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been divided into smaller sections.**

Section 1 of 5

Document Information			
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Tank Vapor Sampling and Analysis Data Package for Tank 241-C-106 Waste Retrieval Sluicing System Process Test, Sampled December 16, 1998

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Abstract: This data package presents field data and analytical results from the December 16, 1998, headspace vapor sampling of Hanford Site single-shell tank 241-C-106 waste retrieval sluicing system process test.

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Tank Vapor Sampling and Analysis Data Package for Tank 241-C-106 Waste Retrieval Sluicing System Process Test, Sampled December 16, 1998

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EXECUTIVE SUMMARY

This data package presents sampling data and analytical results from the December 16, 1998, vapor sampling of Hanford Site single-shell tank 241-C-106, during limited active sluicing. Samples were obtained from the 296-C-006 ventilation system stack, 241-AZ-702 ventilation system stack, and tank 241-AY-102 head space via the standard hydrogen monitoring system (SHMS). Characterization Project Operations (CPO) were responsible for the collection of all SUMMATM canister samples and for the collection of tritium trap and particulate filter samples at the 241-AY-102 SHMS and the 241-AZ-702 stack. The Special Analytical Support (SAS) vapor team was responsible for the collection of all triple sorbent trap (TST), sorbent tube train (STT), polyurethane foam (PUF), particulate filter, and tritium trap samples collected at the 296-C-006 stack, including TSTs and STTs prepared by Pacific Northwest National Laboratory (PNNL). The SAS vapor team used the non-electrical vapor sampling (NEVS) system to collect samples of the air, gases, and vapors from the 296-C-006 stack.

The SAS vapor team collected and analyzed these samples for Lockheed Martin Hanford Corporation (LMHC) and Tank Waste Remediation System (TWRS) in accordance with the sampling and analytical requirements specified in the *Waste Retrieval Sluicing System Vapor Sampling and Analysis Plan (SAP) for Evaluation of Organic Emissions*, HNF-3732, Rev. 0-A, (LMHC, 1998).

SUMMA is a registered trademark of Moleetrics, Inc., Cleveland, Ohio.

All samples were stored in a secured Radioactive Materials Area (RMA) until the samples were radiologically released and received by SAS for analysis. The Waste Sampling and Characterization Facility (WSCF) performed the radiological analyses. The 296-C-006 stack and 241-AZ-702 stack samples were received on December 22, 1998. The 241-AY-102 SHMS samples were received on January 5, 1999.

Four sample types were analyzed by SAS (SUMMA canister, TST, STT, and PUF). Analytes were not detected at concentrations exceeding their notification limits as specified in the SAP.

Section 1.0 presents the sampling information and Section 2.0 presents the results of the analyses.

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ABBREVIATIONS AND ACRONYMS

CAS™	Chemical Abstracts Service™
CCB	continuing calibration blank
CCVS	continuing calibration verification standard
COC	chain of custody
corp.	corporation
CPO	Characterization Project Operations
DBP	dibutyl phosphate
DP	data package
EPA	Environmental Protection Agency
ft	feet
GC	gas chromatograph
GC/MS	gas chromatograph - mass spectrometer
GC/TCD	gas chromatograph - thermal conductivity detector
HP	Hewlett - Packard
IC	ion chromatograph
ICAL	initial calibration
ICVS	initial calibration verification standard
in.Hg	inches of mercury
kPa	kiloPascals
L	liter
LCS	laboratory control sample
LMHC	Lockheed Martin Hanford Corporation
L/min	liters per minute
m	meter
MB	method blank
MDL	minimum detection limit
mg/L	milligrams per liter
mg/m ³	milligrams per cubic meter
ml/min	milliliters per minute
mm	millimeter
mmHg	millimeters of mercury
MPB	method performance blank
MS	mass spectrometry
n/a or N/A	not applicable
NEVS (system)	non-electrical vapor sampling (system)
ng	nanogram
NHC	Numatec Hanford Corporation
NIST	National Institute of Standards and Technology
pCi	picoCurie
pCi/g	picoCurie per gram
perm.	permanent
PNNL	Pacific Northwest National Laboratory
ppbv	parts per billion by volume
ppmv	parts per million by volume
PUF	polyurethane foam
QA	quality assurance
QC	quality control

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ABBREVIATIONS AND ACRONYMS (Cont.)

Rev.	revision
RMA	radioactive material area
RPD	relative percent difference
RSD	relative standard deviation
SAP	sampling and analysis plan
SAS	Special Analytical Support
sccm	standard cubic centimeters per minute
SHMS	standard hydrogen monitoring system
SST	single-shell tank
STT	sorbent tube train
TBP	tributyl phosphate
TD	thermal desorption
TIC	tentatively identified compound
TNMOC	total non-methane organic carbon
TOC	total organic carbon
TO-12	EPA toxic organic method
TO-14	EPA toxic organic method
TST	triple sorbent trap
TWRS	Tank Waste Remediation System
VOC	volatile organic compound
VPRQL	Vapor Program Required Quantitation Limit
WSCF	Waste Sampling and Characterization Facility
°C	degrees Celsius
°F	degrees Fahrenheit
µg/L	micrograms per liter
%R	percent recovery

DOCUMENT INVENTORY FORM

Upon assembly of the complete data package, the document assembler shall verify that each required item is contained in the data package and check the box on this form associated with the required item. The document assembler shall then print his/her name, sign, and date in the assembler's signature block when all items have been checked.

Prefatory Elements:

- ☒ distribution list (form A-6000-135)
- ☒ Engineering Data Transmittal form (form BD-7400-172)
- ☒ Supporting Document cover page (form A-6400-073)
- ☒ title page
- ☒ executive summary
- ☒ table of contents
- ☒ list of abbreviations and acronyms
- ☒ document inventory form
- ☒ quality assurance data package review results
- ☐ nonconformance reports OR
 - ☒ nonconformance reports not applicable

Sampling Elements:

- ☒ sampling case narrative
- ☒ sample summary and event chronology
- ☒ sampling procedures table
- ☒ sampling logbook table
- ☒ field-generated vapor TOC results
- ☒ sample radiation screening results
- ☒ chain of custody forms

Analyses Elements:

- ☒ analytical case narrative
- ☒ analytical procedures identification table
- ☒ data qualifier flag translation table
- ☒ target analyte and duplicates concentration table
- ☒ tentatively identified compound concentration table
- ☒ laboratory blank summary
- ☒ field blank summary
- ☒ mass spectrometer instrument tune report
- ☒ target analyte initial calibration table
- ☒ target analyte continuing calibration table
- ☒ internal standards area counts table
- ☒ laboratory control sample results table
- ☒ surrogate compounds results table
- ☒ quantitation reports
- ☒ chromatograms
- ☒ mass spectra of reported tentatively identified compounds

Greg Fies
Document Assembler (print name)

03/18/99
Document Assembler (sign) date

DATA PACKAGE QUALITY ASSURANCE REVIEW

Date reviewed: 03/03/99

Reviewed by: M. L. Myers

ORGANIC DATA ASSESSMENT SUMMARY

	DBP/TBP	VOC in SUMMA	TNMOC	PERM. GAS	VOC in TST
Holding Time	0	0	0	0	0
Surrogate Recovery	X	n/a	n/a	n/a	0
Blanks	0	X	0	0	X
GC Tunes	0	0	0	0	0
Calibration	0	X	0	0	0
Internal Standards/LCS	0	0	0	0	X

INORGANIC DATA ASSESSMENT SUMMARY

	Ammonia	Nitrogen Dioxide	Nitric Oxide
Calibration	0	0	0
Blanks	X	X	X
CCVS	0	0	0
Matrix Spike/Matrix Spike Duplicate	0	0	0
Holding Time	0	0	0

OVERALL ASSESSMENT: Data acceptable with qualifiers

0 = data had no problems

X = data qualified with minor problems

N = data qualified with major problems, some data may be unusable

n/a = not applicable

Data assessment summaries are available upon request.

NONCONFORMANCE REPORTS

Nonconformance reports were not generated during the sampling and analysis events described in this data package.

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1.0 Sampling Section

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1.1 SCOPE

The sampling section of this data package presents information and sampling data resulting from the December 16, 1998, vapor sampling of Hanford Site single-shell tank (SST) 241-C-106, during limited active sluicing. Samples were obtained from the 296-C-006 ventilation system stack, 241-AZ-702 ventilation system stack, and tank 241-AY-102 head space via the standard hydrogen monitoring system (SHMS). Characterization Project Operations (CPO) were responsible for the collection of all SUMMA canister samples and for the collection of tritium trap and particulate filter samples at the 241-AY-102 SHMS and the 241-AZ-702 stack. The Special Analytical Support (SAS) vapor team was responsible for the collection of all triple sorbent trap (TST), sorbent tube train (STT), polyurethane foam (PUF), particulate filter, and tritium trap samples collected at the 296-C-006 stack, including TSTs and STTs prepared by Pacific Northwest National Laboratory (PNNL). The SAS project file for this sampling event is numbered V9003. The analytical results from these samples are presented in the analyses section of this data package.

The SAS vapor team collected samples for Lockheed Martin Hanford Corporation (LMHC) and Tank Waste Remediation System (TWRS) in accordance with the sampling requirements specified in the *Waste Retrieval Sluicing System Vapor Sampling and Analysis Plan for Evaluation of Organic Emissions*, HNF-3732, Rev. 0-A, (LMHC, 1998), work package 2E-98-02577, and SAS procedure *Vapor Sampling Using the Non-Electrical Vapor Sampling (NEVS) System*, LO-080-400, Rev. A-0. CPO collected samples in accordance with HNF-3732, work package ES-98-00412, Rev. 0, "241-C-106 Vapor Sample," work package ES-98-00413, Rev. 0, "241-AY-102 Perform SUMMA Vapor Samples," and work package ES-98-00415, Rev. 0, "702-AZ Ventilation System Vapor Sample."

All samples were stored in a secured Radioactive Materials Area (RMA) until the samples were radiologically released and received by the SAS analytical laboratory. The 296-C-006 stack and 241-AZ-702 stack samples were received on December 22, 1998. The 241-AY-102 SHMS samples were received on January 5, 1999.

All sample container/media preparation, sample handling and storage, and field sampling were performed according to the procedures and work packages listed in Table 1-1. Any exceptions to these procedures are noted in Section 1.1.5. Project logbooks and logbook pages that contain data and information relevant to this sampling event are listed in Table 1-2.

Table 1-1. Summary of Tank Vapor Sample Preparation, Storage, and Collection Procedures or Work Packages.

Procedure or Work Package Title	Procedure or Work Package #/Revision #
Cleaning Procedure for SUMMA Canisters	LO-080-406/A-0
Triple Sorbent Trap Preparation for Waste Tank Vapor Samples	LA-549-403/A-0
Preparation of Triple Sorbent Tubes for Field Sampling, Analysis, and Calibration Standards	LA-549-404/A-1
Sorbent Trap Preparation for Waste Tank Inorganic Vapor Samples	LA-549-404/A-0
Balance Quality Assurance Checks	HNF-IP1128, 2.15/0
Monitoring and Recording Temperatures of Sample and Standard Storage Units	LQ-549-400/A-0
Laboratory and Sample Security	WMH-310, 1.4/0
Preventing Sample Contamination	WMH-310, 2.13/0
Project and Sample Identification for SAS	WMH-310, 2.7/0
Logkeeping Practices	WMH-200, 2.11/0
Sample Chain of Custody, Acceptance, and Disposal	LO-090-450/B-1
Vapor Sampling Using the Non-Electrical Vapor Sampling (NEVS) System	LO-080-400/A-0
241-C-106 Vapor Sample	ES-98-00412/0
241-AY-102 Perform SUMMA Vapor Samples	ES-98-00413/0
702-AZ Ventilation System Vapor Sample	ES-98-00415/0

Table 1-2. Sampling Project Logbooks.

Logbook Title	Logbook Number	Page Numbers
Trailer #5618, Development of Sample Media Preparation	WHC-N-947-1	66 - 69
Building 622R, Rm 122, SUMMA Preparation	WHC-N-1408-1	19 - 92
Preparation of Samples and Standards for TST Analysis	WHC-N-1411-1	123
Trailer #5618, Sample Media Tracking	WHC-N-855-1	26 - 27
Chain of Custody Numbering	WHC-N-1410-1	53 - 55
Building 622F, Rm 01, Sample Custody	WHC-N-1405-1	5 - 11
Building 622R, Rm 120, Sample Refrigerator Temperature Monitoring	WHC-N-1404-1	148+
Vapor Sampling	WHC-N-448-1	116 - 132

1.2 DESCRIPTION OF VAPOR SAMPLING SYSTEM

This section provides an overview of the non-electrical vapor sampling (NEVS) system, the types of samples acquired, and documents the cleanliness and traceability of the sample containers and media.

1.2.1 Non-Electrical Vapor Sampling (NEVS) System Overview

This section is a summary of what the NEVS system is and how it functions. A schematic drawing of sampling is provided in appendix 1A.

The NEVS system collects representative vapor samples in potentially flammable environments. The system is portable and designed to allow much of the preparation for sampling to be performed outside of a surface contamination area. The NEVS system collects vapor samples by measuring the system pressure change of a known evacuated volume; by drawing vapor samples through the sorbent media, the volume collected is determined by measuring system pressure change. This method eliminates the need for electrically powered equipment. It may also be utilized in nonflammable environments.

Vapor samples are collected in sorbent traps. Sorbent traps are pencil-size stainless steel or glass tubes that contain vapor-adsorbing media. The sorbent traps may be used individually

(TST or PUF) or may be prepared with several individual traps joined in series (STT). A known volume of sample vapor is passed through the tube, which traps (by adsorption) virtually all the target analytes. The concentration of analytes in the vapor sampled is calculated from the quantity of analyte found in the sorbent media and the volume of vapor passed through the sorbent trap.

1.2.2 SUMMA Canister Sampling

SUMMA canisters are stainless-steel vessels that allow collection and transfer of whole-air samples from the sample site to the analytical laboratory for analysis. These canisters have been treated by the SUMMA process that passivates adsorption sites on the interior canister walls to minimize adsorption of gases and vapors. SUMMA canisters must be cleaned and evacuated before each use. The evacuated canister is filled with sample vapor through a valve that is then closed to seal the sample inside. The nominal capacity of each SUMMA canister is 6 L.

SUMMA canister samples were collected without the use of the NEVS system. Tritium trap samples taken at AY-102 and 702-AZ utilized an evacuated canister to pull sample through them.

1.2.3 Sample Container and Sample Media Preparation

This section documents the preparation and storage history of the sample containers and sample media used in the December 16, 1998, sampling event. Table 1-3 documents the treatment of each sample container and sample medium by sample number. Due to the flexibility allowed in the SAP, more sample containers and media were prepared and taken into the field than were actually used for vapor samples. This table summarizes sample media and containers actually utilized in vapor sampling. After preparation, each sample container and sample medium was stored in locked storage at 600/622F/01 until required for field use. The TSTs, STTs, and PUFs were stored at 4 ± 2 °C and SUMMAs were stored at ambient conditions.

Per procedure LO-090-450, Rev. B-1, *Sample Chain of Custody, Acceptance, and Disposal* (NHC, 1997), chains of custody were maintained on each sample container and sample medium upon retrieval from locked storage, through the sampling event, and upon delivery to the analytical laboratory; appendix 1A contains copies of the chains of custody for the samples analyzed by SAS. Sample containers and sample media were transported at ambient temperature to and from the field.

Sample container and medium cleanliness was confirmed as described by *Cleaning Procedure for SUMMA Canisters* (LO-080-406/A-0) and *Preparation of Triple Sorbent Tubes for Field Sampling, Analysis and Calibration Standards* (LA-549-404/A-1). Contamination above 2.5 ppbv was not detected in the canisters. Contamination above detection limits was not detected in the TSTs.

Table 1-3. Sample Containers and Media Preparation History. (6 sheets)

Sample Information					Preparation Information		
Sample Number	COC Number ¹	Sample Type ²	Serial Number	Sample Container or Medium Manufacturer	Preparation Date	Preparation Procedure/ Revision #	Preparation Logbook #/Pages
VS006-002-S019	V9003-b	SUMMA	019	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-010-S036	V9003-b	SUMMA	036	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-018-S045	V9003-b	SUMMA	045	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-033-S053	V9003-b	SUMMA	053	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-034-S057	V9003-b	SUMMA	057	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-025-S064	V9003-b	SUMMA	064	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-041-S074	V9003-b	SUMMA	074	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-042-S075	V9003-b	SUMMA	075	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-050-S077	V9003-b	SUMMA	077	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92

Table 1-3. Sample Containers and Media Preparation History. (6 sheets)

Sample Information					Preparation Information		
Sample Number	COC Number ¹	Sample Type ²	Serial Number	Sample Container or Medium Manufacturer	Preparation Date	Preparation Procedure/ Revision #	Preparation Logbook #/Pages
VS006-051-S078	V9003-b	SUMMA	078	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-058-S080	V9003-b	SUMMA	080	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-059-S081	V9003-b	SUMMA	081	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-067-S082	V9003-b	SUMMA	082	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-068-S091	V9003-b	SUMMA	091	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-128-S096	V9003-b	SUMMA	096	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS702-003-S061	V9005-a	SUMMA	061	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS702-005-S062	V9005-a	SUMMA	062	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS702-008-S063	V9005-a	SUMMA	063	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92

Table 1-3. Sample Containers and Media Preparation History. (6 sheets)

Sample Information				Preparation Information			
Sample Number	COC Number ¹	Sample Type ²	Serial Number	Sample Container or Medium Manufacturer	Preparation Date	Preparation Procedure/ Revision #	Preparation Logbook #/Pages
VS702-011-S068	V9005-a	SUMMA	068	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS702-014-S070	V9005-a	SUMMA	070	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS102-003-S021	V9004-a	SUMMA	021	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS102-006-S022	V9004-a	SUMMA	022	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS102-009-S034	V9004-a	SUMMA	034	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS102-012-S041	V9004-a	SUMMA	041	Molectrics	12/15/98	LO-080-406/A-0	WHC-N-1408-1/19 - 92
VS006-142-TR02	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/68
VS006-102-TR03	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/68
VS006-038-TR05	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/68
VS006-029-TR06	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/68
VS006-117-TR07	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/68
VS006-094-TR08	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/68

Table 1-3. Sample Containers and Media Preparation History. (6 sheets)

Sample Information					Preparation Information		
Sample Number	COC Number ¹	Sample Type ²	Serial Number	Sample Container or Medium Manufacturer	Preparation Date	Preparation Procedure/ Revision #	Preparation Logbook #/Pages
VS006-137-TR09	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/68
VS006-109-TR10	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/68
VS006-072-TR11	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/69
VS006-055-TR12	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/69
VS006-087-TR13	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/69
VS006-079-TR14	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/69
VS006-046-TR15	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/69
VS006-022-TR16	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/69
VS006-006-TR17	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/69
VS006-014-TR18	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/69
VS006-063-TR19	V9003-c	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/69
VS006-mpb-TR20	n/a	STT	n/a	SKC Inc.	12/15/98	LA-549-402/A-0	WHC-N-947-1/69
VS006-053-TS02	V9003-a	TST	0002	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/66
VS006-027-TS07	V9003-a	TST	0007	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/66
VS006-036-TS10	V9003-a	TST	0010	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/66
VS006-004-TS11	V9003-a	TST	0011	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/66
VS006-077-TS12	V9003-a	TST	0012	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/66

Table 1-3. Sample Containers and Media Preparation History. (6 sheets)

Sample Information					Preparation Information		
Sample Number	COC Number ¹	Sample Type ²	Serial Number	Sample Container or Medium Manufacturer	Preparation Date	Preparation Procedure/ Revision #	Preparation Logbook #/Pages
VS006-070-TS13	V9003-a	TST	0013	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/66
VS006-012-TS14	V9003-a	TST	0014	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/66
VS006-061-TS15	V9003-a	TST	0015	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/66
VS006-020-TS16	V9003-a	TST	0016	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/66
VS006-044-TS24	V9003-a	TST	0024	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/66
VS006-092-TS25	V9003-a	TST	0025	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/67
VS006-085-TS28	V9003-a	TST	0028	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/67
VS006-115-TS30	V9003-a	TST	0030	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/67
VS006-140-TS35	V9003-a	TST	0035	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/67
VS006-107-TS43	V9003-a	TST	0043	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/67
VS006-100-TS50	V9003-a	TST	0050	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/67
VS006-135-TS62	V9003-a	TST	0062	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/67
VS006-mpb-TS63	n/a	TST	0063	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/67
VS006-mpb-TS67	n/a	TST	0067	Supelco Inc.	12/15/98	LA-549-403/A-0	WHC-N-947-1/67
VS006-015-P001	V9003-d	PUF	n/a	Supelco Inc.	12/15/98	Factory Direct	n/a
VS006-023-P002	V9003-d	PUF	n/a	Supelco Inc.	12/15/98	Factory Direct	n/a
VS006-030-P003	V9003-d	PUF	n/a	Supelco Inc.	12/15/98	Factory Direct	n/a

Table 1-3. Sample Containers and Media Preparation History. (6 sheets)

Sample Information								Preparation Information		
Sample Number	COC Number ¹	Sample Type ²	Serial Number	Sample Container or Medium Manufacturer	Preparation Date	Preparation Procedure/ Revision #	Preparation Logbook #/Pages			
VS006-047-P004	V9003-d	PUF	n/a	Supelco Inc.	12/15/98	Factory Direct	n/a			
VS006-064-P005	V9003-d	PUF	n/a	Supelco Inc.	12/15/98	Factory Direct	n/a			
VS006-080-P006	V9003-d	PUF	n/a	Supelco Inc.	12/15/98	Factory Direct	n/a			
VS006-095-P007	V9003-d	PUF	n/a	Supelco Inc.	12/15/98	Factory Direct	n/a			
VS006-110-P008	V9003-d	PUF	n/a	Supelco Inc.	12/15/98	Factory Direct	n/a			
VS006-138-P010	V9003-d	PUF	n/a	Supelco Inc.	12/15/98	Factory Direct	n/a			

Notes:

n/a = not applicable

¹Chain of Custody number²SUMMA = SUMMA canister, STT = sorbent tube train, TST = triple sorbent trap, PUF = polyurethane foam

1.3 SAMPLING EVENT DESCRIPTION

This section describes the vapor sampling event on December 16, 1998. All sampling was performed in accordance with the sampling procedures and work packages listed in Table 1-1. Procedure LO-080-400, Rev. A-0, and the work packages governed the actual field collection of the vapor samples.

1.3.1 Sampling Personnel

The SAS sampling team scientists were L. D. Lockard, L. A. Pingel, and J. Y. Smith. The persons in charge (PICs) for the CPO sampling crews were M. L. Sumsion, R. J. Praznik, and J. F. Sickels.

1.3.2 Vapor Sample Collection and Event Chronology

SUMMA canisters and sorbent traps for organic vapors, ammonia (NH_3), and oxides of nitrogen were prepared for this sampling event. The sampling media was stored in a custody secure area until required for field use. The NEVS system was set up at the 296-C-006 stack on December 16, 1998. The sampling media was transported to the field on December 16, 1998.

Prior to sample collection on December 16, 1998, a leak check of the NEVS system was performed. Pressure gauge readings were recorded at the beginning of the leak check. The system was evacuated and leakage of ambient air into the system was observed by monitoring system pressure for 3 hours. Leakage resulted in an increase of 0.27 kPa (2.0 mmHg) absolute in system pressure during the 3-hour test.

Sampling began at approximately 1:00 p.m. on December 16, 1998, and was completed by approximately 10:00 p.m. on the same day. Tank vapor was drawn through each sorbent trap until a specified pressure change was noted by the NEVS system. Appendix 1B contains a sample summary and event chronology table listing the pressure changes of the NEVS system, collection times, calculated volumes of tank gas drawn through each sample, and other relevant information. The field data is also included in this appendix for both the NEVS system and CPO canister sampling.

1.4 SAMPLING QUALITY ASSURANCE AND CONTROL

This section highlights some of the sampling quality controls applied during this sampling event.

1.4.1 Sample Chain of Custody: Receipt, Storage, and Shipment

SAS maintained chains of custody on all samples in accordance with LO-090-450, Rev. B-1, *Sample Chain of Custody, Acceptance, and Disposal* (NHC, 1997). Copies of the completed chains of custody for samples analyzed by SAS are included in appendix 1A.

Prior to the sampling event, all sorbent traps and SUMMA canisters used in this sampling effort were kept in a locked storage area maintained by SAS. Sorbents were maintained at 4 ± 2 °C in a refrigeration unit. SUMMA canisters were stored in the same locked storage area, but were not refrigerated. Personnel from SAS transported these sampling devices to the field in a government vehicle. After sampling, the sample canisters and media were transported by government vehicle to a secure RMA for storage.

1.4.2 Instrument Calibration

The pressure gauge used in the NEVS system is calibrated on an annual basis, or after maintenance or suspected damage, at the Standards Laboratory. It was within its calibration period during this sampling event. The calibration records for the absolute pressure gauge used in collecting samples with the NEVS system are kept in the QA records file of the SAS group.

1.4.3 Blank Samples

Blank samples allow the analyst to determine if any contamination of the tank vapor samples may have occurred during the preparation of the sample containers and media or during the shipping and acquisition of the tank vapor samples.

Trip blanks are samples that accompany the sample media from the point of sample preparation through the sample analysis. They are transported to the field with the sample collection media but remain unopened during the sampling event. Analysis of these trip blanks is used to assess possible sample contamination from the transportation of the sample containers or media to and from the field.

Field blanks are handled in the same manner as trip blanks except they are opened momentarily and closed during the sampling event.

Method performance blanks are samples that are prepared and stored in the custody secured sample storage area. They are not transported to the field and, therefore, do not require a chain of custody. Analysis of these method performance blanks is used to assess possible contamination from the sample container or medium itself, preparation, or sample storage area.

Table 1-4 lists the sample blanks used during this sampling event. This table does not include ambient air or baseline stack samples and only includes SAS sample blanks..

Table 1-4. Sample Blanks.

Sample Number	Blank Type	COC Number
VS006-135-TS62	TST Trip Blank	V9003-a
VS006-137-TR09	STT Trip Blank	V9003-c
VS006-138-P010	PUF Field Blank	V9003-d
VS006-140-TS35	TST Field Blank	V9003-a
VS006-142-TR02	STT Field Blank	V9003-c
VS006-MPB-TS63	TST Method Performance Blank	n/a
VS006-MPB-TS67	TST Method Performance Blank	n/a
VS006-MPB-TR20	STT Method Performance Blank	n/a

Notes:

n/a = not applicable; chain of custody not required

1.5 PROCEDURE DEVIATIONS, SAMPLING ANOMALIES, AND SOURCES OF ERROR

This section identifies any deviations from procedures, any known anomalous occurrences during handling of the sample containers and media or during the sampling event itself, or any other known sources of error that might affect interpretation of the tank vapor sampling results.

All samples were collected in accordance with the SAP, work package, and procedures. No anomalies, procedure deviations, or other sources of error were reported during sample collection except: 1. The ambient air samples to be taken at ≤ 1 hour after the start of the tank waste transfer were not taken as specified in the SAP. The media used in sampling included these sampling event codes. Consequently, the sample numbers are skewed by 1 set of sample media (refer to appendix 1B for the sample summary and event chronology). 2. Sorbents to be sampled 3 hours after pump shut-down were not collected because the waste transfer was stopped prematurely.

1.6 FIELD-GENERATED TANK VAPOR TOC RESULTS

Field measurements for total organic carbon (TOC) were collected by Industrial Hygiene personnel. CPO recorded the TOC reading when each SUMMA canister sample was collected. These measurements were recorded on the data sheets included in appendix 1B.

1.7 SAMPLE RADIOLOGICAL SCREENING RESULTS

Tritium trap samples for all 3 sampling points and particulate filter samples for the NEVS system were prepared by SAS for radiation screening purposes. Evacuated SUMMA canisters were also prepared by SAS for CPO collection of tritium trap samples at 241-AY-102 SHMS and 241-AZ-702 stack.

Each sample collected with the NEVS system was protected from radiological contamination by particulate filters. These filters were placed between the collection device and the sample port. After completion of the sampling event, these filters were used to clear the samples of radiological contamination for receipt at the laboratories.

Relevant correspondence, Waste Sampling and Characterization Facility (WSCF) screening results, particulate filter sample COCs, and tritium trap sample COCs are presented in appendix 1C.

Appendix 1A

**Schematic Drawing of Sampling
and
Chains of Custody for Samples Analyzed
by SAS**

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Schematic Drawing of Sampling

 

NHC/SAS		CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST									
Signature	Gregory A. Fies	Date	12/16/98	Sample Collected by	Summons, Matthews, Karpman	Charge Code	COC No. V9003-b	Page	1	of	2
Project Number	V9003	Sample Origin	296-C-006 Shack	Sample Origin	296-C-006 Shack	Reier No.					
Project Title	296-C-006 Shack	Sampling Logbook No.	ES-78-0041260	Sampling Logbook No.	ES-78-0041260	COC Procedure	LO-990-4500-1				
Shipped To (lab)		Method of Shipment	Government Vehicle	Method of Shipment	Government Vehicle	Sampling Method					
Sample Number		Type	Date	Time	Simple Identification	Analysis Requested	Holding Time				
V9006-0502	2019	SUMMA	12/16/98	13:23		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
V9006-0503	2019	SUMMA	12/16/98	13:44		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
V9006-0504	2019	SUMMA	12/16/98	15:38		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
V9006-0505	2019	SUMMA	12/16/98	17:44		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
V9006-0506	2019	SUMMA	12/16/98	17:50		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
V9006-0507	2019	SUMMA	12/16/98	17:54		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
V9006-0508	2019	SUMMA	12/16/98	19:17		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
V9006-0509	2019	SUMMA	12/16/98	19:23		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
V9006-0510	2019	SUMMA	12/16/98	19:43		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
V9006-0511	2019	SUMMA	12/16/98	19:50		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
V9006-0512	2019	SUMMA	12/16/98	20:16		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*				
*Holding times are internal quality goals only. Holding times do not begin until samples are rail, related and received by the Vapor Analytical Laboratory.											
Relinquished By	Wirt	Date/Time	12-16-98/0740	Received By	LA Pingel	Print	Sign	Date/Time	12-16-98/0740		
Relinquished By	Gregory A. Fies	Date/Time	12-16-98/1020	Received By	LA Pingel	Print	Sign	Date/Time	12-16-98/1030		
Relinquished By		Date/Time	12-16-98/1600	Received By	James Sicketts	Print	Sign	Date/Time	12/16/98/1600		
Relinquished By		Date/Time	12-22-98	Received By	LA Pingel	Print	Sign	Date/Time	12/22/98 1435		
Relinquished By		Date/Time	12-22-98/1620	Received By	Gregory A. Fies	Print	Sign	Date/Time	12-22-98/1620		
Relinquished By		Date/Time		Received By		Print	Sign	Date/Time			
Relinquished By		Date/Time		Received By		Print	Sign	Date/Time			
Relinquished By		Date/Time		Received By		Print	Sign	Date/Time			
Relinquished By		Date/Time		Received By		Print	Sign	Date/Time			

[illegible]

NHC/SAS		CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST				COC No. V5003-c	
Originator Gregory A. Fies		Date 12/16/98	Charge Code		Page 1 of 2		
Project Number V5003		Sample Collection 294-C-005 Stank		Riser No.			
Project Title 294-C-005 Stank		Sampling Logbook No.		COC Procedure LO-910-15010-1			
Shipped To (lab) SAS		Method of Shipment Government Vehicle		Sampling Method		NEWS	
Sample Number	Number	Days	Sampling Date	Sample Identification	Analysis Requested	Holding Time	
V5006-TR01	1	STT (Train)	12-16-98	Not Sampled	NH3/NOx	21 Calendar Days*	
V5006-142-TR02	1	STT (Train)	12-16-98	Not Sampled	NH3/NOx	21 Calendar Days*	
V5006-102-TR03	1	STT (Train)	12-16-98	Not Sampled	NH3/NOx	21 Calendar Days*	
V5006-102-TR04	1	STT (Train)	12-16-98	Not Sampled	NH3/NOx	21 Calendar Days*	
V5006-028-TR05	1	STT (Train)	12-16-98	Not Sampled	NH3/NOx	21 Calendar Days*	
V5006-034-TR06	1	STT (Train)	12-16-98	Not Sampled	NH3/NOx	21 Calendar Days*	
V5006-117-TR07	1	STT (Train)	12-16-98	Not Sampled	NH3/NOx	21 Calendar Days*	
V5006-094-TR08	1	STT (Train)	12-16-98	Not Sampled	NH3/NOx	21 Calendar Days*	
V5006-137-TR09	1	STT (Train)	12-16-98	Not Sampled	NH3/NOx	21 Calendar Days*	
V5006-102-TR10	1	STT (Train)	12-16-98	Not Sampled	NH3/NOx	21 Calendar Days*	
*Holding times are internal quality goals only. Holding times do not begin until samples are rad. released and received by the Vapor Analytical Laboratory.							
Comments/Anomalies:							
Relinquished by Gregory A. Fies	Print	Signature	Date/Time 12-16-98/10731	Received by LA Pineda	Print	Signature Date/Time 12-16-98/0731	
Relinquished by LA Pineda	Print	Signature	Date/Time 12-22-98/1642	Received by Gregory A. Fies	Print	Signature Date/Time 12-22-98/1642	
Relinquished by	Print	Signature	Date/Time	Received by	Print	Signature Date/Time	
Relinquished by	Print	Signature	Date/Time	Received by	Print	Signature Date/Time	
Relinquished by	Print	Signature	Date/Time	Received by	Print	Signature Date/Time	
Relinquished by	Print	Signature	Date/Time	Received by	Print	Signature Date/Time	
Relinquished by	Print	Signature	Date/Time	Received by	Print	Signature Date/Time	
Relinquished by	Print	Signature	Date/Time	Received by	Print	Signature Date/Time	
Final Sample Disposition							

NHIC/SAS			CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST								COC No.	V9003-c
Originator	Gregory A. Fies	Date	12/16/98	Sample Collected(s)	LAFins & [Signature]	Charge Code		Page	2	of	2	
Project Number	V9003	Sample Origin	296-C-006 Stuck	Sample Logbook No.		Riser No.						
Shipped To (lab)	SAB	Method of shipment	Government Vehicle	Sampling Method								
Sample Number	Number	Days	Sampling Date	Sample Identification	Analysis Requested	Holding Time						
V9006-072-TR11	1	STT (Train)	12/16/98 1400	NHE/NOX		21 Calendar Days*						
V9006-055-TR12	1	STT (Train)	1750	NHE/NOX		21 Calendar Days*						
V9006-087-TR13	1	STT (Train)	2006	NHE/NOX		21 Calendar Days*						
V9006-074-TR14	1	STT (Train)	1415	NHE/NOX		21 Calendar Days*						
V9006-046-TR15	1	STT (Train)	1712	NHE/NOX		21 Calendar Days*						
V9006-022-TR16	1	STT (Train)	1534	NHE/NOX		21 Calendar Days*						
V9006-006-TR17	1	STT (Train)	1734	NHE/NOX		21 Calendar Days*						
V9006-014-TR18	1	STT (Train)	1408	NHE/NOX		21 Calendar Days*						
V9006-065-TR19	1	STT (Train)	1815	NHE/NOX		21 Calendar Days*						

*Holding times are internal quality goals only. Holding times do not begin until samples are rad. released and received by the Vaper Analytical Laboratory.

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	[Signature]	[Signature]	12-16-98/0731	Received By	LAFins & [Signature]	[Signature]	12-16-98/0731
Relinquished By	LAFins & [Signature]	[Signature]	12-22-98/1643	Received By	Greg A. Fies & [Signature]	[Signature]	12-22-98/1643
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

Final Sample Description

NHC/SAS		CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST				COC No. V9003-J	
Originator	Gregory A. Fies	Date	12/16/98	Sample Collector(s)	LA Fies	Charge Code	Page 1 of 1
Project Number	V9003	Sample Origin	296-C-006 Stuck	Riser No.			
Project Title	296-C-006 Stuck	Sampling Logbook No.		COC Procedure	LO-090-450/B-1		
Shipped To (lab)	296-C-006 Stuck	Method of Shipment	Government Vehicle	Sampling Method			
Sample Number	Type	Sampling Date	Sample Identification	Analysis Requested	Holding Time		
VS006-015-P001	PUF	12/16/98		DBP/TBP	7 Calendar Days*		
VS006-023-P002	PUF	1605		DBP/TBP	7 Calendar Days*		
VS006-030-P003	PUF	1622		DBP/TBP	7 Calendar Days*		
VS006-047-P004	PUF	1720		DBP/TBP	7 Calendar Days*		
VS006-064-P005	PUF	1822		DBP/TBP	7 Calendar Days*		
VS006-080-P006	PUF	1934		DBP/TBP	7 Calendar Days*		
VS006-095-P007	PUF	2033		DBP/TBP	7 Calendar Days*		
VS006-110-P008	PUF	2137		DBP/TBP	7 Calendar Days*		
VS006-133-P009	PUF	2137		DBP/TBP	7 Calendar Days*		
VS006-138-P010	PUF	1300		DBP/TBP	7 Calendar Days*		
*Holding times are elemental quality goals only. Holding times do not begin until samples are recd. released and received by the Vapor Analytical Laboratory. -post not rec'd on 12-22-98 GAF							
Relinquished By	Gregory A. Fies	Print	Signature	Received By	LA Fies	Print	Date/Time
Relinquished By	LA Fies	Print	Signature	Received By	LA Fies	Print	Date/Time
Relinquished By		Print	Signature	Received By	Gray A. Fies	Print	Date/Time
Relinquished By		Print	Signature	Received By		Print	Date/Time
Relinquished By		Print	Signature	Received By		Print	Date/Time
Relinquished By		Print	Signature	Received By		Print	Date/Time
Relinquished By		Print	Signature	Received By		Print	Date/Time
Relinquished By		Print	Signature	Received By		Print	Date/Time
Relinquished By		Print	Signature	Received By		Print	Date/Time
Final Sample Disposition							

NHC/SAS		CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST				COC No. V9084-a	
Originator	Gregory A. Fies	Date	12/15/98	Sample Collector(s)		Charge Code	Page 1 of 1
Project Number	V9084	Sample Origin	241-AY-102 SIMMS	Riser No.			
Project Title	241-AY-102 SIMMS	Sampling Logbook No.		COC Procedure	LO-490-450/0-1		
Shipped To (lab)		Method of Shipment	Government Vehicle	Sampling Method			
Sample Number	Number	Type	Sampling Date	Time	Sample Identification	Analysis Requested	Holding Time
VS102-003-S021	✓ 1	SUMMA	12-16-98	1331		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*
VS102-006-S022	✓ 1	SUMMA	12-16-98	1814		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*
VS102-009-S034	✓ 1	SUMMA	12-16-98	1914		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*
VS102-012-S041	✓ 1	SUMMA	12-16-98	2014		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*
VS102-015-S044	✓ 1	SUMMA		N#		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*
VS102-018-S046	✓ 1	SUMMA				TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*
VS102-021-S056	✓ 1	SUMMA				TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*
Comments/Anomalies: *Holding times are internal quality goals only. Holding times do not begin until samples are recd. released and received by the Vapor Analytical Laboratory. # Not Used Test Stopped.							
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
		Gregory A. Fies	12-15-98/1642			Don Hallman	12-15-98
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
		Don Hallman	12-15-98/1709			Robert J. Piacitelli	12-15-98
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
		Robert J. Piacitelli	12-15-98/1709			Monte Dunnigan	1-5-99 0845
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
		Monte Dunnigan	1-5-99 0845			Greg A. Fies	01-05-99/0915
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
Final Sample Disposition							

NHC/SAS		CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST				COC No. 19905-a	
Originalator	Gregory A. Fies	Date	12/15/98	Sample Collected(s)	241-AZ-702 Stuck	Charge Code	
Project Number	19905			Sample Origin		Riser No.	
Project Title	241-AZ-702 Stuck			Sampling Logbook No.		COC Procedure	LO-090-4500-1
Shipped To (lab)				Method of Shipment	Government Vehicle	Sampling Method	
Sample Number	Number	Date	Sampling Date	Sample Identification	Analysis Requested	Holding Time	
VST02-023-S061	✓ 1	SUMMA	12-16-98 1326		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*	
VST02-025-S062	✓ 1	SUMMA	12-16-98 1707		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*	
VST02-028-S063	✓ 1	SUMMA	12-16-98 1813		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*	
VST02-011-S068	✓ 1	SUMMA	12-16-98 1912		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*	
VST02-014-S070	✓ 1	SUMMA	12-16-98 2013		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*	
VST02-017-S072	✓ 1	SUMMA	12-16-98 2013		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*	
VST02-020-S073	✓ 1	SUMMA	12-16-98 2013		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*	
VST02-023-S076	✓ 1	SUMMA	12-16-98 2013		TO-12, TO-14 and/or Permanent Gas	21 Calendar Days*	
*Holding times are internal quality pack only. Holding times do not begin until samples are sealed, released and received by the Vapor Analytical Laboratory. **Samples Not Taken per Test Direction							
Relinquished By	Print Gregory A. Fies	Sign	Date/Time 12-15-98/1645	Received By	Print V. Matthews	Sign Date/Time 12-15-98/1645	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign Date/Time	
Relinquished By	Print V. Matthews	Sign	Date/Time 12-15-98/1712	Received By	Print James Sicks	Sign Date/Time 12-15-98/1712	
Relinquished By	Print	Sign	Date/Time 12-22-98	Received By	Print	Sign Date/Time 12/22/98 1420	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign Date/Time	
Relinquished By	Print	Sign	Date/Time 12-22-98/1630	Received By	Print Greg A. Fies	Sign Date/Time 12-22-98/1630	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign Date/Time	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign Date/Time	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign Date/Time	
Final Sample Disposition							

Appendix 1B

**Sample Summary and Event Chronology
and
Field Data**

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Set up NEVS Sampling System
Install Filter holder onto sample line

Date
12/16/98
NEVS Personnel
Pingel, Lockard
Trailer Support
Smith

Sample ID	Desired Volume (liters)	Vol/rt conversion (ml/rt)	Desired Pressure (torr)	Initial system pressure (torr)	Final system pressure (torr)	Time	Temperature (°C)	Actual delta pressure (torr)	Volume Collected (liters)
Ambient Air									
VP006 - 003 - 1381	0.20	10.1	20	112	132	1325	7.78	20	0.20
VS006 - 004 - TS11	1.0	10.1	99	133	231	1329	7.78	98	0.99
VP006 - 005 - 1298	2.0	10.1	198	231	427	1330	7.78	196	1.98
VS006 - 006 - TR17	2.0	10.1	198	171	367	1339	8.33	196	1.98
Baseline Stack									
VS006 - 008 - H003	1.0	10.1	99	206	302	1340	8.33	96	0.97
VP006 - 011 - 1378	0.20	10.1	20	302	320	1352	7.78	18	0.18
VS006 - 012 - TS14	1.0	10.1	99	320	417	1400	7.78	97	0.96
VP006 - 013 - 1296	2.0	10.1	198	417	615	1403	7.78	198	2.00
VS006 - 014 - TR18	2.0	10.1	198	231	476	1408	7.78	195	1.97
VS006 - 015 - P001	25	49.1	509	141	610	1425	7.78	469	23.0
During Operation of the Slurry Submersible pump at AY									
30 min after observed flow in C-106									
Flow Observed at 1455 as reported by Operations									
VS006 - 016 - H008	1.0	10.1	99	104	201	1524	6.67	97	0.98
VP006 - 019 - 1390	0.20	10.1	20	201	220	1525	6.67	19	0.19
VS006 - 020 - TS16	1.0	10.1	99	220	318	1528	6.67	98	0.99
VP006 - 021 - 1296	2.0	10.1	198	318	514	1528	6.67	196	1.98
VS006 - 022 - TR16	2.0	10.1	198	186	383	1534	6.11	195	1.97
VS006 - 023 - P002	25	58.1	430	99	555	1605	5.56	456	26.5

Sample ID	Desired Volume (liters)	Vol/torr conversion (ml/torr)	Desired Pressure (torr)	initial system pressure (torr)	final system pressure (torr)	Time	Temperature (°C)	Actual delta pressure (torr)	Volume Collected (liters)
During Booster Pump Operation @ t = 0.5 hr									
VP006 - 026 - 1327 PNNL TST	0.20	10.1	20	163	184	1605	5.56	21	0.21
VS006 - 027 - TS07 SAS TST	1.0	10.1	99	184	280	1607	5.56	96	0.97
VP006 - 028 - 1298 PNNL Sorbent Train	2.0	10.1	198	280	476	1613	5.56	196	1.98
VS006 - 029 - TR06 SAS Sorbent Train	2.0	10.1	198	228	435	1615	5.56	207	2.09
VS006 - 030 - P003 PUF	25	58.1	430	138	510	1622	5.00	372	21.6
During Booster Pump Operation @ t = 1.0 hr									
VS006 - 031 - H002 Tritium Trap	1.0	10.1	99	166	262	1637	4.44	96	0.97
VP006 - 035 - 1389 PNNL TST	0.20	10.1	20	262	282	1640	4.44	20	0.20
VS006 - 036 - TS10 SAS TST	1.0	10.1	99	282	389	1643	4.44	107	1.08
VP006 - 037 - 1298 PNNL Sorbent Train	2.0	10.1	198	210	406	1647	4.44	196	1.98
VS006 - 038 - TR05 SAS Sorbent Train	2.0	10.1	198	250	447	1650	3.89	197	1.99
During Booster Pump Operation @ t = 1.5 hr									
VP006 - 043 - 1316 PNNL TST	0.20	10.1	20	148	168	1704	4.44	20	0.20
VS006 - 044 - TS24 SAS TST	1.0	10.1	99	168	312	1706	3.33	144	1.45
VP006 - 045 - 1298 PNNL Sorbent Train	2.0	10.1	198	312	508	1710	3.33	196	1.98
VS006 - 046 - TR15 SAS Sorbent Train	2.0	10.1	198	215	412	1712	2.78	197	1.99
VS006 - 047 - P004 PUF	25	49.1	509	104	600	1720	1.67	496	24.4
During Booster Pump Operation @ t = 2.0 hr									
VS006 - 048 - H006 Tritium Trap	1.0	10.1	99	168	266	1738	1.67	98	0.99
VP006 - 052 - 1366 PNNL TST	0.20	10.1	20	266	286	1741	1.67	20	0.20
VS006 - 053 - TS02 SAS TST	1.0	10.1	99	286	383	1743	1.67	97	0.98
VP006 - 054 - 1298 PNNL Sorbent Train	2.0	10.1	198	209	404	1747	1.67	195	1.97
VS006 - 055 - TR12 SAS Sorbent Train	2.0	10.1	198	246	442	1750	1.67	196	1.98

Sample ID	Desired Volume (liters)	Vol/lor conversion (ml/lor)	Desired delta pressure (torr)	initial system pressure (torr)	final system pressure (torr)	Time (°C)	Temperature (°C)	Actual delta pressure (torr)	Volume Collected (liters)
During Booster Pump Operation @ t = 2.5 hr									
VP006 - 060 - 1398 PNNL TST	0.20	10.1	20	126	146	1808	1.67	20	0.20
VS006 - 061 - TS15 SAS TST	1.0	10.1	99	147	246	1809	1.67	99	1.00
VP006 - 062 - 1298 PNNL Sorbent Train	2.0	10.1	198	246	444	1811	1.67	198	2.00
VS006 - 063 - TR19 SAS Sorbent Train	2.0	10.1	198	191	389	1815	1.67	198	2.00
VS006 - 064 - P005 PUF	25	58.1	430	111	527	1822	1.67	416	24.2
During Booster Pump Operation @ t = 3.0 hr									
VS006 - 065 - H007 Tritium Trap	1.0	10.1	99	99	195	1840	1.67	96	0.97
VP006 - 069 - 1347 PNNL TST	0.20	10.1	20	195	213	1843	1.67	18	0.18
VS006 - 070 - TS13 SAS TST	1.0	10.1	99	213	230	1845	1.67	77	0.78
VP006 - 071 - 1298 PNNL Sorbent Train	2.0	10.1	198	213	410	1852	1.67	197	1.99
VS006 - 072 - TR11 SAS Sorbent Train	2.0	10.1	198	253	449	1900	1.67	196	1.98
During Booster Pump Operation @ t = 3.5 hr									
VP006 - 076 - 1395 PNNL TST	0.20	10.1	20	124	145	1906	1.67	21	0.21
VS006 - 077 - TS12 SAS TST	1.0	10.1	99	145	243	1908	1.67	98	0.99
VP006 - 078 - 1298 PNNL Sorbent Train	2.0	10.1	198	243	437	1911	1.67	194	1.96
VS006 - 079 - TR14 SAS Sorbent Train	2.0	10.1	198	192	385	1915	1.67	183	1.95
VS006 - 080 - P006 PUF	25	49.1	509	113	606	1934	1.11	483	24.2
During Booster Pump Operation @ t = 4.0 hr									
VS006 - 081 - H009 Tritium Trap	1.0	10.1	99	183	279	1955	0.56	96	0.97
VP006 - 084 - 1394 PNNL TST	0.20	10.1	20	279	301	1957	0.56	22	0.22
VS006 - 085 - TS28 SAS TST	1.0	10.1	99	309	399	1959	0.56	90	0.91
VP006 - 086 - 1298 PNNL Sorbent Train	2.0	10.1	198	227	422	2003	0.00	195	1.97
VS006 - 087 - TR13 SAS Sorbent Train	2.0	10.1	198	261	457	2006	0.00	196	1.98

Sample ID	Desired Volume (liters)	Vol/torr conversion (ml/torr)	Desired delta Pressure (torr)	Initial system pressure (torr)	final system pressure (torr)	Time	Temperature (°C)	Actual delta pressure (torr)	Volume Collected (liters)
During Booster Pump Operation @ t = 4.5 hr									
VP006 - 091 - 1330 PNNL TST	0.20	10.1	20	128	150	2019	0.00	22	0.22
VS006 - 092 - TS25 SAS TST	1.0	10.1	99	150	2020	2020	0.00	98	0.99
VP006 - 093 - 1298 PNNL Sorbent Train	2.0	10.1	198	248	442	2023	0.00	194	1.96
VS006 - 094 - TR08 SAS Sorbent Train	2.0	10.1	198	192	388	2029	0.00	196	1.98
VS006 - 095 - P007 PUF	25	58.1	430	114	515	2033	0.00	401	23.3
During Booster Pump Operation @ t = 5.0 hr									
VS006 - 096 - H004 Tritium Trap	1.0	10.1	99	180	294	2055	-0.56	104	1.05
VP006 - 099 - 1115 PNNL TST	0.20	10.1	20	296	316	2051	-0.56	20	0.20
VS006 - 100 - TS50 SAS TST	1.0	10.1	99	317	414	2100	-0.56	97	0.98
VP006 - 101 - 1298 PNNL Sorbent Train	2.0	10.1	198	237	432	2104	-0.56	195	1.97
VS006 - 102 - TR03 SAS Sorbent Train	2.0	10.1	198	276	472	2108	-0.56	196	1.98
During Booster Pump Operation @ t = 5.5 hr									
VP006 - 106 - 1314 PNNL TST	0.20	10.1	20	179	199	2121	-0.56	20	0.20
VS006 - 107 - TS43 SAS TST	1.0	10.1	99	199	298	2122	-0.56	99	1.00
VP006 - 108 - 1298 PNNL Sorbent Train	2.0	10.1	198	298	492	2125	-0.56	194	1.96
VS006 - 109 - TR10 SAS Sorbent Train	2.0	10.1	198	240	436	2130	-0.56	196	1.98
VS006 - 110 - P008 PUF	25	49.1	509	142	610	2137	-0.56	468	23.0
During Booster Pump Operation @ t = 6.0 hr									
VS006 - 111 - H005 Tritium Trap	1.0	10.1	99	203	300	2157	-0.56	97	0.98
VP006 - 114 - 1308 PNNL TST	0.20	10.1	20	300	320	2159	0.00	20	0.20
VS006 - 115 - TS30 SAS TST	1.0	10.1	99	320	414	2200	0.00	94	0.95
VP006 - 116 - 1298 PNNL Sorbent Train	2.0	10.1	198	246	441	2204	0.00	195	1.97
VS006 - 117 - TR07 SAS Sorbent Train	2.0	10.1	198	286	481	2208	0.00	195	1.97

Sample ID	Desired Volume (liters)	Vol/torr conversion (ml/torr)	Desired delta Pressure (torr)	initial system pressure (torr)	final system pressure (torr)	Time	Temperature (°C)	Actual delta pressure (torr)	Volume Collected (liters)
Trip Blanks									
VP006 - 134 - 1310	N/A	N/A	N/A	N/A	N/A	2220	N/A	N/A	N/A
VS006 - 135 - TS62	N/A	N/A	N/A	N/A	N/A	2220	N/A	N/A	N/A
VP006 - 136 - 1298	N/A	N/A	N/A	N/A	N/A	2220	N/A	N/A	N/A
VS006 - 137 - TR09	N/A	N/A	N/A	N/A	N/A	2220	N/A	N/A	N/A
Field Blanks									
VS006 - 138 - P010	N/A	N/A	N/A	N/A	N/A	1300	N/A	N/A	N/A
VP006 - 139 - 1311	N/A	N/A	N/A	N/A	N/A	1300	N/A	N/A	N/A
VS006 - 140 - TS35	N/A	N/A	N/A	N/A	N/A	1300	N/A	N/A	N/A
VP006 - 141 - 1298	N/A	N/A	N/A	N/A	N/A	1300	N/A	N/A	N/A
VS006 - 142 - TR02	N/A	N/A	N/A	N/A	N/A	1300	N/A	N/A	N/A

HANFORD ANALYTICAL LABORATORY OPERATIONS
 VAPOR SAMPLING USING THE NON-ELECTRICAL VAPOR SAMPLING SYSTEM (NEVS)
 LO-080-400

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REV/CHANGE NO. A-0

Printed: October 21, 1998 4:38pm

EFFECTIVE DATE 09/03/98

Appendix IV. Sorbent Tube Sampling

- VP006-003-1381
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
 style="text-align: right;">Tube Number 1381
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 112 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure.
 style="text-align: right;">System Pressure 132 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
 style="text-align: right;">
 Ambient Temperature 46 °F
 Time (PST) (PDT) 1325 (AM) (PM)
 Sample Number 003
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

Volume 0.20 LInitial LAP

HANFORD ANALYTICAL LABORATORY OPERATIONS
 VAPOR SAMPLING USING THE NON-ELECTRICAL VAPOR SAMPLING SYSTEM (NEVS)
 LO-080-400

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 EFFECTIVE DATE 09/03/98

Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VS006-004-TS11
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TS11
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 133 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 231 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 46 °F
 Time (PST) (PDT) 1329 (AM) (PM)
 Sample Number 004
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

0.99 LInitial LAP

HANFORD ANALYTICAL LABORATORY OPERATIONS
VAPOR SAMPLING USING THE NON-ELECTRICAL VAPOR SAMPLING SYSTEM (NEVS)
LO-080-400

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Appendix IV. Sorbent Tube Sampling

- VP006-005-1298
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
Tube Number 1298
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
System Pressure 231 mmHg
 - ✓ 5. OPEN sample port riser valves, (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves, (if applicable)
 - ✓ 10. Record the vacuum pressure.
System Pressure 427 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
Ambient Temperature 46 °F
Time (PST) (PDT) 1320 (AM) (PM)
Sample Number 005
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: Volume 1.98 L

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VS006-006-TR17
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TR17
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 171 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 367 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 47 of
 Time (PST) (PDT) 1334 (AM) (PM)
 Sample Number 006
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

1.98 Liters

Initial LJP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. U-006-008-14003
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 14003
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 206 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 302 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 47 °F of
 Time (PST) (PDT) 1347 (AM) (PM)
 Sample Number 008
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

0.97 LInitial LAP

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Appendix IV. Sorbent Tube Sampling

- UP006-011-1378
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1378
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 302 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 320 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 46 °F
Time (PST) (PDT) 1352 (AM) (PM)
Sample Number 011
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.18 liters

Initial LA

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V5006-012-T514
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number T514
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 320 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 417 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 46 °F
Time (PST) (PDT) 1400 (AM) (PM)
Sample Number 012
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.98 L, 1.25

Initial CD

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Appendix IV. Sorbent Tube Sampling

- VP006 - 013 - 1298
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
 Tube Number 1298
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
 System Pressure 417 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure.
 System Pressure 615 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
 Ambient Temperature 46 °F
 Time (PST) (PDT) 1402 (AM) (PM)
 Sample Number 013
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

2.00 litersInitial AP

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Appendix IV. Sorbent Tube Sampling

1. CLOSE all valves. *V5006-014-TR18*
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number *TR18*
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure *281* mmHg
5. OPEN sample port riser valves, (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves, (if applicable)
10. Record the vacuum pressure. System Pressure *476* mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature *46* °F
Time (PST) (PDT) *1408* (AM) (PM)
Sample Number *014*
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes:

1.97 Dekeg

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VS006-015-P001

Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VS006-P001
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number P001
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 141 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 610 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 46 °F
 Time (PST) (PDT) 1425 (AM) (PM)
 Sample Number 015
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

23.03 liters

Initial AP

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Appendix IV. Sorbent Tube Sampling

- V 5006-016-4008
- ✓ 1. CLOSE all valves. Tube Number 4008
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 104 mmHg
- ✓ 5. OPEN sample port riser valves, (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves, (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 201 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 44 °F
 Time (PST) (PDT) 1524 (AM) (PM)
 Sample Number 016
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

0.98 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

VP006-019-1390

- ✓ 1. CLOSE all valves.
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1390
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 201 mmHg
- ✓ 5. OPEN sample port riser valves, (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves, (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 220 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 44 °F
 Time (PST) (PDT) 1525 (AM) (PM)
 Sample Number 019
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

0.19 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- 020 AMP 11/10/98
V 5006 - 016 - TS16
- ✓ 1. CLOSE all valves.
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TS16
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 220 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 318 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 44 °F
Time (PST) (PDT) 1528 (AM) (PM)
Sample Number 020
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.99 literInitial LAP

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Appendix IV. Sorbent Tube Sampling

- 021
 VP006-81 - 1298
 LAP 11/17/98
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1298
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 318 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 514 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 44 °F
 Time (PST) (PDT) 15:28 (AM) (PM)
 Sample Number 021
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

1.98 lbsInitial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VS006-022-TR16
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TR16
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 188 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 383 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes. 43 11/17/98
- Ambient Temperature 44 °F
 Time (PST) (PDT) 1534 (AM) (PM)
 Sample Number 022
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 1.97 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V3006-023-P002
 ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number P002
 ✓ 3. OPEN valve 2
 ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 99 mmHg
 ✓ 5. OPEN sample port riser valves_A (if applicable)
 ✓ 6. OPEN valve 1.
 ✓ 7. Monitor pressure of the system.
 ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 ✓ 9. CLOSE sample port riser valves_A (if applicable)
 ✓ 10. Record the vacuum pressure. System Pressure 555 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 42 °F
Time (PST) (PDT) 1605 (AM) (PM)
Sample Number 023

- ✓ 12. Remove and plug the numbered sample line from port 1.
 ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 ✓ 15. CLOSE all valves.

Field Notes: 26.49 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- VP006-026-1327
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1327
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 163 mmHg
 - ✓ 5. OPEN sample port riser valves, (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves, (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 184 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 42 °F
Time (PST) (PDT) 1605 (AM) (PM)
Sample Number 026

- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

0.21 liters

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V5006-027-T507
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number T507
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 184 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 280 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 42 °F
Time (PST) (PDT) 1607 (AM) (PM)
Sample Number 027
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.97 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- VP006-028-1298
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1298
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 280 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 476 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- U 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 42 °F
 Time (PST) (PDT) 1613 (AM) (PM)
 Sample Number 028
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

1.98 LitersInitial LAR

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Appendix IV. Sorbent Tube Sampling

- V 3006-029-TR06
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
Tube Number TR06
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
System Pressure 228 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure.
System Pressure 435 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
Ambient Temperature 42 °F
Time (PST) (PDT) 1615 (AM) (PM)
Sample Number 029
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes: 2.09 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- U3006-030-P003
- ☒ 1. CLOSE all valves.
 - ☒ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number P003
 - ☒ 3. OPEN valve 2
 - ☒ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 138 mmHg
 - ☒ 5. OPEN sample port riser valves_A (if applicable)
 - ☒ 6. OPEN valve 1.
 - ☒ 7. Monitor pressure of the system.
 - ☒ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ☒ 9. CLOSE sample port riser valves_A (if applicable)
 - ☒ 10. Record the vacuum pressure. System Pressure 510 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ☒ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 41 °F
 Time (PST) (PDT) 1622 (AM) (PM)
 Sample Number 030
 - ☒ 12. Remove and plug the numbered sample line from port 1.
 - ☒ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ☒ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ☒ 15. CLOSE all valves.

Field Notes:

21.61 litersInitial AP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V5006-031-H002
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number H002
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 116 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 262 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 40 °F
 Time (PST) (PDT) 1637 (AM) (PM)
 Sample Number 031
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.97 liters

Initial LAF

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Appendix IV. Sorbent Tube Sampling

- VP006-035-1389
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
Tube Number 1389
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
System Pressure 262 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure.
System Pressure 282 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 40 °F
 Time (PST) (PDT) 1640 (AM) (PM)
 Sample Number 035
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes: 0.20 liters

Initial CMP

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Appendix IV. Sorbent Tube Sampling

- VS 006-036-TS10
- ☒ 1. CLOSE all valves.
 - ☒ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
Tube Number TS10
 - ☒ 3. OPEN valve 2
 - ☒ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
System Pressure 282 mmHg
 - ☒ 5. OPEN sample port riser valves_A (if applicable)
 - ☒ 6. OPEN valve 1.
 - ☒ 7. Monitor pressure of the system.
 - ☒ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ☒ 9. CLOSE sample port riser valves_A (if applicable)
 - ☒ 10. Record the vacuum pressure.
System Pressure 389 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ☒ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
Ambient Temperature 40 °F
Time (~~PST~~) (~~PDT~~) 1643 (AM) (PM)
Sample Number 036
 - ☒ 12. Remove and plug the numbered sample line from port 1.
 - ☒ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ☒ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ☒ 15. CLOSE all valves.

Field Notes:

1.08 litersInitial LAT

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Appendix IV. Sorbent Tube Sampling

- VP006-037-1298
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1298
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 240 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 406 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 40 °F
Time (PST) (PDT) 1647 (AM) (PM)
Sample Number 037
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 1.98 liters

Initial CAF

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Appendix IV. Sorbent Tube Sampling

- VS006-038-TR05
1. CLOSE all valves.
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TR05
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 250 mmHg
5. OPEN sample port riser valves, (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves, (if applicable)
10. Record the vacuum pressure. System Pressure 447 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 39 °F
Time (PST) (PDT) 1650 (AM) (PM)
Sample Number 038
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes:

1.99 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VP006-043-1316
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1316
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 148 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 168 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 40 °F
Time (PST) (PDT) 7:04 (AM) (PM)
Sample Number 043
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.20 liters

Initial SAP

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Appendix IV. Sorbent Tube Sampling

- VS006-044-TS24
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TS24
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 168 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 312 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 38 °F
 Time (PST) (PDT) 1706 (AM) (PM)
 Sample Number 044
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes:

1.45 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. ✓ P006-045-1298
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1298
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 312 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 508 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II:

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 38 °F
 Time (PST) (PDT) 1710 (AM) (PM)
 Sample Number 045
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 1.98 liters

Initial LAF

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. ✓ 5006-046-TR15
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TR15
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 245 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 412 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
Ambient Temperature 37 °F
Time (PST) (PDT) 1712 (AM) (PM)
Sample Number 046
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

199 literInitial CAF

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Appendix IV. Sorbent Tube Sampling

- V 5006 - 047 - P004
1. CLOSE all valves.
 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
Tube Number P004
 3. OPEN valve 2
 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
System Pressure 104 mmHg
 5. OPEN sample port riser valves_A (if applicable)
 6. OPEN valve 1.
 7. Monitor pressure of the system.
 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 9. CLOSE sample port riser valves_A (if applicable)
 10. Record the vacuum pressure.
System Pressure 600 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
Ambient Temperature 35 °F
Time (PST) (PDT) 1720 (AM) (PM)
Sample Number 047
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes:

24.35 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- ☒ 1. CLOSE all valves. V5006-048-H006
 - ☒ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
Tube Number H006
 - ☒ 3. OPEN valve 2
 - ☒ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
System Pressure 168 mmHg
 - ☒ 5. OPEN sample port riser valves_A (if applicable)
 - ☒ 6. OPEN valve 1.
 - ☒ 7. Monitor pressure of the system.
 - ☒ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ☒ 9. CLOSE sample port riser valves_A (if applicable)
 - ☒ 10. Record the vacuum pressure.
System Pressure 266 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ☒ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 35 °F
 Time (PST) (PDT) 1738 (AM) (PM)
 Sample Number 048
 - ☒ 12. Remove and plug the numbered sample line from port 1.
 - ☒ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ☒ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ☒ 15. CLOSE all valves.

Field Notes: 0.99 litersInitial LAI

HANFORD ANALYTICAL LABORATORY OPERATIONS
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Appendix IV. Sorbent Tube Sampling

- VP 006 - 052 - 1396
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1396
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 266 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 286 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 35 °F
Time (PST) (PDT) 1741 (AM) (PM)
Sample Number 052
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes:

0.20 litersInitial AP

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Appendix IV. Sorbent Tube Sampling

1. CLOSE all valves. VS006-053-TS02
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TS02
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 286 mmHg
5. OPEN sample port riser valves, (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves, (if applicable)
10. Record the vacuum pressure. System Pressure 383 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 35 °F
 Time (PST) (PDT) 1743 (AM) (PM)
 Sample Number 053
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes:

0.98 litersInitial LA

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Appendix IV. Sorbent Tube Sampling

1. CLOSE all valves. VP006-054-1298
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1298
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 209 mmHg
5. OPEN sample port riser valves_A (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves_A (if applicable)
10. Record the vacuum pressure. System Pressure 404 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 35 oF
 Time (PST) (PDT) 1747 (AM) (PM)
 Sample Number 054
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes:

1.97 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- V5006-055-TR12
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TR12
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 246 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 442 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 35 °F
 Time (PST) (PDT) 1750 (AM) (PM)
 Sample Number 055

- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 1.98 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- ↓ P006-060-1398
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1398
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 126 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 146 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 35 °F
 Time (PST) (PDT) 1808 (AM) (PM)
 Sample Number 060
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.20 liters

Initial CAF

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V5006-061-T515
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number T515
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 147 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 246 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 35 °F
 Time (PST) (PDT) 1809 (AM) (PM)
 Sample Number 061
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes:

1.00 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- VP006-062-1298
- ☒ 1. CLOSE all valves.
 - ☒ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1298
 - ☒ 3. OPEN valve 2
 - ☒ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 246 mmHg
 - ☒ 5. OPEN sample port riser valves, (if applicable)
 - ☒ 6. OPEN valve 1.
 - ☒ 7. Monitor pressure of the system.
 - ☒ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ☒ 9. CLOSE sample port riser valves, (if applicable)
 - ☒ 10. Record the vacuum pressure. System Pressure 444 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ☒ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 35 °F
 Time (PST) (PDT) 1811 (AM) (PM)
 Sample Number 062
- ☒ 12. Remove and plug the numbered sample line from port 1.
- ☒ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ☒ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ☒ 15. CLOSE all valves.

Field Notes:

2.00 litersInitial LM

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Appendix IV. Sorbent Tube Sampling

- 15000-063-TR19
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
Tube Number TR19
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
System Pressure 191 mmHg
 - ✓ 5. OPEN sample port riser valves, (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves, (if applicable)
 - ✓ 10. Record the vacuum pressure.
System Pressure 389 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 35 °F
 Time (PST) (PDT) 1515 (AM) (PM)
 Sample Number 063
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes:

2.00 litersInitial CAF

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Appendix IV. Sorbent Tube Sampling

- V5006-064-P005
- ☒ 1. CLOSE all valves.
 - ☒ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
Tube Number P005
 - ☒ 3. OPEN valve 2
 - ☒ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
System Pressure 111 mmHg
 - ☒ 5. OPEN sample port riser valves_A (if applicable)
 - ☒ 6. OPEN valve 1.
 - ☒ 7. Monitor pressure of the system.
 - ☒ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ☒ 9. CLOSE sample port riser valves_A (if applicable)
 - ☒ 10. Record the vacuum pressure.
System Pressure 527 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ☒ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 35 °F
Time (PST) (PDT) 1822 (AM) (PM)
Sample Number 064

- ☒ 12. Remove and plug the numbered sample line from port 1.
- ☒ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ☒ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ☒ 15. CLOSE all valves.

Field Notes: 24.17 liters

Initial CAF

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V5006-065-14007
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 14007
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 99 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 195 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 35 °F
 Time (PST) (PDT) 1840 (AM) (PM)
 Sample Number 065
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.97 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- VP006-069-1347
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1347
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 195 mmHg
 - ✓ 5. OPEN sample port riser valves, (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves, (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 213 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature: 35 °F
Time (PST) (PDT) 1843 (AM) (PM)
Sample Number 069

- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.18 liters

Initial CAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VS006-070-TS13
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TS13
12/08
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 213 mmHg
- ✓ 5. OPEN sample port riser valves, (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves, (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 290 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 35 °F
 Time (PST) (PDT) 1845 (AM) (PM)
 Sample Number 070
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.78 Liters

Initial CAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VP006-071-129 ✓
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 129 ✓
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 213 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 410 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 35 °F
 Time (PST) (PDT) 1852 (AM) (PM)
 Sample Number 071
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

1.96⁹ liters
 LMP
 12/17/98

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. *Handwritten: 15006-072-TR-11*
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. *Handwritten: Tube Number TR-11*
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. *Handwritten: System Pressure 253 mmHg*
 - ✓ 5. OPEN sample port riser valves, (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves, (if applicable)
 - ✓ 10. Record the vacuum pressure. *Handwritten: System Pressure 449 mmHg*
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes. *Handwritten: Ambient Temperature 35 oF
 Time (PST) (PDT) 1900 (AM) (PM)
 Sample Number 072*
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes: 1.98 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VP006 - 076 - 1395
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1295
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 124 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 145 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 35 oF
 Time (PST) (PDT) 1906 (AM) (PM)
 Sample Number 026
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes:

0.21 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V9006-077-TS12
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TS12
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 145 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 243 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 35 °F
 Time (PST) (PDT) 1908 (AM) (PM)
 Sample Number 077
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes: 0.99 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VP006 - 078 - 1298
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
 Tube Number 1298
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
 System Pressure 243 mmHg
 - ✓ 5. OPEN sample port riser valves, (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves, (if applicable)
 - ✓ 10. Record the vacuum pressure.
 System Pressure 437 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
 Ambient Temperature 35 °F
 Time (PST) (PDT) 1911 (AM) (PM)
 Sample Number 078
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes: 1.96 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. US006-079-TR14
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TR14
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 192 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 385 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 35 °F
 Time (PST) (PDT) 1915 (AM) (PM)
 Sample Number 079
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

1.95 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

1. CLOSE all valves. *V5006-080-P006*
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number *P006*
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure *113* mmHg
5. OPEN sample port riser valves, (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves, (if applicable)
10. Record the vacuum pressure. System Pressure *606* mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature *34* °F
Time (PST) (PDT) *1934* (AM) (PM)
Sample Number *080*
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes:

*24.21 liters*Initial *LAF*

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Appendix IV. Sorbent Tube Sampling

- VS006 - 081 - H009
- ☒ 1. CLOSE all valves.
 - ☒ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number H009
 - ☒ 3. OPEN valve 2
 - ☒ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 183 mmHg
 - ☒ 5. OPEN sample port riser valves_A (if applicable)
 - ☒ 6. OPEN valve 1.
 - ☒ 7. Monitor pressure of the system.
 - ☒ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ☒ 9. CLOSE sample port riser valves_A (if applicable)
 - ☒ 10. Record the vacuum pressure. System Pressure 279 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ☒ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 33 °F
 Time (PST) (PDT) 1955 (AM) (PM)
 Sample Number 081
- ☒ 12. Remove and plug the numbered sample line from port 1.
- ☒ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ☒ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ☒ 15. CLOSE all valves.

Field Notes: 0.97 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- VP006-084-1394
- ☒ 1. CLOSE all valves.
 - ☒ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1394
 - ☒ 3. OPEN valve 2
 - ☒ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 279 mmHg
 - ☒ 5. OPEN sample port riser valves_A (if applicable)
 - ☒ 6. OPEN valve 1.
 - ☒ 7. Monitor pressure of the system.
 - ☒ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ☒ 9. CLOSE sample port riser valves_A (if applicable)
 - ☒ 10. Record the vacuum pressure. System Pressure 301 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ☒ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 33 °F
 Time (PST) (PDT) 1957 (AM) (PM)
 Sample Number 084
 - ☒ 12. Remove and plug the numbered sample line from port 1.
 - ☒ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ☒ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ☒ 15. CLOSE all valves.

Field Notes: 0.22 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- X 1. CLOSE all valves. 15006-085-T528
- X 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number T528
- X 3. OPEN valve 2
- X 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 309 mmHg
- X 5. OPEN sample port riser valves_A (if applicable)
- X 6. OPEN valve 1.
- X 7. Monitor pressure of the system.
- X 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- X 9. CLOSE sample port riser valves_A (if applicable)
- X 10. Record the vacuum pressure. System Pressure 344 mmHg
299 ¹⁴⁻¹⁷

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- X 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 83 °F
Time (PST) (PDT) 1952 (AM) (PM)
Sample Number 085
- X 12. Remove and plug the numbered sample line from port 1.
- X 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- X 14. CLOSE valve 2 upon completion of sorbent sampling.
- X 15. CLOSE all valves.

Field Notes: 0.91 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. *VP006-086-1298*
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number *1298*
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure *227* mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure *422* mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature *32* °F
 Time (PST) (PDT) *2003* (AM) (PM)
 Sample Number *086*

- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: *1.97 liters*

Initial *LAP*

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Appendix IV. Sorbent Tube Sampling

1. CLOSE all valves. VS006-087-TR13
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TR13
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 261 mmHg
5. OPEN sample port riser valves_A (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves_A (if applicable)
10. Record the vacuum pressure. System Pressure 457 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 32 °F
Time (PST) (PDT) 2006 (AM) (PM)
Sample Number 087
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes:

1.98 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VP006 - 041 - 1330
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1330
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 128 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 150 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 32 °F
 Time (PST) (PDT) 2019 (AM) (PM)
 Sample Number 091
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

0.22 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V6006-092-T525
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
 Tube Number T525
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
 System Pressure 150 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure.
 System Pressure 248 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
 Ambient Temperature 32 °F
 Time (PST) (PDT) 2020 (AM) (PM)
 Sample Number 092
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes: 0.99 liters

Initial CAP

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Appendix IV. Sorbent Tube Sampling

- VP 006-093-1298
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1298
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 248 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 442 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 32 °F
 Time (PST) (PDT) 2023 (AM) (PM)
 Sample Number 093
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves

Field Notes:

1.97 ⁶liters

Initial LAP

1.76

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Appendix IV. Sorbent Tube Sampling

1. CLOSE all valves. US006-094-TR08
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TR08
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 192 mmHg
5. OPEN sample port riser valves_A (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves_A (if applicable)
10. Record the vacuum pressure. System Pressure 388 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 32 °F
 Time (PST) (PDT) 2019 (AM) (PM)
 Sample Number 094
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes: 1.98 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

1. CLOSE all valves. V5006-095-P007
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number P007
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 114 mmHg
5. OPEN sample port riser valves, (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves, (if applicable).
10. Record the vacuum pressure. System Pressure 515 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 32 oF
Time (FST) (PDT) 2033 (AM) (PM)
Sample Number 095
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes: 23.3 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- V5006-096-H004
- ☒ 1. CLOSE all valves.
 - ☒ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number H004
 - ☒ 3. OPEN valve 2
 - ☒ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 190 mmHg
 - ☒ 5. OPEN sample port riser valves_A (if applicable)
 - ☒ 6. OPEN valve 1.
 - ☒ 7. Monitor pressure of the system.
 - ☒ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ☒ 9. CLOSE sample port riser valves_A (if applicable)
 - ☒ 10. Record the vacuum pressure. System Pressure 294 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ☒ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 31 °F
 Time (PST) (PDT) 2055 (AM) (PM)
 Sample Number 046
- ☒ 12. Remove and plug the numbered sample line from port 1.
- ☒ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ☒ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ☒ 15. CLOSE all valves.

Field Notes: 1.05 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- ☒ 1. CLOSE all valves. VP006-099-1115
- ☒ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1115
- ☒ 3. OPEN valve 2
- ☒ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 296 mmHg
- ☒ 5. OPEN sample port riser valves_A (if applicable)
- ☒ 6. OPEN valve 1.
- ☒ 7. Monitor pressure of the system.
- ☒ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ☒ 9. CLOSE sample port riser valves_A (if applicable)
- ☒ 10. Record the vacuum pressure. System Pressure 316 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ☒ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 31 °F
Time (PST) (PDT) 2057 (AM) (PM)
Sample Number 099

- ☒ 12. Remove and plug the numbered sample line from port 1.
- ☒ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ☒ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ☒ 15. CLOSE all valves.

Field Notes: 0.20 liters

Initial AP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V5006-100-T550
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number T550
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 317 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 414 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 31 °F
 Time (PST) (PDT) 2100 (AM) (PM)
 Sample Number 100
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.98 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- VP006-101-1298
- ✓ 1. CLOSE all valves.
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1298
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 237 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 432 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 31 °F
Time (PST) (PDT) 2104 (AM) (PM)
Sample Number 101
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

1.97 litersInitial LM

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V5006-102-TR 03
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
Tube Number 71203
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
System Pressure 276 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure.
System Pressure 472 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 31 °F
 Time (PST)(PDT) 2108 (AM) (PM)
 Sample Number 102
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes:

1.98 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. JP006-106-1314
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet.
 Tube Number 1314
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II.
 System Pressure 179 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure.
 System Pressure 199 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
 Ambient Temperature 31 °F
 Time (PST) (PDT) 2:24 (AM) (PM)
 Sample Number 106
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes: 0.20 liters

Initial AP

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Appendix IV. Sorbent Tube Sampling

1. CLOSE all valves. V5006-107-T513
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 7543
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 197 mmHg
5. OPEN sample port riser valves_A (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves_A (if applicable)
10. Record the vacuum pressure. System Pressure 298 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 31 °F
Time (PST) (PDT) 2122 (AM) (PM)
Sample Number 107
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes:

1.00 litersInitial CHP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. VP006-108-1298
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1298
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 298 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 492 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

2125
 Ambient Temperature 31 °F
 Time (PST) (PDT) 4:55 (AM) (PM)
 Sample Number 108
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes:

1.76 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

1. CLOSE all valves. V5006-109-TR10
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number TR10
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 240 mmHg
5. OPEN sample port riser valves_A (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves_A (if applicable)
10. Record the vacuum pressure. System Pressure 436 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 31 °F
Time (PST) (PDT) 2130 (AM) (PM)
Sample Number 109

12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes: 1.98 liters

Initial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. ✓ 4006 - 110 - P008
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number P008
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 142 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 610 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 21 °F
 Time (PST) (PDT) 2137 (AM) (PM)
 Sample Number 110
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

22.98 litersInitial LAP

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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. ✓ 3006 - 111 - H005
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number H005
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 203 mmHg
- ✓ 5. OPEN sample port riser valves, (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves, (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 300 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 31 °F
 Time (PST) (PDT) 2157 (AM) (PM)
 Sample Number 111

- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

0.98 litersInitial WAP

HANFORD ANALYTICAL LABORATORY OPERATIONS
 VAPOR SAMPLING USING THE NON-ELECTRICAL VAPOR SAMPLING SYSTEM (NEVS)
 LO-080-400

REV/CHANGE NO. A-0 Printed: October 21, 1998 4:38pm PAGE 15 of 16
 EFFECTIVE DATE 09/03/98

Appendix IV. Sorbent Tube Sampling

1. CLOSE all valves. *VS 006-114-1308*
2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. *unlabeled*
 Tube Number 1308
3. OPEN valve 2
4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. *unlabeled*
 System Pressure 300 mmHg
5. OPEN sample port riser valves_A (if applicable)
6. OPEN valve 1.
7. Monitor pressure of the system.
8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
9. CLOSE sample port riser valves_A (if applicable)
10. Record the vacuum pressure.
 System Pressure 320 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
 Ambient Temperature 32 °F
 Time (PST) (PDT) 2:59 (AM) (PM)
 Sample Number 114
12. Remove and plug the numbered sample line from port 1.
13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
14. CLOSE valve 2 upon completion of sorbent sampling.
15. CLOSE all valves.

Field Notes: 0.20 liters

Initial CAF

HANFORD ANALYTICAL LABORATORY OPERATIONS
VAPOR SAMPLING USING THE NON-ELECTRICAL VAPOR SAMPLING SYSTEM (NEVS)
LO-080-400

REV/CHANGE NO. A-0 Printed: October 21, 1998 4:38pm PAGE 15 of 16
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Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V5006-115-7530
 - ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 7530
 - ✓ 3. OPEN valve 2
 - ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 320 mmHg
 - ✓ 5. OPEN sample port riser valves_A (if applicable)
 - ✓ 6. OPEN valve 1.
 - ✓ 7. Monitor pressure of the system.
 - ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
 - ✓ 9. CLOSE sample port riser valves_A (if applicable)
 - ✓ 10. Record the vacuum pressure. System Pressure 414 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.

Ambient Temperature 32 °F
 Time (PST) (PDT) 22:02 (AM) (PM)
 Sample Number 115
 - ✓ 12. Remove and plug the numbered sample line from port 1.
 - ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
 - ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
 - ✓ 15. CLOSE all valves.

Field Notes: 0.95 liters

Initial LAP

HANFORD ANALYTICAL LABORATORY OPERATIONS
 VAPOR SAMPLING USING THE NON-ELECTRICAL VAPOR SAMPLING SYSTEM (NEVS)
 LO-080-400

REV/CHANGE NO. A-0 Printed: October 21, 1998 4:38pm PAGE 15 of 16
 EFFECTIVE DATE 09/03/98

Appendix IV. Sorbent Tube Sampling

- P
 VS006-116-1298
- ☒ 1. CLOSE all valves.
- ☒ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number 1298
- ☒ 3. OPEN valve 2
- ☒ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 246 mmHg
- ☒ 5. OPEN sample port riser valves_A (if applicable)
- ☒ 6. OPEN valve 1.
- ☒ 7. Monitor pressure of the system.
- ☒ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ☒ 9. CLOSE sample port riser valves_A (if applicable)
- ☒ 10. Record the vacuum pressure. System Pressure 441 mmHg

NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.

- ☒ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 32 °F
 Time (PST) (PDT) 2204 (AM) (PM)
 Sample Number 116
- ☒ 12. Remove and plug the numbered sample line from port 1.
- ☒ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ☒ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ☒ 15. CLOSE all valves.

Field Notes: 1.97 liters

Initial LAP

HANFORD ANALYTICAL LABORATORY OPERATIONS
VAPOR SAMPLING USING THE NON-ELECTRICAL VAPOR SAMPLING SYSTEM (NEVS)
LO-080-400

REV/CHANGE NO. A-0 Printed: October 21, 1998 4:38pm PAGE 15 of 16
EFFECTIVE DATE 09/03/98

Appendix IV. Sorbent Tube Sampling

- ✓ 1. CLOSE all valves. V5006-117 - T207
- ✓ 2. Connect one of the numbered sample lines to port 1 and enter that information on the data sheet. Tube Number T207
- ✓ 3. OPEN valve 2
- ✓ 4. Record the system pressure. If system pressure equals or is greater than 400 mmHg (abs) charge NEVS, Appendix II. System Pressure 286 mmHg
- ✓ 5. OPEN sample port riser valves_A (if applicable)
- ✓ 6. OPEN valve 1.
- ✓ 7. Monitor pressure of the system.
- ✓ 8. CLOSE valve 1 when the pressure reaches a value specified by the SAP.
- ✓ 9. CLOSE sample port riser valves_A (if applicable)
- ✓ 10. Record the vacuum pressure. System Pressure 48 mmHg
- NOTE: If system pressure equals or is greater than 500 mmHg (abs) charge NEVS, Appendix II.
- ✓ 11. Record ambient air temperature, sample time, and sample number on the sample check sheet. Record any anomalies in field notes.
- Ambient Temperature 32 °F
Time (PST) (PDT) 2208 (AM) (PM)
Sample Number 117
- ✓ 12. Remove and plug the numbered sample line from port 1.
- ✓ 13. Repeat procedure from Appendix III, step 2, until sorbent sampling is completed.
- ✓ 14. CLOSE valve 2 upon completion of sorbent sampling.
- ✓ 15. CLOSE all valves.

Field Notes:

1.97 litersInitial LAP

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=====WORK DOCUMENT (W110)=====

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1. Document Number ES-98-00412/O OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 241-C-106 VAPOR SAMPLE

3. Components

Component Number	Name	
241-C-106	HIGH HEAT	FACILITY GROUP 3
Temporary Number	Name	

4. System 03 SAMPLING

5. Location

Facility ES	EAST SAMPLING/SALTWELLS	
Bldg/Rm 241-C	Other C-106	Other

6. Symptom, Problem, or Condition

PERFORM SUMMA AND VAPOR SAMPLES ON C-106 EXHAUST DUCT LOCATED ON
 TANK C-106. PITOT ASSEMBLY WILL BE USED.

7. Originator Name GREEN, DJ

Date
12/02/98

Telephone No. 373-5529 MSIN S7-04

8. Charge Code 101983

9. Priority 3

10. Phase Designator 6-4 VAPOR TYPE 4

11. Cognizant Engineer

WANNER, DD

Phone
373-3297

12. Planning Required Y

13. Screener/Ops Review

Signature
X LEE, JSDate
12/03/98

14. Resolution By

Signature
X GREEN, DJDate
12/03/98

15. Approvals

Code	Description	Signature	Date
CE	COGNIZANT ENGINEER	X WANNER, DD	12/15/98
CM	COGNIZANT MANAGER	X BROWN, RG	12/15/98
RADCON	RADCON	X FOUST, DJ	12/15/98
S	SAFETY	X JACKSON, CD	12/15/98
Q	QUALITY ASSURANCE	X MCELROY, ML	12/15/98
PIC	PERSON IN CHARGE	X SUMSION, ML	12/15/98
PLN/SCH	PLANNER/SCHEDULER	X GREEN, DJ	12/15/98

16. Resources Required

Res Code	Description	No.	Act Hrs
04	CERTIFIED OPERATOR	4	

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1. Document Number: ES-98-00412/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title: 241-C-106 VAPOR SAMPLE

54	HEALTH PHYSICS TECHNICIAN	2	_____
96	INDUSTRIAL HYGIENE TECHNICIAN	2	_____
24	PIPEFITTER	1	_____
PIC	PERSON IN CHARGE	2	_____

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1. Document Number ES-98-00412/0 OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 241-C-106 VAPOR SAMPLE

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17. Pre-Work Review Signature [Signature] Date 12/14/98
 18. Tagout Number _____

19. Work Release P Type Signature SEE PARTIAL RELEASE SHEET Date _____
 20. Work Suspension (See Work Suspension Sheet)
 PIC _____

21. PIC SUMSION, ML PIC Org. 75150

Resolution/Retest

1.0 SCOPE

- 1.1 Obtain vapor grab samples from High Heat waste tank 241-C-106.
 1.2 241-C-106 is listed as a Facility Group 3 tank per TWRS Technical Safety Requirements, table 5.9-1.

2.0 DESCRIPTION:

- 2.1 Obtain vapor grab samples from tank 241-C-106 exhaust stack. These samples will be used to address vapor issues related to the sluicing of tank 241-C-106.
 2.2 Sampling will be performed at PIC and IH&S direction.
 2.3 Sampling will be performed numerous times during sluicing operations.

3.0 REFERENCES:

- 3.1 HNF-SD-WM-BIO-001 TWRS Basis for Interim Operations
 3.2 HNF-SD-WM-TSR-006 TWRS Technical Safety Requirements
 3.3 HNF-SD-WM-HSP-002 Tank Farm Health and Safety Plan
 3.4 HNF-IP-1266 Tank Farms Operations Administrative Controls
 3.5 TO-100-052 Perform Waste Generation, Segregation, and Accumulation

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1. Document Number ES-98-00412/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-C-106 VAPOR SAMPLE
- =====

4.0 PERMITS, SPECIAL PROCEDURES, AND OTHER SUPPORTING DOCUMENTS:

- 4.1 RWP CS-102
- 4.2 Pre-Job Safety Meeting Checklist
- 4.3 Dome Loading Assessment
- 4.4 Waste Planning Checklist
- 4.5 Job Hazard Analysis
- 4.6 Chain Of Custody Forms
- 4.7 HNF-3732 Waste Retrieval Sluicing System Vapor Sampling and Analysis Plan

5.0 MATERIALS AND EQUIPMENT:

- 5.1 Craft paper
- 5.2 Plastic drapes (tarps)
- 5.3 Tape (white and duct)
- 5.4 Caution tape
- 5.5 Decon water
- 5.6 Waste bags and inventory sheets
- 5.7 Dry rags
- 5.8 Rubber matting
- 5.9 Tool cart (Tank Farm style)

6.0 PREREQUISITES:

- 6.1 A Pre-Job meeting SHALL be conducted, utilizing that JHA and/or Pre-Job Safety Meeting Checklist.
- 6.2 Sections or steps within sections of this work instruction may be performed out of sequence, as long as the integrity of the work scope remains the same and all ignition controls are applied.
- 6.3 A Waste Planning Checklist has been provided in accordance with HNF-IP-0842. PIC submit container request form to Generator services per POP T0-100-052, as necessary.
- 6.4 Respiratory protection and monitoring requirements shall be in accordance with the safe work practices contained in the HASP (WHC-SD-WM-HSP-002). Specific instructions SHALL be part of the Pre-job Safety Meeting.

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1. Document Number ES-98-00412/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-C-106 VAPOR SAMPLE

- 6.5 Non-sparking tools shall be used when required per HNF-SD-WM-BIO-001 and HNF-SD-WM-TSR-006.
- 6.6 Tank intrusive activities shall be stopped and the tank placed in a stabilized mode if lightning is determined to be within 50 miles of the job-site.
- 6.7 Vehicle access within the tank farm boundary shall:
 - 6.7.1 Be limited to vehicles whose fuel systems are protected from damage.
 - 6.7.2 Drivers shall take great caution to remain clear of above ground objects and shall observe maximum speed limits.
 - 6.7.3 Spotters in communications with the driver are required when driving over a tank dome.
- 6.8 A dome load evaluation has been completed and incorporated into this work package. The dome load evaluation includes all equipment/vehicles that are entering the tank farm to perform this work package.
- 6.9 PIC ensure that the procedures used to perform this task are the most current revision.
- 6.10 PIC check the Standing Order Log to ascertain whether there are orders that may impact this work. If there are any, contact the COG Engineer.
- 6.11 Planner verify that the SAP has been released for this work package:

SAP: HNF-3732

Planner Signature

12/15/98
Date

7.0 SPECIFIC WORK INSTRUCTIONS:

- 7.1 PIC VERIFY job being performed at correct tank.. with independent verification.

Tank: 241-C-106

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1. Document Number ES-98-00412/0 OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 241-C-106 VAPOR SAMPLE

PIC Sign: [Signature] Date: 12/16/98Verification by: BoB CampbellSign: [Signature] Date: 12/16/98

- 7.2 HPT perform dose rate survey of area over and around exhaust stack. RECORD results of Radiation Survey Report.

7.3 OBTAIN Summa sample

- 7.3.1 CONNECT a single ended port connector to the stack port.

- 7.3.2 CONNECT, in-series, two (2) particulate air filters to the quick disconnect installed on the sample line.

NOTE ATTACHMENT 1 (TAKEN FROM THE SAP) WILL INDICATE WHEN A SUMMA SAMPLE WILL BE PERFORMED AND THE SEQUENTIAL ORDER OF THE SAMPLES.

- 7.3.3 REMOVE the protective cap from the summa canister.

- 7.3.4 INSTALL sample port to Summa canister.

- 7.3.5 CONNECT the summa canister sampling line.

- 7.3.6 OPEN the isolation valve.

- 7.3.7 OPEN summa canister isolation valve.

- 7.3.8 RECORD date (first page only), TOC reading, Summa sample identification number, and sample start time on attachment 1 data sheet.

- 7.3.9 ALLOW summa canister to fill for five (5) minutes.

- 7.3.9.1 The five minute time frame is a deviation from the SAP. The SAP states one minute. However, upon consultation with Process Engineering (per the SAP), the

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1. Document Number ES-98-00412/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-C-106 VAPOR SAMPLE

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extension was derived to increase
the chance of full volume
integrity.

- 7.3.10 CLOSE summa canister isolation valve.
- 7.3.11 RECORD sample stop time on attachment 1 data sheet.
- 7.3.12 CLOSE isolation valve.
- 7.3.13 REMOVE summa canister from sample line extension.
- 7.3.14 Remove sample port.
- 7.3.15 REPLACE protective cap on summa canister.
- 7.3.16 RECORD any anomalies on the Work Record (J-5).
- 7.3.17 COMPLETE Chain-of-Custody (C-O-C) for summa sample.
- 7.3.18 REPEAT steps 7.3.3 through 7.3.17 as many times as required to obtain the prescribed set of samples (per Attachment 1).
- 7.3.18.1 PIC N/A all spaces on Attachment 1 pertaining to sampling not performed.

NOTE SAMPLES SHALL BE SHIPPED PER SECTION 2.2 OF SAP.

NOTE: KEEP THE TWO (2) IN-LINE FILTERS IDENTIFIED AND SEPARATED FROM EACH OTHER.

7.4 COLLECT in-line filters.

- 7.4.1 DISCONNECT in-line filter assembly from the Pitot tube assembly.
- 7.4.2 Package filter and housing for transport.

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1. Document Number ES-98-00412/O OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 241-C-106 VAPOR SAMPLE

7.4.3 HPT survey filter and housing for transport.

JOB COMPLETION:

- 7.5 PIC record on J-5 that the Job Site has been cleaned, decontaminated to pre-job status or better, and all waste has been properly disposed of.

- 7.6 Copies of C-O-C and shipment records for each sample placed in work package prior to archive.

Planner Sign _____ Date _____

- 7.7 PIC verify if any of the following trigger levels for Post-Job ALARA review are applicable to work performed in this package:

YES NO

____ Stop radiological work authority was exercised by any radiological worker during the performance of the work.

PIC Signature _____ Date _____

- 7.8 Radiological Control Organization verify if any of the following trigger levels for Post-Job ALARA review are applicable to work performed in this package:

YES NO

____ The job produces an actual collective dose of 5 person-rem or greater.

____ A reportable radiological occurrence in accordance with Occurrence Reporting and Processing of Operations Information (HNF-IP-0842 vol. II, sec. 4.6.2), occurred during the performance of the work.

____ Significant lessons learned are identified

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1. Document Number ES-98-00412/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-C-106 VAPOR SAMPLE

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during the informal radiological performance review.

_____ The actual dose for task outside the range of plus/minus 25% of pre-job estimate of greater than 1,000 person-mrem TEDE.

_____ An ALARA Committee pre-job ALARA review was required.

_____ Is a Post-Job ALARA Review required?

RadCon Signature _____

_____ Date

- 7.9 IF a formal Post-Job ALARA Review is NOT required, this work package has been reviewed by the TWRS ALARA Coordinator for trends and lessons learned.

TWRS ALARA Coordinator Signature _____

_____ Date

8 RESTORATION ACTIONS

- 8.1 Return all unused material to CPO Material Coordinator, at 2101HV. The returned material SHALL be accompanied by a copy of the BOM and the QC accept tag (green tag) or transfer tag, if available.

9 POST MAINTENANCE TESTING

- 9.1 N/A

10 OPERATIONAL FUNCTIONAL TEST

- 10.1 N/A

22. Reference Documents Type

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1. Document Number ES-98-00412/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-C-106 VAPOR SAMPLE

SEE RESOLUTION

	Signature	Date
23. Field Work Complete	_____	_____
24. Ops_Acceptance	_____	_____
25. Post Review	_____	_____

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C-006 Stack

J-5 CRAFT/RESOURCE USAGE LOG AND MAINTENANCE RECORD		1. Document Number			
		[E][S]-[9][8]-[0][0][4][1][2][1][0]			
Date	Turnover, Problem Description, Action Taken	Name	Craft/Resource Type	Hours	
12-16-98	Sample's 014, 017, and 018 will be taken 30 min after flow into Tank 241-C-104, is observed instead of 10 min per note #2 pg 19 of SAP. Direction was given by Tom Kelley ops manager on W 320 project. Documentation of change will be identified in the deliverable report by Tom Kelley per Section 2.2 of SAP HNF-3732 Rev 0. <i>Tom Kelley</i>				
12/16/98	Hold New Per job in 212 AW, A job specific pre-job was held at 2109H. Went to C-104 Set Air truck up and began sampling E-low stack per work instructions + SAP. Per the test director The sampling continued even though the pump was shut down due to the leak detector repeatedly being activated. The test director then requested that the final sample (4121-138) be taken at 09:34 pm. This was performed and the job site cleaned. The bottle truck + Foreman Truck was transported to the RBA near the middle change trailer. All waste was properly contained and disposed of in the LLW. <i>Atkins</i>	Fibers	HPT	3 = 48	4 =
Summary by Craft/Resource Type					
Craft/Resource Type	Total Hours	Craft/Resource Type	Total Hours		

BD-6000-351 (01/92)

**ATTACHMENT No. 1:
296-C-006 VENTILATION SYSTEM (EXHAUST STACK)
SUMMA VAPOR SAMPLING DATA SHEET**

WORK PACKAGE No. ES-98-00412

DATE: 12/16/98

SAMPLE DESCRIPTION	Sample ID No.	Time Start	Time Stop	TUC Reading (ppm)	Recorded by:
Breathing Area, Tank 241-C-106 - PHIL Baseline	VP006-001-C-248	13:17	13:22	.81	CHS
Breathing Area, Tank 241-C-106 - SAS Baseline	VS006-002-S-19	13:23	13:28	.81	CHS
STACK VAPOR - SUMMA SAMPLES:					
C-006 Ventilation System - PHIL Baseline (prior to pump startup)	VP006-009-143	13:38	13:43	.81	CHS
C-006 Ventilation System - SAS Baseline (prior to pump startup)	VS006-010-036	13:44	13:49	.81	CHS
C-006 Ventilation System - Operation of 241-A1-102 slurry submersible pump (PHIL)	VP006-017-1235	15:32	15:37	6.3/324 ^{PA}	CHS
C-006 Ventilation System - Operation of 241-A1-102 slurry submersible pump (SAS)	VS006-018-045	15:38	15:43	6.3/324 ^{FR}	CHS
Breathing Zone During Booster Pump Operation at t = 1 hr. - PHIL	VP006-024-2257	18:58	19:03	29.4	CHS
Breathing Zone During Booster Pump Operation at t = 1 hr. - SAS	VS006-025-S064	19:04	19:09	30.1	CHS
C-006 Ventilation System - Booster Pump Operation at t = 0.5 hr	VP006-032-C257	19:38	19:43	30	CHS
C-006 Ventilation System - Booster Pump Operation at t = 0.5 hr	VS006-033-S053	19:44	19:49	30	CHS
C-006 Ventilation System - Booster Pump Operation at t = 0.5 hr	VS006-034-S057	19:50	19:55	29	CHS

**ATTACHMENT No. 1:
296-C-006 VENTILATION SYSTEM (EXHAUST STACK)
SUMMA VAPOR SAMPLING DATA SHEET**

WORK PACKAGE No. ES-98-00412

DATE: 12/16/98

SAMPLE DESCRIPTION	Sample ID No.	Time Start	Time Stop	TOC Reading (ppm)	Recorded by:
C-006 Ventilation System - Booster Pump Operation @ t = 1.0 hr	VS006-000-C135	19:11	19:16	2.6	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 1.0 hr	VS006-001-S074	19:17	19:22	2.4	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 1.0 hr	VS006-002-S075	19:23	19:28	23/232FR	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 1.5 hr	VS006-009-C223	19:37	19:42	2.5.7	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 1.5 hr	VS006-000-S077	19:45	19:48	2.5.7	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 1.5 hr	VS006-001-S078	19:50	19:55	2.5.7	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 2.0 hr	VS006-007-C303	20:10	20:15	2.2.1	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 2.0 hr	VS006-008-S080	20:16	20:21	2.2.2	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 2.0 hr	VS006-009-S081	20:22	20:27	2.1.4	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 2.5 hr	VS006-006-C226	20:37	20:42	2.1.4	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 2.5 hr	VS006-007-S082	20:43	20:48	2.0.4	AM/LS
C-006 Ventilation System - Booster Pump Operation @ t = 2.5 hr	VS006-008-S091	20:49	20:54	2.2.4	AM/LS

ATTACHMENT No. 1:
296-C-006 VENTILATION SYSTEM (EXHAUST STACK)
SUMMA VAPOR SAMPLING DATA SHEET

WORK PACKAGE No. ES-98-00412 DATE: _____

SAMPLE DESCRIPTION	Sample ID No.	Time Start	Time Stop	TOC Reading (ppm)	Recorded by:
C-006 Ventilation System - Booster Pump Operation @ t = 3.0 hr	VP006-074-				
C-006 Ventilation System - Booster Pump Operation @ t = 3.0 hr	VS006-075-				
C-006 Ventilation System - Booster Pump Operation @ t = 3.5 hr	VP006-082-				
C-006 Ventilation System - Booster Pump Operation @ t = 3.5 hr	VS006-083-				
C-006 Ventilation System - Booster Pump Operation @ t = 4.0 hr	VP006-089-				
C-006 Ventilation System - Booster Pump Operation @ t = 4.0 hr	VS006-090-				
C-006 Ventilation System - Booster Pump Operation @ t = 4.5 hr	VP006-097-				
C-006 Ventilation System - Booster Pump Operation @ t = 4.5 hr	VS006-098-				
C-006 Ventilation System - Booster Pump Operation @ t = 5.0 hr	VP006-104-				
C-006 Ventilation System - Booster Pump Operation @ t = 5.0 hr	VS006-105-				

ATTACHMENT No. 1:
296-C-006 VENTILATION SYSTEM (EXHAUST STACK)
SUMMA VAPOR SAMPLING DATA SHEET

WORK PACKAGE No. ES-98-00412

DATE: 12/16/98

SAMPLE DESCRIPTION	Sample ID No.	Time Start	Time Stop	TOC Reading (ppm)	Recorded by:
C-006 Ventilation System - Booster Pump Operation at t = 5.5 hr	VS006-112-	21:37	21:43	26.7	
C-006 Ventilation System - Booster Pump Operation at t = 5.5 hr	VS006-113-		21:45	26.7	
C-006 Ventilation System - Booster Pump Operation at t = 6.0 hr	VS006-119-				
C-006 Ventilation System - Booster Pump Operation at t = 6.0 hr	VS006-120-				
C-006 Ventilation System - Booster Post Shut-down at t = 3 hr after Pump shut-down	VS006-127-0095	21:34	21:39	26.7	CHS
C-006 Ventilation System - Booster Post Shut-down at t = 3 hr after Pump shut-down	VS006-128-5096	21:40	21:45	25.4	CHS

Each sample identification number shall have the following format:

VLXXX-YYY-ZZZZ

where,

V indicates a vapor sample,

L a letter code identifying the laboratory that prepared the sample container/sample media

P = PNL

S = SWS

XXX a three-digit code identifying the sample location

006 = 296-C-006 stack

ATTACHMENT No. 1:
296-C-006 VENTILATION SYSTEM (EXHAUST STACK)
SUMMA VAPOR SAMPLING DATA SHEET

WORK PACKAGE No. ES-98-00412 DATE: _____

102 = tank 241-AY-102 SHMS

702 = 214-AZ-702 stack,

YYV a three-digit sample code found in HNF-3732,

ZZZZ a special lab-assigned code.

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1. Document Number ES-98-00413/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-AY-102 PERFORM SUMMA VAPOR SAMPLES

3. Components

Component Number
241-AY-102Name
FACILITY GROUP 2

Temporary Number

Name

4. System 03 SAMPLING

5. Location

Facility ES EAST SAMPLING/SALTWELLS

Bldg/Rm 241-AY

Other TANK AY102 Other

6. Symptom, Problem, or Condition

PERFORM SUMMA VAPOR SAMPLES ON AY-102. SAMPLES WILL BE TAKEN
FROM SHMS PROBE LOCATED IN RISER 15C.

7. Originator Name GREEN, DJ

Telephone No. 373-5529

MSIN S7-04

Date
12/02/98

8. Charge Code 101983

9. Priority

3

10. Phase Designator

6-4

VAPOR TYPE 4

11. Cognizant Engineer

WANNER, DD

Phone
373-3297

12. Planning Required Y

13. Screener/Ops Review

Signature
X LEE, JSDate
12/03/98

14. Resolution By

Signature
X GREEN, DJDate
12/03/98

15. Approvals

Code	Description
CE	COGNIZANT ENGINEER
CM	COGNIZANT MANAGER
RADCON	RADCON
S	SAFETY
Q	QUALITY ASSURANCE
PIC	PERSON IN CHARGE
PLN/SCH	PLANNER/SCHEDULER

Signature
X WANNER, DD
X BROWN, RG
X FOUST, DJ
X JACKSON, CD
X MCELROY, ML
X PRAZNIK, RJ
X GREEN, DJ

Date
12/15/98
12/15/98
12/15/98
12/15/98
12/15/98
12/15/98
12/15/98

16. Resources Required

Res Code	Description
04	CERTIFIED OPERATOR

No.	Act Hrs
2	32

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1. Document Number ES-98-00413/0 OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 241-AY-102 PERFORM SUMMA VAPOR SAMPLES

54	HEALTH PHYSICS TECHNICIAN	1	2	16
96	INDUSTRIAL HYGIENE TECHNICIAN	1		16
24	PIPEFITTER	1		24
PIC	PERSON IN CHARGE	1		25

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1. Document Number ES-98-00413/O OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-AY-102 PERFORM SUMMA VAPOR SAMPLES

17. Pre-Work Review Signature _____ Date 12/15/98
 18. Tagout Number _____

19. Work Release F Type Signature _____ Date 12/15/98

20. Work Suspension (See Work Suspension Sheet)
 PIC _____

21. PIC PRAZNIK, RJ PIC Org. 75150

Resolution/Retest

1.0 SCOPE

- 1.1 Obtain vapor grab samples from waste tank 241-AY-102.
- 1.2 241-AY-102 is listed as a Facility Group 2 tank per TWRS Technical Safety Requirements, table 5.9-1.

2.0 DESCRIPTION:

- 2.1 Obtain vapor grab samples from the SHMS port on tank 241-AY-102. These samples will be used to address vapor issues related to the sluicing of tank 241-C-106.
- 2.2 Characterization Project Operations (CPO) will be responsible for the collection of ALL Summa canister samples and for the collection of tritium trap and particulate filter samples at 241-AY-102 SHMS and 702-AZ stack.
- 2.3 Sampling will be performed at PIC and IH&S direction.

3.0 REFERENCES:

- 3.1 HNF-SD-WM-BIO-001 TWRS Basis for Interim Operations
- 3.2 HNF-SD-WM-TSR-006 TWRS Technical Safety Requirements
- 3.3 HNF-SD-WM-HSP-002 Tank Farm Health and Safety Plan
- 3.4 HNF-IP-1266 Tank Farms Operations Administrative Controls

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1. Document Number ES-98-00413/O OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-AY-102 PERFORM SUMMA VAPOR SAMPLES

3.5 TO-100-052 Perform Waste Generation,
Segregation, and Accumulation

4.0 PERMITS, SPECIAL PROCEDURES, AND OTHER SUPPORTING
DOCUMENTS:

- 4.1 RWP CS-102
- 4.2 Pre-Job Safety Meeting Checklist
- 4.3 Dome Loading Assessment
- 4.4 Waste Planning Checklist
- 4.5 Job Hazard Analysis
- 4.6 Chain Of Custody Forms
- 4.7 HNF-3732 Waste Retrieval Sluicing System Vapor
Sampling and Analysis Plan

5.0 MATERIALS AND EQUIPMENT:

- 5.1 Craft paper
- 5.2 Plastic drapes (tarps)
- 5.3 Tape (white and duct)
- 5.4 Caution tape
- 5.5 Decon water
- 5.6 Waste bags and inventory sheets
- 5.7 Dry rags
- 5.8 Rubber matting
- 5.9 Tool cart (Tank Farm style)

6.0 PREREQUISITES:

- 6.1 A Pre-Job meeting SHALL be conducted, utilizing that JHA and/or Pre-Job Safety Meeting Checklist.
- 6.2 Sections or steps within sections of this work instruction may be performed out of sequence, as long as the integrity of the work scope remains the same and all ignition controls are applied.
- 6.3 A Waste Planning Checklist has been provided in accordance with HNF-IP-0842. PIC submit container request form to Generator services per POP TO-100-052, as necessary.
- 6.4 Respiratory protection and monitoring requirements shall be in accordance with the safe work practices contained in the HASP (WHC-SD-WM-HSP-002).

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1. Document Number ES-98-00413/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-AY-102 PERFORM SUMMA VAPOR SAMPLES

Specific instructions SHALL be part of the Pre-job Safety Meeting.

- 6.5 Non-sparking tools shall be used when required per HNF-SD-WM-BIO-001 and HNF-SD-WM-TSR-006.
- 6.6 Ensure active ventilation system is operational. IF NOT operational, contact Tank Farms Operations Manager.
- 6.7 Measuring the tank dome space gas/vapor is required. The measurements may be obtained using a hand-held CGM.
- 6.8 Tank intrusive activities shall be stopped and the tank placed in a stabilized mode if lightning is determined to be within 50 miles of the job-site.
- 6.9 PIC ensure that the procedures used to perform this task are the most current revision.
- 6.10 PIC check the Standing Order Log to ascertain whether there are orders that may impact this work. IF there are any, contact the COG. Engineer.
- 6.11 Planner verify that the SAP has been released for this work package:

SAP: HNF-3732

Don J. Harris
Planner Signature

12/15/98
Date

7.0 SPECIFIC WORK INSTRUCTIONS:

- 7.1 PIC VERIFY job being performed at correct tank and riser, with independent verification.

Tank: 241-AF-102 Riser 15C

PIC Sign: [Signature] Date: 12-16-98

Verification by: Dan Harris

Sign: Dan Harris Date: 12-16-98

NOTE: IH&S monitoring equipment MUST meet Ignition Source

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1. Document Number ES-98-00413/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-AY-102 PERFORM SUMMA VAPOR SAMPLES

Control Set #2.

- 7.2 IH&S PERFORM gas vapor survey at the breather filter or within the ventilation system.

DRI Number: 98-1637

IH&S Sign: [Signature] Date: 12/16/98

- 7.2.1 If combustible gas concentration is greater than 25% of the LFL:

- A. STOP WORK
- B. IH&S to obtain grab sample for laboratory analysis.

- 7.3 HPT perform dose rate survey of work area (baseline). RECORD results on Radiation Survey Report.

- 7.4 OBTAIN Summa samples and tritium trap samples

- 7.4.1 CONNECT a single ended port connector to the SHMS port.

- 7.4.2 CONNECT, in-series, two (2) particulate air filters to the quick disconnect installed on the sample line.

- 7.4.3 ATTACH CGM/OVM meter pump (with meter OFF) to sampling apparatus on SHMS port. Open valve on sampling apparatus to allow CGM purge.

- 7.4.3.1 Purge the sample line for a minimum of five (5) minutes.

- 7.4.4 CLOSE valve on gas supply and disconnect the CGM/OVM from the C-flex.

NOTE ATTACHMENT 1 (TAKEN FROM SAP) WILL INDICATE WHETHER A SUMMA OR TRITIUM SAMPLE WILL BE PERFORMED AND THE SEQUENTIAL ORDER OF THE SAMPLES.

- 7.4.5 REMOVE the protective cap from the summa canister.

- 7.4.6 CONNECT the summa canister or summa/tritium trap sampling assembly.

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1. Document Number ES-98-00413/0 OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 241-AY-102 PERFORM SUMMA VAPOR SAMPLES
- =====

- 7.4.7 OPEN the isolation valve.
- 7.4.8 OPEN summa canister isolation valve.
- 7.4.9 RECORD date (first page only), TOC reading, Summa/Tritium Sample identification number, and sample start time on attachment 1 data sheet.
- 7.4.10 ALLOW summa canister to fill for five (5) minutes.
 - 7.4.10.1 The five minute time frame is a deviation from the SAP. The SAP states one minute. However, upon consultation with Process Engineering (per the SAP), the extension was derived to increase the chance of full volume integrity.
- 7.4.11 CLOSE summa canister isolation valve.
- 7.4.12 RECORD sample stop time on attachment 1 data sheet.
- 7.4.13 CLOSE isolation valve.
- 7.4.14 REMOVE summa canister or summa/tritium trap assembly from sample line extension.
- 7.4.15 REPLACE protective cap on summa canister.
- 7.4.16 RECORD any anomalies on the Work Record (J-5).

NOTE SAMPLES SHALL BE SHIPPED PER SECTION 2.2 OF SAP

- 7.4.17 COMPLETE Chain-of-Custody (C-O-C) for summa sample.

NOTE SAMPLE LINE WILL BE PURGED EVERY HOUR BEFORE THE TRITIUM SAMPLE AND TWO (2) SUMMA SAMPLES ARE TAKEN.

- 7.4.18 Upon completion of each set of two (2)

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1. Document Number ES-98-00413/O OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 241-AY-102 PERFORM SUMMA VAPOR SAMPLES

Summa samples and prior to performing the next tritium sample, purge sample line be repeating steps 7.4.3 and 7.4.4.

- 7.4.19 REPEAT sampling steps 7.4.5 through 7.4.18 as many times as required to obtain the prescribed set of samples (per attachment 1).

- 7.4.19.1 PIC N/A all spaces on attachment 1 pertaining to sampling not performed.

NOTE: KEEP THE TWO (2) IN-LINE FILTERS IDENTIFIED AND SEPARATED FROM EACH OTHER.

- 7.5 COLLECT in-line filters.

- 7.5.1 DISCONNECT in-line filter assembly from the Pitot tube assembly.
- 7.5.2 Package filter and housing for transport.
- 7.5.3 HPT survey and release filter and housing for transport.

JOB COMPLETION:

- 7.6 PIC record on J-5 that the Job Site has been cleaned, decontaminated to pre-job status or better, and all waste has been properly disposed of.
- 7.7 Copies of C-O-C and shipment records for each sample placed in work package prior to archive.

Planner Sign _____ Date _____

- 7.8 PIC verify if any of the following trigger levels for Post-Job ALARA review are applicable to work performed in this package:

YES NO

___ ☒ Stop radiological work authority was

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1. Document Number ES-98-00413/O OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 241-AY-102 PERFORM SUMMA VAPOR SAMPLES

exercised by any radiological worker during
 the performance of the work.

 J. L. L. L.

12-16-98
 Date

- 7.9 Radiological Control Organization verify if any of
 the following trigger levels for Post-Job ALARA
 review are applicable to work performed in this
 package:

YES NO

- ___ ___ The job produces an actual collective dose of
 5 person-rem or greater.
- ___ ___ The actual dose for task outside the range of
 plus/minus 25% of pre-job estimate of greater
 than 1,000 person-mrem TEDE.
- ___ ___ A reportable radiological occurrence in
 accordance with Occurrence Reporting and
 Processing of Operations Information (HNF-IP-
 0842 vol. II, sec. 4.6.2), occurred during
 the performance of the work.
- ___ ___ Significant lessons learned are identified
 during the informal radiological performance
 review.
- ___ ___ An ALARA Committee pre-job ALARA review was
 required.
- ___ ___ Is a Post-Job ALARA Review required?

RadCon Signature

Date

- 7.10 IF a formal Post-Job ALARA Review is NOT required,
 this work package has been reviewed by the TWRS
 ALARA Coordinator for trends and lessons learned.

TWRS ALARA Coordinator Signature

Date

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1. Document Number ES-98-00413/0 OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 241-AY-102 PERFORM SUMMA VAPOR SAMPLES

8 RESTORATION ACTIONS

- 8.1 Return all unused material to CPO Material Coordinator, at 2101HV. The returned material SHALL be accompanied by a copy of the BOM and the QC accept tag (green tag) or transfer tag, if available.

9 POST MAINTENANCE TESTING

- 9.1 N/A

10 OPERATIONAL FUNCTIONAL TEST

- 10.1 N/A

22. Reference Documents.
 SEE RESOLUTION

Type

23. Field Work Complete

Signature

Date

24. Ops_Acceptance

25. Post Review

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BD-6000-351 (01/92)

ATTACHMENT No. 1:
TANK 241-AV-102 SHMS PROBE
SUMMA/TRITIUM TRAP VAPOR SAMPLING DATA SHEET

WORK PACKAGE No. ES-98-00413

DATE: 12/16/98

SAMPLE DESCRIPTION	Sample ID No.	Time Start	Time Stop	TOC Reading (ppm)	Recorded by:
SUMMA/Tritium Trap Sampling Assembly - Baseline	VS102-001-014	1319 hr	1324 hr	Open	① 12/16/98
Tank 241-AV-102 SHMS Probe - PHIL Baseline	VS102-002-025D	1325 hr	1330 hr	Open	② 12/16/98
Tank 241-AV-102 SHMS Probe - SAS Baseline	VS102-003-021	1331 hr	1336 hr	Open	③ 12/16/98
SUMMA/Tritium Trap Sampling Assembly - During Booster Pump Operation @ t = 1 hr	VS102-004-025	1802 hr	1807 hr	3.9 ppm	④ 12/16/98
Tank 241-AV-102 SHMS Probe - Booster Pump Operation @ t = 1 hr	VS102-005-042	1808 hr	1813 hr	3.9 ppm	⑤ 12/16/98
Tank 241-AV-102 SHMS Probe - Booster Pump Operation @ t = 1 hr	VS102-006-022	1814 hr	1819 hr	3.9 ppm	⑥ 12/16/98
SUMMA/Tritium Trap Sampling Assembly - During Booster Pump Operation @ t = 2 hr	VS102-007-026	1902 hr	1907 hr	3.9 ppm	⑦ 12/16/98
Tank 241-AV-102 SHMS Probe - Booster Pump Operation @ t = 2 hr	VS102-008-134	1908 hr	1913 hr	3.9 ppm	⑧ 12/16/98
Tank 241-AV-102 SHMS Probe - Booster Pump Operation @ t = 2 hr	VS102-009-034	1914 hr	1919 hr	3.9 ppm	⑨ 12/16/98

ATTACHMENT No. 1:
TANK 241-AV-102 SHMS PROBE
SUMMA/TRITIUM TRAP VAPOR SAMPLING DATA SHEET

WORK PACKAGE No. ES-98-00413

DATE: 12-16-98

SAMPLE DESCRIPTION	Sample ID No.	Time Start	Time Stop	TOC Reading (ppm)	Recorded by:
SUMMA/Tritium Trap Sampling Assembly - Booster Pump Operation at t = 3 hr	VS102-010-023	2002	2007	6.3 ppm	12/16/98
Tank 241-AV-102 SHMS Probe - Booster Pump Operation at t = 3 hr	VP102-011-298	2008	2013	6.3 ppm	12/16/98
Tank 241-AV-102 SHMS Probe - Booster Pump Operation at t = 3 hr	VS102-012-041	2014	2019	6.3 ppm	12/16/98
SUMMA/Tritium Trap Sampling Assembly - Booster Pump Operation at t = 4 hr	VS102-015-030				11/21
Tank 241-AV-102 SHMS Probe - Booster Pump Operation at t = 4 hr	VP102-016-303				11/21
Tank 241-AV-102 SHMS Probe - Booster Pump Operation at t = 4 hr	VS102-015-044				11/21
SUMMA/Tritium Trap Sampling Assembly - Booster Pump Operation at t = 5 hr	VS102-016-031			12-17-98	11/21
Tank 241-AV-102 SHMS Probe - Booster Pump Operation at t = 5 hr	VP102-017-125				11/21
Tank 241-AV-102 SHMS Probe - Booster Pump Operation at t = 5 hr	VS102-018-046				

ATTACHMENT No. 1:
TANK 241-AV-102 SHMS PROBE
SUMMA/TRITIUM TRAP VAPOR SAMPLING DATA SHEET

WORK PACKAGE No. ES-98-00413

DATE: _____

SAMPLE DESCRIPTION	Sample ID No.	Time Start	Time Stop	TOC Reading (ppm)	Recorded by:
SUMMA/Tritium Trap Sampling Assembly - Booster Pump Operation at t = 6 hr.	VS102-019-029	12/1	12/1		
Tank 241-AV-102 SHMS Probe - Booster Pump Operation at t = 6 hr.	VP102-020-314				
Tank 241-AV-102 SHMS Probe - Booster Pump Operation at t = 6 hr.	VS102-021-050			12/12/98	

Each sample identification number shall have the following format:

VLXX-YY-ZZZ

where,

V indicates a vapor sample,

L indicates identifying the laboratory that prepared the sample container/sample media

a letter P = PAH,

S = SAS,

XXX a three-digit code identifying the sample location

100 = 241-AV-102 SHMS

102 = 241-AV-102 SHMS

702 = 214-AZ-702 stack,

YYY a three-digit sample code found in HNF-3732,

ZZZ a special lab-assigned code.

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1. Document Number ES-98-00415/0 OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 702-AZ-VENTILATION SYSTEM VAPOR SAMPLE

3. Components

Component Number	Name
------------------	------

Temporary Number 702-AZ	Name
----------------------------	------

4. System 03 SAMPLING

5. Location

Facility ES EAST SAMPLING/SALTWELLS	
Bldg/Rm E/W VENT	Other 702-AZ Other

6. Symptom, Problem, or Condition

PERFORM SUMMA VAPOR SAMPLE FROM VENTILATION SYSTEM IN 702-AZ.
 SUMMA SAMPLES AND TRITIUM SAMPLES WILL BE TAKEN.

7. Originator Name GREEN, DJ	Date 12/08/98
Telephone No. 373-5529	MSIN S7-04

8. Charge Code 101982

9. Priority

10. Phase Designator P1. 2 FIRST QUARTER(JAN 1 - MAR 31)

11. Cognizant Engineer WANNER, DD Phone 373-3297

12. Planning Required Y

13. Screener/Ops Review	Signature X LEE, JS	Date 12/08/98
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14. Resolution By	Signature X GREEN, DJ	Date 12/15/98
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15. Approvals

Code	Description	Signature	Date
CE	COGNIZANT ENGINEER	X WANNER, DD	12/15/98
CM	COGNIZANT MANAGER	X BROWN, RG	12/15/98
Q	QUALITY ASSURANCE	X MCELROY, ML	12/15/98
RADCON	RADCON	X FOUST, DJ	12/15/98
S	SAFETY	X JACKSON, CD	12/15/98
PIC	PERSON IN CHARGE	X SICKELS, JF	12/15/98
PLN/SCH	PLANNER/SCHEDULER	X GREEN, DJ	12/15/98

16. Resources Required

Res Code	Description	No.	Act Hrs
04	CERTIFIED OPERATOR	4	

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1. Document Number ES-98-00415/D OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 702-AZ-VENTILATION SYSTEM VAPOR SAMPLE

54	HEALTH PHYSICS TECHNICIAN	2	_____
96	INDUSTRIAL HYGIENE TECHNICIAN	2	_____
24	PIPEFITTER	1	_____
PIC	PERSON IN CHARGE	2	_____

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1. Document Number ES-98-00415/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 702-AZ-VENTILATION SYSTEM VAPOR SAMPLE

- =====
17. Pre-Work Review	Signature	Date
18. Tagout Number	<i>[Signature]</i>	12/15/98
19. Work Release F	Signature	Date
	<i>[Signature]</i>	12/15/98
20. Work Suspension:	(See Work Suspension Sheet)	
PIC	_____	
21. PIC SICKELS, JF	PIC Org. 75150	

Resolution/Retest

1.0 SCOPE

- 1.1 Obtain vapor grab samples from 702-AZ Exhaust.

2.0 DESCRIPTION:

- 2.1 Obtain vapor grab samples from 702-AZ Exhaust. These samples will be used to address vapor issues related to the sluicing of tank 241-C-106.
- 2.2 Characterization Project Operations (CPO) will be responsible for the collection of ALL Summa canister samples and for the collection of tritium trap and particulate filter samples at 241-AV-102 SHMS and 702-AZ stack.
- 2.3 Sampling will be performed at PIC and IH&S direction.

3.0 REFERENCES:

- 3.1 HNF-SD-WM-BIO-001 TWRS Basis for Interim Operations
- 3.2 HNF-SD-WM-TSR-006 TWRS Technical Safety Requirements
- 3.3 HNF-SD-WM-HSP-002 Tank Farm Health and Safety Plan
- 3.4 HNF-IP-1266 Tank Farms Operations Administrative Controls
- 3.5 TO-100-052 Perform Waste Generation, Segregation, and Accumulation

4.0 PERMITS, SPECIAL PROCEDURES, AND OTHER SUPPORTING

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1. Document Number ES-98-00415/0 OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 702-AZ-VENTILATION SYSTEM VAPOR SAMPLE

=====

DOCUMENTS:

- 4.1 RWP CS-102
- 4.2 Pre-Job Safety Meeting Checklist
- 4.3 Dome Loading Assessment
- 4.4 Waste Planning Checklist
- 4.5 Job Hazard Analysis
- 4.6 Chain Of Custody Forms
- 4.7 HNF-3732 Waste Retrieval Sluicing System Vapor Sampling and Analysis Plan

5.0 MATERIALS AND EQUIPMENT:

- 5.1 Craft paper
- 5.2 Plastic drapes (tarps)
- 5.3 Tape (white and duct)
- 5.4 Caution tape
- 5.5 Decon water
- 5.6 Waste bags and inventory sheets
- 5.7 Dry rags
- 5.8 Rubber matting
- 5.9 Tool cart (Tank Farm style)

6.0 PREREQUISITES:

- 6.1 A Pre-Job meeting SHALL be conducted, utilizing that JHA and/or Pre-Job Safety Meeting Checklist.
- 6.2 Sections or steps within sections of this work instruction may be performed out of sequence, as long as the integrity of the work scope remains the same and all ignition controls are applied.
- 6.3 A Waste Planning Checklist has been provided in accordance with HNF-IP-0842. PIC submit container request form to Generator services per POP TO-100-052, as necessary.
- 6.4 PIC ensure that all operating procedures worked in this package are the latest revision.
- 6.5 Respiratory protection and monitoring requirements shall be in accordance with the safe work practices contained in the HASP (WHC-SD-WM-HSP-002). Specific instructions SHALL be part of the Pre-job Safety Meeting.

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1. Document Number: ES-98-00415/0 OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 702-AZ-VENTILATION SYSTEM VAPOR SAMPLE

- 6.6 Non-sparking tools shall be used when required per HNF-SD-WM-BIO-001 and HNF-SD-WM-TSR-006.
- 6.7 Ensure active ventilation system is operational. IF NOT operational, contact Tank Farms Operations Manager.
- 6.8 PIC check the Standing Order Log to ascertain whether there are orders that may impact this work. IF there are any, contact the COG. Engineer.
- 6.9 Planner verify that the SAP has been released for this work package:

SAP: HNF-3732

Dan J. Haer
 Planner Signature

12/15/98
 Date

7.0. SPECIFIC WORK INSTRUCTIONS:

- 7.1 PIC VERIFY job being performed at correct location, with independent verification.

Tank: 702-AZ Exhaust Duct, HV-AZK1-5

PIC Sign: James Nichols Date: 12-16-98

Verification by: Vs Wallace

Sign: Wd Wallace Date: 12-16-98

- 7.2 OBTAIN Summa samples and/or tritium trap samples.

7.2.1 CONNECT a single ended port connector to port HV-AZK1-5.

7.2.2 CONNECT, in-series, two (2) particulate air filters to the quick disconnect installed on the sample line.

NOTE ATTACHMENT 1 (TAKEN FROM SAP) WILL INDICATE WHETHER A SUMMA OR TRITIUM SAMPLE WILL BE PERFORMED AND THE SEQUENTIAL ORDER OF THE SAMPLES.

7.2.3 REMOVE the protective cap from the

=====WORK DOCUMENT (W110)=====

*** RECORD COPY ***

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Page: 6

WORK DOCUMENT (W110)

15:51:23 15 DEC 1998

1. Document Number ES-98-00415/O OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 702-AZ-VENTILATION SYSTEM VAPOR SAMPLE

Summa canister.

- 7.2.4 CONNECT the Summa canister or Summa/Tritium trap sampling assembly.
- 7.2.5 OPEN the isolation valve.
- 7.2.6 OPEN summa canister isolation valve.
- 7.2.7 RECORD date (first page only), TOC reading, Summa/Tritium Sample Identification Number, and sample start time on attachment 1 data sheet.
- 7.2.8 ALLOW summa canister to fill for five (5) minutes.
 - 7.2.8.1 The five minute time frame is a deviation from the SAP. The SAP states one minute. However, upon consultation with Process Engineering (per the SAP), the extension was derived to increase the chance of full volume integrity.
- 7.2.9 CLOSE Summa canister isolation valve.
- 7.2.10 RECORD sample stop time on attachment 1 data sheet.
- 7.2.11 CLOSE isolation valve.
- 7.2.12 REMOVE Summa canister or Summa/Tritium trap sampling assembly from sample line extension.
- 7.2.13 REPLACE protective cap on summa canister.
- 7.2.14 RECORD any anomalies on the Work Record (J-5).

NOTE SAMPLES SHALL BE SHIPPED PER SECTION 2.2 OF SAP

- 7.2.15 COMPLETE Chain-of-Custody (C-O-C) for

WORK DOCUMENT (W110)

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=====WORK DOCUMENT (W110)=====

Page: 7

15:51:23 15 DEC 1998

1. Document Number ES-98-00415/O OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 702-AZ-VENTILATION SYSTEM VAPOR SAMPLE

=====

summa/tritium sample.

- 7.2.16 REPEAT steps 7.2.3 through 7.2.15 as many times as required, per PIC's direction, to obtain the prescribed set of samples (per attachment 1).

- 7.2.16.1 PIC N/A all spaces on attachment 1 pertaining to sampling not performed.

NOTE: KEEP THE TWO (2) IN-LINE FILTERS IDENTIFIED AND SEPARATED FROM EACH OTHER.

- 7.3 COLLECT in-line filters.

- 7.3.1 DISCONNECT in-line filter assembly from the Pitot tube assembly.

- 7.3.2 Package filter and housing for transport.

- 7.3.3 HPT survey and release filter and housing for transport.

JOB COMPLETION:

- 7.4 PIC record on J-5 that the Job Site has been cleaned, decontaminated to pre-job status or better, and all waste has been properly disposed of.
- 7.5 Copies of C-O-C and shipment records for each sample placed in work package prior to archive.

** Sample Fee
Released R 1-5-99*

Planner Sign _____ Date _____

- 7.6 PIC verify if any of the following trigger levels for Post-Job ALARA review are applicable to work performed in this package:

YES NO

☒ Stop radiological work authority was exercised by any radiological worker during the performance of the work.

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=====WORK DOCUMENT (W110)=====

Page: 8

15:51:23 15 DEC 1998

1. Document Number ES-98-00415/0 OPERATIONS SPECIAL PROCEDURE
 2. Work Item Title 702-AZ-VENTILATION SYSTEM VAPOR SAMPLE

 PIG Signature

 1-5-99
 Date

- 7.7 Radiological Control Organization verify if any of the following trigger levels for Post-Job ALARA review are applicable to work performed in this package:

YES NO

- _____ The job produces an actual collective dose of 5 person-rem or greater.
- _____ The actual dose for task outside the range of plus/minus 25% of pre-job estimate of greater than 1,000 person-mrem TEDE.
- _____ A reportable radiological occurrence in accordance with Occurrence Reporting and Processing of Operations Information (HNF-IP-0842 vol. II, sec. 4.6.2), occurred during the performance of the work.
- _____ Significant lessons learned are identified during the informal radiological performance review.
- _____ An ALARA Committee pre-job ALARA review was required.
- _____ Is a Post-Job ALARA Review required?

RadCon Signature

Date

- 7.8 IF a formal Post-Job ALARA Review is NOT required, this work package has been reviewed by the TWRS ALARA Coordinator for trends and lessons learned.

TWRS ALARA Coordinator Signature

Date

8 RESTORATION ACTIONS

=====WORK DOCUMENT (W110)=====

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=====WORK DOCUMENT (W110)=====

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15:51:23 15 DEC 1998

1. Document Number ES-98-00415/O OPERATIONS SPECIAL PROCEDURE
2. Work Item Title 702-AZ-VENTILATION SYSTEM VAPOR SAMPLE

=====

8.1 Return all unused material to CPO Material Coordinator, at 2101HV. The returned material SHALL be accompanied by a copy of the BOM and the QC accept tag (green tag) or transfer tag, if available.

9 POST MAINTENANCE TESTING

9.1 N/A

10 OPERATIONAL FUNCTIONAL TEST

10.1 N/A

22. Reference Documents
SEE RESOLUTION

Type

23. Field Work Complete

Signature

Date

24. Ops Acceptance

25. Post Review

=====

=====WORK DOCUMENT (W110)=====

*** RECORD COPY ***

*** RECORD COPY ***

702-AZ

J-5 CRAFT/RESOURCE USAGE LOG AND MAINTENANCE RECORD		1. Document Number			
		[E][S][I]-[9][8]-[0][0][4][1][5]-[0]			
Date	Turnover, Problem Description, Action Taken	Name	Craft/Resource Type	Hours	
12-16-98	Attended pre-job at 272AZ given by Test Director Ken Anderson. Before pre-job meeting with Personnel performing sampling at 702-AZ. Staged equipment at 702-AZ. Performed sampling per SAP. During sampling activities C-106 Slave pump pit leak detection went off. Under direction of the Test Director sample continued per SAP. After leak detection alarmed for second time Test Director identified to complete the next scheduled sample per SAP and no more. Sample was stopped and Area cleaned up. Adapter for sampling valve was left in place. Sample was shipped to 7272HV.	2 OPS 1-HPT 1-SUP		3/Hrs	
12-17-98	Shipped Trition Traps and Dule Ointment Filter to WSCF for analysis.	2-OP 1-SUP 1-HPT		3/Hrs	
1-5-99	Shipped Remaining Summs to SPS II	1-OP		3/Hrs	
Summary by Craft/Resource Type					
Craft/Resource Type	Total Hours	Craft/Resource Type	Total Hours		

8D-6000-351 (01/92)

**ATTACHMENT No. 1:
702-AZ VENTILATION SYSTEM
SUMMA/TRITIUM TRAP VAPOR SAMPLING DATA SHEET**

DATE: 12-16-98

WORK PACKAGE: ES-98-00415

SAMPLE DESCRIPTION	Sample ID No.	Time Start	Time Stop	TOC Reading (ppm)	Recorded by:
SUMMA/Tritium Trap Sampling Assembly - Baseline	V8702-001-H049	1315	1320	0 ppm	James Sickels
702-AZ Ventilation System - PHIL Baseline	V8702-002-C-488	1321	1326	0 ppm	James Sickels
702-AZ Ventilation System - SAS Baseline	V8702-003-S061	1326	1331	0 ppm	James Sickels
702-AZ Ventilation System - Breathing Area Baseline during Booster Pump Operation	V8702-004-C-489	1707	1712	0 ppm	James Sickels
702-AZ Ventilation System - Breathing Area Baseline during Booster Pump Operation	V8702-005-S062	1707	1712	0 ppm	James Sickels
SUMMA/Tritium Trap Sampling Assembly - During Booster Pump Operation @ t = 1 hr.	V8702-006-H059	1802	1807	0 ppm	James Sickels
702-AZ Ventilation System - Booster Pump Operation @ t = 1 hr.	V8702-007-C-301	1808	1813	0 ppm	James Sickels
702-AZ Ventilation System - Booster Pump Operation @ t = 1 hr.	V8702-008-S063	1813	1818	0 ppm	James Sickels
SUMMA/Tritium Trap Sampling Assembly - Booster Pump Operation @ t = 2 hr.	V8702-009-H065	1902	1906	0 ppm	James Sickels

ATTACHMENT No. 1:
702-AZ VENTILATION SYSTEM
SUMMA/TRITIUM TRAP VAPOR SAMPLING DATA SHEET

DATE: 12-16-98

WORK PACKAGE: ES-98-00415

SAMPLE DESCRIPTION	Sample ID No.	Time Start	Time Stop	TOC Reading (ppm)	Recorded by:
702-AZ Ventilation System - Booster Pump Operation @ t = 2 hr	VF702-010-C160	1907	1912	Ø PPM	JAMES SICKELS
702-AZ Ventilation System - Booster Pump Operation @ t = 2 hr	VF702-011-S048	1912	1917	Ø PPM	JAMES SICKELS
SUMMA/Tritium Trap Sampling Assembly - Booster Pump Operation @ t = 3 hr	VF702-012-H027	2002	2007	Ø PPM	JAMES SICKELS
702-AZ Ventilation System - Booster Pump Operation @ t = 3 hr	VF702-013-C020	2008	2013	Ø PPM	JAMES SICKELS
702-AZ Ventilation System - Booster Pump Operation @ t = 3 hr	VF702-014-S070	2013	2018	Ø PPM	JAMES SICKELS
SUMMA/Tritium Trap Sampling Assembly - Booster Pump Operation @ t = 4 hr	VF702-015-H071				
702-AZ Ventilation System - Booster Pump Operation @ t = 4 hr	VF702-016-S073				
702-AZ Ventilation System - Booster Pump Operation @ t = 4 hr	VF702-017-S072				
SUMMA/Tritium Trap Sampling Assembly - Booster Pump Operation @ t = 5 hr (Tritium Sample)	VF702-018-H077				

* N/A Ref J-5-B 12-17-98

ATTACHMENT No. 1:
702-AZ VENTILATION SYSTEM
SUMMA/TRITIUM TRAP VAPOR SAMPLING DATA SHEET

WORK PACKAGE: ES-98-00415

DATE: 12-12-94

SAMPLE DESCRIPTION	Sample ID No.	Time Start	Time Stop	TOC Reading (ppm)	Recorded by:
702-AZ Ventilation System - Booster Pump Operation @ t = 5 hr	V5702-019-6431				
702-AZ Ventilation System - Booster Pump Operation @ t = 5 hr	V5702-020-3073			N	
SUMMA/Tritium Trap Sampling Assembly- Booster Pump Operation @ t = 6 hr (Tritium Sample)	V5702-021-11085			R	
702-AZ Ventilation System - Booster Pump Operation @ t = 6 hr	V5702-022-6430				
702-AZ Ventilation System - Booster Pump Operation @ t = 6 hr	V5702-023-3076				

Each sample identification number shall have the following format:

VXXX-YYY-ZZZZ

where,

V =

L

P = Plant

XXX =

a three-digit code identifying the sample location

005 = 206-C-005 stack

102 = tank 204-A1-TUC SHRS

103 = tank 204-A1-TUC SHRS

YYY =

a three-digit sample code found in HNF-3732,

ZZZZ =

a special lab-assigned code.

* N/A Ref I-5
 12-17-94

Appendix 1C

Relevant Correspondence, WSCF Screening Results, Particulate Filter Sample COCs, and Tritium Trap Sample COCs

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Pingel, L A Jr (Len)
From: Brown, Robert
Sent: Tuesday, December 22, 1998 1:34 PM
To: Gray, Keith W
Cc: Gray, Keith W; Pingel, L A Jr (Len); Johnston, Julie A; Widdis, Michael A

Keith,

This should do it for you.

Bob Brown
TWRS Radiological Control
372-2932

DON'T SAY IT --- Write It!

DATE: November 21, 1998

TO:
cc: L. A. Pingel, Jr.
R. J. Giordano
RLB File

K. W. Gray S5-07

T4-

SUBJECT: RELEASE OF VAPOR SAMPLES

I have reviewed the laboratory analysis of the vapor samples taken at 106-C, 702-AZ, and AY-102. The review of the data is attached. Based on this review the samples associated with 106-C, and AZ-702 have no potential for internal contamination and can be released based on external surveys. The samples associated with AY-102 are awaiting further laboratory results and are not eligible for release at this time. Should you have any questions, please contact me on 372-2932.

Radiological Release of Vapor Sampling Equipment for Tritium

Tank vapors have the potential to contain Tritium. Any process that collects the tank vapors in volume has the potential to contain tritium, and is therefore radioactive material. This specifically applies to vapor sampling equipment used in Tank Farms.

The release criteria for radioactive material are contained in the Radiological Control Center of Expertise, Completed Decision Making Package (CDMP), #CDGH-9607-RSL-0055, "Release Survey Technical Basis." The root source of requirements for radiological release is not the HSRCM or 10CFR835, but DOE order 5400.5. The CDMP contains the applicable criteria from the DOE order and was used to develop the PHMC release procedure, HNF-IP-0842, section 6.1, and to provide the basis for release survey plans. Release of radioactive material can be accomplished in one of two ways: survey in accordance with the procedure or in accordance with an approved release survey plan.

The release of the vapor sampling equipment is then, not a question of applying the HSRCM or 10CFR835, but the procedures and requirements associated with the release CDMP.

The release procedure, HNF-IP-0718, section 6.1, addresses the surface contamination limits associated with the release of the vapor sampling equipment but does not address volumetric release criteria. The CDMP contains provisions for the volumetric release of radioactive material, thereby resolving the issue that volumetric releases are not permitted by the IP-0718 procedure. The CDMP criteria for volumetric release are contained in section 3.3.2, Applicable Requirements for the Release to Uncontrolled Areas; the CDMP states: "Material and equipment will be evaluated for volumetric contamination against the limits provided in attachment 2. Contamination found must be less than the values provided and that contamination has been subjected to the ALARA processes. Attachment two of the CDMP contains volumetric release criteria. The limits for Tritium are 400 pCi/l for water and 400 pCi/gm for solids or vapors. All other applicable requirements are based on surface contamination potential. These criteria are drawn from Appendix J of WHC-EP-0063-4 which provides for volumetric release criteria relative to mixed waste samples.

The question of whether the vapor sampling equipment can be released is not, however a simple question of volumetric release. Based on the sample analysis performed, the volume of vapor sampling equipment clearly has the potential to contain radioactive tritium. The question is whether the equipment contains enough Tritium as a vapor, a condensed liquid, or a surface contaminant to require radiological controls.

Analysis

The tritium levels in SUMMA canisters are determined by evacuating the SUMMA canister's 6 liter volume through a tritium trap that collects essentially all of the water

and water vapor. The contents of the trap are then deposited in a liquid scintillation vial and the total activity is reported as activity due to tritium.

The highest sample taken, out of 17 total samples, indicate tritium concentrations of 103 pCi/l in a SUMMA canister. The volume of the SUMMA canister is 6 liters, resulting in a total tritium activity of up to 618 pCi/SUMMA canister.

Using this, the highest activity sample, the amount of tritium must be considered in three ways: as a volume, as surface contamination, or as a condensed liquid.

Volume and Airborne Radioactivity Considerations

Considering first the volume contamination issue, the SUMMA canister volume presents two issues, first as an airborne radioactivity potential and second as a contaminated volume to be released. The sample values noted previously translate to $1.03\text{E-}7$ uCi/ml. Controls for airborne radioactivity are put in place at 0.1 DAC, and for Tritium, a DAC is $2\text{E-}5$ uCi/ml, 0.1 DAC is $2\text{E-}6$ pCi/ml. Based on this, the air volume inside of the SUMMA canister does not require any controls for the occupational worker. For the non occupational worker a dose limit of 100 mrem/yr. is imposed, this also translates to exposure to 0.02 DAC ($4\text{E-}7$ uCi/ml) for 2000 hours. This level of airborne contamination in a SUMMA canister is below this level.

Considering the volume as a release issue requires one to consider the mass of the volume; the release limit is 400 pCi/gm. A liter of air at sea level has a density of 1.22 gm/l; the maximum activity measured is 103 pCi/l. This translates to 103 pCi/1.22 gm which simplifies to approximately 84.4 pCi/gm. This is well below the 400 pCi/gm release limit. *No factor is applied to account for condensation as not all tanks have air at elevated temperatures, therefore on some tanks; it could reasonably be assumed that all of the Tritium remains in the vapor state.*

Surface Contamination

The second consideration, that of a surface contamination problem, requires that the total activity available for contamination and the total surface available to be contaminated be considered. As noted earlier the maximum amount of contamination a SUMMA canister has been shown to contain is 618 pCi. This contamination is trapped in water vapor. The amount of vapor is a function of the saturation of the air in the canister. Some limiting assumptions as to the amount of liquid, and the amount that can be deposited on the internals of a canister can be made. Based on the assumption that a water vapor is taken from a saturated system (the tank dome space) at 39 C (102 F) and then cooled to 16 C (61 F) approximately 72% of the water (445 pCi of the tritium) will be condensed into a liquid capable of causing surface contamination. The internals of the SUMMA canister consist of approximately 1600 cm². This results in approximately 445 pCi/1600 cm², or

28 dpm/100 cm². This is well below the 1000 dpm/100 cm² limit for surface contamination.

NOTE: The HSRCM contains a removable contamination limit for Tritium of 10,000 dpm/100 cm², however the current release procedure does not have a separate tritium limit so the more conservative limit of 1000 dpm/100 cm² is used.

Free Liquid

This leaves the question of whether the liquid will exist as a free standing volume or as a surface contaminant. The volume of liquid is extremely small. Based on the premise that 72% (0.24ml) of the available water vapor will plate out, and the inner surface area of the SUMMA canister is 1600 cm², the thickness of the water vapor is approximately 1.5E-3 mm. This is far too small of an amount to form a free volume, and therefore must be treated as a surface contaminant.

Conclusion

For the purpose of tritium, vapor sampling equipment is eligible for release from radiological controls

Radioactive Release for Particulate or Surface Contamination

The samples were drawn through a 2 micron prefilter. Laboratory results from the prefilter showed activity of up to 4.8 E-7 uCi/sample beta gamma and 8.04E-8 alpha. This translates to approximately one dpm beta gamma and less than one dpm alpha, the portions of the sampling system down stream of the sample point are not considered potentially contaminated for particulate or surface contamination

Source Documents

Occupational Radiation Protection (excludes release)

10CFR835, *Occupational Radiation Protection*

HSRCM, *Hanford Site Radiological Control Manual*

Protection of the Public and Environment (includes release)

DOE5400.5, *Radiation Protection of the Public and the Environment*

Implementing (release)

Completed Decision Making Package (CDMP), #CDGH-9607-RSL-0055, *Release Survey Technical Basis*

HNF-IP-0718, *Health Physics Technical Practices and Procedures*, Section 6.1, "Release Surveys for Material and Equipment".

Pingel, L A Jr (Len)
 From: Brown, Robert L
 Sent: Monday, January 04, 1999 1:26 PM
 To: Gray, Keith W
 Cc: Giordano, Robert J (Bob); Johnston, Julie A; Shoemaker, Thomas A; Pingel, L A Jr (Len); Sasaki, Leela M
 Subject: Sample Release

DON'T SAY IT --- Write It!

DATE: January 4, 1999

TO:

K. W. Gray S5-07

T4-

cc: J. A. Johnston
 R. J. Giordano
 T. A. Shoemaker
 RLB File

SUBJECT: RELEASE OF VAPOR SAMPLES

I have reviewed the laboratory analysis of the pre-filters and tritium traps associated with samples taken at AY-102 in support of HNF-3732, *Waste Retrieval Sluicing System Vapor Sampling and Analysis Plan for Evaluation of Organic Emissions*.

The samples were supposed to have been taken with a dual pre-filter. When these samples were taken, the system didn't include the dual pre-filter system, instead using a single pre-filter. The single pre-filter was contaminated; since the air being sampled was tank vapor space this was expected. Lacking the second filter, the samples couldn't be released based on initial review.

To assess the possibility that contamination penetrated the filter, the tritium sorbent cartridges were used as an indicator of likely contamination down stream of the pre-filter. The sorbent cartridges were counted for tritium on 12/18/98 and found to contain low levels of tritium activity, well below the release limits. The samples were analyzed using liquid scintillation.

On 12/23/98 the samples were re-counted for total activity, again using liquid scintillation. The previously noted tritium activity for the samples from the 12/18/98 count was subtracted from the total activity noted in the 12/23/98 count. None of the samples (W980001621, W980001622, W980001623, and W980001623) showed total activity that was greater than the original tritium count. This provides indication that

non-tritium contamination did not penetrate the pre-filter and the SUMMA canisters down stream of the sorbant cartridges can be released from radiological controls.

Should you have any questions, please contact me on 372-2932.

Bob Brown
TWRS Radiological Control
372-2932

12/21/98 MON 18:34 FAX 509 3734641

CANON

014

WSCF ANALYTICAL COMMENT REPORT

Attention: Project Number	LEEILA SASAKI MISC.	Group #:	98001757
Sample #	Client ID	Lab Area	Test
VALGROUP			
ALPHA/BETA RESULTS OF W880001619/31/32/33/34/35-Coverlog Analysis of 11/20/98 31/32/33/34/35 Samples W880001630F-7-2 (sewerline sample) and W8801633 (V702-2) (sewerline) were identified as being the same was found in other filter assembly. The results were confirmed by S.A. W8816 on 12/17/98. W8816 on 12/17/98. W8816 on 12/17/98.			
Comment			

Lab Areas:	VALGROUP - Group Validation LOGSAMP - Login for Sample	VALTEST - Test Validation LOGTEST - Login for Tests	TESTDATA - Test Data Entry
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PHMC

W04C12 Report#: 98001757

Report Date: 10-4-98

Page 1

WSCF

ANALYTICAL LABORATORY REPORT

Attention: LEEILA SASAKI
Project Number: MISC. :PROJ. HANFORD MNGMR. CONT.

Group #: 98001757

Sample #	Client ID	Test Performed	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Received
W980001629	F-7-1	Co-144 Rel. % Count Error (GEA)	F-110	LA-508-462	268.	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Co-144 Rel. % Count Error (GEA)	F-110	LA-508-462	U 3.35e+00	PCI	17.50	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Co-144 Rel. % Count Error (GEA)	F-110	LA-508-462	268.	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Co-144 Rel. % Count Error (GEA)	F-110	LA-508-462	U 4.89e+00	PCI	22.50	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Co-60 Rel. % Count Error (GEA)	F-110	LA-508-462	676.	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Co-60 Rel. % Count Error (GEA)	F-110	LA-508-462	U 2.85e+01	PCI	3.27	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Co-134 Rel. % Count Error (GEA)	F-110	LA-508-462	641.	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Co-134 Rel. % Count Error (GEA)	F-110	LA-508-462	U 2.03e+01	PCI	2.38	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Co-137 Rel. % Count Error (GEA)	F-110	LA-508-462	34.2	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Co-137 Rel. % Count Error (GEA)	F-110	LA-508-462	U 1.01e+01	PCI	2.41	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Eu-152 Rel. % Count Error (GEA)	F-110	LA-508-462	670.	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Eu-152 Rel. % Count Error (GEA)	F-110	LA-508-462	U 4.34e+00	PCI	15.30	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Eu-154 Rel. % Count Error (GEA)	F-110	LA-508-462	268.	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Eu-154 Rel. % Count Error (GEA)	F-110	LA-508-462	U 1.47e+00	PCI	8.99	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Eu-155 Rel. % Count Error (GEA)	F-110	LA-508-462	130.	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Eu-155 Rel. % Count Error (GEA)	F-110	LA-508-462	U 2.31e+00	PCI	8.99	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Nb-94 Rel. % Count Error (GEA)	F-110	LA-508-462	321.	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Nb-94 Rel. % Count Error (GEA)	F-110	LA-508-462	U 3.51e+01	PCI	2.19	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Rb-103 Rel. % Count Error (GEA)	F-110	LA-508-462	55.1	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Rb-103 Rel. % Count Error (GEA)	F-110	LA-508-462	U 1.33e+00	PCI	1.54	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Rb-103 Rel. % Count Error (GEA)	F-110	LA-508-462	200.	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Sr-90 Rel. % Count Error (GEA)	F-110	LA-508-462	U 5.77e+00	PCI	19.30	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Sr-90 Rel. % Count Error (GEA)	F-110	LA-508-462	406.	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Sr-125 Rel. % Count Error (GEA)	F-110	LA-508-462	U 2.25e+00	PCI	5.37	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Sm-113 Rel. % Count Error (GEA)	F-110	LA-508-462	1000	%	0.00	12/18/98	12/17/98	12/17/98
W980001629	F-7-1	Sm-113 Rel. % Count Error (GEA)	F-110	LA-508-462	U 9.86e+00	PCI	243	12/18/98	12/17/98	12/17/98

MDL = Minimum Detection Limit

RQ = Result Qualifier

B - The analyte was detected in the standard method blank.

E - Compound concentration exceeded calibration range.

N - Identification is based on a mass spectral library search.

* - Indicates results that have NOT been validated.

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PROJECT HANFORD MANAGEMENT CONTRACTORS

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WSCF ANALYTICAL LABORATORY REPORT

Attention:
Project Number

LEEELA SASAKI
MISC. :PROJ: HANFORD MNGMT. CONT.

Group #: 98001757

Sample #	Client ID	Test Performed	Matrix	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Received
WS80001629	F-7-1	Zn-65 Rel. % Count Error (GEA)	FILTER	LA-508-462		309.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001631	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		116 ± 0.0	PC	6.24	12/18/98	12/17/98	12/17/98
WS80001632	F-7-1	Cd-114 by GEA	FILTER	LA-508-410		8.04E-08	UC	8.81E-007	12/18/98	12/17/98	12/17/98
WS80001633	F-7-1	Cd-114 by GEA	FILTER	LA-508-410		2.89E-07	UC	0.00	12/18/98	12/17/98	12/17/98
WS80001634	F-7-1	Cd-114 by GEA	FILTER	LA-508-410		4.80E-07	UC	9.75E-007	12/18/98	12/17/98	12/17/98
WS80001635	F-7-1	Cd-114 by GEA	FILTER	LA-508-410		8.08E-07	UC	0.00	12/18/98	12/17/98	12/17/98
WS80001636	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		149.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001637	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		4.53E-06	PC	13.10	12/18/98	12/17/98	12/17/98
WS80001638	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		149.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001639	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		8.64E-06	PC	8.50	12/18/98	12/17/98	12/17/98
WS80001640	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		375.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001641	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		5.70E-06	PC	2.98	12/18/98	12/17/98	12/17/98
WS80001642	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		175.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001643	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		7.33E-07	PC	2.63	12/18/98	12/17/98	12/17/98
WS80001644	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		100.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001645	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		111 ± 0.0	PC	1.59	12/18/98	12/17/98	12/17/98
WS80001646	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		462.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001647	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		7.64E-07	PC	5.14	12/18/98	12/17/98	12/17/98
WS80001648	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		1000.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001649	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		1.93E-07	PC	8.11	12/18/98	12/17/98	12/17/98
WS80001650	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		123.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001651	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		2.10E-07	PC	5.62	12/18/98	12/17/98	12/17/98
WS80001652	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		233.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001653	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		4.59E-07	PC	2.13	12/18/98	12/17/98	12/17/98
WS80001654	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		1000.	%	0.00	12/18/98	12/17/98	12/17/98
WS80001655	F-7-1	Cd-114 by GEA	FILTER	LA-508-462		8.64E-07	PC	1.79	12/18/98	12/17/98	12/17/98

MDL = Minimum Detection Limit

RQ = Result Qualifier

B - The analyte was detected in the associated method blank.
E - Compound concentration exceeded calibration range.
N - Identification is based on a mass spectral library search.
* - Indicates results that have NOT been validated.

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PROJECT HANFORD MANAGEMENT CONTRACTORS

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WSCF ANALYTICAL LABORATORY REPORT

Attention: LEELA SASAKI
Project Number: MISC. :PROJ. HANFORD MNGMT. CONT.

Group #: 98001757

Sample #	Client ID	Test Performed	Matrix	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Receiver
W880001631	C106-1	Ru-106 Rel. % Count Error (GEA)	FILTER	LA-508-462		244.	%	0.00	12/18/98	12/17/98	12/17/98
W880001631	C106-1	Ru-106 by GEA	FILTER	LA-508-462	U	3.37E+00	pCi	1.60	12/18/98	12/17/98	12/17/98
W880001631	C106-1	Sb-125 Rel. % Count Error (GEA)	FILTER	LA-508-462		315.	%	0.00	12/18/98	12/17/98	12/17/98
W880001631	C106-1	Sb-125 by GEA	FILTER	LA-508-462	U	9.44E-01	pCi	5.27	12/18/98	12/17/98	12/17/98
W880001631	C106-1	Sn-113 Rel. % Count Error (GEA)	FILTER	LA-508-462		329.	%	0.00	12/18/98	12/17/98	12/17/98
W880001631	C106-1	Sn-113 by GEA	FILTER	LA-508-462	U	4.74E-01	pCi	2.13	12/18/98	12/17/98	12/17/98
W880001631	C106-1	Zn-65 Rel. % Count Error (GEA)	FILTER	LA-508-462		683.	%	0.00	12/18/98	12/17/98	12/17/98
W880001631	C106-1	Zn-65 by GEA	FILTER	LA-508-462	U	3.74E-01	pCi	0.00	12/18/98	12/17/98	12/17/98
W880001631	C106-1	Gross Alpha	FILTER	LA-508-410	U	8.04E-09	uCi	6.81E-007	12/18/98	12/17/98	12/17/98
W880001631	C106-1	Gross Alpha Abs. Count Error	FILTER	LA-508-410		2.88E-07	uCi	0.00	12/18/98	12/17/98	12/17/98
W880001631	C106-1	Gross Beta	FILTER	LA-508-410	U	2.95E-07	uCi	9.75E-007	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Co-57 Rel. % Count Error (GEA)	FILTER	LA-508-410	U	5.69E-00	uCi	0.00	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Co-57 by GEA	FILTER	LA-508-462		473.	%	0.00	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Co-57 by GEA	FILTER	LA-508-462	U	3.27E+00	pCi	1.160	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Ca-144 Rel. % Count Error	FILTER	LA-508-462		473.	%	0.00	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Ca-144 by GEA	FILTER	LA-508-462	U	2.65E+00	pCi	23.00	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Co-60 Rel. % Count Error (GEA)	FILTER	LA-508-462		1000.	%	0.00	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Co-60 by GEA	FILTER	LA-508-462	U	1.86E-12	pCi	3.23	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Co-134 Rel. % Count Error (GEA)	FILTER	LA-508-462		281.	%	0.00	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Co-134 by GEA	FILTER	LA-508-462	U	4.67E-01	pCi	2.84	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Co-137 Rel. % Count Error (GEA)	FILTER	LA-508-462		166.	%	0.00	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Co-137 by GEA	FILTER	LA-508-462	U	8.79E-01	pCi	2.87	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Eu-152 Rel. % Count Error (GEA)	FILTER	LA-508-462		434.	%	0.00	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Eu-152 by GEA	FILTER	LA-508-462	U	7.94E-01	pCi	8.88	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Eu-154 Rel. % Count Error (GEA)	FILTER	LA-508-462		168.	%	0.00	12/18/98	12/17/98	12/17/98
W880001632	C106-2	Eu-154 by GEA	FILTER	LA-508-462	U	2.35E+00	pCi	10.00	12/18/98	12/17/98	12/17/98

MDL = Minimum Detection Limit

RQ = Result Qualifier

0 - The analyte was detected in the associated method blank.

E - Compound concentration exceeded calibration range.

N - Identification is based on a mass spectral library search.

* - Indicates results that have NOT been validated.

D - Compound concentration resulted from a dilution.

J - Estimated value.

U - The analyte was analyzed for but not detected.

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ANALYTICAL LABORATORY REPORT

Attention:
Project Number

LEE LA SASAKI
MISC.

Test Performed

Matrix

Method

RQ

Result

Units

MDL

Analyzed

Sampled

Receiver

Group #: 98001757

Sample #	Client ID	Test Performed	Matrix	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Receiver
W880001632	C106-2	Eu-155 Rel. % Count Error (GEA)	FILTER	LA-508-462		618.	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Eu-155 by GEA	FILTER	LA-508-462	V	5.97E+01	pc	0.46	1217893	1217788	1217788
W880001632	C106-2	Nb-94 Rel. % Count Error (GEA)	FILTER	LA-508-462		1000	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Nb-94 by GEA	FILTER	LA-508-462	U	2.47E+02	pc	2.34	1217893	1217788	1217788
W880001632	C106-2	Ru-103 Rel. % Count Error (GEA)	FILTER	LA-508-462		664	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Ru-103 by GEA	FILTER	LA-508-462	U	1.98E+01	pc	2.11	1217893	1217788	1217788
W880001632	C106-2	Ru-108 Rel. % Count Error (GEA)	FILTER	LA-508-462		1000	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Ru-108 by GEA	FILTER	LA-508-462	U	1.72E+00	pc	22.30	1217893	1217788	1217788
W880001632	C106-2	Sb-125 Rel. % Count Error (GEA)	FILTER	LA-508-462		174	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Sb-125 by GEA	FILTER	LA-508-462	U	4.76E+00	pc	6.25	1217893	1217788	1217788
W880001632	C106-2	Sm-153 Rel. % Count Error (GEA)	FILTER	LA-508-462		57.6	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Sm-153 by GEA	FILTER	LA-508-462	U	2.53E+00	pc	2.94	1217893	1217788	1217788
W880001632	C106-2	Zn-65 Rel. % Count Error (GEA)	FILTER	LA-508-462		482	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Zn-65 by GEA	FILTER	LA-508-462	U	7.70E+01	pc	6.72	1217893	1217788	1217788
W880001632	C106-2	Gross Alpha	FILTER	LA-508-462	U	4.37E+08	uCi	6.81E-007	1217893	1217788	1217788
W880001632	C106-2	Gross Beta	FILTER	LA-508-462	U	1.47E+07	uCi	0.00	1217893	1217788	1217788
W880001632	C106-2	Gross Beta Absolute Count Error	FILTER	LA-508-462	U	6.36E+07	uCi	9.75E-007	1217893	1217788	1217788
W880001632	C106-2	Co-144 Rel. % Count Error (GEA)	FILTER	LA-508-462		165	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Co-144 by GEA	FILTER	LA-508-462	U	3.50E+00	pc	9.33	1217893	1217788	1217788
W880001632	C106-2	Co-144 Rel. % Count Error	FILTER	LA-508-462		166	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Co-144 by GEA	FILTER	LA-508-462	U	7.72E+00	pc	16.70	1217893	1217788	1217788
W880001632	C106-2	Co-60 Rel. % Count Error (GEA)	FILTER	LA-508-462		681	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Co-60 by GEA	FILTER	LA-508-462	U	2.96E+01	pc	2.66	1217893	1217788	1217788
W880001632	C106-2	Co-134 Rel. % Count Error (GEA)	FILTER	LA-508-462		270	%	0.00	1217893	1217788	1217788
W880001632	C106-2	Co-134 by GEA	FILTER	LA-508-462	U	4.48E+01	pc	2.68	1217893	1217788	1217788

MDL = Minimum Detection Limit

RQ = Result Qualifier

D - Compound concentration resulted from a dilution.
J - Estimated value.
U - The analyte was analyzed for but not detected.

B - The analyte was detected in the associated method blank.
E - Compound concentration exceeded calibration range.
N - Identification is based on a mass spectral library search.

* - Validation results that have NOT been validated.

Report W004/Ver. 3
PROJECT HANFORD MANAGEMENT CONTRACTORS

WSCE

ANALYTICAL LABORATORY REPORT

Attention:
Project Number

LEELA SASAKI
MISC. :PROJ. HANFORD MNGMT. CONT.

Group #: 98001757

Sample #	Client ID	Test Performed	Matrix	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Received
W980001634	703-A2-2	Co-144 Rel. % Count Error	FILTER	LA-508-462		521.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Co-144 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	2.184+00	pCi	19.30	1217898	1217798	1217798
W980001634	703-A2-2	Co-60 Rel. % Count Error (GEA)	FILTER	LA-508-462		129.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Co-40 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	1.025+00	pCi	3.00	1217898	1217798	1217798
W980001634	703-A2-2	Co-134 Rel. % Count Error (GEA)	FILTER	LA-508-462		272.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Co-134 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	4.344+01	pCi	2.13	1217898	1217798	1217798
W980001634	703-A2-2	Co-137 Rel. % Count Error (GEA)	FILTER	LA-508-462		187.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Co-137 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	6.934+01	pCi	2.57	1217898	1217798	1217798
W980001634	703-A2-2	Eu-152 Rel. % Count Error (GEA)	FILTER	LA-508-462		143.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Eu-152 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	2.104+00	pCi	5.77	1217898	1217798	1217798
W980001634	703-A2-2	Eu-154 Rel. % Count Error (GEA)	FILTER	LA-508-462		232.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Eu-154 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	1.324+00	pCi	7.61	1217898	1217798	1217798
W980001634	703-A2-2	Eu-152 Rel. % Count Error (GEA)	FILTER	LA-508-462		235.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Eu-152 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	1.594+00	pCi	6.37	1217898	1217798	1217798
W980001634	703-A2-2	Wd-154 Rel. % Count Error (GEA)	FILTER	LA-508-462		173.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Wd-154 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	1.074+00	pCi	2.01	1217898	1217798	1217798
W980001634	703-A2-2	Re-103 Rel. % Count Error (GEA)	FILTER	LA-508-462		336.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Re-103 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	2.134+01	pCi	1.90	1217898	1217798	1217798
W980001634	703-A2-2	Re-108 Rel. % Count Error (GEA)	FILTER	LA-508-462		317.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Re-108 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	3.344+00	pCi	18.00	1217898	1217798	1217798
W980001634	703-A2-2	Sr-90 Rel. % Count Error (GEA)	FILTER	LA-508-462		418.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Sr-90 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	8.604+01	pCi	4.52	1217898	1217798	1217798
W980001634	703-A2-2	Sr-113 Rel. % Count Error (GEA)	FILTER	LA-508-462		250.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Sr-113 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	5.024+01	pCi	2.36	1217898	1217798	1217798
W980001634	703-A2-2	Zn-65 Rel. % Count Error (GEA)	FILTER	LA-508-462		1000.	%	0.00	1217898	1217798	1217798
W980001634	703-A2-2	Zn-65 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	1.194+01	pCi	5.50	1217898	1217798	1217798

MDL = Minimum Detection Limit

RQ = Result Qualifier

B - The analyte was detected in the associated method blank.

E - Compound concentration exceeded calibration range.

N - Identification is based on a mass spectral library search.

* - Indicates results that have NOT been validated.

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PROJECT HANFORD MANAGEMENT CONTRACTORS

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WSCF ANALYTICAL LABORATORY REPORT

Attention: LEELA SASAKI
Project Number: PROJ. HANFORD MNGMT. CONT.

Group #: 98001757

Sample #	Client ID	Test Performed	Matrix	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Received
W980001634	703-AZ-2	Geiger Alpha	FILTER	LA-508-110	U	4.37E-08	uCi	6.81E-007	1217898	1217798	1217798
W980001634	703-AZ-2	Geiger Alpha Aka. 10mg Error	FILTER	LA-508-110	U	1.47E-07	uCi	0.00	1217898	1217798	1217798
W980001634	703-AZ-2	Geiger Beta	FILTER	LA-508-110	U	2.03E-07	uCi	9.75E-007	1217898	1217798	1217798
W980001634	703-AZ-2	Geiger Beta Absolute Count Error	FILTER	LA-508-110	U	5.17E-07	uCi	0.00	1217898	1217798	1217798
W980001635	AY-102-1	Ge-144 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	100	%	0.00	1217898	1217798	1217798
W980001635	AY-102-1	Ge-144 Rel. % GEA	FILTER	LA-508-462	U	7.15E+100	PCI	11.70	1217898	1217798	1217798
W980001635	AY-102-1	Co-60 Rel. % Count Error	FILTER	LA-508-462	U	100	%	0.00	1217898	1217798	1217798
W980001635	AY-102-1	Co-60 Rel. % GEA	FILTER	LA-508-462	U	1.19E+101	PCI	33.50	1217898	1217798	1217798
W980001635	AY-102-1	Co-60 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	100	%	0.00	1217898	1217798	1217798
W980001635	AY-102-1	Co-134 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	1.84E+100	PCI	5.16	1217898	1217798	1217798
W980001635	AY-102-1	Co-134 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	450	%	0.00	1217898	1217798	1217798
W980001635	AY-102-1	Co-137 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	2.71E+01	PCI	3.18	1217898	1217798	1217798
W980001635	AY-102-1	Co-137 Rel. % GEA	FILTER	LA-508-462	U	10.1	%	0.00	1217898	1217798	1217798
W980001636	AY-102-1	Eu-152 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	7.77E+01	PCI	3.17	1217898	1217798	1217798
W980001636	AY-102-1	Eu-152 Rel. % GEA	FILTER	LA-508-462	U	842	%	0.00	1217898	1217798	1217798
W980001636	AY-102-1	Eu-152 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	3.88E+01	PCI	6.89	1217898	1217798	1217798
W980001636	AY-102-1	Eu-154 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	200	%	0.00	1217898	1217798	1217798
W980001636	AY-102-1	Eu-154 Rel. % GEA	FILTER	LA-508-462	U	2.16E+100	PCI	10.70	1217898	1217798	1217798
W980001636	AY-102-1	Eu-155 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	1000	%	0.00	1217898	1217798	1217798
W980001636	AY-102-1	Eu-155 Rel. % GEA	FILTER	LA-508-462	U	4.05E+01	PCI	7.62	1217898	1217798	1217798
W980001635	AY-102-1	Ni-54 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	232	%	0.00	1217898	1217798	1217798
W980001635	AY-102-1	Ni-54 Rel. % GEA	FILTER	LA-508-462	U	4.33E+01	PCI	2.43	1217898	1217798	1217798
W980001635	AY-102-1	Ra-103 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	193	%	0.00	1217898	1217798	1217798
W980001635	AY-102-1	Ra-103 Rel. % GEA	FILTER	LA-508-462	U	7.25E+01	PCI	2.68	1217898	1217798	1217798
W980001635	AY-102-1	Ra-106 Rel. % Count Error (GEA)	FILTER	LA-508-462	U	195	%	0.00	1217898	1217798	1217798
W980001635	AY-102-1	Ra-106 Rel. % GEA	FILTER	LA-508-462	U	6.14E+00	PCI	25.50	1217898	1217798	1217798

MDL = Minimum Detection Limit

RQ = Result Qualifier

B - The analyte was detected in the associated method blank.

E - Compound concentration exceeded calibration range.

N - Identification is based on a mass spectral library search.

* - Indicates results that have NOT been validated.

Report W004Ver. 3

PROJECT HANFORD MANAGEMENT CONTRACTORS

WSCF ANALYTICAL LABORATORY REPORT

Attention: LEEILA SASAKI
Project Number: MISC. :PROJ. HANFORD MINGMT. CONT.
Group #: 98001757

Sample #	Client ID	Test Performed	Matrix	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Received
W980001632	AY-102-1	Sr-125 Rel. % Count Error (SEA)	FILTER	LA-508-462		220	%	0.00	12/18/98	12/17/98	12/17/98
W980001635	AY-102-1	Sr-125 Rel. % Count Error (SEA)	FILTER	LA-508-462		180	%	0.00	12/18/98	12/17/98	12/17/98
W980001635	AY-102-1	Sr-113 Rel. % Count Error (SEA)	FILTER	LA-508-462		180	%	0.00	12/18/98	12/17/98	12/17/98
W980001637	AY-102-1	Sr-113 by SEA	FILTER	LA-508-462		3,736-01	pCi	2.584	12/18/98	12/17/98	12/17/98
W980001635	AY-102-1	Zr-95 Rel. % Count Error (SEA)	FILTER	LA-508-462		1000	%	0.00	12/18/98	12/17/98	12/17/98
W980001635	AY-102-1	Zr-95 by SEA	FILTER	LA-508-462		146-01	pCi	8.31	12/18/98	12/17/98	12/17/98
W980001635	AY-102-1	Gross Alpha	FILTER	LA-508-410		8.04-08	uCi	6.81E-007	12/22/98	12/17/98	12/17/98
W980001635	AY-102-1	Gross Beta	FILTER	LA-508-410		2.88E-07	uCi	0.00	12/22/98	12/17/98	12/17/98
W980001635	AY-102-1	Gross Beta (Labnet Cong Error)	FILTER	LA-508-410		1.06E-04	uCi	9.75E-007	12/22/98	12/17/98	12/17/98

MDL = Minimum Detection Limit
RQ = Result Qualifier

D - Compound concentration resulted from a dilution.
J - Extended value.
U - The analyte was analyzed for but not detected.

B - The analyte was detected in the associated method blank.
E - Compound concentrations exceeded calibration range.
N - Identification is based on a mass spectral library search.

* - Indicates results that have NOT been validated.

Report W004/ver. 3rd
PROJECT HANFORD MANAGEMENT CONTRACTORS

WSCF ANALYTICAL COMMENT REPORT

Group #: 98001757

 Attention: LEBLA SASAKI
 Project Number: MISC.

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		ALPHA/BETA RESULTS OF W80001629/312/323/34/35-Counting All began at 16:30:11 hrs on 12/17/98 Samples W80001630/61-7-2 (downstream sample) and W8001630 (AY 10-2-2 downstream) - No filter sample in the downstream was found in either filter assembly. — confirmed by chem ist K. Winters on 12/17 and also verified by AK. Disputa on 12/18.
				ALPHA/BETA RESULTS OF W80001635- This sample was recounted per customer request (customer ID: AY10231) on 12/17/98. The recount results as well as first run data are listed below for customer's review.
				12/17/98 12/18/98
				1ST count (35-25-1-1-1) 3.46-3.46-1.05
				12/17/98 12/17/98
				Recount: 1.97-06-1.05 1.05-01-1.01
				ON CUSTOMER'S REQUEST W80001635 WAS RECOUNTED ON 12/17/98 AND RESULTS REPORTED REPRESENTS LATEST RECOUNT (ALPHA/BETA).

TESTDATA - Test Data Entry

 Lab Areas: VALGROUP - Group Validation
 LOGSAMP - Login for Sample
 VALTEST - Test Validation
 LOGTEST - Login for Tests

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PHMC

W04C/2 Report#: 98001757

Report Date: 22-dec-1998

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12/21/98 MON 16:21 FAX 509 3734641

CANON

002

WSCF ANALYTICAL LABORATORY REPORT

Attention: LEILA SASAKI
Project Number MISC. : PROJ. HANFORD MNGMT. CONT.
Group #: 98001754

Sample #	Client ID	Test Performed	Matrix	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Received
W980001021	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001011	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001022	V5102-004-H025	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001023	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001024	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001025	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001026	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001027	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001028	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001029	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001030	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001031	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001032	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001033	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001034	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001035	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001036	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001037	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001038	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001039	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198
W980001040	V5102-001-4014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	121698	121698	1217198

W98001031
-5

limit 400 pCi/g
7.2 SAIR
6.2 AIR

MDL = Minimum Detection Limit
RQ = Result Qualifier

D - Compound concentration resulted from a blank.
J - Estimated value.
U - The analyte was analyzed for but not detected.

S - The analyte was detected in the associated method blank.
E - Compound concentration exceeded calibration range.
N - Identification is based on a mass spectral library search.

** - Indicates results that have NOT been validated.

Report W004/Ver. 3

PROJECT HANFORD MANAGEMENT CONTRACTORS

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WSCF ANALYTICAL LABORATORY REPORT

Group #: 98001754

Attention: L. SASAKI/PINGLE
Project Number: PROJ HANFORD MNGMT. CONT.

Sample #	Client ID	Test Performed	Matrix	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Received
W880001621	V5102-001-14014	Alpha by liquid scintillation	FILTER	LA-508-421	U	-2.3	uCi	0.90	12/23/98	12/16/98	12/17/98
W880001621	V5102-001-14014	Alpha error by LC	FILTER	LA-508-421		100	%	0.00	12/23/98	12/16/98	12/17/98
W880001621	V5102-001-14014	Beta by liquid scintillation	FILTER	LA-508-421		1.8E+02	uCi	1.50	12/23/98	12/16/98	12/17/98
W880001621	V5102-001-14014	Beta error by LC	FILTER	LA-508-421		11	%	0.00	12/23/98	12/16/98	12/17/98
W880001621	V5102-001-14014	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	12/16/98	12/16/98	12/17/98
W880001621	V5102-001-14014	Alpha by liquid scintillation	FILTER	LA-508-421		4.3E+02	pCi	2.00	12/23/98	12/16/98	12/17/98
W880001621	V5102-001-14014	Alpha error by LC	FILTER	LA-508-421		100	%	0.00	12/23/98	12/16/98	12/17/98
W880001622	V5102-004-14025	Alpha by liquid scintillation	FILTER	LA-508-421		1.0E+02	uCi	1.50	12/23/98	12/16/98	12/17/98
W880001622	V5102-004-14025	Alpha error by LC	FILTER	LA-508-421		15	%	0.00	12/23/98	12/16/98	12/17/98
W880001622	V5102-004-14025	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	12/16/98	12/16/98	12/17/98
W880001622	V5102-004-14025	Alpha by liquid scintillation	FILTER	LA-508-421		2.3E+02	pCi	2.00	12/23/98	12/16/98	12/17/98
W880001622	V5102-004-14025	Alpha error by LC	FILTER	LA-508-421		100	%	0.00	12/23/98	12/16/98	12/17/98
W880001622	V5102-004-14025	Beta by liquid scintillation	FILTER	LA-508-421		9.9E+01	uCi	1.50	12/23/98	12/16/98	12/17/98
W880001622	V5102-004-14025	Beta error by LC	FILTER	LA-508-421		15	%	0.00	12/23/98	12/16/98	12/17/98
W880001622	V5102-004-14025	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	12/16/98	12/16/98	12/17/98
W880001623	V5102-007-14028	Alpha by liquid scintillation	FILTER	LA-508-421		2.5E+02	pCi	2.00	12/23/98	12/16/98	12/17/98
W880001623	V5102-007-14028	Alpha error by LC	FILTER	LA-508-421		100	%	0.00	12/23/98	12/16/98	12/17/98
W880001623	V5102-007-14028	Beta by liquid scintillation	FILTER	LA-508-421		9.9E+01	uCi	1.50	12/23/98	12/16/98	12/17/98
W880001623	V5102-007-14028	Beta error by LC	FILTER	LA-508-421		15	%	0.00	12/23/98	12/16/98	12/17/98
W880001623	V5102-007-14028	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	12/16/98	12/16/98	12/17/98
W880001623	V5102-007-14028	Alpha by liquid scintillation	FILTER	LA-508-421		2.5E+02	pCi	2.00	12/23/98	12/16/98	12/17/98
W880001623	V5102-007-14028	Alpha error by LC	FILTER	LA-508-421		100	%	0.00	12/23/98	12/16/98	12/17/98
W880001623	V5102-007-14028	Beta by liquid scintillation	FILTER	LA-508-421		9.9E+01	uCi	1.50	12/23/98	12/16/98	12/17/98
W880001623	V5102-007-14028	Beta error by LC	FILTER	LA-508-421		15	%	0.00	12/23/98	12/16/98	12/17/98
W880001623	V5102-007-14028	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	12/16/98	12/16/98	12/17/98
W880001624	V5102-010-14028	Alpha by liquid scintillation	FILTER	LA-508-421		2.5E+02	pCi	2.00	12/23/98	12/16/98	12/17/98
W880001624	V5102-010-14028	Alpha error by LC	FILTER	LA-508-421		100	%	0.00	12/23/98	12/16/98	12/17/98
W880001624	V5102-010-14028	Beta by liquid scintillation	FILTER	LA-508-421		9.9E+01	uCi	1.50	12/23/98	12/16/98	12/17/98
W880001624	V5102-010-14028	Beta error by LC	FILTER	LA-508-421		15	%	0.00	12/23/98	12/16/98	12/17/98
W880001624	V5102-010-14028	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	12/16/98	12/16/98	12/17/98
W880001624	V5102-010-14028	Alpha by liquid scintillation	FILTER	LA-508-421		2.5E+02	pCi	2.00	12/23/98	12/16/98	12/17/98
W880001624	V5102-010-14028	Alpha error by LC	FILTER	LA-508-421		100	%	0.00	12/23/98	12/16/98	12/17/98
W880001624	V5102-010-14028	Beta by liquid scintillation	FILTER	LA-508-421		9.9E+01	uCi	1.50	12/23/98	12/16/98	12/17/98
W880001624	V5102-010-14028	Beta error by LC	FILTER	LA-508-421		15	%	0.00	12/23/98	12/16/98	12/17/98
W880001624	V5102-010-14028	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	12/16/98	12/16/98	12/17/98
W880001625	V5102-001-14049	Alpha by liquid scintillation	FILTER	LA-508-421		9.8E+02	pCi	2.00	12/23/98	12/16/98	12/17/98
W880001625	V5102-001-14049	Alpha error by LC	FILTER	LA-508-421		100	%	0.00	12/23/98	12/16/98	12/17/98
W880001625	V5102-001-14049	Beta by liquid scintillation	FILTER	LA-508-421		9.9E+01	uCi	1.50	12/23/98	12/16/98	12/17/98
W880001625	V5102-001-14049	Beta error by LC	FILTER	LA-508-421		15	%	0.00	12/23/98	12/16/98	12/17/98
W880001625	V5102-001-14049	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	12/16/98	12/16/98	12/17/98
W880001625	V5102-001-14049	Alpha by liquid scintillation	FILTER	LA-508-421		9.8E+02	pCi	2.00	12/23/98	12/16/98	12/17/98
W880001625	V5102-001-14049	Alpha error by LC	FILTER	LA-508-421		100	%	0.00	12/23/98	12/16/98	12/17/98
W880001625	V5102-001-14049	Beta by liquid scintillation	FILTER	LA-508-421		9.9E+01	uCi	1.50	12/23/98	12/16/98	12/17/98
W880001625	V5102-001-14049	Beta error by LC	FILTER	LA-508-421		15	%	0.00	12/23/98	12/16/98	12/17/98
W880001625	V5102-001-14049	H-3 Rel. % Count Error	FILTER	LA-508-421		20	%	0.00	12/16/98	12/16/98	12/17/98

MDL = Minimum Detection Limit
RQ = Result Qualifier

D - Compound concentration resulted from a dilution.
E - Estimated value.
J - See Comments.
U - The analyte was analyzed but not detected.

* Indicates results that have NOT been validated.

Report W004/ver. 3
PROJECT HANFORD MANAGEMENT CONTRACTORS

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WSCF ANALYTICAL LABORATORY REPORT

Group #: 98001754

Attention: L.SASAKI/L.PINGLE
Project Number MISC. :PROJ. HANFORD MNGMT. CONT.

Sample #	Client ID	Test Performed	Matrix	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Received
W880001626	V5702-009-H054	H-3 Ret. % Count Error	FILTER	08-421	20	%		0.00	12/16/98	12/16/98	12/17/98
W880001626	V5702-009-H054	H-3 Ret. % Count Error	FILTER	08-421	20	%		0.00	12/16/98	12/16/98	12/17/98
W880001627	V5702-009-H005	H-3 Ret. % Count Error	FILTER	08-421	20	%		0.00	12/16/98	12/16/98	12/17/98
W880001627	V5702-009-H005	H-3 Ret. % Count Error	FILTER	08-421	20	%		0.00	12/16/98	12/16/98	12/17/98
W880001628	V5702-012-H007	H-3 Ret. % Count Error	FILTER	08-421	20	%		0.00	12/16/98	12/16/98	12/17/98
W880001628	V5702-012-H007	H-3 Ret. % Count Error	FILTER	08-421	20	%		0.00	12/16/98	12/16/98	12/17/98

MDL = Minimum Detection Limit
RQ = Result Qualifier

D - Compound concentration resulted from a dilution.
J - Estimated value.
U - The analysis was analyzed for but not detected.

B - The analyte was detected in the associated method blank.
E - Compound concentration exceeded calibration range.
N - Identification is based on a mass spectral library search.

* - Indicates results that have NOT been validated.

Report W004/Ver. 3
PROJECT HANFORD MANAGEMENT CONTRACTORS

Page 3

WSCF ANALYTICAL LABORATORY REPORT

Attention: Cary Seidel/Leida Sasaki
Project Number MISC.

Group #: 98001765

PROJ: HANFORD MNGMT. CONT.

Sample #	Client ID	Test Performed	Matrix	Method	RQ	Result	Units	MDL	Analyzed	Sampled	Received
W880001643	V5006-000-1001	H-3 Rd. % Count Error	FILTER	LA-508-421		35	%	0.00	12/21/98		12/18/98
W880001643	V5006-000-1001	H-3 Rd. % Count Error	FILTER	LA-508-421		35	%	2.60	12/21/98		12/18/98
W880001644	V5006-031-1002	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	0.00	12/21/98		12/18/98
W880001644	V5006-031-1002	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	2.60	12/21/98		12/18/98
W880001645	V5006-008-1003	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	0.00	12/21/98		12/18/98
W880001645	V5006-008-1003	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	2.60	12/21/98		12/18/98
W880001646	V5006-000-1004	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	0.00	12/21/98		12/17/98
W880001646	V5006-000-1004	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	2.60	12/21/98		12/17/98
W880001647	V5006-111-1005	H-3 Rd. % Count Error	FILTER	LA-508-421		24	%	0.00	12/21/98		12/17/98
W880001647	V5006-111-1005	H-3 Rd. % Count Error	FILTER	LA-508-421		24	%	2.60	12/21/98		12/17/98
W880001648	V5006-048-1006	H-3 Rd. % Count Error	FILTER	LA-508-421		24	%	0.00	12/21/98		12/18/98
W880001648	V5006-048-1006	H-3 Rd. % Count Error	FILTER	LA-508-421		24	%	2.60	12/21/98		12/18/98
W880001649	V5006-005-1007	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	0.00	12/21/98		12/18/98
W880001649	V5006-005-1007	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	2.60	12/21/98		12/18/98
W880001650	V5006-016-1008	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	0.00	12/21/98		12/17/98
W880001650	V5006-016-1008	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	2.60	12/21/98		12/17/98
W880001651	V5006-081-1009	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	0.00	12/21/98		12/17/98
W880001651	V5006-081-1009	H-3 Rd. % Count Error	FILTER	LA-508-421		23	%	2.60	12/21/98		12/17/98

MDL = Minimum Detection Limit
RQ = Result Qualifier

- 8 - The analyte was detected in the associated method blank.
9 - Compound concentration exceeded calibration range.
N - Identification is based on a mass spectral library search.
* - Indicates results that have NOT been validated.

Report W004/ver. 3

PROJECT HANFORD MANAGEMENT CONTRACTORS

1C-23

12/21/98 MON 16:36 FAX 509 3734641

CANON

017

Waste Management Services		LIQUID WASTE PROCESSING FACILITIES CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C. No. V9003-f	
Requester CAPING		Contact/Requester C-106 Alack		Telephone No. 509 3734641		Page 1 of 1	
Site No. 230-C-006 Stack		Sample Origin Logbook No.		Purchase Order/Change Order		Temp.	
Typed To Lab WSEF		Method of Signment Track		B&E Laboratory No.			
Serial		Date Turnaround		Official Property No.			
Sample No.	Lab ID	Date	Time	No./Type Container	Sample Analysis	Preservative	
71	F-7 U	12-23-98	11:30	1 liter bottle	Alpha & Beta	GFA	
72	F-7 D	"	"	"	"	"	
SINGLE SAMPLE HAZARDOUS WASTES (DOT 49 REGULATORY)				SPECIAL INSTRUCTIONS dis assembly filters and at filters			
MSDS ☐ Yes ☐ No							
Required By APING	Date/Time 12/17/98 12:00	Received By V. J. J.	Date/Time 12/17/98 12:00	Sign [Signature]	Quota/Time 12/17/98 12:00	Masses S = Sol ^s DS = Drum Solids SE = Sediment DL = Drum Liquids SD = Sol ^s T = Tissue SL = Sludge W = Waste W = Water L = Liquid O = Oil V = Vegetation A = Air G = Gas X = Other	
Required By	Date/Time	Received By	Date/Time				
Required By	Date/Time	Received By	Date/Time				
Disposal Method (e.g., Return to customer, per the procedure, used in process)				Disposer: [Signature]			
Samples containing hazardous materials shall be picked up by requestor and returned to point of collection or site of origin.							

A-6001-774 (01/97)

Originator Gregory A. Fies V9004		Date 12/1/98	Sample Collected Bob Prazuk	Charge Code	UAC No. V9004-B
Project Number 241-AV-102 SHIMS		Sample Origin 241-AV-102 SHIMS	Blot No. Shms Bebe	Page 1 of 1	
Project Title Shipped To (lab) WJCF		Sampling Logbook No. 11/1	COC Procedure LO-09-430B-1		
		Method of Shipment Government Vehicle	Sampling Method Summit		

Sample Number	Number	Type	Sampling Date	Time	Sample Identification	Analysis Requested	Holding Time
VSI02-001	-H014	✓	12-16-98	1319h	Tritium Trap with SUMMA		
VSI02-004	-H025	✓	12-16-98	1302h	Tritium Trap with SUMMA		
VSI02-007	-H026	✓	12-16-98	1340h	Tritium Trap with SUMMA		
VSI02-010	-H028	✓	12-16-98	2202h	Tritium Trap with SUMMA		
VSI02-013	-H030	✓			Tritium Trap with SUMMA		
VSI02-016	-H031	✓			Tritium Trap with SUMMA		
VSI02-019	-H039	✓			Tritium Trap with SUMMA		

These SUMMA are for tritium trap sampling only.
2 spare tritium traps w/out C-FLUX. C-FLUX 12/15/98 *Sampling Transmitted Not Used

Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
Relinquished By	Gregory A. Fies		12-15-98 1638	Received By	V. Matthews		12-15-98 1638
Relinquished By	V. Matthews		12-15-98 1707	Received By	Robert J. Przewil		12-15-98 1707
Relinquished By	R.J. Przewil		12-16-98 0320h	Received By	James Sicks		12-16-98 0320h
Relinquished By	James Sicks		12-17-98 1440	Received By	James R. Frueh		12-17-98 1440
Relinquished By	James R. Frueh		12-17-98 1208	Received By	V. Matthews		12-17-98 1208
Relinquished By	V. Matthews		12-17-98 1208	Received By	V. Matthews		12-17-98 1208

Received Summits on 01/05/99
R-J 01/05/99

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

NHC/SAS		COC No. V9005-b				Page 1 of 1	
Originator	Gregory A. Fies	Date	12/15/98	Sample Collector(s)	James Sickels	Charge Code	
Project Number	V9005	Sample Origin	241-AZ-702 Stuck	Sampling Logbook No.	N/A	Riser No.	702-123 5TH K
Project Title	241-AZ-702 Stuck	Method of Shipment		Government Vehicle		COC Procedure	LO-090-450/B-1
Shipped To (lab)	WSCF	Sampling - Sampling				Sampling Method	Summit
Sample Number	Number	Type	Date	Time	Sample Identification	Analysis Requested	Holding Time
VST02-001-H049	✓	Tritium Trap	12-16-98	13:05	Tritium Trap with SUMMA		
VST02-006-H054	✓	Tritium Trap	12-16-98	19:05	Tritium Trap with SUMMA		
VST02-009-H065	✓	Tritium Trap	12-16-98	19:02	Tritium Trap with SUMMA		
VST02-012-H067	✓	Tritium Trap	12-16-98	20:02	Tritium Trap with SUMMA		
VST02-015-H071	✓	Tritium Trap			Tritium Trap with SUMMA		
VST02-018-H079	✓	Tritium Trap			Tritium Trap with SUMMA		
VST02-021-H083	✓	Tritium Trap			Tritium Trap with SUMMA		
Comments/Anomalies: These SUMMA's are for tritium trap sampling only. 2 more tritium traps out C-514K. GAF 12/15/98 *Sampling Stop Not Used							
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
Gregory A. Fies			12-15-98 16:30	William Matthews			12-15-98 16:30
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
William Matthews			12-15-98 17:10	James Sickels			12-15-98 17:10
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
James Sickels			12-17-98 11:40	James Sickels			12-15-98 17:10
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
James Sickels			12-17-98 13:08	James Sickels			12-15-98 17:10
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
James Sickels			12-17-98	James Sickels			12-15-98 17:10
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
Final Sample Disposition							

Received Summits on 01/05/99.
 RJS 01/05/99

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**This document was too large to scan
as a single document; therefore, it has
been divided into smaller sections.**

Section 2 of 5

Document Information			
Document #	HNF-3949	Revision	0
Title	TANK VAPOR SAMPLING & ANALYSIS DATA PACKAGE FOR TANK 241C106 WASTE RETRIEVAL SLUICING SYS PROCESS TEST SAMPLED 12/16/1998		
Date	03/22/1999		
Originator	LOCKREM LL	Originator Co.	NHC
Recipient		Recipient Co.	
References			
Keywords			
Projects			
Other Information			

2.0 Analyses Section

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2.1 General Information

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2.1.1 SCOPE

The analyses section of this data package presents the results of the laboratory analyses of vapor samples collected on December 16, 1998, from the 296-C-006 ventilation system stack, 241-AZ-702 ventilation system stack, and tank 241-AY-102 head space via the standard hydrogen monitoring system (SHMS). These analyses were performed for Lockheed Martin Hanford Corporation (LMHC) and Tank Waste Remediation System (TWRS) in accordance with the analytical requirements specified in the *Waste Retrieval Sluicing System Vapor Sampling and Analysis Plan for Evaluation of Organic Emissions*, HNF-3732, Rev. 0-A, (LMHC, 1998). Discussion and data from the collection of these samples are presented in the sampling section of this data package.

Results for each target analyte are organized by the method used for each analysis. The 7 analytical methods are presented in sections 2.2 through 2.8. Each of these sections has subsections that contain the case narrative, analytical results summary, quality control summary, and supporting data.

2.1.2 ANALYTICAL LOGBOOKS

Table 2-1 provides a listing of the logbooks used during analysis and the corresponding page numbers that contain data and information relevant to this sampling event.

Table 2-1. Analytical Laboratory Project Logbooks.

Logbook Title	Logbook Number	Page Numbers
Preparation of Samples and Standards for TST Analysis	WHC-N-1411-1	123 - 133
Thermal Desorption	WHC-N-943-1	33 - 34
Maintenance and Run Log for Hewlett Packard GC/FTIR/MS	WHC-N-932-1	93 - 101
Tank Vapor Headspace Sampling and Analysis Program - Ammonia Analyses	WHC-N-1400-1	134 - 137
Instrument Log for OI 4460A, HP5890 and HP5971 MSD	WHC-N-1025-4	22
Tank Vapor Headspace Sampling and Analysis Program - Inorganic Anion Analyses	WHC-N-1399-1	126 - 129
TNMOC (TO-12) Analysis	WHC-N-1319-1	66+
Permanent Gas Analysis	HNF-N-125-1	10 - 14

2.1.3 VAPOR PROGRAM REQUIRED QUANTITATION LIMITS

Table 2-2 contains a listing of the Vapor Program Required Quantitation Limit (VPRQL) and corresponding CAS number for each program target analyte.

Table 2-2. Vapor Program Required Quantitation Limits. (5 sheets)

Analyte	CAS Number	VPRQL (mg/m3)	VPRQL (ppbv)
VOCs in TST Samples			
Acetone	67-64-1	0.15	63
Acetonitrile	75-05-8	0.15	89
Benzene	71-43-2	0.15	47
1-Butanol	71-36-3	0.15	49
Dodecane	112-40-3	0.15	22
n-Hexane	110-54-3	0.15	43
Propanenitrile	107-12-0	0.15	67
Tridecane	629-50-5	0.15	20
Dichloromethane (methylene chloride)	75-09-2	0.15	43
Butanenitrile	109-74-0	0.15	53
2-Pentanone	107-87-9	0.15	43
n-Heptane	142-82-5	0.15	37
Methyl Benzene (Toluene)	108-88-3	0.15	40
Pentanenitrile	110-59-8	0.15	44
2-Hexanone (Methyl Butyl Ketone)	591-78-6	0.15	37
Octane	111-65-9	0.15	32
Hexanenitrile	628-73-9	0.15	38
2-Heptanone	110-43-0	0.15	32
n-Nonane	111-84-2	0.15	29
Heptanenitrile	629-08-3	0.15	33
2-Octanone	111-13-7	0.15	29

Table 2-2. Vapor Program Required Quantitation Limits. (5 sheets)

Analyte	CAS Number	VPRQL (mg/m3)	VPRQL (ppbv)
Decane	124-18-5	0.15	26
Undecane	1120-21-4	0.15	23
Dodecane	112-40-3	0.15	22
Methanol	7-56-1	0.15	110
Ethanol	64-17-5	0.15	80
1-Propanol	71-23-8	0.15	61
Tetrahydrofuran	109-99-9	0.15	51
1,2,4-Trimethylbenzene	95-63-6	0.15	30
o-Xylene	95-47-6	0.15	34
Carbon Tetrachloride	56-23-5	0.15	24
Chloroform	67-66-3	0.15	31
Tetrachloroethylene	127-18-4	0.15	22
Permanent Gases in SUMMA Samples			
Carbon Dioxide	124-38-9	90	50 ppmv
Carbon Monoxide	630-08-0	57	50 ppmv
Hydrogen	1333-74-0	4.1	50 ppmv
Methane	74-82-8	33	50 ppmv
Nitrous oxide	10024-97-2	90	50 ppmv
TNMOC in SUMMA Samples			
Total Non-methane Organic Compounds		0.07	150
VOCs in SUMMA Samples			
Acetone	67-64-1	0.012	5.0

Table 2-2. Vapor Program Required Quantitation Limits. (5 sheets)

Analyte	CAS Number	VPRQL (mg/m3)	VPRQL (ppbv)
Acetonitrile	75-05-8	0.008	5.0
Benzene	71-43-2	0.016	5.0
Butanal	123-72-8	0.015	5.0
1-Butanol	71-36-3	0.015	5.0
Propanenitrile	107-12-0	0.011	5.0
Chloroethane	75-00-3	0.013	5.0
Trichlorodifluoromethane (Freon 12)	75-71-8	0.025	5.0
Methylbenzene	108-88-3	0.019	5.0
Ethylbenzene	100-41-4	0.022	5.0
2-Butanone	78-93-3	0.015	5.0
n-Heptane	142-72-5	0.020	5.0
Tetrahydrofuran	109-99-9	0.015	5.0
2-Propanol	67-63-0	0.012	5.0
1-Propanol	71-23-8	0.012	5.0
Trichlorofluoromethane (Freon 11)	75-69-4	0.028	5.0
o-Xylene	95-47-6	0.022	5.0
m-Xylene	108-38-3	0.022	5.0
p-Xylene	106-42-3	0.022	5.0
1,2,4-Trimethylbenzene	95-63-6	0.024	5.0
Decane	124-18-5	0.029	5.0
4-Methyl-2-pentanone	108-10-1	0.020	5.0
Butanenitrile	109-74-0	0.014	5.0
Octane	111-65-9	0.023	5.0
Tetrachloroethylene	127-18-4	0.034	5.0
Chloromethane	74-87-3	0.010	5.0

Table 2-2. Vapor Program Required Quantitation Limits. (5 sheets)

Analyte	CAS Number	VPRQL (mg/m3)	VPRQL (ppbv)
Dichloromethane (methylene chloride)	75-09-2	0.017	5.0
Chloroform (trichloromethane)	67-66-3	0.024	5.0
Carbon tetrachloride (tetrachloromethane)	56-23-5	0.031	5.0
Pentane	109-66-0	0.015	5.0
2-Methylpentane	107-83-5	0.018	5.0
1-Hexene	592-41-6	0.017	5.0
n-Butane	106-97-8	0.012	5.0
3-Methyl hexane	589-34-4	0.020	5.0
1,4-Diethylene dioxide (dioxin)	123-91-1	0.018	5.0
Chlorobenzene	108-90-7	0.023	5.0
Styrene	100-42-5	0.021	5.0
3-Heptanone	106-35-4	0.023	5.0
Cyclohexanone	108-94-1	0.020	5.0
Furan	110-00-9	0.014	5.0
n-Nonane	111-84-2	0.026	5.0
Ethanol	64-17-5	0.009	5.0
2-Pentanone	107-87-9	0.018	5.0
2-Hexanone	591-78-6	0.020	5.0
2-Heptanone	110-43-0	0.023	5.0
2-Octanone	111-13-7	0.026	5.0
Inorganic Sorbent Tube Train Samples			
Ammonia	7664-41-7	10	14 ppmv
Nitrogen dioxide	10102-44-0	5.0	2.7 ppmv
Nitric oxide	10102-43-9	5.0	4.1 ppmv

Table 2-2. Vapor Program Required Quantitation Limits. (5 sheets)

Analyte	CAS Number	VPRQL (mg/m3)	VPRQL (ppbv)
Water	7732-18-5	5400	6700 ppmv

2.1.4 DATA QUALIFIER FLAGS

Table 2-3 contains a listing of each data qualifier flag and its corresponding definition.

Table 2-3. Data Qualifier Flag Translation Table.

Qualifier ("Q") Flag	Definition
T	Target analyte reported in sample was also found in trip blank above action limit.
F	Target analyte reported in sample was also found in field blank above action limit.
B	Target analyte reported in sample was also found in laboratory blank above action limit.
D	Target analyte reported is the result of a secondary dilution.
E	Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.
Q	Target analyte was detected, but at concentrations less than the Vapor Program Required Quantitation Limit.
J	Tentatively Identified Compound: Non-target analyte reported concentration is an estimate.
N	Tentatively Identified Compound: Non-target analyte reported is tentative, not confirmed with authentic standards.
M	Target analyte was absent (not detected) in sample.
*	Asteric: Data did not meet quality control requirements; refer to data package case narrative.

2.1.5 TANK VAPOR SAMPLE ANALYSIS PROCEDURES

All analyses were performed according to the procedures listed in Table 2-4. Any exceptions to these procedures are noted in the relevant analysis subsection.

Table 2-4. Summary of Tank Vapor Sample Analysis Procedures.

Procedure Title	Procedure #/Revision #
Determination of Volatile Organic Compounds in Hanford Waste Tank Headspace Samples Using SUMMA Passivated Canister Sampling and GC/MS Analysis	LA-523-404/A-1
Analysis of Semi-Volatile Organic Compounds in Ambient Air and Tank Headspace	LA-523-428/A-0
Total Nonmethane Organic Compounds	LA-523-407/A-0
Determination of Permanent Gases in SUMMA Passivated Canisters	LA-523-409/A-0
Measurement of Organics by Thermal Desorption/Gas Chromatography/Mass Spectrometry	LA-523-408/A-1
Determination of Ammonia in Sorbent Tube Leachate by Ion Chromatography	LA-533-402/A-0
Determination of Inorganic Anions in Sorbent Tube Leachate by Ion Chromatography	LA-533-400/A-0
Preparation of Triple Sorbent Tubes for Field Sampling, Analysis and Calibration Standards	LA-549-404/A-1

2.2 Volatile Organic Compounds in SUMMA Canister Samples (TO-14 Method)

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2.2.1 Narrative

This section contains descriptions of the analytical method and quality assurance used during analysis.

2.2.1.1 Determination of Volatile Organic Compounds in SUMMA Canister Samples (TO-14 Method)

The SUMMA samples were analyzed for volatile organic compounds (VOCs) according to procedure LA-523-404, Rev. A-1, *Determination of Volatile Organic Compounds in Hanford Site Waste Tank Headspace Samples Using SUMMA Passivated Canister Sampling and GC-MS Analysis*. This method is based on a modified U. S. Environmental Protection Agency (EPA) method TO-14. The VOCs were concentrated from the tank headspace sample by cryogenic trapping with liquid argon and subsequently analyzed by gas chromatography-mass spectrometry (GC-MS). The method offers low ppbv instrument detection limits.

For target analytes, quantitation is performed based on a 5-point calibration with standard mixtures of the target analyte compounds. Non-target compounds detected in the vapor samples are qualitatively identified via computer-automated comparison of the compound's mass spectrum with the Wiley 138 and National Institute of Standards and Technology (NIST) libraries of mass spectra. They are designated as tentatively identified compounds (TICs) if the match quality meets certain criteria (70 % or better match). The concentration of a TIC is estimated using the response factor of the chlorobenzene-d5 internal standard.

The instrumentation consists of a Hewlett-Packard (Palo Alto, CA) model 5890 Series II gas chromatograph equipped with a Hewlett-Packard model 5972 bench top mass spectrometer. A 60 meter methylphenyl-type capillary column (DB-5, J & W Scientific, Folsom, CA) with an internal diameter of 0.32 mm and 1.0 μ m film thickness is used for compound separation.

The pressure of the SUMMA canisters was checked before analysis; all SUMMA canisters were at ambient pressure (approximately 14.7 psia). The canisters were then pressurized to twice the ambient pressure (dilution factor=2) with Ultrapure air (Scott-Marrin) and allowed to equilibrate for 4 hours or longer. A 50.0 torr sample was withdrawn from the pressurized SUMMA canister for analysis. A fixed volume of an internal standard with 2 components was added to each sample prior to injection. For target compounds that exceeded the calibration range of the instrument, a second dilution was made by transferring 500.0 ml from the original, pressurized canister to another 6 L SUMMA canister and pressurizing to 2 atm (total dilution factor = 48). A 50 torr sample was analyzed and the original concentration for the target compounds was calculated; the compounds determined with a secondary dilution are flagged "D" in the target compound tables.

2.2.1.2 Volatile Organic Compound (TO-14 Method) Analytical Quality Assurance

Method LA-523-404, Rev. A-1, is used for the qualitative and quantitative gas chromatography/mass spectrometry (GC/MS) determination of volatile target organic compounds in waste tank headspace samples collected in SUMMA passivated canisters. Non-target organic compounds detected during sample analysis must meet threshold levels prior to reporting. Non-target compounds are reported as "tentatively identified compounds (TICs)" and concentration estimates of TICs are made relative to selected internal standards.

The GC/MS system is tuned and calibrated initially prior to starting sample analysis, and each time continuing calibration criteria cannot be met for subsequent analysis. To ensure satisfactory initial performance, the GC/MS system must meet established tuning and analyte sensitivity criteria. At least 5 concentration levels are used for the initial calibration or ICAL of each target VOC. Internal standards are added to calibration standards and samples in order to compute analyte relative response factors (RRFs). Final computations of sample target analyte concentrations are made using RRFs. The validity of the initial calibration is demonstrated by meeting deviation or curve fit criteria and through the satisfactory measurement of a "check standard", the ICSV, for the target analytes. Initial calibration blanks are measured for target analyte levels to demonstrate satisfactory system cleanliness.

Each day the GC/MS is used for analysis, the continued performance and sensitivity of the system is verified through an "auto-tune" or the analysis of the tuning check compound. GC/MS tuning compound criteria must be met. Also, a mid-level check standard, or CCVS, is measured. Criteria for the CCVS that must be met are percent recovery of the CCVS analytes, response factor sensitivity, and internal standard area counts. Continuing calibration blanks (CCBs) are measured for target analytes to document the continued satisfactory cleanliness of the GC/MS system.

With each tank sample reporting batch, the analysis of a method blank (MB) is conducted and reported. The MB cannot exceed maximum allowable contamination levels for target analytes. With each tank sample reporting batch, the analysis of a laboratory control sample (LCS) and LCS duplicate is conducted. The recovery of the LCS analytes must meet accuracy (percent recovery - %R) and precision (relative percent difference - RPD) requirements. Also, with each tank sample reporting batch, an actual tank sample is analyzed in duplicate, the "laboratory sample duplicate". The RPD between the sample analyte concentrations measured above reporting limits and its sample duplicate analyte concentrations must meet precision requirement or the resulting data is flagged.

The GC-MS system was calibrated according to procedure LA-523-404, Rev. A-1. Two certified gas standards prepared by Scott-Marrin (Riverside, CA) were used: A nonpolar standard with 34 compounds (certificate #CC105483) and a polar standard containing 22 compounds (certificate #CC105523). The calibration is documented in logbook WHC-N-932-1, pages 92 and 94. All compounds met the %RSD requirement of 25 % for the calibration except 1,1,2,2-tetrachloroethane (43 %). The precision of the calibration was checked on the day of the sample analysis by analyzing an independently prepared laboratory control standard (Scott-Merrin #

CC68664). The recovery of the analytes was within the required range of 65 - 135 % except for 1,2,4-trimethylbenzene (167 % and 226 % recovery).

Two internal standards were used to calculate the RRF for each target compound. The recovery of the internal standards for the 24 analyses relative to the CCVS was within the required 50 - 150 % range.

A continuing calibration verification standard (CCVS) prepared from the nonpolar standard was analyzed daily. The response factors for these compounds from the initial calibration were compared with the CCRF on the day of analysis. All compounds in the CCVS met the required 25 % RPD except 1,1,2,2-tetrachloroethane (35 % on 1/12/1999 and 26 % on 1/11/1999). In addition, a polar CCVS was also analyzed; the following target analytes exceeded the 25 % RPD: 2-Octanone (32 % on 1/2/1999, 43 % on 1/8/1999, 57 % on 1/11/1999), 3-heptanone (47 % on 1/5/1999), 2-hexanone (39 % on 1/7/1999), 1,4-dioxane (33 % on 1/7/1999, 43 % on 1/8/1999), 2-pentanone (42 % on 1/8/1999), 1-butanol (43 % on 1/11/1999), tetrahydrofuran (31 % on 1/11/1999), and 1-propanol (33 % on 1/11/1999).

The primary dilution of the tank headspace sample was analyzed in duplicate (replicate analysis). All compounds met the required RPD of 35 %. One target compound (n-butane) exceeded the calibration range; a second dilution was made for this compound but only a single analysis was made.

The laboratory blank collected from a SUMMA canister filled with ultrapure air contained the target analytes 1-butanol (13 ppbv on 1/2/1999, 14 ppbv on 1/4/1999, 12 ppbv on 1/5/1999), 4-methyl-2-pentanone (3.2 ppbv on 1/2/1999, 3.7 ppbv on 1/4/1999, 3.3 ppbv on 1/5/1999) and 3-heptanone (5.8 ppbv on 1/4/1999). No TICs were found in these samples.

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2.2.2 Result Summary Tables

The result summary tables list all target analytes by increasing chromatographic retention times. Also listed are the results of the duplicate analysis using the same SUMMA sample and the relative percent difference (RPD) calculated from these values. All reported values have been corrected to 25 °C and 1 atmosphere pressure.

This section contains a table with the tentatively identified compounds (TICs) found in the vapor samples. The concentrations of these compounds were estimated based on the response of an internal standard. An extended list of TICs (at concentrations of 5 ppbv or greater) is included for sample VS006-051-S078.

C-106 Target Analyte Concentrations for SUMMA Analyses		Sample Number			VS006-002-S019			VS006-010-S036			VS006-018-S045		
		Analysis Date			1/4/99			1/2/99			1/7/99		
		Analysis Time			1235			1416			1258		
		Primary Dilution File ID			1901040.D			19010204.D			19010705.D		
		Secondary Dilution File ID			NA			NA			19010807.D		
Target Analyte Name	CAS #	VPRQL (ppbv)	VPRQL (mg/m ³)		(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²
Freon 12	75-71-8	5.0	0.025	5.0	0.025	M		5.0	0.025	M	5.0	0.025	M
Methyl chloride	74-87-3	5.0	0.010	5.0	0.010	M		5.0	0.010	M	5.0	0.010	M
N-Butane	106-97-8	5.0	0.012	5.0	0.012	M		21	0.051		391	0.929	D
Ethyl Chloride	75-00-3	5.0	0.013	5.0	0.013	M		5.0	0.013	M	5.0	0.013	M
Freon 11	75-69-4	5.0	0.028	5.0	0.028	M		5.0	0.028	Q	5.0	0.028	Q
N-Pentane	109-66-0	5.0	0.015	5.0	0.015	M		11	0.031		98	0.29	
Dichloromethane	75-09-2	5.0	0.017	5.0	0.017	M		5.0	0.017	M	5.0	0.017	M
2-Methyl-Pentane	107-83-5	5.0	0.018	5.0	0.018	M		5.0	0.018	M	12	0.043	
1-Hexene	592-41-6	5.0	0.017	5.0	0.017	M		5.0	0.017	Q	147	0.51	
N-Hexane	110-54-3	5.0	0.018	5.0	0.018	M		6.8	0.024		69	0.24	
Chloroform	67-66-3	5.0	0.024	5.0	0.024	M		5.0	0.024	M	5.0	0.024	M
Benzene	71-43-2	5.0	0.016	5.0	0.016	M		5.0	0.016	M	5.0	0.016	Q
Carbon Tetrachloride	56-23-5	5.0	0.031	5.0	0.031	M		5.0	0.031	M	5.0	0.031	M
3-Methyl-Hexane	589-34-4	5.0	0.020	5.0	0.020	M		5.0	0.020	M	5.0	0.020	Q
N-Heptane	142-82-5	5.0	0.020	5.0	0.020	M		7.5	0.031		171	0.70	
Toluene	108-88-3	5.0	0.019	5.0	0.019	M		5.0	0.019	Q	15	0.057	
N-Octane	111-65-9	5.0	0.023	5.0	0.023	M		5.0	0.023	Q	33	0.16	
Tetrachloroethylene	127-18-4	5.0	0.034	5.0	0.034	M		5.0	0.034	M	5.0	0.034	M
Chlorobenzene	108-90-7	5.0	0.023	5.0	0.023	M		5.0	0.023	M	5.0	0.023	M
Ethylbenzene	100-41-4	5.0	0.022	5.0	0.022	M		5.0	0.022	M	5.0	0.022	M
m,p-Xylene	108-38-3												
Styrene	106-42-3	5.0	0.022	5.0	0.022	M		5.0	0.022	M	5.0	0.022	M
N-Nonane	100-42-5	5.0	0.021	5.0	0.021	M		5.0	0.021	M	5.0	0.021	M
1,1,1,2-Tetrachloroethane	111-84-2	5.0	0.026	5.0	0.026	M		5.0	0.026	Q	36.1	0.19	
o-Xylene	79-34-5	5.0	0.034	5.0	0.034	M		5.0	0.034	M	5.0	0.034	M
N-Decane	95-47-6	5.0	0.022	5.0	0.022	M		5.0	0.022	M	5.0	0.022	M
1,2,4-Trimethylbenzene	124-18-5	5.0	0.029	5.0	0.029	M		8.3	0.049		58	0.34	
Ethanol	95-63-6	5.0	0.025	5.0	0.025	M		5.0	0.025	M	5.0	0.025	M
Acetonitrile	64-17-5	5.0	0.0090	5.0	0.0094	M		224	0.42		253	0.48	D
Acetone	75-05-8	5.0	0.0080	5.0	0.0084	M		13	0.022		52.8	0.089	
Furan	67-64-1	5.0	0.012	5.0	0.012	M		32	0.076		122	0.29	
2-Propanol	110-00-9	5.0	0.014	5.0	0.014	M		5.0	0.014	M	5.0	0.014	M
1-Propanol	67-63-0	5.0	0.012	5.0	0.012	M		5.0	0.012	Q	5.0	0.012	M
Propanenitrile	71-23-8	5.0	0.012	5.0	0.012	M		11	0.027		13	0.033	
Butanol	107-12-0	5.0	0.011	5.0	0.011	M		8.2	0.018		35	0.079	
2-Butanone	123-72-8	5.0	0.015	5.0	0.015	M		17	0.049		33	0.098	
Tetrahydrofuran	78-93-3	5.0	0.015	5.0	0.015	M		11	0.031		33	0.097	
1-Butanol	109-99-9	5.0	0.015	5.0	0.015	M		5.3	0.016		7.5	0.022	
Butanenitrile	71-36-3	5.0	0.015	5.0	0.015	M, B		82	0.25	B	97	0.30	
2-Pentanone	109-74-0	5.0	0.014	5.0	0.014	M		5.0	0.014	M	56	0.16	
1,4-Dioxane	107-87-9	5.0	0.018	5.0	0.018	M		5.0	0.018	M	17	0.060	
4-Methyl-2-Pentanone	123-91-1	5.0	0.018	5.0	0.018	M		5.0	0.018	M	5.0	0.018	M*
2-Hexanone	108-10-1	5.0	0.020	5.0	0.020	M		5.0	0.020	M	5.0	0.020	M
3-Heptanone	591-78-6	5.0	0.020	5.0	0.020	M		5.0	0.020	Q	44	0.18	*
2-Heptanone	106-35-4	5.0	0.023	5.0	0.023	M, B		41	0.19		481	2.2	D
Cyclohexanone	110-43-3	5.0	0.023	5.0	0.023	M		7.3	0.034		120	0.56	
2-Octanone	108-94-1	5.0	0.020	5.0	0.020	M		5.0	0.020	M	5.0	0.020	M
	111-13-7	5.0	0.026	5.0	0.026	M		5.0	0.026	M*	5.0	0.026	Q

¹ mg/m³ calculated at 25°C and 101.3 kPa (1 atmosphere)² Data Flags:

D: Target analyte reported is the result of a secondary dilution

M: Target analyte was absent (not detected) in sample

Q: Target analyte was detected, but at concentrations less than VPRQL

B: Target analyte was detected in laboratory blank

F: Target analyte was found in field blank

* Not all QC criteria were met for this target analyte; see narrative

C-106 Target Analyte Concentrations for SUMMA Analyses		Sample Number		VS006-025-S064			VS006-033-S053			VS006-034-S057		
		Analysis Date		1/2/99			1/2/99			1/5/99		
		Analysis Time		1527			1647			1558		
		Primary Dilution File ID		19010205.D			19010206.D			19010507.D		
		Secondary Dilution File ID		NA			19010808.D			19010706.D		
Target Analyte Name	CAS #	VPRQL (ppbv)	VPRQL (mg/m ³)	(ppbv)	(mg/m ³)	Flag ¹	(ppbv)	(mg/m ³)	Flag ²	(ppbv)	(mg/m ³)	Flag ²
Freon 12	75-71-8	5.0	0.025	5.0	0.025	M	5.0	0.025	M	5.0	0.025	M
Methyl chloride	74-87-3	5.0	0.010	5.0	0.010	M	5.0	0.010	M	5.0	0.010	M
N-Butane	106-97-8	5.0	0.012	5	0.012	M	833	2.0	D	861	2.0	D
Ethyl Chloride	75-00-3	5.0	0.013	5.0	0.013	M	5.0	0.013	M	5.0	0.013	M
Freon 11	75-69-4	5.0	0.028	5.0	0.028	M	5.0	0.028	Q	5.0	0.028	Q
N-Pentane	109-66-0	5.0	0.015	5.0	0.015	M	202	0.60		209	0.62	
Dichloromethane	75-09-2	5.0	0.017	5.0	0.017	M	5.0	0.017	M	5.0	0.017	M
2-Methyl-Pentane	107-83-5	5.0	0.018	5.0	0.018	M	27	0.094		25	0.087	
1-Hexene	592-41-6	5.0	0.017	5.0	0.017	M	401	1.4	D	427	1.5	D
N-Hexane	110-54-3	5.0	0.018	5.0	0.018	M	156	0.55		154	0.54	
Chloroform	67-66-3	5.0	0.024	5.0	0.024	M	5.0	0.024	M	5.0	0.024	M
Benzene	71-43-2	5.0	0.016	5.0	0.016	M	5.0	0.016	M	7.8	0.025	
Carbon Tetrachloride	56-23-5	5.0	0.031	5.0	0.031	M	5.0	0.031	M	5.0	0.031	M
3-Methyl-Hexane	589-34-4	5.0	0.020	5.0	0.020	M	5.0	0.020	M	7.5	0.031	
N-Heptane	142-82-5	5.0	0.020	5.5	0.022		223	0.92		253	1.0	
Toluene	108-88-3	5.0	0.019	5.0	0.019	M	39	0.15		35	0.13	
N-Octane	111-65-9	5.0	0.023	5.0	0.023	M	80	0.37		69	0.32	
Tetrachloroethylene	127-18-4	5.0	0.034	5.0	0.034	M	5.0	0.034	M	5.0	0.034	M
Chlorobenzene	108-90-7	5.0	0.023	5.0	0.023	M	5.0	0.023	M	5.0	0.023	M
Ethylbenzene	100-41-4	5.0	0.022	5.0	0.022	M	5.0	0.022	Q	5.0	0.022	M
m,p-Xylene	108-38-3											
Styrene	106-42-3	5.0	0.022	5.0	0.022	M	5.0	0.022	Q	5.0	0.022	M
N-Nonane	100-42-5	5.0	0.021	5.0	0.021	M	5.0	0.021	M	5.0	0.021	M
1,1,2,2-Tetrachloroethane	111-84-2	5.0	0.026	5.0	0.026	M	95	0.49		83	0.43	
o-Xylene	79-34-5	5.0	0.034	5.0	0.034	M	5.0	0.034	M	5.0	0.034	M
N-Decane	95-47-6	5.0	0.022	5.0	0.022	M	5.0	0.022	M	5.0	0.022	M
1,2,4-Trimethylbenzene	124-18-5	5.0	0.029	6.3	0.037		145	0.84		113	0.66	
Ethanol	95-63-6	5.0	0.025	5.0	0.025	M	5.0	0.025	M	5.0	0.025	M
Acetonitrile	64-17-5	5.0	0.0090	5.0	0.0094	M	414	0.78	D	468	0.88	D
Acetone	75-05-8	5.0	0.0080	5.0	0.0084	M	103	0.17		89	0.15	
Furan	67-64-1	5.0	0.012	5.0	0.012	M	391	0.93	D	419	0.99	D
2-Propanol	110-00-9	5.0	0.014	5.0	0.014	M	5.0	0.014	M	5.0	0.014	M
1-Propanol	67-63-0	5.0	0.012	5.0	0.012	M	5.0	0.012	Q	5.0	0.012	Q
Propanenitrile	71-23-8	5.0	0.012	5.0	0.012	M	23	0.055		22	0.053	
Butanal	107-12-0	5.0	0.011	5.0	0.011	M	74	0.17		72	0.16	
2-Butanone	123-72-8	5.0	0.015	5.0	0.015	M	5.0	0.015	M	5.0	0.015	M
Tetrahydrofuran	78-93-3	5.0	0.015	5.0	0.015	M	65	0.19		64	0.19	
1-Butanol	109-99-9	5.0	0.015	5.0	0.015	M	5.0	0.015	M	8.5	0.025	
Butanenitrile	71-36-3	5.0	0.015	5.0	0.015	M	167	0.51	B	172	0.52	
2-Pentanone	109-74-0	5.0	0.014	5.0	0.014	M	5.0	0.014	Q	5.0	0.014	M
1,4-Dioxane	107-87-9	5.0	0.018	5.0	0.018	M	29	0.10		24	0.083	
4-Methyl-2-Pentanone	123-91-1	5.0	0.018	5.0	0.018	M	5.0	0.018	M	5.0	0.018	M
2-Hexanone	108-10-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M	5.0	0.020	M
3-Heptanone	591-78-6	5.0	0.020	5.0	0.020	M	124	0.51		108	0.44	
2-Heptanone	106-35-4	5.0	0.023	30	0.14		2010	9.4	D	2407	11	D
Cyclohexanone	110-43-3	5.0	0.023	5.0	0.023	Q	356	1.7	D	479	2.2	D
2-Octanone	108-94-1	5.0	0.020	5.0	0.020	M	5.0	0.020	Q	5.0	0.020	M
	111-13-7	5.0	0.026	5.0	0.026	M*	5.0	0.026	Q*	9.8	0.051	

¹ mg/m³ calculated at 25°C and 101.3 kPa (1 atmosphere)² Data Flags:

D: Target analyte reported is the result of a secondary dilution

M: Target analyte was absent (not detected) in sample

Q: Target analyte was detected, but at concentrations less than VPRQL

B: Target analyte was detected in laboratory blank

F: Target analyte was found in field blank

* Not all QC criteria were met for this target analyte; see narrative

C-106 Target Analyte Concentrations for SUMMA Analyses		Sample Number			VS006-041-S074			VS006-042-S075			VS006-050-S077		
		Analysis Date			1/5/99			1/2/99			1/5/99		
		Analysis Time			1331			1758			1716		
		Primary Dilution File ID			19010505.D			19010207.D			19010508.D		
		Secondary Dilution File ID			19010707.D			19010809.D			NA		
Target Analyte Name	CAS #	VPRQL (ppbv)	VPRQL (mg/m ³)		(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²
Freon 12	75-71-8	5.0	0.025	5.0	0.025	M		5.0	0.025	M	5.0	0.025	M
Methyl chloride	74-87-3	5.0	0.010	5.0	0.010	M		5.0	0.010	M	5.0	0.010	M
N-Butane	106-97-8	5.0	0.012	692	1.6	D		664	1.6	D	634	1.5	D
Ethyl Chloride	75-00-3	5.0	0.013	5.0	0.013	M		5.0	0.013	M	5.0	0.013	M
Freon 11	75-69-4	5.0	0.028	5.0	0.028	Q		5.0	0.028	Q	5.0	0.028	Q
N-Pentane	109-66-0	5.0	0.015	188	0.55			190	0.56		173	0.51	
Dichloromethane	75-09-2	5.0	0.017	5.0	0.017	M		5.0	0.017	M	5.0	0.017	M
2-Methyl-Pentane	107-83-5	5.0	0.018	21	0.074			24	0.086		20	0.069	
1-Hexene	592-41-6	5.0	0.017	367	1.3	D		343	1.2	D	332	1.1	D
N-Hexane	110-54-3	5.0	0.018	138	0.49			150	0.53		129	0.45	
Chloroform	67-66-3	5.0	0.024	5.0	0.024	M		5.0	0.024	M	5.0	0.024	M
Benzene	71-43-2	5.0	0.016	7.1	0.023			7.3	0.023		6.6	0.021	
Carbon Tetrachloride	56-23-5	5.0	0.031	5.0	0.031	M		5.0	0.031	M	5.0	0.031	M
3-Methyl-Hexane	589-34-4	5.0	0.020	10.9	0.045			6.8	0.028		5.7	0.023	
N-Heptane	142-82-5	5.0	0.020	205	0.84			256	1.0		215	0.88	
Toluene	108-88-3	5.0	0.019	32	0.12			35	0.13		31	0.12	
N-Octane	111-65-9	5.0	0.023	58	0.27			75	0.35		57	0.27	
Tetrachloroethylene	127-18-4	5.0	0.034	5.0	0.034	M		5.0	0.034	M	5.0	0.034	M
Chlorobenzene	108-90-7	5.0	0.023	5.0	0.023	M		5.0	0.023	M	5.0	0.023	M
Ethylbenzene	100-41-4	5.0	0.022	5.0	0.022	M		5.0	0.022	M	5.0	0.022	M
m,p-Xylene	108-38-3	5.0	0.022	5.0	0.022	M		5.0	0.022	M	5.0	0.022	M
Styrene	100-42-5	5.0	0.021	5.0	0.021	M		5.0	0.021	M	5.0	0.021	M
N-Nonane	111-84-2	5.0	0.026	79	0.41			86	0.44		71	0.37	
1,1,2,2-Tetrachloroethane	79-34-5	5.0	0.034	5.0	0.034	M		5.0	0.034	M	5.0	0.034	M
o-Xylene	95-47-6	5.0	0.022	5.0	0.022	M		5.0	0.022	M	5.0	0.022	M
N-Decane	124-18-5	5.0	0.029	119	0.69			117	0.68		96	0.56	
1,2,4-Trimethylbenzene	95-63-6	5.0	0.025	5.0	0.025	M		5.0	0.025	M	5.0	0.025	M
Ethanol	64-17-5	5.0	0.0090	409	0.77	D		430	0.81	D	399	0.75	D
Acetonitrile	75-05-8	5.0	0.0080	79	0.13			97	0.16		82	0.14	
Acetone	67-64-1	5.0	0.012	236	0.56			397	0.94	D	235	0.56	
Furan	110-00-9	5.0	0.014	5.0	0.014	M		5.0	0.014	M	5.0	0.014	M
2-Propanol	67-63-0	5.0	0.012	5.0	0.012	Q		5.1	0.013		5.0	0.012	Q
1-Propanol	71-23-8	5.0	0.012	27	0.065			33	0.082		17	0.041	
Propanenitrile	107-12-0	5.0	0.011	65	0.15			73	0.16		63	0.14	
Butanal	123-72-8	5.0	0.015	5.0	0.015	M		5.0	0.015	M	5.0	0.015	M
2-Butanone	78-93-3	5.0	0.015	58	0.17			62	0.18		56	0.17	
Tetrahydrofuran	109-99-9	5.0	0.015	6.4	0.019			7.0	0.021		7.5	0.022	
1-Butanol	71-36-3	5.0	0.015	155	0.47	B		200	0.61		164	0.50	B
Butanenitrile	109-74-0	5.0	0.014	5.0	0.014	M		5.0	0.014	M	5.0	0.014	M
2-Pentanone	107-87-9	5.0	0.018	22.5	0.079			26	0.091		21	0.076	
1,4-Dioxane	123-91-1	5.0	0.018	5.0	0.018	M		5.0	0.018	M	5.0	0.018	M
4-Methyl-2-Pentanone	108-10-1	5.0	0.020	5.0	0.020	M		5.0	0.020	M	5.0	0.020	M
2-Hexanone	591-78-6	5.0	0.020	107	0.44			118	0.49		106	0.43	
3-Heptanone	106-35-4	5.0	0.023	2212	10	D		2229	10	D	2100	9.8	D
2-Heptanone	110-43-3	5.0	0.023	425	2.0	D		415	1.9	D	422	2.0	D
Cyclohexanone	108-94-1	5.0	0.020	5.0	0.020	M		5.0	0.020	M	5.0	0.020	M
2-Octanone	111-13-7	5.0	0.026	13	0.070			20	0.10	*	16	0.082	

¹ mg/m³ calculated at 25°C and 101.3 kPa (1 atmosphere)² Data Flags:

D: Target analyte reported is the result of a secondary dilution

M: Target analyte was absent (not detected) in sample

Q: Target analyte was detected, but at concentrations less than VPRQL

B: Target analyte was detected in laboratory blank

F: Target analyte was found in field blank

* Not all QC criteria were met for this target analyte; see narrative

C-106 Target Analyte Concentrations for SUMMA Analyses		Sample Number			VS006-051-S078			VS006-058-S080			VS006-059-S081		
		Analysis Date			1/4/99			1/5/99			1/4/99		
		Analysis Time			1340			1447			1453		
		Primary Dilution File ID			19010405.D			19010506.D			19010406.D		
		Secondary Dilution File ID			19010804.D			19010709.D			19010806.D		
Target Analyte Name	CAS #	VPRQL (ppbv)	VPRQL (mg/m ³)		(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²
Freon 12	75-71-8	5.0	0.025	5.0	0.025	M		5.0	0.025	M	5.0	0.025	M
Methyl chloride	74-87-3	5.0	0.010	5.0	0.010	M		5.0	0.010	M	5.0	0.010	M
N-Butane	106-97-8	5.0	0.012	593	1.4	D		607	1.4	D	572	1.4	D
Ethyl Chloride	75-00-3	5.0	0.013	5.0	0.013	M		5.0	0.013	M	5.0	0.013	M
Freon 11	75-69-4	5.0	0.028	5.0	0.028	Q		5.0	0.028	Q	5.0	0.028	Q
N-Pentane	109-66-0	5.0	0.015	173	0.51			165	0.49		168	0.50	
Dichloromethane	75-09-2	5.0	0.017	5.0	0.017	M		5.0	0.017	M	5.0	0.017	M
2-Methyl-Pentane	107-83-5	5.0	0.018	18	0.063			18	0.064		19	0.067	
1-Hexene	592-41-6	5.0	0.017	312	1.1	D		252	0.87		293	1.0	D
N-Hexane	110-54-3	5.0	0.018	130	0.46			122	0.43		125	0.44	
Chloroform	67-66-3	5.0	0.024	5.0	0.024	M		5.0	0.024	M	5.0	0.024	M
Benzene	71-43-2	5.0	0.016	7.0	0.022			6.4	0.020		6.7	0.021	
Carbon Tetrachloride	56-23-5	5.0	0.031	5.0	0.031	M		5.0	0.031	M	5.0	0.031	M
3-Methyl-Hexane	589-34-4	5.0	0.020	5.8	0.024			5.3	0.022		5.8	0.024	
N-Heptane	142-82-5	5.0	0.020	225	0.92			207	0.85		217	0.89	
Toluene	108-88-3	5.0	0.019	33	0.13			29	0.11		32	0.12	
N-Octane	111-65-9	5.0	0.023	65	0.30			54	0.25		63	0.29	
Tetrachloroethylene	127-18-4	5.0	0.034	5.0	0.034	M		5.0	0.034	M	5.0	0.034	M
Chlorobenzene	108-90-7	5.0	0.023	5.0	0.023	M		5.0	0.023	M	5.0	0.023	M
Ethylbenzene	100-41-4	5.0	0.022	5.0	0.022	M		5.0	0.022	M	5.0	0.022	M
m,p-Xylene	108-38-3	5.0	0.022	5.0	0.022			5.0	0.022	M	5.0	0.022	M
Styrene	100-42-5	5.0	0.021	5.0	0.021	M		5.0	0.021	M	5.0	0.021	M
N-Nonane	111-84-2	5.0	0.026	77	0.40			62	0.32		75	0.39	
1,1,2,2-Tetrachloroethane	79-34-5	5.0	0.034	5.0	0.034	M		5.0	0.034	M	5.0	0.034	M
o-Xylene	95-47-6	5.0	0.022	5.0	0.022	M		5.0	0.022	M	5.0	0.022	M
N-Decane	124-18-5	5.0	0.029	115	0.67			94	0.54		122	0.71	
1,2,4-Trimethylbenzene	95-63-6	5.0	0.025	5.0	0.025	M		5.0	0.025	M	5.0	0.025	M
Ethanol	64-17-5	5.0	0.0090	499	0.94	D		426	0.80	D	406	0.76	D
Acetonitrile	75-05-8	5.0	0.0080	79	0.13			85	0.14		84	0.14	
Acetone	67-64-1	5.0	0.012	242	0.57			245	0.58		249	0.59	
Furan	110-00-9	5.0	0.014	5.0	0.014	M		5.0	0.014	M	5.0	0.014	M
2-Propanol	67-63-0	5.0	0.012	5.0	0.012	Q		5.0	0.012	Q	5.0	0.012	Q
1-Propanol	71-23-8	5.0	0.012	20	0.049			12	0.029		20	0.050	
Propanenitrile	107-12-0	5.0	0.011	68	0.15			67	0.15		68	0.15	
Butanal	123-72-8	5.0	0.015	5.0	0.015	M		5.0	0.015	M	5.0	0.015	M
2-Butanone	78-93-3	5.0	0.015	62	0.18			59	0.18		61	0.18	
Tetrahydrofuran	109-99-9	5.0	0.015	8.2	0.024			11	0.032		8.3	0.024	
1-Butanol	71-36-3	5.0	0.015	186	0.56	B		153	0.46	B	181	0.55	B
Butanenitrile	109-74-0	5.0	0.014	5.0	0.014	M		5.0	0.014	M	5.0	0.014	M
2-Pentanone	107-87-9	5.0	0.018	24	0.083			21	0.075		23	0.081	
1,4-Dioxane	123-91-1	5.0	0.018	5.0	0.018	M		5.0	0.018	M	5.0	0.018	M
4-Methyl-2-Pentanone	108-10-1	5.0	0.020	5.0	0.020	Q		5.0	0.020	M	5.0	0.020	M
2-Hexanone	591-78-6	5.0	0.020	118	0.48			104	0.43		115	0.47	
3-Heptanone	106-35-4	5.0	0.023	2037	9.5	D		2106	9.8	D	2144	10	D
2-Heptanone	110-43-3	5.0	0.023	382	1.8	D		416	1.9	D	421	2.0	D
Cyclohexanone	108-94-1	5.0	0.020	5.0	0.020	M		5.0	0.020	M	5.0	0.020	M
2-Octanone	111-13-7	5.0	0.026	13	0.069			14	0.076		15	0.080	

¹ mg/m³ calculated at 25°C and 101.3 kPa (1 atmosphere)² Data Flags:

D: Target analyte reported is the result of a secondary dilution

M: Target analyte was absent (not detected) in sample

Q: Target analyte was detected, but at concentrations less than VPRQL

B: Target analyte was detected in laboratory blank

F: Target analyte was found in field blank

* Not all QC criteria were met for this target analyte; see narrative

C-106 Target Analyte Concentrations for SUMMA Analytes		Sample Number		VS006-067-S082			VS006-068-S091			VS006-128-S096		
		Analysis Date		1/5/99			1/4/99			1/4/99		
		Analysis Time		1156			1539			1721		
		Primary Dilution File ID		19010504.D			19010407.D			19010408.D		
		Secondary Dilution File ID		19010710.D			19010805.D			19010711.D		
Target Analyte Name	CAS #	VPRQL (ppbv)	VPRQL (mg/m ³)	(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²
Freon 12	75-71-8	5.0	0.025	5.0	0.025	M	5.0	0.025	M	5.0	0.025	M
Methyl chloride	74-87-3	5.0	0.010	5.0	0.010	M	5.0	0.010	M	5.0	0.010	M
N-Butane	106-97-8	5.0	0.012	539	1.3	D	506	1.2	D	444	1.1	D
Ethyl Chloride	75-00-3	5.0	0.013	5.0	0.013	M	5.0	0.013	M	5.0	0.013	M
Freon 11	75-69-4	5.0	0.028	5.0	0.028	Q	5.0	0.028	Q	5.0	0.028	Q
N-Pentane	109-66-0	5.0	0.015	149	0.44		154	0.46		130	0.38	
Dichloromethane	75-09-2	5.0	0.017	5.0	0.017	M	5.0	0.017	M	5.0	0.017	M
2-Methyl-Pentane	107-83-5	5.0	0.018	16	0.058		17	0.061		14	0.050	
1-Hexene	592-41-6	5.0	0.017	228	0.79		238	0.82		202	0.70	
N-Hexane	110-54-3	5.0	0.018	109	0.39		115	0.41		96	0.34	
Chloroform	67-66-3	5.0	0.024	5.0	0.024	M	5.0	0.024	M	5.0	0.024	M
Benzene	71-43-2	5.0	0.016	5.9	0.019		6.2	0.020		5.2	0.017	
Carbon Tetrachloride	56-23-5	5.0	0.031	5.0	0.031	M	5.0	0.031	M	5.0	0.031	M
3-Methyl-Hexane	589-34-4	5.0	0.020	5.0	0.020	Q	5.1	0.021		5.0	0.020	Q
N-Heptane	142-82-5	5.0	0.020	181	0.74		207	0.85		221	0.91	
Toluene	108-88-3	5.0	0.019	29	0.11		30	0.11		26	0.098	
N-Octane	111-65-9	5.0	0.023	60	0.28		61	0.28		50	0.23	
Tetrachloroethylene	127-18-4	5.0	0.034	5.0	0.034	M	5.0	0.034	M	5.0	0.034	M
Chlorobenzene	108-90-7	5.0	0.023	5.0	0.023	M	5.0	0.023	M	5.0	0.023	M
Ethylbenzene	100-41-4	5.0	0.022	5.0	0.022	M	5.0	0.022	M	5.0	0.022	M
m,p-Xylene	106-42-3	5.0	0.022	5.0	0.022	M	5.0	0.022	M	5.0	0.022	M
Styrene	100-42-5	5.0	0.021	5.0	0.021	M	5.0	0.021	M	5.0	0.021	M
N-Nonane	111-84-2	5.0	0.026	63	0.33		70	0.36		57	0.30	
1,1,2,2-Tetrachloroethane	79-34-5	5.0	0.034	5.0	0.034	M	5.0	0.034	M	5.0	0.034	M
o-Xylene	95-47-6	5.0	0.022	5.0	0.022	M	5.0	0.022	M	5.0	0.022	M
N-Decane	124-18-5	5.0	0.029	97	0.57		116	0.68		80	0.47	
1,2,4-Trimethylbenzene	95-63-6	5.0	0.025	5.0	0.025	M	5.0	0.025	M	5.0	0.025	M
Ethanol	64-17-5	5.0	0.0090	463	0.87	D	403	0.76	D	389	0.73	D
Acetonitrile	75-05-8	5.0	0.0080	79	0.13		86	0.15		92	0.15	
Acetone	67-64-1	5.0	0.012	253	0.60		241	0.57		241	0.57	
Furan	110-00-9	5.0	0.014	5.0	0.014	M	5.0	0.014	M	5.0	0.014	M
2-Propanol	67-63-0	5.0	0.012	5.0	0.012	Q	5.0	0.012	Q	5.0	0.012	Q
1-Propanol	71-23-8	5.0	0.012	15	0.036		23	0.056		26	0.063	
Propanenitrile	107-12-0	5.0	0.011	64	0.14		66	0.15		63	0.14	
Butanal	123-72-8	5.0	0.015	46	0.14		5.0	0.015	M	5.0	0.015	M
2-Butanone	78-93-3	5.0	0.015	56	0.17		59	0.17		55	0.16	
Tetrahydrofuran	109-99-9	5.0	0.015	9.5	0.028		8.1	0.024		7.3	0.022	
1-Butanol	71-36-3	5.0	0.015	148	0.45	B	180	0.55	B	183	0.55	B
Butanenitrile	109-74-0	5.0	0.014	5.0	0.014	M	5.0	0.014	M	5.0	0.014	M
2-Pentanone	107-87-9	5.0	0.018	21	0.074		23	0.080		21	0.075	
1,4-Dioxane	123-91-1	5.0	0.018	5.0	0.018	M	5.0	0.018	M	5.0	0.018	M
4-Methyl-2-Pentanone	108-10-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M	5.0	0.020	M
2-Hexanone	591-78-6	5.0	0.020	93	0.38		112	0.46		100	0.41	
3-Heptanone	106-35-4	5.0	0.023	2027	9.5	D	2084	9.7	D	1638	7.7	D
2-Heptanone	110-43-3	5.0	0.023	397	1.9	D	406	1.9	D	305	1.4	D
Cyclohexanone	108-94-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M	5.0	0.020	M
2-Octanone	111-13-7	5.0	0.026	11	0.059		13	0.067		10	0.054	

¹ mg/m³ calculated at 25°C and 101.3 kPa (1 atmosphere)² Data Flags:

D: Target analyte reported is the result of a secondary dilution

M: Target analyte was absent (not detected) in sample

Q: Target analyte was detected, but at concentrations less than VPRQL

B: Target analyte was detected in laboratory blank

F: Target analyte was found in field blank

* Not all QC criteria were met for this target analyte; see narrative

AY-102 Target Analyte Concentrations for SUMMA Analyses		Sample Number		VS102-003-S021			VS102-006-S022		
		Analysis Date		1/12/99			1/12/99		
		Analysis Time		1440			1547		
		Primary Dilution File ID		19011205.D			19011206.D		
		Secondary Dilution File ID							
Target Analyte Name	CAS #	VPRQL (ppbv)	VPRQL (mg/m ³)	(ppbv)	(mg/m ³)	Flag ²	(ppbv)	(mg/m ³)	Flag ²
Freon 12	75-71-8	5.0	0.025	5.0	0.025	M	5.0	0.025	M
Methyl chloride	74-87-3	5.0	0.010	5.0	0.010	M	5.0	0.010	M
N-Butane	106-97-8	5.0	0.012	6.0	0.014		20	0.048	
Ethyl Chloride	75-00-3	5.0	0.013	5.0	0.013	M	5.0	0.013	M
Freon 11	75-69-4	5.0	0.028	5.3	0.030		7.0	0.039	
N-Pentane	109-66-0	5.0	0.015	5.0	0.015	Q	10	0.031	
Dichloromethane	75-09-2	5.0	0.017	5.0	0.017	M	5.0	0.017	M
2-Methyl-Pentane	107-83-5	5.0	0.018	5.0	0.018	M	5.0	0.018	M
1-Hexene	592-41-6	5.0	0.017	5.0	0.017	M	11	0.038	
N-Hexane	110-54-3	5.0	0.018	5.0	0.018	Q	9.6	0.034	
Chloroform	67-66-3	5.0	0.024	5.0	0.024	M	5.0	0.024	M
Benzene	71-43-2	5.0	0.016	5.0	0.016	M	5.0	0.016	M
Carbon Tetrachloride	56-23-5	5.0	0.031	5.0	0.031	M	5.0	0.031	M
3-Methyl-Hexane	589-34-4	5.0	0.020	5.0	0.020	M	5.0	0.020	M
N-Heptane	142-82-5	5.0	0.020	5.0	0.020	Q	41	0.17	
Toluene	108-88-3	5.0	0.019	5.0	0.019	M	5.0	0.019	Q
N-Octane	111-65-9	5.0	0.023	5.0	0.023	M	7.9	0.037	
Tetrachloroethylene	127-18-4	5.0	0.034	5.0	0.034	M	5.0	0.034	M
Chlorobenzene	108-90-7	5.0	0.023	5.0	0.023	M	5.0	0.023	M
Ethylbenzene	100-41-4	5.0	0.022	5.0	0.022	M	5.0	0.022	M
m,p-Xylene	108-38-3								
	106-42-3	5.0	0.022	5.0	0.022	M	5.0	0.022	M
Styrene	100-42-5	5.0	0.021	5.0	0.021	M	5.0	0.021	M
N-Nonane	111-84-2	5.0	0.026	5.0	0.026	M	5.0	0.026	Q
1,1,2,2-Tetrachloroethane	79-34-5	5.0	0.034	5.0	0.034	M*	5.0	0.034	M*
o-Xylene	95-47-6	5.0	0.022	5.0	0.022	M	5.0	0.022	M
N-Decane	124-18-5	5.0	0.029	5.0	0.029	M	5.0	0.029	Q
1,2,4-Trimethylbenzene	95-63-6	5.0	0.025	5.0	0.025	M	5.0	0.025	M
Ethanol	64-17-5	5.0	0.0090	169	0.32		205	0.39	
Acetonitrile	75-05-8	5.0	0.0080	6.0	0.010		11	0.018	
Acetone	67-64-1	5.0	0.012	194	0.46		245	0.58	
Furan	110-00-9	5.0	0.014	5.0	0.014	M	5.0	0.014	M
2-Propanol	67-63-0	5.0	0.012	5.0	0.012	Q	5.0	0.012	Q
1-Propanol	71-23-8	5.0	0.012	7.4	0.018	*	10	0.025	*
Propanenitrile	107-12-0	5.0	0.011	5.0	0.011	M	5.0	0.011	Q
Butanal	123-72-8	5.0	0.015	27	0.081		80	0.24	
2-Butanone	78-93-3	5.0	0.015	35	0.104		62	0.18	
Tetrahydrofuran	109-99-9	5.0	0.015	5.0	0.015	M	5.0	0.015	M
1-Butanol	71-36-3	5.0	0.015	58	0.18	*	76	0.23	*
Butanenitrile	109-74-0	5.0	0.014	16	0.046		26	0.073	
2-Pentanone	107-87-9	5.0	0.018	13	0.047		24	0.086	
1,4-Dioxane	123-91-1	5.0	0.018	5.0	0.018	M	5.0	0.018	M
4-Methyl-2-Pentanone	108-10-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M
2-Hexanone	591-78-6	5.0	0.020	7.4	0.030		15	0.052	
3-Heptanone	106-35-4	5.0	0.023	119	0.56		136	0.64	
2-Heptanone	110-43-3	5.0	0.023	28	0.13		30	0.14	
Cyclohexanone	108-94-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M
2-Octanone	111-13-7	5.0	0.026	5.0	0.026	M	5.0	0.026	M

² mg/m³ calculated at 25°C and 101.3 kPa (1 atmosphere)

² Data Flags:

M: Target analyte reported is the result of a secondary dilution

D: Target analyte was absent (not detected) in sample

Q: Target analyte was detected, but at concentrations less than VPRQL

B: Target analyte was detected in laboratory blank

F: Target analyte was found in field blank

* Not all QC criteria were met for this target analyte;
see narrative

AY-102 Target Analyte Concentrations for SUMMA Analyses		Sample Number		VS102-009-S034			VS102-012-S041		
		Analysis Date		1/12/99			1/12/99		
		Analysis Time		1650			1747		
		Primary Dilution File ID		19011207.D			19011208.D		
		Secondary Dilution File ID							
Target Analyte Name	CAS #	VPRQL (ppbv)	VPRQL (mg/m ³) ¹	(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²
Freon 12	75-71-8	5.0	0.025	5.0	0.025	M	5.0	0.025	M
Methyl chloride	74-87-3	5.0	0.010	5.0	0.010	M	5.0	0.010	M
N-Butane	106-97-8	5.0	0.012	27	0.063		41	0.098	
Ethyl Chloride	75-00-3	5.0	0.013	5.0	0.013	M	5.0	0.013	M
Freon 11	75-69-4	5.0	0.028	7.1	0.040		6.6	0.037	
N-Pentane	109-66-0	5.0	0.015	14	0.040		22	0.064	
Dichloromethane	75-09-2	5.0	0.017	5.0	0.017	M	5.0	0.017	M
2-Methyl-Pentane	107-83-5	5.0	0.018	5.0	0.018	M	5.0	0.018	Q
1-Hexene	592-41-6	5.0	0.017	15	0.051		31	0.11	
N-Hexane	110-54-3	5.0	0.018	13	0.046		22	0.079	
Chloroform	67-66-3	5.0	0.024	5.0	0.024	M	5.0	0.024	M
Benzene	71-43-2	5.0	0.016	5.0	0.016	M	5.0	0.016	M
Carbon Tetrachloride	56-23-5	5.0	0.031	5.0	0.031	M	5.0	0.031	M
3-Methyl-Hexane	589-34-4	5.0	0.020	5.0	0.020	M	5.0	0.020	M
N-Heptane	142-82-5	5.0	0.020	63	0.26		115	0.47	
Toluene	108-88-3	5.0	0.019	5.0	0.019	Q	7.1	0.027	
N-Octane	111-65-9	5.0	0.023	12	0.057		20	0.093	
Tetrachloroethylene	127-18-4	5.0	0.034	5.0	0.034	M	5.0	0.034	M
Chlorobenzene	108-90-7	5.0	0.023	5.0	0.023	M	5.0	0.023	M
Ethylbenzene	100-41-4	5.0	0.022	5.0	0.022	M	5.0	0.022	M
m,p-Xylene	108-38-3 106-42-3	5.0	0.022	5.0	0.022	M	5.0	0.022	M
Styrene	100-42-5	5.0	0.021	5.0	0.021	M	5.0	0.021	M
N-Nonane	111-84-2	5.0	0.026	6.56	0.034		15.2	0.078	
1,1,2,2-Tetrachloroethane	79-34-5	5.0	0.034	5.0	0.034	M*	5.0	0.034	M*
o-Xylene	95-47-6	5.0	0.022	5.0	0.022	M	5.0	0.022	M
N-Decane	124-18-5	5.0	0.029	7.1	0.041		16	0.095	
1,2,4-Trimethylbenzene	95-63-6	5.0	0.025	5.0	0.025	M	5.0	0.025	M
Ethanol	64-17-5	5.0	0.0090	224	0.42		178	0.34	
Acetonitrile	75-05-8	5.0	0.0080	11	0.019		5.6	0.009	
Acetone	67-64-1	5.0	0.012	251	0.60		190	0.45	
Furan	110-00-9	5.0	0.014	5.0	0.014	M	5.0	0.014	M
2-Propanol	67-63-0	5.0	0.012	5.0	0.012	Q	5.0	0.012	Q
1-Propanol	71-23-8	5.0	0.012	12	0.030	*	10	0.025	*
Propanenitrile	107-12-0	5.0	0.011	5.0	0.011	Q	5.0	0.011	Q
Butanal	123-72-8	5.0	0.015	95	0.28		139	0.41	
2-Butanone	78-93-3	5.0	0.015	63	0.19		46	0.14	
Tetrahydrofuran	109-99-9	5.0	0.015	5.0	0.015	M	5.0	0.015	M
1-Butanol	71-36-3	5.0	0.015	91	0.27	*	84	0.26	*
Butanenitrile	109-74-0	5.0	0.014	27	0.077		17	0.048	
2-Pentanone	107-87-9	5.0	0.018	27	0.095		22	0.077	
1,4-Dioxane	123-91-1	5.0	0.018	5.0	0.018	M	5.0	0.018	M
4-Methyl-2-Pentanone	108-10-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M
2-Hexanone	591-78-6	5.0	0.020	21	0.086		27	0.11	
3-Heptanone	106-35-4	5.0	0.023	184	0.86		238	1.1	
2-Heptanone	110-43-3	5.0	0.023	46	0.21		59	0.28	
Cyclohexanone	108-94-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M
2-Octanone	111-13-7	5.0	0.026	5.0	0.026	M	5.0	0.026	M

¹ mg/m³ calculated at 25°C and 101.3 kPa (1 atmosphere)

² Data Flags:
D: Target analyte reported is the result of a secondary dilution
M Target analyte was absent (not detected) in sample
Q: Target analyte was detected, but at concentrations less than VPRQL

B: Target analyte was detected in laboratory blank
F: Target analyte was found in field blank
*: Not all QC criteria were met for this target analyte; see narrative

AZ-702 Target Analyte Concentrations for SUMMA Analyses		Sample Number		VS702-003-S061			VS702-005-S062			VS702-008-S063		
		Analysis Date		1/11/99			1/11/99			1/11/99		
		Analysis Time		1219			1328			1427		
		Primary Dilution File ID		19011104.D			19011105.D			19011106.D		
		Secondary Dilution File ID		NA			NA			NA		
		VPRQL (ppbv)	VPRQL (mg/m ³)									
Target Analyte Name	CAS #			(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²
Freon 12	75-71-8	5.0	0.025	5.0	0.025	M	5.0	0.025	M	5.0	0.025	M
Methyl chloride	74-87-3	5.0	0.010	5.0	0.010	M	5.0	0.010	M	5.0	0.010	M
N-Butane	106-97-8	5.0	0.012	5.0	0.012	Q	5.0	0.012	M	7.3	0.017	
Ethyl Chloride	75-00-3	5.0	0.013	5.0	0.013	M	5.0	0.013	M	5.0	0.013	M
Freon 11	75-69-4	5.0	0.028	22	0.13		5.0	0.028	M	24	0.13	
N-Pentane	109-66-0	5.0	0.015	5.0	0.015	M	5.0	0.015	M	5.0	0.015	M
Dichloromethane	75-09-2	5.0	0.017	5.0	0.017	M	5.0	0.017	M	5.0	0.017	M
2-Methyl-Pentane	107-83-5	5.0	0.018	5.0	0.018	M	5.0	0.018	M	5.0	0.018	M
1-Hexene	592-41-6	5.0	0.017	5.0	0.017	M	5.0	0.017	M	5.0	0.017	M
N-Hexane	110-54-3	5.0	0.018	5.0	0.018	M	5.0	0.018	M	5.0	0.018	M
Chloroform	67-66-3	5.0	0.024	5.0	0.024	M	5.0	0.024	M	5.0	0.024	M
Benzene	71-43-2	5.0	0.016	5.0	0.016	M	5.0	0.016	M	5.0	0.016	M
Carbon Tetrachloride	56-23-5	5.0	0.031	5.0	0.031	M	5.0	0.031	M	5.0	0.031	M
3-Methyl-Hexane	589-34-4	5.0	0.020	5.0	0.020	M	5.0	0.020	M	5.0	0.020	M
N-Heptane	142-82-5	5.0	0.020	5.0	0.020	M	5.0	0.020	M	5.0	0.020	M
Toluene	108-88-3	5.0	0.019	5.0	0.019	M	5.0	0.019	M	5.0	0.019	M
N-Octane	111-65-9	5.0	0.023	5.0	0.023	M	5.0	0.023	M	5.0	0.023	M
Tetrachloroethylene	127-18-4	5.0	0.034	5.0	0.034	Q	5.0	0.034	M	5.0	0.034	Q
Chlorobenzene	108-90-7	5.0	0.023	5.0	0.023	M	5.0	0.023	M	5.0	0.023	M
Ethylbenzene	100-41-4	5.0	0.022	5.0	0.022	M	5.0	0.022	M	5.0	0.022	M
	108-38-3											
m,p-Xylene	106-42-3	5.0	0.022	5.0	0.022	M	5.0	0.022	Q	5.0	0.022	M
Styrene	100-42-5	5.0	0.021	5.0	0.021	M	5.0	0.021	M	5.0	0.021	M
N-Nonane	111-84-2	5.0	0.026	5.0	0.026	M	5.0	0.026	M	5.0	0.026	M
1,1,2,2-Tetrachloroethane	79-34-5	5.0	0.034	5.0	0.034	M*	5.0	0.034	M*	5.0	0.034	M*
o-Xylene	95-47-6	5.0	0.022	5.0	0.022	M	5.0	0.022	M	5.0	0.022	M
N-Decane	124-18-5	5.0	0.029	5.0	0.029	M	5.0	0.029	M	5.0	0.029	M
1,2,4-Trimethylbenzene	95-63-6	5.0	0.025	5.0	0.025	M	5.0	0.025	M	5.0	0.025	M
Ethanol	64-17-5	5.0	0.0090	39	0.074		5.0	0.009	Q	51	0.096	
Acetonitrile	75-05-8	5.0	0.0080	27	0.045		5.0	0.008	M	20	0.034	
Acetone	67-64-1	5.0	0.012	129	0.31		5.6	0.012		122	0.29	
Furan	110-00-9	5.0	0.014	5.0	0.014	M	5.0	0.014	M	5.0	0.014	M
2-Propanol	67-63-0	5.0	0.012	5.0	0.012	M	5.0	0.012	M	5.0	0.012	M
1-Propanol	71-23-8	5.0	0.012	5.0	0.012	Q*	5.0	0.012	M*	5.0	0.012	Q*
Propanenitrile	107-12-0	5.0	0.011	16	0.036		5.0	0.011	M	13	0.030	
Butanal	123-72-8	5.0	0.015	5.0	0.015	M	5.0	0.015	M	5.0	0.015	Q
2-Butanone	78-93-3	5.0	0.015	15	0.045		5.0	0.015	M	16	0.046	
Tetrahydrofuran	109-99-9	5.0	0.015	5.0	0.015	M*	5.0	0.015	M*	5.0	0.015	M*
1-Butanol	71-36-3	5.0	0.015	5.0	0.015	Q*	5.0	0.015	M*	5.1	0.015	*
Butanenitrile	109-74-0	5.0	0.014	11	0.030		5.0	0.014	M	9.9	0.028	
2-Pentanone	107-87-9	5.0	0.018	5.0	0.018	M	5.0	0.018	M	5.0	0.018	M
1,4-Dioxane	123-91-1	5.0	0.018	5.0	0.018	M	5.0	0.018	M	5.0	0.018	M
4-Methyl-2-Pentanone	108-10-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M	5.0	0.020	M
2-Hexanone	591-78-6	5.0	0.020	5.0	0.020	M	5.0	0.020	M	5.0	0.020	M
3-Heptanone	106-35-4	5.0	0.023	5.0	0.023	M	5.0	0.023	M	5.0	0.023	M
2-Heptanone	110-43-3	5.0	0.023	5.0	0.023	M	5.0	0.023	M	5.0	0.023	M
Cyclohexanone	108-94-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M	5.0	0.020	M
2-Octanone	111-13-7	5.0	0.026	5.0	0.026	M*	5.0	0.026	M*	5.0	0.026	M*

¹ mg/m³ calculated at 25°C and 101.3 kPa (1 atmosphere)

² Data Flags:

D: Target analyte reported is the result of a secondary dilution

M: Target analyte was absent (not detected) in sample

Q: Target analyte was detected, but at concentrations less than VPRQL

B: Target analyte was detected in laboratory blank

F: Target analyte was found in field blank

* Not all QC criteria were met for this target analyte;
see narrative

AZ-702 Target Analyte Concentrations for SUMMA Analyses		Sample Number		VS702-011-S068			VS702-014-S070		
		Analysis Date		1/11/99			1/11/99		
		Analysis Time		1525			1624		
		Primary Dilution File ID		19011107.D			19011108.D		
		Secondary Dilution File ID		NA			NA		
Target Analyte Name	CAS #	VPRQL (ppbv)	VPRQL (mg/m ³)	(ppbv)	(mg/m ³) ¹	Flag ²	(ppbv)	(mg/m ³) ¹	Flag ²
Freon 12	75-71-8	5.0	0.025	5.0	0.025	M	5.0	0.025	M
Methyl chloride	74-87-3	5.0	0.010	5.0	0.010	M	5.0	0.010	M
N-Butane	106-97-8	5.0	0.012	9.0	0.021		14	0.032	
Ethyl Chloride	75-00-3	5.0	0.013	5.0	0.013	M	5.0	0.013	M
Freon 11	75-69-4	5.0	0.028	23	0.13		24	0.13	
N-Pentane	109-66-0	5.0	0.015	5.0	0.015	M	5.0	0.015	Q
Dichloromethane	75-09-2	5.0	0.017	5.0	0.017	M	5.0	0.017	M
2-Methyl-Pentane	107-83-5	5.0	0.018	5.0	0.018	M	5.0	0.018	M
1-Hexene	592-41-6	5.0	0.017	5.0	0.017	M	5.0	0.017	M
N-Hexane	110-54-3	5.0	0.018	5.0	0.018	M	5.0	0.018	M
Chloroform	67-66-3	5.0	0.024	5.0	0.024	M	5.0	0.024	M
Benzene	71-43-2	5.0	0.016	5.0	0.016	M	5.0	0.016	M
Carbon Tetrachloride	56-23-5	5.0	0.031	5.0	0.031	M	5.0	0.031	M
3-Methyl-Hexane	589-34-4	5.0	0.020	5.0	0.020	M	5.0	0.020	M
N-Heptane	142-82-5	5.0	0.020	5.0	0.020	M	5.0	0.020	M
Toluene	108-88-3	5.0	0.019	5.0	0.019	M	5.0	0.019	M
N-Octane	111-65-9	5.0	0.023	5.0	0.023	M	5.0	0.023	M
Tetrachloroethylene	127-18-4	5.0	0.034	5.0	0.034	Q	5.0	0.034	Q
Chlorobenzene	108-90-7	5.0	0.023	5.0	0.023	M	5.0	0.023	M
Ethylbenzene	100-41-4	5.0	0.022	5.0	0.022	M	5.0	0.022	M
m,p-Xylene	106-42-3	5.0	0.022	5.0	0.022	M	5.0	0.022	M
Styrene	100-42-5	5.0	0.021	5.0	0.021	M	5.0	0.021	M
N-Nonane	111-84-2	5.0	0.026	5.0	0.026	M	5.0	0.026	M
1,1,2,2-Tetrachloroethane	79-34-5	5.0	0.034	5.0	0.034	M*	5.0	0.034	M*
o-Xylene	95-47-6	5.0	0.022	5.0	0.022	M	5.0	0.022	M
N-Decane	124-18-5	5.0	0.029	5.0	0.029	M	5.0	0.029	M
1,2,4-Trimethylbenzene	95-63-6	5.0	0.025	5.0	0.025	M	5.0	0.025	M
Ethanol	64-17-5	5.0	0.0090	54	0.10		61	0.12	
Acetonitrile	75-05-8	5.0	0.0080	19	0.032		22	0.037	
Acetone	67-64-1	5.0	0.012	155	0.37		149	0.36	
Furan	110-00-9	5.0	0.014	5.0	0.014	M	5.0	0.014	M
2-Propanol	67-63-0	5.0	0.012	5.0	0.012	M	5.0	0.012	M
1-Propanol	71-23-8	5.0	0.012	5.0	0.012	Q*	5.0	0.012	Q*
Propanenitrile	107-12-0	5.0	0.011	16	0.035		16	0.037	
Butanal	123-72-8	5.0	0.015	5.0	0.015	Q	5.0	0.015	Q
2-Butanone	78-93-3	5.0	0.015	20	0.059		23	0.067	
Tetrahydrofuran	109-99-9	5.0	0.015	5.0	0.015	M*	5.0	0.015	M*
1-Butanol	71-36-3	5.0	0.015	6.4	0.019	*	8.0	0.024	*
Butanenitrile	109-74-0	5.0	0.014	13	0.036		15	0.043	
2-Pentanone	107-87-9	5.0	0.018	5.0	0.018	M	5.0	0.018	M
1,4-Dioxane	123-91-1	5.0	0.018	5.0	0.018	M	5.0	0.018	M
4-Methyl-2-Pentanone	108-10-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M
2-Hexanone	591-78-6	5.0	0.020	5.0	0.020	M	5.0	0.020	M
3-Heptanone	106-35-4	5.0	0.023	5.0	0.023	M	5.0	0.023	M
2-Heptanone	110-43-3	5.0	0.023	5.0	0.023	M	5.0	0.023	M
Cyclohexanone	108-94-1	5.0	0.020	5.0	0.020	M	5.0	0.020	M
2-Octanone	111-13-7	5.0	0.026	5.0	0.026	M*	5.0	0.026	M*

¹ mg/m³ calculated at 25°C and 101.3 kPa (1 atmosphere)

² Data Flags:
D: Target analyte reported is the result of a secondary dilution
M: Target analyte was absent (not detected) in sample
Q: Target analyte was detected, but at concentrations less than VPRQL

B: Target analyte was detected in laboratory blank
F: Target analyte was found in field blank
* Not all QC criteria were met for this target analyte; see narrative

	Sample Number		VS006-018-S045	VS006-018-S045		
C-106	Analysis Date		1/7/99	1/18/99		
Duplicate Analysis	Analysis Time		1258	11:52		
	File ID		19010705.D	19111803.d		
Target Analyte Name	VPRQL (ppbv)	VPRQL (mg/m ³)	(ppbv)	(ppbv)	RPD (%)	Comments
Freon 12	5.0	0.025	5.0	5.0		
Methyl chloride	5.0	0.010	5.0	5.0		
N-Butane	5.0	0.012	356	328.0	8.2	Exceeded calibration range
Ethyl Chloride	5.0	0.013	5.0	5.0		
Freon 11	5.0	0.028	5.0	5.0		
N-Pentane	5.0	0.015	98	90.0	8.7	
Dichloromethane	5.0	0.017	5.0	5.0		
2-Methyl-Pentane	5.0	0.018	12	11.0	9.8	
1-Hexene	5.0	0.017	147	131.0	11.8	
N-Hexane	5.0	0.018	69	62.0	11.1	
Chloroform	5.0	0.024	5.0	5.0		
Benzene	5.0	0.016	5.0	5.0		
Carbon Tetrachloride	5.0	0.031	5.0	5.0		
3-Methyl-Hexane	5.0	0.020	5.0	5.0		
N-Heptane	5.0	0.020	171	194.0	12.5	
Toluene	5.0	0.019	15	14.0	7.2	
N-Octane	5.0	0.023	33	28.0	17.4	
Tetrachloroethylene	5.0	0.034	5.0	5.0		
Chlorobenzene	5.0	0.023	5.0	5.0		
Ethylbenzene	5.0	0.022	5.0	5.0		
m,p-Xylene	5.0	0.022	5.0	5.0		
Styrene	5.0	0.021	5.0	5.0		
N-Nonane	5.0	0.026	36.1	31.0	15.1	
1,1,2,2-Tetrachloroethane	5.0	0.034	5.0	5.0		
o-Xylene	5.0	0.022	5.0	5.0		
N-Decane	5.0	0.029	58	53.0	9.5	
1,2,4-Trimethylbenzene	5.0	0.025	5.0	5.0		
Ethanol	5.0	0.0090	344	320.0	7.2	
Acetonitrile	5.0	0.0080	52.8	56.0	5.9	
Acetone	5.0	0.012	122	129.0	5.9	
Furan	5.0	0.014	5.0	5.0		
2-Propanol	5.0	0.012	5.0	5.0		
1-Propanol	5.0	0.012	13	14.0	5.6	
Propanenitrile	5.0	0.011	35	35.0	0.3	
Butanal	5.0	0.015	33	36.0	8.2	
2-Butanone	5.0	0.015	33	40.0	19.8	
Tetrahydrofuran	5.0	0.015	7.5	6.7	11.3	
1-Butanol	5.0	0.015	97	109.0	11.2	
Butanenitrile	5.0	0.014	56	61.0	9.1	
2-Pentanone	5.0	0.018	17	20.0	15.5	
1,4-Dioxane	5.0	0.018	5.0	5.0		
4-Methyl-2-Pentanone	5.0	0.020	5.0	5.0		
2-Hexanone	5.0	0.020	44	41.0	6.3	
3-Heptanone	5.0	0.023	547	546.0	0.2	
2-Heptanone	5.0	0.023	120	103.0	15.3	
Cyclohexanone	5.0	0.020	5.0	5.0		
2-Octanone	5.0	0.026	5.0	5.0		

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-002-S019 Analysis Date: 1/4/99 Data File ID: 19010404.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
42.41	Tridecane	629-50-5	184	0.045	5.9

Notes: Estimation based on chlorobenzene-d5 internal standard
 TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-010-S036 Analysis Date: 1/2/99 Data File ID: 19010204.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
10.94	Acetaldehyde	75-07-0	44	0.027	15
11.18	1-Butene	590-18-1	56	0.096	42
15.94	1-Pentene	109-67-1	70	0.020	6.9
22.92	1,3-Dioxolane, 2-methyl-	497-26-7	88	0.078	22
24.32	Unknown		102	0.19	46
24.72	Unknown		88	0.11	30
25.03	3-Heptene	592-78-9	98	0.023	5.8
25.15	2-Heptene, isomer	14686-13-6	98	0.051	13
25.49	2-Heptene, isomer	14686-13-6	98	0.051	13
25.73	Unknown		195	0.048	6.1
27.61	Heptane, 3-methyl-	589-81-1	114	0.036	7.6
30.97	4-Heptanone	123-19-3	114	0.061	13
33.31	Unknown		98	0.047	12
33.60	Unknown		126	0.081	16
37.80	Undecane	1120-21-4	156	0.15	23
40.44	Dodecane	112-40-3	170	0.14	20
42.40	Tridecane	629-50-5	184	0.12	17

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-018-S045 Analysis Date: 1/7/99 Data File ID: 19010705.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
11.25	1-Butene	106-98-9	56	3.3	1400
12.20	2-Butene, E	624-64-6	56	0.23	100
12.66	2-Butene, Z	590-18-1	56	0.21	91
12.92	1-Propene, 2-methyl-	115-11-7	56	0.46	200
16.02	1-Pentene	109-67-1	70	0.57	200
24.41	Unknown		98	0.23	56
24.63	1-Heptene	592-76-7	98	0.76	190
24.79	Butanenitrile, 2-methylene-	1647-11-6	81	0.31	94
25.13	3-Heptene, E	592-78-9	98	2.4	590
25.25	2-Heptene, E	14686-13-6	98	4.2	1000
25.58	2-Heptene, Z	592-77-8	98	3.1	770
25.82	Cyclopropane, butyl-	930-57-4	98	0.64	160
27.10	C7 cycloalkene/diene		96	0.93	240
27.71	Heptane, 3-methyl-	589-81-1	114	1.6	330
27.85	2-Heptyne	1119-65-9	96	0.40	100
28.27	3-heptene, 5-methyl-	50422-80-5	112	1.4	310
28.97	2-Heptene, 3-methyl-	3404-75-9	112	0.31	67
29.11	2-Octene, isomer	7642-04-8	112	0.16	36
31.05	4-Heptanone	123-19-3	114	1.3	280
31.36	n-Butyl ether	142-96-1	130	0.20	37
32.77	Unknown		113	0.26	56
33.11	Unknown		128	0.62	120
33.24	1,3-Diethyl-1,4-epoxybutane		128	0.69	130
33.38	C7 alkene/cycloalkane		128	0.66	130
33.67	Unknown		126	0.71	140
34.22	4-Octanone	589-63-9	128	0.17	32
35.37	Unknown		140	0.51	90
35.72	Decane, 4-methyl-	2847-72-5	156	0.16	26
37.87	Undecane	1120-21-4	156	0.68	110
40.50	Dodecane	112-40-3	170	1.1	160
40.84	Dodecane, 6-methyl-	6044-71-9	184	0.18	24
42.00	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.15	20
42.44	Tridecane	629-50-5	184	1.0	130

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-025-S064 Analysis Date: 1/2/99 Data File ID: 19010205.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
24.89	3-Heptene, isomer	14686-14-7	98	0.11	27
25.03	3-Heptene, isomer	592-78-9	98	0.031	7.8
25.15	2-Heptene, isomer	14686-13-6	98	0.075	19
25.49	2-Heptene, isomer	14686-13-6	98	0.048	12
27.63	Heptane, 3-methyl-	589-81-1	114	0.039	8.4
28.19	Heptane, 3-methylene-	1632-16-2	112	0.045	9.8
28.54	4-Octene, isomer	14850-23-8	112	0.036	7.8
30.97	4-Heptanone	123-19-3	114	0.051	11
33.04	Unknown		126	0.029	5.6
33.18	1,3-Diethyl-1,4-epoxybutane		128	0.038	7.2
33.31	C7 alkene/cycloalkane		128	0.037	7.0
33.60	Unknown		126	0.027	5.2
37.81	Undecane	1120-21-4	156	0.068	11
40.44	Dodecane	112-40-3	170	0.14	20
42.39	Tridecane	629-50-5	184	0.23	31

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-033-S053 Analysis Date: 1/2/99 Data File ID: 19010206.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
11.19	1-Butene	106-98-9	56	6.2	2700
12.85	1-Propene, 2-methyl-	115-11-7	56	1.2	500
15.94	1-Pentene	109-67-1	70	1.7	600
24.56	1-Heptene	592-76-7	98	2.1	530
24.94	3-Heptene, isomer	10/6/42	98	11	2700
25.07	3-Heptene, isomer	592-78-9	98	5.2	1300
25.2	2-Heptene, isomer	14686-13-6	98	7.8	1900
25.52	2-Heptene, isomer	592-77-8	98	6.2	1600
25.76	Cyclopropane, butyl-	930-57-4	98	1.6	390
27.03	C7 cycloalkene/diene		96	2.7	680
27.64	Heptane, 3-methyl-	589-81-1	114	3.9	850
27.78	2-Heptyne	1119-65-9	96	1.2	310
28.21	Heptane, 3-methylene-	1632-16-2	112	3.4	750
28.55	C8 alkene/cycloalkane		112	3.1	680
28.91	2-Heptene, 3-methyl-	3404-75-9	112	0.97	210
29.04	4-Octene, isomer	14850-23-8	112	0.52	110
30.99	4-Heptanone	123-19-3	114	4.1	870
31.29	n-Butyl ether	142-96-1	130	0.62	120
31.7	3-Heptanol	589-82-2	116	0.40	85
32.71	Unknown		128	0.93	180
33.05	Unknown		128	2.0	390
33.18	1,3-Diethyl-1,4-epoxybutane		128	2.4	450
33.32	C7 alkene/cycloalkane		128	2.2	430
33.61	Unknown		126	2.5	490
34.16	4-Octanone	589-63-9	128	0.50	96
34.36	Heptanenitrile	629-08-3	111	0.46	100
35.32	Unknown		140	1.8	320
35.65	Decane, 4-methyl-	2847-72-5	156	0.43	68
37.81	Undecane	1120-21-4	156	1.6	250
40.46	Dodecane	112-40-3	170	2.9	420
40.78	Dodecane, 6-methyl-	6044-71-9	184	0.47	63
41.96	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.44	58
42.4	Tridecane	629-50-5	184	2.9	380

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-034-S057 Analysis Date: 1/5/99 Data File ID: 19010507.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
7.12	Propene	115-07-1	42	1.5	850
11.27	1-Butene	106-98-9	56	5.9	2600
12.93	1-Propene, 2-methyl-	115-11-7	56	1.1	480
16.01	1-Pentene	109-67-1	70	1.7	590
24.61	1-Heptene	592-76-7	98	2.1	520
25.12	3-Heptene	592-78-9	98	4.9	1200
25.25	2-Heptene, isomer	592-77-8	98	7.2	1800
25.57	2-Heptene, isomer	592-77-8	98	5.9	1500
25.82	Cyclopropane, butyl-	930-57-4	98	1.4	350
27.08	C7cycloalkene/diene		96	2.4	620
27.69	Heptane, 3-methyl-	589-81-1	114	3.6	760
27.83	2-Heptyne	1119-65-9	96	1.1	280
28.25	Heptane, 3-methylene-	1632-16-2	112	3.2	690
28.8	2-Octene, isomer	14850-23-8	112	0.29	63
28.95	2-Heptene, 3-methyl-	3404-75-9	112	0.86	190
29.08	Octene, isomer		112	0.45	97
31.03	4-Heptanone	123-19-3	114	3.5	740
31.34	n-Butyl ether	142-96-1	130	0.49	92
31.74	3-Heptanol	589-82-2	116	0.41	86
32.75	Unknown		128	0.72	140
33.09	Unknown		128	1.7	320
33.23	1,3-Diethyl-1,4-epoxybutane		128	1.9	360
33.36	C7 alkene/cycloalkane		128	1.8	340
33.66	Unknown		126	2.1	400
34.2	4-Octanone	589-63-9	128	0.42	80
34.4	Heptanenitrile	629-08-3	111	0.36	80
35.35	Unknown		140	1.4	250
35.69	Decane, 4-methyl-	2847-72-5	156	0.33	53
35.82	1-Hexanol, 2-ethyl-	104-76-7	130	1.2	230
37.84	Undecane	1120-21-4	156	1.3	200
40.49	Dodecane	112-40-3	170	2.7	390
40.82	Dodecane, 6-methyl-	6044-71-9	184	0.43	58
41.98	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.47	62
42.43	Tridecane	629-50-5	184	3.3	440
43.81	Tetradecane	629-59-4	198	0.69	85

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-041-S074 Analysis Date: 1/5/99 Data File ID: 19010505.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
7.17	Propene	115-07-1	42	2.5	1500
11.28	1-Butene	106-98-9	56	5.3	2300
12.93	1-Propene, 2-methyl-	115-11-7	56	0.95	410
16.01	1-Pentene	109-67-1	70	1.5	520
24.61	1-Heptene	592-76-7	98	2.0	500
24.98	3-Heptene, isomer	2097503	98	10	2500
25.12	3-Heptene, isomer	592-78-9	98	5.0	1200
25.24	2-Heptene, isomer	592-77-8	98	7.3	1800
25.56	2-Heptene, isomer	14686-13-6	98	5.9	1500
25.81	Cyclopropane, butyl-	930-57-4	98	1.4	340
27.08	C7 cycloalkene/diene		96	2.4	600
27.68	Heptane, 3-methyl-	589-81-1	114	3.4	730
27.83	2-Heptyne	1119-65-9	96	1.1	270
28.25	Heptane, 3-methylene-	1632-16-2	112	3.1	680
28.59	C8 alkene/cycloalkane		112	2.6	570
28.95	2-Heptene, 3-methyl-	3404-75-9	112	0.80	180
31.03	4-Heptanone	123-19-3	114	3.6	770
31.34	n-Butyl ether	142-96-1	130	0.48	90
31.74	3-Heptanol	589-82-2	116	0.84	180
32.75	Unknown		128	0.72	140
33.09	Unknown		128	1.7	330
33.23	1,3-Diethyl-1,4-epoxybutane		128	2.0	390
33.36	C7 cycloalkane/alkene		128	2.0	380
33.65	Unknown		126	1.8	350
34.2	4-Octanone	589-63-9	128	0.46	88
34.4	Heptanenitrile	629-08-3	111	0.46	100
35.36	Unknown		140	1.9	330
35.81	1-Hexanol, 2-ethyl-	104-76-7	130	1.1	210
37.84	Undecane	1120-21-4	156	1.4	220
40.49	Dodecane	112-40-3	170	2.7	390
41.98	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.45	59
42.43	Tridecane	629-50-5	184	3.6	470
43.81	Tetradecane	629-59-4	198	1.0	120

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-042-S075 Analysis Date: 1/2/99 Data File ID: 19010207.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
11.19	1-Butene	106-98-9	56	5.0	2200
12.86	1-Propene, 2-methyl-	115-11-7	56	0.90	390
15.94	1-Pentene	109-67-1	70	1.4	500
24.56	1-Heptene	592-76-7	98	1.8	460
25.07	3-Heptene, isomer	14686-13-6	98	4.5	1100
25.2	2-Heptene, isomer	14686-13-6	98	6.6	1700
25.52	2-Heptene, isomer	592-77-8	98	5.4	1300
25.76	Cyclopropane, butyl-	930-57-4	98	1.3	330
27.03	C7 cycloalkene/diene		96	2.3	590
27.64	Heptane, 3-methyl-	589-81-1	114	3.4	730
27.79	2-Heptyne	1119-65-9	96	1.1	280
28.21	Heptane, 3-methylene-	1632-16-2	112	2.9	630
28.91	2-Heptene, 3-methyl-	3404-75-9	112	0.82	180
29.04	Octene, isomer		112	0.44	95
30.99	4-Heptanone	123-19-3	114	3.7	790
31.29	n-Butyl ether	142-96-1	130	0.48	91
31.71	3-Heptanol	589-82-2	116	1.3	260
32.71	Unknown		128	0.76	150
33.05	Unknown		128	1.8	350
33.19	1,3-Diethyl-1,4-epoxybutane		128	2.2	410
33.32	C7 alkene/cycloalkane		128	2.0	380
33.62	Unknown		126	2.6	500
34.16	4-Octanone	589-63-9	128	0.51	97
34.36	Heptanenitrile	629-08-3	111	0.58	130
35.32	Unknown		140	2.3	390
35.65	Decane, 4-methyl-	2847-72-5	156	0.30	47
35.78	1-Hexanol, 2-ethyl-	104-76-7	130	1.7	310
37.34	Octanenitrile	124-12-9	125	0.43	84
37.81	Undecane	1120-21-4	156	1.1	170
38.11	Unknown		154	0.35	56
40.45	Dodecane	112-40-3	170	1.8	250
41.95	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.29	39
42.4	Tridecane	629-50-5	184	2.8	380
43.78	Tetradecane	629-59-4	198	0.88	110

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-050-S077 Analysis Date: 1/5/99 Data File ID: 19010508.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
11.26	1-Butene	106-98-9	56	4.8	2100
12.91	1-Propene, 2-methyl-	115-11-7	56	0.82	360
16.00	1-Pentene	109-67-1	70	1.3	450
24.61	1-Heptene	592-76-7	98	1.7	430
24.76	2-Pentenitrile	13284-42-9	81	0.66	200
25.12	3-Heptene, isomer	14686-14-7	98	4.4	1100
25.24	2-Heptene, isomer	592-77-8	98	6.6	1600
25.56	2-Heptene, isomer	592-77-8	98	5.3	1320
25.81	Cyclopropane, butyl-	930-57-4	98	1.2	300
27.08	2-Cyclopenten-1-one, 2-methyl-	1120-73-6	96	2.1	550
27.68	Heptane, 3-methyl-	589-81-1	114	3.1	670
27.83	2-Heptyne	1119-65-9	96	1.0	260
28.25	Heptane, 3-methylene-	1632-16-2	112	2.8	610
28.95	2-Heptene, 3-methyl-	3404-75-9	112	0.73	160
29.08	Octene, isomer		112	0.39	85
31.04	4-Heptanone	123-19-3	114	3.5	750
31.34	n-Butyl ether	142-96-1	130	0.44	84
31.75	3-Heptanol	589-82-2	116	1.2	260
32.76	Unknown		128	0.71	140
33.09	2,2'-Bioxepane	74793-02-5	198	1.7	210
33.23	1,3-Diethyl-1,4-epoxybutane		198	2.0	250
33.37	C7alkene/cycloalkane		128	1.9	360
33.65	Unknown		140	1.8	320
34.2	4-Octanone	589-63-9	128	0.45	87
34.4	Heptanenitrile	629-08-3	111	0.50	110
35.36	Unknown		140	2.1	360
35.82	1-Hexanol, 2-ethyl-	104-76-7	130	2.1	390
37.38	Octanenitrile	124-12-9	125	0.38	75
37.85	Undecane	1120-21-4	156	1.1	160
38.16	Unknown		111	0.35	76
40.49	Dodecane	112-40-3	170	2.1	300
40.82	Dodecane, 6-methyl-	6044-71-9	184	0.30	40
41.99	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.34	45
42.43	Tridecane	629-50-5	184	3.0	400
43.81	Tetradecane	629-59-4	198	0.82	100

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-051-S078 Analysis Date: 1/4/99 Data File ID: 19010405.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
7.18	Propene	115-07-1	42	2.3	1400
11.29	1-Butene	106-98-9	56	4.8	2100
16.00	1-Pentene	109-67-1	70	1.3	450
24.59	1-Heptene	592-76-7	98	1.8	440
25.10	3-Heptene	592-78-9	98	4.4	1100
25.23	2-Heptene, isomer	592-77-8	98	6.6	1600
25.55	2-Heptene, isomer	14686-13-6	98	5.3	1300
25.80	Cyclopropane, butyl-	930-57-4	98	1.3	320
27.06	C7cycloalkene/diene		96	2.2	570
27.67	Heptane, 3-methyl-	589-81-1	114	3.2	700
27.82	2-Heptyne	1119-65-9	96	1.1	280
28.24	Heptane, 3-methylene-	1632-16-2	112	2.8	610
28.94	2-Heptene, 3-methyl-	3404-75-9	112	0.79	170
31.02	4-Heptanone	123-19-3	114	3.6	780
31.73	3-Heptanol	589-82-2	116	0.71	150
32.74	Unknown		113	0.78	170
33.08	Unknown		198	1.8	230
33.21	1,3-Diethyl-1,4-epoxybutane		198	2.1	260
33.35	C7alkene/cycloalkane		98	2.0	500
33.65	Unknown		126	2.3	440
35.35	Unknown		97	1.8	460
35.8	1-Hexanol, 2-ethyl-	104-76-7	130	0.69	130
37.83	Undecane	1120-21-4	156	1.4	220
40.48	Dodecane	112-40-3	170	2.6	370
42.43	Tridecane	629-50-5	184	3.5	460
43.80	Tetradecane	629-59-4	198	0.90	110

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

Extended List of Tentatively Identified Compounds in Sample VS006-051-S078

List updated 2/12/1999

Collected with SUMMA Canister after 1.5 Hours of Stulcing

Analyzed by GC-MS with Cryotrapping

This extended TIC list reports nontarget compounds at estimated concentrations of 5 ppbv or higher

Retention Time (min)	Tentative ID	CAS#	Mol Weight	Concentration (ng/mls)	Concentration (ppbv)	Comments
7.18	Propene	115-07-1	42	1.5	860	Co-elution
7.3	Propane	74-98-6	44	0.71	400	Co-elution with propene
8.76	1-Propyne	74-99-7	40	0.093	57	
8.98	Methyl nitrite	624-91-9	61	0.10	39	
9.18	Cyclopropane	75-19-4	42	0.14	100	
9.88	Isobutane	75-28-5	58	0.14	80	
10.99	Acetaldehyde	75-07-0	44	0.14	79	
11.29	1-Butene	105-98-9	56	4.3	2100	Based on retention time
12.21	E-2-Butene	624-64-6	56	0.41	180	Very similar to 2-butene
12.67	Z-2-Butene	590-18-1	56	0.37	160	Based on retention time
12.93	1-Propene, 2-methyl-	115-11-7	56	0.84	370	
13.24	Unknown		74	0.083	27	
14.08	C4-diene/alkyne		54	0.068	31	1,2-butadiene or 2-butyne
14.41	1,1-Dimethylcyclopropane	1630-94-0	70	0.10	33	
15.14	Butane, 2-methyl-	78-78-4	72	0.20	69	
16.00	1-Pentene	109-67-1	70	1.3	450	
16.34	1-Butene, 2-methyl	569-46-2	70	0.35	120	
16.9	2-Pentene, E	627-20-3	70	0.37	130	Similar to 1,2-dimethylcyclopropane
17.25	2-Pentene, Z	627-20-3	70	0.14	49	
17.33	Ethylcyclopropane	1191-496-4	70	0.28	97	
17.45	1,2-dimethyl cyclopropane	390-18-7	70	0.095	30	
17.49	C5 cycloalkane/alkene		70	0.055	20	Spiropentane ?
17.7	1,3-pentadiene		68	0.036	13	
17.81	Unknown		78	0.046	15	No good match; related isomer below ?
17.96	Unknown		78	0.016	5.0	No good match
18.12	C5 diene/cycloalkane	596-59-3	68	0.016	5.7	1,3-pentadiene or ethylidene cyclopropane
18.29	Nitric acid methyl ester		77	0.13	41	
18.73	C5 diene/ cycloalkane		68	0.020	7.2	1,2- or 1,3-pentadiene
19.04	1-Pentene, 4-methyl-	691-37-2	84	0.26	76	Better match than 1-ethyl-1-methyl cyclopropane
19.4	Cyclopentane	287-92-3	84	0.037	11	Coelutes with 1-propanol
19.52	Pentane, 2-methyl-	107-83-5	86	0.32	90	
19.68	C6 alkene/cycloalkane		84	0.034	10	Trimethyl cyclopropane
19.84	Silanol, trimethyl- *	1066-40-6	90	0.092	22	
19.99	Propanenitrile	107-12-0	55	0.26	110	
20.09	1,5-Hexadiene	592-42-7	82	0.056	17	Coelution with next

Retention Time (min)	Tentative ID	CAS#	Mol Weight	Concentration (mg/m3)	Concentration (ppbv)	Comments
20.14	C6 aliphatic compound		86	0.10	27	Pentane, 3-methyl-, 3 unresolved peaks
20.2	Unknown		86	0.046	13	Coelution, 1,2-pentadiene or 2,3-pentadiene
20.96	Pentane, 3-methylene-	760-21-4	84	0.037	11	
21.08	3-Hexene, E	13289-52-3	84	0.12	34	
21.18	2-Hexene, E	4050-45-7	84	0.24	69	
21.27	C6 Cycloalkane/alkene		84	0.042	12	4-methyl-2-pentene
21.46	C6 Cyclic alkene	7642-09-3	82	0.028	8.4	3- or 4-methyl cyclopentene
21.58	3-Hexene, Z	2415-72-7	84	0.27	79	
21.76	Cyclopropane, propyl-	2415-72-7	84	0.08	24	
21.85	1-Hexyne	693-02-7	82	0.18	53	
21.91	C6 alkene/cycloalkane		84	0.067	19	Coelution
22.03	Nitric acid ethyl ester	625-58-1	91	0.21	56	
22.82	Unknown		82	0.061	18	3-methyl-1-pentyne ?
23.02	3-Hexene, -methyl-, isomer	692-24-0	98	0.060	15	3- or 2-methyl-3-hexene
23.13	Cyclopentene, methyl-, isomer		82	0.056	17	1- or 4-methyl cyclopentene
23.31	1-Hexene, 5-methyl-		98	0.051	13	
23.42	3-Hexene, 2-methyl-, E	692-24-0	98	0.11	29	
23.63	Hexene, 2-methyl-	591-78-4	100	0.10	26	
23.73	2-Hexene, 5-methyl-, E	7385-82-2	98	0.16	39	
23.86	3-Heptene, E	14686-14-7	98	0.34	84	
24.06	2-Hexyne	764-35-2	82	0.12	36	Coelution
24.22	2-Hexene, 5-methyl-, cis & trans	3404-82-4	98	0.10	26	
24.29	Cyclohexene	110-83-8	82	0.040	12	
24.49	1-Hexene, 2-methyl-	6094-02-6	98	0.13	34	
24.59	1-Heptene	592-76-7	98	1.8	440	
24.76	Butanenitrile, 2-methylene-	1647-11-6	81	0.69	210	
25.1	3-Heptene, Z	592-78-9	98	4.4	1100	
25.23	2-Heptene, E	14686-13-6	98	6.6	1600	
25.65	2-Heptene, Z	592-77-3	98	5.3	1300	
25.8	2,4-Hexadiene, 4-methyl-	1116-90-1	96	0.034	8.5	
25.9	Cyclopropane, butyl-	930-57-4	98	1.3	320	
25.99	Methylcyclohexane	103-87-2	98	0.12	31	
26.2	Hexane, 2,4-dimethyl-	589-43-5	114	0.048	10	
26.36	Cyclopentane, ethyl-	1650-89-7	96	0.13	32	
26.56	Heptadiene, isomer	2434-31-1	96	0.10	25	3,4-Heptadiene or 2,4-dimethyl-1,3-pentadiene
26.7	Unknown C6 alkene/cycloalkane	5885-46-1	112	0.13	29	
26.82	1-Heptene, 3-methyl-	4310-09-7	112	0.11	23	
26.88	Unknown, m/z 96		96	0.049	12	No good match, octene ?
27.06	2,3-Hexadiene, 2-methyl-	29212-09-7	96	2.2	570	
27.67	Heptane, 3-methyl-	589-91-1	114	0.62	700	
27.77	Octene, isomer		112	0.62	140	2-octene
27.82	2-Heptyne	11119-65-9	96	1.9	470	
28.01	3-Hexanone	589-38-8	100	0.089	22	

Retention Time (min)	Tentative ID	CAS#	Mol Weight	Concentration (mg/m3)	Concentration (ppbv)	Comments
28.24	Heptane, 3-methyl-	1632-16-2	112	3.9	850	
28.32	3-Heptene, 5-methyl-	50422-80-3	112	0.40	87	
28.48	4-Octene, isomer	14850-23-3	112	0.24	83	
28.58	C8 alkene w/ m/z=112		112	2.5	560	Coelution
28.79	Octene, isomer	7642-94-8	112	0.27	60	
28.94	2-Heptene, 3-methyl-	3404-75-9	112	0.78	170	
29.07	Octene, isomer	38851-70-6	112	0.30	65	
29.09	Octene, isomer		112	0.11	24	2-octene, E
29.76	3-Hexanone, 5-methyl-	623-56-3	114	0.17	35	2-octene, Z
30.01	Cyclohexane, ethyl-	1678-91-7	112	0.033	18	
30.13	Cyclohexane, 1,1,3-trimethyl-	3073-66-3	126	0.10	19	
30.77	C8 aliphatic hydrocarbon		128	0.11	20	Nonane isomer
30.92	Unknown		113	0.26	56	
31.02	4-Heptanone	123-19-3	114	3.6	780	
31.22	Hexanenitrile	628-73-9	97	0.20	51	
31.32	n-Butyl ether	142-98-1	130	0.48	91	
31.73	3-Heptanol	569-82-2	116	0.71	150	
31.83	Unknown		126	0.089	17	Nonene isomer?
32.17	Unknown		126	0.058	11	No good match
32.28	Unknown		124	0.10	20	Poorly resolved (mixture)
32.53	C9 cycloalkane/alkene		126	0.093	18	
32.74	Unknown		128	0.78	150	
32.85	4-Heptanone, 3-methyl-		128	0.16	31	
33.08	1,3-Diethyl-1,4-epoxycyclobutane, isomer	15726-15-5	128	1.8	350	
33.21	1,3-Diethyl-1,4-epoxycyclobutane, isomer		128	2.1	410	
33.35	Unknown		128	2.0	380	No good match
33.63	Unknown		126	2.3	440	
33.94	C10 aliphatic hydrocarbon-		142	0.12	20	
34.19	4-Octanone	599-63-9	128	0.41	79	
34.39	Heptanenitrile	629-08-3	111	0.45	99	
34.68	3-Octanone	106-68-3	128	0.14	27	
34.71	2-Octanone	111-13-7	140	0.25	43	
34.82	Cyclohexane, 1-methyl-3-propyl-	4291-80-9	140	0.15	27	
35.15	Unknown		140	0.073	13	
35.35	Unknown		140	1.8	320	
35.68	Decane, 4-methyl-	2847-72-5	156	0.34	54	
36.8	1-Hexanol, 2-ethyl-	104-76-7	130	0.68	130	
36.31	Cyclohexane, (2-methylpropyl)-	1678-98-4	140	0.10	17	
36.43	Unknown		154	0.054	10	
37.05	Decane, 3-methyl-	13151-34-3	156	0.055	8.6	
37.36	Octanenitrile	124-12-9	125	0.33	64	
37.61	Undecene, 1- or 3- isomer	821-97-6	154	0.14	22	
37.83	Undecane	1120-21-4	156	1.4	220	

Retention Time (min)	Tentative ID	CAS#	Mol Weight	Concentration (mg/m3)	Concentration (ppbv)	Comments
37.94	Unknown		164	0.087	14	ORNL: C11 alkene
38.14	Unknown		164		42	Coelution
38.62	3,7-dimethyl decane ?	17312-54-8	170	0.12	17	
38.76	Unknown		139	0.14	24	ORNL: nonaromatic
38.88	trans-Decalin, 2-methyl-	1000152-47-	182	0.15	24	
39.18	Cyclohexane, C5 substituted		164	0.15	24	Poor match
39.28	Undecane, 6-methyl-	17302-33-9	170	0.087	10	
39.38	Naphthalene, decalhydro, 2-methyl	2958-76-1	192	0.16	28	
39.55	Undecane, 2-methyl-	7045-71-8	170	0.13	19	
39.75	Undecane, 3-methyl-	1002-43-3	170	0.051	7.3	
40.27	Dodecane, isomer		168	0.11	16	
40.36	Naphthalene, decalhydro, 2,3-dimethyl-	1008-80-6	168	0.032	4.7	
40.48	Dodecane	112-40-3	170	2.6	370	
40.72	Naphthalene, decalhydro-, 2,6-dimethyl-	1618-22-0	166	0.041	6.1	
40.81	Dodecane, 6-methyl-	6044-71-9	184	0.40	53	
41.52	Cyclohexane, 2-butyl-1,3-trimethyl-	54676-39-0	182	0.069	9.2	
41.64	Cyclohexane, (4-methylpentyl)-	61142-20-9	168	0.066	10	
41.81	Undecane, 2,10-dimethyl-	17301-27-8	184	0.066	8.8	
41.98	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.44	59	
42.29	Tridecene, 3,5, or 6- isomer		182	0.17	23	
42.43	Tridecene	629-50-5	184	3.5	460	
42.71	Tridecene, 6-methyl-		198	0.048	6.0	
43.53	Dodecane, trimethyl-, isomer	13287-21-3	212	0.12	13	2,6,10- or 2,6,11-trimethyl dodecane
43.8	Tetradecane	629-59-4	198	0.90	110	

Comments: Qualitation is based on the chlorobenzene-d5 internal standard
The extended TIC list reports nontarget compounds at estimated concentrations of 5 ppbv or higher.

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-058-S080 Analysis Date: 1/5/99 Data File ID: 19010506.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m ³)	Estimated Concentration (ppbv)
7.19	Propene	115-07-1	42	2.0	1200
11.29	1-Butene	106-98-9	56	4.5	1900
12.94	1-Propene, 2-methyl-	115-11-7	56	0.76	330
16.01	1-Pentene	109-67-1	70	1.2	410
24.61	1-Heptene	592-76-7	98	1.6	400
24.97	3-Heptene, isomer	7642-10-6	98	8.4	2100
25.11	3-Heptene, isomer	592-78-9	98	4.1	1000
25.24	2-Heptene, isomer	592-77-8	98	6.2	1500
25.56	2-Heptene, isomer	592-77-8	98	4.9	1200
25.81	Cyclopropane, butyl-	930-57-4	98	1.1	280
27.08	C7 cycloalkene/diene		96	2.0	500
27.68	Heptane, 3-methyl-	589-81-1	114	2.9	610
27.83	2-Heptyne	1119-65-9	96	0.95	240
28.25	Heptane, 3-methylene-	1632-16-2	112	2.5	550
28.59	C8 alkene/cycloalkane		112	2.1	460
28.95	2-Heptene, 3-methyl-	3404-75-9	112	0.65	140
31.04	4-Heptanone	123-19-3	114	3.4	720
31.32	n-Butyl ether	142-96-1	130	0.40	76
31.75	3-Heptanol	589-82-2	116	1.2	260
32.76	Unknown		128	0.67	130
33.09	Unknown		128	1.7	320
33.23	1,3-Diethyl-1,4-epoxybutane		128	2.0	370
33.37	C7 alkene/cycloalkane		128	1.8	350
33.65	Unknown		128	1.7	320
34.2	4-Octanone	589-63-9	128	0.42	81
34.4	Heptanenitrile	629-08-3	111	0.44	96
35.36	Unknown		140	1.8	320
35.83	1-Hexanol, 2-ethyl-	104-76-7	130	2.6	490
37.85	Undecane	1120-21-4	156	1.1	170
40.48	Dodecane	112-40-3	170	2.0	290
41.98	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.35	47
42.43	Tridecane	629-50-5	184	3.1	420
43.81	Tetradecane	629-59-4	198	0.96	120

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-059-S081 Analysis Date: 1/4/99 Data File ID: 19010406.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
11.26	1-Butene	106-98-9	56	4.6	2000
12.91	1-Propene, 2-methyl-	115-11-7	56	0.79	340
15.99	1-Pentene	109-67-1	70	1.2	430
24.59	1-Heptene	592-76-7	98	1.7	420
24.75	2-Pentenitrile	13284-42-9	81	0.69	210
25.09	3-Heptene	592-78-9	98	4.3	1100
25.23	2-Heptene, isomer	592-77-8	98	6.4	1600
25.54	2-Heptene, isomer	14686-13-6	98	5.2	1300
25.79	Cyclopropane, butyl-	930-57-4	98	1.2	310
27.06	C7 cycloalkene/diene		96	2.2	550
27.67	Heptane, 3-methyl-	589-81-1	114	3.1	660
27.81	2-Heptyne	1119-65-9	96	1.0	260
28.15	3-Hexanone	589-38-8	100	0.56	140
28.23	Heptane, 3-methylene-	1632-16-2	112	2.7	600
28.93	2-Heptene, 3-methyl-	3404-75-9	112	0.73	160
29.06	4-Octene, isomer	14850-23-8	112	0.42	92
31.32	n-Butyl ether	142-96-1	130	0.45	85
31.73	3-Heptanol	589-82-2	116	1.0	220
32.74	Unknown		113	0.74	160
33.08	Unknown		128	1.8	340
33.21	1,3-Diethyl-1,4-epoxybutane		128	2.1	400
33.35	C7 alkene/cycloalkane		128	2.0	380
33.64	Unknown		126	2.4	460
34.19	4-Octanone	589-63-9	128	0.42	80
34.39	Heptanenitrile	629-08-3	111	0.45	100
35.35	Unknown		140	2.0	340
35.81	1-Hexanol, 2-ethyl-	104-76-7	130	1.5	280
37.36	Octanenitrile	124-12-9	125	0.38	75
37.83	Undecane	1120-21-4	156	1.4	210
38.14	Unknown		154	0.35	55
40.48	Dodecane	112-40-3	170	2.6	370
40.81	Dodecane, 6-methyl-	6044-71-9	184	0.39	52
41.98	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.44	58
42.43	Tridecane	629-50-5	184	3.5	470
43.8	Tetradecane	629-59-4	198	1.1	140

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-067-S082 Analysis Date: 1/5/99 Data File ID: 19010504.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
11.25	1-Butene	106-98-9	56	4.0	1700
12.91	1-Propene, 2-methyl-	115-11-7	56	0.67	290
15.99	1-Pentene	109-67-1	70	1.0	360
24.60	1-Heptene	592-76-7	98	1.5	370
24.97	3-Heptene, isomer	14686-14-7	98	7.9	2000
25.1	3-Heptene, isomer	592-78-9	98	3.9	970
25.23	2-Heptene, isomer	592-77-8	98	5.8	1500
25.66	2-Heptene, isomer	14686-13-6	98	4.7	1200
25.80	Cyclopropane, butyl-	930-57-4	98	1.1	270
27.07	C7cycloalkene/diene		96	1.9	480
27.68	Heptane, 3-methyl-	589-81-1	114	2.7	580
27.83	2-Heptyne	1119-65-9	96	0.91	230
28.24	Heptane, 3-methylene-	1632-16-2	112	2.4	530
28.58	C8alkene/cycloalkane		112	1.7	370
28.94	2-Heptene, 3-methyl-	3404-75-9	114	0.63	130
29.07	Octene, isomer	14850-23-8	112	0.32	70
31.03	4-Heptanone	123-19-3	114	3.0	640
31.33	n-Butyl ether	142-96-1	130	0.39	74
31.74	3-Heptanol	589-82-2	116	0.59	120
32.75	Unknown		126	0.64	120
33.08	Unknown		128	1.5	290
33.22	1,3-Diethyl-1,4-epoxybutane		128	1.8	340
33.36	C7 alkene/cycloalkane		128	1.6	310
33.65	Unknown		126	1.9	370
34.2	4-Octanone	589-63-9	128	0.34	66
34.4	Heptanenitrile	629-08-3	111	0.37	81
35.35	Unknown		140	1.6	270
35.81	1-Hexanol, 2-ethyl-	104-76-7	130	0.61	110
37.85	Undecane	1120-21-4	156	1.2	190
40.48	Dodecane	112-40-3	170	2.2	320
40.82	Dodecane, 6-methyl-	6044-71-9	184	0.34	45
41.98	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.38	50
42.43	Tridecane	629-50-5	184	3.1	420
43.81	Tetradecane	629-59-4	198	1.1	140

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-068-S091 Analysis Date: 1/4/99 Data File ID: 19010407.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m ³)	Estimated Concentration (ppbv)
7.14	Propene	115-07-1	42	0.10	55
11.26	1-Butene	106-98-9	56	4.2	1900
12.92	1-Propene, 2-methyl-	115-11-7	56	0.71	310
15.99	1-Pentene	109-67-1	70	1.1	390
24.59	1-Heptene	592-76-7	98	1.6	400
24.96	3-Heptene, isomer	7642-10-6	98	8.5	2100
25.1	3-Heptene, isomer	14686-14-7	98	4.1	1000
25.22	2-Heptene, isomer	592-77-8	98	6.3	1600
25.55	2-Heptene, isomer	14686-13-6	98	5.0	1300
25.79	Cyclopropane, butyl-	930-57-4	98	1.2	290
27.06	C7 cycloalkene/diene		96	2.0	510
27.67	Heptane, 3-methyl-	589-81-1	114	3.0	640
27.82	2-Heptyne	1119-65-9	96	1.0	260
28.23	Heptane, 3-methylene-	1632-16-2	112	2.6	560
28.57	C8 alkene/cycloalkane		112	2.3	490
28.94	2-Heptene, 3-methyl-	3404-75-9	112	0.69	150
31.02	4-Heptanone	123-19-3	114	3.4	740
31.33	n-Butyl ether	142-96-1	130	0.43	82
31.73	3-Heptanol	589-82-2	116	0.78	170
32.74	Unknown		128	0.72	140
33.07	Unknown		128	1.7	330
33.21	1,3-Diethyl-1,4-epoxybutane		198	2.0	250
33.35	C7 alkene/cycloalkane		128	1.9	360
33.64	Unknown		126	2.1	420
34.19	4-Octanone	589-63-9	128	0.39	74
34.39	Heptanenitrile	629-08-3	111	0.42	93
35.35	Unknown		140	1.8	310
35.81	1-Hexanol, 2-ethyl-	104-76-7	130	1.3	250
37.84	Undecane	1120-21-4	156	1.3	210
40.47	Dodecane	112-40-3	170	2.4	350
41.98	Decane, 2,6,7-trimethyl-	62108-25-2	184	0.44	58
42.42	Tridecane	629-50-5	184	3.5	470
43.8	Tetradecane	629-59-4	198	1.5	190

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

296-C-006 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS006-128-S096 Analysis Date: 1/4/99 Data File ID: 19010408.D			
Retention Time (min)	Tentative ID	CAS #	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
7.17	Propene	115-07-1	42	1.5	890
11.26	1-Butene	106-98-9	56	3.5	1500
12.91	1-Propene, 2-methyl-	115-11-7	56	0.57	250
15.98	1-Pentene	109-67-1	70	0.87	300
24.59	1-Heptene	592-76-7	98	1.3	320
25.09	3-Heptene, isomer	14686-14-7	98	3.6	890
25.22	2-Heptene, isomer	592-77-8	98	5.6	1400
25.54	2-Heptene, isomer	14686-13-6	98	4.4	1100
25.78	Cyclopropane, butyl-	930-57-4	98	0.98	250
27.06	C7 cycloalkene/diene		96	1.7	430
27.66	Heptane, 3-methyl-	589-81-1	114	2.5	540
27.81	2-Heptyne	1119-65-9	96	0.84	220
28.23	Heptane, 3-methylene-	1632-16-2	112	2.2	480
28.57	C8 alkene/cycloalkane		112	1.8	400
28.93	2-Heptene, 3-methyl-	3404-75-9	95	0.55	140
29.06	Octene, isomer	14850-23-8	112	0.29	63
31.02	4-Heptanone	123-19-3	114	3.0	650
31.32	n-Butyl ether	142-96-1	130	0.35	67
31.73	3-Heptanol	589-82-2	116	0.92	190
32.74	Unknown		128	0.61	120
33.07	Unknown		128	1.5	280
33.21	1,3-Diethyl-1,4-epoxybutane		128	1.7	330
33.35	C7 alkene/cycloalkane		128	1.5	280
33.63	Unknown		128	1.2	240
34.18	4-Octanone	589-63-9	128	0.34	64
34.38	Heptanenitrile	629-08-3	111	0.34	75
35.34	Unknown		140	1.4	240
35.8	1-Hexanol, 2-ethyl-	104-76-7	130	1.2	220
37.83	Undecane	1120-21-4	156	0.96	150
40.47	Dodecane	112-40-3	170	1.7	240
42.42	Tridecane	629-50-5	184	2.3	310
43.8	Tetradecane	629-59-4	198	0.74	91

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

241-AY-102 SHMS Tentatively Identified Compounds Summary Table		Sample Number: VS102-003-S021 Analysis Date: 1/12/99 Data File ID: 19011205.D				
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
10.98	Acetaldehyde	75-07-0	83	44	0.056	31
22.09	Nitric acid, ethyl ester	625-58-1	64	91	0.032	8.5
25.81	Cyclopropane, butyl-	930-57-4	56	98	0.035	8.9
31.05	4-Heptanone	123-19-3	91	114	0.26	56
31.77	3-Heptanol	589-82-2	78	116	0.022	4.6
33.11	Unknown		59	128	0.031	5.9
33.26	1,3-Diethyl-1,4-epoxybutane		78	128	0.042	8.0
35.38	Unknown		40	140	0.043	7.5
35.85	1-Hexanol, 2-ethyl-	104-76-7	78	130	0.040	7.4

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

241-AY-102 SHMS Tentatively Identified Compounds Summary Table		Sample Number: VS102-006-S022 Analysis Date: 1/12/99 Data File ID: 19011206.D				
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
10.96	Acetaldehyde	75-07-0	83	44	0.12	64
11.26	1-Butene	106-98-9	83	56	0.079	35
16.03	1-Pentene	109-67-1	90	70	0.028	9.7
22.08	Nitric acid, ethyl ester	625-58-1	74	91	0.038	10
24.64	1-Heptene	592-76-7	97	98	0.050	12
24.81	Butanenitrile, 2-methylene-	1647-11-6	53	81	0.20	61
25.11	3-Heptene, (E)-	14686-14-7	95	98	0.078	19
25.23	2-Heptene, (E)-	14686-13-6	97	98	0.097	24
25.57	2-Heptene, (Z)-	592-77-8	96	98	0.092	23
25.82	Cyclopropane, butyl-	930-57-4	38	98	0.087	22
27.10	C7 Cycloalkene/diene		74	96	0.092	24
27.71	Heptane, 3-methyl-	589-81-1	91	114	0.22	48
27.86	2-Heptyne	1119-65-9	96	96	0.048	12
28.27	3-Heptene, 5-methyl-	50422-80-5	78	112	0.11	24
31.05	4-Heptanone	123-19-3	91	114	0.35	75
31.37	n-Butyl ether	142-96-1	72	130	0.027	5.1
32.78	Unknown		50	128	0.041	7.9
33.11	Unknown		53	128	0.068	13
33.25	1,3-Diethyl-1,4-epoxybutane		78	128	0.080	15
40.50	Dodecane	112-40-3	93	170	0.056	8.1
42.44	Tridecane	629-50-5	94	184	0.076	10

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

241-AY-102 SHMS Tentatively Identified Compounds Summary Table		Sample Number: VS102-009-S034 Analysis Date: 1/12/99 Data File ID: 19011207.D				
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
10.96	Acetaldehyde	75-07-0	83	44	0.13	71
11.26	1-Butene	106-98-9	83	56	0.084	37
16.02	1-Pentene	109-67-1	90	70	0.037	13
16.27	Propanal	123-38-6	78	58	0.034	14
22.09	Nitric acid, ethyl ester	625-58-1	83	91	0.040	11
24.63	1-Heptene	592-76-7	93	98	0.073	18
24.81	Butanal, 3-methyl-	590-86-3	78	86	0.21	61
25.11	3-Heptene, (E)-	14686-14-7	95	98	0.11	28
25.23	2-Heptene, E	14686-13-6	96	98	0.14	34
25.82	Cyclopropane, butyl-	930-57-4	47	98	0.12	29
27.10	C7 Cycloalkene/diene	2454-31-1	74	96	0.13	34
27.60	2-Octene, (Z)-	7642-04-8	64	112	0.10	22
27.70	Heptane, 3-methyl-	589-81-1	91	114	0.36	78
27.81	2-Octene, isomer		93	112	0.023	5.0
27.86	2-Heptyne	1119-65-9	96	96	0.064	16
28.27	Heptane, 3-methylene-	1632-16-2	78	112	0.16	35
29.10	2-Octene, isomer		81	112	0.028	6.0
31.05	4-Heptanone	123-19-3	91	114	0.49	110
31.37	n-Butyl ether	142-96-1	72	130	0.042	7.9
32.78	Unknown		50	128	0.062	12
33.11	Unknown		78	128	0.11	22
33.25	1,3-Diethyl-1,4-epoxybutane		83	128	0.13	25
33.38	C7 alkene/alkane		53	128	0.030	5.7
33.66	Unknown		23	126	0.021	4.2
34.22	4-Octanone	589-63-9	83	128	0.025	4.8
35.37	Unknown		40	140	0.086	15
37.87	Undecane	1120-21-4	95	156	0.055	8.6
40.50	Dodecane	112-40-3	93	170	0.11	16
42.44	Tridecane	629-50-5	91	184	0.16	21

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

241-AY-102 SHMS Tentatively Identified Compounds Summary Table		Sample Number: VS102-012-S041 Analysis Date: 1/12/99 Data File ID: 19011208.D				
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
10.96	Acetaldehyde	75-07-0	83	44	0.20	110
11.26	1-Butene	106-98-9	83	56	0.20	88
16.02	1-Pentene	109-67-1	90	70	0.081	28
16.27	Propanal	123-38-6	78	58	0.080	34
22.09	Nitric acid, ethyl ester	625-58-1	74	91	0.050	14
24.63	1-Heptene	592-76-7	91	98	0.18	46
24.82	Butanal, 3-methyl-	590-86-3	64	86	0.42	120
25.12	3-Heptene	592-77-8	95	98	0.34	86
25.23	2-Heptene, (E)	14686-13-6	97	98	0.53	130
25.57	2-Heptene, (Z)-	592-77-8	96	98	0.44	110
25.82	Cyclopropane, butyl-	930-57-4	50	98	0.23	58
27.10	C7 alkene/diene		74	96	0.30	78
27.70	Heptane, 3-methyl-	589-81-1	91	114	0.80	170
27.81	1-Octene	111-66-0	91	112	0.055	12
27.85	2-Heptyne	1119-65-9	96	96	0.14	35
28.27	Heptane, 3-methylene-	1632-16-2	90	112	0.46	99
29.10	Octene, isomer	14850-23-8	87	112	0.065	14
31.05	4-Heptanone	123-19-3	91	114	0.67	140
31.37	n-Butyl ether	142-96-1	72	130	0.089	17
32.77	Unknown		50	128	0.10	19
33.11	Unknown		78	128	0.19	36
33.24	1,3-Diethyl-1,4-epoxybutane		83	128	0.22	42
33.38	C7 alkene/alkane		53	128	0.064	12
33.66	Unknown		25	126	0.040	7.8
34.23	4-Octanone	589-63-9	70	128	0.048	9.3
35.37	Unknown		42	140	0.15	25
35.84	1-Hexanol, 2-ethyl-	104-76-7	72	130	0.045	8.5
37.86	Undecane	1120-21-4	91	156	0.13	21
40.50	Dodecane	112-40-3	93	170	0.26	38
42.44	Tridecane	629-50-5	94	184	0.42	55
43.82	Tetradecane	629-59-4	91	198	0.058	7.2

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

241-AZ-702 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS702-003-S061 Analysis Date: 1/11/99 Data File ID: 19011104.D				
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
11.05	Acetaldehyde	75-07-0	83	44	0.032	18
36.80	Decane, 3,7-dimethyl-	17312-54-8	86	170	0.042	6.0

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

241-AZ-702 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS702-005-S062 Analysis Date: 1/11/99 Data File ID: 19011105.D				
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
	None					

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

241-AZ-702 Stack Tentatively Identified Compounds Summary Table			Sample Number: VS702-008-S063 Analysis Date: 1/11/99 Data File ID: 19011106.D			
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
11.06	Acetaldehyde	75-07-0	83	44	0.056	31
11.32	1-Butene	106-98-9	87	56	0.022	9.8
36.80	Decane, 3,7-dimethyl-	17312-54-8	76	170	0.039	5.6

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

241-AZ-702 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS702-011-S068 Analysis Date: 1/11/99 Data File ID: 19011107.D				
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
11.04	Acetaldehyde	75-07-0	83	44	0.057	32
11.32	1-Butene	106-98-9	87	56	0.031	13

Notes: Estimation based on chlorobenzene-d5 internal standard
TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

241-AZ-702 Stack Tentatively Identified Compounds Summary Table		Sample Number: VS702-014-S070 Analysis Date: 1/11/99 Data File ID: 19011108.D				
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)
11.03	Acetaldehyde	75-07-0	83	44	0.082	46
11.31	1-Butene	106-98-9	83	56	0.055	24

Notes:

Estimation based on chlorobenzene-d5 internal standard

TICs are reported for concentrations > 10 % of the chlorobenzene-d5 internal standard

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2.2.3 Quality Control Summary Tables

This section contains 4 tables that summarize the quality control parameters used during analysis:

- The Laboratory Blank Summary lists the target compounds above 2.5 ppbv and TICs found in analyzing a method blank
- A continuing calibration verification standard (CCVS) is analyzed before the analysis of the vapor samples to assure valid calibration. The Continuing Calibration Report has the continuing calibration response factors (CCRF) for all target compounds and the percent deviation from the CCRFs calculated during initial calibration
- The Internal Standards Area Counts Table lists the area counts of the 4 internal standards added during the analysis and % recoveries
- Two laboratory control samples (LCSs) are analyzed with each batch of vapor samples to measure accuracy and precision. This table lists % recovery and %RPD for the 6 compounds in the LCS.

LAB BLANK

Laboratory Blank Summary

Laboratory identification number 19010203.d
 Analysis date and time 1/2/99 12:52
 Associated Vapor sample VS006-010-S036, VS006-025-S064, VS006-033-S053, VS006-042-S075

Target analyte	CAS#	Retention Time (min)	Concentration (ppbv)	Concentration (mg/m ³)
1-Butanol	71-36-3	23.54	13	0.039
4-Methyl-2-pentanone	108-10-1	26.37	3.2	0.013

TIC Compound Name	CAS#	Retention Time (min)	Estimated Concentration (ppbv)	Estimated Concentration (mg/m ³)
None > 5 ppbv				

Laboratory identification number 19010403.d
 Analysis date and time 1/4/99 11:31
 Associated Vapor sample VS006-002-S019, VS006-051-S078, VS006-059-S081, VS006-068-S091, VS006-12

Target analyte	CAS#	Retention Time (min)	Concentration (ppbv)	Concentration (mg/m ³)
1-Butanol	71-36-3	23.54	14	0.042
4-Methyl-2-pentanone	108-10-1	26.37	3.7	0.015
3-Heptanone	106-35-4	31.44	5.8	0.027

TIC Compound Name	CAS#	Retention Time (min)	Estimated Concentration (ppbv)	Estimated Concentration (mg/m ³)
None > 5 ppbv				

Laboratory identification number 19010503.d
 Analysis date and time 1/5/99 10:42
 Associated Vapor sample VS006-067-S082, VS006-041-S074, VS006-058-S080, VS006-034-S057, VS006-05

Target analyte	CAS#	Retention Time (min)	Concentration (ppbv)	Concentration (mg/m ³)
1-Butanol	71-36-3	23.58	12	0.036
4-Methyl-2-pentanone	108-10-1	26.41	3.3	0.013

TIC Compound Name	CAS#	Retention Time (min)	Estimated Concentration (ppbv)	Estimated Concentration (mg/m ³)
None > 5 ppbv				

Notes:

TIC estimation based on chlorobenzene-d5 internal standard

Target compounds are reported above 2.5 ppbv (0.5 of the VPRQL of 5 ppbv) except for acetone, methylene chloride, and 2-butanone (12.5 ppbv or 5 times VPRQL)

TICs are reported above 5 ppbv (the VPRQL of the target compounds)

LAB BLANK

Laboratory Blank Summary

Laboratory identification number 19010704.d
 Analysis date and time 1/1/99 11:51
 Associated Vapor sample VS006-034-S057-2, VS006-041-S074-2, VS006-050-S077-2, VS006-058-S080-2
 VS006-067-S082-2, VS006-128-S096-2

Target analyte	CAS	Retention Time	Concentration (ppbv)	Concentration (mg/m ³)
None > 2.5 ppbv				

TIC Compound Name	CAS	Retention Time (min)	Estimated Concentration (ppbv)	Estimated Concentration (mg/m ³)
None > 5 ppbv				

Laboratory identification number 19011103.d
 Analysis date and time 1/1/99 11:16
 Associated Vapor sample VS702-003-S061, VS702-005-S062, VS702-008-S063, VS702-011-S068, VS702-01

Target analyte	CAS	Retention Time	Concentration (ppbv)	Concentration (mg/m ³)
None > 2.5 ppbv				

TIC Compound Name	CAS	Retention Time (min)	Estimated Concentration (ppbv)	Estimated Concentration (mg/m ³)
None > 5 ppbv				

Laboratory identification number 19011204.d
 Analysis date and time 1/12/99 13:38
 Associated Vapor sample VS102-003-S021, VS102-006-S022, VS102-009-S034, VS102-012-S041

Target analyte	CAS	Retention Time	Concentration (ppbv)	Concentration (mg/m ³)
None > 2.5 ppbv				

TIC Compound Name	CAS	Retention Time (min)	Estimated Concentration (ppbv)	Estimated Concentration (mg/m ³)
None > 5 ppbv				

Notes:

TIC estimation based on chlorobenzene-d5 internal standard

Target compounds are reported above 2.5 ppbv (0.5 of the VPRQL of 5 ppbv) except for acetone, methylene chloride, and 2-butanone (12.5 ppbv or 5 times VPRQL)

TICs are reported above 5 ppbv (the VPRQL of the target compounds)

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19010201.D Vial: 1
 Acq On : 2 Jan 93 10:24 am Operator: M. STAUFFER
 Sample : P ICAL #3/CCVS: 21 PPBV Inst : 5972 - MS
 Misc : 50 TORR Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Wed Dec 23 08:45:05 1998
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	63	0.04
2	ETHANOL	0.203	0.215	-6.0	65	-0.38
3	ACETONITRILE	0.316	0.319	-1.2	60	-0.25
4	ACETONE	0.326	0.324	0.5	68	-0.26
5	FURAN	0.611	0.663	-8.4	68	-0.20
6	2-PROPANOL	0.780	0.878	-12.5	62	-0.36
7	1-PROPANOL	0.619	0.592	4.4	59	-0.30
8	PROPANENITRILE	0.456	0.457	-0.3	63	-0.23
9	BUTANAL	0.189	0.193	-1.8	65	-0.20
10	2-BUTANONE	0.297	0.301	-1.5	63	-0.22
11	TETRAHYDROFURAN	0.273	0.282	-3.3	64	-0.20
12	1-BUTANOL	0.316	0.268	15.0	57	-0.26
13	BUTANENITRILE	0.886	0.961	-8.5	61	-0.21
14	2-PENTANONE	1.779	1.914	-7.6	60	-0.20
15	1,4-DIOXANE	0.357	0.388	-8.6	61	-0.19
16	4-METHYL-2-PENTANONE	0.172	0.159	7.4	57	-0.19
17	CHLOROBENZENE-D5	1.000	1.000	0.0	59	-0.12
18	2-HEXANONE	1.048	1.007	3.9	54	-0.18
19	3-HEPTANONE	0.206	0.174	15.4	50#	-0.17
20	2-HEPTANONE	1.429	1.241	13.2	49#	-0.18
21	CYCLOHEXANONE	0.393	0.328	16.5	48#	-0.17
22	2-OCTANONE	1.521	1.035	31.9#	46#	-0.15

(#) = Out of Range
 18122205.D VAP_P7.M

SPCC's out = 0 CCC's out = 0
 Sat Jan 02 11:19:41 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19010202.D

Acq On : 2 Jan 99 11:39 am

Sample : NP ICAL #3/CCVS: 21 PPBV

Misc : 50 TORR

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	117	0.04
2	FREON 12	1.205	1.153	4.3	115	-0.21
3	METHYL CHLORIDE	0.611	0.575	6.0	118	-0.17
4	N-BUTANE	1.061	1.011	4.7	117	-0.13
5	ETHYL CHLORIDE	0.335	0.324	3.0	120	-0.10
6	FREON 11	0.993	0.960	3.3	114	-0.09
7	N-PENTANE	0.097	0.094	3.0	116	-0.09
8	DICHLOROMETHANE	0.698	0.640	8.4	116	-0.09
9	2-METHYL-PENTANE	1.409	1.373	2.5	123	-0.09
10	1-HEXENE	0.630	0.609	3.3	114	-0.08
11	N-HEXANE	0.939	0.911	3.0	115	-0.09
12	CHLOROFORM	0.994	0.960	3.5	113	-0.08
13	BENZENE	1.652	1.652	-0.0	114	-0.09
14	CARBON TETRACHLORIDE	0.749	0.755	-0.9	114	-0.09
15	3-METHYL-HEXANE	1.086	1.068	1.7	112	-0.09
16	N-HEPTANE	0.556	0.556	-0.2	114	-0.09
17	TOLUENE	1.753	1.713	2.3	109	-0.09
18	N-OCTANE	0.462	0.481	-4.1	117	-0.09
19	TETRACHLOROETHYLENE	0.773	0.777	-0.6	111	-0.09
20	CHLOROBENZENE-D5	1.000	1.000	0.0	121	-0.08
21	CHLOROBENZENE	1.961	1.873	4.5	115	-0.09
22	ETHYLBENZENE	2.568	2.447	4.7	115	-0.09
23	M,P-XYLENE	1.892	1.836	3.0	114	-0.09
24	STYRENE	1.414	1.385	2.1	114	-0.09
25	N-NONANE	1.483	1.516	-2.2	120	-0.09
26	1,1,2,2-TETRACHLOROETHANE	0.815	0.684	16.1	140	-0.09
27	O-XYLENE	1.833	1.766	3.7	114	-0.09
28	N-DECANE	1.171	1.183	-1.0	130	-0.09
29	1,2,4-TRIMETHYLBENZENE	1.648	1.585	3.8	114	-0.09

(#) = Out of Range
18123105.D VAP_NP7.M

SPCC's out = 0 CCC's out = 0
Sat Jan 02 14:27:25 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19010401.D
 Acq On : 4 Jan 99 9:18 am
 Sample : Polar CCVS @ 21 PPBV; ICAL 3
 Misc : 50 TORR

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	76	0.07
2	ETHANOL	0.203	0.198	2.5	73	-0.37
3	ACETONITRILE	0.316	0.319	-1.1	72	-0.22
4	ACETONE	0.326	0.309	5.4	78	-0.24
5	FURAN	0.611	0.627	-2.5	77	-0.18
6	2-PROPANOL	0.780	0.807	-3.4	69	-0.33
7	1-PROPANOL	0.619	0.539	13.0	64	-0.28
8	PROPANENITRILE	0.456	0.426	6.6	71	-0.20
9	BUTANAL	0.189	0.191	-0.6	77	-0.18
10	2-BUTANONE	0.297	0.288	2.9	73	-0.19
11	TETRAHYDROFURAN	0.273	0.271	0.7	75	-0.17
12	1-BUTANOL	0.316	0.267	15.5	68	-0.24
13	BUTANENITRILE	0.886	0.822	7.1	63	-0.18
14	2-PENTANONE	1.779	1.601	10.0	61	-0.17
15	1,4-DIOXANE	0.357	0.368	-2.9	70	-0.17
16	4-METHYL-2-PENTANONE	0.172	0.147	14.1	64	-0.16
17	CHLOROBENZENE-D5	1.000	1.000	0.0	72	-0.10
18	2-HEXANONE	1.048	0.886	15.5	58	-0.16
19	3-HEPTANONE	0.206	0.208	-1.2	73	-0.15
20	2-HEPTANONE	1.429	1.288	9.9	63	-0.15
21	CYCLOHEXANONE	0.393	0.326	17.1	58	-0.14
22	2-OCTANONE	1.521	1.191	21.7	64	-0.14

(#) = Out of Range
 18122205.D VAP_P7.M

SPCC's out = 0 , CCC's out = 0
 Mon Jan 04 10:08:12 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19010402.D
 Acq On : 4 Jan 99 10:22 am
 Sample : NonPolar CCVS @ 21 PPEV; ICAL 3
 Misc : 50 TORR

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	148	0.07
2	FREON 12	1.205	1.116	7.4	141	-0.17
3	METHYL CHLORIDE	0.611	0.517	15.5	133	-0.14
4	N-BUTANE	1.061	0.888	16.3	130	-0.09
5	ETHYL CHLORIDE	0.335	0.298	10.9	140	-0.07
6	FREON 11	0.993	0.982	1.1	148	-0.07
7	N-PENTANE	0.097	0.092	4.8	143	-0.07
8	DICHLOROMETHANE	0.698	0.604	13.5	138	-0.06
9	2-METHYL-PENTANE	1.409	1.135	19.4	128	-0.06
10	1-HEXENE	0.630	0.591	6.1	140	-0.06
11	N-HEXANE	0.939	0.884	5.9	141	-0.06
12	CHLOROFORM	0.994	0.960	3.4	143	-0.05
13	BENZENE	1.652	1.643	0.6	143	-0.06
14	CARBON TETRACHLORIDE	0.749	0.792	-5.8	151#	-0.07
15	3-METHYL-HEXANE	1.086	0.991	8.8	132	-0.07
16	N-HEPTANE	0.556	0.517	6.9	133	-0.07
17	TOLUENE	1.753	1.687	3.8	136	-0.06
18	N-OCTANE	0.462	0.461	0.1	142	-0.07
19	TETRACHLOROETHYLENE	0.773	0.779	-0.8	140	-0.06
20	CHLOROBENZENE-D5	1.000	1.000	0.0	153#	-0.06
21	CHLOROBENZENE	1.961	1.899	3.1	148	-0.07
22	ETHYLBENZENE	2.568	2.450	4.6	146	-0.07
23	M, P-XYLENE	1.892	1.848	2.4	145	-0.07
24	STYRENE	1.414	1.406	0.6	146	-0.07
25	N-NONANE	1.483	1.335	10.0	134	-0.07
26	1,1,2,2-TETRACHLOROETHANE	0.815	0.878	-7.7	228#	-0.07
27	O-XYLENE	1.833	1.767	3.6	144	-0.07
28	N-DECANE	1.171	1.089	7.0	152#	-0.07
29	1,2,4-TRIMETHYLBENZENE	1.648	1.656	-0.5	151#	-0.07

(#) = Out of Range
 18123105.D VAP_NP7.M

SPCC's out = 0 CCC's out = 0
 Mon Jan 04 11:15:25 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19010501.D
 Acq On : 5 Jan 99 8:29 am
 Sample : Polar CCVS @ 21 PPBV; ICAL 3
 Misc : 50 TORR

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	74	0.08
2	ETHANOL	0.203	0.187	7.8	67	-0.35
3	ACETONITRILE	0.316	0.338	-7.1	75	-0.20
4	ACETONE	0.326	0.297	8.9	74	-0.21
5	FURAN	0.611	0.596	2.4	72	-0.15
6	2-PROPANOL	0.780	0.802	-2.7	67	-0.31
7	1-PROPANOL	0.619	0.537	13.4	63	-0.26
8	PROPANENITRILE	0.456	0.407	10.7	66	-0.18
9	BUTANAL	0.189	0.182	3.8	72	-0.15
10	2-BUTANONE	0.297	0.282	5.0	70	-0.17
11	TETRAHYDROFURAN	0.273	0.260	4.6	70	-0.14
12	1-BUTANOL	0.316	0.265	16.1	66	-0.22
13	BUTANENITRILE	0.886	0.810	8.6	60	-0.16
14	2-PENTANONE	1.779	1.650	7.3	61	-0.16
15	1,4-DIOXANE	0.357	0.373	-4.3	69	-0.15
16	4-METHYL-2-PENTANONE	0.172	0.159	7.3	67	-0.14
17	CHLOROBENZENE-D5	1.000	1.000	0.0	70	-0.08
18	2-HEXANONE	1.048	1.069	-2.0	68	-0.14
19	3-HEPTANONE	0.206	0.302	-46.6#	102	-0.13
20	2-HEPTANONE	1.429	1.690	-18.3	80	-0.14
21	CYCLOHEXANONE	0.393	0.403	-2.5	70	-0.13
22	2-OCTANONE	1.521	1.427	6.2	75	-0.12

(#) = Out of Range
 18122205.D VAP_P7.M

SPCC's out = 0 CCC's out = 0
 Tue Jan 05 09:22:22 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19010702.D

Vial: 1

Acq On : 7 Jan 99 9:25 am

Operator: G. FIES

Sample : Polar CCVS @ 21 PPBV

Inst : 5972 - MS

Misc : 50 TORR

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	50	0.11
2	ETHANOL	0.203	0.238	-17.4	58	-0.32
3	ACETONITRILE	0.316	0.310	1.8	47#	-0.17
4	ACETONE	0.326	0.354	-8.6	60	-0.19
5	FURAN	0.611	0.719	-17.6	59	-0.12
6	2-PROPANOL	0.780	0.984	-26.2	56	-0.28
7	1-PROPANOL	0.619	0.653	-5.5	52	-0.24
8	PROPANENITRILE	0.456	0.484	-6.1	53	-0.16
9	BUTANAL	0.189	0.205	-8.2	55	-0.12
10	2-BUTANONE	0.297	0.332	-12.0	56	-0.14
11	TETRAHYDROFURAN	0.273	0.298	-9.2	55	-0.12
12	1-BUTANOL	0.316	0.304	3.6	52	-0.19
13	BUTANENITRILE	0.886	1.042	-17.7	53	-0.13
14	2-PENTANONE	1.779	2.281	-28.2	57	-0.13
15	1,4-DIOXANE	0.357	0.474	-32.6#	60	-0.12
16	4-METHYL-2-PENTANONE	0.172	0.211	-23.2	61	-0.11
17	CHLOROBENZENE-D5	1.000	1.000	0.0	48#	-0.05
18	2-HEXANONE	1.048	1.460	-39.3#	64	-0.11
19	3-HEPTANONE	0.206	0.211	-2.6	49#	-0.11
20	2-HEPTANONE	1.429	1.549	-8.4	50#	-0.11
21	CYCLOHEXANONE	0.393	0.387	1.7	46#	-0.10
22	2-OCTANONE	1.521	1.168	23.2	42#	-0.09

(#) = Out of Range
18122205.D VAP_P7.M

SPCC's out = 0 CCC's out = 0.
Thu Jan 07 10:18:08 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19010703.D

Acq On : 7 Jan 99 10:39 am

Sample : NP CCVS @ 21 PPBV

Misc : 50 TORR

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	98	0.11
2	FREON 12	1.205	1.104	8.4	93	-0.12
3	METHYL CHLORIDE	0.611	0.577	5.7	99	-0.08
4	N-BUTANE	1.061	1.007	5.1	98	-0.04
5	ETHYL CHLORIDE	0.335	0.319	4.7	99	-0.02
6	FREON 11	0.993	0.959	3.4	96	-0.02
7	N-PENTANE	0.097	0.097	0.3	100	-0.02
8	DICHLOROMETHANE	0.698	0.716	-2.5	109	0.00
9	2-METHYL-PENTANE	1.409	1.454	-3.2	110	0.00
10	1-HEXENE	0.630	0.630	0.1	99	0.00
11	N-HEXANE	0.939	0.946	-0.7	100	-0.02
12	CHLOROFORM	0.994	0.944	5.0	93	0.00
13	BENZENE	1.652	1.649	0.2	96	-0.02
14	CARBON TETRACHLORIDE	0.749	0.752	-0.4	96	-0.02
15	3-METHYL-HEXANE	1.086	1.157	-6.5	102	-0.02
16	N-HEPTANE	0.556	0.572	-2.9	98	-0.02
17	TOLUENE	1.753	1.760	-0.4	95	-0.01
18	N-OCTANE	0.462	0.560	-21.4	115	-0.02
19	TETRACHLOROETHYLENE	0.773	0.736	4.7	88	-0.01
20	CHLOROBENZENE-D5	1.000	1.000	0.0	109	-0.02
21	CHLOROBENZENE	1.961	1.811	7.6	101	-0.02
22	ETHYLBENZENE	2.568	2.361	8.0	100	-0.02
23	M,P-XYLENE	1.892	1.780	5.9	100	-0.03
24	STYRENE	1.414	1.308	7.5	97	-0.02
25	N-NONANE	1.483	1.487	-0.2	106	-0.03
26	1,1,2,2-TETRACHLOROETHANE	0.815	0.992	-21.6	184#	-0.03
27	O-XYLENE	1.833	1.651	10.0	96	-0.03
28	N-DECANE	1.171	1.061	9.4	105	-0.03
29	1,2,4-TRIMETHYLBENZENE	1.648	1.421	13.8	92	-0.03

(#) = Out of Range
 18123105.D VAP_NP7.M

SPCC's out = 0 CCC's out = 0
 Thu Jan 07 11:38:46 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19010801.D

Vial: 1

Acq On : 8 Jan 99 9:15 am

Operator: G. FIES

Sample : Polar CCVS @ 21 PPBV

Inst : 5972 - MS

Misc : 50 TORR

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	53	0.08
2	ETHANOL	0.203	0.228	-12.5	59	-0.35
3	ACETONITRILE	0.316	0.375	-18.7	59	-0.20
4	ACETONE	0.326	0.331	-1.6	59	-0.22
5	FURAN	0.611	0.625	-2.2	54	-0.16
6	2-PROPANOL	0.780	0.954	-22.2	57	-0.32
7	1-PROPANOL	0.619	0.694	-12.0	58	-0.27
8	PROPANENITRILE	0.456	0.464	-1.7	54	-0.19
9	BUTANAL	0.189	0.191	-0.8	54	-0.15
10	2-BUTANONE	0.297	0.334	-12.5	59	-0.17
11	TETRAHYDROFURAN	0.273	0.280	-2.5	54	-0.15
12	1-BUTANOL	0.316	0.312	1.0	56	-0.22
13	BUTANENITRILE	0.886	1.133	-27.9	61	-0.17
14	2-PENTANONE	1.779	2.527	-42.0#	67	-0.16
15	1,4-DIOXANE	0.357	0.510	-42.6#	68	-0.15
16	4-METHYL-2-PENTANONE	0.172	0.215	-25.1	65	-0.15
17	CHLOROBENZENE-D5	1.000	1.000	0.0	52	-0.08
18	2-HEXANONE	1.048	1.246	-18.9	59	-0.15
19	3-HEPTANONE	0.206	0.188	8.6	47#	-0.13
20	2-HEPTANONE	1.429	1.298	9.2	46#	-0.14
21	CYCLOHEXANONE	0.393	0.343	12.8	44#	-0.13
22	2-OCTANONE	1.521	0.864	43.2#	34#	-0.12

(#) = Out of Range
18122205.D VAP_P7.M

SPCC's out = 0 CCC's out = 0
Fri Jan 08 10:14:10 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19010802.D

Vial: 1

Acq On : 8 Jan 99 10:32 am

Operator: G. FIES

Sample : NonPolar CCVS @ 42 PPBV

Inst : 5972 - MS

Misc : 50 TORR

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	97	0.08
2	FREON 12	1.205	1.078	10.5	86	-0.19
3	METHYL CHLORIDE	0.611	0.563	8.0	92	-0.14
4	N-BUTANE	1.061	0.956	9.9	88	-0.09
5	ETHYL CHLORIDE	0.335	0.308	7.9	89	-0.07
6	FREON 11	0.993	0.899	9.4	87	-0.06
7	N-PENTANE	0.097	0.093	4.8	92	-0.06
8	DICHLOROMETHANE	0.698	0.661	5.3	94	-0.05
9	2-METHYL-PENTANE	1.409	1.362	3.3	92	-0.05
10	1-HEXENE	0.630	0.609	3.2	93	-0.05
11	N-HEXANE	0.939	0.908	3.4	93	-0.05
12	CHLOROFORM	0.994	0.915	7.9	89	-0.05
13	BENZENE	1.652	1.601	3.1	93	-0.05
14	CARBON TETRACHLORIDE	0.749	0.695	7.2	89	-0.05
15	3-METHYL-HEXANE	1.086	1.068	1.7	96	-0.05
16	N-HEPTANE	0.556	0.556	-0.0	98	-0.05
17	TOLUENE	1.753	1.728	1.4	96	-0.05
18	N-OCTANE	0.462	0.507	-9.9	108	-0.05
19	TETRACHLOROETHYLENE	0.773	0.741	4.1	91	-0.05
20	CHLOROBENZENE-D5	1.000	1.000	0.0	107	-0.05
21	CHLOROBENZENE	1.961	1.785	8.9	95	-0.06
22	ETHYLBENZENE	2.568	2.296	10.6	91	-0.06
23	M,P-XYLENE	1.892	1.681	11.2	90	-0.07
24	STYRENE	1.414	1.276	9.7	89	-0.06
25	N-NONANE	1.483	1.382	6.8	91	-0.07
26	1,1,2,2-TETRACHLOROETHANE	0.815	1.002	-22.8	114	-0.07
27	O-XYLENE	1.833	1.575	14.1	86	-0.07
28	N-DECANE	1.171	1.084	7.4	85	-0.06
29	1,2,4-TRIMETHYLBENZENE	1.648	1.497	9.1	86	-0.07

(#) = Out of Range
18123106.D VAP_NP7.M

SPCC's out = 0 CCC's out = 0
Fri Jan 08 11:26:44 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19011101.D
 Acq On : 11 Jan 99 8:58 am
 Sample : Polar CCVS @ 42 PPEV
 Misc : 50 TORR

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev Area	% Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	60 0.17
2	ETHANOL	0.203	0.153	24.7	44# -0.27
3	ACETONITRILE	0.316	0.272	13.9	45# -0.12
4	ACETONE	0.326	0.267	18.1	47# -0.13
5	FURAN	0.611	0.435	28.8	37# -0.07
6	2-PROPANOL	0.780	0.615	21.2	43# -0.23
7	1-PROPANOL	0.619	0.414	33.2#	35# -0.18
8	PROPANENITRILE	0.456	0.329	27.7	39# -0.10
9	BUTANAL	0.189	0.145	23.5	42# -0.06
10	2-BUTANONE	0.297	0.222	25.1	42# -0.08
11	TETRAHYDROFURAN	0.273	0.189	30.7#	38# -0.06
12	1-BUTANOL	0.316	0.180	43.1#	34# -0.14
13	BUTANENITRILE	0.886	0.684	22.8	44# -0.08
14	2-PENTANONE	1.779	1.499	15.7	46# -0.07
15	1,4-DIOXANE	0.357	0.337	5.8	56 -0.06
16	4-METHYL-2-PENTANONE	0.172	0.122	29.0	45# -0.06
17	CHLOROBENZENE-D5	1.000	1.000	0.0	57 0.00
18	2-HEXANONE	1.048	0.924	11.8	46# -0.06
19	3-HEPTANONE	0.206	0.158	23.4	41# -0.05
20	2-HEPTANONE	1.429	1.047	26.7	38# -0.06
21	CYCLOHEXANONE	0.393	0.295	24.8	41# -0.04
22	2-OCTANONE	1.521	0.656	56.9#	25# -0.05

(#) = Out of Range
 18122206.D VAP_P7.M

SPCC's out = 0 CCC's out = 0
 Mon Jan 11 09:49:42 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19011102.D

Acq On : 11 Jan 99 10:08 am

Sample : NonPolar CCVS @ 84 PPBV

Misc : 50 TORR

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP_NF7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	115	0.17
2	FRON 12	1.205	1.134	5.9	109	-0.10
3	METHYL CHLORIDE	0.611	0.581	5.0	107	-0.05
4	N-BUTANE	1.061	0.964	9.1	107	0.00
5	ETHYL CHLORIDE	0.335	0.328	2.0	113	0.03
6	FRON 11	0.993	0.936	5.7	113	0.04
7	N-PENTANE	0.097	0.097	0.2	118	0.04
8	DICHLOROMETHANE	0.698	0.643	7.9	113	0.05
9	2-METHYL-PENTANE	1.409	1.271	9.8	108	0.05
10	1-HEXENE	0.630	0.607	3.6	115	0.05
11	N-HEXANE	0.939	0.898	4.4	116	0.05
12	CHLOROFORM	0.994	0.938	5.7	114	0.05
13	BENZENE	1.652	1.545	6.5	116	0.05
14	CARBON TETRACHLORIDE	0.749	0.661	11.8	112	0.05
15	3-METHYL-HEXANE	1.086	0.941	13.4	111	0.04
16	N-HEPTANE	0.556	0.506	8.9	115	0.04
17	TOLUENE	1.753	1.542	12.0	113	0.04
18	N-OCTANE	0.462	0.388	15.9	113	0.03
19	TETRACHLOROETHYLENE	0.773	0.643	16.7	115	0.03
20	CHLOROBENZENE-D5	1.000	1.000	0.0	108	0.03
21	CHLOROBENZENE	1.961	1.800	8.2	108	0.03
22	ETHYLBENZENE	2.568	2.346	8.7	106	0.03
23	M,P-XYLENE	1.892	1.654	12.6	106	0.03
24	STYRENE	1.414	1.299	8.1	105	0.03
25	N-NONANE	1.483	1.235	16.7	105	0.02
26	1,1,2,2-TETRACHLOROETHANE	0.815	1.028	-26.1	91	0.02
27	O-XYLENE	1.833	1.627	11.2	105	0.02
28	N-DECANE	1.171	1.086	7.3	111	0.02
29	1,2,4-TRIMETHYLBENZENE	1.648	1.558	5.5	107	0.02

(#) = Out of Range
 18123107.D VAP_NF7.M

SPCC's out = 0 CCC's out = 0
 Mon Jan 11 10:57:34 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19011202.D Vial: 1
 Acq On : 12 Jan 99 11:20 am Operator: G. FIES
 Sample : Polar CCVS @ 84 PPBV Inst : 5972 - MS
 Misc : 50 TORR Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	63	0.14
2	ETHANOL	0.203	0.184	9.4	59	-0.29
3	ACETONITRILE	0.316	0.309	2.1	64	-0.12
4	ACETONE	0.326	0.292	10.5	65	-0.15
5	FURAN	0.611	0.610	0.2	63	-0.10
6	2-PROPANOL	0.780	0.690	11.5	55	-0.22
7	1-PROPANOL	0.619	0.437	29.4	45#	-0.17
8	PROPANENITRILE	0.456	0.447	2.0	63	-0.10
9	BUTANAL	0.189	0.191	-0.7	66	-0.09
10	2-BUTANONE	0.297	0.300	-0.9	67	-0.10
11	TETRAHYDROFURAN	0.273	0.270	1.0	64	-0.09
12	1-BUTANOL	0.316	0.233	26.2	56	-0.14
13	BUTANENITRILE	0.886	0.775	12.5	59	-0.08
14	2-PENTANONE	1.779	1.698	4.6	63	-0.09
15	1,4-DIOXANE	0.357	0.408	-14.1	76	-0.08
16	4-METHYL-2-PENTANONE	0.172	0.141	17.7	63	-0.08
17	CHLOROBENZENE-D5	1.000	1.000	0.0	56	-0.03
18	2-HEXANONE	1.048	1.183	-12.8	65	-0.08
19	3-HEPTANONE	0.206	0.228	-10.5	65	-0.07
20	2-HEPTANONE	1.429	1.568	-9.7	64	-0.08
21	CYCLOHEXANONE	0.393	0.443	-12.7	65	-0.06
22	2-OCTANONE	1.521	1.696	-11.5	59	-0.07

(#) = Out of Range
 18122207.D VAP_P7.M

SPCC's out = 0 CCC's out = 0
 Tue Jan 12 12:11:17 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\19011203.D

Acq On : 12 Jan 99 12:27 pm

Sample : NonPolar CCVS @ 84 PPEV

Misc : 50 TORR

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRRF	CCRF	%Dev Area	% Dev(min)
1	FLUOROBENZENE	1.000	1.000	0.0	104 0.13
2	FREON 12	1.205	1.128	6.4	97 -0.14
3	METHYL CHLORIDE	0.611	0.590	3.4	98 -0.09
4	N-BUTANE	1.061	0.974	8.2	97 -0.04
5	ETHYL CHLORIDE	0.335	0.330	1.4	102 0.00
6	FREON 11	0.993	0.942	5.1	103 0.00
7	N-PENTANE	0.097	0.093	3.9	102 0.00
8	DICHLOROMETHANE	0.698	0.646	7.5	102 0.01
9	2-METHYL-PENTANE	1.409	1.284	8.9	98 0.01
10	1-HEXENE	0.630	0.592	6.0	101 0.02
11	N-HEXANE	0.939	0.874	7.0	101 0.01
12	CHLOROPORM	0.994	0.934	6.0	102 0.02
13	BENZENE	1.611	1.533	7.0	101 0.01
14	CARBON TETRACHLORIDE	0.749	0.680	9.2	103 0.01
15	3-METHYL-HEXANE	1.086	0.911	16.1	97 0.00
16	N-HEPTANE	0.556	0.483	13.1	98 0.00
17	TOLUENE	1.753	1.559	11.0	103 0.00
18	N-OCTANE	0.462	0.375	18.8	98 0.00
19	TETRACHLOROETHYLENE	0.773	0.684	11.5	110 0.00
20	CHLOROBENZENE-D5	1.000	1.000	0.0	98 0.00
21	CHLOROBENZENE	1.961	1.774	9.5	96 0.00
22	ETHYLBENZENE	2.568	2.251	12.4	92 0.00
23	M,P-XYLENE	1.892	1.584	16.3	92 0.00
24	STYRENE	1.414	1.266	10.5	93 0.00
25	N-NONANE	1.483	1.185	20.1	91 0.00
26	1,1,2,2-TETRACHLOROETHANE	0.815	1.102	-35.2#	89 0.00
27	O-XYLENE	1.833	1.574	14.1	92 0.00
28	N-DECANE	1.171	1.061	9.4	99 0.00
29	1,2,4-TRIMETHYLBENZENE	1.648	1.576	4.4	98 0.00

(#) = Out of Range
 18123107.D VAP_NP7.M

SPCC's out = 0 CCC's out = 0
 Tue Jan 12 13:21:41 1999

IS

Internal Standard Area Counts Table

File: Demo- Sample Method Instrument	19010203.D	19010203.D	19010203.D	19010203.D	19010203.D	19010203.D	19010203.D	19010203.D	19010203.D	19010203.D
	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler
	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS
	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M
	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1
Internal Standard	Q (nmol)	Retention Time (min)	Area	Recovery %	Area	Recovery %	Area	Recovery %	Area	Recovery %
Phenobutane	96	23.97	549521	764872	126	547930	98	530474	95	566922
Chlorobutane-d ³	117	30.35	323812	489472	126	318457	117	240716	74	369718
File: Demo- Sample Method Instrument	19010204.D	19010204.D	19010204.D	19010204.D	19010204.D	19010204.D	19010204.D	19010204.D	19010204.D	19010204.D
	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler
	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS
	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M
	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1
Internal Standard	Q (nmol)	Retention Time (min)	Area	Recovery %	Area	Recovery %	Area	Recovery %	Area	Recovery %
Phenobutane	96	23.97	535821	637846	114	617606	110	640529	116	623187
Chlorobutane-d ³	117	30.35	323812	232125	76	234531	71	238797	83	252465
File: Demo- Sample Method Instrument	19010205.D	19010205.D	19010205.D	19010205.D	19010205.D	19010205.D	19010205.D	19010205.D	19010205.D	19010205.D
	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler	M. Swaffler
	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS	CCVS
	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M	VAP_NPT3.M
	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1
Internal Standard	Q (nmol)	Retention Time (min)	Area	Recovery %	Area	Recovery %	Area	Recovery %	Area	Recovery %
Phenobutane	96	23.97	535821	651249	117	701895	126	672123	121	681280
Chlorobutane-d ³	117	30.35	323812	267023	80	279912	84	280520	86	278614

Notes:

- 1) Internal standards used to calculate Relative Response Factors for target compounds.
- 2) Recovery relative to the CCVS (CCVS = 100 %).

IS

Internal Standards Area Counts Table

File:	19010202.D	19011205.d	1901206.d	19011207.d	19011208.d						
Operator:	M. Stauffer	M. Stauffer	M. Stauffer	M. Stauffer	M. Stauffer						
Sample:	CCVS	VS102-003-S021	VS102-006-S022	VS102-009-S034	VS102-012-S041						
Method:	VAP_NP7.M	VAP_NP7.M	VAP_NP7.M	VAP_NP7.M	VAP_NP7.M						
Instrument:	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1	GC-MS #1						
Internal St	Q ton (amu)	Retention Time (min)	Area	Recovery ² %	Area	Recovery ² %					
Fluorobenzene	96	23.97	5587621	5493436	98	5369363	96	5084663	91	5167728	92
Chlorobenzene	117	30.35	3321012	3855970	116	3684143	111	3470027	104	2964781	89

Notes:

- 1) Internal standards used to calculate Relative Response Factors for target compounds
- 2) Recovery relative to the CCVS (CCVS = 100 %)

IS

Internal Standards Area Counts Table

Internal Stan	Q Ion (amu)	Retention Time (min)	1901104.d		1901105.d		1901106.d		1901107.d		1901108.d	
			Area	Recovery ¹ %	Area	Recovery ¹ %	Area	Recovery ¹ %	Area	Recovery ¹ %	Area	Recovery ¹ %
Fluorobenzene	96	23.97	5587621	102	5459039	98	5633271	101	5677351	102	5633862	101
Chlorobenzene	117	30.35	3321012	112	3446102	104	3642174	110	3686283	111	3710070	112

File: 1901002.D
 Operator: M. Stauffer
 Sample: CCVS
 Method: VAP_NP7.M
 Instrument: GC-MS #1

Notes:

- 1) Internal standards used to calculate Relative Response Factors for target compounds
- 2) Recovery relative to the CCVS (CCVS = 100 %)

LCS

Laboratory Control Sample Results

Laboratory name
 Instrument identification number
 Operator
 Laboratory control sample analysis date and time
 Associated Vapor sample

Special Analytical Support
 GC-MS # 1
 M. Stauffer
 1/5/99 9:35
 V5006-2, 10, 18, 25, 33, 34, 41, 42, 50,
 51, 58, 59, 67, 68, 128
 V5102-3, 6, 9, 12
 V5702-3, 5, 8, 11, 14

Special Analytical Support
 GC-MS # 1
 M. Stauffer
 12/22/98 10:40
 Calibration

Analyte	Certified Concentration (ppbv)	Diluted Concentration (ppbv)	Measured Concentration (ppbv)	Recovery %	Measured Concentration (ppbv)	Recovery %	RPD %
Chloromethane	1009 +/- 50	42	32	76	34	81	6
Toluene	1009 +/- 50	42	42	100	46	109	9
Trichloroethane	1006 +/- 55	46	43	94	45	99	5
n-Pentane	1029 +/- 51	43	43	101	58	135	29
4-Methyl-2-pentanone	1053 +/- 53	44	45	102	50	114	11
Chlorobenzene	605 +/- 61	25	42	167	57	226	30
1,2,4-Trimethylbenzene							

2.2.4 Supporting Data

This section contains relevant information used for the tuning and calibration of the instrument, and the analysis and quantitation of the organic compounds. The following tables are included:

- Instrument tune reports and tune checks
- Response Factor Reports with relative standard deviations (%RSD) for the target compounds
- For each SUMMA sample received, the following information is included:
 - Chromatogram using the total ion chromatogram from the mass spectral analysis
 - The Quantitation Reports for both polar and nonpolar target compounds
 - Area Counts Table from the integrated total ion chromatogram
 - A printout of the mass spectral library search using the NIST 98 or Wiley 138 database
 - Mass spectra for each listed tentatively identified compound (TIC).

HP5972 Maximum Sensitivity Autotune

Instrument: 5972 - MS-IRD

Mon Dec 21 11:33:12 1998

C:\HPCHEM\1\5972\ATUNE.U

M. Jaffer
12/21/98

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
 140 peaks Base: 69.00 Abundance: 944128

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	944128	100.00	70.00	10725	1.14
218.95	446528	47.30	219.95	19312	4.32
501.95	30416	3.22	502.95	3061	10.06

N. Stark
12/22/98

Instrument: 5972 - MS-IRD
Tue Dec 22 08:44:02 1998

C:\HPCHEM\1\5972\ATUNE.U

EMVolts	2847	AmuGain	482
Xray	25.7	AmuOffs	69
Emission	50.0	Wid219	-0.061
MS Temp	175	TTI	OFF
Vacuum	48	DC Pol	NEG
Samples	8	Repeller	28.39
Averages	3	IonFocus	90.0
StepSize	0.10	EntLens	16.06
MassGain	165	EntOffs	18.07
MassOffs	5	Filament	1

PFTBA OPEN

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10

157 peaks Base: 69.00 Abundance: 1335808

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	1335808	100.00	70.00	15040	1.13
218.95	595776	44.60	219.95	25832	4.34
501.95	40216	3.01	502.95	4086	10.16

M. Haffner
12/23/98

Instrument: 5972 - MS-IRD
Wed Dec 23 08:48:27 1998

C:\HPCHEM\1\5972\ATUNE.U

EMVolts	2847	AmuGain	482
Xray	25.7	AmuOffs	69
Emission	50.0	Wid219	-0.061
MS Temp	175	TTI	OFF
Vacuum	47	DC Pol	NEG
Samples	8	Repeller	28.39
Averages	3	IonFocus	90.0
StepSize	0.10	EntLens	16.06
MassGain	165	EntOffs	18.07
MassOffs	5	Filament	1

PFTBA OPEN

Scan: 10.00 ~ 700.00 Samples: 8 Thresh: 100 Step: 0.10
187 peaks Base: 69.00 Abundance: 1829376

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	1829376	100.00	70.00	20616	1.13
218.95	829696	45.35	219.95	36072	4.35
501.95	56400	3.08	502.95	5642	10.00

HP5972 Maximum Sensitivity Autotune

Instrument: 5972 - MS-IRD
Thu Dec 31 08:22:50 1998

C:\HPCHEM\1\5972\ATUNE.U

W. Stauffer
12/31/98

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
137 peaks Base: 69.05 Abundance: 940800

HP5972 Maximum Sensitivity Autotune

Instrument: 5972 - MS-IRD

Sat Jan 02 09:58:05 1999

C:\HPCHEM\1\5972\ATUNE.U

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
138 peaks Base: 69.00 Abundance: 1044736

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	1044736	100.00	70.00	11798	1.13
218.95	458944	43.93	219.95	20152	4.39
501.95	26976	2.58	503.05	2760	10.23

HP5972 Maximum Sensitivity Autotune

Instrument: 5972 - MS-IRD

Mon Jan 04 08:58:19 1999

C:\HPCHEM\1\5972\ATUNE.U

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10

139 peaks Base: 69.95 Abundance: 1207512

Instrument: 5972 - MS-IRD
Tue Jan 05 08:22:02 1999

01/05/99
JF
C:\HPCHEM\1\5972\ATUNE.U

EMVolts	2612	AmuGain	480
Xray	25.7	AmuOffs	74
Emission	50.0	Wid219	-0.026
MS Temp	177	TTI	OFF
Vacuum	48	DC Pol	NEG
Samples	8	Repeller	28.06
Averages	3	IonFocus	89.0
StepSize	0.10	EntLens	14.05
MassGain	167	EntOffs	19.07
MassOffs	5	Filament	1

PFTBA OPEN

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
151 peaks Base: 69.05 Abundance: 1464832

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	1464832	100.00	69.95	16624	1.13
219.00	714240	48.76	219.90	31520	4.41
502.05	48168	3.29	503.05	4910	10.19

HP5972 Maximum Sensitivity Autotune

Instrument: 5972 - MS-IRD
Wed Jan 06 08:24:09 1999

C:\HPCHEM\1\5972\ATUNE.U

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
132 peaks Base: 69.05 Abundance: 973184

01/07/99

SJS

Instrument: 5972 - MS-IRD
 Thu Jan 07 07:43:56 1999

C:\HPCHEM\1\5972\ATUNE.U

EMVolts	2612	AmuGain	484
Xray	21.4	AmuOffs	70
Emission	50.0	Wid219	-0.062
MS Temp	177	TTI	OFF
Vacuum	49	DC Pol	NEG
Samples	8	Repeller	29.40
Averages	3	IonFocus	90.0
StepSize	0.10	EntLens	11.55
MassGain	158	EntOffs	19.33
MassOffs	5	Filament	1

PFTEA OPEN

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
 142 peaks Base: 69.05 Abundance: 1233408

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	1233408	100.00	69.95	13927	1.13
219.00	504512	40.90	219.90	22376	4.44
501.95	36688	2.97	502.95	3688	10.05

01/08/99
876Instrument: 5972 - MS-IRD
Fri Jan 08 09:09:24 1999

C:\HPCHEM\1\5972\ATUNE.U

EMVolts	2612	AmuGain	484
Xray	21.4	AmuOffs	70
Emission	50.0	Wid219	-0.062
MS Temp	177	TTI	OFF
Vacuum	48	DC Pol	NEG
Samples	8	Repeller	29.40
Averages	3	IonFocus	90.0
StepSize	0.10	EntLens	11.55
MassGain	158	EntOffs	19.33
MassOffs	5	Filament	1

PFTBA OPEN

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
152 peaks Base: 69.05 Abundance: 1315328

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.05	1315328	100.00	69.95	14827	1.13
219.00	567680	43.16	220.00	24744	4.36
501.95	40712	3.10	502.95	4067	9.99

HP5972 Maximum Sensitivity Autotune
 Instrument: 5972 - MS-IRD
 Mon Jan 11 08:40:44 1999

01/11/99
 C:\HPCHEM\1\5972\ATUNE.U

Instrument: 5972 - MS-IRD
Tue Jan 12 09:51:55 1999

276
01/12/99
C:\HPCHEM\1\5972\ATUNE.U

EMVolts	2565	AmuGain	481
Xray	25.7	AmuOffs	71
Emission	50.0	Wid219	-0.048
MS Temp	177	TTI	OFF
Vacuum	48	DC Pol	NEG
Samples	8	Repeller	29.90
Averages	3	IonFocus	90.0
StepSize	0.10	EntLens	14.05
MassGain	166	EntOffs	19.07
MassOffs	5	Filament	1

PFTBA OPEN

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
158 peaks Base: 69.00 Abundance: 1358848

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	1358848	100.00	70.00	15509	1.14
218.95	677312	49.84	219.95	29776	4.40
502.00	46568	3.43	503.00	4699	10.09

HP5972 Maximum Sensitivity Autotune

Instrument: 5972 - MS-IRD

Fri Jan 15 13:47:35 1999

C:\HPCHEM\1\5972\ATUNE.U

H. Raulb
1/15/99

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
 138 peaks Base: 69.05 Abundance: 964672

Response Factor Report 5972 - MS

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 13:51:16 1999
 Response via : Initial Calibration

Calibration Files

1 =18123103.D 2 =18123104.D 3 =18123105.D
 4 =18123106.D 5 =18123107.D 6 =18123108.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) FLUOROBENZENE	-----ISTD-----							
2) FREON 12	1.146	1.243	1.169	1.214	1.203	1.253	1.205	3.43
3) METHYL CHLORIDE	0.580	0.626	0.572	0.592	0.624	0.674	0.611	6.18
4) N-BUTANE	1.065	1.101	1.011	1.055	1.040	1.094	1.061	3.17
5) ETHYL CHLORIDE	0.320	0.349	0.316	0.336	0.335	0.351	0.335	4.35
6) FREON 11	0.992	1.065	0.983	1.008	0.952	0.956	0.993	4.18
7) N-PENTANE	0.095	0.103	0.095	0.098	0.095	0.097	0.097	3.12
8) DICHLOROMETHANE	0.743	0.772	0.647	0.685	0.659	0.682	0.698	7.01
9) 2-METHYL-PENTANE	1.433	1.559	1.307	1.446	1.355	1.354	1.409	6.42
10) 1-HEXENE	0.618	0.675	0.625	0.637	0.610	0.615	0.630	3.80
11) N-HEXANE	0.944	1.021	0.928	0.950	0.897	0.897	0.939	4.88
12) CHLOROFORM	0.991	1.076	0.995	0.996	0.950	0.957	0.994	4.50
13) BENZENE	1.711	1.857	1.694	1.673	1.531	1.446	1.652	8.76
14) CARBON TETRACHLORIDE	0.783	0.856	0.775	0.764	0.682	0.633	0.749	10.59
15) 3-METHYL-HEXANE	1.156	1.260	1.113	1.086	0.977	0.927	1.086	11.11
16) N-HEPTANE	0.573	0.635	0.573	0.552	0.509	0.491	0.556	9.29
17) TOLUENE	1.871	2.014	1.833	1.756	1.570	1.475	1.753	11.39
18) N-OCTANE	0.497	0.558	0.480	0.458	0.395	0.379	0.462	14.44
19) TETRACHLOROETHYLENE	0.864	0.943	0.822	0.788	0.645	0.573	0.773	17.98
20) CHLOROBENZENE-D5	-----ISTD-----							
21) CHLOROBENZENE	1.990	2.309	1.968	2.011	1.795	1.691	1.961	10.83
22) ETHYLBENZENE	2.498	2.994	2.578	2.702	2.380	2.256	2.568	10.11
23) M,P-XYLENE	1.901	2.287	1.951	1.999	1.675	1.540	1.892	13.81
24) STYRENE	1.298	1.627	1.472	1.533	1.326	1.227	1.414	10.91
25) N-NONANE	1.414	1.880	1.530	1.615	1.272	1.188	1.483	16.90
26) 1,1,2,2-TETRACHLORO	0.355	0.610	0.589	0.936	1.213	1.188	0.815	43.08
27) O-XYLENE	1.769	2.155	1.875	1.941	1.671	1.589	1.833	11.10
28) N-DECANE	1.007	1.410	1.101	1.364	1.050	1.096	1.171	14.60
29) 1,2,4-TRIMETHYLBENZ	1.399	1.848	1.685	1.857	1.569	1.529	1.648	11.10

(#) = Out of Range

VAP_NP7.M

Sat Jan 02 14:22:35 1999

Response Factor Report 5972 - MS

Method : C:\HPCHEM\1\METHODS\VAP_P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Wed Dec 23 08:45:05 1998
 Response via : Initial Calibration

Calibration Files

1 =18122203.D 2 =18122204.D 3 =18122205.D
 4 =18122206.D 5 =18122207.D 6 =18122208.D

Compound	1	2	3	4	5	6	Avg	%RSD
-----ISTD-----								
1) FLUOROBENZENE	0.213	0.189	0.206	0.210	0.196	0.202	0.203	4.43
2) ETHANOL	0.215	0.374	0.335	0.359	0.300	0.311	0.316	17.93
3) ACETONITRILE	0.419	0.332	0.299	0.343	0.282	0.281	0.326	16.05
4) ACETONE	0.543	0.574	0.616	0.707	0.607	0.621	0.611	9.06
5) FURAN	0.686	0.699	0.886	0.850	0.791	0.769	0.780	10.24
6) 2-PROPANOL	0.538	0.593	0.635	0.708	0.607	0.635	0.619	9.10
7) 1-PROPANOL	0.416	0.440	0.457	0.507	0.443	0.471	0.456	6.82
8) PROPANENITRILE	0.179	0.189	0.187	0.209	0.182	0.190	0.189	5.49
9) BUTANAL	0.304	0.289	0.299	0.318	0.281	0.290	0.297	4.43
10) 2-BUTANONE	0.255	0.272	0.275	0.298	0.263	0.273	0.273	5.27
11) TETRAHYDROFURAN	0.346	0.406	0.297	0.314	0.260	0.271	0.316	17.00
12) 1-BUTANOL	0.879	0.893	0.994	0.943	0.816	0.789	0.886	8.64
13) BUTANENITRILE	1.681	1.715	2.004	1.947	1.692	1.636	1.779	8.73
14) 2-PENTANONE	0.380	0.336	0.400	0.361	0.334	0.333	0.357	7.88
15) 1,4-DIOXANE	0.230	0.187	0.176	0.162	0.140	0.135	0.172	20.42
16) 4-METHYL-2-PENTANON	-----ISTD-----							
17) CHLOROBENZENE-D5	1.025	0.908	1.098	1.150	1.027	1.081	1.048	7.92
18) 2-HEXANONE	0.212	0.186	0.208	0.221	0.197	0.212	0.206	6.12
19) 3-HEPTANONE	1.452	1.215	1.482	1.550	1.372	1.503	1.429	8.42
20) 2-HEPTANONE	0.403	0.340	0.405	0.408	0.381	0.421	0.393	7.36
21) CYCLOHEXANONE	1.501	1.162	1.337	1.507	1.607	2.014	1.521	18.90
22) 2-OCTANONE	-----ISTD-----							

(#) = Out of Range

VAP_P7.M

Wed Dec 23 08:47:19 1998

File : C:\HPCHEM\1\DATA\19010404.D
 Operator : G. FIES
 Acquired : 4 Jan 99 12:35 pm using AcqMethod VAP_NP6
 Instrument : 5972 - MS
 Sample Name: VS006-002-S019
 Misc Info : 50 TORR
 Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010404.D

Vial: 1

Acq On : 4 Jan 99 12:35 pm

Operator: G. FIES

Sample : VS006-002-S019

Inst : 5972 - MS

Misc : 50 TORR

Multiplr: 2.00

Quant Time: Jan 6 9:35 1999

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q	Ion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.01	96		7040872	100.00	NG	0.08
17) CHLOROBENZENE-D5	30.38	117		4194272	100.00	NG	-0.08

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) ETHANOL	0.00	45	Not Detected
3) ACETONITRILE	0.00	40	Not Detected
4) ACETONE	0.00	58	Not Detected
5) FURAN	0.00	68	Not Detected
6) 2-PROPANOL	0.00	45	Not Detected
7) 1-PROPANOL	0.00	31	Not Detected
8) PROPANENITRILE	0.00	54	Not Detected
9) BUTANAL	0.00	72	Not Detected
10) 2-BUTANONE	0.00	72	Not Detected
11) TETRAHYDROFURAN	0.00	72	Not Detected
12) 1-BUTANOL	0.00	56	Not Detected
13) BUTANENITRILE	0.00	41	Not Detected
14) 2-PENTANONE	0.00	43	Not Detected
15) 1,4-DIOXANE	0.00	88	Not Detected
16) 4-METHYL-2-PENTANONE	0.00	100	Not Detected
18) 2-HEXANONE	0.00	58	Not Detected
19) 3-HEPTANONE	0.00	114	Not Detected
20) 2-HEPTANONE	0.00	58	Not Detected
21) CYCLOHEXANONE	0.00	98	Not Detected
22) 2-OCTANONE	0.00	58	Not Detected

(#)= qualifier out of range (m)= manual integration

19010404.D VAP_P7.M

Wed Jan 06 09:36:44 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010404.D

Acq On : 4 Jan 99 12:35 pm

Sample : VS006-002-S019

Misc : 50 TORR

Quant Time: Jan 6 9:38 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.01	96	7040872	100.00	NG	0.08
20) CHLOROBENZENE-D5	30.38	117	4194272	100.00	PFB	-0.05

System Monitoring Compounds

%Recovery

Target Compounds			Qvalue
2) FREON 12	0.00	85	Not Detected
3) METHYL CHLORIDE	0.00	50	Not Detected
4) N-BUTANE	0.00	43	Not Detected
5) ETHYL CHLORIDE	0.00	64	Not Detected
6) FREON 11	0.00	101	Not Detected
7) N-PENTANE	0.00	72	Not Detected
8) DICHLOROMETHANE	0.00	49	Not Detected
9) 2-METHYL-PENTANE	0.00	43	Not Detected
10) 1-HEXENE	0.00	56	Not Detected
11) N-HEXANE	0.00	57	Not Detected
12) CHLOROCUMENE	0.00	83	Not Detected
13) BENZENE	0.00	78	Not Detected
14) CARBON TETRACHLORIDE	0.00	117	Not Detected
15) 3-METHYL-HEXANE	0.00	43	Not Detected
16) N-HEPTANE	0.00	57	Not Detected
17) TOLUENE	0.00	91	Not Detected
18) N-OCTANE	0.00	57	Not Detected
19) TETRACHLOROETHYLENE	0.00	166	Not Detected
21) CHLOROBENZENE	0.00	112	Not Detected
22) ETHYLBENZENE	0.00	91	Not Detected
23) M,P-XYLENE	0.00	91	Not Detected
24) STYRENE	0.00	104	Not Detected
25) N-NONANE	0.00	43	Not Detected
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83	Not Detected
27) O-XYLENE	0.00	91	Not Detected
28) N-DECANE	0.00	43	Not Detected
29) 1,2,4-TRIMETHYLBENZENE	0.00	105	Not Detected

(#) = qualifier out of range (m) = manual integration
 19010404.D VAP_NP7.M Wed Jan 06 09:39:15 1999

TIC: 19010404.D

VS006-002-S019

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	12.475	rBB	0.054	209636	12.469	12.522
2	24.007	rBB	0.214	14133496	23.914	24.128
3	27.563	rBB	0.127	70687	27.490	27.617
4	30.376	rBB	0.241	11568675	30.276	30.517
5	31.448	rBB	0.127	118426	31.387	31.515
6	36.718	rBB	0.141	409718	36.644	36.785
7	36.892	rBB	0.141	160670	36.798	36.939
8	37.830	rBB	0.107	98171	37.770	37.877
9	37.944	rBB	0.114	75962	37.877	37.991
10	39.658	rBB	0.020	307356	39.651	39.671
11	40.468	rBB	0.107	163206	40.415	40.522
12	42.410	rBB	0.100	544878	42.364	42.464
13	43.797	rBB	0.074	201016	43.763	43.837

Library Search Compound Report

Data File : D:\C106\19010404.D
 Acq Time : 4 Jan 99 12:35 pm
 Sample : VS006-002-S019
 Misc : 50 TORR
 Method : D:\METHODS\VAP_NF7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
12.48	4.61 PPB	209636	FLUOROBENZENE	24.01
Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1 No Hits From C:\DATABASE\NIST98.L		0	000000-00-0	0

Spika

 Peak Number 2 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
31.45	3.88 PPB	118426	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 3-Heptanone		112074	000106-35-4	91
2 3-Heptanone		112010	000106-35-4	87
3 3-Heptanone		112009	000106-35-4	86
4 3-Hexanone, 5-methyl-		17303	000623-56-3	80
5 3-Heptanone		15594	000106-35-4	72

 Peak Number 3 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
36.72	13.42 PPB	409718	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Undecane, 4,7-dimethyl-		5605	017301-32-5	86
2 Eicosane		112344	000112-95-8	83
3 Decane, 3,7-dimethyl-		5589	017312-54-8	81
4 Hexane, 3,3-dimethyl-		109664	000563-16-6	80
5 Pentane, 2,3,3-trimethyl-		6364	000560-21-4	64

 Peak Number 4 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
36.89	5.26 PPB	160670	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Undecane, 4,7-dimethyl-	5605 017301-32-5	64
2 Hexane, 3,3-dimethyl-	109664 000563-16-6	64
3 Decane, 5,6-dipropyl-	17110 119209-20-0	64
4 Octane, 2,3,6,7-tetramethyl-	6367 052670-34-5	59
5 Nonane, 5-butyl-	109648 017312-63-9	59

Peak Number 5 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
39.66	10.07 PPB	307356	CHLORO BENZENE-D5	30.38

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1 No Hits From C:\DATABASE\NIST98.L		0	000000-00-0	0

Peak Number 6 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
40.47	5.35 PPB	163206	CHLORO BENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Dodecane		16262	000112-40-3	93
2 Dodecane		112318	000112-40-3	90
3 Eicosane		112343	000112-95-8	86
4 Tridecane		16403	000629-50-5	86
5 Tridecane		112309	000629-50-5	78

Peak Number 7 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
42.41	17.85 PPB	544878	CHLORO BENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Tridecane		16403	000629-50-5	94
2 Heptadecane		112319	000629-78-7	91
3 Tridecane		112309	000629-50-5	91
4 Hexadecane		112408	000544-76-3	90
5 Hexadecane		112406	000544-76-3	90

Peak Number 8 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
43.80	6.59 PPB	201016	CHLORO BENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Tetradecane		112357	000629-59-4	95
2 Tetradecane		16474	000629-59-4	94
3 Hexadecane		112408	000544-76-3	91

HNF-3949 Rev. 0

4 Heptadecane	112319 000629-78-7	91
5 Tetradecane	112355 000629-59-4	90

19010404.D VAP_NF7.M Wed Jan 20 09:42:43 1999

File : C:\HPCHEM\1\DATA\19010204.D
Operator : M. STAUFFER
Acquired : 2 Jan 99 2:16 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-010-S036
Misc Info : 50 TORR
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010204.D

Acq On : 2 Jan 99 2:16 pm

Sample : VS006-010-S036

Misc : 50 TORR

Quant Time: Jan 2 15:32 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Wed Dec 23 08:45:05 1998

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	23.98	96	5478360	100.00	NG	0.05
17) CHLOROBENZENE-D5	30.34	117	3888437	100.00	NG	-0.12

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.73	45	1230370	223.55	PPB	m 0
3) ACETONITRILE	16.01	40	139270	13.07	PPB	m 1
4) ACETONE	16.09	58	251874	32.10	PPB	m 1
5) FURAN	16.39	68	1742	0.10	PPB	# 1
6) 2-PROPANOL	16.61	45	33976	1.58	PPB	# 75
7) 1-PROPANOL	19.31	31	193663	11.18	PPB	m 98
8) PROPANENITRILE	19.93	54	104265	8.18	PPB	m 98
9) BUTANAL	20.52	72	85843	16.56	PPB	m 95
10) 2-BUTANONE	20.70	72	83563	10.54	PPB	m 92
11) TETRAHYDROFURAN	22.06	72	39250	5.26	PPB	m 87
12) 1-BUTANOL	23.48	56	613857	82.35	PPB	m 99
13) BUTANENITRILE	23.96	41	2774	0.12	PPB	# 100
14) 2-PENTANONE	24.55	43	5263	0.11	PPB	# 65
15) 1,4-DIOXANE	25.19	88	1797	0.20	PPB	# 67
16) 4-METHYL-2-PENTANONE	26.35	100	1604	0.42	PPB	# 1
18) 2-HEXANONE	28.11	58	83518	4.01	PPB	m 93
19) 3-HEPTANONE	31.42	114	164253	40.61	PPB	m 100
20) 2-HEPTANONE	31.54	58	207189	7.26	PPB	m 84
21) CYCLOHEXANONE	31.93	98	258	0.03	PPB	# 1
22) 2-OCTANONE	34.74	58	70	0.00	PPB	# 1

(#) = qualifier out of range (m) = manual integration
 19010204.D VAP_P7.M Sat Jan 02 15:32:57 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010204.D

Acq On : 2 Jan 99 2:16 pm

Sample : VS006-010-S036

Misc : 50 TORR

Quant Time: Jan 2 15:04 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	23.98	96	5478360	100.00	NG	0.05
20) CHLOROBENZENE-D5	30.34	117	3888437	100.00	PPB	-0.08

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) FREON 12	7.74	85	16342	0.48	PPB	m 0
3) METHYL CHLORIDE	9.36	50	7712	0.43	PPB	96
4) N-BUTANE	11.46	43	625801	21.26	PPB	99
5) ETHYL CHLORIDE	13.74	64	6027	0.64	PPB	100
6) FREON 11	15.65	101	94331	3.59	PPB	100
7) N-PENTANE	16.34	72	27984	10.57	PPB	# 100
8) DICHLOROMETHANE	18.02	49	723	0.04	PPB	# 34
9) 2-METHYL-PENTANE	19.48	43	23587	0.63	PPB	# 68
10) 1-HEXENE	20.47	56	51352	3.05	PPB	# 8
11) N-HEXANE	20.84	57	167154	6.77	PPB	# 81
12) CHLOROFORM	21.66	83	2633	0.10	PPB	92
13) BENZENE	23.47	78	24829	0.61	PPB	98
14) CARBON TETRACHLORIDE	23.52	117	1977	0.11		93
15) 3-METHYL-HEXANE	23.96	43	10153	0.39	PPB	# 22
16) N-HEPTANE	24.89	57	102936	7.49	PPB	84
17) TOLUENE	27.54	91	67825	1.62	PPB	94
18) N-OCTANE	28.54	57	44680	4.17	PPB	m 72
19) TETRACHLOROETHYLENE	29.14	166	6417	0.38	PPB	91
21) CHLOROBENZENE	30.42	112	676	0.02	PPB	# 6
22) ETHYLBENZENE	30.88	91	6940	0.15	PPB	91
23) M,P-XYLENE	31.13	91	16158	0.51	PPB	89
24) STYRENE	31.88	104	1119	0.04	PPB	m 31
25) N-NONANE	31.88	43	43490	1.79	PPB	88
26) 1,1,2,2-TETRACHLOROETHANE	32.68	83	66	0.00	PPB	# 17
27) O-XYLENE	31.97	91	6015	0.19	PPB	97
28) N-DECANE	34.96	43	178834	8.34	PPB	m 91
29) 1,2,4-TRIMETHYLBENZENE	35.14	105	6522	0.21	PPB	96

(#)=qualifier out of range (m)=manual integration

19010204.D VAP_NP7.M

Sat Jan 02 15:05:33 1999

TIC: 19010204.D

VS006-010-S036

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	8.854	rBB	0.174	244316	8.787	8.961
2	9.048	rBB	0.114	167032	8.995	9.109
3	10.836	rBB	0.020	70213	10.830	10.850
4	10.937	rBB	0.161	310363	10.903	11.064
5	11.185	rBB	0.201	1104298	11.077	11.278
6	11.459	rBB	0.174	1173302	11.392	11.566
7	12.578	rBB	0.121	135654	12.531	12.651
8	13.160	rBB	0.127	147494	13.100	13.227
9	14.727	rBB	0.328	4071446	14.674	15.002
10	15.651	rBB	0.147	230704	15.584	15.732
11	15.939	rBB	0.100	227812	15.879	15.980
12	16.006	rBB	0.074	195975	15.980	16.053
13	16.093	rBB	0.107	936935	16.053	16.160
14	16.341	rBB	0.167	891838	16.247	16.415
15	17.761	rBB	0.121	154590	17.701	17.821
16	18.243	rBB	0.161	257830	18.176	18.337
17	19.308	rBB	0.134	269541	19.261	19.395
18	19.797	rBB	0.127	71773	19.743	19.870
19	19.937	rBB	0.134	186994	19.870	20.004
20	20.299	rBB	0.127	63866	20.245	20.373
21	20.520	rBB	0.241	914217	20.373	20.614
22	20.708	rBB	0.134	597664	20.647	20.781
23	20.842	rBB	0.127	671945	20.781	20.908
24	21.846	rBB	0.141	69107	21.772	21.913
25	22.000	rBB	0.060	146017	21.960	22.020
26	22.054	rBB	0.094	236794	22.020	22.114
27	22.924	rBB	0.208	893251	22.857	23.065
28	23.480	rBB	0.221	2613441	23.413	23.634
29	23.748	rBB	0.161	348980	23.701	23.862
30	23.976	rBB	0.221	11211030	23.875	24.096
31	24.324	rBB	0.154	2207537	24.257	24.411
32	24.552	rBB	0.141	160357	24.491	24.632
33	24.719	rBB	0.174	1237257	24.645	24.819
34	24.886	rBB	0.161	1319519	24.819	24.980
35	25.034	rBB	0.114	269333	24.980	25.094
36	25.154	rBB	0.121	591393	25.094	25.215
37	25.328	rBB	0.020	306031	25.322	25.342
38	25.489	rBB	0.141	390242	25.436	25.576
39	25.730	rBB	0.094	556774	25.677	25.770
40	25.791	rBB	0.060	56153	25.770	25.831
41	26.346	rBB	0.147	81571	26.273	26.420
42	27.029	rBB	0.121	127238	26.976	27.096
43	27.291	rBB	0.174	139048	27.204	27.378
44	27.532	rBB	0.080	122720	27.485	27.565
45	27.612	rBB	0.114	408167	27.565	27.679
46	27.779	rBB	0.141	126553	27.692	27.833
47	27.974	rBB	0.134	1111330	27.920	28.054
48	28.114	rBB	0.094	309935	28.061	28.155
49	28.188	rBB	0.067	61601	28.155	28.221
50	28.543	rBB	0.201	447665	28.409	28.610
51	29.320	rBB	0.107	140896	29.266	29.373
52	29.628	rBB	0.100	77420	29.574	29.675
53	29.896	rBB	0.127	172211	29.829	29.956
54	30.344	rBB	0.208	10891795	30.231	30.438
55	30.967	rBB	0.114	703708	30.920	31.034
56	31.141	rBB	0.147	126029	31.081	31.228

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57	31.295	rbb	0.121	102938	31.228	31.349
58	31.416	rbb	0.134	3554082	31.349	31.483
59	31.536	rbb	0.114	751254	31.483	31.597
60	31.697	rbb	0.107	78115	31.657	31.764
61	31.891	rbb	0.208	203836	31.831	32.039
62	32.708	rbb	0.174	158912	32.595	32.769
63	33.043	rbb	0.114	273318	32.983	33.097
64	33.177	rbb	0.127	341671	33.110	33.237
65	33.311	rbb	0.161	539847	33.251	33.412
66	33.599	rbb	0.188	929959	33.539	33.726
67	34.456	rbb	0.094	85475	34.409	34.503
68	34.965	rbb	0.134	732697	34.905	35.039
69	36.693	rbb	0.141	306085	36.619	36.760
70	36.860	rbb	0.134	121108	36.787	36.921
71	37.805	rbb	0.134	1683279	37.731	37.865
72	37.912	rbb	0.094	58466	37.865	37.959
73	40.443	rbb	0.147	1579640	40.370	40.517
74	42.138	rbb	0.100	82129	42.104	42.205
75	42.399	rbb	0.134	1428171	42.345	42.479
76	43.410	rbb	0.033	95215	43.397	43.430
77	43.798	rbb	0.134	159551	43.752	43.886
78	44.642	rbb	0.080	267505	44.636	44.716

Library Search Compound Report

Data File : D:\C106\19010204.D
 Acq Time : 2 Jan 99 2:16 pm
 Sample : VS006-010-S036
 Misc : 50 TORR
 Method : D:\METHODS\VAP_NF7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
8.85	6.78 PPB	244316	FLUOROBENZENE	23.98

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L	0	000000-00-0	0

 Peak Number 2 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
10.94	8.61 PPB	310363	FLUOROBENZENE	23.98

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Acetaldehyde	108064	000075-07-0	83
2	Acetaldehyde	108065	000075-07-0	64
3	Acetaldehyde	430	000075-07-0	64

 Peak Number 3 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
11.18	30.63 PPB	1104298	FLUOROBENZENE	23.98

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108673	000106-98-9	83
2	1-Butene	108672	000106-98-9	83
3	1-Butene	108671	000106-98-9	83
4	1-Propene, 2-methyl-	108463	000115-11-7	74
5	2-Butene, (E)-	108665	000624-64-6	72

 Peak Number 4 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
11.46	32.55 PPB	1173302	FLUOROBENZENE	23.98

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Butane	109164	000106-97-8	59
2	Butane	3946	000106-97-8	50

 Peak Number 5 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
14.73	112.94 PPB	4071446	FLUOROBENZENE	23.98

Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	Ethanol		108332	000064-17-5	90
2	Ethanol		1076	000064-17-5	90
3	Ethanol		108331	000064-17-5	83

 Peak Number 6 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
15.65	6.40 PPB	230704	FLUOROBENZENE	23.98

Hit# of	4	Tentative ID	Ref#	CAS#	Qual
1	Trichloromonofluoromethane		118725	000075-69-4	90
2	Trichloromonofluoromethane		44156	000075-69-4	90
3	Trichloromonofluoromethane		118724	000075-69-4	83
4	Trichloromonofluoromethane		118723	000075-69-4	47

 Peak Number 7 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
15.94	6.32 PPB	227812	FLUOROBENZENE	23.98

Hit# of	20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene		109031	000109-67-1	90
2	1-Pentene		109030	000109-67-1	90
3	1-Pentene		109032	000109-67-1	86
4	Cyclobutane, methyl-		3261	000598-61-8	86
5	Cyclopropane, ethyl-		109028	001191-96-4	83

 Peak Number 8 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
16.01	5.44 PPB	195975	FLUOROBENZENE	23.98

Hit# of	0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L		0	000000-00-0	0

 Peak Number 9 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
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16.09	25.99 PPB	936935	FLUOROBENZENE	23.98	
Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	Acetone		109727	000067-64-1	72
2	Acetone		109703	000067-64-1	64
3	Acetone		109708	000067-64-1	50

Peak Number 10 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD		R.T.
16.34	24.74 PPB	891838	FLUOROBENZENE		23.98
Hit#	of	Tentative ID	Ref#	CAS#	Qual
1	Pentane		4653	000109-66-0	90
2	Pentane		109385	000109-66-0	86
3	Pentane		109386	000109-66-0	64
4	Butane, 2-methyl-		4658	000078-78-4	39

Peak Number 11 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.	
18.24	7.15 PPB	257830	FLUOROBENZENE	23.98	
Hit# of	0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L		0	000000-00-0	0

Peak Number 12 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD		R.T.
20.84	18.64 PPB	671945	FLUOROBENZENE		23.98
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Hexane		112279	000110-54-3	91
2	Hexane		112278	000110-54-3	74
3	Hexane		112277	000110-54-3	74
4	Hexane		16315	000110-54-3	74
5	Pentane, 2,4-dimethyl-		5552	000108-08-7	38

Peak Number 13 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.	
22.92	24.78 PPB	893251	FLUOROBENZENE	23.98	
Hit#	of 11	Tentative ID	Ref#	CAS#	Qual
1	1,3-Dioxolane, 2-methyl-		114825	000497-26-7	91

2	1,3-Dioxolane, 2-methyl-	25345	000497-26-7	91
3	1,3-Dioxolane, 2-methyl-	114824	000497-26-7	91
4	2,2'-Bi-1,3-dioxolane	25462	006705-89-1	36
5	1,3-Dioxolane, 2-(chloromethyl)-	114848	002568-30-1	28

Peak Number 14 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
23.75	9.68 PPB	348980	FLUOROBENZENE	23.98
Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1	Butanenitrile	108435	000109-74-0	72
2	Butanenitrile	1478	000109-74-0	56
3	Butanenitrile	108437	000109-74-0	40
4	Butanenitrile	108436	000109-74-0	38
5	2-Butanenitrile	108466	004786-20-3	16

Peak Number 15 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
24.32	61.24 PPB	2207537	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,3-Dioxane, 2-methyl-	116916	000626-68-6	52
2	1,3-Dioxane	35220	000505-22-6	47
3	1,3-Dioxane, 2-methyl-	110109	000626-68-6	40
4	1,3-Dioxolane, 2-ethyl-4-methyl-	116957	004359-46-0	40
5	Methyl 4-O-methyl-d-arabinoside	35449	1000129-79-9	39

Peak Number 16 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
24.72	34.32 PPB	1237257	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,3-Dioxane	116908	000505-22-6	64
2	1,3-Dioxane, 2-methyl-	116916	000626-68-6	58
3	1,3-Dioxolane, 2-ethyl-4-methyl-	116957	004359-46-0	50
4	Oxirane, (propoxymethyl)-	3969	003126-95-2	49
5	Monomethyl malonate	7213	016695-14-0	45

Peak Number 17 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
24.89	36.60 PPB	1319519	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Heptane	109303	000142-82-5	58
2 Heptane	4133	000142-82-5	58
3 1-Heptene	111846	000592-76-7	53
4 Heptane	109668	000142-82-5	52
5 1-Pentanol, 2-methyl-	109331	000105-30-6	47

Peak Number 18 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
25.03	7.47 PPB	269333	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 3-Heptene		108688	000592-78-9	95
2 3-Heptene, (E)-		108689	014686-14-7	94
3 3-Heptene, (E)-		2212	014686-14-7	94
4 3-Heptene, (E)-		108697	014686-14-7	91
5 (Z)-3-Heptene		108691	007642-10-6	91

Peak Number 19 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
25.15	16.41 PPB	591393	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene, (E)-		111908	014686-13-6	96
2 2-Heptene, (E)-		13656	014686-13-6	95
3 2-Heptene		108687	000592-77-8	95
4 2-Heptene		108605	000592-77-8	94
5 2-Heptene		2208	000592-77-8	90

Peak Number 20 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
25.33	8.49 PPB	306031	FLUOROBENZENE	23.98
Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1 No Hits From C:\DATABASE\NIST98.L		0	000000-00-0	0

Peak Number 21 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
25.49	10.83 PPB	390242	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene, (E)-		111908	014686-13-6	96
2 2-Heptene		108687	000592-77-8	95
3 2-Heptene		108605	000592-77-8	93

4 (Z)-3-Heptene 108691 007642-10-6 91
 5 2-Heptene 2208 000592-77-8 91

 Peak Number 22 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
25.73	15.45 PPB	556774	FLUOROBENZENE	23.98

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Triethylene glycol, mononitrate	12240	020600-87-7	64
2	Nitric acid, propyl ester	12186	000627-13-4	64
3	Nitric acid, propyl ester	110983	000627-13-4	50
4	1,3-Propanediol, 2-nitro-2-(nitro	12194	020820-44-4	33

 Peak Number 23 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
27.61	14.20 PPB	408167	CHLOROBENZENE-D5	30.34

Hit# of 13	Tentative ID	Ref#	CAS#	Qual
1	Pentanenitrile	4187	000110-59-8	50
2	Pentanenitrile	108508	000110-59-8	40
3	Pentanenitrile	108514	000110-59-8	33
4	Butane, 1-isocyano-	1757	002769-64-4	25
5	Heptane, 3-methyl-	5681	000589-81-1	22

 Peak Number 24 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
28.54	15.58 PPB	447665	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane	110051	000111-65-9	91
2	Octane	109231	000111-65-9	87
3	Octane	5673	000111-65-9	81
4	Octane	109559	000111-65-9	81
5	Heptane, 2,4-dimethyl-	110057	002213-23-2	64

 Peak Number 25 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
29.90	5.99 PPB	172211	CHLOROBENZENE-D5	30.34

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Butane, 1-nitro-	108047	000627-05-4	72
2	Butane, 2-nitro-	406	000600-24-8	33
3	Formamide, N-(cyanomethyl)-	541	005018-27-9	17

 Peak Number 26 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
30.97	24.49 PPB	703708	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109855	000123-19-3	91
2	4-Heptanone	109874	000123-19-3	91
3	4-Heptanone	114577	000123-19-3	91
4	4-Heptanone	6294	000123-19-3	91
5	3-Pentanone, 2,4-dimethyl-	109870	000565-80-0	78

 Peak Number 27 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
31.54	26.14 PPB	751254	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	109741	000110-43-0	91
2	2-Heptanone	109709	000110-43-0	91
3	2-Heptanone	5736	000110-43-0	90
4	2-Heptanone	109740	000110-43-0	83
5	2-Hexanone, 5-methyl-	109729	000110-12-3	74

 Peak Number 28 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
31.89	7.09 PPB	203836	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	109596	000111-84-2	94
2	Nonane	109595	000111-84-2	91
3	Nonane	109597	000111-84-2	91
4	Nonane	5495	000111-84-2	90
5	Octane	109559	000111-65-9	59

 Peak Number 29 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
32.71	5.53 PPB	158912	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	52
2	2H-Pyran-2-one, tetrahydro-3,5-dime	15306	003290-57-1	35
3	2-Oxepanone, 4-methyl-	15310	1000196-99-7	27
4	(s)-3,4-Dimethylpentanol	14986	1000143-83-9	27

3 J-Hexanol

111884 000111-27-3 27

 Peak Number 30 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
33.04	9.51 PPB	273318	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	64
2	Hexanoic acid, anhydride	118546	002051-49-2	53
3	Hexanoic acid, anhydride	43066	002051-49-2	53
4	Glycocyanidine	43063	000503-86-6	42
5	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	42

 Peak Number 31 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
33.18	11.89 PPB	341671	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	64
2	Glycocyanidine	43063	000503-86-6	59
3	2-Pyrrolidinone, 1-methyl-	118550	000872-50-4	50
4	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	45
5	Oxirane, 2-methyl-2-(2-methylpropyl)	43000	053897-31-7	38

 Peak Number 32 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
33.31	18.78 PPB	539847	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Penten-2-one, 4-methyl-	116425	000141-79-7	59
2	Phosphonous dibromide, cyclohexyl-	14252	086012-32-0	59
3	3-(Butylamino)propionitrile	116379	000693-51-6	47
4	1,5-Heptadien-4-one, 3,3,6-trimethyl-	116418	000546-49-6	45
5	3-Acetamidofuran	32812	059445-85-1	40

 Peak Number 33 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
33.60	32.36 PPB	929959	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,4,4-Trimethylbut-2-enolide	110039	004182-41-6	42
2	3-Octen-2-one, (E)-	5082	018402-82-9	28
3	1,3,2-Dioxaborolane-4,5-dimethanol,	8055	074841-61-5	28

4 5-Hexen-2-one, 5-methyl- 109317 003240-09-3 12
 5 2-Propenal, (1,1-dimethylethyl)meth 5107 072101-22-5 12

 Peak Number 34 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
34.97	25.50 PPB	732697	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	109556	000124-18-5	94
2	Undecane	109663	001120-21-4	83
3	Decane	112241	000124-18-5	81
4	Eicosane	109630	000112-95-8	78
5	Nonacosane	109621	000630-03-5	78

 Peak Number 35 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
36.69	10.65 PPB	306085	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Eicosane	112344	000112-95-8	86
2	Undecane, 4,7-dimethyl-	109663	001120-21-4	80
3	Octacosane	109620	000630-02-4	72
4	Decane, 2,4-dimethyl-	5624	002801-84-5	72
5	Heptadecane	112319	000629-78-7	72

 Peak Number 36 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
37.80	58.57 PPB	1683279	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	112395	001120-21-4	91
2	Undecane	16533	001120-21-4	91
3	Undecane	109663	001120-21-4	90
4	Tridecane	112309	000629-50-5	86
5	Tridecane	16403	000629-50-5	83

 Peak Number 37 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
40.44	54.97 PPB	1579640	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	16262	000112-40-3	93
2	Tridecane	16403	000629-50-5	90

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3	Tridecane	112309	000629-50-5	90
4	Tetradecane	112357	000629-59-4	90
5	Undecane	16533	001120-21-4	83

 Peak Number 38 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
42.40	49.70 PPB	1428171	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	16403	000629-50-5	91
2	Tridecane	112309	000629-50-5	91
3	Heptadecane	112319	000629-78-7	90
4	Hexadecane	112408	000544-76-3	90
5	Tetradecane	112357	000629-59-4	90

 Peak Number 39 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
43.80	5.55 PPB	159551	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	112359	000629-59-4	97
2	Tetradecane	112357	000629-59-4	96
3	Hexadecane	112406	000544-76-3	91
4	Heptadecane	112319	000629-78-7	91
5	Tetradecane	112355	000629-59-4	90

 Peak Number 40 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
44.64	9.31 PPB	267505	CHLOROBENZENE-D5	30.34

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L	0	000000-00-0	0

 19010204.D VAP_NP7.M Wed Jan 20 10:07:01 1999

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010204.D

Acq On : 2 Jan 99 2:16 pm

Sample : VS006-010-S036

Misc : 50 TORR

Vial: 1

Operator: M. STAUFFE

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD	R.T.	
11.46	32.55 PPB	1173302	FLUOROBENZENE	23.98	
Hit# of	1	Tentative ID	Ref#	CAS#	Qual
1	Butane		116078	000106-97-8	64

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010204.D
 Acq On : 2 Jan 99 2:16 pm
 Sample : VS006-010-S036
 Misc : 50 TORR

Vial: 1
 Operator: M. STAUFFE
 Inst : 5972 - MS
 Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD	R.T.
14.73	112.94 PPE	4071447	FLUOROBENZENE	23.98
Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	115959	000064-17-5	90

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010204.D

Acq On : 2 Jan 99 2:16 pm

Sample : VS006-010-S036

Misc : 50 TORR

Vial: 1

Operator: M. STAUFFE

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD	R.T.	
24.32	61.24 PPB	2207538	FLUOROBENZENE	23.98	
Hit# of	1	Tentative ID	Ref#	CAS#	Qual
1	1,3-Dioxane, 2-methyl-		1391	000626-68-6	50

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010204.D
Acq On : 2 Jan 99 2:16 pm
Sample : VS006-010-S036
Misc : 50 TORR

Vial: 1
Operator: M. STAUFFE
Inst : 5972 - MS
Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
Title : NONPOLAR VAPOR STANDARD CALIBRATION
Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD	R.T.	
24.72	34.32 PPB	1237258	FLUOROBENZENE	23.98	
Hit# of	1	Tentative ID	Ref#	CAS#	Qual
1	1,3-Dioxolane, 2-ethyl-4-methyl-		119555	004359-46-0	50

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010204.D

Acq On : 2 Jan 99 2:16 pm

Sample : VS006-010-S036

Misc : 50 TORR

Vial: 1

Operator: M. STAUFFE

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.89	36.60 PPB	1319519	FLUOROBENZENE	23.98
Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1 Heptane		118104	000142-82-5	58

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010204.D

Acq On : 2 Jan 99 2:16 pm

Sample : VS006-010-S036

Misc : 50 TORR

Vial: 1

Operator: M. STAUFFE

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD	R.T.	
37.80	58.57 PPB	1683279	CHLOROBENZENE-D5	30.34	
Hit#	of	Tentative ID	Ref#	CAS#	Qual
1	Undecane		15622	001120-21-4	97

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010204.D

Acq On : 2 Jan 99 2:16 pm

Sample : VS006-010-S036

Misc : 50 TORR

Vial: 1

Operator: M. STAUFFE

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD		R.T.
40.44	54.97 PPB	1579640	CHLORO BENZENE-D5		30.34
Hit# of	1	Tentative ID	Ref#	CAS#	Qual
1	Dodecane		126009	000112-40-3	91

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010204.D

Acq On : 2 Jan 99 2:16 pm

Sample : VS006-010-S036

Misc : 50 TORR

Vial: 1

Operator: M. STAUFFE

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD		R.T.
42.40	49.70 PPB	1428172	CHLOROBENZENE-D5		30.34
Hit# of	1	Tentative ID	Ref#	CAS#	Qual
1	Tridecane		127251	000629-50-5	91

File : C:\HPCHEM\1\DATA\19010705.D
Operator : G. FIES
Acquired : 7 Jan 99 12:58 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-018-S045
Misc Info : 50 TORR
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010705.D

Acq On : 7 Jan 99 12:58 pm

Sample : VS006-018-S045

Misc : 50 TORR

Quant Time: Jan 7 13:53 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.05	96	5304774	100.00	NG	0.12
17) CHLOROBENZENE-D5	30.42	117	2443716	100.00	NG	-0.04

System Monitoring Compounds

%Recovery

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue	
2) ETHANOL	14.83	45	1831985	343.75	PPE	m	100 E
3) ACETONITRILE	16.08	40	456555	52.78	PPB	m	92
4) ACETONE	16.17	58	923714	121.58	PPB	m	79
5) FURAN	0.00	68		Not Detected			
6) 2-PROPANOL	0.00	45		Not Detected			
7) 1-PROPANOL	19.38	31	222074	13.24	PPB	m	99
8) PROPANENITRILE	20.01	54	430317	34.88	PPB	m	100
9) BUTANAL	20.60	72	166426	33.16	PPB	m	82
10) 2-BUTANONE	20.78	72	251821	32.81	PPB	m	97
11) TETRAHYDROFURAN	22.14	72	54164	7.50	PPB	m	84
12) 1-BUTANOL	23.56	56	703015	97.40	PPB	m	95
13) BUTANENITRILE	23.83	41	1198500	55.71	PPB	m	100
14) 2-PENTANONE	24.42	43	762931	17.12	PPB	m	65
15) 1,4-DIOXANE	0.00	88		Not Detected			
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected			
18) 2-HEXANONE	28.19	58	571008	43.66	PPB	m	81
19) 3-HEPTANONE	31.52	114	1389828	546.84	PPB	m	90 E
20) 2-HEPTANONE	31.62	58	2154331	120.06	PPB	m	98
21) CYCLOHEXANONE	0.00	98		Not Detected			
22) 2-OCTANONE	34.74	58	83661	3.70	PPB	#	71

(#) = qualifier out of range (m) = manual integration
 19010705.D VAP_P7.M Thu Jan 07 13:55:31 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010705.D

Acq On : 7 Jan 99 12:58 pm

Sample : VS006-018-S045

Misc : 50 TORR

Quant Time: Jan 7 14:01 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.05	96	5304774	100.00	NG	0.12
20) CHLOROBENZENE-D5	30.42	117	2443716	100.00	PPB	-0.01

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	11.53	43	10143390	355.88 PPB	100 E
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.73	101	96433	3.79	100
7) N-PENTANE	16.42	72	251752	98.19 PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	19.55	43	437736	12.13 PPB #	72
10) 1-HEXENE	20.55	56	2407939	147.47 PPB #	70
11) N-HEXANE	20.92	57	1657696	69.31 PPB	84
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	23.55	78	113899	2.88 PPB	98
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	23.78	43	74715	2.94 PPB m	89
16) N-HEPTANE	24.97	57	2279993	171.24 PPB m	84
17) TOLUENE	27.61	91	610296	15.05 PPB	96
18) N-OCTANE	28.62	57	346337	33.34 PPB m	83
19) TETRACHLOROETHYLENE	0.00	166		Not Detected	
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	0.00	91		Not Detected	
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	31.96	43	550365	36.06 PPB	88
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	35.03	43	785307	58.29 PPB	91
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#) = qualifier out of range (m) = manual integration
 19010705.D VAP_NP7.M Thu Jan 07 14:01:54 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010807.D
 Acq On : 8 Jan 99 3:48 pm
 Sample : VS006-018-S045-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 13:06 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	5142661	100.00	NG	0.09
17) CHLOROBENZENE-DS	30.38	117	3323878	100.00	NG	-0.08

System Monitoring Compounds

%Recovery

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ETHANOL	14.99	45	54565	253.47	PPB m	100
3) ACETONITRILE	0.00	40		Not Detected		
4) ACETONE	16.21	58	61614	200.76	PPB m	1
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.93	45	5138	6.13	PPB	93
7) 1-PROPANOL	0.00	31		Not Detected		
8) PROPANENITRILE	20.02	54	10455	20.98	PPB m	92
9) BUTANAL	20.79	72	6613	32.62	PPB #	72
10) 2-BUTANONE	20.79	72	7584	24.46	PPB m	64
11) TETRAHYDROFURAN	22.16	72	940	3.22	PPB #	1
12) 1-BUTANOL	23.55	56	23070	79.13	PPB m	95
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.59	43	5103	3.00	PPB #	65
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.16	58	16304	21.99	PPB m	64
19) 3-HEPTANONE	31.46	114	69262	480.85	PPB	81
20) 2-HEPTANONE	31.58	58	80735	79.39	PPB m	99
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	0.00	58		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19010807.D VAP_P7.M Mon Jan 11 13:06:48 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010807.D
 Acq On : 8 Jan 99 3:48 pm
 Sample : VS006-018-S045-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 13:08 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	5142661	100.00	NG	0.09
20) CHLOROBENZENE-D5	30.38	117	3323878	100.00	PPB	-0.05

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.51	43	449779	390.67	PPB m	99
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.70	101	5220	5.08		97
7) N-PENTANE	16.39	72	8947	86.39	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.52	43	16665	11.44	PPB m	28
10) 1-HEXENE	20.52	56	92144	139.71	PPB #	80
11) N-HEXANE	20.89	57	69428	71.87	PPB m	79
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.53	78	6888	4.31	PPB	99
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	0.00	43		Not Detected		
16) N-HEPTANE	24.93	57	173392	322.40	PPB #	77
17) TOLUENE	27.58	91	69031	42.14	PPB	95
18) N-OCTANE	28.58	57	19212	45.79	PPB m	81
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	31.18	91	3266	2.91	PPB	94
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.92	43	22929	26.51	PPB	89
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	35.00	43	38897	50.94	PPB m	94
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19010807.D VAP_NP7.M Mon Jan 11 13:09:16 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011803.D

Acq On : 18 Jan 99 11:52 am

Sample : VS006-018-S045 DUP

Misc : 50 TORR, DF=2

Quant Time: Jan 18 13:52 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.11	96	4539529	100.00	NG	0.18
17) CHLOROBENZENE-D5	30.48	117	1967473	100.00	NG	0.02

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.89	45	1457715	319.64	PPB m	100 E
3) ACETONITRILE	16.14	40	411768	55.82	PPB m	96
4) ACETONE	16.24	58	838787	129.01	PPB m	82
5) FURAN	0.00	68			Not Detected	
6) 2-PROPANOL	0.00	45			Not Detected	
7) 1-PROPANOL	19.43	31	205775	14.34	PPB m	100
8) PROPANENITRILE	20.08	54	373220	35.35	PPB m	100
9) BUTANAL	20.66	72	154139	35.88	PPB #	31
10) 2-BUTANONE	20.85	72	261203	39.76	PPB m	91
11) TETRAHYDROFURAN	22.21	72	41510	6.71	PPB m	82
12) 1-BUTANOL	23.62	56	671782	108.76	PPB m	96
13) BUTANENITRILE	23.89	41	1114676	60.55	PPB m	100
14) 2-PENTANONE	24.43	43	771324	20.23	PPB m	65
15) 1,4-DIOXANE	0.00	88			Not Detected	
16) 4-METHYL-2-PENTANONE	0.00	100			Not Detected	
18) 2-HEXANONE	28.25	58	428885	40.73	PPB m	77
19) 3-HEPTANONE	31.57	114	1117725	546.23	PPB m	70 E
20) 2-HEPTANONE	31.67	58	1492006	103.28	PPB m	99
21) CYCLOHEXANONE	0.00	98			Not Detected	
22) 2-OCTANONE	34.79	58	63104	3.47	PPB m	76

(#) = qualifier out of range (m) = manual integration
 19011803.D VAP_P7.M Mon Jan 18 13:53:23 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011803.D

Acq On : 18 Jan 99 11:52 am

Sample : VS006-018-S045 DUP

Misc : 50 TORR, DF=2

Quant Time: Jan 18 13:56 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD-CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.11	96	4539529	100.00	NG	0.18
20) CHLOROBENZENE-D5	30.48	117	1967473	100.00	PPB	0.05

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.60	43	7995033	327.79	PPB	99 E
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.79	101	81728	3.75		99
7) N-PENTANE	16.49	72	198415	90.44	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.61	43	334049	10.82	PPB #	73
10) 1-HEXENE	20.62	56	1830968	131.04	PPB m	68
11) N-HEXANE	20.98	57	1277865	62.44	PPB #	84
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.61	78	99638	2.94	PPB	98
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.84	43	57285	2.64	PPB m	89
16) N-HEPTANE	25.02	57	2213738	194.29	PPB	86
17) TOLUENE	27.67	91	485463	13.99	PPB	95
18) N-OCTANE	28.67	57	249592	28.08	PPB m	87
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	31.27	91	60296	3.78	PPB	88
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	32.01	43	377704	30.74	PPB m	89
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	35.08	43	573893	52.91	PPB m	92
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#)= qualifier out of range (m)= manual integration

19011803.D VAP_NP7.M Mon Jan 18 13:57:19 1999

TIC: 19010705.D

VS006-018-S045

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	8.915	rBB	0.174	436058	8.854	9.028
2	9.095	rBB	0.161	900444	9.028	9.189
3	9.825	rBB	0.161	449278	9.752	9.912
4	10.971	rBB	0.188	555674	10.930	11.118
5	11.252	rBB	0.268	24856340	11.118	11.386
6	11.533	rBB	0.409	20236073	11.439	11.848
7	12.196	rBB	0.167	1771176	12.109	12.276
8	12.658	rBB	0.154	1576819	12.585	12.739
9	12.919	rBB	0.208	3456872	12.819	13.027
10	13.227	rBB	0.114	507417	13.181	13.294
11	14.828	rBB	0.342	6342910	14.748	15.089
12	15.156	rBB	0.147	773140	15.089	15.236
13	16.020	rBB	0.100	4312337	15.960	16.060
14	16.174	rBB	0.114	3746326	16.127	16.241
15	16.422	rBB	0.114	6381291	16.368	16.482
16	16.924	rBB	0.181	1229933	16.837	17.018
17	17.279	rBB	0.087	457025	17.225	17.313
18	17.353	rBB	0.100	956954	17.313	17.413
19	17.842	rBB	0.141	452195	17.795	17.935
20	18.317	rBB	0.161	569466	18.257	18.418
21	19.074	rBB	0.214	929358	18.960	19.174
22	19.549	rBB	0.147	1607216	19.469	19.616
23	20.011	rBB	0.127	809078	19.944	20.072
24	20.172	rBB	0.134	337783	20.085	20.219
25	20.554	rBB	0.268	14149006	20.453	20.721
26	20.782	rBB	0.134	1852069	20.721	20.855
27	20.922	rBB	0.127	6540263	20.855	20.982
28	21.116	rBB	0.107	354046	21.069	21.177
29	21.224	rBB	0.094	707283	21.177	21.270
30	21.619	rBB	0.134	796470	21.558	21.692
31	21.880	rBB	0.080	450406	21.840	21.920
32	22.074	rBB	0.067	341703	22.034	22.101
33	23.561	rBB	0.121	2935665	23.500	23.621
34	23.668	rBB	0.100	374362	23.621	23.721
35	23.829	rBB	0.074	761377	23.788	23.862
36	23.896	rBB	0.074	635932	23.862	23.936
37	24.050	rBB	0.254	11908262	23.949	24.204
38	24.411	rBB	0.121	1709492	24.351	24.472
39	24.518	rBB	0.100	404502	24.472	24.572
40	24.632	rBB	0.134	5766125	24.572	24.706
41	24.793	rBB	0.188	2342074	24.713	24.900
42	24.987	rBB	0.161	42895982	24.900	25.061
43	25.128	rBB	0.121	17861856	25.061	25.181
44	25.248	rBB	0.127	31666903	25.181	25.309
45	25.577	rBB	0.141	23425520	25.510	25.650
46	25.824	rBB	0.221	4868927	25.737	25.958
47	26.019	rBB	0.121	398685	25.958	26.079
48	26.400	rBB	0.194	519419	26.286	26.481
49	26.742	rBB	0.121	486607	26.682	26.802
50	26.856	rBB	0.087	384912	26.809	26.896
51	27.103	rBB	0.234	7050738	26.990	27.224
52	27.599	rBB	0.100	3600164	27.545	27.646
53	27.706	rBB	0.114	11738036	27.646	27.760
54	27.807	rBB	0.047	650945	27.773	27.820
55	27.853	rBB	0.074	2998284	27.820	27.894
56	28.048	rBB	0.141	362600	27.987	28.128

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57	28.188	rBB	0.074	1615008	28.141	28.215
58	28.269	rBB	0.127	10764022	28.215	28.342
59	28.510	rBB	0.107	419318	28.436	28.543
60	28.610	rBB	0.167	6534373	28.550	28.717
61	28.825	rBB	0.141	780901	28.771	28.912
62	28.972	rBB	0.114	2331215	28.918	29.032
63	29.106	rBB	0.161	1233629	29.032	29.193
64	29.802	rBB	0.094	404753	29.749	29.842
65	30.418	rBB	0.234	7162260	30.278	30.512
66	30.954	rBB	0.080	419118	30.907	30.988
67	31.048	rBB	0.134	9995603	30.988	31.122
68	31.222	rBB	0.114	549026	31.168	31.282
69	31.363	rBB	0.141	1505524	31.282	31.423
70	31.517	rBB	0.147	28557351	31.423	31.570
71	31.624	rBB	0.100	7332352	31.570	31.671
72	31.751	rBB	0.080	637368	31.718	31.798
73	31.959	rBB	0.181	2180710	31.898	32.079
74	32.769	rBB	0.167	1942603	32.669	32.836
75	32.883	rBB	0.094	335200	32.836	32.930
76	33.111	rBB	0.234	4705642	32.936	33.171
77	33.244	rBB	0.147	5245676	33.171	33.318
78	33.378	rBB	0.127	5022311	33.318	33.445
79	33.666	rBB	0.127	5349035	33.593	33.720
80	33.968	rBB	0.094	352963	33.934	34.028
81	34.222	rBB	0.181	1278815	34.142	34.323
82	34.416	rBB	0.154	921163	34.323	34.477
83	35.026	rBB	0.234	3649903	34.899	35.133
84	35.367	rBB	0.234	3877722	35.287	35.521
85	35.716	rBB	0.121	1240394	35.649	35.769
86	35.836	rBB	0.167	546129	35.769	35.937
87	36.338	rBB	0.107	368687	36.278	36.385
88	37.397	rBB	0.194	803505	37.309	37.504
89	37.644	rBB	0.167	367698	37.577	37.745
90	37.865	rBB	0.121	5111631	37.805	37.926
91	38.173	rBB	0.134	520969	38.086	38.220
92	38.649	rBB	0.127	410616	38.575	38.702
93	38.917	rBB	0.107	529935	38.856	38.964
94	39.211	rBB	0.127	584360	39.151	39.278
95	39.412	rBB	0.094	344225	39.359	39.452
96	39.580	rBB	0.134	491791	39.506	39.640
97	40.504	rBB	0.181	8281379	40.417	40.598
98	40.839	rBB	0.121	1378291	40.778	40.899
99	41.997	rBB	0.141	1142364	41.930	42.071
100	42.439	rBB	0.100	7596421	42.386	42.486

Library Search Compound Report

Data File : D:\C106\19010705.D

Acq Time : 7 Jan 99 12:58 pm

Sample : VS006-018-S045

Misc : 50 TORR

Method : D:\METHODS\VAP_NF7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : NIST98.L

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
11.25	417.46 PPB	24856340	FLUOROBENZENE	24.05

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1 1-Butene		108673	000106-98-9	83
2 1-Butene		108672	000106-98-9	83
3 1-Butene		108671	000106-98-9	83
4 1-Propene, 2-methyl-		108669	000115-11-7	81
5 1-Propene, 2-methyl-		108463	000115-11-7	74

 Peak Number 2 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
12.20	29.75 PPB	1771176	FLUOROBENZENE	24.05

Hit# of 14	Tentative ID	Ref#	CAS#	Qual
1 1-Butene		108673	000106-98-9	83
2 1-Butene		108672	000106-98-9	83
3 1-Butene		108671	000106-98-9	83
4 1-Propene, 2-methyl-		108668	000115-11-7	72
5 1-Propene, 2-methyl-		108463	000115-11-7	72

 Peak Number 3 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
12.66	26.48 PPB	1576819	FLUOROBENZENE	24.05

Hit# of 14	Tentative ID	Ref#	CAS#	Qual
1 Cyclobutane		107955	000287-23-0	62
2 1-Butene		108671	000106-98-9	58
3 1-Propene, 2-methyl-		108669	000115-11-7	53
4 2-Butene, (Z)-		2189	000590-18-1	53
5 1-Propene, 2-methyl-		108668	000115-11-7	50

 Peak Number 4 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
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.92	58.06 PPB	3456872	FLUOROBENZENE	24.05
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Propene, 2-methyl-	108463	000115-11-7	87
4	1-Butene	108671	000106-98-9	83
5	1-Propene, 2-methyl-	108668	000115-11-7	72

 Peak Number 5 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
14.83	106.53 PPB	6342910	FLUOROBENZENE	24.05
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	108332	000064-17-5	90
2	Ethanol	1076	000064-17-5	90
3	Ethanol	108331	000064-17-5	83

 Peak Number 6 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
16.02	70.13 PPB	1010657	FLUOROBENZENE	24.05
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene	109030	000109-67-1	91
2	1-Pentene	109032	000109-67-1	86
3	1-Pentene	3426	000109-67-1	86
4	Cyclopentane	109034	000287-92-3	78
5	Cyclopropane, ethyl-	109028	001191-96-4	78

 Peak Number 7 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
16.17	62.92 PPB	3746326	FLUOROBENZENE	24.05
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Acetone	109727	000067-64-1	72
2	Acetone	109703	000067-64-1	64
3	Acetone	5734	000067-64-1	50

 Peak Number 8 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
20.78	31.11 PPB	1852069	FLUOROBENZENE	24.05
Hit# of 5	Tentative ID	Ref#	CAS#	Qual

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenenitrile	12695	013284-42-9	91
2	Butanenitrile, 2-methylene-	12684	001647-11-6	90
3	3-Pentenenitrile	12688	004635-87-4	59
4	2-Pentenenitrile	111125	013284-42-9	49
5	1-Oxetan-2-one, 4-methyl-3-methyleh	12683	1000142-17-3	47

 Peak Number 13 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
25.13	299.99 PPB	17861856	FLUOROBENZENE	24.05

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	95
2	3-Heptene, (E)-	2212	014686-14-7	94
3	3-Heptene, (E)-	108697	014686-14-7	94
4	3-Heptene	108688	000592-78-9	93
5	3-Heptene, (E)-	108689	014686-14-7	91

 Peak Number 14 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
25.20	311.11 PPB	17861856	FLUOROBENZENE	24.05

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene	108605	000592-77-8	94
4	2-Heptene, (E)-	13656	014686-13-6	94
5	2-Heptene	2208	000592-77-8	91

 Peak Number 15 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
25.58	393.43 PPB	23425520	FLUOROBENZENE	24.05

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95
3	(Z)-3-Heptene	108691	007642-10-6	94
4	2-Heptene	108605	000592-77-8	91
5	3-Heptene	108688	000592-78-9	91

 Peak Number 16 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
25.82	81.77 PPB	4868927	FLUOROBENZENE	24.05

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, butyl-	1931	000930-57-4	72
2	2H-Pyran-2-one, tetrahydro-3,6-dime	109044	003720-22-7	53
3	Hexane, 2-chloro-	1457	000638-28-8	50
4	1-Hexene	2192	000592-41-6	50
5	1-Heptene	2183	000592-76-7	47

Peak Number 17 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
27.10	118.42 PPB	7050738	FLUOROBENZENE	24.05

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	72
2	2-Cyclopenten-1-one, 2-methyl-	113922	001120-73-6	72
3	2-Butenal, 2-ethenyl-	108753	020521-42-0	64
4	2-Cyclopenten-1-one, 2-methyl-	21588	001120-73-6	59
5	Cyclohexene, 1-methyl-	116137	000591-49-1	59

Peak Number 18 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
27.71	327.77 PPB	11738036	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	109689	000589-81-1	91
2	Heptane, 3-methyl-	5681	000589-81-1	83
3	Hexane, 2,4-dimethyl-	109686	000589-43-5	72
4	Hexane, 2-methyl-	109353	000591-76-4	64
5	Hexane, 2,4-dimethyl-	109577	000589-43-5	59

Peak Number 19 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
27.85	83.72 PPB	2998284	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	116095	001119-65-9	96
2	Cyclohexene, 4-methyl-	31569	000591-47-9	68
3	1,4-Heptadiene	31572	005675-22-9	64
4	1,2-Butadiene	111115	000590-19-2	58
5	1,2-Butadiene	12655	000590-19-2	53

Peak Number 20 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
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28.19 45.10 PPB 1615008 CHLORO BENZENE-D5 30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Hexanone		109711	000591-78-6	90
2 2-Hexanone		109712	000591-78-6	87
3 2-Hexanone		5779	000591-78-6	87
4 2-Hexanone		109732	000591-78-6	83
5 2-Hexanone, 4-hydroxy-5-methyl-3-pr		5762	061141-74-0	78

Peak Number 21 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
28.27	300.58 PPB	10764022	CHLORO BENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Cyclopentane, 1,2,4-trimethyl-, (1.		23858	004850-28-6	90
2 Cyclopentane, 1,2,4-trimethyl-, (1.		23853	016883-48-0	86
3 1,2-Oxaborolane, 2-ethyl-4,5-dimeth		23877	074685-45-3	72
4 Octane, 3-methyl-6-methylene-		23865	074630-07-2	72
5 2-Azetidinone, 3,4,4-trimethyl-		23879	022607-01-8	59

Peak Number 22 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
28.97	65.10 PPB	2331215	CHLORO BENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene, 3-methyl-		23868	003404-75-9	95
2 Hexane, 2-methyl-4-methylene-		23848	003404-80-6	86
3 Heptane, 3-methylene-		23862	001632-16-2	72
4 Hexane, 2-methyl-4-methylene-		114420	003404-80-6	72
5 Heptane, 3-methylene-		114416	001632-16-2	64

Peak Number 23 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
29.11	34.45 PPB	1233629	CHLORO BENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Octene, (Z)-		111246	007642-04-8	83
2 4-Octene, (E)-		13070	014850-23-8	81
3 2-Octene, (E)-		111294	013389-42-9	80
4 4-Octene, (Z)-		111286	007642-15-1	72
5 3-Octene, (E)-		108600	014919-01-8	72

Peak Number 24 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.05	279.12 PPB	9995603	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109855	000123-19-3	91
2	4-Heptanone	109874	000123-19-3	91
3	4-Heptanone	6294	000123-19-3	91
4	4-Heptanone	114577	000123-19-3	91
5	3-Pentanone, 2,4-dimethyl-	109869	000565-80-0	72

 Peak Number 25 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
31.36	42.04 PPB	1505524	CHLOROBENZENE-D5	30.42
Hit# of 12	Tentative ID	Ref#	CAS#	Qual
1	n-Butyl ether	112037	000142-96-1	72
2	n-Butyl ether	112208	000142-96-1	59
3	n-Butyl ether	15788	000142-96-1	59
4	Ethanol, 2-butoxy-	112447	000111-76-2	50
5	Propanoic acid, 1-methylpropyl este	15651	000591-34-4	40

 Peak Number 26 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
31.52	797.44 PPB	28557351	CHLOROBENZENE-D5	30.42
Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	112010	000106-35-4	91
2	3-Heptanone	112074	000106-35-4	90
3	3-Heptanone	15594	000106-35-4	90
4	3-Heptanone	112009	000106-35-4	78
5	3-Heptanone	112011	000106-35-4	72

 Peak Number 27 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
31.62	204.75 PPB	7332352	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	109741	000110-43-0	91
2	2-Heptanone	109709	000110-43-0	91
3	2-Heptanone	109740	000110-43-0	90
4	2-Heptanone	5736	000110-43-0	90
5	2-Hexanone, 5-methyl-	109729	000110-12-3	74

 Peak Number 28 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
32.77	54.25 PPB	1942603	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	52
2	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	50
3	Thiazole, 2,5-dimethyl-	51095	004175-66-0	38
4	1-Pentanol, 3-methyl-	111840	000589-35-5	27
5	Cyclopentane, methyl-	15051	000096-37-7	27

Peak Number 29 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
33.11	131.40 PPB	4705642	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanoic acid, anhydride	43066	002051-49-2	59
2	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	59
3	Hexanoic acid, anhydride	118546	002051-49-2	45
4	Glycocyanidine	43063	000503-86-6	45
5	Furan, 2,5-diethyltetrahydro-	32025	041239-48-9	38

Peak Number 30 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
33.24	146.48 PPB	5245676	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	64
2	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
3	Furan, tetrahydro-2,2-dimethyl-5-(1	32021	033978-70-0	47
4	Glycocyanidine	43063	000503-86-6	45
5	1-Hydroxycyclohexanecarboxylic acid	43242	001123-28-0	39

Peak Number 31 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
33.38	140.24 PPB	5022311	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-(Butylamino)propionitrile	116379	000693-51-6	50
2	Penten-2-one, 4-methyl-	116425	000141-79-7	45
3	2-Pentene, 4,4-dimethyl-, (E)-	111632	000690-08-4	45
4	Phosphonous dibromide, cyclohexyl-	14252	086012-32-0	45
5	3-(Butylamino)propionitrile	32754	000693-51-6	40

Peak Number 32 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
33.67	149.37 PPB	5349035	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,4,4-Trimethylbut-2-enolide	110039	004182-41-6	40
2	Heptafluorobutyric acid,n-tridecyl	4323	1000216-78-9	33
3	1-Octene, 3,7-dimethyl-	109534	004984-01-4	33
4	5-Hexen-2-one, 5-methyl-	109317	003240-09-3	25
5	1,3,2-Dioxaborolane-4,5-dimethanol,	8055	074841-61-5	25

Peak Number 33 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
34.22	35.71 PPB	1278815	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octanone	109634	000589-63-9	80
2	Cyclohexane, 1,1,2,3-tetramethyl-	22348	006783-92-2	55
3	4-Octanone	109631	000589-63-9	42
4	4-Nonene, 3-methyl-, (Z)-	13846	063830-69-3	38
5	4-Octanone	109632	000589-63-9	30

Peak Number 34 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
35.37	108.28 PPB	3877722	CHLOROBENZENE-D5	30.42
Hit# of 14	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	45
2	Hexanenitrile	108570	000628-73-9	45
3	Hexane-2,6-dicarbonitrile, 1-(formy	12747	1000159-54-2	39
4	1,8-Nonadiene	2340	004900-30-5	38
5	5-Hexen-1-ol	111145	000821-41-0	38

Peak Number 35 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
35.72	34.64 PPB	1240394	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	6376	002847-72-5	87
2	Decane, 4-methyl-	109904	002847-72-5	87
3	Octane, 2,3,7-trimethyl-	16473	062016-34-6	80
4	Nonane, 2,6-dimethyl-	5582	017302-28-2	78
5	Octane, 2,3,6-trimethyl-	17068	062016-33-5	72

Peak Number 36

Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
37.87	142.74 PPB	5111631	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	109663	001120-21-4	93
2	Undecane	16533	001120-21-4	91
3	Undecane	112395	001120-21-4	91
4	Tridecane	16403	000629-50-5	90
5	Tetradecane	112357	000629-59-4	90

 Peak Number 37 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
40.50	231.25 PPB	8281379	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	16262	000112-40-3	93
2	Tridecane	112309	000629-50-5	90
3	Tetradecane	112355	000629-59-4	86
4	Hexadecane	112408	000544-76-3	86
5	Undecane	16533	001120-21-4	83

 Peak Number 38 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
40.84	38.49 PPB	1378291	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 6-methyl-	16443	006044-71-9	97
2	Undecane, 2,6-dimethyl-	112404	017301-23-4	97
3	Undecane, 2,6-dimethyl-	17111	017301-23-4	83
4	Undecane, 3,6-dimethyl-	16435	017301-28-9	74
5	Undecane, 3,5-dimethyl-	16437	017312-81-1	72

 Peak Number 39 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
42.00	31.90 PPB	1142364	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2,6,7-trimethyl-	16475	062108-25-2	83
2	Nonane, 3-methyl-	112310	005911-04-6	72
3	Hexadecane, 2,6,11,15-tetramethyl-	17080	000504-44-9	72
4	Octane, 3,6-dimethyl-	17112	015869-94-0	64
5	Undecane, 6,6-dimethyl-	17116	017312-76-4	64

Peak Number 40 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
42.44	212.12 PPB	7596421	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	112309	000629-50-5	94
2	Tridecane	16403	000629-50-5	91
3	Hexadecane	112408	000544-76-3	90
4	Pentadecane	16493	000629-62-9	90
5	Hexadecane	112406	000544-76-3	86

19010705.D VAF_NP7.M Wed Jan 20 10:17:18 1999

File : C:\HPCHEM\1\DATA\19010205.D
Operator : M. STAUFFER
Acquired : 2 Jan 99 3:27 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-025-S064
Misc Info : 50 TORR
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010205.D

Vial: 1

Acq On : 2 Jan 99 3:27 pm

Operator: M. STAUFFER

Sample : VS006-025-S064

Inst : 5972 - MS

Misc : 50 TORR

Multiplr: 2.00

Quant Time: Jan 11 13:41 1999

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI on	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	23.98	96	5609322	100.00	NG	0.05
17) CHLOROBENZENE-D5	30.34	117	3607718	100.00	NG	-0.12

System Monitoring Compounds

%Recovery

Target Compounds				Qvalue
2) ETHANOL	0.00	45	Not Detected	
3) ACETONITRILE	0.00	40	Not Detected	
4) ACETONE	0.00	58	Not Detected	
5) FURAN	0.00	68	Not Detected	
6) 2-PROPANOL	0.00	45	Not Detected	
7) 1-PROPANOL	0.00	31	Not Detected	
8) PROPANENITRILE	0.00	54	Not Detected	
9) BUTANAL	0.00	72	Not Detected	
10) 2-BUTANONE	0.00	72	Not Detected	
11) TETRAHYDROFURAN	0.00	72	Not Detected	
12) 1-BUTANOL	0.00	56	Not Detected	
13) BUTANENITRILE	0.00	41	Not Detected	
14) 2-PENTANONE	0.00	43	Not Detected	
15) 1,4-DIOXANE	0.00	88	Not Detected	
16) 4-METHYL-2-PENTANONE	0.00	100	Not Detected	
18) 2-HEXANONE	0.00	58	Not Detected	
19) 3-HEPTANONE	31.42	114	113739	30.31 PPB 97
20) 2-HEPTANONE	31.54	58	94306	3.56 PPB m 97
21) CYCLOHEXANONE	0.00	98	Not Detected	
22) 2-OCTANONE	0.00	58	Not Detected	

(#) = qualifier out of range (m) = manual integration
 19010205.D VAP_P7.M Mon Jan 11 13:42:02 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010205.D

Acq On : 2 Jan 99 3:27 pm

Sample : VS006-025-S064

Misc : 50 TORR

Quant Time: Jan 11 13:38 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	23.98	96	5609322	100.00	NG	0.05
20) CHLOROBENZENE-D5	30.34	117	3607718	100.00	PPB	-0.08

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	0.00	43		Not Detected	
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	0.00	101		Not Detected	
7) N-PENTANE	0.00	72		Not Detected	
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	0.00	43		Not Detected	
10) 1-HEXENE	0.00	56		Not Detected	
11) N-HEXANE	0.00	57		Not Detected	
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	0.00	78		Not Detected	
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	0.00	43		Not Detected	
16) N-HEPTANE	24.89	57	77021	5.47 PPB m	3
17) TOLUENE	0.00	91		Not Detected	
18) N-OCTANE	0.00	57		Not Detected	
19) TETRACHLOROETHYLENE	0.00	166		Not Detected	
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	0.00	91		Not Detected	
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	0.00	43		Not Detected	
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	34.96	43	125389	6.30 PPB m	92
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#) = qualifier out of range (m) = manual integration
 19010205.D VAP_NP7.M Mon Jan 11 13:39:24 1999

TIC: 19010205.D

VS006-025-S064

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	20.474	rBB	0.114	87773	20.420	20.534
2	20.842	rBB	0.107	61662	20.789	20.896
3	23.976	rBB	0.228	11470807	23.882	24.110
4	24.244	rBB	0.047	278855	24.237	24.284
5	24.552	rBB	0.114	88500	24.499	24.612
6	24.887	rBB	0.154	1158409	24.813	24.967
7	25.034	rBB	0.127	333090	24.967	25.095
8	25.155	rBB	0.127	794084	25.095	25.222
9	25.490	rBB	0.141	510171	25.429	25.570
10	25.751	rBB	0.107	66256	25.697	25.804
11	27.030	rBB	0.147	147317	26.970	27.117
12	27.532	rBB	0.094	180524	27.479	27.572
13	27.626	rBB	0.114	416816	27.572	27.686
14	27.780	rBB	0.067	74277	27.753	27.820
15	28.189	rBB	0.127	478791	28.142	28.269
16	28.537	rBB	0.221	380456	28.470	28.691
17	28.905	rBB	0.121	106919	28.838	28.959
18	30.345	rBB	0.194	10072268	30.265	30.459
19	30.974	rBB	0.134	544871	30.914	31.048
20	31.296	rBB	0.141	120198	31.209	31.350
21	31.416	rBB	0.134	2487255	31.350	31.483
22	31.537	rBB	0.107	339475	31.483	31.591
23	31.885	rBB	0.107	183504	31.832	31.939
24	32.709	rBB	0.154	168001	32.609	32.763
25	33.037	rBB	0.194	304576	32.917	33.111
26	33.178	rBB	0.141	399029	33.111	33.251
27	33.312	rBB	0.147	390709	33.251	33.399
28	33.600	rBB	0.107	282650	33.539	33.647
29	34.156	rBB	0.181	116033	34.048	34.229
30	34.959	rBB	0.147	495552	34.906	35.053
31	35.307	rBB	0.080	80036	35.261	35.341
32	35.649	rBB	0.114	169885	35.589	35.703
33	35.783	rBB	0.167	117909	35.703	35.870
34	36.272	rBB	0.114	60707	36.211	36.325
35	36.694	rBB	0.154	245465	36.613	36.767
36	36.861	rBB	0.147	151640	36.767	36.915
37	37.805	rBB	0.121	720035	37.745	37.866
38	38.589	rBB	0.141	66624	38.502	38.642
39	38.850	rBB	0.121	91945	38.790	38.910
40	39.151	rBB	0.134	89752	39.084	39.218
41	39.346	rBB	0.094	66219	39.299	39.393
42	39.520	rBB	0.100	58052	39.473	39.573
43	40.444	rBB	0.167	1500520	40.364	40.531
44	40.785	rBB	0.127	217598	40.718	40.846
45	41.957	rBB	0.147	255615	41.890	42.038
46	42.272	rBB	0.107	86837	42.199	42.306
47	42.393	rBB	0.107	2457827	42.346	42.453
48	43.786	rBB	0.080	192565	43.752	43.833

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010205.D

Acq On : 2 Jan 99 3:27 pm

Sample : VS006-025-S064

Misc : 50 TORR

Vial: 1

Operator: M. STAUFFE

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD	R.T.		
24.89	20.20 PPB	1158410	FLUOROBENZENE	23.98		
Hit#	of	1	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene			901	000592-78-9	53

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010205.D

Acq On : 2 Jan 99 3:27 pm

Sample : VS006-025-S064

Misc : 50 TORR

Vial: 1

Operator: M. STAUFFE

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD		R.T.
40.44	29.80 PPB	1500520	CHLOROBENZENE-D5		30.34
Hit#	of	Tentative ID	Ref#	CAS#	Qual
1		Dodecane	126004	000112-40-3	91

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010205.D

Acq On : 2 Jan 99 3:27 pm

Sample : VS006-025-S064

Misc : 50 TORR

Vial: 1

Operator: M. STAUFFE

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\WILEY138.L

R.T.	Conc	Area	Relative to ISTD	R.T.
42.39	48.80 PPB	2457828	CHLOROBENZENE-D5	30.34
Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	127251	000629-50-5	94

Library Search Compound Report

Data File : D:\C106\19010205.D
 Acq Time : 2 Jan 99 3:27 pm
 Sample : VS006-025-S064
 Misc : 50 TORR
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
24.24	4.86 PPB	278855	FLUOROBENZENE	23.98

Hit# of	Tentative ID	Ref#	CAS#	Qual
1 No Hits	From C:\DATABASE\NIST98.L	0	000000-00-0	0

 Peak Number 2 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
24.89	20.20 PPB	1158409	FLUOROBENZENE	23.98

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene, (E)-	108689	014686-14-7	60
2	(Z)-3-Heptene	108691	007642-10-6	60
3	3-Heptene	108688	000592-78-9	53
4	Heptane, 1-fluoro-	15111	000661-11-0	50
5	3-Heptene, (E)-	2212	014686-14-7	49

 Peak Number 3 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
25.03	5.81 PPB	333090	FLUOROBENZENE	23.98

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	108688	000592-78-9	97
2	3-Heptene, (E)-	108689	014686-14-7	95
3	(Z)-3-Heptene	108691	007642-10-6	94
4	3-Heptene, (E)-	2212	014686-14-7	94
5	2-Heptene	108687	000592-77-8	94

 Peak Number 4 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
25.15	13.85 PPB	794084	FLUOROBENZENE	23.98

Hit# of	Tentative ID	Ref#	CAS#	Qual
---------	--------------	------	------	------

1	2-Heptene, (E)-	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95
3	2-Heptene, (E)-	13656	014686-13-6	95
4	2-Heptene	108605	000592-77-8	94
5	2-Heptene	2208	000592-77-8	91

Peak Number 5 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
25.49	8.90 PPB	510171	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	111908	014686-13-6	97
2	2-Heptene	108687	000592-77-8	95
3	2-Heptene, (E)-	13656	014686-13-6	95
4	2-Heptene	108605	000592-77-8	91
5	2-Heptene	2208	000592-77-8	91

Peak Number 6 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
27.03	2.57 PPB	147317	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,3-Hexadiene, 2-methyl-	2762	029212-09-7	86
2	2-Butenal, 2-ethenyl-	108753	020521-42-0	72
3	Furan, 2,4-dimethyl-	41734	003710-43-8	72
4	Furan, 2,4-dimethyl-	118263	003710-43-8	72
5	2-Cyclopenten-1-one, 2-methyl-	21588	001120-73-6	72

Peak Number 7 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
27.53	3.58 PPB	180524	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Toluene	117282	000108-88-3	92
2	Toluene	117281	000108-88-3	90
3	Toluene	117283	000108-88-3	70
4	Toluene	117292	000108-88-3	70
5	Toluene	37326	000108-88-3	70

Peak Number 8 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
27.63	8.28 PPB	416816	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Heptane, 3-methyl-	109689	000589-81-1	91
2 Hexane, 2,4-dimethyl-	109686	000589-43-5	72
3 Heptane, 3-methyl-	5681	000589-81-1	72
4 Hexane, 2-methyl-	109248	000591-76-4	64
5 Hexane, 1-(hexyloxy)-2-methyl-	7097	074421-17-3	59

Peak Number 9 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
28.19	9.51 PPB	478791	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methylene-	114416	001632-16-2	94
2	Cyclopentane, 1,2,4-trimethyl-, (1.	23858	004850-28-6	90
3	Cyclopentane, 1,2,4-trimethyl-, (1.	23853	016883-48-0	72
4	2-Azetidinone, 3,4,4-trimethyl-	23879	022607-01-8	59
5	Cyclopropane, 1,2-dimethyl-, cis-	111567	000930-18-7	59

Peak Number 10 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
28.54	7.55 PPB	380456	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octene, (E)-	111301	014850-23-8	64
2	2-Octene, (Z)-	13071	007642-04-8	58
3	2-Octene	13061	000111-67-1	53
4	Cyclohexane, 1,2-dimethyl-, cis-	111705	002207-01-4	52
5	2-Octene, (E)-	111294	013389-42-9	52

Peak Number 11 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
28.91	2.12 PPB	106919	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, 3-methyl-	23868	003404-75-9	90
2	Hexane, 2-methyl-4-methylene-	23848	003404-80-6	78
3	2-Hexene, 3,5-dimethyl-	2644	003404-79-3	62
4	Heptane, 3-methylene-	114415	001632-16-2	53
5	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	50

Peak Number 12 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
30.97	10.82 PPB	544871	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Heptanone		109855	000123-19-3	91
2 4-Heptanone		109874	000123-19-3	91
3 4-Heptanone		6294	000123-19-3	91
4 4-Heptanone		114577	000123-19-3	91
5 3-Hexanone, 2-methyl-		6315	007379-12-6	86

 Peak Number 13 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
31.30	2.39 PPB	120198	CHLOROBENZENE-D5	30.34

Hit# of 11	Tentative ID	Ref#	CAS#	Qual
1 n-Butyl ether		15788	000142-96-1	72
2 n-Butyl ether		112037	000142-96-1	64
3 n-Butyl ether		112208	000142-96-1	53
4 Ethanedioic acid, dibutyl ester		15761	002050-60-4	45
5 Propane, 1-(chloromethoxy)-2-methyl		17371	034180-11-5	42

 Peak Number 14 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
31.54	6.74 PPB	339475	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptanone		109709	000110-43-0	87
2 2-Heptanone		109741	000110-43-0	80
3 2-Heptanone		109740	000110-43-0	72
4 2-Hexanone, 5-methyl-		109706	000110-12-3	52
5 2-Hexanone, 5-methyl-		5735	000110-12-3	52

 Peak Number 15 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
31.89	3.64 PPB	183504	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Nonane		109596	000111-84-2	93
2 Nonane		109595	000111-84-2	91
3 Nonane		109597	000111-84-2	90
4 Nonane		5495	000111-84-2	90
5 Decane		109556	000124-18-5	59

 Peak Number 16 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
32.71	3.34 PPB	168001	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	50
2	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	50
3	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	47
4	Thiazole, 2,5-dimethyl-	51095	004175-66-0	38
5	2-Oxepanone, 4-methyl-	15310	1000196-99-7	38

 Peak Number 17 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
33.04	6.05 PPB	304576	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	59
2	3,5-Diamino-1,2,4-triazole	43053	000503-88-8	40
3	Pentenoic acid, 4-methyl-	7632	000504-85-8	39
4	Cyclohexanol, 1-ethyl-	118587	001940-18-7	38
5	Hexanoic acid, 4-octyl ester	43032	1000160-13-3	36

 Peak Number 18 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
33.18	7.92 PPB	399029	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	59
2	3,5-Diamino-1,2,4-triazole	43053	000503-88-8	53
3	2-Pyrrolidinone, 1-methyl-	118550	000872-50-4	50
4	2,2'-Bioxepane	43236	074793-02-5	50
5	Glycocyanidine	43063	000503-86-6	50

 Peak Number 19 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
33.31	7.76 PPB	390709	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentene, 3-ethyl-2-methyl-	111623	019780-67-7	64
2	Cyclopropane, 1,1,2,2-tetramethyl-	111640	004127-47-3	59
3	Phosphonous dibromide, cyclohexyl-	14252	086012-32-0	59
4	3-Hexene, 2,4-dimethyl-	14204	082085-14-1	50
5	3-Penten-2-one, 4-methyl-	116450	000141-79-7	50

 Peak Number 20 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
------	------	------	------------------	------

33.60 5.61 PPB 282650 CHLOROBENZENE-D5 30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Trifluoroacetic acid, n-tetradecyl	4218	1000216-79-0	53
2	Heptafluorobutyric acid, n-tridecyl	4323	1000216-78-9	33
3	1-Hexene, 4-ethyl-	6199	016746-85-3	25
4	1-Trifluoroacetoxydecane	4215	1000215-96-3	25
5	1,3,2-Dioxaborolane-4,5-dimethanol,	8055	074841-61-5	25

 Peak Number 21 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
34.16	2.30 PPB	116033	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,1,2,3-tetramethyl-	22348	006783-92-2	58
2	2-Octene, 2,6-dimethyl-	114125	004057-42-5	49
3	2-Octene, 2,6-dimethyl-	114252	004057-42-5	43
4	Cyclohexane, 1,1,2-trimethyl-	114112	007094-26-0	38
5	3-Heptene, 2-methyl-	22753	017618-76-7	38

 Peak Number 22 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
34.96	9.84 PPB	495552	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	109556	000124-18-5	93
2	Nonane	5495	000111-84-2	90
3	Nonacosane	109621	000630-03-5	72
4	Nonane	109595	000111-84-2	72
5	Undecane	109663	001120-21-4	72

 Peak Number 23 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
35.65	3.37 PPB	169885	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	6376	002847-72-5	87
2	Decane, 4-methyl-	109904	002847-72-5	87
3	1-Decene, 4-methyl-	112347	013151-29-6	64
4	Octane, 2-bromo-	112564	000557-35-7	59
5	Pentadecane, 7-methyl-	16513	006165-40-8	50

 Peak Number 24 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
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35.78	2.34 PPB	117909	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112165	000104-76-7	78
2	1-Hexanol, 2-ethyl-	15889	000104-76-7	78
3	1-Hexanol, 2-ethyl-	112637	000104-76-7	64
4	Heptane, 1,1'-oxybis-	17017	000629-64-1	50
5	Octane, 2,3-dimethyl-	112152	007146-60-3	43

Peak Number 25 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
36.69	4.87 PPB	245465	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 3,7-dimethyl-	5589	017312-54-8	87
2	Undecane, 4,7-dimethyl-	5605	017301-32-5	83
3	Nonane, 5-methyl-5-propyl-	24552	017312-75-3	64
4	Decane, 5,6-dipropyl-	17110	119209-20-0	59
5	Heptane, 2,4-dimethyl-	7092	002213-23-2	59

Peak Number 26 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
36.86	3.01 PPB	151640	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentatriacontane	112346	000630-07-9	59
2	Hexane, 2,3,4-trimethyl-	109334	000921-47-1	53
3	1-Iodo-2-methylnonane	5574	1000101-47-9	53
4	Heptane, 2,4-dimethyl-	110057	002213-23-2	53
5	Hexadecane	112406	000544-76-3	53

Peak Number 27 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
37.81	14.30 PPB	720035	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	16533	001120-21-4	91
2	Undecane	112395	001120-21-4	91
3	Tetradecane	112357	000629-59-4	90
4	Tridecane	112309	000629-50-5	90
5	Undecane	109663	001120-21-4	87

Peak Number 28 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
40.44	29.80 PPB	1500520	CHLORO BENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	16262	000112-40-3	93
2	Tridecane	112309	000629-50-5	90
3	Heptadecane	112319	000629-78-7	83
4	Tridecane	16403	000629-50-5	83
5	Undecane	16533	001120-21-4	83

Peak Number 29 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
40.79	4.32 PPB	217598	CHLORO BENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 6-methyl-	16443	006044-71-9	94
2	Undecane, 2,6-dimethyl-	17111	017301-23-4	94
3	Undecane, 2,6-dimethyl-	112404	017301-23-4	91
4	Undecane, 3,6-dimethyl-	16435	017301-28-9	72
5	Undecane, 2,6-dimethyl-	112287	017301-23-4	64

Peak Number 30 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
41.96	5.08 PPB	255615	CHLORO BENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane, 3-methyl-	16406	005911-04-6	78
2	Octane, 2,3,6-trimethyl-	17068	062016-33-5	78
3	Nonane, 3-methyl-	112557	005911-04-6	78
4	Dodecane, 2,7,10-trimethyl-	17104	074645-98-0	72
5	Heptadecane, 7-methyl-	17075	020959-33-5	72

Peak Number 31 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
42.39	48.80 PPB	2457827	CHLORO BENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	16403	000629-50-5	94
2	Hexadecane	112408	000544-76-3	91
3	Tridecane	112309	000629-50-5	91
4	Tetradecane	112357	000629-59-4	90
5	Heptadecane	112319	000629-78-7	90

Peak Number 32 Rank in Relative Concentration 22

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R.T.	Conc	Area	Relative to ISTD	R.T.
43.79	3.82 PPB	192565	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	16474	000629-59-4	95
2	Tetradecane	112356	000629-59-4	93
3	Tetradecane	112357	000629-59-4	92
4	Heptadecane	112319	000629-78-7	91
5	Tetradecane	112355	000629-59-4	90

 19010205.D VAP_NF7.M Wed Jan 20 10:25:02 1999

File : C:\HPCHEM\1\DATA\19010206.D
Operator : M. STAUFFER
Acquired : 2 Jan 99 4:47 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-033-S053
Misc Info : 50 TORR
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010206.D

Vial: 1

Acq On : 2 Jan 99 4:47 pm

Operator: M. STAUFFER

Sample : VS006-033-S053

Inst : 5972 - MS

Misc : 50 TORR

Multiplr: 2.00

Quant Time: Jan 2 17:52 1999

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	23.97	96	5858473	100.00	NG	0.04
17) CHLOROBENZENE-D5	30.34	117	2505428	100.00	NG	-0.12

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue	
2) ETHANOL	14.79	45	2768061	470.31	PPB	100	E
3) ACETONITRILE	16.02	40	949606	102.57	PPB	m	79
4) ACETONE	16.11	58	2286989	272.56	PPB	m	88
5) FURAN	16.39	68	6833	0.37	PPB	#	1
6) 2-PROPANOL	16.59	45	104343	4.55	PPB		94
7) 1-PROPANOL	19.31	31	417411	22.54	PPB		97
8) PROPANENITRILE	19.94	54	1005303	73.78	PPB		99
9) BUTANAL	20.60	72	2759	0.50	PPB	m	82
10) 2-BUTANONE	20.71	72	553444	65.29	PPB		94
11) TETRAHYDROFURAN	22.18	72	698	0.09	PPB	m	89
12) 1-BUTANOL	23.49	56	1334966	167.47	PPB	m	94
13) BUTANENITRILE	23.95	41	54892	2.31	PPB	#	100
14) 2-PENTANONE	24.34	43	1443975	29.34	PPB		97
15) 1,4-DIOXANE	0.00	88			Not Detected		
16) 4-METHYL-2-PENTANONE	26.77	100	2715	0.67	PPB		80
18) 2-HEXANONE	28.13	58	1661121	123.87	PPB	m	79
19) 3-HEPTANONE	31.51	114	3100586	1189.89	PPB	m	1
20) 2-HEPTANONE	31.58	58	6454369	350.85	PPB	m	96
21) CYCLOHEXANONE	32.14	98	8956	1.75	PPB		90
22) 2-OCTANONE	34.96	58	90887	3.92	PPB	#	1

(#) = qualifier out of range (m) = manual integration
 19010206.D VAP_P7.M Sat Jan 02 17:56:31 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010206.D

Acq On : 2 Jan 99 4:47 pm

Sample : VS006-033-S053

Misc : 50 TORR

Quant Time: Jan 2 17:43 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI on	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	23.97	96	5858473	100.00	NG	0.04
20) CHLOROBENZENE-D5	30.34	117	2505428	100.00	PPB	-0.09

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) FREON 12	7.75	85	16880	0.47	PPB	m 0
3) METHYL CHLORIDE	9.36	50	9192	0.48	PPB	91
4) N-BUTANE	11.47	43	17566740	558.08	PPB	98 E
5) ETHYL CHLORIDE	13.74	64	457	0.05	PPB	100
6) FREON 11	15.65	101	109071	3.88		99
7) N-PENTANE	16.35	72	571294	201.77	PPB	# 100
8) DICHLOROMETHANE	18.03	49	569	0.03	PPB	89
9) 2-METHYL-PENTANE	19.47	43	1061960	26.65	PPB	m 28
10) 1-HEXENE	20.48	56	5718952	317.15	PPB	# 77 E
11) N-HEXANE	20.85	57	4117741	155.90	PPB	86
12) CHLOROFORM	21.66	83	4382	0.16	PPB	87
13) BENZENE	23.61	78	837	0.02	PPB	m 98
14) CARBON TETRACHLORIDE	23.52	117	1858	0.10		88
15) 3-METHYL-HEXANE	23.99	43	16900	0.60	PPB	m 1
16) N-HEPTANE	24.91	57	3285072	223.41	PPB	m 30
17) TOLUENE	27.54	91	1735793	38.75	PPB	95
18) N-OCTANE	28.55	57	919984	80.20	PPB	m 90
19) TETRACHLOROETHYLENE	29.15	166	3986	0.22	PPB	85
21) CHLOROBENZENE	30.49	112	134	0.01	PPB	# 6
22) ETHYLBENZENE	30.88	91	38892	1.33	PPB	96
23) M,P-XYLENE	31.13	91	42839	2.11	PPB	87
24) STYRENE	31.88	104	2522	0.16	PPB	91
25) N-NONANE	31.90	43	1488327	95.11	PPB	91
26) 1,1,2,2-TETRACHLOROETHANE	32.51	83	10831	0.74	PPB	# 17
27) O-XYLENE	31.98	91	14436	0.70	PPB	98
28) N-DECANE	34.96	43	2005407	145.18	PPB	m 96
29) 1,2,4-TRIMETHYLBENZENE	35.14	105	10630	0.54	PPB	98

(#) = qualifier out of range (m) = manual integration
 19010206.D VAP_NP7.M Sat Jan 02 17:45:47 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010808.D
 Acq On : 8 Jan 99 4:46 pm
 Sample : VS006-033-S053-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 13:12 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	5142098	100.00	NG	0.09
17) CHLOROBENZENE-D5	30.38	117	3189906	100.00	NG	-0.08

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.92	45	89057	413.75	PPB m	100
3) ACETONITRILE	0.00	40		Not Detected		
4) ACETONE	16.16	58	120046	391.20	PPB m	82
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.90	45	68564	81.75	PPB #	89
7) 1-PROPANOL	19.38	31	11972	17.68	PPB #	88
8) PROPANENITRILE	20.00	54	25299	50.77	PPB m	98
9) BUTANAL	20.58	72	11429	56.37	PPB m	78
10) 2-BUTANONE	20.77	72	34705	111.94	PPB m	87
11) TETRAHYDROFURAN	22.15	72	1549	5.31	PPB #	17
12) 1-BUTANOL	23.53	56	46016	157.84	PPB m	97
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.40	43	35115	19.51	PPB	96
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.16	58	58979	82.91	PPB m	89
19) 3-HEPTANONE	31.46	114	277859	2010.04	PPB	93
20) 2-HEPTANONE	31.57	58	347554	356.13	PPB	100
21) CYCLOHEXANONE	31.98	98	895	3.30	PPB #	1
22) 2-OCTANONE	34.71	58	8455	6.88	PPB #	69

(#) = qualifier out of range (m) = manual integration
 19010808.D VAP_P7.M Mon Jan 11 13:13:12 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010808.D
 Acq On : 8 Jan 99 4:46 pm
 Sample : VS006-033-S053-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 13:15 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	5142098	100.00 NG	0.09
20) CHLOROBENZENE-D5	30.38	117	3189906	100.00 PPB	-0.05

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	11.51	43	958750	832.84 PPB m	99
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.70	101	4510	4.39	99
7) N-PENTANE	16.39	72	22697	219.19 PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	19.52	43	35761	24.54 PPB #	73
10) 1-HEXENE	20.52	56	264338	400.83 PPB #	67
11) N-HEXANE	20.88	57	167260	173.16 PPB #	79
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	23.52	78	14617	9.15 PPB	99
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	23.74	43	9107	8.89 PPB m	95
16) N-HEPTANE	24.93	57	501518	932.60 PPB #	79
17) TOLUENE	27.58	91	378108	230.82 PPB	95
18) N-OCTANE	28.58	57	53871	128.41 PPB m	82
19) TETRACHLOROETHYLENE	0.00	166		Not Detected	
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	31.18	91	7322	6.80 PPB	95
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	31.92	43	65258	78.61 PPB	84
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	35.00	43	89329	121.90 PPB m	93
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#) = qualifier out of range (m) = manual integration
 19010808.D VAP_NP7.M Mon Jan 11 13:15:35 1999

TIC: 19010206.D

VS006-033-S053

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	9.053	rBB	0.208	1678148	8.973	9.181
2	9.770	rBB	0.181	871690	9.690	9.870
3	10.895	rBB	0.174	1067437	10.861	11.036
4	11.190	rBB	0.308	42983182	11.056	11.364
5	11.471	rBB	0.409	35112402	11.370	11.779
6	12.127	rBB	0.194	3931755	12.047	12.241
7	12.583	rBB	0.167	3567118	12.502	12.670
8	12.850	rBB	0.214	7949365	12.743	12.958
9	14.786	rBB	0.321	9703428	14.679	15.000
10	15.074	rBB	0.161	1931635	15.000	15.161
11	15.938	rBB	0.114	11833848	15.877	15.991
12	16.105	rBB	0.167	8106808	16.052	16.219
13	16.346	rBB	0.221	19824804	16.226	16.447
14	16.842	rBB	0.208	3367059	16.741	16.949
15	17.197	rBB	0.080	1230823	17.150	17.230
16	17.270	rBB	0.100	2532209	17.230	17.331
17	18.241	rBB	0.194	1177712	18.175	18.369
18	18.998	rBB	0.208	2517589	18.884	19.092
19	19.474	rBB	0.141	3195752	19.400	19.541
20	19.936	rBB	0.127	2003741	19.869	19.996
21	20.485	rBB	0.254	32329644	20.378	20.632
22	20.706	rBB	0.141	3973162	20.632	20.773
23	20.847	rBB	0.134	16115907	20.773	20.907
24	21.041	rBB	0.107	1079126	20.994	21.101
25	21.141	rBB	0.094	2077858	21.101	21.195
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27	21.804	rBB	0.080	1203394	21.764	21.844
28	21.998	rBB	0.100	896119	21.958	22.025
29	22.052	rBB	0.107	916261	22.025	22.132
30	23.385	rBB	0.094	959021	23.331	23.425
31	23.492	rBB	0.114	5390377	23.432	23.545
32	23.592	rBB	0.100	971969	23.545	23.646
33	23.760	rBB	0.067	1352994	23.726	23.793
34	23.820	rBB	0.067	1518514	23.793	23.860
35	23.974	rBB	0.167	12298263	23.874	24.041
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37	24.342	rBB	0.107	2489444	24.289	24.396
38	24.450	rBB	0.100	1178484	24.396	24.496
39	24.563	rBB	0.141	14734530	24.496	24.637
40	24.717	rBB	0.121	4279930	24.650	24.771
41	24.938	rBB	0.174	74284101	24.831	25.005
42	25.072	rBB	0.121	35749792	25.005	25.126
43	25.200	rBB	0.134	53407053	25.126	25.260
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53	27.644	rBB	0.121	27159063	27.577	27.698
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55	27.785	rBB	0.080	8433427	27.751	27.831
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57	28.206	rBB	0.121	23702450	28.153	28.273
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59	28.548	rBB	0.221	21549446	28.481	28.702
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69	31.495	rBB	0.167	62458744	31.367	31.535
70	31.588	rBB	0.127	23799503	31.535	31.662
71	31.696	rBB	0.080	2766942	31.662	31.742
72	31.896	rBB	0.121	5852968	31.836	31.957
73	32.707	rBB	0.174	6410858	32.600	32.774
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78	33.611	rBB	0.214	17554623	33.517	33.731
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80	34.160	rBB	0.181	3475141	34.080	34.260
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82	34.964	rBB	0.147	7818907	34.910	35.057
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91	38.855	rBB	0.114	1232461	38.794	38.908
92	39.149	rBB	0.127	1341686	39.089	39.216
93	39.518	rBB	0.127	1051830	39.451	39.578
94	40.241	rBB	0.154	910441	40.140	40.294
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97	41.955	rBB	0.141	3020758	41.888	42.029
98	42.270	rBB	0.107	1036648	42.196	42.303
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Library Search Compound Report

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 Misc : 50 TORR
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
11.19	699.01 PPB	42983182	FLUOROBENZENE	23.97

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	108669	000115-11-7	87
2	1-Propene, 2-methyl-	108463	000115-11-7	87
3	1-Butene	108673	000106-98-9	83
4	1-Butene	108672	000106-98-9	83
5	1-Butene	108671	000106-98-9	83

 Peak Number 2 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
11.47	571.01 PPB	35112402	FLUOROBENZENE	23.97

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Butane	109164	000106-97-8	64
2	Butane	3946	000106-97-8	52

 Peak Number 3 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
12.85	129.28 PPB	7949365	FLUOROBENZENE	23.97

Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Butene	108671	000106-98-9	83
4	1-Propene, 2-methyl-	108463	000115-11-7	83
5	1-Propene, 2-methyl-	108669	000115-11-7	80

 Peak Number 4 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
15.94	192.45 PPB	11833848	FLUOROBENZENE	23.97

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
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1	1-Pentene	109031	000109-67-1	91
2	1-Pentene	109030	000109-67-1	91
3	1-Pentene	109032	000109-67-1	86
4	1-Pentene	3426	000109-67-1	86
5	Cyclobutane, methyl-	3261	000598-61-8	86

Peak Number 5 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
16.35	322.40 PPB	19824804	FLUOROBENZENE	23.97
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	90
2	Pentane	4653	000109-66-0	90
3	Pentane	109386	000109-66-0	64

Peak Number 6 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
20.48	525.76 PPB	32329644	FLUOROBENZENE	23.97
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexene	11822	000592-41-6	95
2	1-Hexene	108657	000592-41-6	91
3	1-Hexene	111822	000592-41-6	81
4	1-Hexene	111823	000592-41-6	81
5	Cyclopropane, propyl-	15015	002415-72-7	78

Peak Number 7 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
20.85	262.08 PPB	16115907	FLUOROBENZENE	23.97
Hit# of 18	Tentative ID	Ref#	CAS#	Qual
1	Hexane	112279	000110-54-3	91
2	Hexane	16315	000110-54-3	86
3	Hexane	112278	000110-54-3	83
4	Hexane	112277	000110-54-3	74
5	Pentane, 2,4-dimethyl-	5552	000108-08-7	39

Peak Number 8 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
24.56	239.62 PPB	14734530	FLUOROBENZENE	23.97
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1	1-Heptene	2183	000592-76-7	95
2	1-Heptene	108686	000592-76-7	94
3	1-Heptene	108660	000592-76-7	91
4	1-Heptene	111846	000592-76-7	91
5	1-Heptene	111847	000592-76-7	91

Peak Number 9 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
24.94	1208.04 PPB	74284101	FLUOROBENZENE	23.97

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	(Z)-3-Heptene	108691	007642-10-6	81
2	3-Heptene, (E)-	108689	014686-14-7	62
3	3-Heptene, (E)-	2212	014686-14-7	62
4	3-Heptene	108688	000592-78-9	58
5	2-Heptene	108687	000592-77-8	58

Peak Number 10 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
25.07	581.38 PPB	35749792	FLUOROBENZENE	23.97

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	108688	000592-78-9	97
2	3-Heptene	2209	000592-78-9	95
3	3-Heptene, (E)-	2212	014686-14-7	94
4	3-Heptene, (E)-	108689	014686-14-7	94
5	(Z)-3-Heptene	2213	007642-10-6	93

Peak Number 11 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
25.20	868.53 PPB	53407053	FLUOROBENZENE	23.97

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95
3	2-Heptene, (E)-	13656	014686-13-6	95
4	2-Heptene	108605	000592-77-8	94
5	2-Heptene	2208	000592-77-8	80

Peak Number 12 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
25.52	699.88 PPB	43036712	FLUOROBENZENE	23.97

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
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1 2-Heptene	108687	000592-77-8	97
2 2-Heptene, (E)-	111908	014686-13-6	96
3 2-Heptene	108605	000592-77-8	94
4 (Z)-3-Heptene	108691	007642-10-6	91
5 2-Heptene	2208	000592-77-8	90

Peak Number 13 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
25.76	175.25 PPB	10776406	FLUOROBENZENE	23.97
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, butyl-	1931	000930-57-4	58
2	Cyclopentane, 1,2-dimethyl-, cis-	111951	001192-18-3	53
3	2H-Pyran-2-one, tetrahydro-3,6-dime	109044	003720-22-7	53
4	Hexane, 2-chloro-	1457	000638-28-8	53
5	Cyclopentane, 1,2-dimethyl-, cis-	23919	001192-18-3	53

Peak Number 14 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
27.03	299.96 PPB	18444712	FLUOROBENZENE	23.97
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
2	2-Cyclopenten-1-one, 2-methyl-	21588	001120-73-6	72
3	Furan, 2,4-dimethyl-	41734	003710-43-8	72
4	Furan, 2,4-dimethyl-	118263	003710-43-8	72
5	2-Cyclopenten-1-one, 3-methyl-	118261	002758-18-1	64

Peak Number 15 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
27.53	296.63 PPB	9678067	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Toluene	117281	000108-88-3	68
2	4-Octene, (E)-	111302	014850-23-8	64
3	Toluene	117292	000108-88-3	60
4	Toluene	117282	000108-88-3	60
5	4-Octene, (Z)-	111286	007642-15-1	58

Peak Number 16 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
27.64	832.41 PPB	27159063	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	109689	000589-81-1	91
2	Heptane, 3-methyl-	5681	000589-81-1	91
3	Heptane, 3,4,5-trimethyl-	7053	020278-89-1	78
4	Hexane, 2,4-dimethyl-	109577	000589-43-5	53
5	Hexane, 1-(hexyloxy)-2-methyl-	7097	074421-17-3	53

 Peak Number 17 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
27.78	258.48 PPB	8433427	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	116095	001119-65-9	96
2	2-Heptyne	31411	001119-65-9	83
3	Cyclohexene, 4-methyl-	116094	000591-47-9	64
4	1,4-Heptadiene	31572	005675-22-9	64
5	Cyclohexene, 4-methyl-	31569	000591-47-9	59

 Peak Number 18 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
28.21	726.47 PPB	23702450	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1,2,4-trimethyl-, (1.	23858	004850-28-6	90
2	Heptane, 3-methylene-	114415	001632-16-2	87
3	Heptane, 3-methylene-	23862	001632-16-2	86
4	Nonane, 3-methylene-	23869	051655-64-2	72
5	Octane, 3-methyl-6-methylene-	23865	074630-07-2	72

 Peak Number 19 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
28.55	660.48 PPB	21549446	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,2-dimethyl-, cis-	111705	002207-01-4	68
2	Cyclohexane, 1,2-dimethyl-, cis-	14486	002207-01-4	68
3	4-Octene, (E)-	111301	014850-23-8	64
4	4-Octene, (E)-	13070	014850-23-8	59
5	2-Octene, (E)-	111293	013389-42-9	52

 Peak Number 20 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
28.91	204.12 PPB	6659798	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, 3-methyl-	23868	003404-75-9	95
2	Hexane, 2-methyl-4-methylene-	23848	003404-80-6	80
3	Hexane, 2-methyl-4-methylene-	114420	003404-80-6	72
4	Heptane, 3-methylene-	23862	001632-16-2	72
5	Heptane, 3-methylene-	114416	001632-16-2	64

Peak Number 21 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
29.04	109.32 PPB	3566937	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octene, (E)-	13070	014850-23-8	87
2	2-Octene, (Z)-	111246	007642-04-8	87
3	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	87
4	3-Octene, (E)-	108600	014919-01-8	83
5	2-Octene	111287	000111-67-1	83

Peak Number 22 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
30.99	858.81 PPB	28020509	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109874	000123-19-3	91
2	4-Heptanone	109855	000123-19-3	91
3	4-Heptanone	6294	000123-19-3	91
4	4-Heptanone	114577	000123-19-3	91
5	3-Hexanone, 2-methyl-	109949	007379-12-6	80

Peak Number 23 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
31.29	131.09 PPB	4277190	CHLOROBENZENE-D5	30.34
Hit# of 12	Tentative ID	Ref#	CAS#	Qual
1	n-Butyl ether	112208	000142-96-1	74
2	n-Butyl ether	15788	000142-96-1	72
3	Propane, 1-(chloromethoxy)-2-methyl	17371	034180-11-5	53
4	n-Butyl ether	112037	000142-96-1	50
5	Pentane, 1-butoxy-	16488	018636-66-3	39

Peak Number 24 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.70 84.81 PPB 2766942 CHLOROBENZENE-D5 30.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Hexanol, 5-methyl-	113293	000623-55-2	83
2	3-Heptanol	19637	000589-82-2	74
3	3-Heptanol	113288	000589-82-2	64
4	Propane, 2-ethoxy-2-methyl-	19731	000637-92-3	59
5	3-Heptanol	113289	000589-82-2	56

Peak Number 25 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
31.90	179.39 PPB	5852968	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	109596	000111-84-2	94
2	Nonane	109595	000111-84-2	91
3	Nonane	109597	000111-84-2	90
4	Nonane	5495	000111-84-2	76
5	Octane	5673	000111-65-9	59

Peak Number 26 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
32.71	196.49 PPB	6410858	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	50
2	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	40
3	1H-2-Pyrrolone, 4-methoxy-2,5-dihyd	51055	1000196-86-0	27
4	Cyclopentane, methyl-	15051	000096-37-7	27
5	Cyclopentane, 1,2-dimethyl-, trans-	15029	000822-50-4	27

Peak Number 27 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
33.05	432.68 PPB	14117138	CHLOROBENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
1	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	64
3	Hexanoic acid, anhydride	118546	002051-49-2	53
4	Hexanoic acid, anhydride	43066	002051-49-2	53
5	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53

Peak Number 28 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
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33.18	496.21	PPB	16189917	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1,3,2-Dioxaborolane, 2,4-diethyl-		43307	057633-63-3	64
2	2,2'-Bioxepane		43236	074793-02-5	50
3	3,5-Diamino-1,2,4-triazole		43045	001455-77-2	50
4	Glycocyanidine		43063	000503-86-6	45
5	Hexanoic acid, anhydride		118546	002051-49-2	42

Peak Number 29			Rank in Relative Concentration 16		
R.T.	Conc	Area	Relative to ISTD		R.T.
33.32	474.92	PPB	15495100	CHLOROBENZENE-D5	30.34

Hit# of 18	Tentative ID		Ref#	CAS#	Qual
1	3,3-Diethoxy-1-propyne		32833	010160-87-9	59
2	3-Penten-2-one, 4-methyl-		116425	000141-79-7	45
3	Cyclopropane, 1,1,2,2-tetramethyl-		111640	004127-47-3	40
4	Phosphonous dibromide, cyclohexyl-		14252	086012-32-0	38
5	1-Butene, 2,3,3-trimethyl-		32888	000594-56-9	36

Peak Number 30			Rank in Relative Concentration 13		
R.T.	Conc	Area	Relative to ISTD		R.T.
33.61	538.04	PPB	17554623	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Trifluoroacetic acid, n-heptadecyl		4324	1000216-79-2	28
2	1,3,2-Dioxaborolane-4,5-dimethanol,		8055	074841-61-5	28
3	1-Eicosanol		4354	000629-96-9	25
4	3-Octen-2-one, (E)-		5082	018402-82-9	25
5	1-Octene, 3,7-dimethyl-		109482	004984-01-4	25

Peak Number 31			Rank in Relative Concentration 35		
R.T.	Conc	Area	Relative to ISTD		R.T.
34.16	106.51	PPB	3475141	CHLOROBENZENE-D5	30.34

Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	4-Octanone		109631	000589-63-9	86
2	4-Octanone		109634	000589-63-9	83
3	Cyclohexane, 1,1,2,3-tetramethyl-		22348	006783-92-2	50
4	4-Octanone		109632	000589-63-9	46
5	4-Nonene, 3-methyl-, (Z)-		13846	063830-69-3	30

Peak Number 32			Rank in Relative Concentration 37		

R.T.	Conc	Area	Relative to ISTD	R.T.
34.36	97.25 PPB	3172896	CHLORO BENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	116270	000629-08-3	90
2	Heptanenitrile	108876	000629-08-3	64
3	Heptanenitrile	108877	000629-08-3	53
4	Heptanenitrile	108875	000629-08-3	40
5	Heptanenitrile	32551	000629-08-3	40

 Peak Number 33 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
34.96	239.65 PPB	7818907	CHLORO BENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	109556	000124-18-5	95
2	Docosane	109660	000629-97-0	72
3	Tricosane	109662	000638-67-5	72
4	Nonane	109595	000111-84-2	72
5	Eicosane	109630	000112-95-8	72

 Peak Number 34 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
35.32	388.99 PPB	12691483	CHLORO BENZENE-D5	30.34
Hit# of 12	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	Hexanenitrile	108570	000628-73-9	42
3	5-Hexen-1-ol	111145	000821-41-0	40
4	1,8-Nonadiene	2340	004900-30-5	36
5	1,2-Nonadiene	12691	022433-33-6	33

 Peak Number 35 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
35.65	91.58 PPB	2988090	CHLORO BENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	109904	002847-72-5	83
2	Decane, 4-methyl-	6376	002847-72-5	81
3	Octane, 2,3,7-trimethyl-	16473	062016-34-6	64
4	Heptane, 3,3,5-trimethyl-	114596	007154-80-5	64
5	Octane, 3-ethyl-	114591	005881-17-4	64

 Peak Number 36 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
37.81	340.97 PPB	11124698	CHLORO BENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	109663	001120-21-4	95
2	Undecane	16533	001120-21-4	91
3	Tetradecane	112357	000629-59-4	90
4	Tridecane	16403	000629-50-5	90
5	Tridecane	112309	000629-50-5	90

 Peak Number 37 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
40.46	614.54 PPB	20050643	CHLORO BENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	16262	000112-40-3	96
2	Hexadecane	112408	000544-76-3	86
3	Tridecane	16403	000629-50-5	83
4	Undecane	16533	001120-21-4	83
5	Pentadecane	16493	000629-62-9	83

 Peak Number 38 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
40.78	99.48 PPB	3245761	CHLORO BENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2,6-dimethyl-	112404	017301-23-4	96
2	Dodecane, 6-methyl-	16443	006044-71-9	91
3	Undecane, 2,6-dimethyl-	17111	017301-23-4	87
4	Undecane, 3,6-dimethyl-	16435	017301-28-9	74
5	Decane, 2,6,8-trimethyl-	16481	062108-26-3	68

 Peak Number 39 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
41.96	92.58 PPB	3020758	CHLORO BENZENE-D5	30.34
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 2,6-dimethyl-	112396	002051-30-1	83
2	Decane, 2,6,7-trimethyl-	16475	062108-25-2	83
3	Nonane, 3-methyl-	16406	005911-04-6	78
4	Octane, 3,6-dimethyl-	17112	015869-94-0	72
5	Nonane, 3-methyl-	112310	005911-04-6	72

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Peak Number 40

Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD		R.T.
42.40	610.53 PPB	19919805	CHLOROBENZENE-D5		30.34
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Tridecane		112308	000629-50-5	93
2	Tridecane		16403	000629-50-5	91
3	Hexadecane		112406	000544-76-3	91
4	Pentadecane		16493	000629-62-9	90
5	Hexadecane		112408	000544-76-3	90

19010206.D VAP_NP7.M Wed Jan 20 10:28:53 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010507.D

Acq On : 5 Jan 99 3:58 pm

Sample : VS006-034-S057

Misc : 50 TORR; 2 ATM

Quant Time: Jan 6 9:56 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev (Min)
1) FLUOROBENZENE	24.03	96	6373046	100.00	NG	0.10
17) CHLOROBENZENE-D5	30.39	117	2513125	100.00	NG	-0.07

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) ETHANOL	14.85	45	2936178	458.59	PPB m	100 E
3) ACETONITRILE	16.09	40	896338	88.52	PPB m	82
4) ACETONE	16.17	58	2336658	256.00	PPB m	96 E
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.65	45	111524	4.47	PPB #	86
7) 1-PROPANOL	19.36	31	434704	21.58	PPB m	97
8) PROPANENITRILE	20.00	54	1071107	72.26	PPB m	99
9) BUTANAL	0.00	72		Not Detected		
10) 2-BUTANONE	20.77	72	590600	64.04	PPB	81
11) TETRAHYDROFURAN	22.12	72	73531	8.47	PPB	92
12) 1-BUTANOL	23.55	56	1487680	171.56	PPB m	89
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.40	43	1260337	23.54	PPB	99
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.17	58	1456728	108.30	PPB m	80
19) 3-HEPTANONE	31.55	114	2966612	1134.99	PPB m	1 E
20) 2-HEPTANONE	31.62	58	5934998	321.63	PPB m	88 E
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	34.72	58	226936	9.76	PPB	84

(#) = qualifier out of range (m) = manual integration

19010507.D VAP_P7.M

Wed Jan 06 09:57:31 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010507.D

Acq On : 5 Jan 99 3:58 pm

Sample : VS006-034-S057

Misc : 50 TORR; 2 ATM

Quant Time: Jan 6 10:00 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q	Ion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.03	96		6373046	100.00	NG	0.10
20) CHLOROBENZENE-D5	30.39	117		2513125	100.00	PPB	-0.04

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85			Not Detected		
3) METHYL CHLORIDE	0.00	50			Not Detected		
4) N-BUTANE	11.55	43	17376260		507.45 PPB m	99	E
5) ETHYL CHLORIDE	0.00	64			Not Detected		
6) FREON 11	15.72	101	123759		4.05	99	
7) N-PENTANE	16.41	72	645116		209.45 PPB #	100	
8) DICHLOROMETHANE	0.00	49			Not Detected		
9) 2-METHYL-PENTANE	19.53	43	1064770		24.57 PPB #	77	
10) 1-HEXENE	20.55	56	6115718		311.77 PPB m	85	E
11) N-HEXANE	20.90	57	4416992		153.73 PPB	93	
12) CHLOROFORM	0.00	83			Not Detected		
13) BENZENE	23.53	78	372434		7.84 PPB	99	
14) CARBON TETRACHLORIDE	0.00	117			Not Detected		
15) 3-METHYL-HEXANE	23.75	43	227093		7.45 PPB m	90	
16) N-HEPTANE	24.96	57	4040624		252.60 PPB m	31	
17) TOLUENE	27.58	91	1708343		35.06 PPB	96	
18) N-OCTANE	28.60	57	857858		68.74 PPB m	94	
19) TETRACHLOROETHYLENE	0.00	166			Not Detected		
21) CHLOROBENZENE	0.00	112			Not Detected		
22) ETHYLBENZENE	0.00	91			Not Detected		
23) M,P-XYLENE	0.00	91			Not Detected		
24) STYRENE	0.00	104			Not Detected		
25) N-NONANE	31.94	43	1304862		83.13 PPB	94	
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83			Not Detected		
27) O-XYLENE	0.00	91			Not Detected		
28) N-DECANE	35.00	43	1568154		113.18 PPB	98	
29) 1,2,4-TRIMETHYLBENZENE	0.00	105			Not Detected		

(#)= qualifier out of range (m)= manual integration

19010507.D VAP_NP7.M Wed Jan 06 10:01:14 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010706.D

Vial: 1

Acq On : 7 Jan 99 2:06 pm

Operator: M. STAUFFER

Sample : VS006-034-S057-2; SEC. DIL.

Inst : 5972 - MS

Misc : 50 TORR

Multiplr: 48.00

Quant Time: Jan 7 17:38 1999

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev (Min)
1) FLUOROBENZENE	24.04	96	5284954	100.00	NG	0.11
17) CHLOROBENZENE-D5	30.41	117	3274696	100.00	NG	-0.05

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) ETHANOL	14.91	45	103426	467.51 PPB m	100
3) ACETONITRILE	0.00	40		Not Detected	
4) ACETONE	16.19	58	132007	418.55 PPB m	1
5) FURAN	0.00	68		Not Detected	
6) 2-PROPANOL	16.72	45	28835	33.45 PPB	93
7) 1-PROPANOL	19.40	31	23592	33.89 PPB	98
8) PROPANENITRILE	20.03	54	32004	62.49 PPB m	99
9) BUTANAL	0.00	72		Not Detected	
10) 2-BUTANONE	20.79	72	20504	64.35 PPB	87
11) TETRAHYDROFURAN	22.18	72	1941	6.47 PPB #	19
12) 1-BUTANOL	23.54	56	62191	207.56 PPB m	98
13) BUTANENITRILE	0.00	41		Not Detected	
14) 2-PENTANONE	24.42	43	40070	21.66 PPB	96
15) 1,4-DIOXANE	0.00	88		Not Detected	
16) 4-METHYL-2-PENTANONE	26.43	100	994	6.49 PPB #	50
18) 2-HEXANONE	28.18	58	73611	100.79 PPB m	77
19) 3-HEPTANONE	31.48	114	341575	2406.98 PPB	87
20) 2-HEPTANONE	31.60	58	479533	478.64 PPB	100
21) CYCLOHEXANONE	0.00	98		Not Detected	
22) 2-OCTANONE	34.74	58	17683	14.01 PPB	83

(#) = qualifier out of range (m) = manual integration

19010706.D VAP_P7.M

Thu Jan 07 17:38:46 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010706.D
 Acq On : 7 Jan 99 2:06 pm
 Sample : VS006-034-S057-2; SEC. DIL.
 Misc : 50 TORR
 Quant Time: Jan 7 17:29 1999

Vial: 1
 Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD-CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.04	96	5284954	100.00	NG	0.11
20) CHLOROBENZENE-D5	30.41	117	3274696	100.00	PPB	-0.02

System Monitoring Compounds

%Recovery

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.54	43	1018181	860.56	PPB	99
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.73	101	4788	4.53		99
7) N-PENTANE	16.42	72	25096	235.81	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.55	43	44911	29.99	PPB #	70
10) 1-HEXENE	20.55	56	289692	427.40	PPB #	67
11) N-HEXANE	20.91	57	179798	181.11	PPB #	80
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.55	78	15419	9.39	PPB	96
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.67	43	15356	14.58	PPB	93
16) N-HEPTANE	24.96	57	543122	982.67	PPB #	78
17) TOLUENE	27.61	91	108883	64.67	PPB	95
18) N-OCTANE	28.61	57	62470	144.88	PPB m	79
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	31.20	91	4922	4.45	PPB	91
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.95	43	75365	88.43	PPB	88
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	32.04	91	2904	2.59	PPB	89
28) N-DECANE	35.02	43	93847	124.75	PPB	94
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19010706.D VAP_NP7.M Thu Jan 07 17:32:03 1999

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TIC: 19010507.D

VS006-034-S057

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.119	rBB	0.127	10488195	7.065	7.193
2	9.141	rBB	0.167	1609441	9.074	9.242
3	9.858	rBB	0.181	904174	9.784	9.965
4	10.990	rBB	0.208	1150396	10.943	11.150
5	11.271	rBB	0.281	42540465	11.150	11.432
6	11.552	rBB	0.362	35102565	11.452	11.813
7	12.209	rBB	0.167	3929257	12.135	12.302
8	12.664	rBB	0.161	3508811	12.584	12.744
9	12.925	rBB	0.194	7911160	12.825	13.019
10	14.854	rBB	0.315	9902862	14.747	15.061
11	15.142	rBB	0.161	1897741	15.061	15.222
12	16.006	rBB	0.114	12196595	15.945	16.059
13	16.086	rBB	0.060	822793	16.059	16.119
14	16.173	rBB	0.114	8344725	16.119	16.233
15	16.414	rBB	0.214	20515340	16.294	16.508
16	16.910	rBB	0.194	3459831	16.809	17.003
17	17.265	rBB	0.087	1308695	17.211	17.298
18	17.338	rBB	0.100	2556255	17.298	17.399
19	18.303	rBB	0.167	1100846	18.229	18.396
20	19.053	rBB	0.221	2588726	18.939	19.160
21	19.528	rBB	0.134	3241285	19.461	19.595
22	19.997	rBB	0.134	2057811	19.923	20.057
23	20.546	rBB	0.268	33283376	20.432	20.700
24	20.767	rBB	0.127	3985665	20.700	20.827
25	20.901	rBB	0.127	16691010	20.834	20.961
26	21.095	rBB	0.107	1086330	21.048	21.156
27	21.196	rBB	0.087	2123136	21.156	21.243
28	21.598	rBB	0.127	2446909	21.537	21.665
29	21.859	rBB	0.080	1250969	21.819	21.899
30	22.053	rBB	0.074	935451	22.006	22.080
31	22.113	rBB	0.114	882204	22.080	22.194
32	23.433	rBB	0.100	1008786	23.379	23.479
33	23.546	rBB	0.121	5891834	23.479	23.600
34	23.647	rBB	0.094	959195	23.600	23.694
35	23.814	rBB	0.060	1256232	23.781	23.841
36	23.868	rBB	0.074	1512901	23.841	23.915
37	24.029	rBB	0.167	13099723	23.928	24.095
38	24.236	rBB	0.087	894149	24.189	24.276
39	24.397	rBB	0.107	2122399	24.343	24.450
40	24.497	rBB	0.100	1169358	24.450	24.551
41	24.611	rBB	0.134	14968820	24.551	24.685
42	24.765	rBB	0.121	3921575	24.698	24.819
43	24.986	rBB	0.174	71455029	24.879	25.053
44	25.120	rBB	0.121	35468441	25.053	25.174
45	25.254	rBB	0.134	51638033	25.174	25.308
46	25.569	rBB	0.141	42225949	25.502	25.642
47	25.817	rBB	0.228	10212437	25.723	25.951
48	26.004	rBB	0.114	998187	25.951	26.064
49	26.379	rBB	0.167	1009655	26.292	26.460
50	26.714	rBB	0.114	1029464	26.667	26.781
51	26.835	rBB	0.094	862225	26.781	26.875
52	27.082	rBB	0.254	17598076	26.948	27.203
53	27.384	rBB	0.147	1793346	27.283	27.431
54	27.578	rBB	0.100	9129642	27.524	27.625
55	27.692	rBB	0.121	25597025	27.625	27.745
56	27.792	rBB	0.047	1379392	27.752	27.799

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57	27.832	rBB	0.080	7932198	27.799	27.879
58	28.174	rBB	0.074	3793245	28.127	28.201
59	28.254	rBB	0.121	22653332	28.201	28.321
60	28.489	rBB	0.114	1037857	28.415	28.529
61	28.596	rBB	0.221	20072928	28.529	28.750
62	28.803	rBB	0.141	2077764	28.750	28.890
63	28.951	rBB	0.121	6173883	28.890	29.011
64	29.078	rBB	0.161	3207302	29.011	29.172
65	29.774	rBB	0.094	1091863	29.728	29.821
66	x30.391	rBB	0.161	6808088	30.330	30.491
67	30.933	rBB	0.087	1244841	30.879	30.967
68	31.033	rBB	0.134	24865243	30.967	31.100
69	31.234	rBB	0.127	1391287	31.161	31.288
70	31.342	rBB	0.114	3515142	31.288	31.402
71	31.529	rBB	0.167	56937042	31.409	31.576
72	31.630	rBB	0.127	20966741	31.576	31.703
73	31.743	rBB	0.087	2928209	31.703	31.790
74	31.938	rBB	0.114	5278725	31.884	31.998
75	32.755	rBB	0.174	5144570	32.647	32.822
76	32.862	rBB	0.094	976352	32.822	32.915
77	33.089	rBB	0.228	11876139	32.922	33.150
78	33.230	rBB	0.147	13461239	33.150	33.297
79	33.364	rBB	0.127	12837618	33.297	33.424
80	33.659	rBB	0.214	14754027	33.558	33.773
81	33.953	rBB	0.094	807337	33.913	34.007
82	34.201	rBB	0.181	3027049	34.127	34.308
83	34.402	rBB	0.154	2599745	34.308	34.462
84	35.005	rBB	0.147	6561942	34.951	35.099
85	35.353	rBB	0.241	10389402	35.259	35.500
86	35.695	rBB	0.114	2407056	35.634	35.748
87	35.815	rBB	0.167	8762559	35.748	35.916
88	36.317	rBB	0.141	800375	36.257	36.398
89	37.375	rBB	0.188	2027636	37.288	37.476
90	37.623	rBB	0.161	845574	37.563	37.724
91	37.844	rBB	0.114	9121668	37.791	37.905
92	38.152	rBB	0.134	1522543	38.065	38.199
93	38.768	rBB	0.161	940951	38.681	38.842
94	39.190	rBB	0.127	1047925	39.130	39.257
95	39.559	rBB	0.134	957864	39.485	39.619
96	40.490	rBB	0.181	19665075	40.402	40.583
97	40.824	rBB	0.134	3125489	40.757	40.891
98	41.983	rBB	0.154	3354922	41.916	42.070
99	42.432	rBB	0.100	23886858	42.378	42.478
100	43.811	rBB	0.141	4938421	43.764	43.905

Library Search Compound Report

Data File : D:\C106\19010507.D
 Acq Time : 5 Jan 99 3:58 pm Operator: M. STAUFFER
 Sample : VS006-034-S057 Inst : 5972 - MS
 Misc : 50 TORR; 2 ATM Multiplr: 2.00
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

 Peak Number 1 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
7.12	160.13 PPB	10488195	FLUOROBENZENE	24.03
Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1	Propene	108457	000115-07-1	86
2	Cyclopropane	108993	000075-19-4	80
3	Cyclopropane	108992	000075-19-4	72
4	Propene	1533	000115-07-1	47
5	Cyclopropane	3264	000075-19-4	37

 Peak Number 2 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
11.27	649.49 PPB	42540465	FLUOROBENZENE	24.03
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108672	000106-98-9	87
2	1-Propene, 2-methyl-	108669	000115-11-7	87
3	1-Propene, 2-methyl-	108463	000115-11-7	87
4	1-Butene	108673	000106-98-9	83
5	1-Butene	108671	000106-98-9	83

 Peak Number 3 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
12.93	120.78 PPB	7911160	FLUOROBENZENE	24.03
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Butene	108671	000106-98-9	87
4	1-Propene, 2-methyl-	108463	000115-11-7	83
5	1-Propene, 2-methyl-	108669	000115-11-7	80

 Peak Number 4 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
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14.85 151.19 PPB 9902862 FLUOROBENZENE 24.03

Hit# of 3 Tentative ID Ref# CAS# Qual

1 Ethanol	108332	000064-17-5	90
2 Ethanol	1076	000064-17-5	90
3 Ethanol	108331	000064-17-5	83

Peak Number 5 Rank in Relative Concentration 22

R.T. Conc Area Relative to ISTD R.T.

16.01 186.21 PPB 12196595 FLUOROBENZENE 24.03

Hit# of 20 Tentative ID Ref# CAS# Qual

1 1-Pentene	109030	000109-67-1	90
2 1-Pentene	109032	000109-67-1	86
3 1-Pentene	109031	000109-67-1	86
4 Cyclopentane	109034	000287-92-3	78
5 1-Pentene	3426	000109-67-1	78

Peak Number 6 Rank in Relative Concentration 29

R.T. Conc Area Relative to ISTD R.T.

16.17 127.40 PPB 8344725 FLUOROBENZENE 24.03

Hit# of 3 Tentative ID Ref# CAS# Qual

1 Acetone	109727	000067-64-1	80
2 Acetone	109703	000067-64-1	56
3 Acetone	5734	000067-64-1	56

Peak Number 7 Rank in Relative Concentration 21

R.T. Conc Area Relative to ISTD R.T.

24.61 228.54 PPB 14968820 FLUOROBENZENE 24.03

Hit# of 20 Tentative ID Ref# CAS# Qual

1 1-Heptene	2183	000592-76-7	94
2 1-Heptene	111846	000592-76-7	91
3 1-Heptene	111847	000592-76-7	91
4 1-Heptene	108660	000592-76-7	87
5 1-Heptene	108686	000592-76-7	81

Peak Number 8 Rank in Relative Concentration 11

R.T. Conc Area Relative to ISTD R.T.

25.12 541.51 PPB 35468441 FLUOROBENZENE 24.03

Hit# of 20 Tentative ID Ref# CAS# Qual

1

1	3-Heptene	108688	000592-78-9	96
2	(Z)-3-Heptene	108691	007642-10-6	94
3	3-Heptene, (E)-	108689	014686-14-7	94
4	(Z)-3-Heptene	2213	007642-10-6	94
5	2-Heptene	108687	000592-77-8	94

 Peak Number 9 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
25.25	788.38 PPB	51638033	FLUOROBENZENE	24.03
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene, (E)-	13656	014686-13-6	95
4	2-Heptene	108605	000592-77-8	94
5	2-Heptene	2208	000592-77-8	80

 Peak Number 10 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
25.57	644.68 PPB	42225949	FLUOROBENZENE	24.03
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene	108605	000592-77-8	95
4	3-Heptene	108688	000592-78-9	94
5	2-Heptene, (E)-	13656	014686-13-6	90

 Peak Number 11 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
25.82	155.92 PPB	10212437	FLUOROBENZENE	24.03
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, butyl-	1931	000930-57-4	90
2	2H-Pyran-2-one, tetrahydro-3,6-dime	109044	003720-22-7	59
3	Cyclopentane, 1,3-dimethyl-	114428	002453-00-1	53
4	Cyclopentane, 1,2-dimethyl-, cis-	23919	001192-18-3	53
5	Hexane, 2-chloro-	1457	000638-28-8	53

 Peak Number 12 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
27.08	268.68 PPB	17598076	FLUOROBENZENE	24.03

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
2	3,4-Heptadiene	31430	002454-31-1	72
3	2-Cyclopenten-1-one, 2-methyl-	21588	001120-73-6	72
4	Furan, 2,4-dimethyl-	41734	003710-43-8	72
5	Furan, 2,4-dimethyl-	118263	003710-43-8	72

 Peak Number 13 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
27.69	751.96 PPB	25597025	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	5681	000589-81-1	91
2	Heptane, 3-methyl-	109689	000589-81-1	87
3	Heptane, 3,4,5-trimethyl-	110075	020278-89-1	64
4	Hexane, 2,4-dimethyl-	5467	000589-43-5	58
5	Hexane, 2,4-dimethyl-	109577	000589-43-5	53

 Peak Number 14 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
27.83	233.02 PPB	7932198	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	116095	001119-65-9	95
2	2-Heptyne	116025	001119-65-9	90
3	2-Heptyne	31411	001119-65-9	90
4	1,4-Heptadiene	31572	005675-22-9	60
5	Cyclohexene, 4-methyl-	31569	000591-47-9	59

 Peak Number 15 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
28.17	111.43 PPB	3793245	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	109711	000591-78-6	90
2	2-Hexanone	109712	000591-78-6	87
3	2-Hexanone	5779	000591-78-6	87
4	2-Hexanone, 4-hydroxy-3-propyl-	5739	062338-17-4	83
5	Oxirane, 2-methyl-2-(1-methylethyl)	5754	072221-03-5	64

 Peak Number 16 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
28.25	665.48 PPB	22653332	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methylene-	114415	001632-16-2	87
2	Heptane, 3-methylene-	114416	001632-16-2	78
3	Heptane, 3-methylene-	23862	001632-16-2	78
4	Cyclopentane, 1,2,4-trimethyl-, (1.	23858	004850-28-6	72
5	Nonane, 3-methylene-	23869	051655-64-2	72

Peak Number 17 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
28.80	61.04 PPB	2077764	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Octene, (Z)-	111303	007642-04-8	93
2	3-Octene, (Z)-	108606	014850-22-7	87
3	4-Octene, (E)-	111302	014850-23-8	72
4	2-Octene, (E)-	12956	013389-42-9	72
5	2-Octene, (E)-	111295	013389-42-9	70

Peak Number 18 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
28.95	181.37 PPB	6173883	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, 3-methyl-	23868	003404-75-9	95
2	Hexane, 2-methyl-4-methylene-	23848	003404-80-6	90
3	Hexane, 2-methyl-4-methylene-	114420	003404-80-6	83
4	Heptane, 3-methylene-	114416	001632-16-2	72
5	Heptane, 3-methylene-	111568	001632-16-2	72

Peak Number 19 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
29.08	94.22 PPB	3207302	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	87
2	4-Octene, (E)-	13070	014850-23-8	83
3	2-Octene	111287	000111-67-1	83
4	3-Octene, (E)-	108600	014919-01-8	83
5	4-Octene, (E)-	111302	014850-23-8	83

Peak Number 20 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.03 730.46 PPB 24865243 CHLOROBENZENE-D5 30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Heptanone		109874	000123-19-3	91
2 4-Heptanone		114577	000123-19-3	91
3 3-Hexanone, 2-methyl-		6315	007379-12-6	78
4 3-Pentanone, 2,4-dimethyl-		109869	000565-80-0	72
5 4-Heptanone		109855	000123-19-3	72

 Peak Number 21 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
31.34	103.26 PPB	3515142	CHLOROBENZENE-D5	30.39

Hit# of 10	Tentative ID	Ref#	CAS#	Qual
1 n-Butyl ether		15788	000142-96-1	72
2 n-Butyl ether		112208	000142-96-1	64
3 n-Butyl ether		112037	000142-96-1	42
4 Propane, 2-[(1,1-dimethylethyl)sulf		15759	001866-75-5	40
5 Pentane, 1-butoxy-		16488	018636-66-3	39

 Peak Number 22 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
31.53	1672.63 PPB	56937042	CHLOROBENZENE-D5	30.39

Hit# of 19	Tentative ID	Ref#	CAS#	Qual
1 3-Heptanone		112010	000106-35-4	91
2 3-Heptanone		15594	000106-35-4	78
3 3-Heptanone		112011	000106-35-4	72
4 3-Heptanone		112074	000106-35-4	64
5 2-Hexanone, 5-methyl-		17303	000623-56-3	64

 Peak Number 23 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
31.63	615.94 PPB	20966741	CHLOROBENZENE-D5	30.39

Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1 2-Heptanone		109740	000110-43-0	90
2 2-Heptanone		5736	000110-43-0	90
3 2-Heptanone		109741	000110-43-0	86
4 2-Heptanone		109709	000110-43-0	58
5 2-Hexanone, 5-methyl-		109729	000110-12-3	56

 Peak Number 24 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.74	86.02 PPB	2928209	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanol	19637	000589-82-2	90
2	3-Hexanol, 5-methyl-	113293	000623-55-2	72
3	3-Heptanol	113289	000589-82-2	64
4	3-Heptanol	113288	000589-82-2	64
5	Propane, 2-ethoxy-2-methyl-	19731	000637-92-3	59

Peak Number 25 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
32.75	151.13 PPB	5144570	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	50
2	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	47
3	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	40
4	Thiazole, 5-methyl-	51053	001121-07-9	32
5	2-Oxepanone, 4-methyl-	15310	1000196-99-7	38

Peak Number 26 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
33.09	348.88 PPB	11876139	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	64
3	Hexanoic acid, anhydride	118546	002051-49-2	53
4	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	53
5	Hexanoic acid, anhydride	43066	002051-49-2	53

Peak Number 27 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
33.23	395.45 PPB	13461239	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	53
2	2-Pyrrolidinone, 1-methyl-	43090	000872-50-4	47
3	2,2'-Bioxepane	43236	074793-02-5	53
4	Furan, tetrahydro-2,2-dimethyl-5-(1	32021	033978-70-0	45
5	Hexanoic acid, anhydride	118546	002051-49-2	42

Peak Number 28 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
33.36	377.13 PPB	12837618	CHLORO BENZENE-D5	30.39
Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	3,3-Diethoxy-1-propyne	32833	010160-87-9	59
2	1H-1,2,4-Triazole, 3-propyl-	33272	019932-60-6	53
3	3-Penten-2-one, 4-methyl-	116425	000141-79-7	53
4	3-(Butylamino)propionitrile	116379	000693-51-6	47
5	Cyclopropane, 1,1,2,2-tetramethyl-	111640	004127-47-3	42

Peak Number 29 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
33.66	433.43 PPB	14754027	CHLORO BENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,5-Octadien-2-ol	13586	1000132-14-0	59
2	3-Hepten-2-one, 3-methyl-	14650	039899-08-6	50
3	4-Amino-6-hydroxypyrimidine	50272	001193-22-2	49
4	Benzenamine, 2-fluoro-	120100	000348-54-9	47
5	cis-4-Nonene	111306	010405-85-3	35

Peak Number 30 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
34.20	88.93 PPB	3027049	CHLORO BENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octanone	109631	000589-63-9	86
2	4-Octanone	109634	000589-63-9	83
3	Cyclohexane, 1,1,2,3-tetramethyl-	22348	006783-92-2	50
4	4-Octanone	109632	000589-63-9	46
5	4-Octanone	5601	000589-63-9	42

Peak Number 31 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
34.40	76.37 PPB	2599745	CHLORO BENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	116270	000629-08-3	90
2	Heptanenitrile	108877	000629-08-3	64
3	Heptanenitrile	108876	000629-08-3	64
4	Azeleoneitrile	2780	001675-69-0	53
5	Heptanenitrile	108875	000629-08-3	45

Peak Number 32 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
35.35	305.21 PPB	10389402	CHLOROBENZENE-D5	30.39
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	5-Hexen-1-ol	111145	000821-41-0	40
3	Hexanenitrile	108570	000628-73-9	36
4	1,8-Nonadiene	2340	004900-30-5	36
5	1,2-Nonadiene	12691	022433-33-6	33

 Peak Number 33 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
35.69	70.71 PPB	2407056	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	109904	002847-72-5	90
2	Decane, 4-methyl-	6376	002847-72-5	90
3	Heptane, 3,3,5-trimethyl-	114596	007154-80-5	72
4	Dodecane, 4-methyl-	5607	006117-97-1	64
5	Octane, 2,3,7-trimethyl-	16473	062016-34-6	64

 Peak Number 34 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
35.82	257.42 PPB	8762559	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	90
2	1-Hexanol, 2-ethyl-	112165	000104-76-7	80
3	1-Hexanol, 2-ethyl-	112147	000104-76-7	74
4	2-Propyl-1-pentanol	15895	058175-57-8	53
5	1-Hexanol, 2-ethyl-	15889	000104-76-7	53

 Peak Number 35 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
37.84	267.97 PPB	9121668	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	109663	001120-21-4	93
2	Undecane	16533	001120-21-4	91
3	Tetradecane	112357	000629-59-4	90
4	Tridecane	112309	000629-50-5	90
5	Undecane	112395	001120-21-4	87

Peak Number 36

Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
40.49	577.70 PPB	19665075	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	109555	000112-40-3	87
2	Hexadecane	112408	000544-76-3	86
3	Dodecane	16262	000112-40-3	76
4	Dodecane	112317	000112-40-3	76
5	Pentadecane	16493	000629-62-9	72

Peak Number 37 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
40.82	91.82 PPB	3125489	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 6-methyl-	16443	006044-71-9	96
2	Undecane, 2,6-dimethyl-	17111	017301-23-4	95
3	Undecane, 2,6-dimethyl-	112404	017301-23-4	86
4	Undecane, 3,6-dimethyl-	16435	017301-28-9	81
5	Decane, 2,6,8-trimethyl-	16481	062108-26-3	64

Peak Number 38 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
41.98	98.56 PPB	3354922	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 2,6-dimethyl-	112396	002051-30-1	83
2	Nonane, 3-methyl-	112310	005911-04-6	78
3	Octane, 3,6-dimethyl-	17112	015869-94-0	72
4	Decane, 3,6-dimethyl-	16418	017312-53-7	72
5	Undecane, 6,6-dimethyl-	17116	017312-76-4	72

Peak Number 39 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
42.43	701.72 PPB	23886858	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	112308	000629-50-5	94
2	Tridecane	112309	000629-50-5	94
3	Tridecane	16403	000629-50-5	91
4	Heptadecane	112319	000629-78-7	91
5	Undecane	16533	001120-21-4	90

Peak Number 40 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
43.81	145.08	4938421	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	112357	000629-59-4	96
2	Tetradecane	112356	000629-59-4	94
3	Hexadecane	112408	000544-76-3	91
4	Tetradecane	16474	000629-59-4	90
5	Tridecane	16403	000629-50-5	90

19010507.D VAP_NP7.M Wed Jan 20 10:34:00 1999

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010507.D
 Acq On : 5 Jan 99 3:58 pm
 Sample : VS006-034-S057
 Misc : 50 TORR; 2 ATM
 Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Vial: 1
 Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
11.27	649.49 PPB	42540465	FLUOROBENZENE	24.03
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108672	000106-98-9	87
2	1-Propene, 2-methyl-	108669	000115-11-7	87
3	Cyclobutane	107955	000287-23-0	80

 Peak Number 2 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
25.12	541.51 PPB	35468441	FLUOROBENZENE	24.03
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	108688	000592-78-9	96
2	(Z)-3-Heptene	108691	007642-10-6	94
3	2-Heptene	108687	000592-77-8	94

 Peak Number 3 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
25.25	788.38 PPB	51638033	FLUOROBENZENE	24.03
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	3-Heptene, (E)-	108689	014686-14-7	74

 Peak Number 4 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
25.57	644.68 PPB	42225950	FLUOROBENZENE	24.03
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96

3 3-Heptene

108688 000592-78-9 94

 Peak Number 5 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
27.08	268.68 PPB	17598076	FLUOROBENZENE	24.03

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
2	Furan, 2,4-dimethyl-	118263	003710-43-8	72
3	3,4-Heptadiene	31430	002454-31-1	72

 Peak Number 6 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
27.69	751.96 PPB	25597025	CHLOROBENZENE-D5	30.39

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	5681	000589-81-1	91
2	Heptane, 3,4,5-trimethyl-	110075	020278-89-1	64
3	Hexane, 2,4-dimethyl-	5467	000589-43-5	58

 Peak Number 7 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
27.83	233.02 PPB	7932198	CHLOROBENZENE-D5	30.39

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	116095	001119-65-9	95
2	1,4-Heptadiene	31572	005675-22-9	60
3	Cyclohexene, 4-methyl-	31569	000591-47-9	59

 Peak Number 8 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
28.25	665.48 PPB	22653332	CHLOROBENZENE-D5	30.39

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methylene-	114415	001632-16-2	87
2	1,2-Oxaborolane, 2-ethyl-4,5-dimeth	23877	074685-45-3	72
3	Octane, 3-methyl-6-methylene-	23865	074630-07-2	72

 Peak Number 9 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
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 31.03 730.46 PPB 24865244 CHLOROBENZENE-D5 30.39

Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone		109874	000123-19-3	91
2	3-Hexanone, 2-methyl-		6315	007379-12-6	78
3	3-Pentanone, 2,4-dimethyl-		109869	000565-80-0	72

 Peak Number 10 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
31.53	1672.63 PPB	56937043	CHLOROBENZENE-D5	30.39

Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone		112010	000106-35-4	91
2	3-Hexanone, 5-methyl-		17303	000623-56-3	64
3	2-Propen-1-ol, 2-methyl-		15716	000513-42-8	49

 Peak Number 11 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
31.63	615.94 PPB	20966741	CHLOROBENZENE-D5	30.39

Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone		5736	000110-43-0	90
2	2-Hexanone, 4-methyl-		5737	000105-42-0	56
3	2-Hexanone, 5-methyl-		109729	000110-12-3	56

 Peak Number 12 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
33.09	348.88 PPB	11876140	CHLOROBENZENE-D5	30.39

Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane		43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol		118582	002888-11-1	64
3	Hexanoic acid, anhydride		43066	002051-49-2	53

 Peak Number 13 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
33.23	395.45 PPB	13461240	CHLOROBENZENE-D5	30.39

Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	1,3,2-Dioxaborolane, 2,4-diethyl-		43307	057633-63-3	53
2	2,2'-Bioxepane		43236	074793-02-5	47

3 Furan, tetrahydro-2,2-dimethyl-5- (1 32021 033978-70-0 45

 Peak Number 14 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
33.36	377.13 PPB	12837618	CHLOROBENZENE-D5	30.39

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	3,3-Diethoxy-1-propyne	32833	010160-87-9	59
2	1H-1,2,4-Triazole, 3-propyl-	33272	019932-60-6	53
3	3-Penten-2-one, 4-methyl-	116425	000141-79-7	53

 Peak Number 15 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
33.66	433.43 PPB	14754028	CHLOROBENZENE-D5	30.39

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	3,5-Octadien-2-ol	13586	1000132-14-0	59
2	3-Hepten-2-one, 3-methyl-	14650	039899-08-6	50
3	Cyclohexane, 1,4-dimethyl-2-octadec	50284	055282-02-5	50

 Peak Number 16 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
35.35	305.21 PPB	10389402	CHLOROBENZENE-D5	30.39

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	Hexanenitrile	108570	000628-73-9	36
3	1,2-Nonadiene	12691	022433-33-6	33

 Peak Number 17 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
35.82	257.42 PPB	8762559	CHLOROBENZENE-D5	30.39

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	90
2	2-Propyl-1-pentanol	15895	058175-57-8	53
3	Heptane, 1,1'-oxybis-	17017	000629-64-1	50

 Peak Number 18 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
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 37.84 267.97 PPB 9121669 CHLOROBENZENE-D5 30.39

Hit# of 3 Tentative ID Ref# CAS# Qual

 1 Undecane 109663 001120-21-4 93
 2 Tridecane 112309 000629-50-5 90
 3 Tetradecane 112357 000629-59-4 90

 Peak Number 19 Rank in Relative Concentration 10

R.T. Conc Area Relative to ISTD R.T.

 40.49 577.70 PPB 19665076 CHLOROBENZENE-D5 30.39

Hit# of 3 Tentative ID Ref# CAS# Qual

 1 Dodecane 109555 000112-40-3 87
 2 Hexadecane 112408 000544-76-3 86
 3 Pentadecane 16493 000629-62-9 72

 Peak Number 20 Rank in Relative Concentration 5

R.T. Conc Area Relative to ISTD R.T.

 42.43 701.72 PPB 23886859 CHLOROBENZENE-D5 30.39

Hit# of 3 Tentative ID Ref# CAS# Qual

 1 Tridecane 112308 000629-50-5 94
 2 Heptadecane 112319 000629-78-7 91
 3 Undecane 16533 001120-21-4 90

 19010507.D VAP_NP7.M Tue Jan 12 08:00:59 1999

File : C:\HPCHEM\1\DATA\19010505.D
Operator : G. FIES
Acquired : 5 Jan 99 1:31 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-041-S074
Misc Info : 50 TORR; 2 ATM
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010505.D

Acq On : 5 Jan 99 1:31 pm

Sample : VS006-041-S074

Misc : 50 TORR; 2 ATM

Quant Time: Jan 5 14:57 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	6170696	100.00	NG	0.09
17) CHLOROBENZENE-D5	30.39	117	2344531	100.00	NG	-0.07

System Monitoring Compounds

%Recovery

Target Compounds

Target Compounds						Qvalue
2) ETHANOL	14.85	45	2808131	452.98	PPB m	100 E
3) ACETONITRILE	16.08	40	779007	79.09	PPB m	87
4) ACETONE	16.17	58	2089003	236.37	PPB m	98
5) FURAN	0.00	68			Not Detected	
6) 2-PROPANOL	16.64	45	104413	4.32	PPB #	91
7) 1-PROPANOL	19.35	31	518524	26.58	PPB	99
8) PROPANENITRILE	19.99	54	927493	64.62	PPB m	99
9) BUTANAL	0.00	72			Not Detected	
10) 2-BUTANONE	20.76	72	520839	58.33	PPB	80
11) TETRAHYDROFURAN	22.12	72	53691	6.39	PPB	79
12) 1-BUTANOL	23.54	56	1305320	155.46	PPB m	89
13) BUTANENITRILE	0.00	41			Not Detected	
14) 2-PENTANONE	24.39	43	1164060	22.45	PPB	99
15) 1,4-DIOXANE	0.00	88			Not Detected	
16) 4-METHYL-2-PENTANONE	0.00	100			Not Detected	
18) 2-HEXANONE	28.17	58	1339843	106.77	PPB m	73
19) 3-HEPTANONE	31.50	114	3041005	1247.12	PPB m	1 E
20) 2-HEPTANONE	31.62	58	6184163	359.23	PPB m	87 E
21) CYCLOHEXANONE	0.00	98			Not Detected	
22) 2-OCTANONE	34.71	58	290974	13.42	PPB	89

(#) = qualifier out of range (m) = manual integration
 19010505.D VAP_P7.M Tue Jan 05 14:57:47 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010505.D

Acq On : 5 Jan 99 1:31 pm

Sample : VS006-041-S074

Misc : 50 TORR; 2 ATM

Quant Time: Jan 5 14:49 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI on	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	6170696	100.00	NG	0.09
20) CHLOROBENZENE-D5	30.39	117	2344531	100.00	PPB	-0.04

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.56	43	15018672	452.99	PPB	99 E
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.71	101	115446	3.90		98
7) N-PENTANE	16.41	72	559649	187.66	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.53	43	885423	21.10	PPB #	78
10) 1-HEXENE	20.54	56	5460265	287.48	PPB	84 E
11) N-HEXANE	20.90	57	3847372	138.30	PPB	92
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.52	78	328147	7.13	PPB	99
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.64	43	321480	10.89	PPB	91
16) N-HEPTANE	24.95	57	3177056	205.13	PPB m	84
17) TOLUENE	27.59	91	1498315	31.76	PPB	96
18) N-OCTANE	28.60	57	695949	57.60	PPB m	93
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.93	43	1150212	78.55	PPB	94
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	35.01	43	1540877	119.21	PPB	99
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19010505.D VAP_NP7.M Tue Jan 05 14:52:28 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010707.D

Acq On : 7 Jan 99 3:04 pm

Sample : VS006-041-S074-2; SEC. DIL.

Misc : 50 TORR

Quant Time: Jan 11 10:30 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.05	96	5362572	100.00	NG	0.12
17) CHLOROBENZENE-D5	30.41	117	3260433	100.00	NG	-0.05

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.95	45	91766	408.80	PPB m	100
3) ACETONITRILE	0.00	40		Not Detected		
4) ACETONE	16.20	58	109642	342.61	PPB m	87
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	0.00	45		Not Detected		
7) 1-PROPANOL	19.41	31	18354	25.99	PPB #	93
8) PROPANENITRILE	20.03	54	26237	50.49	PPB m	96
9) BUTANAL	20.61	72	9509	44.98	PPB m	81
10) 2-BUTANONE	20.80	72	18444	57.05	PPB m	92
11) TETRAHYDROFURAN	22.17	72	1682	5.53	PPB #	5
12) 1-BUTANOL	23.55	56	59905	197.04	PPB m	96
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.42	43	36567	19.48	PPB	96
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.19	58	66248	91.11	PPB m	75
19) 3-HEPTANONE	31.48	114	312597	2212.42	PPB	86
20) 2-HEPTANONE	31.60	58	423450	424.51	PPB	100
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	34.73	58	16380	13.03	PPB m	80

(#) = qualifier out of range (m) = manual integration
 19010707.D VAP_P7.M Mon Jan 11 10:31:10 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010707.D
 Acq On : 7 Jan 99 3:04 pm
 Sample : VS006-041-S074-2; SEC. DIL.
 Misc : 50 TORR
 Quant Time: Jan 11 10:09 1999

Vial: 1
 Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.05	96	5362572	100.00	NG	0.12
20) CHLOROBENZENE-D5	30.41	117	3260433	100.00	PPB	-0.02

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	11.54	43	831304	692.45 PPB	99
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.72	101	4249	3.96	97
7) N-PENTANE	16.42	72	21003	194.49 PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	19.55	43	36308	23.89 PPB #	71
10) 1-HEXENE	20.55	56	252735	367.48 PPB #	68
11) N-HEXANE	20.91	57	158188	157.03 PPB #	79
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	23.55	78	14077	8.45 PPB	95
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	24.02	43	13063	12.22 PPB #	22
16) N-HEPTANE	24.96	57	487755	869.72 PPB #	78
17) TOLUENE	27.60	91	91624	53.63 PPB	95
18) N-OCTANE	28.61	57	56221	128.50 PPB m	79
19) TETRACHLOROETHYLENE	29.20	166	1725	2.52 PPB	93
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	31.21	91	4954	4.50 PPB	91
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	31.95	43	67934	80.06 PPB m	3
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	32.04	91	3121	2.80 PPB	94
28) N-DECANE	35.02	43	83012	110.83 PPB	93
29) 1,2,4-TRIMETHYLBENZENE	35.20	105	3311	3.11 PPB	99

(#) = qualifier out of range (m) = manual integration
 19010707.D VAP_NP7.M Mon Jan 11 10:13:12 1999

TIC: 19010505.D

VS006-041-S074

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.175	rBB	0.342	17049307	7.088	7.429
2	9.171	rBB	0.167	1296355	9.110	9.278
3	9.880	rBB	0.221	768253	9.793	10.014
4	10.999	rBB	0.194	1048520	10.959	11.153
5	11.280	rBB	0.261	36005030	11.153	11.414
6	11.561	rBB	0.388	30438647	11.468	11.856
7	12.211	rBB	0.194	3141460	12.137	12.332
8	12.666	rBB	0.201	2811961	12.586	12.787
9	12.934	rBB	0.201	6389481	12.827	13.028
10	14.850	rBB	0.315	9523424	14.742	15.057
11	15.144	rBB	0.154	1532246	15.077	15.231
12	16.008	rBB	0.107	9956218	15.948	16.055
13	16.169	rBB	0.121	7682489	16.115	16.236
14	16.410	rBB	0.107	11865478	16.363	16.470
15	16.906	rBB	0.181	2790762	16.805	16.986
16	17.260	rBB	0.080	1070366	17.214	17.294
17	17.334	rBB	0.100	2129519	17.294	17.394
18	18.298	rBB	0.147	1016022	18.238	18.386
19	19.055	rBB	0.201	2108557	18.948	19.149
20	19.531	rBB	0.134	2653313	19.464	19.598
21	19.993	rBB	0.127	1786286	19.926	20.053
22	20.535	rBB	0.254	29763790	20.428	20.683
23	20.756	rBB	0.134	3526516	20.689	20.823
24	20.897	rBB	0.134	14616028	20.830	20.964
25	21.091	rBB	0.107	909011	21.044	21.151
26	21.198	rBB	0.094	1791071	21.151	21.245
27	21.593	rBB	0.147	2114005	21.513	21.660
28	21.855	rBB	0.080	927046	21.814	21.895
29	22.049	rBB	0.087	1152181	22.002	22.089
30	22.136	rBB	0.107	790195	22.089	22.196
31	23.435	rBB	0.100	855584	23.375	23.475
32	23.535	rBB	0.121	5268484	23.475	23.596
33	23.643	rBB	0.094	848945	23.596	23.689
34	23.810	rBB	0.067	1251394	23.770	23.837
35	23.870	rBB	0.074	1547436	23.837	23.910
36	24.024	rBB	0.161	12537839	23.924	24.085
37	24.232	rBB	0.087	778129	24.185	24.272
38	24.393	rBB	0.107	1973251	24.339	24.446
39	24.493	rBB	0.100	1031469	24.446	24.547
40	24.607	rBB	0.134	13422250	24.547	24.681
41	24.761	rBB	0.127	3744659	24.694	24.821
42	24.982	rBB	0.167	67606034	24.875	25.042
43	25.116	rBB	0.121	33491327	25.049	25.170
44	25.243	rBB	0.127	49065052	25.170	25.297
45	25.565	rBB	0.141	39603766	25.491	25.632
46	25.806	rBB	0.228	9130148	25.719	25.946
47	25.993	rBB	0.121	866471	25.946	26.067
48	26.375	rBB	0.194	817428	26.254	26.449
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51	27.379	rBB	0.147	1548830	27.279	27.426
52	27.574	rBB	0.100	7912555	27.520	27.621
53	27.681	rBB	0.114	22840832	27.621	27.734
54	27.788	rBB	0.047	1189641	27.748	27.795
55	27.828	rBB	0.080	7242600	27.795	27.875
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57	28.250	rBB	0.121	21009872	28.197	28.317
58	28.484	rBB	0.114	890260	28.411	28.525
59	28.592	rBB	0.221	17714426	28.525	28.746
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61	28.947	rBB	0.121	5411945	28.886	29.007
62	29.074	rBB	0.161	2849810	29.007	29.168
63	29.777	rBB	0.094	1024902	29.723	29.817
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66	31.029	rBB	0.134	24229178	30.962	31.096
67	31.224	rBB	0.134	1432082	31.150	31.284
68	31.337	rBB	0.114	3227219	31.284	31.398
69	31.525	rBB	0.167	56849189	31.404	31.572
70	31.619	rBB	0.127	21303741	31.572	31.699
71	31.739	rBB	0.094	5665680	31.699	31.793
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73	32.750	rBB	0.174	4849706	32.643	32.817
74	32.858	rBB	0.094	1031113	32.817	32.911
75	33.085	rBB	0.228	11771745	32.918	33.146
76	33.226	rBB	0.147	13737331	33.146	33.293
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78	33.654	rBB	0.134	12293709	33.567	33.701
79	33.949	rBB	0.100	801137	33.909	34.009
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81	34.398	rBB	0.154	3073986	34.304	34.458
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83	35.355	rBB	0.241	12534461	35.255	35.496
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87	37.626	rBB	0.161	963748	37.559	37.719
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89	38.148	rBB	0.141	1915550	38.061	38.202
90	38.624	rBB	0.141	773540	38.537	38.677
91	38.764	rBB	0.147	1070600	38.684	38.831
92	38.891	rBB	0.114	993374	38.831	38.945
93	39.186	rBB	0.121	1033905	39.133	39.253
94	39.554	rBB	0.134	885880	39.481	39.615
95	40.485	rBB	0.181	18227907	40.398	40.579
96	40.820	rBB	0.127	2768692	40.753	40.880
97	41.979	rBB	0.161	3017468	41.912	42.072
98	42.293	rBB	0.107	1149667	42.220	42.327
99	42.427	rBB	0.100	24005248	42.374	42.474
100	43.807	rBB	0.147	6769460	43.767	43.914

Library Search Compound Report

Data File : D:\C106\19010505.D
 Acq Time : 5 Jan 99 1:31 pm
 Sample : VS006-041-S074
 Misc : 50 TORR; 2 ATM
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
7.17	271.97 PPB	17049307	FLUOROBENZENE	24.02

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1 Propene		108457	000115-07-1	86
2 Cyclopropane		108993	000075-19-4	80
3 Cyclopropane		108992	000075-19-4	72
4 Propene		1533	000115-07-1	47
5 Cyclopropene		1232	1000194-05-8	12

 Peak Number 2 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
11.28	574.34 PPB	36005030	FLUOROBENZENE	24.02

Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1 1-Butene		108672	000106-98-9	87
2 1-Propene, 2-methyl-		108669	000115-11-7	87
3 1-Butene		108673	000106-98-9	83
4 1-Butene		108671	000106-98-9	83
5 1-Propene, 2-methyl-		108463	000115-11-7	83

 Peak Number 3 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
11.56	485.55 PPB	30438647	FLUOROBENZENE	24.02

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1 Butane		109164	000106-97-8	64
2 Butane		3946	000106-97-8	52

 Peak Number 4 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
12.93	101.92 PPB	6389481	FLUOROBENZENE	24.02

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
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1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Butene	108671	000106-98-9	87
4	1-Propene, 2-methyl-	108463	000115-11-7	83
5	1-Propene, 2-methyl-	108669	000115-11-7	80

Peak Number 5 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
16.01	158.82 PPB	9956218	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene	109030	000109-67-1	91
2	1-Pentene	109032	000109-67-1	86
3	1-Pentene	109031	000109-67-1	86
4	1-Pentene	3426	000109-67-1	86
5	Cyclopentane	3292	000287-92-3	86

Peak Number 6 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
16.41	189.27 PPB	11865478	FLUOROBENZENE	24.02
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	86
2	Pentane	109386	000109-66-0	80
3	Pentane	4653	000109-66-0	78

Peak Number 7 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
20.54	474.78 PPB	29763790	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexene	111822	000592-41-6	91
2	1-Hexene	2192	000592-41-6	91
3	1-Hexene	111823	000592-41-6	91
4	1-Hexene	108674	000592-41-6	83
5	Cyclobutane, butyl-	15024	013152-44-8	83

Peak Number 8 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
20.90	233.15 PPB	14616028	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Hexane	16315	000110-54-3	91
2 Hexane	112277	000110-54-3	86
3 Hexane	112279	000110-54-3	74
4 Pentane, 2,4-dimethyl-	5552	000108-08-7	50
5 Hexane	112278	000110-54-3	42

 Peak Number 9 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
24.61	214.11 PPB	13422250	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Heptene	111847	000592-76-7	94
2	1-Heptene	2183	000592-76-7	94
3	1-Heptene	111846	000592-76-7	91
4	1-Heptene	108660	000592-76-7	87
5	1-Heptene	108686	000592-76-7	81

 Peak Number 10 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
24.98	1078.43 PPB	67606034	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	(Z)-3-Heptene	108691	007642-10-6	81
2	3-Heptene, (E)-	108689	014686-14-7	81
3	3-Heptene	108688	000592-78-9	70
4	3-Heptene, (E)-	2212	014686-14-7	62
5	3-Heptene	2209	000592-78-9	58

 Peak Number 11 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
25.12	534.24 PPB	33491327	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	108688	000592-78-9	96
2	3-Heptene, (E)-	108689	014686-14-7	95
3	3-Heptene, (E)-	2212	014686-14-7	95
4	(Z)-3-Heptene	108691	007642-10-6	94
5	(Z)-3-Heptene	2213	007642-10-6	94

 Peak Number 12 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
25.24	782.67 PPB	49065052	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene	108605	000592-77-8	94
4	2-Heptene, (E)-	13656	014686-13-6	94
5	2-Heptene	2208	000592-77-8	80

 Peak Number 13 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
25.56	631.75 PPB	39603766	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95
3	2-Heptene	108605	000592-77-8	95
4	2-Heptene, (E)-	13656	014686-13-6	91
5	3-Heptene	108688	000592-78-9	91

 Peak Number 14 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
25.81	145.64 PPB	9130148	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, butyl-	1931	000930-57-4	78
2	2H-Pyran-2-one, tetrahydro-3,6-dime	109044	003720-22-7	59
3	Cyclopentane, 1,2-dimethyl-, cis-	23919	001192-18-3	53
4	Cyclopentane, 1,2-dimethyl-, cis-	111951	001192-18-3	50
5	Hexane, 2-chloro-	1457	000638-28-8	50

 Peak Number 15 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
27.08	253.24 PPB	15875364	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
2	3,4-Heptadiene	31430	002454-31-1	72
3	2-Cyclopenten-1-one, 2-methyl-	21588	001120-73-6	72
4	Furan, 2,4-dimethyl-	118263	003710-43-8	72
5	2-Cyclopenten-1-one, 2-methyl-	113922	001120-73-6	72

 Peak Number 16 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
27.57	248.01 PPB	7912555	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Octene, (E)-		111302	014850-23-8	64
2 Toluene		117282	000108-88-3	60
3 Toluene		117292	000108-88-3	60
4 4-Octene, (Z)-		111286	007642-15-1	58
5 Toluene		117281	000108-88-3	53

Peak Number 17 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
27.68	715.93 PPB	22840832	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methyl-		5681	000589-81-1	91
2 Heptane, 3-methyl-		109689	000589-81-1	87
3 Hexane, 2,4-dimethyl-		5467	000589-43-5	58
4 Hexane, 2-methyl-		109353	000591-76-4	53
5 Hexane, 2,4-dimethyl-		109577	000589-43-5	53

Peak Number 18 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
27.83	227.01 PPB	7242600	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptyne		116095	001119-65-9	95
2 2-Heptyne		116025	001119-65-9	91
3 2-Heptyne		31411	001119-65-9	90
4 1,4-Heptadiene		31572	005675-22-9	60
5 Cyclohexene, 4-methyl-		31569	000591-47-9	59

Peak Number 19 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
28.25	658.54 PPB	21009872	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methylene-		114415	001632-16-2	87
2 Heptane, 3-methylene-		114416	001632-16-2	72
3 Cyclopentane, 1,2,4-trimethyl-, (1.		23858	004850-28-6	72
4 Nonane, 3-methylene-		23869	051655-64-2	72
5 1,2-Oxaborolane, 2-ethyl-4,5-dimeth		23877	074685-45-3	72

Peak Number 20 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
28.59	555.24 PPB	17714426	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octene, (E)-	111301	014850-23-8	72
2	Cyclohexane, 1,2-dimethyl-, cis-	111705	002207-01-4	58
3	2-Octene, (E)-	111293	013389-42-9	58
4	Cyclohexane, 1,2-dimethyl-, cis-	14486	002207-01-4	58
5	4-Octene, (E)-	13070	014850-23-8	53

Peak Number 21 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
28.95	169.63 PPB	5411945	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, 3-methyl-	23868	003404-75-9	95
2	Hexane, 2-methyl-4-methylene-	23848	003404-80-6	90
3	Hexane, 2-methyl-4-methylene-	114420	003404-80-6	83
4	Heptane, 3-methylene-	114416	001632-16-2	72
5	Heptane, 3-methylene-	111568	001632-16-2	72

Peak Number 22 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
31.03	759.44 PPB	24229178	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109874	000123-19-3	91
2	4-Heptanone	114577	000123-19-3	91
3	3-Pentanone, 2,4-dimethyl-	109869	000565-80-0	72
4	4-Heptanone	109855	000123-19-3	72
5	4-Heptanone	6294	000123-19-3	72

Peak Number 23 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
31.34	101.15 PPB	3227219	CHLOROBENZENE-D5	30.39

Hit# of 12	Tentative ID	Ref#	CAS#	Qual
1	n-Butyl ether	15788	000142-96-1	72
2	n-Butyl ether	112208	000142-96-1	64
3	n-Butyl ether	112037	000142-96-1	56
4	Pentane, 1-butoxy-	16488	018636-66-3	39
5	Ethanol, 2-butoxy-	112447	000111-76-2	38

Peak Number 24 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.74 177.59 PPB 5665680 CHLORO BENZENE-D5 30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanol	19637	000589-82-2	74
2	3-Hexanol, 5-methyl-	113293	000623-55-2	74
3	3-Heptanol	113289	000589-82-2	64
4	Propane, 2-ethoxy-2-methyl-	19731	000637-92-3	59
5	3-Pentanol	113145	000584-02-1	59

 Peak Number 25 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
31.93	145.41 PPB	4639297	CHLORO BENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	109596	000111-84-2	94
2	Nonane	109595	000111-84-2	91
3	Nonane	109597	000111-84-2	90
4	Nonane	5495	000111-84-2	68
5	Octane	109559	000111-65-9	59

 Peak Number 26 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
32.75	152.01 PPB	4849706	CHLORO BENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	50
2	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	47
3	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	40
4	2-Oxepanone, 4-methyl-	15310	1000196-99-7	38
5	Cyclopentane, methyl-	111861	000096-37-7	27

 Peak Number 27 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
33.09	368.97 PPB	11771745	CHLORO BENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	72
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	59
4	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
5	Hexanoic acid, anhydride	118546	002051-49-2	42

 Peak Number 28 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
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33.23	430.58 PPB	13737331	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	64
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	56
3	Hexanoic acid, anhydride	118546	002051-49-2	53
4	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	53
5	2-Pyrrolidinone, 1-methyl-	43090	000872-50-4	53

 Peak Number 29 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
33.36	417.67 PPB	13325221	CHLOROBENZENE-D5	30.39
Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1	3,3-Diethoxy-1-propyne	32833	010160-87-9	59
2	1H-1,2,4-Triazole, 3-propyl-	33272	019932-60-6	53
3	Cyclopropane, 1,1,2,2-tetramethyl-	111640	004127-47-3	53
4	3-(Butylamino)propionitrile	116379	000693-51-6	47
5	2-Pentene, 4,4-dimethyl-, (E)-	32892	000690-08-4	42

 Peak Number 30 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
33.65	385.34 PPB	12293709	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,5-Octadien-2-ol	13586	1000132-14-0	59
2	3-Hepten-2-one, 3-methyl-	14650	039899-08-6	50
3	trans-4-Nonene	13074	010405-84-2	35
4	cis-4-Nonene	111306	010405-85-3	35
5	1-Tetracosanol	5175	000506-51-4	35

 Peak Number 31 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
34.20	97.41 PPB	3107611	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octanone	109631	000589-63-9	92
2	4-Octanone	109634	000589-63-9	92
3	4-Octanone	109632	000589-63-9	91
4	4-Octanone	5601	000589-63-9	78
5	4-Octanone	109633	000589-63-9	60

 Peak Number 32 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
34.40	96.35 PPB	3073986	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	116270	000629-08-3	90
2	Heptanenitrile	108877	000629-08-3	64
3	Heptanenitrile	108876	000629-08-3	64
4	Heptanenitrile	108875	000629-08-3	59
5	Octanenitrile	108878	000124-12-9	38

Peak Number 33 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
35.01	202.33 PPB	6454980	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	109556	000124-18-5	95
2	Undecane	109663	001120-21-4	90
3	Decane	5445	000124-18-5	81
4	Nonane	109596	000111-84-2	60
5	Heptadecane	112321	000629-78-7	78

Peak Number 34 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
35.36	392.88 PPB	12534461	CHLOROBENZENE-D5	30.39
Hit# of 13	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	5-Hexen-1-ol	111145	000821-41-0	40
3	Hexanenitrile	108570	000628-73-9	36
4	1,8-Nonadiene	2340	004900-30-5	36
5	1,2-Nonadiene	12691	022433-33-6	33

Peak Number 35 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
35.81	236.36 PPB	7540737	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	83
2	1-Hexanol, 2-ethyl-	112165	000104-76-7	80
3	1-Hexanol, 2-ethyl-	15889	000104-76-7	64
4	2-Propyl-1-pentanol	15895	058175-57-8	53
5	1-Hexanol, 2-ethyl-	112147	000104-76-7	53

Peak Number 36 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
37.84	298.26 PPB	9515737	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	109663	001120-21-4	93
2	Undecane	16533	001120-21-4	91
3	Undecane	112395	001120-21-4	91
4	Tetradecane	112357	000629-59-4	90
5	Tridecane	112309	000629-50-5	90

Peak Number 37 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
40.49	571.34 PPB	18227907	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	109555	000112-40-3	87
2	Hexadecane	112408	000544-76-3	86
3	Hexadecane	112406	000544-76-3	83
4	Dodecane	112317	000112-40-3	76
5	Dodecane	16262	000112-40-3	76

Peak Number 38 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
41.98	94.58 PPB	3017468	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 2,6-dimethyl-	112396	002051-30-1	83
2	Nonane, 3-methyl-	112310	005911-04-6	78
3	Nonane, 3-methyl-	16406	005911-04-6	78
4	Heptadecane, 7-methyl-	17075	020959-33-5	72
5	Octane, 3,6-dimethyl-	17112	015869-94-0	72

Peak Number 39 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
42.43	752.42 PPB	24005248	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	112308	000629-50-5	95
2	Tridecane	112309	000629-50-5	94
3	Tridecane	16403	000629-50-5	91
4	Hexadecane	112406	000544-76-3	87
5	Heptadecane	112319	000629-78-7	86

Peak Number 40 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.	
43.81	212.18	PPB	6769460	CHLOROBENZENE-D5	30.39

Hit#	of 20	Tentative ID	Ref#	CAS#	Qual
1		Tetradecane	112357	000629-59-4	96
2		Tetradecane	112356	000629-59-4	94
3		Hexadecane	112408	000544-76-3	91
4		Tridecane	16403	000629-50-5	90
5		Tetradecane	112355	000629-59-4	87

19010505.D VAP_NP7.M Wed Jan 20 10:37:06 1999

File : C:\HPCHEM\1\DATA\19010207.D
Operator : M. STAUFFER
Acquired : 2 Jan 99 5:58 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-042-S075
Misc Info : 50 TORR
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010207.D

Vial: 1

Acq On : 2 Jan 99 5:58 pm

Operator: M. STAUFFER

Sample : VS006-042-S075

Inst : 5972 - MS

Misc : 50 TORR

Multiplr: 2.00

Quant Time: Jan 6 10:53 1999

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI on	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	23.98	96	6465269	100.00	NG	0.05
17) CHLOROBENZENE-D5	30.35	117	2768707	100.00	NG	-0.11

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.79	45	3246341	499.81	PPB m	100 E
3) ACETONITRILE	16.02	40	995346	97.24	PPB m	1
4) ACETONE	16.11	58	2451644	264.76	PPB m	91 E
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.59	45	128783	5.09	PPB	92
7) 1-PROPANOL	19.31	31	680986	33.32	PPB	98
8) PROPANENITRILE	19.94	54	1099419	73.11	PPB m	99
9) BUTANAL	0.00	72		Not Detected		
10) 2-BUTANONE	20.71	72	582473	62.26	PPB	98
11) TETRAHYDROFURAN	22.07	72	61541	6.99	PPB #	62
12) 1-BUTANOL	23.50	56	1759939	200.06	PPB m	93
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.35	43	1409335	25.95	PPB	97
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.13	58	1755218	118.44	PPB m	79
19) 3-HEPTANONE	31.46	114	3308231	1148.86	PPB m	1 E
20) 2-HEPTANONE	31.59	58	8482493	417.25	PPB m	91 E
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	34.68	58	506334	19.77	PPB m	89

(#) = qualifier out of range (m) = manual integration
 19010207.D VAP_P7.M Wed Jan 06 11:47:38 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010207.D

Acq On : 2 Jan 99 5:58 pm

Sample : VS006-042-S075

Misc : 50 TORR

Quant Time: Jan 6 11:50 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	23.98	96	6465269	100.00	NG	0.05
20) CHLOROBENZENE-D5	30.35	117	2768707	100.00	PPB	-0.08

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.47	43	17499152	503.75	PPB m	99 E
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.66	101	116771	3.76		99
7) N-PENTANE	16.35	72	594649	190.31	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.47	43	1076848	24.49	PPB m	28
10) 1-HEXENE	20.49	56	6105005	306.78	PPB #	79 E
11) N-HEXANE	20.85	57	4364453	149.74	PPB	88
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.48	78	351645	7.29	PPB	99
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.71	43	208762	6.75	PPB m	1
16) N-HEPTANE	24.91	57	4157166	256.18	PPB m	32 E
17) TOLUENE	27.54	91	1725516	34.91	PPB	95
18) N-OCTANE	28.55	57	950314	75.07	PPB m	87
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.90	43	1487870	86.04	PPB	91
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	34.97	43	1781016	116.67	PPB	93
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19010207.D VAP_NP7.M Wed Jan 06 11:52:14 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010809.D
 Acq On : 8 Jan 99 5:47 pm
 Sample : VS006-042-S075-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 13:20 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	5129427	100.00	NG	0.09
17) CHLOROBENZENE-D5	30.38	117	3273507	100.00	NG	-0.08

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.86	45	91403	425.69	PPB m	100
3) ACETONITRILE	0.00	40		Not Detected		
4) ACETONE	16.15	58	121415	396.64	PPB m	85
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	0.00	45		Not Detected		
7) 1-PROPANOL	19.38	31	17232	25.51	PPB	98
8) PROPANENITRILE	19.99	54	28515	57.36	PPB m	99
9) BUTANAL	20.59	72	5328	26.35	PPB m	86
10) 2-BUTANONE	20.76	72	16916	54.70	PPB	98
11) TETRAHYDROFURAN	22.13	72	1717	5.90	PPB #	1
12) 1-BUTANOL	23.52	56	101997	350.73	PPB m	100
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.40	43	35429	19.73	PPB	98
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	26.41	100	695	4.68	PPB #	1
18) 2-HEXANONE	28.15	58	65708	90.01	PPB m	78
19) 3-HEPTANONE	31.46	114	316184	2228.87	PPB	95
20) 2-HEPTANONE	31.58	58	415719	415.10	PPB	100
21) CYCLOHEXANONE	31.93	98	1945	6.98	PPB #	1
22) 2-OCTANONE	34.71	58	14010	11.10	PPB	88

(#) = qualifier out of range (m) = manual integration
 19010809.D VAP_P7.M Mon Jan 11 13:21:36 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010809.D
 Acq On : 8 Jan 99 5:47 pm
 Sample : VS006-042-S075-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 13:18 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	5129427	100.00	NG	0.09
20) CHLOROBENZENE-D5	30.38	117	3273507	100.00	PPB	-0.04

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	11.51	43	762735	664.21 PPB	99
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.69	101	4207	4.10	97
7) N-PENTANE	16.39	72	19805	191.73 PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	19.52	43	33067	22.75 PPB #	71
10) 1-HEXENE	20.52	56	225391	342.62 PPB #	77
11) N-HEXANE	20.88	57	142704	148.10 PPB #	80
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	23.52	78	13163	8.26 PPB	99
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	23.74	43	7751	7.58 PPB m	98
16) N-HEPTANE	24.93	57	440826	821.77 PPB #	79
17) TOLUENE	27.58	91	87226	53.38 PPB	95
18) N-OCTANE	28.58	57	49698	118.75 PPB m	80
19) TETRACHLOROETHYLENE	0.00	166		Not Detected	
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	31.17	91	3951	3.58 PPB	98
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	31.93	43	59529	69.88 PPB	89
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	34.99	43	84343	112.16 PPB m	91
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#) = qualifier out of range (m) = manual integration
 19010809.D VAP_NP7.M Mon Jan 11 13:19:02 1999

TIC: 19Q10207.D

VS006-042-S075

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	9.040	rBB	0.167	1504828	8.966	9.133
2	10.901	rBB	0.201	1150148	10.868	11.069
3	11.189	rBB	0.288	42034523	11.069	11.357
4	11.471	rBB	0.402	35396628	11.377	11.779
5	12.134	rBB	0.161	3622777	12.060	12.221
6	12.589	rBB	0.167	3254714	12.509	12.676
7	12.857	rBB	0.208	7505551	12.750	12.957
8	14.786	rBB	0.321	11012394	14.685	15.007
9	15.080	rBB	0.161	1872119	15.007	15.167
10	15.944	rBB	0.107	11837116	15.884	15.991
11	16.024	rBB	0.067	1040526	15.991	16.058
12	16.112	rBB	0.167	9122676	16.058	16.225
13	16.353	rBB	0.208	20406154	16.232	16.440
14	16.848	rBB	0.167	3257542	16.754	16.922
15	17.203	rBB	0.080	1236990	17.156	17.237
16	17.277	rBB	0.100	2518466	17.237	17.337
17	18.248	rBB	0.154	1135779	18.174	18.328
18	18.998	rBB	0.194	2481649	18.897	19.092
19	19.473	rBB	0.134	3173348	19.406	19.540
20	19.942	rBB	0.127	2116603	19.875	20.002
21	20.491	rBB	0.221	33827971	20.398	20.619
22	20.712	rBB	0.141	4299802	20.639	20.779
23	20.846	rBB	0.134	16949172	20.779	20.913
24	21.047	rBB	0.107	1043501	20.994	21.101
25	21.148	rBB	0.094	2095593	21.101	21.195
26	21.543	rBB	0.127	2389107	21.489	21.616
27	21.811	rBB	0.080	1033072	21.764	21.844
28	21.998	rBB	0.087	1309504	21.951	22.038
29	22.085	rBB	0.107	932094	22.038	22.145
30	23.384	rBB	0.100	957102	23.331	23.431
31	23.498	rBB	0.121	6953632	23.431	23.552
32	23.599	rBB	0.094	889817	23.552	23.646
33	23.766	rBB	0.067	1513113	23.726	23.793
34	23.820	rBB	0.074	1487633	23.793	23.867
35	23.974	rBB	0.167	13672152	23.873	24.041
36	24.188	rBB	0.087	883662	24.141	24.228
37	24.349	rBB	0.107	2263062	24.295	24.402
38	24.449	rBB	0.094	1175722	24.402	24.496
39	24.563	rBB	0.141	15295401	24.496	24.637
40	24.717	rBB	0.121	4164932	24.650	24.771
41	24.938	rBB	0.174	76510112	24.831	25.005
42	25.072	rBB	0.121	37123122	25.005	25.126
43	25.199	rBB	0.134	55414844	25.126	25.260
44	25.521	rBB	0.141	44803656	25.447	25.588
45	25.762	rBB	0.221	11136945	25.675	25.896
46	25.949	rBB	0.121	1041152	25.896	26.016
47	26.331	rBB	0.201	1049374	26.210	26.411
48	26.666	rBB	0.121	1153872	26.612	26.733
49	26.786	rBB	0.094	937306	26.733	26.827
50	27.034	rBB	0.248	19156361	26.907	27.155
51	27.336	rBB	0.147	2006598	27.235	27.382
52	27.530	rBB	0.100	9818934	27.476	27.577
53	27.644	rBB	0.121	28299631	27.577	27.697
54	27.744	rBB	0.040	1507500	27.711	27.751
55	27.791	rBB	0.080	9162526	27.751	27.831
56	28.126	rBB	0.080	4899904	28.079	28.159

57	28.206	rBB	0.114	24237855	28.159	28.273
58	28.447	rBB	0.107	1103993	28.374	28.481
59	28.548	rBB	0.221	21967660	28.481	28.702
60	28.755	rBB	0.141	2335525	28.702	28.842
61	28.909	rBB	0.121	6800223	28.849	28.970
62	29.037	rBB	0.154	3630976	28.970	29.124
63	29.733	rBB	0.094	1321861	29.679	29.773
64	30.349	rBB	0.161	7900562	30.282	30.443
65	30.892	rBB	0.087	1662613	30.838	30.925
66	30.992	rBB	0.134	30547163	30.925	31.059
67	31.200	rBB	0.107	1709939	31.139	31.247
68	31.293	rBB	0.114	4021977	31.247	31.360
69	31.494	rBB	0.174	67893085	31.367	31.541
70	31.595	rBB	0.121	28969077	31.541	31.662
71	31.709	rBB	0.100	10454186	31.662	31.762
72	31.802	rBB	0.080	942527	31.762	31.843
73	31.896	rBB	0.114	5786375	31.843	31.956
74	32.713	rBB	0.181	6352742	32.593	32.773
75	32.820	rBB	0.100	1377244	32.773	32.874
76	33.048	rBB	0.228	15357614	32.881	33.108
77	33.189	rBB	0.147	17985406	33.108	33.256
78	33.323	rBB	0.154	16540115	33.256	33.410
79	33.617	rBB	0.214	21636160	33.517	33.731
80	33.912	rBB	0.100	1033454	33.872	33.972
81	34.160	rBB	0.174	4220511	34.093	34.267
82	34.361	rBB	0.154	4826647	34.267	34.421
83	34.675	rBB	0.114	901915	34.595	34.709
84	34.970	rBB	0.134	6996990	34.916	35.050
85	35.325	rBB	0.241	18800348	35.218	35.459
86	35.653	rBB	0.114	2494845	35.593	35.707
87	35.780	rBB	0.174	13809047	35.707	35.881
88	37.341	rBB	0.241	3589267	37.187	37.428
89	37.589	rBB	0.154	1140950	37.528	37.682
90	37.810	rBB	0.114	9146542	37.749	37.863
91	38.111	rBB	0.147	2954282	38.024	38.171
92	38.727	rBB	0.147	1681482	38.647	38.794
93	38.854	rBB	0.114	927189	38.794	38.908
94	39.149	rBB	0.121	903918	39.095	39.216
95	40.448	rBB	0.188	14713776	40.361	40.549
96	40.783	rBB	0.134	2050284	40.716	40.850
97	41.955	rBB	0.161	2420726	41.888	42.049
98	42.270	rBB	0.107	966048	42.196	42.303
99	42.404	rBB	0.100	23694083	42.350	42.450
100	43.783	rBB	0.080	7357829	43.750	43.830

Library Search Compound Report

Data File : D:\C106\19010207.D
 Acq Time : 2 Jan 99 5:58 pm Operator: M. STAUFFER
 Sample : VS006-042-S075 Inst : 5972 - MS
 Misc : 50 TORR Multiplr: 2.00
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
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 Peak Number 1 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
11.19	614.89 PPB	42034523	FLUOROBENZENE	23.98
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	108669	000115-11-7	87
2	1-Propene, 2-methyl-	108463	000115-11-7	87
3	1-Butene	108673	000106-98-9	83
4	1-Butene	108672	000106-98-9	83
5	1-Butene	108671	000106-98-9	83

 Peak Number 2 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
12.86	109.79 PPB	7505551	FLUOROBENZENE	23.98
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Butene	108671	000106-98-9	83
4	1-Propene, 2-methyl-	108463	000115-11-7	83
5	1-Propene, 2-methyl-	108669	000115-11-7	80

 Peak Number 3 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
14.79	161.09 PPB	11012394	FLUOROBENZENE	23.98
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	108332	000064-17-5	90
2	Ethanol	1076	000064-17-5	90
3	Ethanol	108331	000064-17-5	74

 Peak Number 4 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
15.94	173.16 PPB	11837116	FLUOROBENZENE	23.98

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Pentene		109030	000109-67-1	91
2 1-Pentene		109032	000109-67-1	86
3 1-Pentene		109031	000109-67-1	86
4 1-Pentene		3426	000109-67-1	86
5 Cyclopentane		3292	000287-92-3	86

 Peak Number 5 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
16.11	133.45 PPB	9122676	FLUOROBENZENE	23.98
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1 Acetone		109727	000067-64-1	72
2 Acetone		109708	000067-64-1	50
3 Acetone		5734	000067-64-1	50

 Peak Number 6 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
20.71	62.90 PPB	4299802	FLUOROBENZENE	23.98
Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1 2-Butanone		109957	000078-93-3	86
2 2-Butanone		109955	000078-93-3	86
3 2-Butanone		109956	000078-93-3	64
4 2-Butanone		6522	000078-93-3	64
5 Propanal, 2-methyl-		109228	000078-84-2	39

 Peak Number 7 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
24.56	223.75 PPB	15295401	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Heptene		2183	000592-76-7	94
2 1-Heptene		111846	000592-76-7	91
3 Isopropylcyclobutane		15016	000872-56-0	72
4 1-Heptene		108686	000592-76-7	64
5 1-Heptene		111847	000592-76-7	64

 Peak Number 8 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
25.07	543.05 PPB	37123122	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1	3-Heptene	108688	000592-78-9	97
2	3-Heptene, (E)-	2212	014686-14-7	94
3	3-Heptene, (E)-	108689	014686-14-7	94
4	(Z)-3-Heptene	108691	007642-10-6	91
5	2-Heptene	108687	000592-77-8	91

Peak Number 9 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
25.20	810.62 PPB	55414844	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95
3	2-Heptene, (E)-	13656	014686-13-6	95
4	2-Heptene	108605	000592-77-8	94
5	2-Heptene	2208	000592-77-8	80

Peak Number 10 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
25.52	655.40 PPB	44803656	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene	108605	000592-77-8	94
4	2-Heptene	2208	000592-77-8	91
5	2-Heptene, (E)-	13656	014686-13-6	90

Peak Number 11 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
25.76	162.91 PPB	11136945	FLUOROBENZENE	23.98
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, butyl-	1931	000930-57-4	58
2	Cyclopentane, 1,2-dimethyl-, cis-	23919	001192-18-3	53
3	Cyclopentane, 1,2-dimethyl-, cis-	111951	001192-18-3	53
4	2H-Pyran-2-one, tetrahydro-3,6-dime	109044	003720-22-7	53
5	Hexane, 2-chloro-	1457	000638-28-8	53

Peak Number 12 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
27.03	280.22 PPB	19156361	FLUOROBENZENE	23.98

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Cyclopenten-1-one, 2-methyl-		113921	001120-73-6	74
2 3,4-Heptadiene		31430	002454-31-1	72
3 2-Cyclopenten-1-one, 2-methyl-		21588	001120-73-6	72
4 Furan, 2,4-dimethyl-		118263	003710-43-8	72
5 Furan, 2,4-dimethyl-		41734	003710-43-8	72

 Peak Number 13 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
27.64	716.40 PPB	28299631	CHLOROBENZENE-D5	30.35

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methyl-		109689	000589-81-1	91
2 Heptane, 3-methyl-		5681	000589-81-1	91
3 Heptane, 3,4,5-trimethyl-		7053	020278-89-1	78
4 Hexane, 2,4-dimethyl-		109686	000589-43-5	59
5 Hexane, 2,4-dimethyl-		109577	000589-43-5	59

 Peak Number 14 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
27.79	231.95 PPB	9162526	CHLOROBENZENE-D5	30.35

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptyne		116095	001119-65-9	96
2 2-Heptyne		116025	001119-65-9	87
3 2-Heptyne		31411	001119-65-9	83
4 1,4-Heptadiene		31572	005675-22-9	64
5 Cyclohexene, 4-methyl-		116094	000591-47-9	64

 Peak Number 15 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
28.13	124.04 PPB	4899904	CHLOROBENZENE-D5	30.35

Hit# of 12	Tentative ID	Ref#	CAS#	Qual
1 2-Hexanone		109711	000591-78-6	90
2 2-Hexanone		109712	000591-78-6	86
3 2-Hexanone		5779	000591-78-6	86
4 2-Hexanone		109732	000591-78-6	83
5 2-Hexanone, 4-hydroxy-3-propyl-		5739	062338-17-4	78

 Peak Number 16 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
28.21	613.57 PPB	24237855	CHLOROBENZENE-D5	30.35

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1,2,4-trimethyl-, (1.	23858	004850-28-6	90
2	Heptane, 3-methylene-	114415	001632-16-2	72
3	Octane, 3-methyl-6-methylene-	23865	074630-07-2	72
4	Heptane, 3-methylene-	23862	001632-16-2	56
5	Heptane, 3-methylene-	114416	001632-16-2	52

Peak Number 17 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
28.91	172.15 PPB	6800223	CHLOROBENZENE-D5	30.35

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, 3-methyl-	23868	003404-75-9	95
2	Hexane, 2-methyl-4-methylene-	23848	003404-80-6	80
3	Heptane, 3-methylene-	23862	001632-16-2	72
4	Hexane, 2-methyl-4-methylene-	114420	003404-80-6	72
5	Heptane, 3-methylene-	114416	001632-16-2	64

Peak Number 18 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
29.04	91.92 PPB	3630976	CHLOROBENZENE-D5	30.35

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	87
2	4-Octene, (E)-	13070	014850-23-8	87
3	2-Octene	111287	000111-67-1	83
4	4-Octene, (E)-	111302	014850-23-8	83
5	4-Octene, (Z)-	111286	007642-15-1	80

Peak Number 19 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
30.99	773.29 PPB	30547163	CHLOROBENZENE-D5	30.35

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109874	000123-19-3	91
2	4-Heptanone	109855	000123-19-3	91
3	4-Heptanone	6294	000123-19-3	91
4	4-Heptanone	114577	000123-19-3	91
5	3-Hexanone, 2-methyl-	6315	007379-12-6	78

Peak Number 20 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.29 101.81 PPB 4021977 CHLOROBENZENE-D5 30.35

Hit# of 10	Tentative ID	Ref#	CAS#	Qual
1 n-Butyl ether		112208	000142-96-1	74
2 n-Butyl ether		15788	000142-96-1	58
3 n-Butyl ether		112037	000142-96-1	50
4 Propanoic acid, 1-methylpropyl este		15651	000591-34-4	40
5 Propane, 2-[(1,1-dimethylethyl)sulf		15759	001886-75-5	40

Peak Number 21 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
31.49	1718.69 PPB	67893085	CHLOROBENZENE-D5	30.35

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1 3-Heptanone		112010	000106-35-4	91
2 3-Heptanone		112009	000106-35-4	72
3 3-Heptanone		112011	000106-35-4	72
4 3-Heptanone		112074	000106-35-4	64
5 3-Heptanone		15594	000106-35-4	64

Peak Number 22 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
31.59	733.34 PPB	28969077	CHLOROBENZENE-D5	30.35

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1 2-Heptanone		109740	000110-43-0	83
2 2-Heptanone		109741	000110-43-0	78
3 2-Hexanone, 4-methyl-		5737	000105-42-0	64
4 2-Heptanone		109709	000110-43-0	64
5 2-Heptanone		5736	000110-43-0	52

Peak Number 23 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
31.71	264.64 PPB	10454186	CHLOROBENZENE-D5	30.35

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 3-Heptanol		113288	000589-82-2	78
2 3-Heptanol		113289	000589-82-2	64
3 3-Octanol		19555	000589-98-0	53
4 2-Pentanol, 2-methyl-		113237	000590-36-3	50
5 Propane, 2-ethoxy-2-methyl-		113322	000637-92-3	50

Peak Number 24 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
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32.71	160.82 PPB	6352742	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	40
2	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	40
3	Thiazole, 2,5-dimethyl-	51095	004175-66-0	38
4	4-Piperidinone, 1-methyl-	120221	001445-73-4	30
5	1H-2-Pyrrrolone, 4-methoxy-2,5-dihyd	51055	1000196-86-0	27

Peak Number 25	Rank in Relative Concentration 15			
R.T.	Conc	Area	Relative to ISTD	R.T.
33.05	388.77 PPB	15357614	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	64
3	Hexanoic acid, anhydride	43066	002051-49-2	53
4	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
5	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	50

Peak Number 26	Rank in Relative Concentration 13			
R.T.	Conc	Area	Relative to ISTD	R.T.
33.19	455.29 PPB	17985406	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	64
2	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
3	4-Methylthiazole	118576	000693-95-8	42
4	Glycocyanidine	43063	000503-86-6	42
5	3-Pentenoic acid, 4-methyl-	7632	000504-85-8	38

Peak Number 27	Rank in Relative Concentration 14			
R.T.	Conc	Area	Relative to ISTD	R.T.
33.32	418.71 PPB	16540115	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,3-Diethoxy-1-propyne	32833	010160-87-9	59
2	2-Pentene, 2,4-dimethyl-	111643	000625-65-0	53
3	3-(Butylamino)propionitrile	116379	000693-51-6	50
4	3-Penten-2-one, 4-methyl-	116425	000141-79-7	45
5	2-Pentene, 4,4-dimethyl-, (Z)-	116392	000762-63-0	42

Peak Number 28	Rank in Relative Concentration 10			

R.T.	Conc	Area	Relative to ISTD	R.T.
33.62	547.71 PPB	21636160	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Trifluoroacetic acid, n-heptadecyl	4324	1000216-79-2	28
2	1,3,2-Dioxaborolane-4,5-dimethanol,	8055	074841-61-5	28
3	Heptafluorobutyric acid,n-tridecyl	4323	1000216-78-9	25
4	3-Octen-2-one, (E)-	5082	018402-82-9	25
5	1-Octene, 3,7-dimethyl-	109482	004984-01-4	25

Peak Number 29 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
34.16	106.84 PPB	4220511	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octanone	109634	000589-63-9	93
2	4-Octanone	109631	000589-63-9	93
3	4-Octanone	109632	000589-63-9	92
4	4-Octanone	5601	000589-63-9	92
5	4-Octanone	109633	000589-63-9	91

Peak Number 30 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
34.36	122.18 PPB	4826647	CHLOROBENZENE-D5	30.35
Hit# of 19	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	116270	000629-08-3	86
2	Heptanenitrile	108877	000629-08-3	64
3	Octanenitrile	108878	000124-12-9	50
4	Heptanenitrile	108876	000629-08-3	50
5	Heptanenitrile	108875	000629-08-3	50

Peak Number 31 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
35.32	475.92 PPB	18800348	CHLOROBENZENE-D5	30.35
Hit# of 14	Tentative ID	Ref#	CAS#	Qual
1	Hexanenitrile	108570	000628-73-9	42
2	5-Hexen-1-ol	111145	000821-41-0	38
3	1,8-Nonadiene	2340	004900-30-5	36
4	2-Oxazolidinone, 3-ethenyl-5-methyl	12662	003395-98-0	33
5	1,2-Nonadiene	12691	022433-33-6	33

Peak Number 32 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
35.65	63.16 PPB	2494845	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	6376	002847-72-5	90
2	Decane, 4-methyl-	109904	002847-72-5	81
3	Octane, 2,3,6-trimethyl-	17068	062016-33-5	72
4	Octane, 2,3,7-trimethyl-	16473	062016-34-6	72
5	Heptane, 2,5,5-trimethyl-	6366	001189-99-7	64

Peak Number 33 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
35.78	349.57 PPB	13809047	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	83
2	1-Hexanol, 2-ethyl-	112165	000104-76-7	80
3	2-Propyl-1-pentanol	15895	058175-57-8	53
4	Heptane, 1,1'-oxybis-	17017	000629-64-1	50
5	1-Hexanol, 2-ethyl-	15889	000104-76-7	47

Peak Number 34 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
37.34	90.86 PPB	3589267	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octanenitrile	108878	000124-12-9	94
2	Octanenitrile	32299	000124-12-9	86
3	E-6-Octadecen-1-ol acetate	32330	1000130-94-7	59
4	Octanenitrile	108880	000124-12-9	49
5	Heptanenitrile	116270	000629-08-3	47

Peak Number 35 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
37.81	231.54 PPB	9146542	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	109663	001120-21-4	95
2	Undecane	16533	001120-21-4	91
3	Undecane	112395	001120-21-4	91
4	Tetradecane	112357	000629-59-4	90
5	Tridecane	16403	000629-50-5	90

Peak Number 36 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
38.11	74.79 PPB	2954282	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Buten-2-one, 4-(1-aziridinyl)-	8039	018277-57-1	52
2	Bicyclo[2.2.1]heptan-2-amine, exo-	32329	007242-92-4	43
3	Cyclohexane, isocyanato-	32607	003173-53-3	43
4	Methanamine, N-[3-methyl-2-butenyl]	32310	1000196-86-4	38
5	2-Cyclohexen-1-one, 4,4-dimethyl-	116316	001073-13-8	38

Peak Number 37 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
40.45	372.47 PPB	14713776	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	16262	000112-40-3	93
2	Hexadecane	112408	000544-76-3	86
3	Tetradecane	112355	000629-59-4	86
4	Pentadecane	16493	000629-62-9	83
5	Undecane	16533	001120-21-4	83

Peak Number 38 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
41.95	61.28 PPB	2420726	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 2,6-dimethyl-	112396	002051-30-1	78
2	Decane, 2,4-dimethyl-	5624	002801-84-5	72
3	Nonane, 3-methyl-	112310	005911-04-6	72
4	Nonane, 3-methyl-	16406	005911-04-6	72
5	Nonane, 3-methyl-	112557	005911-04-6	64

Peak Number 39 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
42.40	599.81 PPB	23694083	CHLOROBENZENE-D5	30.35
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	112309	000629-50-5	94
2	Tridecane	112308	000629-50-5	93
3	Tridecane	16403	000629-50-5	91
4	Heptadecane	112319	000629-78-7	91
5	Hexadecane	112406	000544-76-3	91

Peak Number 40 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
43.78	186.26 PPB	7357829	CHLOROBENZENE-D5	30.35

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	16474	000629-59-4	91
2	Hexadecane	112408	000544-76-3	91
3	Heptadecane	112319	000629-78-7	91
4	Tetradecane	112355	000629-59-4	90
5	Pentadecane	16493	000629-62-9	90

19010207.D VAP_NP7.M Wed Jan 20 10:40:09 1999

File : C:\HPCHEM\1\DATA\19010508.D
Operator : M. STAUFFER
Acquired : 5 Jan 99 5:16 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-050-S077
Misc Info : 50 TORR; 2 ATM
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010508.D

Acq On : 5 Jan 99 5:16 pm

Sample : VS006-050-S077

Misc : 50 TORR; 2 ATM

Quant Time: Jan 6 10:10 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	6222167	100.00	NG	0.09
17) CHLOROBENZENE-D5	30.39	117	2524065	100.00	NG	-0.07

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue	
2) ETHANOL	14.84	45	2675066	427.94	PPB	m	100 E
3) ACETONITRILE	16.07	40	815740	82.27	PPB	m	79
4) ACETONE	16.16	58	2094086	234.98	PPB	m	98
5) FURAN	0.00	68		Not Detected			
6) 2-PROPANOL	16.64	45	101496	4.17	PPB	#	91
7) 1-PROPANOL	19.35	31	325835	16.57	PPB	m	97
8) PROPANENITRILE	19.99	54	913824	63.15	PPB	m	99
9) BUTANAL	0.00	72		Not Detected			
10) 2-BUTANONE	20.76	72	504028	55.98	PPB		82
11) TETRAHYDROFURAN	22.11	72	63342	7.48	PPB		93
12) 1-BUTANOL	23.54	56	1387027	163.83	PPB	m	90
13) BUTANENITRILE	0.00	41		Not Detected			
14) 2-PENTANONE	24.39	43	1122647	21.48	PPB		98
15) 1,4-DIOXANE	0.00	88		Not Detected			
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected			
18) 2-HEXANONE	28.17	58	1432248	106.02	PPB		75
19) 3-HEPTANONE	31.50	114	3034673	1156.00	PPB	m	1 E
20) 2-HEPTANONE	31.63	58	6668751	359.83	PPB	m	86 E
21) CYCLOHEXANONE	0.00	98		Not Detected			
22) 2-OCTANONE	34.72	58	363171	15.55	PPB		97

(#)= qualifier out of range (m)= manual integration

19010508.D VAP_P7.M

Wed Jan 06 10:11:27 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010508.D

Acq On : 5 Jan 99 5:16 pm

Sample : VS006-050-S077

Misc : 50 TORR; 2 ATM

Quant Time: Jan 6 10:14 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	6222167	100.00	NG	0.09
20) CHLOROBENZENE-D5	30.39	117	2524065	100.00	PPB	-0.04
System Monitoring Compounds						%Recovery
Target Compounds						Qvalue
2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.53	43	14373543	429.94	PPB m	100 E
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.71	101	114829	3.85		99
7) N-PENTANE	16.40	72	521710	173.49	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.52	43	832394	19.67	PPB #	77
10) 1-HEXENE	20.54	56	5126831	267.69	PPB m	83 E
11) N-HEXANE	20.90	57	3618089	128.98	PPB	92
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.52	78	306566	6.61	PPB	98
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.75	43	168715	5.67	PPB m	90
16) N-HEPTANE	24.96	57	3358374	215.04	PPB m	84
17) TOLUENE	27.59	91	1474146	30.99	PPB	96
18) N-OCTANE	28.60	57	693263	56.90	PPB m	92
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.94	43	1119341	71.00	PPB	94
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	35.01	43	1339757	96.27	PPB	98
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#)= qualifier out of range (m) = manual integration

19010508.D VAP_NP7.M

Wed Jan 06 10:14:49 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010708.D
 Acq On : 7 Jan 99 4:08 pm
 Sample : VS006-050-S077-2; SEC. DIL.
 Misc : 50 TORR
 Quant Time: Jan 11 11:10 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QION	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.04	96	5412920	100.00	NG	0.11
17) CHLOROBENZENE-D5	30.40	117	3389192	100.00	NG	-0.06

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.93	45	90448	399.18	PPB m	100
3) ACETONITRILE	0.00	40		Not Detected		
4) ACETONE	16.19	58	107471	332.70	PPB m	82
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	0.00	45		Not Detected		
7) 1-PROPANOL	19.40	31	13115	18.40	PPB #	92
8) PROPANENITRILE	20.02	54	26570	50.65	PPB m	99
9) BUTANAL	20.60	72	9607	45.02	PPB m	31
10) 2-BUTANONE	20.79	72	18514	56.73	PPB m	82
11) TETRAHYDROFURAN	22.16	72	1692	5.51	PPB #	21
12) 1-BUTANOL	23.54	56	77265	251.77	PPB m	100
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.42	43	31525	16.64	PPB	98
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	26.43	100	702	4.48	PPB	71
18) 2-HEXANONE	28.17	58	63237	83.66	PPB m	76
19) 3-HEPTANONE	31.48	114	308387	2099.70	PPB	89
20) 2-HEPTANONE	31.59	58	438051	422.47	PPB	99
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	34.73	58	17552	13.44	PPB	89

(#) = qualifier out of range (m) = manual integration
 19010708.D VAP_P7.M Mon Jan 11 11:12:19 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010708.D

Acq On : 7 Jan 99 4:08 pm

Sample : VS006-050-S077-2; SEC. DIL.

Misc : 50 TORR

Quant Time: Jan 11 11:04 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.04	96	5412920	100.00	NG	0.11
20) CHLOROBENZENE-D5	30.40	117	3389192	100.00	PPB	-0.02

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	11.53	43	767901	633.68 PPB	98
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.72	101	4247	3.92	100
7) N-PENTANE	16.41	72	19833	181.95 PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	19.54	43	35329	23.03 PPB #	70
10) 1-HEXENE	20.54	56	230785	332.44 PPB #	68
11) N-HEXANE	20.90	57	145152	142.75 PPB #	81
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	23.54	78	13500	8.03 PPB	97
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	23.77	43	8969	8.31 PPB m	93
16) N-HEPTANE	24.95	57	448755	792.74 PPB #	78
17) TOLUENE	27.60	91	86321	50.06 PPB	94
18) N-OCTANE	28.60	57	40948	92.72 PPB	82
19) TETRACHLOROETHYLENE	0.00	166		Not Detected	
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	31.19	91	4252	3.72 PPB #	40
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	31.94	43	59428	67.38 PPB	89
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	35.01	43	88524	113.70 PPB m	92
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#)= qualifier out of range (m)= manual integration

19010708.D VAP_NP7.M

Mon Jan 11 11:06:47 1999

'9010508.D

VS006-050-S077

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.175	rBB	0.114	1424584	7.142	7.256
2	9.111	rBB	0.161	1271385	9.050	9.211
3	10.966	rBB	0.201	963187	10.932	11.133
4	11.260	rBB	0.295	34815398	11.133	11.428
5	11.535	rBB	0.402	29382858	11.441	11.843
6	12.191	rBB	0.167	2913148	12.124	12.292
7	12.647	rBB	0.174	2622690	12.573	12.747
8	12.915	rBB	0.201	5979519	12.807	13.008
9	14.837	rBB	0.362	9159297	14.703	15.064
10	15.131	rBB	0.147	1453807	15.064	15.212
11	16.002	rBB	0.100	9271154	15.942	16.042
12	16.069	rBB	0.067	747200	16.042	16.109
13	16.163	rBB	0.167	7748637	16.109	16.276
14	16.404	rBB	0.201	16595813	16.283	16.484
15	16.899	rBB	0.188	2636095	16.799	16.986
16	17.254	rBB	0.080	985245	17.207	17.288
17	17.328	rBB	0.107	1998169	17.288	17.395
18	18.292	rBB	0.161	978490	18.225	18.386
19	19.049	rBB	0.208	1964915	18.942	19.149
20	19.524	rBB	0.134	2516218	19.457	19.591
21	19.986	rBB	0.141	1742957	19.913	20.053
22	20.536	rBB	0.261	28064438	20.428	20.690
23	20.757	rBB	0.134	3440068	20.690	20.824
24	20.897	rBB	0.127	13787715	20.830	20.958
25	21.091	rBB	0.107	851620	21.045	21.152
26	21.192	rBB	0.094	1665985	21.152	21.245
27	21.594	rBB	0.121	1909996	21.540	21.661
28	21.855	rBB	0.080	839525	21.815	21.895
29	22.049	rBB	0.080	877380	22.002	22.083
30	23.429	rBB	0.094	784103	23.382	23.476
31	23.543	rBB	0.121	5467070	23.476	23.596
32	23.643	rBB	0.094	762921	23.596	23.690
33	23.810	rBB	0.067	1241598	23.770	23.837
34	23.871	rBB	0.074	1412193	23.837	23.911
35	24.025	rBB	0.167	12727746	23.924	24.092
36	24.393	rBB	0.107	1818925	24.339	24.447
37	24.493	rBB	0.100	951220	24.447	24.547
38	24.607	rBB	0.134	12467503	24.547	24.681
39	24.761	rBB	0.188	4814695	24.688	24.875
40	24.982	rBB	0.167	65146580	24.875	25.043
41	25.116	rBB	0.121	31802690	25.049	25.170
42	25.244	rBB	0.134	47891212	25.170	25.304
43	25.565	rBB	0.141	38453606	25.491	25.632
44	25.806	rBB	0.228	8808201	25.712	25.940
45	26.000	rBB	0.208	960843	25.940	26.148
46	26.375	rBB	0.194	819853	26.261	26.456
47	26.710	rBB	0.114	878972	26.663	26.777
48	26.831	rBB	0.087	725632	26.784	26.871
49	27.078	rBB	0.248	15572460	26.951	27.199
50	27.380	rBB	0.147	1557208	27.279	27.427
51	27.574	rBB	0.100	7753378	27.520	27.621
52	27.681	rBB	0.121	22721504	27.621	27.741
53	27.788	rBB	0.040	1177863	27.755	27.795
54	27.829	rBB	0.080	7305019	27.795	27.875
55	28.170	rBB	0.074	3833723	28.123	28.197
56	28.250	rBB	0.121	20210469	28.197	28.317

	28.485	rBB	0.107	853593	28.418	28.525
	28.592	rBB	0.221	17319937	28.525	28.746
59	28.800	rBB	0.141	1859415	28.746	28.887
60	28.954	rBB	0.121	5292623	28.887	29.007
61	29.081	rBB	0.161	2820285	29.007	29.168
62	29.777	rBB	0.094	1093308	29.724	29.818
63	30.387	rBB	0.154	6892566	30.326	30.481
64	30.929	rBB	0.087	1319803	30.882	30.969
65	31.036	rBB	0.127	25327589	30.969	31.097
66	31.231	rBB	0.114	1387067	31.170	31.284
67	31.338	rBB	0.114	3233009	31.284	31.398
68	31.532	rBB	0.167	57660574	31.411	31.579
69	31.626	rBB	0.121	22178572	31.579	31.699
70	31.746	rBB	0.100	8801320	31.699	31.800
71	31.847	rBB	0.087	777563	31.800	31.887
72	31.940	rBB	0.114	4495944	31.887	32.001
73	32.757	rBB	0.174	5185990	32.644	32.818
74	32.865	rBB	0.100	1112276	32.818	32.918
75	33.092	rBB	0.234	12558709	32.918	33.153
76	33.226	rBB	0.147	14894113	33.153	33.300
77	33.367	rBB	0.154	13849725	33.300	33.454
78	33.655	rBB	0.141	13124643	33.568	33.708
79	33.950	rBB	0.107	809209	33.909	34.016
80	34.204	rBB	0.174	3297192	34.130	34.304
81	34.405	rBB	0.161	3602530	34.304	34.465
82	34.720	rBB	0.167	1821459	34.626	34.793
83	34.834	rBB	0.094	748133	34.793	34.887
84	35.008	rBB	0.134	5475864	34.954	35.088
85	35.363	rBB	0.234	14947663	35.262	35.496
86	35.697	rBB	0.114	1967800	35.630	35.744
87	35.825	rBB	0.181	14931569	35.744	35.925
88	37.378	rBB	0.241	2782933	37.231	37.472
89	37.626	rBB	0.154	915862	37.566	37.720
90	37.847	rBB	0.121	7638451	37.787	37.907
91	38.155	rBB	0.141	2512297	38.068	38.209
92	38.765	rBB	0.154	1544321	38.684	38.838
93	38.892	rBB	0.107	779781	38.838	38.945
94	39.186	rBB	0.114	765604	39.140	39.253
95	40.486	rBB	0.181	15084120	40.405	40.586
96	40.821	rBB	0.141	2203013	40.754	40.894
97	41.986	rBB	0.161	2470066	41.919	42.080
98	42.301	rBB	0.114	986177	42.220	42.334
99	42.434	rBB	0.094	21955567	42.381	42.475
100	43.807	rBB	0.248	5952415	43.767	44.015

Library Search Compound Report

Data File : D:\C106\19010508.D
 Acq Time : 5 Jan 99 5:16 pm
 Sample : VS006-050-S077
 Misc : 50 TORR; 2 ATM
 Method : D:\METHODS\VAP_NF7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
11.26	547.08 PPB	34815398	FLUOROBENZENE	24.02
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108672	000106-98-9	87
2	1-Propene, 2-methyl-	108669	000115-11-7	87
3	1-Butene	108673	000106-98-9	83
4	1-Butene	108671	000106-98-9	83
5	1-Propene, 2-methyl-	108463	000115-11-7	83

 Peak Number 2 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
12.91	93.96 PPB	5979519	FLUOROBENZENE	24.02
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Butene	108671	000106-98-9	87
4	1-Propene, 2-methyl-	108463	000115-11-7	83
5	1-Propene, 2-methyl-	108669	000115-11-7	80

 Peak Number 3 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
14.84	143.93 PPB	9159297	FLUOROBENZENE	24.02
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	108332	000064-17-5	90
2	Ethanol	1076	000064-17-5	90
3	Ethanol	108331	000064-17-5	83

 Peak Number 4 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
16.00	145.68 PPB	9271154	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Pentene		109030	000109-67-1	91
2 1-Pentene		109032	000109-67-1	86
3 1-Pentene		109031	000109-67-1	86
4 1-Pentene		3426	000109-67-1	86
5 Cyclopentane		3292	000287-92-3	86

Peak Number 5 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
16.16	121.76 PPB	7748637	FLUOROBENZENE	24.02

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1 Acetone		109727	000067-64-1	80
2 Acetone		5734	000067-64-1	56

Peak Number 6 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
24.61	195.91 PPB	12467503	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Heptene		2183	000592-76-7	94
2 1-Heptene		111847	000592-76-7	91
3 1-Heptene		111846	000592-76-7	91
4 1-Heptene		108660	000592-76-7	87
5 Cyclopentane, 1,2-dimethyl-		15223	002452-99-5	83

Peak Number 7 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
24.76	75.66 PPB	4814695	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Pentenitrile		12695	013284-42-9	91
2 Butanenitrile, 2-methylene-		12684	001647-11-6	83
3 3-Pentenitrile		12688	004635-87-4	72
4 2-Pentenitrile		111125	013284-42-9	58
5 Cyclobutanecarbonitrile		12658	004426-11-3	50

Peak Number 8 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
25.12	499.74 PPB	31802690	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
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1	3-Heptene, (E)-	108689	014686-14-7	94
2	(Z)-3-Heptene	2213	007642-10-6	94
3	2-Heptene	108687	000592-77-8	94
4	3-Heptene	108688	000592-78-9	93
5	3-Heptene, (E)-	108697	014686-14-7	91

 Peak Number 9 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
25.24	752.55 PPB	47891212	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene, (E)-	13656	014686-13-6	94
4	2-Heptene	108605	000592-77-8	94
5	3-Heptene, (E)-	108689	014686-14-7	74

 Peak Number 10 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
25.56	604.25 PPB	38453606	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene	108605	000592-77-8	95
4	2-Heptene, (E)-	13656	014686-13-6	91
5	(Z)-3-Heptene	108691	007642-10-6	91

 Peak Number 11 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
25.81	138.41 PPB	8808201	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, butyl-	1931	000930-57-4	78
2	2H-Pyran-2-one, tetrahydro-3,6-dime	109044	003720-22-7	59
3	Cyclopentane, 1,2-dimethyl-, cis-	23919	001192-18-3	53
4	Hexane, 2-chloro-	1457	000638-28-8	50
5	Cyclopentane, 1,2-dimethyl-, cis-	111951	001192-18-3	50

 Peak Number 12 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
27.08	244.70 PPB	15572460	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
2	3,4-Heptadiene	31430	002454-31-1	72
3	Furan, 2,4-dimethyl-	41734	003710-43-8	72
4	Furan, 2,4-dimethyl-	118263	003710-43-8	72
5	2-Cyclopenten-1-one, 2-methyl-	21588	001120-73-6	72

 Peak Number 13 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
27.68	659.30 PPB	22721504	CHLORO BENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	5681	000589-81-1	91
2	Heptane, 3-methyl-	109689	000589-81-1	81
3	Hexane, 2,4-dimethyl-	5467	000589-43-5	58
4	Hexane, 1-(hexyloxy)-2-methyl-	7097	074421-17-3	53
5	Hexane, 2,4-dimethyl-	109577	000589-43-5	53

 Peak Number 14 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
27.83	211.97 PPB	7305019	CHLORO BENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	116095	001119-65-9	96
2	2-Heptyne	116025	001119-65-9	91
3	2-Heptyne	31411	001119-65-9	86
4	1,4-Heptadiene	31572	005675-22-9	64
5	Cyclohexene, 4-methyl-	116094	000591-47-9	64

 Peak Number 15 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
28.17	111.24 PPB	3833723	CHLORO BENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	109711	000591-78-6	90
2	2-Hexanone	109712	000591-78-6	87
3	2-Hexanone	5779	000591-78-6	87
4	2-Hexanone	109732	000591-78-6	83
5	2-Hexanone, 4-hydroxy-3-propyl-	5739	062338-17-4	83

 Peak Number 16 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
28.25	586.44 PPB	20210469	CHLORO BENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methylene-	114415	001632-16-2	87
2	Heptane, 3-methylene-	114416	001632-16-2	72
3	Cyclopentane, 1,2,4-trimethyl-, (1.	23858	004850-28-6	72
4	Nonane, 3-methylene-	23869	051655-64-2	72
5	1,2-Oxaborolane, 2-ethyl-4,5-dimeth	23877	074685-45-3	72

 Peak Number 17 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
28.95	153.57 PPB	5292623	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, 3-methyl-	23868	003404-75-9	95
2	Hexane, 2-methyl-4-methylene-	23848	003404-80-6	90
3	Hexane, 2-methyl-4-methylene-	114420	003404-80-6	83
4	Heptane, 3-methylene-	114416	001632-16-2	72
5	Heptane, 3-methylene-	111568	001632-16-2	72

 Peak Number 18 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
29.08	81.84 PPB	2820285	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	87
2	2-Octene	111287	000111-67-1	83
3	3-Octene, (E)-	108600	014919-01-8	83
4	4-Octene, (E)-	111302	014850-23-8	83
5	4-Octene, (E)-	13070	014850-23-8	83

 Peak Number 19 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
31.04	734.92 PPB	25327589	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109874	000123-19-3	91
2	4-Heptanone	114577	000123-19-3	91
3	4-Heptanone	109855	000123-19-3	72
4	4-Heptanone	6294	000123-19-3	72
5	3-Buten-2-ol, 2-methyl-	114556	000115-18-4	64

 Peak Number 20 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
31.34	93.81 PPB	3233009	CHLOROBENZENE-D5	30.39

Hit# of 7	Tentative ID	Ref#	CAS#	Qual
1	n-Butyl ether	15788	000142-96-1	72
2	n-Butyl ether	112208	000142-96-1	64
3	n-Butyl ether	112037	000142-96-1	56
4	Pentane, 1-butoxy-	16488	018636-66-3	39
5	Ethanol, 2-butoxy-	112447	000111-76-2	38

Peak Number 21 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
31.53	1673.12 PPB	57660574	CHLOROBENZENE-D5	30.39
Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	112010	000106-35-4	91
2	3-Heptanone	15594	000106-35-4	78
3	3-Heptanone	112011	000106-35-4	72
4	3-Heptanone	112074	000106-35-4	64
5	3-Hexanone, 5-methyl-	17303	000623-56-3	64

Peak Number 22 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
31.63	643.55 PPB	22178572	CHLOROBENZENE-D5	30.39
Hit# of 18	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	109741	000110-43-0	90
2	2-Heptanone	109740	000110-43-0	90
3	2-Heptanone	109709	000110-43-0	83
4	2-Hexanone, 5-methyl-	109729	000110-12-3	52
5	2-Heptanone	5736	000110-43-0	52

Peak Number 23 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
31.75	255.39 PPB	8801320	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanol	19637	000589-82-2	83
2	3-Hexanol, 5-methyl-	113293	000623-55-2	72
3	3-Heptanol	113288	000589-82-2	64
4	2-Pentanol, 2-methyl-	113238	000590-36-3	64
5	3-Heptanol	113291	000589-82-2	64

Peak Number 24 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
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32.76 150.48 PPB 5185990 CHLOROBENZENE-D5 30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	50
2	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	47
3	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	40
4	2-Oxepanone, 4-methyl-	15310	1000196-99-7	38
5	Cyclopentane, methyl-	15051	000096-37-7	27

Peak Number 25 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
33.09	364.41 PPB	12558709	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	72
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	64
4	Hexanoic acid, anhydride	118546	002051-49-2	53
5	Hexanoic acid, anhydride	43066	002051-49-2	53

Peak Number 26 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
33.23	432.18 PPB	14894113	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	Hexanoic acid, anhydride	118546	002051-49-2	59
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	53
4	Hexanoic acid, anhydride	43066	002051-49-2	53
5	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53

Peak Number 27 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
33.37	401.87 PPB	13849725	CHLOROBENZENE-D5	30.39

Hit# of 18	Tentative ID	Ref#	CAS#	Qual
1	3,3-Diethoxy-1-propyne	32833	010160-87-9	53
2	1H-1,2,4-Triazole, 3-propyl-	33272	019932-60-6	50
3	Cyclopropane, 1,1,2,2-tetramethyl-	111640	004127-47-3	50
4	3-(Butylamino)propionitrile	116379	000693-51-6	47
5	N,N'-Bis(2,6-dimethyl-6-nitrosohept	32831	066737-12-0	40

Peak Number 28 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
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33.65	380.83 PPB	13124643	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Octene, 3,7-dimethyl-	109482	004984-01-4	32
2	2-Acetylcyclopentanone	110242	001670-46-8	27
3	3-Octen-2-one, (E)-	5082	018402-82-9	25
4	Heptafluorobutyric acid,n-tridecyl	4323	1000216-78-9	25
5	3-Hexadecyloxy carbonyl-5-(2-hydroxy	4219	1000222-82-8	25

Peak Number 29 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
34.20	95.67 PPB	3297192	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octanone	109633	000589-63-9	95
2	4-Octanone	109631	000589-63-9	93
3	4-Octanone	109634	000589-63-9	86
4	4-Octanone	109632	000589-63-9	55
5	4-Octanone	5601	000589-63-9	55

Peak Number 30 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
34.40	104.53 PPB	3602530	CHLOROBENZENE-D5	30.39
Hit# of 19	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	116270	000629-08-3	90
2	Heptanenitrile	108877	000629-08-3	64
3	Heptanenitrile	108875	000629-08-3	53
4	Heptanenitrile	108876	000629-08-3	50
5	Octanenitrile	108878	000124-12-9	38

Peak Number 31 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
35.36	433.73 PPB	14947663	CHLOROBENZENE-D5	30.39
Hit# of 14	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	Hexanenitrile	108570	000628-73-9	42
3	5-Hexen-1-ol	111145	000821-41-0	38
4	Cyclobutanecarbonitrile	111127	004426-11-3	38
5	1,8-Nonadiene	2340	004900-30-5	36

Peak Number 32 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
35.82	433.27 PPB	14931569	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	90
2	1-Hexanol, 2-ethyl-	15889	000104-76-7	83
3	1-Hexanol, 2-ethyl-	112147	000104-76-7	74
4	1-Hexanol, 2-ethyl-	112165	000104-76-7	64
5	2-Propyl-1-pentanol	15895	058175-57-8	47

Peak Number 33 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
37.38	80.75 PPB	2782933	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octanenitrile	108878	000124-12-9	87
2	Octanenitrile	32299	000124-12-9	72
3	Nonanenitrile	108904	002243-27-8	53
4	1,10-Dicyanodecane	108882	004543-66-2	53
5	Octanenitrile	108880	000124-12-9	47

Peak Number 34 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
37.85	221.64 PPB	7638451	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	109663	001120-21-4	93
2	Undecane	16533	001120-21-4	91
3	Undecane	112395	001120-21-4	91
4	Tetradecane	112357	000629-59-4	90
5	Tridecane	112309	000629-50-5	90

Peak Number 35 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
38.16	72.90 PPB	2512297	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Buten-2-one, 4-(1-aziridinyl)-	8039	018277-57-1	50
2	N-Methylmaleimide	50219	000930-88-1	43
3	3,4-Dimethyl-3-pyrrolin-2-one	50379	1000196-61-4	43
4	Cyclohexane, isocyanato-	32607	003173-53-3	43
5	2(1H)-Pyrimidinone, 4-amino-	50276	000071-30-7	38

Peak Number 36 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD		R.T.
40.49	437.69 PPB	15084120	CHLOROBENZENE-D5		30.39
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Dodecane		16262	000112-40-3	94
2	Hexadecane		112408	000544-76-3	86
3	Undecane		112395	001120-21-4	86
4	Decane, 6-ethyl-2-methyl-		16450	062108-21-8	83
5	Undecane		16533	001120-21-4	83

 Peak Number 37 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD		R.T.
40.82	63.92 PPB	2203013	CHLOROBENZENE-D5		30.39
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Dodecane, 6-methyl-		16443	006044-71-9	97
2	Undecane, 2,6-dimethyl-		17111	017301-23-4	95
3	Undecane, 2,6-dimethyl-		112404	017301-23-4	94
4	Undecane, 3,6-dimethyl-		16435	017301-28-9	81
5	Undecane, 2,6-dimethyl-		112287	017301-23-4	74

 Peak Number 38 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD		R.T.
41.99	71.67 PPB	2470066	CHLOROBENZENE-D5		30.39
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Octane, 2,6-dimethyl-		112396	002051-30-1	83
2	Nonane, 3-methyl-		112310	005911-04-6	78
3	Octane, 3,6-dimethyl-		17112	015869-94-0	72
4	Undecane, 6,6-dimethyl-		17116	017312-76-4	72
5	Decane, 3,6-dimethyl-		16418	017312-53-7	72

 Peak Number 39 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD		R.T.
42.43	637.08 PPB	21955567	CHLOROBENZENE-D5		30.39
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Tridecane		112308	000629-50-5	95
2	Tridecane		112309	000629-50-5	94
3	Tridecane		16403	000629-50-5	91
4	Hexadecane		112406	000544-76-3	87
5	Heptadecane		112319	000629-78-7	86

1

Peak Number 40 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
43.81	172.72 PPB	5952415	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	112356	000629-59-4	93
2	Hexadecane	112408	000544-76-3	91
3	Tetradecane	112359	000629-59-4	91
4	Heptadecane	112319	000629-78-7	91
5	Tetradecane	112355	000629-59-4	90

19010508.D VAP_NP7.M Wed Jan 20 10:43:47 1999

File : C:\HPCHEM\1\DATA\19010405.D
Operator : G. FIES
Acquired : 4 Jan 99 1:40 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-051-S078
Misc Info : 50 TORR
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010405.D

Vial: 1

Acq On : 4 Jan 99 1:40 pm

Operator: G. FIES

Sample : VS006-051-S078

Inst : 5972 - MS

Misc : 50 TORR

Multiplr: 2.00

Quant Time: Jan 6 9:23 1999

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.01	96	7175660	100.00	NG	0.08
17) CHLOROBENZENE-D5	30.38	117	2900585	100.00	NG	-0.08

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.85	45	3271272	453.78	PPB m	100 E
3) ACETONITRILE	16.07	40	901802	78.72	PPB m	83
4) ACETONE	16.16	58	2482898	241.59	PPB m	99
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.64	45	123397	4.39	PPB m	93
7) 1-PROPANOL	19.35	31	452909	19.97	PPB m	94
8) PROPANENITRILE	19.99	54	1133298	67.90	PPB m	99
9) BUTANAL	0.00	72		Not Detected		
10) 2-BUTANONE	20.76	72	641699	61.80	PPB	81
11) TETRAHYDROFURAN	22.10	72	80003	8.19	PPB	97
12) 1-BUTANOL	23.54	56	1818052	186.21	PPB m	89
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.39	43	1419961	23.55	PPB	98
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	26.39	100	15498	3.11	PPB	58
18) 2-HEXANONE	28.16	58	1829541	117.84	PPB m	75
19) 3-HEPTANONE	31.54	114	3495447	1158.68	PPB m	1 E
20) 2-HEPTANONE	31.62	58	7371752	346.13	PPB m	87 E
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	34.71	58	355480	13.25	PPB m	88

(#) = qualifier out of range (m) = manual integration
 19010405.D VAP_P7.M Wed Jan 06 09:24:09 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010405.D

Acq On : 4 Jan 99 1:40 pm

Sample : VS006-051-S078

Misc : 50 TORR

Quant Time: Jan 6 9:28 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI on	Response	Conc	Units	Dev (Min)
1) FLUOROBENZENE	24.01	96	7175660	100.00	NG	0.08
20) CHLOROBENZENE-D5	30.38	117	2900585	100.00	PPB	-0.05
System Monitoring Compounds						
						%Recovery
Target Compounds						Qvalue
2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.56	43	16229205	420.94	PPB m	99 E
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.71	101	140534	4.08		99
7) N-PENTANE	16.40	72	599456	172.85	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.52	43	872211	17.87	PPB #	81
10) 1-HEXENE	20.53	56	5840528	264.44	PPB	82 E
11) N-HEXANE	20.88	57	4219659	130.44	PPB	92
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.51	78	372112	6.95	PPB	100
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.74	43	199818	5.82	PPB m	86
16) N-HEPTANE	24.94	57	4050514	224.90	PPB m	34
17) TOLUENE	27.57	91	1836653	33.48	PPB	95
18) N-OCTANE	28.58	57	907338	64.58	PPB m	94
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.93	43	1399400	77.24	PPB	95
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	34.99	43	1835068	114.75	PPB	99
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration

19010405.D VAP_NP7.M

Wed Jan 06 09:29:18 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010804.D
 Acq On : 8 Jan 99 12:46 pm
 Sample : VS006-051-S078-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 11:30 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.01	96	5273318	100.00	NG	0.08
17) CHLOROBENZENE-D5	30.38	117	3346507	100.00	NG	-0.08

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) ETHANOL	14.86	45	110121	498.87 PPB	m 100
3) ACETONITRILE	0.00	40		Not Detected	
4) ACETONE	16.15	58	119562	379.93 PPB	m 85
5) FURAN	0.00	68		Not Detected	
6) 2-PROPANOL	16.68	45	44426	51.65 PPB	m 87
7) 1-PROPANOL	19.37	31	50154	72.21 PPB	m 99
8) PROPANENITRILE	20.00	54	27058	52.95 PPB	m 98
9) BUTANAL	20.60	72	4998	24.04 PPB	m 84
10) 2-BUTANONE	20.76	72	23312	73.32 PPB	m 88
11) TETRAHYDROFURAN	22.13	72	3890	13.00 PPB	# 69
12) 1-BUTANOL	23.52	56	203038	679.13 PPB	m 99
13) BUTANENITRILE	0.00	41		Not Detected	
14) 2-PENTANONE	24.40	43	45333	24.56 PPB	98
15) 1,4-DIOXANE	25.23	88	1346	3.64 PPB	# 13
16) 4-METHYL-2-PENTANONE	26.40	100	1430	9.36 PPB	73
18) 2-HEXANONE	28.15	58	65770	88.13 PPB	m 76
19) 3-HEPTANONE	31.45	114	295444	2037.24 PPB	92
20) 2-HEPTANONE	31.57	58	390767	381.67 PPB	99
21) CYCLOHEXANONE	0.00	98		Not Detected	
22) 2-OCTANONE	34.72	58	12266	9.51 PPB	82

(#) = qualifier out of range (m) = manual integration
 19010804.D VAP_P7.M Mon Jan 11 11:31:15 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010804.D
 Acq On : 8 Jan 99 12:46 pm
 Sample : VS006-051-S078-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 11:25 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.01	96	5273318	100.00	NG	0.08
20) CHLOROBENZENE-D5	30.38	117	3346507	100.00	PPB	-0.05

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.50	43	700637	593.48	PPB	99
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.70	101	4295	4.07		97
7) N-PENTANE	16.39	72	17965	169.17	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.51	43	32280	21.60	PPB #	72
10) 1-HEXENE	20.52	56	210845	311.76	PPB #	77
11) N-HEXANE	20.88	57	134689	135.97	PPB #	80
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.52	78	12787	7.80	PPB	97
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.75	43	7883	7.50	PPB m	91
16) N-HEPTANE	24.93	57	409173	741.95	PPB #	78
17) TOLUENE	27.57	91	82669	49.21	PPB	94
18) N-OCTANE	28.58	57	47211	109.73	PPB m	83
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	31.17	91	5178	4.59	PPB	91
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.92	43	54810	62.93	PPB	89
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	34.99	43	80470	104.67	PPB m	93
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19010804.D VAP_NP7.M Mon Jan 11 11:26:42 1999

TIC: 19010405.D

VS006-051-S078

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.181	rBB	0.449	19361827	7.074	7.523
2	9.177	rBB	0.181	1465954	9.103	9.284
3	10.992	rBB	0.201	1178142	10.951	11.152
4	11.286	rBB	0.288	39504002	11.152	11.440
5	11.567	rBB	0.462	33271771	11.454	11.916
6	12.210	rBB	0.181	3419353	12.130	12.311
7	12.666	rBB	0.167	3085922	12.579	12.746
8	12.927	rBB	0.201	6947430	12.827	13.027
9	14.849	rBB	0.342	11081637	14.735	15.077
10	15.137	rBB	0.141	1689337	15.077	15.217
11	16.001	rBB	0.107	10797806	15.941	16.048
12	16.162	rBB	0.121	9032569	16.108	16.229
13	16.403	rBB	0.114	12980154	16.349	16.463
14	16.898	rBB	0.167	3034314	16.798	16.965
15	17.253	rBB	0.080	1162584	17.206	17.287
16	17.327	rBB	0.100	2315761	17.287	17.387
17	18.291	rBB	0.147	1084390	18.224	18.372
18	19.041	rBB	0.234	2164088	18.921	19.155
19	19.517	rBB	0.134	2641425	19.450	19.584
20	19.986	rBB	0.127	2136809	19.912	20.039
21	20.528	rBB	0.268	32394796	20.414	20.682
22	20.756	rBB	0.134	4331467	20.682	20.816
23	20.883	rBB	0.134	16035853	20.816	20.950
24	21.077	rBB	0.100	970044	21.037	21.137
25	21.184	rBB	0.094	1984170	21.137	21.231
26	21.579	rBB	0.127	2266637	21.526	21.653
27	21.847	rBB	0.080	980622	21.800	21.881
28	22.035	rBB	0.074	1034458	21.995	22.068
29	22.115	rBB	0.107	872786	22.068	22.175
30	23.421	rBB	0.100	951880	23.367	23.468
31	23.535	rBB	0.121	7138446	23.468	23.588
32	23.803	rBB	0.067	1508979	23.763	23.830
33	23.856	rBB	0.067	1270301	23.830	23.896
34	24.010	rBB	0.167	14612768	23.910	24.077
35	24.225	rBB	0.094	856401	24.171	24.265
36	24.385	rBB	0.107	2276272	24.332	24.439
37	24.486	rBB	0.094	1116561	24.439	24.533
38	24.593	rBB	0.141	14677096	24.533	24.673
39	24.754	rBB	0.188	5734902	24.673	24.861
40	24.968	rBB	0.174	74125783	24.861	25.035
41	25.102	rBB	0.121	36406382	25.035	25.156
42	25.229	rBB	0.134	54957385	25.156	25.289
43	25.551	rBB	0.141	44434763	25.484	25.624
44	25.798	rBB	0.228	10626498	25.705	25.932
45	25.986	rBB	0.114	1020558	25.932	26.046
46	26.361	rBB	0.201	1078243	26.247	26.448
47	26.702	rBB	0.114	1106748	26.649	26.763
48	26.816	rBB	0.087	880315	26.769	26.857
49	27.064	rBB	0.254	18681128	26.937	27.191
50	27.566	rBB	0.100	9391541	27.506	27.607
51	27.674	rBB	0.121	26968948	27.607	27.727
52	27.774	rBB	0.040	1344492	27.741	27.781
53	27.821	rBB	0.080	9004094	27.781	27.861
54	28.162	rBB	0.080	4791425	28.109	28.189
55	28.236	rBB	0.121	23414107	28.189	28.310
56	28.477	rBB	0.107	1055291	28.404	28.511

HNF-3949 Rev. 0

57	28.578	rBB	0.221	21193018	28.511	28.732
58	28.785	rBB	0.141	22777725	28.732	28.872
59	28.939	rBB	0.121	6518638	28.879	29.000
60	29.066	rBB	0.161	3371048	29.000	29.160
61	29.763	rBB	0.100	1372554	29.709	29.810
62	30.379	rBB	0.161	7876545	30.312	30.473
63	30.922	rBB	0.087	1624691	30.868	30.955
64	31.022	rBB	0.127	30068111	30.955	31.082
65	31.223	rBB	0.107	1695242	31.169	31.276
66	31.323	rBB	0.114	4007013	31.276	31.390
67	31.518	rBB	0.174	66469119	31.397	31.571
68	31.618	rBB	0.121	25446600	31.571	31.692
69	31.732	rBB	0.087	5919189	31.692	31.779
70	31.926	rBB	0.114	5647245	31.873	31.986
71	32.743	rBB	0.174	6484441	32.629	32.803
72	32.850	rBB	0.100	1354120	32.803	32.904
73	33.078	rBB	0.234	15349238	32.904	33.138
74	33.212	rBB	0.147	17660508	33.138	33.286
75	33.353	rBB	0.154	16488112	33.286	33.440
76	33.647	rBB	0.208	18982993	33.547	33.754
77	33.935	rBB	0.100	963488	33.895	33.995
78	34.190	rBB	0.134	3446668	34.116	34.250
79	34.391	rBB	0.154	3737684	34.297	34.451
80	34.993	rBB	0.147	7815875	34.940	35.087
81	35.348	rBB	0.241	15244962	35.248	35.489
82	35.683	rBB	0.121	2850666	35.616	35.737
83	35.804	rBB	0.167	5684030	35.737	35.904
84	37.364	rBB	0.198	2719618	37.277	37.464
85	37.612	rBB	0.154	1141670	37.551	37.705
86	37.833	rBB	0.114	11741186	37.779	37.893
87	38.141	rBB	0.141	2218497	38.054	38.194
88	38.616	rBB	0.141	956298	38.529	38.670
89	38.757	rBB	0.154	1149304	38.670	38.824
90	38.884	rBB	0.114	1220069	38.824	38.938
91	39.179	rBB	0.121	1282447	39.125	39.246
92	39.547	rBB	0.134	1072320	39.473	39.607
93	40.270	rBB	0.154	919028	40.170	40.324
94	40.478	rBB	0.181	21578879	40.391	40.572
95	40.813	rBB	0.127	3331648	40.746	40.873
96	41.978	rBB	0.147	3666140	41.904	42.052
97	42.286	rBB	0.107	1404958	42.213	42.320
98	42.427	rBB	0.094	28890912	42.373	42.467
99	43.525	rBB	0.127	958339	43.472	43.599
100	43.800	rBB	0.087	7476553	43.759	43.847

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Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19010405.D
 Acq On : 4 Jan 99 1:40 pm
 Sample : VS006-051-S078
 Misc : 50 TORR
 Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD		R.T.
7.18	265.00 PPB	19361828	FLUOROBENZENE		24.01
Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	Propene		108457	000115-07-1	90
2	Cyclopropane		108993	000075-19-4	86
3	Cyclopropene		1232	1000194-05-8	16

 Peak Number 2 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to.ISTD		R.T.
<u>11.29</u>	540.68 PPB	39504003	FLUOROBENZENE		24.01
Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	1-Butene		108672	000106-98-9	87
2	1-Propene, 2-methyl-		108669	000115-11-7	87
3	Cyclobutane		107955	000287-23-0	80

 Peak Number 3 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.	
25.10	498.28 PPB	36406382	FLUOROBENZENE	24.01	
Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene		108688	000592-78-9	96
2	3-Heptene, (E)-		108689	014686-14-7	95
3	(Z)-3-Heptene		108691	007642-10-6	94

 Peak Number 4 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.	
25.23	752.18 PPB	54957386	FLUOROBENZENE	24.01	
Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene		108687	000592-77-8	97
2	2-Heptene, (E)-		111908	014686-13-6	96

3 3-Heptene, (E) -

108689 014686-14-7 74

 Peak Number 5 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
25.55	608.16 PPB	44434764	FLUOROBENZENE	24.01

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E) -	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95
3	3-Heptene	108688	000592-78-9	91

 Peak Number 6 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
27.06	255.68 PPB	18681129	FLUOROBENZENE	24.01

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
2	Furan, 2,4-dimethyl-	41734	003710-43-8	72
3	2-Cyclopenten-1-one, 3-methyl-	118261	002758-18-1	64

 Peak Number 7 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
27.67	684.79 PPB	26968949	CHLOROBENZENE-D5	30.38

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	5681	000589-81-1	91
2	Heptane, 3,4,5-trimethyl-	7053	020278-89-1	78
3	Nonane, 5-methyl-	110078	015869-85-9	64

 Peak Number 8 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
27.82	228.63 PPB	9004095	CHLOROBENZENE-D5	30.38

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	116095	001119-65-9	95
2	1,4-Heptadiene	31572	005675-22-9	60
3	Cyclohexene, 4-methyl-	31569	000591-47-9	59

 Peak Number 9 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
------	------	------	------------------	------

28.24	594.53 PPB	23414107	CHLOROBENZENE-D5	30.38
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methylene-	23862	001632-16-2	90
2	Hexane, 2-methyl-4-methylene-	114420	003404-80-6	87
3	Cyclopentane, 1,2,3-trimethyl-, (1.	23917	015890-40-1	50

Peak Number 10	Rank in Relative Concentration 2			
R.T.	Conc	Area	Relative to ISTD	R.T.
31.02	763.48 PPB	30068112	CHLOROBENZENE-D5	30.38
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109874	000123-19-3	91
2	3-Pentanone, 2,4-dimethyl-	109869	000565-80-0	72
3	3-Buten-2-ol, 2-methyl-	114556	000115-18-4	64

Peak Number 11	Rank in Relative Concentration 1			
R.T.	Conc	Area	Relative to ISTD	R.T.
31.52	1687.77 PPB	66469119	CHLOROBENZENE-D5	30.38
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	112010	000106-35-4	91
2	3-Hexanone, 5-methyl-	17303	000623-56-3	64
3	2-Propen-1-ol, 2-methyl-	15716	000513-42-8	49

Peak Number 12	Rank in Relative Concentration 6			
R.T.	Conc	Area	Relative to ISTD	R.T.
31.62	646.14 PPB	25446600	CHLOROBENZENE-D5	30.38
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	109741	000110-43-0	91
2	2-Nonanone	112829	000821-55-6	64
3	2-Heptanone, 6-methyl-	5759	000928-68-7	43

Peak Number 13	Rank in Relative Concentration 15			
R.T.	Conc	Area	Relative to ISTD	R.T.
33.08	389.75 PPB	15349239	CHLOROBENZENE-D5	30.38
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	59

3 1,3,2-Dioxaborolane, 2,4-diethyl-

43307 057633-63-3 59

 Peak Number 14 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
33.21	448.43 PPB	17660508	CHLOROBENZENE-D5	30.38
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
3	Hexanoic acid, anhydride	118546	002051-49-2	53

 Peak Number 15 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
33.35	418.66 PPB	16488112	CHLOROBENZENE-D5	30.38
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	3,3-Diethoxy-1-propyne	32833	010160-87-9	59
2	1H-1,2,4-Triazole, 3-propyl-	33272	019932-60-6	53
3	3-(Butylamino)propionitrile	116379	000693-51-6	47

 Peak Number 16 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
33.65	482.01 PPB	18982993	CHLOROBENZENE-D5	30.38
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	3,5-Octadien-2-ol	13586	1000132-14-0	59
2	3-Hepten-2-one, 3-methyl-	14650	039899-08-6	50
3	4-Amino-6-hydroxypyrimidine	50272	001193-22-2	49

 Peak Number 17 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
35.35	387.10 PPB	15244963	CHLOROBENZENE-D5	30.38
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Hexanenitrile	108570	000628-73-9	42
2	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
3	Cyclobutanecarbonitrile	111127	004426-11-3	38

 Peak Number 18 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
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 37.83 298.13 PPB 11741186 CHLOROBENZENE-D5 30.38

Hit# of 3 Tentative ID Ref# CAS# Qual

 1 Undecane 16533 001120-21-4 91
 2 Tetradecane 112357 000629-59-4 90
 3 Tridecane 112309 000629-50-5 90

 Peak Number 19 Rank in Relative Concentration 9

R.T. Conc Area Relative to ISTD R.T.

 40.48 547.93 PPB 21578880 CHLOROBENZENE-D5 30.38

Hit# of 3 Tentative ID Ref# CAS# Qual

 1 Pentadecane 16493 000629-62-9 90
 2 Dodecane 109555 000112-40-3 87
 3 Hexadecane 112408 000544-76-3 86

 Peak Number 20 Rank in Relative Concentration 4

R.T. Conc Area Relative to ISTD R.T.

 42.43 733.59 PPB 28890912 CHLOROBENZENE-D5 30.38

Hit# of 3 Tentative ID Ref# CAS# Qual

 1 Tridecane 112308 000629-50-5 94
 2 Heptadecane 112319 000629-78-7 91
 3 Hexadecane 112406 000544-76-3 87

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Library Search Compound Report

Data File : D:\C106\19010405.D

Acq Time : 4 Jan 99 1:40 pm

Sample : VS006-051-S078

Misc : 50 TORR

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : D:\METHODS\VAP_NF7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

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R.T.	Conc	Area	Relative to ISTD	R.T.
7.18	412.07 PPB	19361827	FLUOROBENZENE	24.01
Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Propene	108457	000115-07-1	90
2	Cyclopropane	108993	000075-19-4	86
3	Cyclopropane	108992	000075-19-4	78
4	Propene	1533	000115-07-1	50
5	Cyclopropane	1232	1000194-05-8	16

Library Search Compound Report

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Acq Time : 4 Jan 99 1:40 pm

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R.T.	Conc	Area	Relative to ISTD		R.T.
11.29	840.75 PPB	39504002	FLUOROBENZENE		24.01
Hit# of 15	Tentative ID		Ref#	CAS#	Qual
1	1-Butene		108672	000106-98-9	87
2	1-Propene, 2-methyl-		108669	000115-11-7	87
3	1-Butene		108673	000106-98-9	83
4	1-Butene		108671	000106-98-9	83
5	1-Propene, 2-methyl-		108463	000115-11-7	83

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R.T.	Conc	Area	Relative to ISTD	R.T.		
14.85	235.85 PPB	11081637	FLUOROBENZENE	24.01		
Hit#	of	3	Tentative ID	Ref#	CAS#	Qual
1	Ethanol			108332	000064-17-5	90
2	Ethanol			1076	000064-17-5	90
3	Ethanol			108331	000064-17-5	83

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Misc : 50 TORR

Operator: G. FIES
Inst : 5972 - MS
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R.T.	Conc	Area	Relative to ISTD	R.T.
16.00	229.81 PPB	10797806	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene	109030	000109-67-1	91
2	1-Pentene	109032	000109-67-1	86
3	1-Pentene	109031	000109-67-1	86
4	1-Pentene	3426	000109-67-1	86
5	Cyclopentane	3292	000287-92-3	86

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Misc : 50 TORR

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R.T.	Conc	Area	Relative to ISTD	R.T.	
24.59	312.37 PPB	14677096	FLUOROBENZENE	24.01	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Heptene		111847	000592-76-7	94
2	1-Heptene		2183	000592-76-7	94
3	1-Heptene		111846	000592-76-7	91
4	1-Heptene		108660	000592-76-7	87
5	1-Heptene		108686	000592-76-7	81

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R.T.	Conc	Area	Relative to ISTD	R.T.
25.10	774.83 PPB	36406382	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	108688	000592-78-9	96
2	3-Heptene, (E)-	108689	014686-14-7	95
3	(Z)-3-Heptene	108691	007642-10-6	94
4	(Z)-3-Heptene	2213	007642-10-6	94
5	2-Heptene	108687	000592-77-8	94

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Misc : 50 TORR

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R.T.	Conc	Area	Relative to ISTD	R.T.
25.23	1169.64 PPB	54957385	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene	108605	000592-77-8	94
4	2-Heptene, (E)-	13656	014686-13-6	94
5	2-Heptene	2208	000592-77-8	80

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R.T.	Conc	Area	Relative to ISTD	R.T.
25.55	945.69 PPB	44434763	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95
3	2-Heptene	108605	000592-77-8	95
4	(Z)-3-Heptene	108691	007642-10-6	91
5	3-Heptene	108688	000592-78-9	91

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R.T.	Conc	Area	Relative to ISTD	R.T.
25.80	226.16 PPB	10626498	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, butyl-	1931	000930-57-4	90
2	2H-Pyran-2-one, tetrahydro-3,6-dime	109044	003720-22-7	59
3	Cyclopentane, 1,2-dimethyl-, cis-	23919	001192-18-3	53
4	Hexane, 2-chloro-	1457	000638-28-8	53
5	Cyclopentane, 1,3-dimethyl-	114428	002453-00-1	50

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R.T.	Conc	Area	Relative to ISTD	R.T.
27.06	397.59 PPB	18681128	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
2	Furan, 2,4-dimethyl-	118263	003710-43-8	72
3	Furan, 2,4-dimethyl-	41734	003710-43-8	72
4	2-Cyclopenten-1-one, 2-methyl-	21588	001120-73-6	72
5	2-Cyclopenten-1-one, 3-methyl-	118261	002758-18-1	64

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Misc : 50 TORR

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R.T.	Conc	Area	Relative to ISTD	R.T.	
27.67	1297.68 PPB	26968948	CHLOROBENZENE-D5	30.38	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Heptane, 3-methyl-		5681	000589-81-1	91
2	Heptane, 3-methyl-		109689	000589-81-1	87
3	Heptane, 3,4,5-trimethyl-		7053	020278-89-1	78
4	Nonane, 5-methyl-		110078	015869-85-9	64
5	Hexane, 2,4-dimethyl-		5467	000589-43-5	58

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R.T.	Conc	Area	Relative to ISTD	R.T.
27.82	433.25 PPB	9004094	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	116095	001119-65-9	95
2	2-Heptyne	116025	001119-65-9	90
3	2-Heptyne	31411	001119-65-9	90
4	1,4-Heptadiene	31572	005675-22-9	60
5	Cyclohexene, 4-methyl-	31569	000591-47-9	59

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Misc : 50 TORR

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R.T.	Conc	Area	Relative to ISTD	R.T.	
28.16	230.55 PPB	4791425	CHLOROBENZENE-D5	30.38	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Hexanone		109712	000591-78-6	91
2	2-Hexanone		109711	000591-78-6	91
3	2-Hexanone		5779	000591-78-6	91
4	2-Hexanone		109732	000591-78-6	83
5	2-Hexanone, 4-hydroxy-3-propyl-		5739	062338-17-4	83

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Multiplr: 2.00

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R.T.	Conc	Area	Relative to ISTD	R.T.
28.24	1126.63 PPB	23414107	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methylene-	23862	001632-16-2	90
2	Hexane, 2-methyl-4-methylene-	114420	003404-80-6	87
3	Heptane, 3-methylene-	114415	001632-16-2	87
4	Heptane, 3-methylene-	114416	001632-16-2	72
5	Cyclopentane, 1,2,3-trimethyl-, (1.	23917	015890-40-1	50

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Misc : 50 TORR

Operator: G. FIES

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Multiplr: 2.00

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R.T.	Conc	Area	Relative to ISTD	R.T.	
28.94	313.66 PPB	6518638	CHLOROBENZENE-D5	30.38	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene, 3-methyl-		23868	003404-75-9	95
2	Hexane, 2-methyl-4-methylene-		23848	003404-80-6	90
3	Hexane, 2-methyl-4-methylene-		114420	003404-80-6	83
4	Heptane, 3-methylene-		114416	001632-16-2	72
5	Heptane, 3-methylene-		111568	001632-16-2	72

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Misc : 50 TORR

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

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R.T.	Conc	Area	Relative to ISTD	R.T.	
31.02	1446.80 PPB	30068111	CHLOROBENZENE-D5	30.38	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	4-Heptanone		109874	000123-19-3	91
2	4-Heptanone		114577	000123-19-3	91
3	3-Pentanone, 2,4-dimethyl-		109869	000565-80-0	72
4	4-Heptanone		109855	000123-19-3	72
5	4-Heptanone		6294	000123-19-3	72

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R.T.	Conc	Area	Relative to ISTD	R.T.
31.52	3198.33 PPB	66469119	CHLOROBENZENE-D5	30.38

Hit# of 19	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	112010	000106-35-4	91
2	3-Heptanone	15594	000106-35-4	78
3	3-Heptanone	112011	000106-35-4	72
4	3-Heptanone	112074	000106-35-4	64
5	3-Hexanone, 5-methyl-	17303	000623-56-3	64

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Misc : 50 TORR

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Multiplr: 2.00

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R.T.	Conc	Area	Relative to ISTD	R.T.	
31.62	1224.43 PPB	25446600	CHLOROBENZENE-D5	30.38	
Hit# of 19	Tentative ID		Ref#	CAS#	Qual
1	2-Heptanone		109741	000110-43-0	91
2	2-Heptanone		109740	000110-43-0	90
3	2-Nonanone		112829	000821-55-6	64
4	2-Heptanone		109709	000110-43-0	64
5	2-Heptanone		5736	000110-43-0	52

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R.T.	Conc	Area	Relative to ISTD	R.T.
31.73	284.82 PPB	5919189	CHLORO BENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanol	113288	000589-82-2	78
2	2-Pentanol, 2-methyl-	113238	000590-36-3	56
3	Propane, 2-ethoxy-2-methyl-	113322	000637-92-3	53
4	3-Pentanol	113149	000584-02-1	53
5	Propane, 1-ethoxy-2-methyl-	113165	000627-02-1	53

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Sample : VS006-051-S078

Misc : 50 TORR

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : D:\METHODS\VAP_NF7.M

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R.T.	Conc	Area	Relative to ISTD	R.T.	
32.74	312.02 PPB	6484441	CHLOROBENZENE-D5	30.38	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-		107966	001121-07-9	47
2	2,5-Pyrrolidinedione, 1-methyl-		223	001121-07-9	40
3	2-Oxepanone, 4-methyl-		15310	1000196-99-7	38
4	Cyclohexanol, 4-methyl-1-(1-methyl		120265	000470-65-5	35
5	Cyclopentane, methyl-		15051	000096-37-7	27

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Misc : 50 TORR

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R.T.	Conc	Area	Relative to ISTD	R.T.
33.08	738.57 PPB	15349238	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	59
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	59
4	Hexanoic acid, anhydride	118546	002051-49-2	53
5	Hexanoic acid, anhydride	43066	002051-49-2	53

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R.T.	Conc	Area	Relative to ISTD	R.T.
33.21	849.78 PPB	17660508	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	Hexanoic acid, anhydride	118546	002051-49-2	53
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	53
4	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
5	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	50

Library Search Compound Report

Data File : D:\C106\19010405.D

Acq Time : 4 Jan 99 1:40 pm

Sample : VS006-051-S078

Misc : 50 TORR

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : D:\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\NIST98.L

R.T.	Conc	Area	Relative to ISTD	R.T.
33.35	793.37 PPB	16488112	CHLOROBENZENE-D5	30.38

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	3,3-Diethoxy-1-propyne	32833	010160-87-9	59
2	1H-1,2,4-Triazole, 3-propyl-	33272	019932-60-6	53
3	3-(Butylamino)propionitrile	116379	000693-51-6	47
4	Cyclopropane, 1,1,2,2-tetramethyl-	111640	004127-47-3	42
5	1H-Imidazol-2-amine	33094	007720-39-0	37

Library Search Compound Report

Data File : D:\CI06\19010405.D

Acq Time : 4 Jan 99 1:40 pm

Sample : VS006-051-S078

Misc : 50 TORR

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : D:\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\NIST98.L

R.T.	Conc	Area	Relative to ISTD	R.T.	
33.65	913.41 PPB	18982993	CHLOROBENZENE-D5	30.38	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	3,5-Octadien-2-ol		13586	1000132-14-0	59
2	3-Hepten-2-one, 3-methyl-		14650	039899-08-6	50
3	4-Amino-6-hydroxypyrimidine		50272	001193-22-2	49
4	Benzenamine, 2-fluoro-		120100	000348-54-9	47
5	cis-4-Nonene		111306	010405-85-3	35

Library Search Compound Report

Data File : D:\C106\19010405.D

Acq Time : 4 Jan 99 1:40 pm

Sample : VS006-051-S078

Misc : 50 TORR

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : D:\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\NIST98.L

R.T.	Conc	Area	Relative to ISTD	R.T.
35.35	733.55 PPB	45244962	CHLOROBENZENE-D5	30.38
Hit# of 13	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	Hexanenitrile	108570	000628-73-9	42
3	5-Hexen-1-ol	111145	000821-41-0	38
4	Cyclobutanecarbonitrile	111127	004426-11-3	38
5	1,8-Nonadiene	2340	004900-30-5	36

Library Search Compound Report

Data File : D:\C106\19010405.D
 Acq Time : 4 Jan 99 1:40 pm
 Sample : VS006-051-S078
 Misc : 50 TORR

Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 2.00

Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : C:\DATABASE\NIST98.L

R.T.	Conc	Area	Relative to ISTD	R.T.
35.80	273.50 PPB	5684030	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	83
2	1-Hexanol, 2-ethyl-	15889	000104-76-7	78
3	1-Hexanol, 2-ethyl-	112165	000104-76-7	72
4	1-Hexanol, 2-ethyl-	112147	000104-76-7	53
5	2-Propyl-1-pentanol	15895	058175-57-8	50

Library Search Compound Report

Data File : D:\C106\19010405.D
Acq Time : 4 Jan 99 1:40 pm
Sample : VS006-051-S078
Misc : 50 TORR

Operator: G. FIES
Inst : 5972 - MS
Multiplr: 2.00

Method : D:\METHODS\VAP_NP7.M
Title : NONPOLAR VAPOR STANDARD CALIBRATION
Library : C:\DATABASE\NIST98.L

R.T.	Conc	Area	Relative to ISTD	R.T.	
37.83	564.96 PPB	11741186	CHLOROBENZENE-D5	30.38	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Undecane		16533	001120-21-4	91
2	Undecane		112395	001120-21-4	91
3	Tridecane		112309	000629-50-5	90
4	Tetradecane		112357	000629-59-4	90
5	Undecane		109663	001120-21-4	87

Library Search Compound Report

Data File : D:\C106\19010405.D

Acq Time : 4 Jan 99 1:40 pm

Sample : VS006-051-S078

Misc : 50 TORR

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : D:\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\NIST98.L

Library Search Compound Report

Data File : D:\C106\19010405.D

Acq Time : 4 Jan 99 1:40 pm

Sample : VS006-051-S078

Misc : 50 TORR

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : D:\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\NIST98.L

R.T.	Conc	Area	Relative to ISTD	R.T.	
42.43	1390.16 PPB	28890912	CHLOROBENZENE-D5	30.38	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Tridecane		112308	000629-50-5	94
2	Tridecane		112309	000629-50-5	94
3	Tridecane		16403	000629-50-5	91
4	Heptadecane		112319	000629-78-7	91
5	Hexadecane		112406	000544-76-3	87

Library Search Compound Report

Data File : D:\C106\19010405.D

Acq Time : 4 Jan 99 1:40 pm

Sample : VS006-051-S078

Misc : 50 TORR

Operator: G. FIES

Inst : 5972 - MS

Multiplx: 2.00

Method : D:\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : C:\DATABASE\NIST98.L

R.T.	Conc	Area	Relative to ISTD	R.T.	
43.80	359.75 PPB	7476553	CHLOROBENZENE-D5	30.38	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Tetradecane		112357	000629-59-4	94
2	Tetradecane		112356	000629-59-4	94
3	Hexadecane		112408	000544-76-3	91
4	Tridecane		16403	000629-50-5	90
5	Tetradecane		112355	000629-59-4	87

File : C:\HPCHEM\1\DATA\19010506.D
Operator : M. STAUFFER
Acquired : 5 Jan 99 2:47 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-058-S080
Misc Info : 50 TORR; 2 ATM
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010506.D

Acq On : 5 Jan 99 2:47 pm

Sample : VS006-058-S080

Misc : 50 TORR; 2 ATM

Quant Time: Jan 6 9:50 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	6510249	100.00	NG	0.09
17) CHLOROBENZENE-D5	30.39	117	2673023	100.00	NG	-0.07

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue	
2) ETHANOL	14.86	45	2995400	457.98	PPB	m	100 E
3) ACETONITRILE	16.08	40	877223	84.66	PPB	m	1
4) ACETONE	16.17	58	2286041	245.17	PPB	m	99
5) FURAN	0.00	68		Not Detected			
6) 2-PROPANOL	16.64	45	118442	4.65	PPB	#	91
7) 1-PROPANOL	19.36	31	240182	11.67	PPB	m	96
8) PROPANENITRILE	19.99	54	1019353	67.32	PPB	m	99
9) BUTANAL	0.00	72		Not Detected			
10) 2-BUTANONE	20.76	72	559545	59.40	PPB		81
11) TETRAHYDROFURAN	22.11	72	95182	10.74	PPB		95
12) 1-BUTANOL	23.54	56	1353542	152.80	PPB	m	90
13) BUTANENITRILE	0.00	41		Not Detected			
14) 2-PENTANONE	24.39	43	1162755	21.26	PPB		98
15) 1,4-DIOXANE	0.00	88		Not Detected			
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected			
18) 2-HEXANONE	28.17	58	1494695	104.47	PPB	m	74
19) 3-HEPTANONE	31.50	114	3110106	1118.71	PPB	m	1 E
20) 2-HEPTANONE	31.63	58	6846856	348.85	PPB	m	85 E
21) CYCLOHEXANONE	0.00	98		Not Detected			
22) 2-OCTANONE	34.72	58	358381	14.49	PPB	m	96

(#) = qualifier out of range (m) = manual integration

19010506.D VAP_P7.M

Wed Jan 06 09:50:26 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010506.D

Acq On : 5 Jan 99 2:47 pm

Sample : VS006-058-S080

Misc : 50 TORR; 2 ATM

Quant Time: Jan 6 9:45 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI	on	Response	Conc	Units	Dev (Min)
1) FLUOROBENZENE	24.02	96		6510249	100.00	NG	0.09
20) CHLOROBENZENE-D5	30.39	117		2673023	100.00	PPB	-0.04

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85			Not Detected		
3) METHYL CHLORIDE	0.00	50			Not Detected		
4) N-BUTANE	11.57	43	14170909		405.12	PPB m	100 E
5) ETHYL CHLORIDE	0.00	64			Not Detected		
6) FREON 11	15.72	101	127077		4.07		99
7) N-PENTANE	16.41	72	517810		164.57	PPB #	100
8) DICHLOROMETHANE	0.00	49			Not Detected		
9) 2-METHYL-PENTANE	19.53	43	809231		18.28	PPB #	77
10) 1-HEXENE	20.53	56	5058481		252.44	PPB m	83
11) N-HEXANE	20.90	57	3565953		121.50	PPB	92
12) CHLOROFORM	0.00	83			Not Detected		
13) BENZENE	23.52	78	310781		6.40	PPB	99
14) CARBON TETRACHLORIDE	0.00	117			Not Detected		
15) 3-METHYL-HEXANE	23.75	43	165615		5.32	PPB m	90
16) N-HEPTANE	24.95	57	3379785		206.84	PPB m	84
17) TOLUENE	27.59	91	1459079		29.31	PPB	95
18) N-OCTANE	28.60	57	691650		54.26	PPB m	93
19) TETRACHLOROETHYLENE	0.00	166			Not Detected		
21) CHLOROBENZENE	0.00	112			Not Detected		
22) ETHYLBENZENE	0.00	91			Not Detected		
23) M,P-XYLENE	0.00	91			Not Detected		
24) STYRENE	0.00	104			Not Detected		
25) N-NONANE	31.94	43	1042440		62.44	PPB	95
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83			Not Detected		
27) O-XYLENE	0.00	91			Not Detected		
28) N-DECANE	35.01	43	1377911		93.50	PPB	98
29) 1,2,4-TRIMETHYLBENZENE	0.00	105			Not Detected		

(#) = qualifier out of range (m) = manual integration
 19010506.D VAP_NP7.M Wed Jan 06 09:46:00 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010709.D
 Acq On : 7 Jan 99 5:18 pm
 Sample : VS006-058-S080-2; SEC. DIL.
 Misc : 50 TORR
 Quant Time: Jan 7 18:14 1999

Vial: 1
 Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	Qlon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.04	96	5232236	100.00	NG	0.11
17) CHLOROBENZENE-D5	30.40	117	3282531	100.00	NG	-0.06

System Monitoring Compounds

%Recovery

Target Compounds	R.T.	Qlon	Response	Conc	Units	Qvalue
2) ETHANOL	14.91	45	93341	426.18	PPB m	100
3) ACETONITRILE	0.00	40		Not Detected		
4) ACETONE	16.17	58	110019	352.35	PPB	82
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	0.00	45		Not Detected		
7) 1-PROPANOL	19.39	31	9896	14.36	PPB #	93
8) PROPANENITRILE	20.01	54	28255	55.72	PPB m	99
9) BUTANAL	20.59	72	9067	43.95	PPB m	77
10) 2-BUTANONE	20.78	72	17927	56.83	PPB	86
11) TETRAHYDROFURAN	22.15	72	2488	8.38	PPB m	1
12) 1-BUTANOL	23.53	56	57505	193.86	PPB	99
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.41	43	32433	17.71	PPB	97
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	26.42	100	2103	13.87	PPB #	45
18) 2-HEXANONE	28.17	58	61550	34.08	PPB	76
19) 3-HEPTANONE	31.48	114	299574	2105.97	PPB	89
20) 2-HEPTANONE	31.59	58	418217	416.44	PPB m	99
21) CYCLOHEXANONE	31.94	98	2240	8.02	PPB #	2
22) 2-OCTANONE	34.72	58	15687	12.40	PPB	86

(#) = qualifier out of range (m) = manual integration
 19010709.D VAP_P7.M Thu Jan 07 18:15:21 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010709.D
 Acq On : 7 Jan 99 5:18 pm
 Sample : VS006-058-S080-2; SEC. DIL.
 Misc : 50 TORR
 Quant Time: Jan 7 18:18 1999

Vial: 1
 Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.04	96	5232236	100.00	NG	0.11
20) CHLOROBENZENE-D5	30.40	117	3282531	100.00	PPB	-0.02

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	11.52	43	711041	607.02 PPB	99
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.71	101	4705	4.50	99
7) N-PENTANE	16.40	72	18479	175.38 PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	19.54	43	32319	21.80 PPB #	70
10) 1-HEXENE	20.53	56	213615	318.34 PPB #	68
11) N-HEXANE	20.90	57	136448	138.83 PPB #	81
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	23.54	78	12877	7.92 PPB	98
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	24.01	43	10214	9.80 PPB #	22
16) N-HEPTANE	24.95	57	416004	760.26 PPB #	78
17) TOLUENE	27.59	91	82848	49.70 PPB	95
18) N-OCTANE	28.60	57	40065	93.85 PPB	81
19) TETRACHLOROETHYLENE	0.00	166		Not Detected	
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	31.19	91	3774	3.41 PPB	96
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	31.94	43	59456	69.60 PPB	89
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	35.01	43	78924	104.66 PPB	89
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#) = qualifier out of range (m) = manual integration
 19010709.D VAP_NP7.M Thu Jan 07 18:20:39 1999

HNF-3949 Rev. 0

TIC: 19010506.D

VS006-058-S080

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.188	rBB	0.368	15545972	7.101	7.469
2	9.003	rBB	0.154	917349	8.942	9.096
3	9.197	rBB	0.174	1304956	9.116	9.291
4	11.005	rBB	0.181	1073821	10.978	11.159
5	11.293	rBB	0.275	34286432	11.172	11.447
6	11.581	rBB	0.409	29161149	11.474	11.882
7	12.224	rBB	0.181	2908927	12.143	12.324
8	12.679	rBB	0.167	2608424	12.599	12.766
9	12.940	rBB	0.188	5860476	12.826	13.014
10	13.242	rBB	0.114	781208	13.201	13.315
11	14.856	rBB	0.321	10188490	14.742	15.063
12	15.150	rBB	0.161	1420718	15.077	15.237
13	16.007	rBB	0.107	9126569	15.947	16.054
14	16.081	rBB	0.067	912279	16.054	16.121
15	16.175	rBB	0.114	8083848	16.121	16.235
16	16.409	rBB	0.214	16343785	16.289	16.503
17	16.905	rBB	0.181	2598139	16.798	16.979
18	17.260	rBB	0.080	981637	17.213	17.293
19	17.333	rBB	0.107	1989980	17.293	17.400
20	18.298	rBB	0.167	1035941	18.238	18.405
21	19.055	rBB	0.201	1915381	18.947	19.148
22	19.530	rBB	0.134	2462543	19.463	19.597
23	19.992	rBB	0.127	1920577	19.925	20.052
24	20.535	rBB	0.254	27990614	20.427	20.682
25	20.756	rBB	0.134	3788857	20.695	20.829
26	20.896	rBB	0.134	13573783	20.829	20.963
27	21.090	rBB	0.107	817105	21.044	21.151
28	21.198	rBB	0.094	1633529	21.151	21.244
29	21.593	rBB	0.121	1871179	21.539	21.660
30	21.854	rBB	0.080	790886	21.814	21.894
31	22.102	rBB	0.114	1205664	22.068	22.182
32	23.542	rBB	0.121	5350262	23.475	23.595
33	23.809	rBB	0.074	1423443	23.769	23.843
34	23.870	rBB	0.067	1215638	23.843	23.910
35	24.024	rBB	0.261	15000615	23.917	24.178
36	24.392	rBB	0.107	1873582	24.338	24.446
37	24.492	rBB	0.100	924440	24.446	24.546
38	24.606	rBB	0.141	12248135	24.546	24.687
39	24.767	rBB	0.188	5068986	24.687	24.874
40	24.975	rBB	0.167	64501451	24.874	25.042
41	25.109	rBB	0.121	31541141	25.048	25.169
42	25.236	rBB	0.127	47337230	25.169	25.296
43	25.564	rBB	0.141	37916459	25.490	25.631
44	25.805	rBB	0.228	8652761	25.718	25.946
45	25.999	rBB	0.114	824759	25.946	26.060
46	26.374	rBB	0.201	806616	26.254	26.455
47	26.716	rBB	0.114	865215	26.662	26.776
48	27.077	rBB	0.254	15078091	26.950	27.205
49	27.379	rBB	0.147	1485610	27.278	27.426
50	27.580	rBB	0.100	7428550	27.519	27.620
51	27.680	rBB	0.121	21947579	27.620	27.740
52	27.787	rBB	0.040	1117256	27.754	27.794
53	27.828	rBB	0.080	7289163	27.794	27.874
54	28.169	rBB	0.080	4181196	28.122	28.203
55	28.249	rBB	0.114	19219435	28.203	28.316
56	28.484	rBB	0.107	777144	28.417	28.524

57	28.591	rBB	0.221	16307750	28.524	28.745
58	28.799	rBB	0.141	1790148	28.745	28.886
59	28.953	rBB	0.121	4966708	28.886	29.006
60	29.080	rBB	0.154	2662072	29.013	29.167
61	29.776	rBB	0.094	1070415	29.723	29.816
62	30.392	rBB	0.161	7288749	30.325	30.486
63	30.928	rBB	0.087	1311985	30.881	30.968
64	31.035	rBB	0.127	25869796	30.968	31.096
65	31.236	rBB	0.121	1485960	31.169	31.290
66	31.337	rBB	0.107	3092224	31.290	31.397
67	31.524	rBB	0.167	59017447	31.410	31.578
68	31.631	rBB	0.121	22724872	31.578	31.698
69	31.752	rBB	0.094	9391365	31.705	31.799
70	31.846	rBB	0.080	811806	31.805	31.886
71	31.939	rBB	0.114	4197800	31.886	32.000
72	32.756	rBB	0.167	5156352	32.649	32.817
73	32.864	rBB	0.100	1162754	32.817	32.917
74	33.091	rBB	0.234	12726409	32.917	33.152
75	33.225	rBB	0.147	15085089	33.152	33.299
76	33.366	rBB	0.154	14045028	33.299	33.453
77	33.654	rBB	0.134	12750784	33.573	33.707
78	33.948	rBB	0.107	784756	33.908	34.015
79	34.203	rBB	0.181	3262081	34.129	34.310
80	34.404	rBB	0.154	3351496	34.310	34.464
81	34.719	rBB	0.121	1090014	34.672	34.792
82	34.839	rBB	0.100	798016	34.792	34.893
83	35.007	rBB	0.134	5659111	34.953	35.087
84	35.362	rBB	0.248	14093977	35.254	35.502
85	35.696	rBB	0.114	2115909	35.629	35.743
86	35.830	rBB	0.188	19868336	35.743	35.931
87	37.377	rBB	0.241	2673186	37.230	37.471
88	37.632	rBB	0.154	961521	37.565	37.719
89	37.846	rBB	0.114	8564491	37.793	37.906
90	38.154	rBB	0.141	2590692	38.067	38.208
91	38.770	rBB	0.154	1709558	38.683	38.837
92	38.898	rBB	0.107	839061	38.837	38.944
93	39.192	rBB	0.114	856788	39.139	39.252
94	40.485	rBB	0.174	15507811	40.404	40.578
95	40.820	rBB	0.127	2228704	40.759	40.886
96	41.985	rBB	0.154	2717232	41.918	42.072
97	42.300	rBB	0.114	1095351	42.219	42.333
98	42.433	rBB	0.094	24059997	42.380	42.474
99	43.532	rBB	0.134	884443	43.478	43.612
100	43.813	rBB	0.147	7376237	43.766	43.913

Library Search Compound Report

Data File : D:\C106\19010506.D
 Acq Time : 5 Jan 99 2:47 pm
 Sample : VS006-058-S080
 Misc : 50 TORR; 2 ATM
 Method : D:\METHODS\VAP_NF7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
7.19	207.27 PPB	15545972	FLUOROBENZENE	24.02

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	Propene	108457	000115-07-1	86
2	Cyclopropane	108993	000075-19-4	80
3	Cyclopropane	108992	000075-19-4	72
4	Propene	1533	000115-07-1	47
5	Cyclopropene	1232	1000194-05-8	12

 Peak Number 2 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
11.29	457.13 PPB	34286432	FLUOROBENZENE	24.02

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108672	000106-98-9	87
2	1-Propene, 2-methyl-	108669	000115-11-7	87
3	1-Butene	108673	000106-98-9	83
4	1-Butene	108671	000106-98-9	83
5	1-Propene, 2-methyl-	108463	000115-11-7	83

 Peak Number 3 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
11.58	388.80 PPB	29161149	FLUOROBENZENE	24.02

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Butane	3946	000106-97-8	72
2	Butane	109164	000106-97-8	64

 Peak Number 4 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
12.94	78.14 PPB	5860476	FLUOROBENZENE	24.02

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
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1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Butene	108671	000106-98-9	87
4	1-Propene, 2-methyl-	108463	000115-11-7	83
5	1-Propene, 2-methyl-	108669	000115-11-7	80

 Peak Number 5 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
16.01	121.68 PPB	9126569	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene	109030	000109-67-1	91
2	1-Pentene	109032	000109-67-1	86
3	1-Pentene	109031	000109-67-1	86
4	1-Pentene	3426	000109-67-1	86
5	Cyclopentane	3292	000287-92-3	86

 Peak Number 6 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
16.41	217.91 PPB	16343785	FLUOROBENZENE	24.02
Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	90
2	Pentane	109386	000109-66-0	72
3	Pentane	4653	000109-66-0	50
4	Butane, 2,3-dimethyl-	109396	000079-29-8	36

 Peak Number 7 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
20.53	373.19 PPB	27990614	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexene	111822	000592-41-6	91
2	1-Hexene	2192	000592-41-6	91
3	1-Hexene	111823	000592-41-6	91
4	Cyclobutane, butyl-	15024	013152-44-8	83
5	Cyclohexane	111956	000110-82-7	78

 Peak Number 8 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
20.90	180.98 PPB	13573783	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Hexane	112279	000110-54-3	91
2 Hexane	16315	000110-54-3	91
3 Hexane	112277	000110-54-3	86
4 Hexane	112278	000110-54-3	64
5 Pentane, 2,4-dimethyl-	5552	000108-08-7	50

 Peak Number 9 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
24.61	163.30 PPB	12248135	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Heptene		111847	000592-76-7	94
2 1-Heptene		2183	000592-76-7	94
3 1-Heptene		111846	000592-76-7	91
4 1-Heptene		108686	000592-76-7	81
5 Cyclopentane, 1,2-dimethyl-		15223	002452-99-5	72

 Peak Number 10 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
24.97	859.98 PPB	64501451	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 (Z)-3-Heptene		108691	007642-10-6	81
2 3-Heptene		108688	000592-76-7	70
3 3-Heptene, (E)-		108689	014686-14-7	62
4 2-Heptene		108687	000592-77-8	62
5 3-Heptene, (E)-		2212	014686-14-7	62

 Peak Number 11 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
25.11	420.53 PPB	31541141	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 3-Heptene		108688	000592-78-9	96
2 3-Heptene, (E)-		108689	014686-14-7	95
3 (Z)-3-Heptene		108691	007642-10-6	94
4 (Z)-3-Heptene		2213	007642-10-6	94
5 2-Heptene		108687	000592-77-8	94

 Peak Number 12 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
25.24	631.14 PPB	47337230	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene		108687	000592-77-8	97
2 2-Heptene, (E)-		111908	014686-13-6	96
3 2-Heptene, (E)-		13656	014686-13-6	94
4 2-Heptene		108605	000592-77-8	94
5 2-Heptene		2208	000592-77-8	80

 Peak Number 13 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
25.56	505.53 PPB	37916459	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene		108687	000592-77-8	97
2 2-Heptene, (E)-		111908	014686-13-6	96
3 2-Heptene		108605	000592-77-8	95
4 2-Heptene, (E)-		13656	014686-13-6	91
5 (Z)-3-Heptene		108691	007642-10-6	91

 Peak Number 14 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
25.81	115.37 PPB	8652761	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Cyclopropane, butyl-		1931	000930-57-4	78
2 Cyclopentane, 1,2-dimethyl-, cis-		23919	001192-18-3	53
3 2H-Pyran-2-one, tetrahydro-3,6-dime		109044	003720-22-7	53
4 Cyclopentane, 1,2-dimethyl-, cis-		111951	001192-18-3	50
5 Hexane, 2-chloro-		1457	000638-28-8	50

 Peak Number 15 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
27.08	201.03 PPB	15078091	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Cyclopenten-1-one, 2-methyl-		113921	001120-73-6	74
2 3,4-Heptadiene		31430	002454-31-1	72
3 Furan, 2,4-dimethyl-		41734	003710-43-8	72
4 Furan, 2,4-dimethyl-		118263	003710-43-8	72
5 2-Cyclopenten-1-one, 2-methyl-		21588	001120-73-6	72

 Peak Number 16 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
27.58	203.84 PPB	7428550	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Toluene		117292	000108-88-3	70
2 Toluene		117282	000108-88-3	70
3 4-Octene, (E)-		111302	014850-23-8	55
4 Toluene		117281	000108-88-3	53
5 2-Octene		111287	000111-67-1	53

Peak Number 17 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
27.68	602.23 PPB	21947579	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methyl-		5681	000589-81-1	91
2 Heptane, 3-methyl-		109689	000589-81-1	81
3 Hexane, 2,4-dimethyl-		109686	000589-43-5	64
4 Hexane, 2,3,3-trimethyl-		7046	016747-28-7	64
5 Hexane, 2,4-dimethyl-		5467	000589-43-5	58

Peak Number 18 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
27.83	200.01 PPB	7289163	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptyne		116095	001119-65-9	96
2 2-Heptyne		116025	001119-65-9	91
3 2-Heptyne		31411	001119-65-9	86
4 1,4-Heptadiene		31572	005675-22-9	64
5 Cyclohexene, 4-methyl-		116094	000591-47-9	64

Peak Number 19 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
28.25	527.37 PPB	19219435	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methylene-		114415	001632-16-2	87
2 Heptane, 3-methylene-		114416	001632-16-2	78
3 Cyclopentane, 1,2,3-trimethyl-, (1.		114430	015890-40-1	64
4 Hexane, 2-methyl-4-methylene-		114420	003404-80-6	52
5 Cyclopentane, 1,2,3-trimethyl-, (1.		23917	015890-40-1	50

Peak Number 20 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
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28.59 447.48 PPB 16307750 CHLOROBENZENE-D5 30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Octene, (E)-		111301	014850-23-8	72
2 Cyclohexane, 1,2-dimethyl-, cis-		14486	002207-01-4	58
3 Cyclohexane, 1,2-dimethyl-, cis-		111705	002207-01-4	58
4 4-Octene, (E)-		13070	014850-23-8	58
5 5-Methyl-1-heptanol		14279	007212-53-5	50

Peak Number 21 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
28.95	136.28 PPB	4966708	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene, 3-methyl-		23868	003404-75-9	95
2 Hexane, 2-methyl-4-methylene-		23848	003404-80-6	90
3 Hexane, 2-methyl-4-methylene-		114420	003404-80-6	83
4 Cyclopentane, 1,2,3-trimethyl-, (1.		23917	015890-40-1	78
5 Heptane, 3-methylene-		111568	001632-16-2	72

Peak Number 22 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
31.04	709.86 PPB	25869796	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Heptanone		109874	000123-19-3	91
2 4-Heptanone		114577	000123-19-3	91
3 3-Pentanone, 2,4-dimethyl-		109869	000565-80-0	72
4 4-Heptanone		109855	000123-19-3	72
5 4-Heptanone		6294	000123-19-3	72

Peak Number 23 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
31.34	84.85 PPB	3092224	CHLOROBENZENE-D5	30.39

Hit# of 8	Tentative ID	Ref#	CAS#	Qual
1 n-Butyl ether		15788	000142-96-1	72
2 n-Butyl ether		112208	000142-96-1	64
3 n-Butyl ether		112037	000142-96-1	56
4 Pentane, 1-butoxy-		16488	018636-66-3	39
5 Ethanol, 2-butoxy-		112447	000111-76-2	38

Peak Number 24 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.75	257.69 PPB	9391365	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanol	19637	000589-82-2	53
2	3-Pentanol	113150	000584-02-1	53
3	Propane, 2-ethoxy-2-methyl-	113322	000637-92-3	50
4	Propane, 1-ethoxy-2-methyl-	113165	000627-02-1	50
5	2-Pentanol, 2-methyl-	113237	000590-36-3	50

Peak Number 25 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
31.94	115.19 PPB	4197800	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	109597	000111-84-2	91
2	Nonane	109595	000111-84-2	91
3	Nonane	5495	000111-84-2	90
4	Nonane	109596	000111-84-2	90
5	Heptane, 4-ethyl-	112262	002216-32-2	52

Peak Number 26 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
32.76	141.49 PPB	5156352	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	50
2	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	47
3	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	40
4	Thiazole, 2,5-dimethyl-	51095	004175-66-0	38
5	Cyclopentane, methyl-	15051	000096-37-7	27

Peak Number 27 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
33.09	349.21 PPB	12726409	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	64
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	64
4	Hexanoic acid, anhydride	118546	002051-49-2	53
5	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53

Peak Number 28 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD		R.T.
33.23	413.93 PPB	15085089	CHLOROBENZENE-D5		30.39
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2,2'-Bioxepane		43236	074793-02-5	64
2	Hexanoic acid, anhydride		118546	002051-49-2	53
3	1,3,2-Dioxaborolane, 2,4-diethyl-		43307	057633-63-3	53
4	Hexanoic acid, anhydride		43066	002051-49-2	53
5	3,5-Diamino-1,2,4-triazole		43045	001455-77-2	53

Peak Number 29 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD		R.T.
33.37	385.39 PPB	14045028	CHLOROBENZENE-D5		30.39
Hit# of 17	Tentative ID		Ref#	CAS#	Qual
1	Cyclopropane, 1,1,2,2-tetramethyl-		111640	004127-47-3	53
2	3,3-Diethoxy-1-propyne		32833	010160-87-9	53
3	1H-1,2,4-Triazole, 3-propyl-		33272	019932-60-6	50
4	3-(Butylamino)propionitrile		116379	000693-51-6	43
5	1-Butene, 2,3,3-trimethyl-		32888	000594-56-9	42

Peak Number 30 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD		R.T.
33.65	349.88 PPB	12750784	CHLOROBENZENE-D5		30.39
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Octene, 3,7-dimethyl-		109482	004984-01-4	32
2	3-Octen-2-one, (E)-		5082	018402-82-9	25
3	1-Tetracosanol		5175	000506-51-4	25
4	Trifluoroacetic acid, n-heptadecyl		4324	1000216-79-2	23
5	1-Trifluoroacetoxydecane		4215	1000215-96-3	23

Peak Number 31 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD		R.T.
34.20	89.51 PPB	3262081	CHLOROBENZENE-D5		30.39
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	4-Octanone		109631	000589-63-9	95
2	4-Octanone		109634	000589-63-9	95
3	4-Octanone		109633	000589-63-9	95
4	4-Octanone		5601	000589-63-9	55
5	4-Octanone		109632	000589-63-9	55

Peak Number 32 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
34.40	91.96 PPB	3351496	CHLOROBENZENE-D5	30.39
Hit# of 13	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	116270	000629-08-3	90
2	Heptanenitrile	108877	000629-08-3	64
3	Heptanenitrile	108876	000629-08-3	64
4	Octanenitrile	108878	000124-12-9	50
5	Heptanenitrile	108875	000629-08-3	45

 Peak Number 33 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
35.01	155.28 PPB	5659111	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	109556	000124-18-5	95
2	Undecane	109663	001120-21-4	90
3	Heptadecane	112321	000629-78-7	72
4	Elcosane	109630	000112-95-8	72
5	Decane	5445	000124-18-5	72

 Peak Number 34 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
35.36	386.73 PPB	14093977	CHLOROBENZENE-D5	30.39
Hit# of 12	Tentative ID	Ref#	CAS#	Qual
1	Hexanenitrile	108570	000628-73-9	53
2	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	45
3	5-Hexen-1-ol	111145	000821-41-0	40
4	Cyclobutanecarbonitrile	111127	004426-11-3	37
5	1,8-Nonadiene	2340	004900-30-5	36

 Peak Number 35 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
35.83	545.18 PPB	19868336	CHLOROBENZENE-D5	30.39
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	90
2	1-Hexanol, 2-ethyl-	15889	000104-76-7	78
3	1-Hexanol, 2-ethyl-	112147	000104-76-7	78
4	1-Hexanol, 2-ethyl-	112165	000104-76-7	64
5	1-Hexanol, 2-ethyl-	112146	000104-76-7	50

Peak Number 36 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
37.85	235.01 PPB	8564491	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	16533	001120-21-4	91
2	Tridecane	112309	000629-50-5	90
3	Tetradecane	112357	000629-59-4	90
4	Undecane	112395	001120-21-4	87
5	Undecane	109663	001120-21-4	87

Peak Number 37 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
40.48	425.53 PPB	15507811	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	16262	000112-40-3	94
2	Undecane	112395	001120-21-4	86
3	Hexadecane	112408	000544-76-3	86
4	Undecane	16533	001120-21-4	83
5	Decane, 6-ethyl-2-methyl-	16450	062108-21-8	83

Peak Number 38 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
41.98	74.56 PPB	2717232	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane, 3-methyl-	112310	005911-04-6	78
2	Undecane, 6,6-dimethyl-	17116	017312-76-4	72
3	Octane, 3,6-dimethyl-	17112	015869-94-0	72
4	Tridecane, 5-propyl-	16558	055045-11-9	72
5	Dodecane, 4,6-dimethyl-	112585	061141-72-8	64

Peak Number 39 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
42.43	660.20 PPB	24059997	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	112308	000629-50-5	94
2	Tridecane	112309	000629-50-5	94
3	Tridecane	16403	000629-50-5	91
4	Hexadecane	112406	000544-76-3	87
5	Heptadecane	112319	000629-78-7	86

Peak Number 40 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
43.81	202.40 PPB	7376237	CHLOROBENZENE-D5	30.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	112356	000629-59-4	96
2	Tetradecane	112357	000629-59-4	94
3	Hexadecane	112408	000544-76-3	90
4	Heptadecane	112319	000629-78-7	87
5	Tetradecane	112355	000629-59-4	87

19010506.D VAP_NP7.M Wed Jan 20 11:33:18 1999

File : C:\HPCHEM\1\DATA\19010406.D
Operator : G. FIES
Acquired : 4 Jan 99 2:53 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-059-S081
Misc Info : 50 TORR
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010406.D

Acq On : 4 Jan 99 2:53 pm

Sample : VS006-059-S081

Misc : 50 TORR

Quant Time: Jan 6 9:04 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.01	96	7018395	100.00	NG	0.08
17) CHLOROBEZENE-D5	30.38	117	2799812	100.00	NG	-0.08

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.83	45	3311270	469.62	PPB m	100 E
3) ACETONITRILE	16.06	40	938488	83.99	PPB m	1
4) ACETONE	16.15	58	2501709	248.88	PPB m	100
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.64	45	117790	4.29	PPB #	90
7) 1-PROPANOL	19.34	31	449692	20.27	PPB m	98
8) PROPANENITRILE	19.98	54	1111537	68.09	PPB m	99
9) BUTANAL	0.00	72		Not Detected		
10) 2-BUTANONE	20.74	72	617017	60.76	PPB	82
11) TETRAHYDROFURAN	22.09	72	79067	8.27	PPB	96
12) 1-BUTANOL	23.53	56	1725347	180.67	PPB m	90
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.38	43	1351209	22.91	PPB	98
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.15	58	1718017	114.64	PPB m	74
19) 3-HEPTANONE	31.54	114	3433573	1179.14	PPB m	1 E
20) 2-HEPTANONE	31.62	58	7515647	365.59	PPB m	86 E
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	34.70	58	392936	15.17	PPB	92

(#) = qualifier out of range (m) = manual integration
 19010406.D VAP_P7.M Wed Jan 06 09:09:56 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010406.D

Acq On : 4 Jan 99 2:53 pm

Sample : VS006-059-S081

Misc : 50 TORR

Quant Time: Jan 6 9:15 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QION	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.01	96	7018395	100.00	NG	0.08
20) CHLOROBENZENE-D5	30.38	117	2799812	100.00	PPB	-0.05

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.53	43	15602095	413.75	PPB	100 E
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.69	101	143117	4.25		100
7) N-PENTANE	16.39	72	568971	167.74	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.51	43	908230	19.03	PPB #	77
10) 1-HEXENE	20.52	56	5577599	258.19	PPB	83 E
11) N-HEXANE	20.88	57	3963031	125.25	PPB	92
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.51	78	351390	6.71	PPB	99
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.73	43	194594	5.80	PPB m	87
16) N-HEPTANE	24.93	57	3816805	216.67	PPB m	84
17) TOLUENE	27.57	91	1726634	32.18	PPB	96
18) N-OCTANE	28.58	57	859848	62.57	PPB m	92
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.92	43	1315068	75.20	PPB	95
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	34.99	43	1876317	121.55	PPB m	99
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#)=qualifier out of range (m)=manual integration

19010406.D VAP_NP7.M

Wed Jan 06 09:15:53 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010806.D
 Acq On : 8 Jan 99 2:49 pm
 Sample : VS006-059-S081-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 11:46 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	5211648	100.00	NG	0.09
17) CHLOROBENZENE-D5	30.39	117	3309568	100.00	NG	-0.07

System Monitoring Compounds

*Recovery

Target Compounds						Qvalue
2) ETHANOL	14.90	45	88506	405.70	PPB m	100
3) ACETONITRILE	0.00	40		Not Detected		
4) ACETONE	16.16	58	130398	419.27	PPB m	1
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	0.00	45		Not Detected		
7) 1-PROPANOL	19.38	31	10266	14.96	PPB #	81
8) PROPANENITRILE	20.00	54	24874	49.25	PPB m	97
9) BUTANAL	20.58	72	15903	77.40	PPB m	82
10) 2-BUTANONE	20.78	72	18923	60.22	PPB m	86
11) TETRAHYDROFURAN	22.14	72	1496	5.06	PPB #	1
12) 1-BUTANOL	23.52	56	51127	173.04	PPB m	100
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.39	43	34619	18.98	PPB	97
15) 1,4-DIOXANE	25.24	88	1372	3.76	PPB #	24
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.16	58	61275	83.02	PPB m	76
19) 3-HEPTANONE	31.46	114	307469	2143.82	PPB	93
20) 2-HEPTANONE	31.57	58	426123	420.85	PPB m	84
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	34.71	58	15766	12.36	PPB	90

(#) = qualifier out of range (m) = manual integration
 19010806.D VAP_P7.M Mon Jan 11 11:46:47 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010806.D
 Acq On : 8 Jan 99 2:49 pm
 Sample : VS006-059-S081-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 11:41 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	5211648	100.00	NG	0.09
20) CHLOROBENZENE-D5	30.39	117	3309568	100.00	PPB	-0.04

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.50	43	667537	572.14	PPB m	99
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.69	101	4789	4.60		98
7) N-PENTANE	16.39	72	16798	160.06	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.52	43	28338	19.19	PPB #	72
10) 1-HEXENE	20.52	56	195936	293.14	PPB #	64
11) N-HEXANE	20.88	57	126924	129.65	PPB #	80
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.52	78	12117	7.48	PPB	95
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.74	43	6660	6.41	PPB m	98
16) N-HEPTANE	24.93	57	381954	700.79	PPB #	78
17) TOLUENE	27.57	91	79141	47.67	PPB	95
18) N-OCTANE	28.58	57	43284	101.79	PPB m	80
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	31.17	91	3502	3.14	PPB	97
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.92	43	52304	60.73	PPB	88
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	34.99	43	81772	107.55	PPB m	92
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19010806.D VAP_NP7.M Mon Jan 11 11:42:28 1999

TIC: 19010406.D

VS006-059-S081

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.139	rBB	0.141	3274637	7.066	7.206
2	9.142	rBB	0.181	1375529	9.068	9.249
3	10.963	rBB	0.201	1236885	10.930	11.131
4	11.258	rBB	0.301	37781899	11.131	11.432
5	11.532	rBB	0.435	32016587	11.432	11.867
6	12.189	rBB	0.147	3177851	12.115	12.262
7	12.644	rBB	0.161	2904344	12.570	12.731
8	12.905	rBB	0.228	6483931	12.785	13.012
9	14.834	rBB	0.328	11116142	14.727	15.055
10	15.122	rBB	0.141	1595441	15.055	15.196
11	15.986	rBB	0.107	10223490	15.926	16.033
12	16.059	rBB	0.067	1029727	16.033	16.100
13	16.153	rBB	0.114	8906700	16.100	16.214
14	16.388	rBB	0.214	17944928	16.274	16.488
15	16.883	rBB	0.167	2838475	16.803	16.970
16	17.245	rBB	0.080	1034866	17.191	17.272
17	17.312	rBB	0.107	2168227	17.272	17.379
18	18.283	rBB	0.174	1087676	18.216	18.390
19	19.033	rBB	0.201	2142292	18.926	19.127
20	19.508	rBB	0.134	2781474	19.441	19.575
21	19.977	rBB	0.127	2093806	19.910	20.037
22	20.520	rBB	0.261	30928824	20.412	20.674
23	20.741	rBB	0.134	4202335	20.674	20.808
24	20.881	rBB	0.127	15047490	20.814	20.942
25	21.075	rBB	0.107	928990	21.029	21.136
26	21.176	rBB	0.087	1834767	21.136	21.223
27	21.578	rBB	0.127	2108174	21.517	21.645
28	21.839	rBB	0.080	880840	21.799	21.879
29	22.033	rBB	0.080	1045172	21.986	22.067
30	23.413	rBB	0.094	876726	23.366	23.460
31	23.527	rBB	0.121	6835882	23.460	23.580
32	23.794	rBB	0.067	1512344	23.754	23.821
33	23.848	rBB	0.074	1342945	23.821	23.895
34	24.009	rBB	0.174	14323448	23.902	24.076
35	24.377	rBB	0.107	2159346	24.323	24.431
36	24.477	rBB	0.094	1060029	24.431	24.524
37	24.591	rBB	0.141	13866163	24.524	24.665
38	24.745	rBB	0.188	5647303	24.672	24.859
39	24.960	rBB	0.167	72190566	24.859	25.027
40	25.094	rBB	0.121	35528762	25.033	25.154
41	25.228	rBB	0.127	52931290	25.154	25.281
42	25.542	rBB	0.141	43050879	25.475	25.616
43	25.790	rBB	0.221	10145834	25.703	25.924
44	25.978	rBB	0.121	964187	25.924	26.045
45	26.359	rBB	0.194	998817	26.239	26.433
46	26.694	rBB	0.121	1039975	26.641	26.761
47	26.815	rBB	0.094	829575	26.761	26.855
48	27.062	rBB	0.248	17717508	26.935	27.183
49	27.364	rBB	0.147	1734839	27.257	27.404
50	27.558	rBB	0.100	8890870	27.504	27.605
51	27.665	rBB	0.114	25283723	27.605	27.719
52	27.772	rBB	0.047	1384464	27.732	27.779
53	27.813	rBB	0.080	8370755	27.779	27.859
54	28.154	rBB	0.074	4582197	28.107	28.181
55	28.234	rBB	0.121	22465624	28.181	28.301
56	28.469	rBB	0.114	965006	28.395	28.509

57	28.576	rBB	0.221	19657529	28.509	28.730
58	28.784	rBB	0.141	2122701	28.730	28.871
59	28.931	rBB	0.121	6041311	28.871	28.991
60	29.058	rBB	0.161	3159782	28.991	29.152
61	29.761	rBB	0.094	1263763	29.708	29.802
62	30.371	rBB	0.234	7799541	30.237	30.471
63	30.913	rBB	0.087	1534858	30.866	30.953
64	31.020	rBB	0.127	28991049	30.953	31.081
65	31.221	rBB	0.114	1625262	31.161	31.275
66	31.322	rBB	0.107	3700011	31.275	31.382
67	31.516	rBB	0.167	65618353	31.395	31.563
68	31.616	rBB	0.127	25419448	31.563	31.690
69	31.730	rBB	0.094	8412557	31.690	31.784
70	31.924	rBB	0.114	5272551	31.871	31.985
71	32.741	rBB	0.174	6061445	32.628	32.802
72	32.849	rBB	0.100	1326645	32.802	32.902
73	33.076	rBB	0.228	14697606	32.902	33.130
74	33.210	rBB	0.154	17280240	33.130	33.284
75	33.351	rBB	0.154	16211308	33.284	33.438
76	33.639	rBB	0.208	19482148	33.545	33.753
77	33.934	rBB	0.107	939982	33.893	34.000
78	34.188	rBB	0.134	3456468	34.114	34.248
79	34.389	rBB	0.141	3722248	34.302	34.442
80	34.817	rBB	0.094	850798	34.777	34.871
81	34.992	rBB	0.147	7454439	34.938	35.085
82	35.347	rBB	0.241	16190435	35.246	35.487
83	35.681	rBB	0.121	2650724	35.614	35.735
84	35.809	rBB	0.174	12307233	35.735	35.909
85	37.362	rBB	0.248	3163702	37.208	37.456
86	37.617	rBB	0.154	1207657	37.550	37.704
87	37.831	rBB	0.114	11223242	37.778	37.891
88	38.139	rBB	0.141	2857134	38.052	38.193
89	38.615	rBB	0.141	894573	38.528	38.668
90	38.755	rBB	0.154	1682602	38.668	38.822
91	38.883	rBB	0.114	1153208	38.822	38.936
92	39.177	rBB	0.114	1198978	39.124	39.237
93	39.546	rBB	0.134	1033018	39.472	39.606
94	40.476	rBB	0.181	21290791	40.389	40.570
95	40.811	rBB	0.134	3245782	40.744	40.878
96	41.976	rBB	0.161	3612317	41.910	42.070
97	42.291	rBB	0.114	1389679	42.211	42.325
98	42.425	rBB	0.100	28851996	42.372	42.472
99	43.523	rBB	0.127	1111108	43.470	43.597
100	43.805	rBB	0.141	9338053	43.758	43.898

Library Search Compound Report

Data File : D:\C106\19010406.D
 Acq Time : 4 Jan 99 2:53 pm Operator: G. FIES
 Sample : VS006-059-S081 Inst : 5972 - MS
 Misc : 50 TORR Multiplr: 2.00
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

 Peak Number 1 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
11.26	527.55 PPB	37781899	FLUOROBENZENE	24.01

Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108672	000106-98-9	87
2	1-Propene, 2-methyl-	108669	000115-11-7	87
3	1-Butene	108673	000106-98-9	83
4	1-Butene	108671	000106-98-9	83
5	1-Propene, 2-methyl-	108463	000115-11-7	83

 Peak Number 2 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
12.91	90.54 PPB	6483931	FLUOROBENZENE	24.01

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Butene	108671	000106-98-9	87
4	1-Propene, 2-methyl-	108463	000115-11-7	83
5	1-Propene, 2-methyl-	108669	000115-11-7	80

 Peak Number 3 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
14.83	155.22 PPB	11116142	FLUOROBENZENE	24.01

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	108332	000064-17-5	90
2	Ethanol	1076	000064-17-5	90
3	Ethanol	108331	000064-17-5	83

 Peak Number 4 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
15.99	142.75 PPB	10223490	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Pentene		109030	000109-67-1	91
2 1-Pentene		109032	000109-67-1	86
3 1-Pentene		109031	000109-67-1	86
4 1-Pentene		3426	000109-67-1	86
5 Cyclopentane		109034	000287-92-3	78

Peak Number 5 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
16.15	124.37 PPB	8906700	FLUOROBENZENE	24.01

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1 Acetone		109727	000067-64-1	72
2 Acetone		109708	000067-64-1	50
3 Acetone		5734	000067-64-1	50

Peak Number 6 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
24.59	193.61 PPB	13866163	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Heptene		111847	000592-76-7	94
2 1-Heptene		2183	000592-76-7	94
3 1-Heptene		108686	000592-76-7	93
4 1-Heptene		111846	000592-76-7	91
5 1-Heptene		108660	000592-76-7	87

Peak Number 7 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
24.75	78.85 PPB	5647303	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Pentenitrile		12695	013284-42-9	91
2 Butanenitrile, 2-methylene-		12684	001647-11-6	83
3 3-Pentenitrile		12688	004635-87-4	72
4 2-Pentenitrile		111125	013284-42-9	58
5 Cyclobutanecarbonitrile		12658	004426-11-3	50

Peak Number 8 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
25.09	496.09 PPB	35528762	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
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1	3-Heptene	108688	000592-78-9	96
2	3-Heptene, (E)-	108689	014686-14-7	95
3	3-Heptene, (E)-	108697	014686-14-7	94
4	(Z)-3-Heptene	2213	007642-10-6	94
5	2-Heptene	108687	000592-77-8	94

Peak Number 9 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
25.23	739.09 PPB	52931290	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene	108605	000592-77-8	94
4	2-Heptene, (E)-	13656	014686-13-6	94
5	2-Heptene	2208	000592-77-8	80

Peak Number 10 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
25.54	601.12 PPB	43050879	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95
3	2-Heptene	108605	000592-77-8	95
4	2-Heptene, (E)-	13656	014686-13-6	91
5	(Z)-3-Heptene	108691	007642-10-6	91

Peak Number 11 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
25.79	141.67 PPB	10145834	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, butyl-	1931	000930-57-4	78
2	2H-Pyran-2-one, tetrahydro-3,6-dime	109044	003720-22-7	59
3	Cyclopentane, 1,2-dimethyl-, cis-	23919	001192-18-3	53
4	Cyclopentane, 1,3-dimethyl-	114428	002453-00-1	50
5	Hexane, 2-chloro-	1457	000638-28-8	50

Peak Number 12 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
27.06	247.39 PPB	17717508	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Cyclopenten-1-one, 2-methyl-		113921	001120-73-6	74
2 3,4-Heptadiene		31430	002454-31-1	72
3 2-Cyclopenten-1-one, 2-methyl-		21588	001120-73-6	72
4 Furan, 2,4-dimethyl-		41734	003710-43-8	72
5 Furan, 2,4-dimethyl-		118263	003710-43-8	72

 Peak Number 13 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
27.67	648.34 PPB	25283723	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methyl-		5681	000589-81-1	91
2 Heptane, 3-methyl-		109689	000589-81-1	81
3 Hexane, 2,3,3-trimethyl-		7046	016747-28-7	64
4 Hexane, 2,4-dimethyl-		5467	000589-43-5	58
5 Hexane, 2,4-dimethyl-		109577	000589-43-5	53

 Peak Number 14 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
27.81	214.65 PPB	8370755	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptyne		116095	001119-65-9	96
2 2-Heptyne		116025	001119-65-9	91
3 1,4-Heptadiene		31572	005675-22-9	64
4 Cyclohexene, 4-methyl-		116094	000591-47-9	64
5 Cyclohexene, 4-methyl-		31569	000591-47-9	59

 Peak Number 15 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
28.15	117.50 PPB	4582197	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Hexanone		109711	000591-78-6	91
2 2-Hexanone		109712	000591-78-6	90
3 2-Hexanone		5779	000591-78-6	87
4 2-Hexanone, 4-hydroxy-3-propyl-		5739	062338-17-4	83
5 Oxirane, 2-methyl-2-(1-methylethyl)		5754	072221-03-5	64

 Peak Number 16 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
28.23	576.08 PPB	22465624	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methylene-	114415	001632-16-2	87
2	Heptane, 3-methylene-	114416	001632-16-2	72
3	Cyclopentane, 1,2,4-trimethyl-, (1.	23858	004850-28-6	72
4	Octane, 3-methyl-6-methylene-	23865	074630-07-2	72
5	Cyclopentane, 1,2,3-trimethyl-	23915	002815-57-8	59

Peak Number 17 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
28.93	154.91 PPB	6041311	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, 3-methyl-	23868	003404-75-9	95
2	Hexane, 2-methyl-4-methylene-	23848	003404-80-6	80
3	Hexane, 2-methyl-4-methylene-	114420	003404-80-6	72
4	Cyclopentane, 1,2,3-trimethyl-, (1.	23917	015890-40-1	64
5	Heptane, 3-methylene-	111568	001632-16-2	64

Peak Number 18 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
29.06	81.02 PPB	3159782	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octene, (E)-	13070	014850-23-8	83
2	4-Octene, (E)-	111302	014850-23-8	83
3	3-Octene, (E)-	108600	014919-01-8	83
4	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	81
5	Cyclooctane	111838	000292-64-8	80

Peak Number 19 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
31.02	743.40 PPB	28991049	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109874	000123-19-3	91
2	4-Heptanone	114577	000123-19-3	91
3	3-Pentanone, 2,4-dimethyl-	109869	000565-80-0	72
4	4-Heptanone	109855	000123-19-3	72
5	4-Heptanone	6294	000123-19-3	72

Peak Number 20 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.32 94.88 PPB 3700011 CHLOROBENZENE-D5 30.38

Hit# of 7	Tentative ID	Ref#	CAS#	Qual
1	n-Butyl ether	15788	000142-96-1	72
2	n-Butyl ether	112208	000142-96-1	59
3	n-Butyl ether	112037	000142-96-1	56
4	Ethanol, 2-butoxy-	112447	000111-76-2	38
5	Isobutyl ether	15773	000628-55-7	36

 Peak Number 21 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
31.52	1682.62 PPB	65618353	CHLOROBENZENE-D5	30.38

Hit# of 18	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	112010	000106-35-4	91
2	3-Heptanone	112009	000106-35-4	86
3	3-Heptanone	15594	000106-35-4	78
4	3-Heptanone	112011	000106-35-4	72
5	3-Heptanone	112074	000106-35-4	64

 Peak Number 22 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
31.62	651.82 PPB	25419448	CHLOROBENZENE-D5	30.38

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	109740	000110-43-0	90
2	2-Heptanone	109741	000110-43-0	78
3	2-Heptanone	109709	000110-43-0	64
4	2-Hexanone, 5-methyl-	109706	000110-12-3	64
5	2-Heptanone	5736	000110-43-0	52

 Peak Number 23 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
31.73	215.72 PPB	8412557	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanol	19637	000589-82-2	90
2	3-Heptanol	113288	000589-82-2	78
3	3-Hexanol, 5-methyl-	113293	000623-55-2	56
4	Propane, 2-ethoxy-2-methyl-	113322	000637-92-3	53
5	Propane, 1-ethoxy-2-methyl-	113165	000627-02-1	53

 Peak Number 24 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
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32.74	155.43 PPB	6061445	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	50
2	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	47
3	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	40
4	2-Oxepanone, 4-methyl-	15310	1000196-99-7	38
5	Cyclopentane, methyl-	111861	000096-37-7	27

Peak Number 25		Rank in Relative Concentration 16		
R.T.	Conc	Area	Relative to ISTD	R.T.
33.08	376.88 PPB	14697606	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	64
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	64
4	Hexanoic acid, anhydride	118546	002051-49-2	53
5	Hexanoic acid, anhydride	43066	002051-49-2	53

Peak Number 26		Rank in Relative Concentration 13		
R.T.	Conc	Area	Relative to ISTD	R.T.
33.21	443.11 PPB	17280240	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	64
2	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	53
3	Furan, tetrahydro-2,2-dimethyl-5-(1	32021	033978-70-0	45
4	Hexanoic acid, anhydride	118546	002051-49-2	42
5	Hexanoic acid, anhydride	43066	002051-49-2	42

Peak Number 27		Rank in Relative Concentration 14		
R.T.	Conc	Area	Relative to ISTD	R.T.
33.35	415.70 PPB	16211308	CHLOROBENZENE-D5	30.38
Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, 1,1,2,2-tetramethyl-	111640	004127-47-3	53
2	3,3-Diethoxy-1-propyne	32833	010160-87-9	53
3	1H-1,2,4-Triazole, 3-propyl-	33272	019932-60-6	50
4	3-(Butylamino)propionitrile	116379	000693-51-6	43
5	1-Butene, 2,3,3-trimethyl-	32888	000594-56-9	42

Peak Number 28		Rank in Relative Concentration 11		

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R.T.	Conc	Area	Relative to ISTD	R.T.
33.64	499.57 PPB	19482148	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,5-Octadien-2-ol	13586	1000132-14-0	59
2	3-Hepten-2-one, 3-methyl-	14650	039899-08-6	50
3	3-Ethyl-6-trifluoroacetoxyoctane	13863	1000215-97-3	38
4	cis-4-Nonene	111306	010405-85-3	35
5	cis-4-Nonene	13077	010405-85-3	35

Peak Number 29 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
34.19	88.63 PPB	3456468	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octanone	109633	000589-63-9	93
2	4-Octanone	109632	000589-63-9	91
3	4-Octanone	5601	000589-63-9	86
4	4-Octanone	109631	000589-63-9	83
5	4-Octanone	109634	000589-63-9	45

Peak Number 30 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
34.39	95.45 PPB	3722248	CHLOROBENZENE-D5	30.38
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	116270	000629-08-3	90
2	Heptanenitrile	108877	000629-08-3	74
3	Heptanenitrile	108875	000629-08-3	50
4	Octanenitrile	108878	000124-12-9	40
5	Heptanenitrile	108876	000629-08-3	40

Peak Number 31 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
35.35	415.16 PPB	16190435	CHLOROBENZENE-D5	30.38
Hit# of 12	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	Hexanenitrile	108570	000628-73-9	42
3	5-Hexen-1-ol	111145	000821-41-0	38
4	Cyclobutanecarbonitrile	111127	004426-11-3	38
5	1,8-Nonadiene	2340	004900-30-5	36

Peak Number 32 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
35.81	315.59 PPB	12307233	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	90
2	1-Hexanol, 2-ethyl-	15889	000104-76-7	83
3	1-Hexanol, 2-ethyl-	112165	000104-76-7	80
4	1-Hexanol, 2-ethyl-	112147	000104-76-7	74
5	2-Propyl-1-pentanol	15895	058175-57-8	47

Peak Number 33 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
37.36	81.13 PPB	3163702	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octanenitrile	32299	000124-12-9	87
2	Octanenitrile	108878	000124-12-9	72
3	Heptanenitrile	116270	000629-08-3	50
4	8-Azabicyclo[3.2.1]octan-3-ol, 2-br	32309	038853-62-2	47
5	Octanenitrile	108880	000124-12-9	43

Peak Number 34 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
37.83	287.79 PPB	11223242	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	109663	001120-21-4	93
2	Undecane	16533	001120-21-4	91
3	Undecane	112395	001120-21-4	91
4	Tetradecane	112357	000629-59-4	90
5	Tridecane	112309	000629-50-5	90

Peak Number 35 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
38.14	73.26 PPB	2857134	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Buten-2-one, 4-(1-aziridinyl)-	8039	018277-57-1	47
2	4(1H)-Pyridinone, 2,3-dihydro-1-met	50156	035488-00-7	35
3	Methanamine, N-[3-methyl-2-butenyl]	32310	1000196-86-4	27
4	2-Aminopyrimidin-1-oxide	50375	035034-15-2	25
5	2(1H)-Pyrimidinone, 4-amino-	50276	000071-30-7	22

Peak Number 36 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
40.48	545.95 PPB	21290791	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentadecane	16493	000629-62-9	90
2	Dodecane	109555	000112-40-3	87
3	Hexadecane	112408	000544-76-3	86
4	Decane, 6-ethyl-2-methyl-	16450	062108-21-8	83
5	Dodecane	16262	000112-40-3	76

Peak Number 37 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
40.81	83.23 PPB	3245782	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 6-methyl-	16443	006044-71-9	96
2	Undecane, 2,6-dimethyl-	17111	017301-23-4	95
3	Undecane, 2,6-dimethyl-	112404	017301-23-4	86
4	Undecane, 3,6-dimethyl-	16435	017301-28-9	81
5	Undecane, 2,6-dimethyl-	112287	017301-23-4	74

Peak Number 38 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
41.98	92.63 PPB	3612317	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 2,6-dimethyl-	112396	002051-30-1	83
2	Nonane, 3-methyl-	112310	005911-04-6	78
3	Undecane, 6,6-dimethyl-	17116	017312-76-4	72
4	Octane, 3,6-dimethyl-	17112	015869-94-0	72
5	Octane, 2,3,7-trimethyl-	16473	062016-34-6	64

Peak Number 39 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
42.43	739.84 PPB	28851996	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	112308	000629-50-5	94
2	Tridecane	112309	000629-50-5	94
3	Tridecane	16403	000629-50-5	91
4	Heptadecane	112319	000629-78-7	91
5	Hexadecane	112406	000544-76-3	87

Peak Number 40 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
43.80	239.45 PPB	9338053	CHLORO BENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	112356	000629-59-4	97
2	Tridecane	112239	000629-50-5	94
3	Tetradecane	112357	000629-59-4	94
4	Heptadecane	112319	000629-78-7	91
5	Tridecane	112307	000629-50-5	90

19010406.D VAP_NP7.M Wed Jan 20 11:37:24 1999

File : C:\HPCHEM\1\DATA\19010504.D
Operator : G. FIES
Acquired : 5 Jan 99 11:56 am using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-067-S082
Misc Info : 50 TORR; 2 ATM
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010504.D

Acq On : 5 Jan 99 11:56 am

Sample : VS006-067-S082

Misc : 50 TORR; 2 ATM

Quant Time: Jan 5 14:01 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	6772873	100.00	NG	0.09
17) CHLOROBENZENE-D5	30.38	117	2840520	100.00	NG	-0.08

System Monitoring Compounds

%Recovery

Target Compounds

Target Compounds					Qvalue	
2) ETHANOL	14.84	45	3063204	450.19	PPB	m 100 E
3) ACETONITRILE	16.07	40	858801	79.46	PPB	m 81
4) ACETONE	16.16	58	2452504	252.83	PPB	m 99
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.65	45	109558	4.13	PPB	# 89
7) 1-PROPANOL	19.35	31	313807	14.66	PPB	m 96
8) PROPANENITRILE	19.98	54	1002663	63.65	PPB	m 99
9) BUTANAL	20.57	72	295454	46.10	PPB	m 80
10) 2-BUTANONE	20.75	72	551684	56.29	PPB	m 80
11) TETRAHYDROFURAN	22.10	72	87960	9.54	PPB	m 95
12) 1-BUTANOL	23.53	56	1367520	148.39	PPB	m 90
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.38	43	1191773	20.94	PPB	m 98
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.16	58	1412892	92.93	PPB	m 78
19) 3-HEPTANONE	31.50	114	3038971	1028.67	PPB	m 1 E
20) 2-HEPTANONE	31.62	58	6214212	297.95	PPB	m 87 E
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	34.71	58	297716	11.33	PPB	m 89

(#) = qualifier out of range (m) = manual integration
 19010504.D VAP_P7.M Tue Jan 05 14:02:50 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010504.D

Acq On : 5 Jan 99 11:56 am

Sample : VS006-067-S082

Misc : 50 TORR; 2 ATM

Quant Time: Jan 5 13:45 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	6772873	100.00	NG	0.09
20) CHLOROBENZENE-D5	30.38	117	2840520	100.00	PPB	-0.04

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.53	43	13447385	369.53	PPB	100 E
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.70	101	133706	4.11		100
7) N-PENTANE	16.39	72	486814	148.72	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.52	43	756897	16.43	PPB #	77
10) 1-HEXENE	20.53	56	4757178	228.19	PPB	82
11) N-HEXANE	20.89	57	3343179	109.49	PPB	92
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.51	78	298612	5.91	PPB	99
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.75	43	153238	4.73	PPB m	89
16) N-HEPTANE	24.95	57	3074003	180.83	PPB m	85
17) TOLUENE	27.58	91	1493431	28.84	PPB	96
18) N-OCTANE	28.59	57	795110	59.95	PPB m	93
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.93	43	1125766	63.45	PPB	95
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	35.00	43	1523130	97.26	PPB	100
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19010504.D VAP_NP7.M Tue Jan 05 13:46:40 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010710.D

Acq On : 7 Jan 99 6:25 pm

Sample : VS006-067-S082-2; SEC. DIL.

Misc : 50 TORR

Quant Time: Jan 11 12:58 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.03	96	5120615	100.00	NG	0.10
17) CHLOROBENZENE-D5	30.40	117	3282403	100.00	NG	-0.06

System Monitoring Compounds

%Recovery

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ETHANOL	14.91	45	99209	462.84	PPB m	100
3) ACETONITRILE	0.00	40		Not Detected		
4) ACETONE	16.17	58	138824	454.29	PPB m	35
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.72	45	10683	12.79	PPB	92
7) 1-PROPANOL	19.39	31	21246	31.50	PPB #	76
8) PROPANENITRILE	20.01	54	27434	55.28	PPB m	98
9) BUTANAL	20.59	72	13138	65.08	PPB m	31
10) 2-BUTANONE	20.77	72	19276	62.44	PPB m	89
11) TETRAHYDROFURAN	22.15	72	1724	5.93	PPB #	13
12) 1-BUTANOL	23.53	56	56895	195.98	PPB m	99
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.41	43	33413	18.64	PPB	99
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.17	58	59436	81.19	PPB m	75
19) 3-HEPTANONE	31.47	114	288289	2026.72	PPB	89
20) 2-HEPTANONE	31.58	58	398697	397.02	PPB	99
21) CYCLOHEXANONE	31.93	98	1731	6.20	PPB #	1
22) 2-OCTANONE	34.72	58	13438	10.62	PPB	86

(#) = qualifier out of range (m) = manual integration
 19010710.D VAP_P7.M Mon Jan 11 12:58:57 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010710.D
 Acq On : 7 Jan 99 6:25 pm
 Sample : VS006-067-S082-2; SEC. DIL.
 Misc : 50 TORR
 Quant Time: Jan 11 12:55 1999

Vial: 1
 Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QI on	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.03	96	5120615	100.00	NG	0.10
20) CHLOROBENZENE-D5	30.40	117	3282403	100.00	PPB	-0.03

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.52	43	617576	538.73	PPB	99
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.71	101	4853	4.74		95
7) N-PENTANE	16.40	72	16201	157.11	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.53	43	27608	19.03	PPB #	73
10) 1-HEXENE	20.53	56	185597	282.61	PPB #	66
11) N-HEXANE	20.89	57	118833	123.54	PPB #	81
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	23.53	78	11927	7.50	PPB	97
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	23.76	43	6622	6.49	PPB m	96
16) N-HEPTANE	24.94	57	364316	680.31	PPB #	78
17) TOLUENE	27.59	91	74355	45.58	PPB	95
18) N-OCTANE	28.59	57	45555	109.04	PPB m	80
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	31.18	91	3524	3.18	PPB #	45
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.94	43	56451	66.08	PPB	88
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	35.01	43	90830	120.46	PPB m	91
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19010710.D VAP_NP7.M Mon Jan 11 12:55:59 1999

HNF-3949 Rev. 0

TIC: 19010504.D

VS006-067-S082

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	9.122	rBB	0.188	1258217	9.042	9.229
2	10.957	rBB	0.188	1046814	10.924	11.111
3	11.252	rBB	0.261	32249680	11.124	11.386
4	11.533	rBB	0.362	27472975	11.433	11.794
5	12.189	rBB	0.208	2609438	12.122	12.330
6	12.645	rBB	0.161	2399344	12.564	12.725
7	12.906	rBB	0.208	5429047	12.799	13.006
8	14.841	rBB	0.321	10392042	14.727	15.049
9	15.129	rBB	0.154	1320351	15.049	15.203
10	15.993	rBB	0.107	8487998	15.933	16.040
11	16.067	rBB	0.060	927408	16.040	16.100
12	16.161	rBB	0.114	8110073	16.107	16.221
13	16.395	rBB	0.114	10643651	16.341	16.455
14	16.897	rBB	0.181	2369027	16.797	16.978
15	17.252	rBB	0.080	854672	17.199	17.279
16	17.326	rBB	0.107	1797468	17.279	17.386
17	18.290	rBB	0.141	943135	18.230	18.371
18	19.040	rBB	0.208	1767148	18.933	19.141
19	19.516	rBB	0.141	2299284	19.449	19.589
20	19.984	rBB	0.134	1879993	19.911	20.045
21	20.527	rBB	0.254	26550150	20.420	20.674
22	20.755	rBB	0.134	3716934	20.688	20.822
23	20.889	rBB	0.134	12759178	20.822	20.956
24	21.083	rBB	0.107	762703	21.036	21.143
25	21.190	rBB	0.094	1527068	21.143	21.237
26	21.585	rBB	0.121	1746462	21.531	21.652
27	21.846	rBB	0.080	717955	21.806	21.886
28	22.094	rBB	0.107	926001	22.067	22.174
29	23.427	rBB	0.094	725479	23.373	23.467
30	23.534	rBB	0.127	5441604	23.467	23.594
31	23.802	rBB	0.074	1476619	23.762	23.835
32	23.862	rBB	0.067	1077090	23.835	23.902
33	24.016	rBB	0.254	15346754	23.916	24.170
34	24.384	rBB	0.107	1915870	24.331	24.438
35	24.492	rBB	0.100	893325	24.438	24.538
36	24.599	rBB	0.141	12047556	24.538	24.679
37	24.759	rBB	0.188	4808591	24.679	24.867
38	24.967	rBB	0.167	64296103	24.867	25.034
39	25.101	rBB	0.121	31527262	25.041	25.161
40	25.228	rBB	0.127	47448765	25.161	25.288
41	25.556	rBB	0.141	38153566	25.483	25.623
42	25.797	rBB	0.228	8805966	25.710	25.938
43	25.992	rBB	0.114	833105	25.938	26.052
44	26.367	rBB	0.194	815050	26.253	26.447
45	26.708	rBB	0.114	877714	26.655	26.768
46	26.822	rBB	0.087	693324	26.775	26.862
47	27.070	rBB	0.254	15256966	26.943	27.197
48	27.371	rBB	0.147	1480775	27.271	27.418
49	27.572	rBB	0.100	7508153	27.512	27.612
50	27.679	rBB	0.121	22015634	27.612	27.733
51	27.780	rBB	0.040	1097411	27.746	27.786
52	27.827	rBB	0.080	7430964	27.786	27.867
53	28.161	rBB	0.080	3996765	28.115	28.195
54	28.242	rBB	0.114	19677792	28.195	28.309
55	28.483	rBB	0.114	832897	28.402	28.516
56	28.583	rBB	0.174	13680390	28.516	28.690

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57	28.791	rBB	0.141	1796518	28.737	28.878
58	28.945	rBB	0.121	5093967	28.885	29.005
59	29.072	rBB	0.161	2620723	29.005	29.166
60	29.769	rBB	0.100	1045604	29.715	29.816
61	30.385	rBB	0.161	7698112	30.318	30.479
62	30.927	rBB	0.087	1290929	30.874	30.961
63	31.028	rBB	0.127	24359826	30.961	31.088
64	31.222	rBB	0.107	1361853	31.168	31.275
65	31.329	rBB	0.121	3182182	31.275	31.396
66	31.517	rBB	0.167	56870485	31.403	31.570
67	31.617	rBB	0.121	20814476	31.570	31.691
68	31.738	rBB	0.087	4807016	31.697	31.784
69	31.932	rBB	0.114	4530457	31.878	31.992
70	32.749	rBB	0.174	5173512	32.635	32.809
71	32.856	rBB	0.100	1087019	32.809	32.910
72	33.084	rBB	0.228	12344975	32.916	33.144
73	33.218	rBB	0.147	14254227	33.144	33.291
74	33.358	rBB	0.154	13332055	33.291	33.445
75	33.646	rBB	0.214	15395963	33.552	33.767
76	33.948	rBB	0.100	781659	33.901	34.001
77	34.195	rBB	0.134	2787127	34.122	34.256
78	34.396	rBB	0.147	3003757	34.309	34.456
79	34.999	rBB	0.147	6530746	34.945	35.093
80	35.354	rBB	0.241	12786862	35.253	35.495
81	35.689	rBB	0.121	2341799	35.622	35.742
82	35.809	rBB	0.167	4964203	35.742	35.910
83	37.370	rBB	0.181	2262003	37.289	37.470
84	37.624	rBB	0.161	971453	37.557	37.718
85	37.845	rBB	0.114	10071004	37.785	37.899
86	38.146	rBB	0.147	1921194	38.059	38.207
87	38.622	rBB	0.134	783305	38.542	38.676
88	38.763	rBB	0.147	927066	38.682	38.830
89	38.890	rBB	0.114	1028049	38.830	38.943
90	39.185	rBB	0.121	1077830	39.131	39.251
91	39.385	rBB	0.094	696231	39.339	39.432
92	39.553	rBB	0.134	879159	39.486	39.620
93	40.276	rBB	0.147	752650	40.182	40.330
94	40.484	rBB	0.174	18244568	40.403	40.577
95	40.819	rBB	0.127	2769536	40.758	40.886
96	41.984	rBB	0.167	3064816	41.910	42.078
97	42.292	rBB	0.114	1153480	42.218	42.332
98	42.432	rBB	0.094	25460567	42.379	42.473
99	43.531	rBB	0.127	1002701	43.477	43.604
100	43.812	rBB	0.141	9072882	43.765	43.906

Library Search Compound Report

Data File : D:\C106\19010504.D
 Acq Time : 5 Jan 99 11:56 am Operator: G. FIES
 Sample : VS006-067-S082 Inst : 5972 - MS
 Misc : 50 TORR; 2 ATM Multiplr: 2.00
 Method : D:\METHODS\VAP_NF7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

 Peak Number 1 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
11.25	420.28 PPB	32249680	FLUOROBENZENE	24.02

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108672	000106-98-9	87
2	1-Propene, 2-methyl-	108669	000115-11-7	87
3	1-Butene	108673	000106-98-9	83
4	1-Butene	108671	000106-98-9	83
5	1-Propene, 2-methyl-	108463	000115-11-7	83

 Peak Number 2 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
11.53	358.03 PPB	27472975	FLUOROBENZENE	24.02

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Butane	109164	000106-97-8	64
2	Butane	3946	000106-97-8	52

 Peak Number 3 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
12.91	70.75 PPB	5429047	FLUOROBENZENE	24.02

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Butene	108671	000106-98-9	87
4	1-Propene, 2-methyl-	108463	000115-11-7	83
5	1-Propene, 2-methyl-	108669	000115-11-7	80

 Peak Number 4 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
15.99	110.62 PPB	8487998	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
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1	1-Pentene	109030	000109-67-1	91
2	1-Pentene	109032	000109-67-1	86
3	1-Pentene	109031	000109-67-1	86
4	1-Pentene	3426	000109-67-1	86
5	Cyclopentane	3292	000287-92-3	86

Peak Number 5 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
16.39	138.71 PPB	10643651	FLUOROBENZENE	24.02

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	80
2	Pentane	4653	000109-66-0	78
3	Pentane	109386	000109-66-0	72

Peak Number 6 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
20.89	166.28 PPB	12759178	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexane	16315	000110-54-3	91
2	Hexane	112277	000110-54-3	86
3	Hexane	112279	000110-54-3	74
4	Hexane	112278	000110-54-3	64
5	Pentane, 2,4-dimethyl-	5552	000108-08-7	50

Peak Number 7 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
24.60	157.00 PPB	12047556	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Heptene	111847	000592-76-7	94
2	1-Heptene	2183	000592-76-7	94
3	1-Heptene	108686	000592-76-7	93
4	1-Heptene	108660	000592-76-7	91
5	1-Heptene	111846	000592-76-7	91

Peak Number 8 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
24.97	837.91 PPB	64296103	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
------------	--------------	------	------	------

1	3-Heptene, (E)-	108689	014686-14-7	81
2	(Z)-3-Heptene	108691	007642-10-6	81
3	3-Heptene	108688	000592-78-9	70
4	2-Heptene	108687	000592-77-8	68
5	3-Heptene, (E)-	2212	014686-14-7	62

 Peak Number 9 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
25.10	410.87 PPB	31527262	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	108688	000592-78-9	96
2	3-Heptene, (E)-	108689	014686-14-7	95
3	(Z)-3-Heptene	108691	007642-10-6	94
4	(Z)-3-Heptene	2213	007642-10-6	94
5	3-Heptene, (E)-	108697	014686-14-7	94

 Peak Number 10 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
25.23	618.36 PPB	47448765	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene	108605	000592-77-8	95
4	2-Heptene, (E)-	13656	014686-13-6	94
5	(Z)-3-Heptene	108691	007642-10-6	87

 Peak Number 11 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
25.56	497.22 PPB	38153566	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95
3	2-Heptene	108605	000592-77-8	95
4	2-Heptene, (E)-	13656	014686-13-6	91
5	3-Heptene	108688	000592-78-9	91

 Peak Number 12 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
25.80	114.76 PPB	8805966	FLUOROBENZENE	24.02
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1	Cyclopropane, butyl-	1931	000930-57-4	78
2	2H-Pyran-2-one, tetrahydro-3,6-dime	109044	003720-22-7	53
3	Cyclopentane, 1,2-dimethyl-, cis-	23919	001192-18-3	53
4	Hexane, 2-chloro-	1457	000638-28-8	50
5	Cyclopentane, 1,2-dimethyl-, cis-	111951	001192-18-3	50

Peak Number 13 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
27.07	198.83 PPB	15256966	FLUOROBENZENE	24.02

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
2	3,4-Heptadiene	31430	002454-31-1	72
3	Furan, 2,4-dimethyl-	41734	003710-43-8	72
4	Furan, 2,4-dimethyl-	118263	003710-43-8	72
5	2-Cyclopenten-1-one, 2-methyl-	21588	001120-73-6	72

Peak Number 14 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
27.57	195.06 PPB	7508153	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Toluene	117292	000108-88-3	60
2	Toluene	117282	000108-88-3	60
3	2-Octene, (Z)-	111246	007642-04-8	60
4	2-Octene	111287	000111-67-1	58
5	4-Octene, (E)-	111302	014850-23-8	55

Peak Number 15 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
27.68	571.97 PPB	22015634	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	5681	000589-81-1	91
2	Heptane, 3-methyl-	109689	000589-81-1	87
3	Nonane, 5-methyl-	110078	015869-85-9	64
4	Hexane, 1-(hexyloxy)-2-methyl-	7097	074421-17-3	59
5	Hexane, 2,4-dimethyl-	109577	000589-43-5	53

Peak Number 16 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
27.83	193.06 PPB	7430964	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptyne		116095	001119-65-9	95
2 2-Heptyne		116025	001119-65-9	91
3 2-Heptyne		31411	001119-65-9	90
4 1,4-Heptadiene		31572	005675-22-9	60
5 Cyclohexene, 4-methyl-		31569	000591-47-9	59

 Peak Number 17 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
28.24	511.24 PPB	19677792	CHLORO BENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methylene-		114415	001632-16-2	87
2 Heptane, 3-methylene-		114416	001632-16-2	83
3 Cyclopentane, 1,2,3-trimethyl-, (1.		114430	015890-40-1	64
4 Hexane, 2-methyl-4-methylene-		114420	003404-80-6	52
5 Cyclopentane, 1,2,3-trimethyl-, (1.		23917	015890-40-1	50

 Peak Number 18 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
28.58	355.42 PPB	13680390	CHLORO BENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Octene, (E)-		111301	014850-23-8	64
2 Cyclohexane, 1,2-dimethyl-, cis-		111705	002207-01-4	58
3 2-Octene, (E)-		111293	013389-42-9	53
4 1,2-Cyclohexanedione		14660	000765-87-7	50
5 Cyclohexane, 1,2-dimethyl-, cis-		14486	002207-01-4	49

 Peak Number 19 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
28.94	132.34 PPB	5093967	CHLORO BENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene, 3-methyl-		23868	003404-75-9	95
2 Hexane, 2-methyl-4-methylene-		23848	003404-80-6	90
3 Hexane, 2-methyl-4-methylene-		114420	003404-80-6	83
4 Heptane, 3-methylene-		114416	001632-16-2	78
5 Heptane, 3-methylene-		111568	001632-16-2	78

 Peak Number 20 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
29.07	68.09 PPB	2620723	CHLORO BENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Octene, (E)-		111302	014850-23-8	83
2 4-Octene, (Z)-		111286	007642-15-1	83
3 4-Octene, (E)-		13070	014850-23-8	83
4 trans-1-Butyl-2-methylcyclopropane		13988	038851-70-6	81
5 cis-1-Butyl-2-methylcyclopropane		13987	038851-69-3	81

 Peak Number 21 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
31.03	632.88 PFB	24359826	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Heptanone		109874	000123-19-3	91
2 4-Heptanone		114577	000123-19-3	91
3 3-Hexanone, 2-methyl-		109949	007379-12-6	80
4 3-Pentanone, 2,4-dimethyl-		109869	000565-80-0	72
5 4-Heptanone		109855	000123-19-3	72

 Peak Number 22 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
31.33	82.67 PFB	3182182	CHLOROBENZENE-D5	30.38

Hit# of 10	Tentative ID	Ref#	CAS#	Qual
1 n-Butyl ether		15788	000142-96-1	72
2 n-Butyl ether		112208	000142-96-1	59
3 n-Butyl ether		112037	000142-96-1	50
4 Pentane, 1-butoxy-		16488	018636-66-3	39
5 Ethanol, 2-butoxy-		112447	000111-76-2	38

 Peak Number 23 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
31.74	124.89 PFB	4807016	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 3-Heptanol		113288	000589-82-2	78
2 3-Heptanol		19637	000589-82-2	74
3 2-Pentanol, 2-methyl-		113238	000590-36-3	72
4 3-Pentanol		113150	000584-02-1	53
5 3-Pentanol		113149	000584-02-1	53

 Peak Number 24 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.93 117.70 PPB 4530457 CHLOROBENZENE-D5 30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	109596	000111-84-2	94
2	Nonane	109595	000111-84-2	91
3	Nonane	109597	000111-84-2	90
4	Nonane	5495	000111-84-2	68
5	Octane	109559	000111-65-9	59

Peak Number 25 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
32.75	134.41 PPB	5173512	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	50
2	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	47
3	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	40
4	2-Oxepanone, 4-methyl-	15310	1000196-99-7	38
5	Thiazole, 2,5-dimethyl-	51095	004175-66-0	38

Peak Number 26 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
33.08	320.73 PPB	12344975	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	59
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	59
4	Hexanoic acid, anhydride	118546	002051-49-2	53
5	Hexanoic acid, anhydride	43066	002051-49-2	53

Peak Number 27 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
33.22	370.33 PPB	14254227	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	64
2	Hexanoic acid, anhydride	118546	002051-49-2	53
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	53
4	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
5	Furan, tetrahydro-2,2-dimethyl-5-(1	32021	033978-70-0	45

Peak Number 28 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
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33.36	346.37 PPB	13332055	CHLOROBENZENE-D5	30.38
Hit# of 18	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, 1,1,2,2-tetramethyl-	111640	004127-47-3	53
2	3,3-Diethoxy-1-propyne	32833	010160-87-9	53
3	1H-1,2,4-Triazole, 3-propyl-	33272	019932-60-6	50
4	3-(Butylamino)propionitrile	116379	000693-51-6	43
5	2-Pentene, 4,4-dimethyl-, (E)-	32892	000690-08-4	42

Peak Number 29 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
33.65	399.99 PPB	15395963	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Octene, 3,7-dimethyl-	109482	004984-01-4	32
2	2-Acetylcyclopentanone	110242	001670-46-8	27
3	3-Hexadecyloxy carbonyl-5-(2-hydroxy	4219	1000222-82-8	25
4	1-Tetracosanol	5175	000506-51-4	25
5	1-Octanol, 3,7-dimethyl-, (S)-	4241	068680-98-8	23

Peak Number 30 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
34.20	72.41 PPB	2787127	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octanone	109633	000589-63-9	93
2	4-Octanone	5601	000589-63-9	93
3	4-Octanone	109631	000589-63-9	93
4	4-Octanone	109634	000589-63-9	93
5	4-Octanone	109632	000589-63-9	92

Peak Number 31 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
34.40	78.04 PPB	3003757	CHLOROBENZENE-D5	30.38
Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	116270	000629-08-3	90
2	Heptanenitrile	108877	000629-08-3	64
3	Heptanenitrile	108876	000629-08-3	64
4	Octanenitrile	108878	000124-12-9	50
5	Heptanenitrile	108875	000629-08-3	50

Peak Number 32 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
35.00	169.67 PPB	6530746	CHLORO BENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	109556	000124-18-5	95
2	Undecane	109663	001120-21-4	90
3	Nonane	109596	000111-84-2	80
4	Elcosane	109630	000112-95-8	72
5	Heptadecane	112321	000629-78-7	72

Peak Number 33 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
35.35	332.21 PPB	12786862	CHLORO BENZENE-D5	30.38
Hit# of 13	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	Hexanenitrile	108570	000628-73-9	42
3	5-Hexen-1-ol	111145	000821-41-0	38
4	Cyclobutanecarbonitrile	111127	004426-11-3	38
5	1,8-Nonadiene	2340	004900-30-5	36

Peak Number 34 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
35.81	128.97 PPB	4964203	CHLORO BENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112165	000104-76-7	80
2	1-Hexanol, 2-ethyl-	112637	000104-76-7	64
3	2-Propyl-1-pentanol	15895	058175-57-8	50
4	1-Hexanol, 2-ethyl-	15889	000104-76-7	50
5	1-Hexanol, 2-ethyl-	112146	000104-76-7	47

Peak Number 35 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
37.85	261.65 PPB	10071004	CHLORO BENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	112395	001120-21-4	94
2	Undecane	109663	001120-21-4	91
3	Undecane	16533	001120-21-4	91
4	Tridecane	16403	000629-50-5	90
5	Tetradecane	112357	000629-59-4	90

Peak Number 36 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
40.48	474.00 PPB	18244568	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	109555	000112-40-3	87
2	Hexadecane	112408	000544-76-3	86
3	Undecane	112395	001120-21-4	86
4	Decane, 6-ethyl-2-methyl-	16450	062108-21-8	83
5	Hexadecane	112406	000544-76-3	83

Peak Number 37 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
40.82	71.95 PPB	2769536	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 6-methyl-	16443	006044-71-9	96
2	Undecane, 2,6-dimethyl-	17111	017301-23-4	95
3	Undecane, 2,6-dimethyl-	112404	017301-23-4	94
4	Undecane, 3,6-dimethyl-	16435	017301-28-9	81
5	Undecane, 2,6-dimethyl-	112287	017301-23-4	74

Peak Number 38 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
41.98	79.63 PPB	3064816	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 2,6-dimethyl-	112396	002051-30-1	83
2	Nonane, 3-methyl-	112310	005911-04-6	78
3	Undecane, 6,6-dimethyl-	17116	017312-76-4	72
4	Octane, 3,6-dimethyl-	17112	015869-94-0	72
5	Hexadecane, 7-methyl-	17103	026730-20-1	72

Peak Number 39 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
42.43	661.48 PPB	25460567	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	112308	000629-50-5	95
2	Tridecane	112309	000629-50-5	94
3	Heptadecane	112319	000629-78-7	91
4	Tridecane	16403	000629-50-5	91
5	Hexadecane	112406	000544-76-3	87

Peak Number 40

Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
43.81	235.72 PPB	9072882	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	112356	000629-59-4	97
2	Tetradecane	112357	000629-59-4	94
3	Tetradecane	16474	000629-59-4	91
4	Heptadecane	112319	000629-78-7	91
5	Hexadecane	112408	000544-76-3	90

19010504.D VAP_NP7.M Wed Jan 20 11:41:30 1999

File : C:\HPCHEM\1\DATA\19010407.D
Operator : G. FIES
Acquired : 4 Jan 99 3:59 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-068-S091
Misc Info : 50 TORR
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010407.D

Acq On : 4 Jan 99 3:59 pm

Sample : VS006-068-S091

Misc : 50 TORR

Quant Time: Jan 6 8:55 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.01	96	6834780	100.00	NG	0.08
17) CHLOROBENZENE-D5	30.38	117	2780414	100.00	NG	-0.08

System Monitoring Compounds

%Recovery

Target Compounds

Target Compounds					Qvalue	
2) ETHANOL	14.85	45	3245733	472.70	PPB	m 100 E
3) ACETONITRILE	16.06	40	938892	86.38	PPB	m 80
4) ACETONE	16.16	58	2354486	240.52	PPB	m 99
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.65	45	118701	4.44	PPB	# 89
7) 1-PROPANOL	19.35	31	494676	22.90	PPB	m 96
8) PROPANENITRILE	19.98	54	1054072	66.31	PPB	m 99
9) BUTANAL	0.00	72		Not Detected		
10) 2-BUTANONE	20.75	72	585134	59.16	PPB	m 80
11) TETRAHYDROFURAN	22.11	72	74975	8.05	PPB	m 98
12) 1-BUTANOL	23.53	56	1673917	179.99	PPB	m 90
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.38	43	1303576	22.70	PPB	m 98
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.16	58	1661392	111.64	PPB	m 73
19) 3-HEPTANONE	31.53	114	3300623	1141.39	PPB	m 1 E
20) 2-HEPTANONE	31.61	58	6771089	331.67	PPB	m 87 E
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	34.70	58	330972	12.87	PPB	m 91

(#) = qualifier out of range (m) = manual integration
 19010407.D VAP_P7.M Wed Jan 06 08:56:08 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010407.D

Acq On : 4 Jan 99 3:59 pm

Sample : VS006-068-S091

Misc : 50 TORR

Quant Time: Jan 6 8:48 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.01	96	6834780	100.00	NG	0.08
20) CHLOROBENZENE-D5	30.38	117	2780414	100.00	PPB	-0.05

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-EUTANE	11.54	43	14169453	385.85 PPB	100 E
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.70	101	143084	4.36	
7) N-PENTANE	16.39	72	509618	154.28 PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	19.51	43	809782	17.42 PPB #	77
10) 1-HEXENE	20.52	56	5014412	238.35 PPB #	81
11) N-HEXANE	20.88	57	3541182	114.92 PPB	92
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	23.51	78	314642	6.17 PPB	99
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	23.73	43	168144	5.14 PPB m	86
16) N-HEPTANE	24.93	57	3555393	207.25 PPB m	85
17) TOLUENE	27.57	91	1587678	30.38 PPB	95
18) N-OCTANE	28.58	57	816334	61.00 PPB m	93
19) TETRACHLOROETHYLENE	0.00	166		Not Detected	
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	0.00	91		Not Detected	
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	31.92	43	1222839	70.42 PPB	94
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	34.99	43	1779845	116.11 PPB m	100
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#) = qualifier out of range (m) = manual integration
 19010407.D VAP_NP7.M Wed Jan 06 08:49:44 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010805.D
 Acq On : 8 Jan 99 1:49 pm
 Sample : VS006-068-S091-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 11:37 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	5237224	100.00	NG	0.09
17) CHLOROBENZENE-D5	30.39	117	3369930	100.00	NG	-0.07

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) ETHANOL	14.89	45	88397	403.22 PPB m	100
3) ACETONITRILE	0.00	40		Not Detected	
4) ACETONE	16.16	58	119579	382.60 PPB m	80
5) FURAN	0.00	68		Not Detected	
6) 2-PROPANOL	0.00	45		Not Detected	
7) 1-PROPANOL	19.38	31	11395	16.52 PPB #	88
8) PROPANENITRILE	20.00	54	23876	47.04 PPB m	99
9) BUTANAL	20.58	72	9603	46.51 PPB m	82
10) 2-BUTANONE	20.76	72	16052	50.84 PPB m	84
11) TETRAHYDROFURAN	22.14	72	1552	5.22 PPB #	21
12) 1-BUTANOL	0.00	56		Not Detected	
13) BUTANENITRILE	0.00	41		Not Detected	
14) 2-PENTANONE	24.39	43	35066	19.13 PPB	98
15) 1,4-DIOXANE	0.00	88		Not Detected	
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected	
18) 2-HEXANONE	28.16	58	61768	82.19 PPB m	81
19) 3-HEPTANONE	31.46	114	304271	2083.52 PPB	93
20) 2-HEPTANONE	31.57	58	418721	406.13 PPB m	80
21) CYCLOHEXANONE	31.92	98	1649	5.75 PPB #	1
22) 2-OCTANONE	34.71	58	15152	11.67 PPB	88

(#) = qualifier out of range (m) = manual integration
 19010805.D VAP_P7.M Mon Jan 11 11:38:45 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010805.D
 Acq On : 8 Jan 99 1:49 pm
 Sample : VS006-068-S091-2; SEC. DILUTION
 Misc : 50 TORR
 Quant Time: Jan 11 11:34 1999

Vial: 1
 Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.02	96	5237224	100.00	NG	0.09
20) CHLOROBENZENE-D5	30.39	117	3369930	100.00	PPB	-0.04

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	11.50	43	592906	505.69 PPB	99
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.69	101	4254	4.06	97
7) N-PENTANE	16.38	72	15313	145.19 PPB	# 100
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	19.52	43	26833	18.08 PPB	# 70
10) 1-HEXENE	20.52	56	177009	263.53 PPB	# 68
11) N-HEXANE	20.88	57	114613	116.50 PPB	# 81
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	23.52	78	11274	6.93 PPB	98
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	23.74	43	6607	6.33 PPB	m 98
16) N-HEPTANE	24.93	57	346266	632.21 PPB	# 78
17) TOLUENE	27.57	91	72456	43.43 PPB	95
18) N-OCTANE	28.58	57	38222	89.45 PPB	m 1
19) TETRACHLOROETHYLENE	0.00	166		Not Detected	
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	31.17	91	3169	2.79 PPB	98
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	31.92	43	48059	54.80 PPB	89
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	34.99	43	75873	98.01 PPB	m 94
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#) = qualifier out of range (m) = manual integration
 19010805.D VAP_NP7.M Mon Jan 11 11:35:21 1999

TIC: 19010407.D

VS006-068-S091

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.138	rBB	0.449	7603811	7.064	7.513
2	9.154	rBB	0.154	1065717	9.080	9.234
3	10.975	rBB	0.188	1199490	10.935	11.122
4	11.263	rBB	0.308	33914181	11.143	11.451
5	11.544	rBB	0.395	29155742	11.451	11.846
6	12.194	rBB	0.161	2757915	12.120	12.281
7	12.649	rBB	0.181	2525739	12.562	12.743
8	12.917	rBB	0.194	5676892	12.803	12.998
9	14.846	rBB	0.321	11003118	14.732	15.054
10	15.127	rBB	0.147	1395596	15.054	15.201
11	15.991	rBB	0.107	8947825	15.931	16.038
12	16.065	rBB	0.067	964313	16.038	16.105
13	16.159	rBB	0.114	8389654	16.105	16.219
14	16.393	rBB	0.221	16157426	16.279	16.500
15	16.895	rBB	0.181	2508784	16.795	16.976
16	17.243	rBB	0.080	921573	17.197	17.277
17	17.317	rBB	0.107	1927399	17.277	17.384
18	18.281	rBB	0.134	986941	18.221	18.355
19	19.038	rBB	0.208	1783259	18.931	19.139
20	19.514	rBB	0.134	2432652	19.447	19.581
21	19.976	rBB	0.134	1960767	19.909	20.043
22	20.525	rBB	0.261	28114244	20.411	20.672
23	20.746	rBB	0.134	3934043	20.679	20.813
24	20.880	rBB	0.134	13493983	20.813	20.947
25	21.081	rBB	0.114	811914	21.027	21.141
26	21.181	rBB	0.087	1602648	21.141	21.228
27	21.583	rBB	0.121	1836232	21.523	21.643
28	21.844	rBB	0.080	742498	21.797	21.878
29	22.025	rBB	0.080	1292068	21.992	22.072
30	23.418	rBB	0.094	774507	23.364	23.458
31	23.532	rBB	0.121	6551754	23.465	23.585
32	23.800	rBB	0.067	1520342	23.759	23.826
33	23.853	rBB	0.067	1057577	23.826	23.893
34	24.007	rBB	0.167	13867216	23.907	24.074
35	24.382	rBB	0.107	2075834	24.329	24.436
36	24.483	rBB	0.094	928826	24.436	24.530
37	24.590	rBB	0.141	12668150	24.530	24.670
38	24.751	rBB	0.188	5197070	24.670	24.858
39	24.965	rBB	0.167	67521359	24.858	25.025
40	25.099	rBB	0.121	33039263	25.032	25.152
41	25.219	rBB	0.127	50009820	25.152	25.280
42	25.548	rBB	0.141	40026583	25.474	25.615
43	25.789	rBB	0.228	9270430	25.702	25.929
44	25.983	rBB	0.121	878859	25.929	26.050
45	26.358	rBB	0.194	902090	26.244	26.438
46	26.699	rBB	0.114	900793	26.646	26.760
47	27.061	rBB	0.248	16157254	26.934	27.182
48	27.362	rBB	0.147	1615827	27.262	27.409
49	27.563	rBB	0.100	8011457	27.503	27.604
50	27.670	rBB	0.121	23653365	27.604	27.724
51	27.771	rBB	0.040	1148511	27.737	27.778
52	27.818	rBB	0.080	8009958	27.778	27.858
53	28.005	rBB	0.141	750348	27.952	28.092
54	28.153	rBB	0.080	4507181	28.106	28.186
55	28.233	rBB	0.114	20634842	28.186	28.300
56	28.474	rBB	0.107	882645	28.400	28.508

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57	28.575	rBB	0.221	18008714	28.508	28.729
58	28.789	rBB	0.141	1947676	28.729	28.869
59	28.936	rBB	0.121	5480135	28.876	28.996
60	29.063	rBB	0.067	870925	29.023	29.090
61	29.760	rBB	0.100	1231150	29.706	29.807
62	x30.376	rBB	0.161	7561556	30.309	30.470
63	30.918	rBB	0.087	1442481	30.865	30.952
64	31.019	rBB	0.127	27454183	30.952	31.079
65	31.220	rBB	0.114	1561109	31.160	31.273
66	31.327	rBB	0.114	3471206	31.273	31.387
67	31.515	rBB	0.167	62570030	31.394	31.561
68	31.615	rBB	0.127	23213279	31.561	31.689
69	31.729	rBB	0.094	6253020	31.689	31.782
70	31.923	rBB	0.114	4914137	31.869	31.983
71	32.740	rBB	0.181	5776101	32.620	32.800
72	32.847	rBB	0.100	1249227	32.800	32.901
73	33.075	rBB	0.228	13814265	32.907	33.135
74	33.209	rBB	0.147	16084546	33.135	33.282
75	33.349	rBB	0.154	14995580	33.282	33.437
76	33.637	rBB	0.214	17154580	33.544	33.758
77	33.939	rBB	0.100	846149	33.899	33.999
78	34.187	rBB	0.134	3098831	34.113	34.247
79	34.387	rBB	0.147	3373793	34.300	34.448
80	34.990	rBB	0.141	6964228	34.937	35.077
81	35.345	rBB	0.241	14267733	35.245	35.486
82	35.680	rBB	0.114	2453725	35.620	35.734
83	35.807	rBB	0.174	10752701	35.734	35.908
84	36.303	rBB	0.107	745478	36.249	36.356
85	37.361	rBB	0.181	2631805	37.281	37.461
86	37.615	rBB	0.154	1042788	37.548	37.702
87	37.836	rBB	0.114	10667971	37.776	37.890
88	38.138	rBB	0.141	2371187	38.051	38.191
89	38.613	rBB	0.141	837850	38.526	38.667
90	38.754	rBB	0.161	1477969	38.667	38.828
91	38.881	rBB	0.107	1075245	38.828	38.935
92	39.176	rBB	0.121	1120314	39.122	39.243
93	39.377	rBB	0.094	757059	39.330	39.424
94	39.544	rBB	0.127	936818	39.477	39.604
95	40.475	rBB	0.174	19414558	40.395	40.569
96	40.810	rBB	0.134	2938061	40.743	40.877
97	41.975	rBB	0.154	3486194	41.908	42.062
98	42.424	rBB	0.100	27961855	42.370	42.471
99	43.522	rBB	0.121	1250926	43.475	43.596
100	43.803	rBB	0.087	12002817	43.763	43.850

Library Search Compound Report

Data File : D:\C106\19010407.D
 Acq Time : 4 Jan 99 3:59 pm
 Sample : VS006-068-S091
 Misc : 50 TORR
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
7.14	109.67 PPB	7603811	FLUOROBENZENE	24.01

Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1 Propene		108457	000115-07-1	86
2 Cyclopropane		108993	000075-19-4	80
3 Cyclopropane		108992	000075-19-4	72
4 Propene		1533	000115-07-1	47
5 Cyclopropane		3264	000075-19-4	37

 Peak Number 2 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
11.26	489.13 PPB	33914181	FLUOROBENZENE	24.01

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1 1-Butene		108672	000106-98-9	87
2 1-Propene, 2-methyl-		108669	000115-11-7	87
3 1-Butene		108673	000106-98-9	83
4 1-Butene		108671	000106-98-9	83
5 1-Propene, 2-methyl-		108463	000115-11-7	83

 Peak Number 3 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
11.54	420.50 PPB	29155742	FLUOROBENZENE	24.01

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1 Butane		3946	000106-97-8	72
2 Butane		109164	000106-97-8	64

 Peak Number 4 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
12.92	81.88 PPB	5676892	FLUOROBENZENE	24.01

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
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1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Butene	108671	000106-98-9	87
4	1-Propene, 2-methyl-	108463	000115-11-7	83
5	1-Propene, 2-methyl-	108669	000115-11-7	80

 Peak Number 5 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
15.99	129.05 PPB	8947825	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene	109030	000109-67-1	91
2	1-Pentene	109032	000109-67-1	86
3	1-Pentene	109031	000109-67-1	86
4	1-Pentene	3426	000109-67-1	86
5	Cyclopentane	3292	000287-92-3	86

 Peak Number 6 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
16.39	233.03 PPB	16157426	FLUOROBENZENE	24.01

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	90
2	Pentane	4653	000109-66-0	90
3	Pentane	109386	000109-66-0	72
4	Butane, 2,3-dimethyl-	109396	000079-29-8	36

 Peak Number 7 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
20.52	405.48 PPB	28114244	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexene	111822	000592-41-6	91
2	1-Hexene	2192	000592-41-6	91
3	1-Hexene	111823	000592-41-6	90
4	1-Hexene	108674	000592-41-6	83
5	Cyclobutane, butyl-	15024	013152-44-8	83

 Peak Number 8 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
20.88	194.62 PPB	13493983	FLUOROBENZENE	24.01

Hit# of 19	Tentative ID	Ref#	CAS#	Qual
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1 Hexane	112279	000110-54-3	91
2 Hexane	16315	000110-54-3	91
3 Hexane	112277	000110-54-3	86
4 Pentane, 2,4-dimethyl-	5552	000108-08-7	50
5 Hexane	112278	000110-54-3	42

 Peak Number 9 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
24.59	182.71 PPB	12668150	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Heptene		2183	000592-76-7	94
2 1-Heptene		111847	000592-76-7	91
3 1-Heptene		111846	000592-76-7	91
4 1-Heptene		108686	000592-76-7	81
5 Isopropylcyclobutane		15016	000872-56-0	64

 Peak Number 10 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
24.96	973.83 PPB	67521359	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 (Z)-3-Heptene		108691	007642-10-6	81
2 3-Heptene, (E)-		108689	014686-14-7	81
3 3-Heptene		108688	000592-78-9	70
4 2-Heptene		108687	000592-77-8	68
5 3-Heptene, (E)-		2212	014686-14-7	62

 Peak Number 11 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
25.10	476.51 PPB	33039263	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 3-Heptene, (E)-		108689	014686-14-7	95
2 (Z)-3-Heptene		2213	007642-10-6	94
3 2-Heptene		108687	000592-77-8	94
4 3-Heptene, (E)-		108697	014686-14-7	94
5 3-Heptene		108688	000592-78-9	93

 Peak Number 12 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
25.22	721.27 PPB	50009820	FLUOROBENZENE	24.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene		108687	000592-77-8	97
2 2-Heptene, (E)-		111908	014686-13-6	96
3 2-Heptene		108605	000592-77-8	95
4 2-Heptene, (E)-		13656	014686-13-6	94
5 3-Heptene, (E)-		108689	014686-14-7	87

Peak Number 13 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
25.55	577.28 PPB	40026583	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene, (E)-		111908	014686-13-6	96
2 2-Heptene		108687	000592-77-8	95
3 2-Heptene		108605	000592-77-8	95
4 2-Heptene, (E)-		13656	014686-13-6	91
5 (Z)-3-Heptene		108691	007642-10-6	91

Peak Number 14 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
25.79	133.70 PPB	9270430	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Cyclopropane, butyl-		1931	000930-57-4	78
2 Cyclopentane, 1,2-dimethyl-, cis-		23919	001192-18-3	53
3 2H-Pyran-2-one, tetrahydro-3,6-dime		109044	003720-22-7	53
4 Cyclopentane, 1,2-dimethyl-, cis-		111951	001192-18-3	50
5 Hexane, 2-chloro-		1457	000638-28-8	50

Peak Number 15 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
27.06	233.03 PPB	16157254	FLUOROBENZENE	24.01
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Cyclopenten-1-one, 2-methyl-		113921	001120-73-6	81
2 3,4-Heptadiene		31430	002454-31-1	72
3 Furan, 2,4-dimethyl-		41734	003710-43-8	72
4 Furan, 2,4-dimethyl-		118263	003710-43-8	72
5 2-Cyclopenten-1-one, 2-methyl-		21588	001120-73-6	72

Peak Number 16 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
27.56	211.90 PPB	8011457	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Toluene		117282	000108-88-3	60
2 Toluene		117292	000108-88-3	60
3 4-Octene, (E)-		111302	014850-23-8	55
4 Toluene		117281	000108-88-3	53
5 2-Octene		111287	000111-67-1	52

Peak Number 17 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
27.67	625.62 PPB	23653365	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methyl-		5681	000589-81-1	91
2 Heptane, 3-methyl-		109689	000589-81-1	87
3 Heptane, 3,4,5-trimethyl-		7053	020278-89-1	78
4 Nonane, 5-methyl-		110078	015869-85-9	64
5 Hexane, 1-(hexyloxy)-2-methyl-		7097	074421-17-3	53

Peak Number 18 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
27.82	211.86 PPB	8009958	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptyne		116095	001119-65-9	96
2 2-Heptyne		116025	001119-65-9	91
3 2-Heptyne		31411	001119-65-9	86
4 1,4-Heptadiene		31572	005675-22-9	64
5 Cyclohexene, 4-methyl-		116094	000591-47-9	64

Peak Number 19 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
28.23	545.78 PPB	20634842	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methylene-		114415	001632-16-2	87
2 Heptane, 3-methylene-		114416	001632-16-2	72
3 Cyclopentane, 1,2,4-trimethyl-, (1.		23858	004850-28-6	72
4 Octane, 3-methyl-6-methylene-		23865	074630-07-2	72
5 Cyclopentane, 1,2,3-trimethyl-		23915	002815-57-8	59

Peak Number 20 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
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28.57 476.32 PPB 18008714 CHLOROBENZENE-D5 30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Octene, (E)-		111301	014850-23-8	64
2 Cyclohexane, 1,2-dimethyl-, cis-		111705	002207-01-4	52
3 4-Octene, (E)-		13070	014850-23-8	52
4 Cyclohexane, 1,2-dimethyl-, cis-		14486	002207-01-4	49
5 Cyclopentane, 1-ethyl-2-methyl-, ci		111377	000930-89-2	47

Peak Number 21 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
28.94	144.95 PPB	5480135	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene, 3-methyl-		23868	003404-75-9	95
2 Hexane, 2-methyl-4-methylene-		23848	003404-80-6	90
3 Hexane, 2-methyl-4-methylene-		114420	003404-80-6	83
4 Heptane, 3-methylene-		111568	001632-16-2	78
5 Heptane, 3-methylene-		114415	001632-16-2	72

Peak Number 22 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
31.02	726.15 PPB	27454183	CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Heptanone		109874	000123-19-3	91
2 4-Heptanone		114577	000123-19-3	91
3 3-Pentanone, 2,4-dimethyl-		109869	000565-80-0	72
4 4-Heptanone		109855	000123-19-3	72
5 4-Heptanone		6294	000123-19-3	72

Peak Number 23 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
31.33	91.81 PPB	3471206	CHLOROBENZENE-D5	30.38

Hit# of 10	Tentative ID	Ref#	CAS#	Qual
1 n-Butyl ether		112208	000142-96-1	72
2 n-Butyl ether		15788	000142-96-1	72
3 n-Butyl ether		112037	000142-96-1	56
4 Pentane, 1-butoxy-		16488	018636-66-3	39
5 Ethanol, 2-butoxy-		112447	000111-76-2	38

Peak Number 24 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.73	165.39 PPB	6253020	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanol	113288	000589-82-2	78
2	3-Heptanol	19637	000589-82-2	74
3	Propane, 2-ethoxy-2-methyl-	19731	000637-92-3	59
4	2-Pentanol, 2-methyl-	113238	000590-36-3	56
5	Propane, 1-ethoxy-2-methyl-	113165	000627-02-1	53

Peak Number 25 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
31.92	129.98 PPB	4914137	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	109596	000111-84-2	94
2	Nonane	109595	000111-84-2	91
3	Nonane	109597	000111-84-2	90
4	Nonane	5495	000111-84-2	68
5	Octane	109559	000111-65-9	59

Peak Number 26 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
32.74	152.78 PPB	5776101	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	47
2	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	40
3	2-Oxepanone, 4-methyl-	15310	1000196-99-7	38
4	Thiazole, 2,5-dimethyl-	51095	004175-66-0	38
5	Cyclohexanol, 4-methyl-1-(1-methyl-	120265	000470-65-5	35

Peak Number 27 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
33.07	365.38 PPB	13814265	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	59
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	59
4	Hexanoic acid, anhydride	118546	002051-49-2	53
5	Hexanoic acid, anhydride	43066	002051-49-2	53

Peak Number 28 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD		R.T.
33.21	425.43 PPB	16084546	CHLOROBENZENE-D5		30.38
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2,2'-Bioxepane		43236	074793-02-5	64
2	1,3,2-Dioxaborolane, 2,4-diethyl-		43307	057633-63-3	53
3	3,5-Diamino-1,2,4-triazole		43045	001455-77-2	53
4	1-Hydroxycyclohexanecarboxylic acid		43242	001123-28-0	50
5	Furan, tetrahydro-2,2-dimethyl-5-(1		32021	033978-70-0	45

 Peak Number 29 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD		R.T.
33.35	396.63 PPB	14995580	CHLOROBENZENE-D5		30.38
Hit# of 17	Tentative ID		Ref#	CAS#	Qual
1	Cyclopropane, 1,1,2,2-tetramethyl-		111640	004127-47-3	53
2	3,3-Diethoxy-1-propyne		32833	010160-87-9	53
3	1H-1,2,4-Triazole, 3-propyl-		33272	019932-60-6	50
4	3-(Butylamino)propionitrile		116379	000693-51-6	43
5	N,N'-Bis(2,6-dimethyl-6-nitrosohept		32831	066737-12-0	40

 Peak Number 30 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD		R.T.
33.64	453.73 PPB	17154580	CHLOROBENZENE-D5		30.38
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Octene, 3,7-dimethyl-		109482	004984-01-4	32
2	3-Hexadecyloxy carbonyl-5-(2-hydroxy		4219	1000222-82-8	25
3	Trifluoroacetic acid, n-heptadecyl		4324	1000216-79-2	25
4	1-Tetracosanol		5175	000506-51-4	25
5	1-Octanol, 3,7-dimethyl-, (S)-		4241	068680-98-8	23

 Peak Number 31 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD		R.T.
34.19	81.96 PPB	3098831	CHLOROBENZENE-D5		30.38
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	4-Octanone		109634	000589-63-9	92
2	4-Octanone		109631	000589-63-9	92
3	4-Octanone		109633	000589-63-9	92
4	4-Octanone		109632	000589-63-9	91
5	4-Octanone		5601	000589-63-9	78

 Peak Number 32 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
34.39	89.24 PPB	3373793	CHLOROBENZENE-D5	30.38
Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	116270	000629-08-3	90
2	Heptanenitrile	108877	000629-08-3	74
3	Heptanenitrile	108876	000629-08-3	64
4	Octanenitrile	108878	000124-12-9	50
5	Heptanenitrile	108875	000629-08-3	45

Peak Number 33 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
34.99	184.20 PPB	6964228	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	109556	000124-18-5	95
2	Nonane	5495	000111-84-2	90
3	Undecane	109663	001120-21-4	90
4	Noxane	109596	000111-84-2	80
5	Heptadecane	112321	000629-78-7	72

Peak Number 34 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
35.35	377.38 PPB	14267733	CHLOROBENZENE-D5	30.38
Hit# of 12	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	Hexanenitrile	108570	000628-73-9	42
3	5-Hexen-1-ol	111145	000821-41-0	38
4	1,8-Nonadiene	2340	004900-30-5	36
5	1,2-Nonadiene	12691	022433-33-6	33

Peak Number 35 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
35.81	284.40 PPB	10752701	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	90
2	1-Hexanol, 2-ethyl-	112165	000104-76-7	80
3	1-Hexanol, 2-ethyl-	112147	000104-76-7	74
4	1-Hexanol, 2-ethyl-	15889	000104-76-7	59
5	2-Propyl-1-pentanol	15895	058175-57-8	53

Peak Number 36 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
37.84	282.16 PPB	10667971	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	112395	001120-21-4	94
2	Undecane	109663	001120-21-4	93
3	Undecane	16533	001120-21-4	91
4	Tetradecane	112357	000629-59-4	90
5	Tridecane	112309	000629-50-5	90

Peak Number 37 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
40.47	513.51 PPB	19414558	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	109555	000112-40-3	87
2	Hexadecane	112408	000544-76-3	86
3	Decane, 6-ethyl-2-methyl-	16450	062108-21-8	83
4	Dodecane	16262	000112-40-3	76
5	Pentadecane	16493	000629-62-9	72

Peak Number 38 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
41.98	92.21 PPB	3486194	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane, 3-methyl-	16406	005911-04-6	72
2	Nonane, 3-methyl-	112310	005911-04-6	72
3	Octane, 2,3,7-trimethyl-	16473	062016-34-6	64
4	Tridecane, 5-propyl-	16558	055045-11-9	64
5	Octane, 3,6-dimethyl-	17112	015869-94-0	64

Peak Number 39 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
42.42	739.58 PPB	27961855	CHLOROBENZENE-D5	30.38
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	112308	000629-50-5	94
2	Tridecane	112309	000629-50-5	94
3	Tridecane	16403	000629-50-5	91
4	Heptadecane	112319	000629-78-7	91
5	Hexadecane	112406	000544-76-3	87

Peak Number 40 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
43.80	317.47	PPB	12002817 CHLOROBENZENE-D5	30.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	112356	000629-59-4	97
2	Tetradecane	112357	000629-59-4	94
3	Tetradecane	112355	000629-59-4	91
4	Heptadecane	112319	000629-78-7	91
5	Tridecane	112309	000629-50-5	87

19010407.D VAP_NP7.M Wed Jan 20 11:45:35 1999

File : C:\HPCHEM\1\DATA\19010408.D
Operator : M. STAUFFER
Acquired : 4 Jan 99 5:21 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-128-S096
Misc Info : 50 TORR
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010408.D

Acq On : 4 Jan 99 5:21 pm

Sample : VS006-128-S096

Misc : 50 TORR

Quant Time: Jan 5 17:14 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Qion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.00	96	6571594	100.00	NG	0.07
17) CHLOROBENZENE-D5	30.37	117	2702491	100.00	NG	-0.09

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue	
2) ETHANOL	14.84	45	3102785	469.98	PPB	100 E
3) ACETONITRILE	16.05	40	954365	91.52	PPB m	79
4) ACETONE	16.15	58	2264390	240.58	PPB m	99
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.63	45	117531	4.57	PPB	94
7) 1-PROPANOL	19.33	31	534198	25.72	PPB	98
8) PROPANENITRILE	19.97	54	958444	62.71	PPB m	99
9) BUTANAL	0.00	72		Not Detected		
10) 2-BUTANONE	20.74	72	525817	55.30	PPB	80
11) TETRAHYDROFURAN	22.09	72	65443	7.31	PPB	96
12) 1-BUTANOL	23.52	56	1636515	183.02	PPB m	91
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.37	43	1179153	21.36	PPB	99
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.15	58	1443342	99.78	PPB	77
19) 3-HEPTANONE	31.48	114	3083029	1096.88	PPB m	1 E
20) 2-HEPTANONE	31.60	58	5915069	298.09	PPB m	87 E
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	34.70	58	257686	10.31	PPB	94

(#) = qualifier out of range (m) = manual integration
 19010408.D VAP_P7.M Tue Jan 05 17:14:38 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010408.D

Acq On : 4 Jan 99 5:21 pm

Sample : VS006-128-S096

Misc : 50 TORR

Quant Time: Jan 5 17:10 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.00	96	6571594	100.00	NG	0.07
20) CHLOROBENZENE-D5	30.37	117	2702491	100.00	PPB	-0.06

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	11.53	43	11829573	335.03 PPB	100 E
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.69	101	136008	4.31	99
7) N-PENTANE	16.39	72	411692	129.62 PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	19.51	43	628610	14.07 PPB #	77
10) 1-HEXENE	20.51	56	4090696	202.23 PPB #	79
11) N-HEXANE	20.88	57	2845504	96.04 PPB	91
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	23.50	78	256688	5.24 PPB	99
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	23.73	43	133248	4.24 PPB m	87
16) N-HEPTANE	24.93	57	3646956	221.11 PPB m	85
17) TOLUENE	27.57	91	1304580	25.97 PPB	96
18) N-OCTANE	28.58	57	644640	50.10 PPE m	91
19) TETRACHLOROETHYLENE	0.00	166		Not Detected	
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	0.00	91		Not Detected	
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	31.92	43	967446	57.32 PPB	94
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	34.99	43	1195606	80.24 PPB	98
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#)= qualifier out of range (m)= manual integration

19010408.D VAP_NP7.M

Tue Jan 05 17:10:34 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010711.D
 Acq On : 7 Jan 99 7:30 pm
 Sample : VS006-128-S096-2; SEC. DIL.
 Misc : 50 TORR
 Quant Time: Jan 11 13:01 1999

Vial: 1
 Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Last Update : Sat Jan 02 16:48:55 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.03	96	4985430	100.00	NG	0.10
17) CHLOROBENZENE-D5	30.39	117	3019972	100.00	NG	-0.07

System Monitoring Compounds

%Recovery

Target Compounds	R.T.	Q Ion	Response	Conc	Units	Qvalue
2) ETHANOL	14.94	45	81197	389.08	PFB m	100
3) ACETONITRILE	0.00	40		Not Detected		
4) ACETONE	16.19	58	88706	298.16	PFB m	81
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.92	45	4546	5.59	PFB #	87
7) 1-PROPANOL	19.40	31	9996	15.22	PFB	97
8) PROPANENITRILE	20.01	54	20531	42.49	PFB m	95
9) BUTANAL	20.59	72	8139	41.41	PFB m	75
10) 2-BUTANONE	20.78	72	13758	45.77	PFB m	71
11) TETRAHYDROFURAN	22.16	72	1424	5.03	PFB #	22
12) 1-BUTANOL	23.53	56	48210	170.57	PFB m	100
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	24.40	43	25415	14.56	PFB	97
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.16	58	46097	68.44	PFB m	76
19) 3-HEPTANONE	31.46	114	214362	1637.96	PFB	87
20) 2-HEPTANONE	31.58	58	281570	304.75	PFB m	80
21) CYCLOHEXANONE	31.93	98	1596	6.21	PFB #	1
22) 2-OCTANONE	34.72	58	9416	8.09	PFB	83

(#) = qualifier out of range (m) = manual integration
 19010711.D VAP_P7.M Mon Jan 11 13:02:02 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19010711.D

Acq On : 7 Jan 99 7:30 pm

Sample : VS006-128-S096-2; SEC. DIL.

Misc : 50 TORR

Quant Time: Jan 11 13:03 1999

Vial: 1

Operator: M. STAUFFER

Inst : 5972 - MS

Multiplr: 48.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Last Update : Sat Jan 02 14:22:01 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.03	96	4985430	100.00	NG	0.10
20) CHLOROBENZENE-D5	30.39	117	3019972	100.00	PPB	-0.04

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	11.52	43	495969	444.38 PPB m	98
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.71	101	4560	4.58	100
7) N-PENTANE	16.40	72	12542	124.93 PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	19.53	43	22315	15.80 PPB #	70
10) 1-HEXENE	20.53	56	142929	223.54 PPB #	66
11) N-HEXANE	20.90	57	95450	101.92 PPB #	80
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	23.53	78	9965	6.43 PPB	98
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	23.65	43	6945	6.99 PPB	99
16) N-HEPTANE	24.93	57	284609	545.88 PPB #	78
17) TOLUENE	27.59	91	93253	58.72 PPB	96
18) N-OCTANE	28.59	57	35841	88.12 PPB m	78
19) TETRACHLOROETHYLENE	0.00	166		Not Detected	
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M,P-XYLENE	31.18	91	3516	3.45 PPB	95
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	31.93	43	41956	53.38 PPB	90
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	35.01	43	69804	100.62 PPB m	92
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#) = qualifier out of range (m) = manual integration
 19010711.D VAP_NP7.M Mon Jan 11 13:03:56 1999

TIC: 19010408.D

VS006-128-S096

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.168	rBB	0.348	12050485	7.067	7.415
2	9.163	rBB	0.188	1152282	9.083	9.270
3	10.965	rBB	0.154	1079088	10.931	11.085
4	11.259	rBB	0.241	27841131	11.132	11.373
5	11.541	rBB	0.348	24334252	11.440	11.788
6	12.190	rBB	0.161	2173638	12.117	12.277
7	12.646	rBB	0.154	2016420	12.572	12.726
8	12.907	rBB	0.188	4524325	12.800	12.987
9	14.829	rBB	0.328	10645913	14.722	15.050
10	15.123	rBB	0.154	1070601	15.050	15.204
11	15.981	rBB	0.107	6884470	15.920	16.028
12	16.054	rBB	0.067	1003849	16.028	16.094
13	16.148	rBB	0.114	7799568	16.094	16.208
14	16.382	rBB	0.221	13012770	16.269	16.490
15	16.885	rBB	0.161	1950997	16.798	16.958
16	17.240	rBB	0.087	733782	17.186	17.273
17	17.313	rBB	0.100	1489536	17.273	17.374
18	18.278	rBB	0.161	937874	18.204	18.365
19	19.034	rBB	0.194	1463906	18.927	19.121
20	19.510	rBB	0.134	1881869	19.436	19.570
21	19.811	rBB	0.154	658556	19.738	19.892
22	19.965	rBB	0.127	1767863	19.905	20.032
23	20.514	rBB	0.261	23182880	20.407	20.668
24	20.735	rBB	0.134	3551738	20.668	20.802
25	20.876	rBB	0.134	10899455	20.809	20.943
26	21.070	rBB	0.107	630481	21.023	21.131
27	21.177	rBB	0.094	1258808	21.131	21.224
28	21.573	rBB	0.127	1445924	21.512	21.640
29	22.028	rBB	0.080	941049	21.981	22.061
30	22.108	rBB	0.107	624446	22.061	22.169
31	23.521	rBB	0.127	6540341	23.454	23.582
32	23.789	rBB	0.080	1554716	23.742	23.823
33	23.849	rBB	0.067	931884	23.823	23.890
34	24.004	rBB	0.261	14696821	23.896	24.158
35	24.372	rBB	0.107	1911060	24.318	24.425
36	24.472	rBB	0.100	748080	24.425	24.526
37	24.586	rBB	0.134	10246011	24.526	24.660
38	24.740	rBB	0.188	4497207	24.667	24.854
39	24.954	rBB	0.167	60030229	24.854	25.021
40	25.088	rBB	0.121	28384019	25.021	25.142
41	25.216	rBB	0.134	44492262	25.142	25.276
42	25.537	rBB	0.141	34917455	25.470	25.611
43	25.785	rBB	0.228	7788576	25.691	25.919
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52	27.807	rBB	0.080	6692215	27.774	27.854
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54	28.149	rBB	0.080	4237985	28.102	28.182
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59	28.932	rBB	0.121	4372682	28.872	28.993
60	29.060	rBB	0.161	2299734	28.993	29.153
61	29.756	rBB	0.100	1029045	29.703	29.803
62	30.372	rBB	0.214	7509489	30.252	30.466
63	30.761	rBB	0.141	615502	30.707	30.848
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66	31.209	rBB	0.127	1387283	31.136	31.263
67	31.323	rBB	0.121	2807676	31.263	31.384
68	31.504	rBB	0.161	56191670	31.390	31.551
69	31.605	rBB	0.127	19633889	31.551	31.678
70	31.725	rBB	0.100	7282095	31.678	31.779
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72	31.919	rBB	0.114	3887555	31.866	31.980
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81	34.384	rBB	0.154	2700379	34.290	34.444
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83	34.986	rBB	0.141	4955001	34.933	35.074
84	35.341	rBB	0.241	10739075	35.241	35.482
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90	38.134	rBB	0.141	1901593	38.047	38.188
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94	39.547	rBB	0.134	617994	39.473	39.607
95	40.471	rBB	0.188	13402279	40.384	40.572
96	40.806	rBB	0.127	1844880	40.746	40.873
97	41.971	rBB	0.141	1827742	41.904	42.045
98	42.286	rBB	0.107	705726	42.212	42.320
99	42.420	rBB	0.100	18218953	42.366	42.467
100	43.800	rBB	0.241	5838551	43.759	44.000

Library Search Compound Report

Data File : D:\C106\19010408.D
 Acq Time : 4 Jan 99 5:21 pm
 Sample : VS006-128-S096
 Misc : 50 TORR
 Method : D:\METHODS\VAP_NF7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: M. STAUFFER
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
7.17	163.99 PPB	12050485	FLUOROBENZENE	24.00

Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1	Propene	108457	000115-07-1	86
2	Cyclopropane	108993	000075-19-4	80
3	Cyclopropane	108992	000075-19-4	72
4	Propene	1533	000115-07-1	47
5	Cyclopropane	3264	000075-19-4	37

 Peak Number 2 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
11.26	378.87 PPB	27841131	FLUOROBENZENE	24.00

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	108669	000115-11-7	87
2	1-Butene	108673	000106-98-9	83
3	1-Butene	108672	000106-98-9	83
4	1-Butene	108671	000106-98-9	83
5	1-Propene, 2-methyl-	108463	000115-11-7	83

 Peak Number 3 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
11.54	331.15 PPB	24334252	FLUOROBENZENE	24.00

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Butane	3946	000106-97-8	72
2	Butane	109164	000106-97-8	64

 Peak Number 4 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
12.91	61.57 PPB	4524325	FLUOROBENZENE	24.00

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
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1	1-Butene	108673	000106-98-9	87
2	1-Butene	108672	000106-98-9	87
3	1-Butene	108671	000106-98-9	87
4	1-Propene, 2-methyl-	108463	000115-11-7	83
5	Cyclobutane	107955	000287-23-0	80

 Peak Number 5 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
15.98	93.69 PPB	6884470	FLUOROBENZENE	24.00

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene	109030	000109-67-1	91
2	1-Pentene	109032	000109-67-1	86
3	1-Pentene	109031	000109-67-1	86
4	1-Pentene	3426	000109-67-1	86
5	Cyclopentane	3292	000287-92-3	86

 Peak Number 6 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
16.38	177.08 PPB	13012770	FLUOROBENZENE	24.00

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	90
2	Pentane	4653	000109-66-0	90
3	Pentane	109386	000109-66-0	72
4	Butane, 2,3-dimethyl-	109396	000079-29-8	36

 Peak Number 7 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
20.51	315.48 PPB	23182880	FLUOROBENZENE	24.00

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexene	111822	000592-41-6	91
2	1-Hexene	2192	000592-41-6	91
3	1-Hexene	111823	000592-41-6	90
4	Cyclobutane, butyl-	15024	013152-44-8	83
5	Cyclopropane, propyl-	15015	002415-72-7	78

 Peak Number 8 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
20.88	148.32 PPB	10899455	FLUOROBENZENE	24.00

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
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1 Hexane	16315	000110-54-3	91
2 Hexape	112277	000110-54-3	86
3 Hexane	112279	000110-54-3	74
4 Hexane	112278	000110-54-3	64
5 Pentane, 2,4-dimethyl-	5552	000108-08-7	50

Peak Number 9 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
24.59	139.43 PPB	10246011	FLUOROBENZENE	24.00

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Heptene		111847	000592-76-7	94
2 1-Heptene		108660	000592-76-7	91
3 1-Heptene		111846	000592-76-7	91
4 1-Heptene		2183	000592-76-7	90
5 1-Heptene		108686	000592-76-7	81

Peak Number 10 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
24.95	816.91 PPB	60030229	FLUOROBENZENE	24.00

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene		108687	000592-77-8	81
2 3-Heptene		108688	000592-78-9	81
3 3-Heptene, (E)-		108689	014686-14-7	81
4 (Z)-3-Heptene		108691	007642-10-6	81
5 3-Heptene, (E)-		108697	014686-14-7	68

Peak Number 11 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
25.09	386.26 PPB	28384019	FLUOROBENZENE	24.00

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 3-Heptene, (E)-		108689	014686-14-7	95
2 (Z)-3-Heptene		108691	007642-10-6	94
3 (Z)-3-Heptene		2213	007642-10-6	94
4 2-Heptene		108687	000592-77-8	94
5 3-Heptene, (E)-		108697	014686-14-7	94

Peak Number 12 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
25.22	605.47 PPB	44492262	FLUOROBENZENE	24.00

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene		108687	000592-77-8	97
2 2-Heptene, (E)-		111908	014686-13-6	96
3 2-Heptene		108605	000592-77-8	95
4 2-Heptene, (E)-		13656	014686-13-6	94
5 3-Heptene, (E)-		108689	014686-14-7	87

 Peak Number 13 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
25.54	475.17 PPB	34917455	FLUOROBENZENE	24.00
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptene, (E)-		111908	014686-13-6	96
2 2-Heptene		108687	000592-77-8	95
3 2-Heptene		108605	000592-77-8	95
4 2-Heptene, (E)-		13656	014686-13-6	91
5 (Z)-3-Heptene		108691	007642-10-6	91

 Peak Number 14 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
25.78	105.99 PPB	7788576	FLUOROBENZENE	24.00
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Cyclopropane, butyl-		1931	000930-57-4	78
2 2H-Pyran-2-one, tetrahydro-3,6-dime		109044	003720-22-7	53
3 Cyclopentane, 1,2-dimethyl-, cis-		23919	001192-18-3	53
4 Hexane, 2-chloro-		1457	000638-28-8	50
5 Cyclopentane, 1,2-dimethyl-, cis-		111951	001192-18-3	50

 Peak Number 15 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
27.06	182.23 PPB	13391273	FLUOROBENZENE	24.00
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Cyclopenten-1-one, 2-methyl-		113921	001120-73-6	74
2 2-Cyclopenten-1-one, 2-methyl-		21588	001120-73-6	72
3 3,4-Heptadiene		31430	002454-31-1	72
4 Furan, 2,4-dimethyl-		41734	003710-43-8	72
5 Furan, 2,4-dimethyl-		118263	003710-43-8	72

 Peak Number 16 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
27.56	172.94 PPB	6493429	CHLOROBENZENE-D5	30.37

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Toluene		117292	000108-88-3	80
2 Toluene		117282	000108-88-3	80
3 Toluene		117281	000108-88-3	70
4 4-Octene, (E)-		111302	014850-23-8	50
5 2-Octene		111287	000111-67-1	49

 Peak Number 17 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
27.66	527.70 PPB	19813872	CHLOROBENZENE-D5	30.37

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methyl-		109689	000589-81-1	91
2 Heptane, 3-methyl-		5681	000589-81-1	91
3 Hexane, 2,4-dimethyl-		109686	000589-43-5	80
4 Hexane, 2,4-dimethyl-		5467	000589-43-5	64
5 Hexane, 1-(hexyloxy)-2-methyl-		7097	074421-17-3	64

 Peak Number 18 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
27.81	178.23 PPB	6692215	CHLOROBENZENE-D5	30.37

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptyne		116095	001119-65-9	97
2 2-Heptyne		116025	001119-65-9	87
3 1,4-Heptadiene		31572	005675-22-9	64
4 Cyclohexene, 4-methyl-		116092	000591-47-9	59
5 Cyclohexene, 4-methyl-		31569	000591-47-9	59

 Peak Number 19 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
28.23	464.42 PPB	17437808	CHLOROBENZENE-D5	30.37

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methylene-		114415	001632-16-2	87
2 Heptane, 3-methylene-		114416	001632-16-2	78
3 Octane, 3-methyl-6-methylene-		23865	074630-07-2	72
4 Cyclopentane, 1,2,3-trimethyl-		23915	002815-57-8	59
5 Heptane, 3-methylene-		23862	001632-16-2	56

 Peak Number 20 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
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28.57 385.55 PPB 14476590 CHLOROBENZENE-D5 30.37

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,2-dimethyl-, cis-	14486	002207-01-4	68
2	Cyclohexane, 1,2-dimethyl-, cis-	111705	002207-01-4	68
3	4-Octene, (E)-	111301	014850-23-8	64
4	5-Methyl-1-heptanol	14279	007212-53-5	47
5	Cyclopentane, 1-ethyl-2-methyl-, ci	111377	000930-89-2	47

Peak Number 21 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
28.93	116.46 PPB	4372682	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, 3-methyl-	23868	003404-75-9	95
2	Hexane, 2-methyl-4-methylene-	23848	003404-80-6	90
3	Hexane, 2-methyl-4-methylene-	114420	003404-80-6	83
4	Heptane, 3-methylene-	114416	001632-16-2	72
5	Heptane, 3-methylene-	111568	001632-16-2	72

Peak Number 22 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
29.06	61.25 PPB	2299734	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octene, (E)-	111302	014850-23-8	83
2	4-Octene, (E)-	13070	014850-23-8	83
3	4-Octene, (Z)-	111286	007642-15-1	83
4	3-Octene, (E)-	108600	014919-01-8	83
5	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	81

Peak Number 23 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
31.02	642.46 PPB	24122899	CHLOROBENZENE-D5	30.37
Hit# of 19	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109874	000123-19-3	91
2	4-Heptanone	114577	000123-19-3	91
3	3-Hexanone, 2-methyl-	109949	007379-12-6	80
4	4-Heptanone	109855	000123-19-3	72
5	3-Hexanone, 2-methyl-	6315	007379-12-6	72

Peak Number 24 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.32	74.78 PPB	2807676	CHLOROBENZENE-D5	30.37
Hit# of 10	Tentative ID	Ref#	CAS#	Qual
1	n-Butyl ether	112208	000142-96-1	72
2	n-Butyl ether	15788	000142-96-1	72
3	n-Butyl ether	112037	000142-96-1	56
4	Propane, 2-[(1,1-dimethylethyl)sulf	15759	001886-75-5	40
5	Pentane, 1-butoxy-	16488	018636-66-3	39

Peak Number 25		Rank in Relative Concentration 21		
R.T.	Conc	Area	Relative to ISTD	R.T.
31.73	193.94 PPB	7282095	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanol	19637	000589-82-2	90
2	Propane, 2-ethoxy-2-methyl-	19731	000637-92-3	59
3	Propane, 1-ethoxy-2-methyl-	113165	000627-02-1	53
4	3-Pentanol	113149	000584-02-1	53
5	3-Heptanol	113289	000589-82-2	50

Peak Number 26		Rank in Relative Concentration 34		
R.T.	Conc	Area	Relative to ISTD	R.T.
31.92	103.54 PPB	3887555	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	109597	000111-84-2	94
2	Nonane	109596	000111-84-2	94
3	Nonane	109595	000111-84-2	91
4	Nonane	5495	000111-84-2	90
5	Octane	109559	000111-65-9	59

Peak Number 27		Rank in Relative Concentration 31		
R.T.	Conc	Area	Relative to ISTD	R.T.
32.74	127.75 PPB	4796519	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	47
2	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	43
3	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	40
4	Thiazole, 2,5-dimethyl-	51095	004175-66-0	38
5	2-Oxepanone, 4-methyl-	15310	1000196-99-7	38

Peak Number 28		Rank in Relative Concentration 16		

R.T.	Conc	Area	Relative to ISTD	R.T.
33.07	311.13 PPB	11682134	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	64
3	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	64
4	Hexanoic acid, anhydride	118546	002051-49-2	53
5	Hexanoic acid, anhydride	43066	002051-49-2	53

Peak Number 29 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
33.21	368.52 PPB	13836958	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	64
2	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	53
3	1,1'-Bicyclohexyl-1,1'-diol	118582	002888-11-1	50
4	Furan, tetrahydro-2,2-dimethyl-5-(1	32021	033978-70-0	45
5	Cyclohexanol, 1-ethyl-	118587	001940-18-7	42

Peak Number 30 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
33.35	312.66 PPB	11739535	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, 1,1,2,2-tetramethyl-	111640	004127-47-3	53
2	3,3-Diethoxy-1-propyne	32833	010160-87-9	53
3	1H-1,2,4-Triazole, 3-propyl-	33272	019932-60-6	50
4	3-(Butylamino)propionitrile	116379	000693-51-6	43
5	2-Pentene, 4,4-dimethyl-, (E)-	32892	000690-08-4	42

Peak Number 31 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
33.63	260.60 PPB	9784744	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Octene, 3,7-dimethyl-	109482	004984-01-4	32
2	Trifluoroacetic acid, n-heptadecyl	4324	1000216-79-2	25
3	3-Octen-2-one, (E)-	5082	018402-82-9	25
4	6,10,14-Trimethyl-pentadecan-2-ol	5513	1000143-49-8	23
5	1-Octanol, 3,7-dimethyl-	109535	000106-21-8	23

Peak Number 32 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
34.18	70.93 PPB	2663147	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octanone	109633	000589-63-9	92
2	4-Octanone	109632	000589-63-9	91
3	4-Octanone	5601	000589-63-9	46
4	4-Octanone	109634	000589-63-9	46
5	4-Octanone	109631	000589-63-9	46

Peak Number 33 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
34.38	71.92 PPB	2700379	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	116270	000629-08-3	90
2	Heptanenitrile	108877	000629-08-3	64
3	Heptanenitrile	108876	000629-08-3	64
4	Heptanenitrile	108875	000629-08-3	42
5	Octanenitrile	108878	000124-12-9	38

Peak Number 34 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
34.99	131.97 PPB	4955001	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	109556	000124-18-5	95
2	Nonane	5495	000111-84-2	90
3	Docosane	109660	000629-97-0	72
4	Tricosane	109662	000638-67-5	72
5	Undecane	109663	001120-21-4	72

Peak Number 35 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
35.34	286.01 PPB	10739075	CHLOROBENZENE-D5	30.37
Hit# of 13	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	Hexanenitrile	108570	000628-73-9	42
3	5-Hexen-1-ol	111145	000821-41-0	40
4	1,8-Nonadiene	2340	004900-30-5	36
5	1,2-Nonadiene	12691	022433-33-6	33

Peak Number 36 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
35.80	251.02 PFB	9425285	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	90
2	1-Hexanol, 2-ethyl-	15889	000104-76-7	83
3	1-Hexanol, 2-ethyl-	112165	000104-76-7	80
4	2-Propyl-1-pentanol	15895	058175-57-8	53
5	Heptane, 1,1'-oxybis-	17017	000629-64-1	50

Peak Number 37 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
37.83	201.60 PFB	7569516	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	109663	001120-21-4	93
2	Undecane	16533	001120-21-4	91
3	Tridecane	112309	000629-50-5	90
4	Tetradecane	112357	000629-59-4	90
5	Tridecane	16403	000629-50-5	90

Peak Number 38 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
40.47	356.94 PFB	13402279	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	16262	000112-40-3	94
2	Tridecane	16403	000629-50-5	90
3	Hexadecane	112406	000544-76-3	86
4	Hexadecane	112408	000544-76-3	86
5	Undecane	112395	001120-21-4	86

Peak Number 39 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
42.42	485.22 PFB	18218953	CHLOROBENZENE-D5	30.37
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	112308	000629-50-5	95
2	Tridecane	112309	000629-50-5	94
3	Tridecane	16403	000629-50-5	91
4	Heptadecane	112319	000629-78-7	87
5	Hexadecane	112406	000544-76-3	87

Peak Number 40 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
43.80	155.50 PPB	5838551	CHLOROBENZENE-D5	30.37

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	112356	000629-59-4	93
2	Heptadecane	112319	000629-78-7	91
3	Tetradecane	112359	000629-59-4	91
4	Hexadecane	112408	000544-76-3	91
5	Tetradecane	112355	000629-59-4	90

19010408.D VAP_NP7.M Wed Jan 20 11:50:05 1999

File : C:\HPCHEM\1\DATA\19011205.D
Operator : G. FIES
Acquired : 12 Jan 99 2:40 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS102-003-S021
Misc Info : 50 TORR, DF=2
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011205.D

Acq On : 12 Jan 99 2:40 pm

Sample : VS102-003-S021

Misc : 50 TORR, DF=2

Quant Time: Jan 13 11:40 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.07	96	5493436	100.00	NG	0.14
17) CHLOROBENZENE-D5	30.43	117	3855970	100.00	NG	-0.03

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.83	45	934755	169.37	PPB m	100
3) ACETONITRILE	16.12	40	80439	6.01	PPB m	1
4) ACETONE	16.19	58	1522580	193.52	PPB m	88
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.70	45	72621	3.38	PPB	98
7) 1-PROPANOL	19.40	31	127665	7.35	PPB	99
8) PROPANENITRILE	0.00	54		Not Detected		
9) BUTANAL	20.61	72	142632	27.44	PPB	99
10) 2-BUTANONE	20.80	72	280831	35.33	PPB	89
11) TETRAHYDROFURAN	0.00	72		Not Detected		
12) 1-BUTANOL	23.56	56	436678	58.42	PPB m	96
13) BUTANENITRILE	23.84	41	364359	16.35	PPB m	100
14) 2-PENTANONE	24.43	43	613242	13.29	PPB	100
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.20	58	151680	7.35	PPB	99
19) 3-HEPTANONE	31.51	114	476787	118.89	PPB	88
20) 2-HEPTANONE	31.61	58	801052	28.29	PPB m	91
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	0.00	58		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19011205.D VAP_P7.M Wed Jan 13 11:40:40 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011205.D

Acq On : 12 Jan 99 2:40 pm

Sample : VS102-003-S021

Misc : 50 TORR, DF=2

Quant Time: Jan 13 11:36 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.07	96	5493436	100.00	NG	0.14
20) CHLOROBENZENE-D5	30.43	117	3855970	100.00	PPB	0.00

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.55	43	175883	5.96	PPB	98
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.74	101	140435	5.33		100
7) N-PENTANE	16.44	72	10438	3.93	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	0.00	43		Not Detected		
10) 1-HEXENE	0.00	56		Not Detected		
11) N-HEXANE	20.93	57	70465	2.85	PPB #	81
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	0.00	78		Not Detected		
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	0.00	43		Not Detected		
16) N-HEPTANE	24.97	57	46734	3.39	PPB m	95
17) TOLUENE	0.00	91		Not Detected		
18) N-OCTANE	0.00	57		Not Detected		
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M, P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	0.00	43		Not Detected		
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	0.00	43		Not Detected		
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration

19011205.D VAP_NP7.M

Wed Jan 13 11:37:25 1999

TIC: 19011205.D

VS102-003-S021

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	10.981	rBB	0.208	646739	10.941	11.149
2	11.551	rBB	0.067	93248	11.504	11.571
3	11.591	rBB	0.228	912247	11.571	11.798
4	14.825	rBB	0.234	2946277	14.772	15.006
5	15.743	rBB	0.134	319494	15.676	15.810
6	16.191	rBB	0.121	5957094	16.131	16.252
7	16.433	rBB	0.121	302289	16.379	16.500
8	16.700	rBB	0.181	104989	16.660	16.841
9	18.335	rBB	0.161	344720	18.274	18.435
10	19.399	rBB	0.154	209326	19.346	19.500
11	19.560	rBB	0.121	70616	19.500	19.620
12	20.611	rBB	0.234	1138765	20.491	20.725
13	20.799	rBB	0.154	2015656	20.725	20.879
14	20.926	rBB	0.127	280739	20.879	21.007
15	22.091	rBB	0.114	363669	22.031	22.145
16	23.384	rBB	0.107	86861	23.330	23.438
17	23.565	rBB	0.147	1828830	23.505	23.652
18	23.839	rBB	0.174	461666	23.786	23.960
19	24.067	rBB	0.201	11206778	23.973	24.174
20	24.281	rBB	0.094	74475	24.234	24.328
21	24.429	rBB	0.147	972271	24.362	24.509
22	24.817	rBB	0.134	160997	24.764	24.897
23	24.971	rBB	0.167	397550	24.897	25.065
24	25.815	rBB	0.188	406143	25.741	25.929
25	26.672	rBB	0.147	77493	26.625	26.773
26	27.114	rBB	0.114	82107	27.047	27.161
27	27.623	rBB	0.094	130512	27.563	27.657
28	27.697	rBB	0.100	153954	27.657	27.757
29	27.864	rBB	0.147	121060	27.770	27.918
30	28.058	rBB	0.121	92814	28.005	28.125
31	28.199	rBB	0.154	682705	28.139	28.293
32	28.614	rBB	0.067	244360	28.601	28.668
33	29.404	rBB	0.107	64631	29.351	29.458
34	30.429	rBB	0.167	10847517	30.349	30.516
35	31.052	rBB	0.161	3006538	30.992	31.152
36	31.226	rBB	0.134	121530	31.159	31.293
37	31.501	rBB	0.141	9721396	31.420	31.561
38	31.614	rBB	0.141	2789278	31.561	31.702
39	31.768	rBB	0.134	249045	31.715	31.849
40	31.963	rBB	0.121	84450	31.909	32.030
41	32.780	rBB	0.167	195351	32.679	32.847
42	33.115	rBB	0.121	355319	33.061	33.182
43	33.255	rBB	0.147	479234	33.182	33.329
44	33.382	rBB	0.100	62622	33.342	33.443
45	33.677	rBB	0.087	67205	33.624	33.711
46	34.233	rBB	0.161	65509	34.126	34.287
47	34.387	rBB	0.181	214418	34.300	34.481
48	35.037	rBB	0.141	59287	34.963	35.104
49	35.378	rBB	0.234	492392	35.291	35.525
50	35.847	rBB	0.214	453498	35.760	35.974
51	36.764	rBB	0.121	207737	36.704	36.825
52	36.932	rBB	0.100	65101	36.878	36.979
53	37.983	rBB	0.107	56862	37.923	38.030

Library Search Compound Report

Data File : D:\C106\19011205.D

Acq Time : 12 Jan 99 2:40 pm

Sample : VS102-003-S021

Misc : 50 TORR, DF=2

Method : D:\METHODS\VAP_NF7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Library : NIST98.L

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
10.98	11.54 PPB	646739	FLUOROBENZENE	24.07
Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Acetaldehyde	108064	000075-07-0	83
2	Acetaldehyde	108065	000075-07-0	74
3	Acetaldehyde	430	000075-07-0	74
4	Acetaldehyde	108066	000075-07-0	64

 Peak Number 2 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
11.59	16.28 PPB	912247	FLUOROBENZENE	24.07
Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L	0	000000-00-0	0

 Peak Number 3 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
15.74	5.70 PPB	319494	FLUOROBENZENE	24.07
Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Trichloromonofluoromethane	118725	000075-69-4	90
2	Trichloromonofluoromethane	44156	000075-69-4	90
3	Trichloromonofluoromethane	118723	000075-69-4	83
4	Trichloromonofluoromethane	118724	000075-69-4	83

 Peak Number 4 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
16.43	5.39 PPB	302289	FLUOROBENZENE	24.07
Hit# of 8	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	90
2	Pentane	4653	000109-66-0	90

3 Butane, 2-methyl-	109393 000078-78-4	72
4 Pentane	109386 000109-66-0	64
5 Oxirane, ethyl-	108990 000106-88-7	50

 Peak Number 5 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
18.33	6.15 PPB	344720	FLUOROBENZENE	24.07
Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1/ No Hits From C:\DATABASE\NIST98.L			0 000000-00-0	0

 Peak Number 6 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
20.93	5.01 PPB	280739	FLUOROBENZENE	24.07
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Hexane		112279	000110-54-3	90
2 Hexane		112278	000110-54-3	86
3 Hexane		112277	000110-54-3	86
4 Hexane		16315	000110-54-3	86
5 1-Pentene, 4-methyl-		109287	000691-37-2	40

 Peak Number 7 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
22.09	6.49 PPB	363669	FLUOROBENZENE	24.07
Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1 Nitric acid, ethyl ester		110982	000625-58-1	64
2 1,3-Propanediol, dinitrate		12246	003457-90-7	64

 Peak Number 8 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
24.82	2.87 PPB	160997	FLUOROBENZENE	24.07
Hit# of 8	Tentative ID	Ref#	CAS#	Qual
1 Cyclopentanol		112443	000096-41-3	90
2 Cyclopentanol		112441	000096-41-3	72
3 Cyclopentanol		16664	000096-41-3	64
4 Oxirane, [(2-propenyloxy)methyl]-		112115	000106-92-3	17
5 3-Pentanone		15599	000096-22-0	16

Peak Number 9 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
24.97	7.09 PPB	397550	FLUOROBENZENE	24.07
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane	109303	000142-82-5	76
2	Heptane	4133	000142-82-5	68
3	Heptane	109598	000142-82-5	58
4	Heptane	109668	000142-82-5	52
5	Hydroxylamine, O-(2-methylpropyl)-	4349	005618-62-2	47

Peak Number 10 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
25.81	7.25 PPB	406143	FLUOROBENZENE	24.07
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	1,5-Pentanediol, dinitrate	12244	003457-92-9	56
2	Nitric acid, propyl ester	110983	000627-13-4	50
3	Triethylene glycol, mononitrate	12240	020600-87-7	40

Peak Number 11 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
27.62	2.41 PPB	130512	CHLOROBENZENE-D5	30.43
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Toluene	117282	000108-88-3	94
2	Toluene	117292	000108-88-3	94
3	Toluene	117281	000108-88-3	93
4	Toluene	37326	000108-88-3	91
5	1,3,5-Cycloheptatriene	37276	000544-25-2	87

Peak Number 12 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
27.70	2.84 PPB	153954	CHLOROBENZENE-D5	30.43
Hit# of 14	Tentative ID	Ref#	CAS#	Qual
1	Pentanenitrile	4187	000110-59-8	53
2	Pentanenitrile	108514	000110-59-8	42
3	Pentanenitrile	108508	000110-59-8	40
4	Hexanedinitrile	2416	000111-69-3	32
5	Butane, 1-isocyano-	1757	002769-64-4	25

Peak Number 13 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
27.86	2.23 PPB	121060	CHLORO BENZENE-D5	30.43
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	116025	001119-65-9	98
2	2-Heptyne	116095	001119-65-9	97
3	2-Heptyne	31411	001119-65-9	96
4	1,4-Heptadiene	31572	005675-22-9	86
5	Cyclohexene, 4-methyl-	31569	000591-47-9	76

Peak Number 14 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
28.61	4.51 PPB	244360	CHLORO BENZENE-D5	30.43
Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L	0	000000-00-0	0

Peak Number 15 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
31.05	55.43 PPB	3006538	CHLORO BENZENE-D5	30.43
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	114577	000123-19-3	91
2	4-Heptanone	109874	000123-19-3	91
3	4-Heptanone	109855	000123-19-3	91
4	4-Heptanone	6294	000123-19-3	91
5	4-Heptanone	109854	000123-19-3	74

Peak Number 16 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
31.23	2.24 PPB	121530	CHLORO BENZENE-D5	30.43
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,3-dimethyl-	117394	000108-38-3	92
2	p-Xylene	117400	000106-42-3	91
3	p-Xylene	117404	000106-42-3	91
4	p-Xylene	117401	000106-42-3	83
5	Benzene, 1,3-dimethyl-	117397	000108-38-3	64

Peak Number 17 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
------	------	------	------------------	------

31.77 4.59 PPB 249045 CHLOROBENZENE-D5 30.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanol	19637	000589-82-2	78
2	3-Heptanol	113290	000589-82-2	56
3	3-Hexanol, 5-methyl-	113293	000623-55-2	50
4	3-Heptanol	113288	000589-82-2	47
5	Formic acid, 1,1-dimethylethyl este	19575	000762-75-4	43

Peak Number 18 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
32.78	3.60 PPB	195351	CHLOROBENZENE-D5	30.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	52
2	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	38
3	Thiazole, 2,5-dimethyl-	51095	004175-66-0	38
4	Cyclohexanol, 4-methyl-1-(1-methyle	120265	000470-65-5	35
5	1-Hexanol	111884	000111-27-3	27

Peak Number 19 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
33.11	6.55 PPB	355319	CHLOROBENZENE-D5	30.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Glycocyranidine	43063	000503-86-6	59
2	2,2'-Bioxepane	43236	074793-02-5	56
3	Hexanoic acid, anhydride	118546	002051-49-2	53
4	Hexanoic acid, anhydride	43066	002051-49-2	53
5	2-Pyrrolidinone, 1-methyl-	43090	000872-50-4	40

Peak Number 20 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
33.26	8.84 PPB	479234	CHLOROBENZENE-D5	30.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	64
3	1-Hydroxycyclohexanecarboxylic acid	43242	001123-28-0	64
4	Glycocyranidine	43063	000503-86-6	64
5	Hexanoic acid, anhydride	118546	002051-49-2	45

Peak Number 21 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
------	------	------	------------------	------

 34.39 3.95 PPB 214418 CHLOROBENZENE-D5 30.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene, 3-ethyl-	14502	074764-46-8	68
2	3-Hepten-2-one	13512	001119-44-4	50
3	Cyclopentane, 1-hydroxymethyl-1,3-d	14530	1000156-73-8	50
4	Cyclohexane, 1-ethyl-4-methyl-, cis	111708	004926-78-7	50
5	4-Hepten-3-one, 5-methyl-, (Z)-	15624	020685-43-2	50

 Peak Number 22 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
35.38	9.08 PPB	492392	CHLOROBENZENE-D5	30.43

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	5-Hexen-1-ol	111145	000821-41-0	40
2	Hexanenitrile	108570	000628-73-9	36
3	1,8-Nonadiene	2340	004900-30-5	36
4	1,7-Octadiene	108571	003710-30-3	33
5	Cyclopentanecarboxylic acid, etheny	22474	016523-06-1	9

 Peak Number 23 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
35.85	8.36 PPB	453498	CHLOROBENZENE-D5	30.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	78
2	1-Hexanol, 2-ethyl-	15889	000104-76-7	72
3	1-Hexanol, 2-ethyl-	112147	000104-76-7	56
4	1-Hexanol, 2-ethyl-	112146	000104-76-7	56
5	Octane, 2,3-dimethyl-	112152	007146-60-3	53

 Peak Number 24 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
36.76	3.83 PPB	207737	CHLOROBENZENE-D5	30.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Eicosane	112344	000112-95-8	80
2	Undecane, 4,7-dimethyl-	5605	017301-32-5	72
3	Hexatriacontane	112335	000630-06-8	64
4	Eicosane	112343	000112-95-8	53
5	Hexadecane	112408	000544-76-3	53

 19011205.D VAP_NP7.M Wed Jan 20 13:39:23 1999

File : C:\HPCHEM\1\DATA\19011206.D
Operator : G. FIES
Acquired : 12 Jan 99 3:47 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS102-006-S022
Misc Info : 50 TORR, DF=2
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011206.D

Vial: 1

Acq On : 12 Jan 99 3:47 pm

Operator: G. FIES

Sample : VS102-006-S022

Inst : 5972 - MS

Misc : 50 TORR, DF=2

Multiplr: 2.00

Quant Time: Jan 13 11:56 1999

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.06	96	5369363	100.00	NG	0.13
17) CHLOROBENZENE-D5	30.42	117	3684143	100.00	NG	-0.04

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.83	45	1103995	204.66	PPB	m 100
3) ACETONITRILE	16.12	40	118342	10.86	PPB	m 1
4) ACETONE	16.19	58	1884368	245.03	PPB	m 83
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.68	45	94328	4.49	PPB	97
7) 1-PROPANOL	19.39	31	169305	9.97	PPB	99
8) PROPANENITRILE	20.02	54	39331	3.15	PPB	m 98
9) BUTANAL	20.61	72	408948	80.49	PPB	97
10) 2-BUTANONE	20.79	72	480601	61.86	PPB	86
11) TETRAHYDROFURAN	0.00	72		Not Detected		
12) 1-BUTANOL	23.56	56	554541	75.90	PPB	m 97
13) BUTANENITRILE	23.84	41	561470	25.78	PPB	m 100
14) 2-PENTANONE	24.42	43	1099653	24.38	PPB	99
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.19	58	299642	15.20	PPB	88
19) 3-HEPTANONE	31.50	114	522703	136.42	PPB	85
20) 2-HEPTANONE	31.61	58	819058	30.28	PPB	99
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	0.00	58		Not Detected		

{#} = qualifier out of range (m) = manual integration

19011206.D VAP_P7.M

Wed Jan 13 11:56:40 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011206.D

Acq On : 12 Jan 99 3:47 pm

Sample : VS102-006-S022

Misc : 50 TORR, DF=2

Quant Time: Jan 13 11:15 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.06	96	5369363	100.00	NG	0.13
20) CHLOROBENZENE-D5	30.42	117	3684143	100.00	PPB	0.00

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.55	43	588623	20.40	PPB	99
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.74	101	180545	7.01		99
7) N-PENTANE	16.43	72	27213	10.49	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	0.00	43		Not Detected		
10) 1-HEXENE	20.56	56	180600	10.93	PPB #	8
11) N-HEXANE	20.93	57	231267	9.55	PPB #	83
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	0.00	78		Not Detected		
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	0.00	43		Not Detected		
16) N-HEPTANE	24.97	57	551553	40.93	PPB m	91
17) TOLUENE	27.62	91	158197	3.85	PPB	95
18) N-OCTANE	28.62	57	83427	7.93	PPB #	72
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.96	43	81495	3.54	PPB m	3
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	35.03	43	79523	3.92	PPB m	93
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#)= qualifier out of range (m) = manual integration

19011206.D VAP_NP7.M

Wed Jan 13 11:19:30 1999

TIC: 19011206.D

VS102-006-S022

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	9.678	rBB	0.020	183991	9.671	9.691
2	10.964	rBB	0.221	1263184	10.923	11.144
3	11.258	rBB	0.167	866474	11.178	11.345
4	11.540	rBB	0.074	456135	11.493	11.566
5	11.586	rBB	0.214	533298	11.566	11.781
6	12.665	rBB	0.114	85844	12.618	12.732
7	14.834	rBB	0.268	3741328	14.774	15.042
8	15.163	rBB	0.141	95779	15.109	15.250
9	15.738	rBB	0.147	413652	15.672	15.819
10	16.026	rBB	0.114	303933	15.966	16.080
11	16.120	rBB	0.040	66526	16.087	16.127
12	16.194	rBB	0.121	7995049	16.134	16.254
13	16.274	rBB	0.060	222324	16.254	16.314
14	16.428	rBB	0.181	814543	16.341	16.522
15	16.676	rBB	0.141	125517	16.629	16.770
16	17.366	rBB	0.127	102030	17.312	17.440
17	18.330	rBB	0.141	373537	18.250	18.390
18	19.388	rBB	0.154	275678	19.341	19.495
19	19.562	rBB	0.121	167227	19.495	19.616
20	20.025	rBB	0.121	75295	19.978	20.098
21	20.607	rBB	0.248	3937782	20.473	20.721
22	20.795	rBB	0.147	3340701	20.721	20.868
23	20.929	rBB	0.121	920379	20.868	20.989
24	22.080	rBB	0.107	412393	22.027	22.134
25	22.168	rBB	0.087	76582	22.134	22.221
26	23.380	rBB	0.121	160502	23.313	23.433
27	23.560	rBB	0.141	2324574	23.507	23.648
28	23.835	rBB	0.100	569584	23.781	23.882
29	24.063	rBB	0.268	10972483	23.956	24.223
30	24.277	rBB	0.100	97966	24.223	24.324
31	24.424	rBB	0.127	1746098	24.364	24.491
32	24.639	rBB	0.154	546158	24.572	24.726
33	24.813	rBB	0.154	2194920	24.746	24.900
34	24.967	rBB	0.154	5331983	24.900	25.054
35	25.114	rBB	0.127	853784	25.061	25.188
36	25.235	rBB	0.107	1055360	25.188	25.295
37	25.570	rBB	0.121	1001522	25.516	25.637
38	25.824	rBB	0.214	947063	25.724	25.938
39	26.433	rBB	0.174	117703	26.333	26.507
40	26.862	rBB	0.094	67230	26.815	26.909
41	27.103	rBB	0.208	1009750	27.016	27.224
42	27.411	rBB	0.141	102930	27.317	27.458
43	27.605	rBB	0.100	722605	27.552	27.652
44	27.706	rBB	0.114	2427243	27.652	27.766
45	27.813	rBB	0.054	135124	27.773	27.826
46	27.860	rBB	0.074	528384	27.826	27.900
47	28.054	rBB	0.134	186819	28.001	28.134
48	28.195	rBB	0.087	1033046	28.141	28.228
49	28.268	rBB	0.127	1212352	28.228	28.355
50	28.623	rBB	0.141	750062	28.530	28.670
51	28.730	rBB	0.107	105597	28.670	28.777
52	28.831	rBB	0.141	66545	28.777	28.918
53	29.106	rBB	0.147	180271	29.032	29.179
54	29.219	rBB	0.094	66076	29.179	29.273
55	29.400	rBB	0.087	71660	29.353	29.440
56	29.809	rBB	0.121	79832	29.728	29.849

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57	30.425	rBB	0.214	10360095	30.304	30.519
58	30.813	rBB	0.141	56361	30.760	30.900
59	31.048	rBB	0.141	3800188	30.987	31.128
60	31.222	rBB	0.121	91307	31.168	31.289
61	31.369	rBB	0.134	294537	31.289	31.423
62	31.503	rBB	0.141	10497286	31.423	31.563
63	31.610	rBB	0.107	2835585	31.563	31.670
64	31.771	rBB	0.100	96294	31.724	31.824
65	31.958	rBB	0.194	418896	31.905	32.099
66	32.119	rBB	0.020	183506	32.112	32.133
67	32.782	rBB	0.188	452432	32.662	32.849
68	33.110	rBB	0.214	740390	32.956	33.171
69	33.251	rBB	0.161	869687	33.171	33.331
70	33.385	rBB	0.121	158105	33.331	33.452
71	33.666	rBB	0.107	117466	33.599	33.706
72	34.229	rBB	0.141	130919	34.148	34.289
73	34.383	rBB	0.167	130457	34.309	34.476
74	34.744	rBB	0.147	79297	34.664	34.811
75	35.032	rBB	0.134	313877	34.979	35.113
76	35.374	rBB	0.080	148210	35.327	35.407
77	35.722	rBB	0.114	84433	35.655	35.769
78	35.849	rBB	0.127	143587	35.769	35.896
79	36.767	rBB	0.174	96974	36.673	36.847
80	37.872	rBB	0.121	304979	37.811	37.932
81	40.504	rBB	0.188	613641	40.423	40.611
82	42.439	rBB	0.100	829442	42.392	42.493
83	43.825	rBB	0.074	65552	43.785	43.859

**This document was too large to scan
as a single document; therefore, it has
been divided into smaller sections.**

Section 3 of 5

Document Information

Document #	HNF-3949	Revision	0
Title	TANK VAPOR SAMPLING & ANALYSIS DATA PACKAGE FOR TANK 241C106 WASTE RETRIEVAL SLUICING SYS PROCESS TEST SAMPLED 12/16/1998		
Date	03/22/1999		
Originator	LOCKREM LL	Originator Co.	NHC
Recipient		Recipient Co.	
References			
Keywords			
Projects			
Other Information			

Library Search Compound Report

Data File : D:\C106\19011206.D
 Acq Time : 12 Jan 99 3:47 pm
 Sample : VS102-006-S022
 Misc : 50 TORR, DF=2
 Method : D:\METHODS\VAP_NF7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
9.68	3.35 PPB	183991	FLUOROBENZENE	24.06

Hit# of	0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L		0	000000-00-0	0

 Peak Number 2 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
10.96	23.02 PPB	1263184	FLUOROBENZENE	24.06

Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	Acetaldehyde		108065	000075-07-0	83
2	Acetaldehyde		108064	000075-07-0	83
3	Acetaldehyde		430	000075-07-0	64

 Peak Number 3 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
11.26	15.79 PPB	866474	FLUOROBENZENE	24.06

Hit# of	16	Tentative ID	Ref#	CAS#	Qual
1	1-Butene		108673	000106-98-9	83
2	1-Butene		108672	000106-98-9	83
3	1-Butene		108671	000106-98-9	83
4	1-Propene, 2-methyl-		108669	000115-11-7	81
5	1-Propene, 2-methyl-		108463	000115-11-7	74

 Peak Number 4 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
11.54	8.31 PPB	456135	FLUOROBENZENE	24.06

Hit# of	2	Tentative ID	Ref#	CAS#	Qual
1	Butane		109164	000106-97-8	64
2	Butane		3946	000106-97-8	52

 Peak Number 5 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
11.59	9.72 PPB	533298	FLUOROBENZENE	24.06

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L	0	000000-00-0	0

 Peak Number 6 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
15.74	7.54 PPB	413652	FLUOROBENZENE	24.06

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Trichloromonofluoromethane	118725	000075-69-4	90
2	Trichloromonofluoromethane	44156	000075-69-4	90
3	Trichloromonofluoromethane	118723	000075-69-4	83
4	Trichloromonofluoromethane	118724	000075-69-4	47

 Peak Number 7 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
16.03	5.54 PPB	303933	FLUOROBENZENE	24.06

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene	109031	000109-67-1	90
2	1-Pentene	109030	000109-67-1	90
3	1-Pentene	109032	000109-67-1	86
4	1-Pentene	3426	000109-67-1	86
5	Cyclobutane, methyl-	3261	000598-61-8	86

 Peak Number 8 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
16.27	4.05 PPB	222324	FLUOROBENZENE	24.06

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Boron, trihydro(N-methylmethanamine	18467	000074-94-2	56
2	Trimethylene oxide	107971	000503-30-0	43
3	Propanal	488	000123-38-6	43

 Peak Number 9 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
------	------	------	------------------	------

16.43	14.85, PPB	814543	FLUOROBENZENE	24.06
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1 Pentane		109385	000109-66-0	90
2 Pentane		4653	000109-66-0	78
3 Pentane		109386	000109-66-0	72

Peak Number 10 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
18.33	6.81 PPB	373537	FLUOROBENZENE	24.06
Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1 No Hits From C:\DATABASE\NIST98.L		0	000000-00-0	0

Peak Number 11 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
19.56	3.05 PPB	167227	FLUOROBENZENE	24.06
Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1 Pentane, 2-methyl-		109382	000107-83-5	90
2 Pentane, 2-methyl-		4652	000107-83-5	90
3 Pentane, 2-methyl-		109383	000107-83-5	87
4 Pentane, 2-methyl-		109402	000107-83-5	64
5 Pentane, 2-methyl-		109384	000107-83-5	64

Peak Number 12 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
20.93	16.78 PPB	920379	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Hexane		112279	000110-54-3	91
2 Hexane		112277	000110-54-3	91
3 Hexane		16315	000110-54-3	83
4 Hexane		112278	000110-54-3	78
5 3-Buten-1-ol, 3-methyl-		108663	000763-32-6	43

Peak Number 13 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
22.08	7.52 PPB	412393	FLUOROBENZENE	24.06
Hit# of 3	Tentative ID	Ref#	CAS#	Qual

1 Nitric acid, ethyl ester	110982 000625-58-1	74
2 1,3-Propanediol, dinitrate	12246 003457-90-7	64
3 Nitric acid, ethyl ester	110980 000625-58-1	40

Peak Number 14 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
24.64	9.96 PPB	546158	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Heptene	108686	000592-76-7	97
2	1-Heptene	108660	000592-76-7	93
3	1-Heptene	2183	000592-76-7	91
4	Isopropylcyclobutane	15016	000872-56-0	64
5	Cyclopentane, 1,2-dimethyl-	15223	002452-99-5	53

Peak Number 15 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
24.81	40.01 PPB	2194920	FLUOROBENZENE	24.06
Hit# of 13	Tentative ID	Ref#	CAS#	Qual
1	Pentanal	110569	000110-62-3	53
2	Pentanal	110477	000110-62-3	50
3	Pentanal	110476	000110-62-3	50
4	Pentanal	10484	000110-62-3	50
5	Butanal, 3-methyl-	110504	000590-86-3	47

Peak Number 16 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
24.97	97.19 PPB	5331983	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane	4133	000142-82-5	64
2	Heptane	109668	000142-82-5	64
3	Heptane	109303	000142-82-5	58
4	Heptane	109598	000142-82-5	53
5	Hydroxylamine, O-(2-methylpropyl)-	4349	005618-62-2	50

Peak Number 17 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
25.11	15.56 PPB	853784	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene, (E)-	108689	014686-14-7	95

2 3-Heptene, (E)-	2212 014686-14-7	94
3 3-Heptene, (E)-	108697 014686-14-7	94
4 3-Heptene	108688 000592-78-9	93
5 2-Heptene	108687 000592-77-8	91

Peak Number 18 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD		R.T.
25.23	19.24 PPB	1055360	FLUOROBENZENE		24.06
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1 2-Heptene, (E)-			111908	014686-13-6	97
2 2-Heptene			108687	000592-77-8	95
3 2-Heptene, (E)-			13656	014686-13-6	94
4 2-Heptene			108605	000592-77-8	91
5 2-Heptene			2208	000592-77-8	80

Peak Number 19 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD		R.T.
25.57	18.26 PPB	1001522	FLUOROBENZENE		24.06
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1 2-Heptene, (E)-			111908	014686-13-6	96
2 2-Heptene			108687	000592-77-8	95
3 2-Heptene			108605	000592-77-8	91
4 3-Heptene			108688	000592-78-9	91
5 2-Heptene, (E)-			13656	014686-13-6	90

Peak Number 20 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD		R.T.
25.82	17.26 PPB	947063	FLUOROBENZENE		24.06
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1 Cyclopropane, butyl-			1931	000930-57-4	38
2 Cyclobutanone, 2-ethyl-			1930	010374-14-8	35
3 1-Octene			111259	000111-66-0	32
4 1-Heptene, 3-methyl-			13651	004810-09-7	27
5 Pentane, 1-chloro-			111571	000543-59-9	22

Peak Number 21 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD		R.T.
27.10	18.41 PPB	1009750	FLUOROBENZENE		24.06
Hit# of 20	Tentative ID		Ref#	CAS#	Qual

1 2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
2 3,4-Heptadiene	31430	002454-31-1	74
3 2-Cyclopenten-1-one, 2-methyl-	113922	001120-73-6	72
4 Furan, 2,4-dimethyl-	41734	003710-43-8	72
5 2-Cyclopenten-1-one, 2-methyl-	21588	001120-73-6	72

Peak Number 22 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
27.61	13.95 PPB	722605	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Toluene		117281	000108-88-3	78
2 Toluene		117292	000108-88-3	70
3 Toluene		117282	000108-88-3	70
4 2-Octene, (E)-		12956	013389-42-9	53
5 2-Octene, (Z)-		111246	007642-04-8	50

Peak Number 23 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
27.71	46.86 PPB	2427243	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Heptane, 3-methyl-		109689	000589-81-1	91
2 Heptane, 3-methyl-		5681	000589-81-1	91
3 Hexane, 1-(hexyloxy)-2-methyl-		7097	074421-17-3	64
4 Octane, 3,4-dimethyl-		5555	015869-92-8	59
5 Hexane, 2,4-dimethyl-		109686	000589-43-5	53

Peak Number 24 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
27.86	10.20 PPB	528384	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Heptyne		116095	001119-65-9	96
2 2-Heptyne		31411	001119-65-9	87
3 Cyclohexene, 4-methyl-		116094	000591-47-9	64
4 1,4-Heptadiene		31572	005675-22-9	64
5 Cyclohexene, 4-methyl-		31569	000591-47-9	59

Peak Number 25 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
28.05	3.61 PPB	186819	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1	3-Hexanone	109637	000589-38-8	86
2	3-Hexanone	5604	000589-38-8	80
3	3-Hexanone	112056	000589-38-8	72
4	3-Hexanone	109636	000589-38-8	72
5	3-Pentanone, 2-methyl-	112237	000565-69-5	50

Peak Number 26 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
28.27	23.40 PPB	1212352	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1,2,4-trimethyl-, (1.	23858	004850-28-6	78
2	Cyclopentane, 1,2,4-trimethyl-, (1.	23853	016883-48-0	72
3	1,2-Oxaborolane, 2-ethyl-4,5-dimeth	23877	074685-45-3	72
4	Octane, 3-methyl-6-methylene-	23865	074630-07-2	72
5	Heptane, 3-methylene-	114416	001632-16-2	58

Peak Number 27 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
28.62	14.48 PPB	750062	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane	109559	000111-65-9	91
2	Octane	110051	000111-65-9	91
3	Octane	109231	000111-65-9	87
4	Octane	5673	000111-65-9	81
5	Heptane, 2,4-dimethyl-	110057	002213-23-2	72

Peak Number 28 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
29.11	3.48 PPB	180271	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	87
2	Cyclopropane, butyl-	1931	000930-57-4	72
3	4-Octene, (E)-	13070	014850-23-8	68
4	2-Octene, (Z)-	13071	007642-04-8	64
5	2-Octene, (E)-	111293	013389-42-9	64

Peak Number 29 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
31.05	73.36 PPB	3800188	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 4-Heptanone		109874	000123-19-3	91
2 4-Heptanone		109855	000123-19-3	91
3 4-Heptanone		114577	000123-19-3	91
4 4-Heptanone		6294	000123-19-3	91
5 3-Hexanone, 2-methyl-		6315	007379-12-6	72

Peak Number 30 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
31.37	5.69 PPB	294537	CHLOROBENZENE-D5	30.42

Hit# of 10	Tentative ID	Ref#	CAS#	Qual
1 n-Butyl ether		112208	000142-96-1	72
2 n-Butyl ether		15788	000142-96-1	72
3 n-Butyl ether		112037	000142-96-1	72
4 Propane, 1-(chloromethoxy)-2-methyl		17371	034180-11-5	59
5 Propane, 1-(1,1-dimethylethoxy)-2,2		15915	032970-46-0	53

Peak Number 31 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
31.96	8.09 PPB	418896	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Nonane		109596	000111-84-2	91
2 Nonane		109595	000111-84-2	91
3 Nonane		109597	000111-84-2	90
4 Nonane		5495	000111-84-2	76
5 Octane		5673	000111-65-9	59

Peak Number 32 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
32.12	3.54 PPB	183506	CHLOROBENZENE-D5	30.42

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1 No Hits From C:\DATABASE\NIST98.L		0	000000-00-0	0

Peak Number 33 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
32.78	8.73 PPB	452432	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2,5-Pyrrolidinedione, 1-methyl-		223	001121-07-9	50

2	2,5-Pyrrolidinedione, 1-methyl-	111981	001121-07-9	50
3	Thiazole, 2,5-dimethyl-	51095	004175-66-0	35
4	Cyclopentane, methyl-	15051	000096-37-7	27
5	Isopropylcyclobutane	15016	000872-56-0	27

Peak Number 34 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
33.11	14.29 PPB	740390	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pyrrolidinone, 1-methyl-	118550	000872-50-4	53
2	Hexanoic acid, anhydride	118546	002051-49-2	53
3	Hexanoic acid, anhydride	43066	002051-49-2	53
4	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
5	Glycocyanidine	43063	000503-86-6	45

Peak Number 35 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
33.25	16.79 PPB	869687	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	2-Pyrrolidinone, 1-methyl-	118550	000872-50-4	53
3	Glycocyanidine	43063	000503-86-6	45
4	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	45
5	Hexanoic acid, anhydride	118546	002051-49-2	42

Peak Number 36 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
33.38	3.05 PPB	158105	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,5-Heptadien-4-one, 3,3,6-trimethyl-	116418	000546-49-6	59
2	2-Pentene, 3,4-dimethyl-, (Z)-	116420	004914-91-4	53
3	Cyclopropane, 1,1,2,2-tetramethyl-	111639	004127-47-3	53
4	2-Pentene, 3,4-dimethyl-	14207	024910-63-2	53
5	Cyclohexane, (1-methylethyl)-	111668	000696-29-7	53

Peak Number 37 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
35.03	6.06 PPB	313877	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1	Decane	109556	000124-18-5	94
2	Decane	112241	000124-18-5	93
3	Nonane	5495	000111-84-2	86
4	Octane, 4-ethyl-	16302	015869-86-0	80
5	Pentadecane	112369	000629-62-9	78

Peak Number 38 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
37.87	5.89 PPB	304979	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	109663	001120-21-4	95
2	Undecane	16533	001120-21-4	91
3	Undecane	112395	001120-21-4	91
4	Tetradecane	112357	000629-59-4	90
5	Tridecane	112309	000629-50-5	90

Peak Number 39 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
40.50	11.85 PPB	613641	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	16262	000112-40-3	93
2	Heptadecane	112319	000629-78-7	90
3	Undecane	16533	001120-21-4	83
4	Tridecane	112309	000629-50-5	83
5	Hexadecane	112408	000544-76-3	78

Peak Number 40 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
42.44	16.01 PPB	829442	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	112309	000629-50-5	94
2	Tridecane	16403	000629-50-5	91
3	Heptadecane	112319	000629-78-7	91
4	Pentadecane	16493	000629-62-9	90
5	Hexadecane	112408	000544-76-3	90

19011206.D VAP_NP7.M Wed Jan 20 13:43:22 1999

File : C:\HPCHEM\1\DATA\19011207.D
Operator : G. FIES
Acquired : 12 Jan 99 4:50 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS102-009-S034
Misc Info : 50 TORR, DF=2
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011207.D

Acq On : 12 Jan 99 4:50 pm

Sample : VS102-009-S034

Misc : 50 TORR, DF=2

Quant Time: Jan 13 11:51 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.06	96	5084663	100.00	NG	0.13
17) CHLOROBENZENE-D5	30.42	117	3470027	100.00	NG	-0.04

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.84	45	1143353	223.83	PPB m	100
3) ACETONITRILE	16.12	40	113400	11.03	PPB m	30
4) ACETONE	16.19	58	1828034	251.02	PPB m	79
5) FURAN	0.00	68			Not Detected	
6) 2-PROPANOL	16.67	45	94848	4.77	PPB	96
7) 1-PROPANOL	19.39	31	193156	12.02	PPB m	96
8) PROPANENITRILE	20.02	54	40281	3.41	PPB m	97
9) BUTANAL	20.61	72	457582	95.11	PPB	97
10) 2-BUTANONE	20.79	72	464523	63.14	PPB	86
11) TETRAHYDROFURAN	0.00	72			Not Detected	
12) 1-BUTANOL	23.57	56	626490	90.55	PPB m	96
13) BUTANENITRILE	23.83	41	563679	27.33	PPB m	100
14) 2-PENTANONE	24.42	43	1158095	27.11	PPB	98
15) 1,4-DIOXANE	0.00	88			Not Detected	
16) 4-METHYL-2-PENTANONE	0.00	100			Not Detected	
18) 2-HEXANONE	28.19	58	387687	20.87	PPB m	86
19) 3-HEPTANONE	31.50	114	665633	184.44	PPB	78
20) 2-HEPTANONE	31.62	58	1161816	45.60	PPB	97
21) CYCLOHEXANONE	0.00	98			Not Detected	
22) 2-OCTANONE	0.00	58			Not Detected	

(#) = qualifier out of range (m) = manual integration

19011207.D VAP_P7.M

Wed Jan 13 11:52:05 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011207.D

Acq On : 12 Jan 99 4:50 pm

Sample : VS102-009-S034

Misc : 50 TORR, DF=2

Quant Time: Jan 13 9:45 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.06	96	5084663	100.00	NG	0.13
20) CHLOROBENZENE-D5	30.42	117	3470027	100.00	PPB	0.00

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.54	43	729595	26.71	PPB	100
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.74	101	174121	7.14		100
7) N-PENTANE	16.43	72	33476	13.62	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	0.00	43		Not Detected		
10) 1-HEXENE	20.56	56	233879	14.94	PPB #	8
11) N-HEXANE	20.92	57	301751	13.16	PPB	85
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	0.00	78		Not Detected		
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	0.00	43		Not Detected		
16) N-HEPTANE	24.97	57	801653	62.82	PPB m	92
17) TOLUENE	27.62	91	186781	4.80	PPB	95
18) N-OCTANE	28.62	57	121022	12.16	PPB #	74
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.96	43	142262	6.56	PPB	89
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	35.03	43	135730	7.09	PPB m	94
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19011207.D VAP_NP7.M Wed Jan 13 10:18:45 1999

TIC: 19011207.D

VS102-009-S034

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	10.962	rBB	0.167	1286830	10.928	11.096
2	11.263	rBB	0.127	848509	11.203	11.330
3	11.545	rBB	0.067	379502	11.498	11.565
4	12.670	rBB	0.127	108734	12.609	12.737
5	12.864	rBB	0.033	192659	12.857	12.891
6	14.833	rBB	0.261	3859824	14.779	15.040
7	15.161	rBB	0.141	133031	15.101	15.241
8	15.737	rBB	0.161	396904	15.670	15.831
9	16.025	rBB	0.114	372857	15.964	16.078
10	16.192	rBB	0.114	7368382	16.132	16.246
11	16.273	rBB	0.074	345322	16.246	16.319
12	16.427	rBB	0.154	992152	16.339	16.494
13	16.674	rBB	0.121	119721	16.627	16.748
14	17.357	rBB	0.134	134249	17.304	17.438
15	18.328	rBB	0.161	365583	18.275	18.436
16	19.387	rBB	0.174	320422	19.326	19.500
17	19.561	rBB	0.121	209020	19.500	19.621
18	20.023	rBB	0.121	75925	19.969	20.090
19	20.612	rBB	0.261	4528576	20.465	20.726
20	20.793	rBB	0.141	3205892	20.726	20.867
21	20.920	rBB	0.121	1187511	20.867	20.987
22	22.085	rBB	0.094	405796	22.032	22.126
23	22.166	rBB	0.100	93188	22.126	22.226
24	23.378	rBB	0.121	162168	23.311	23.432
25	23.565	rBB	0.134	2621171	23.505	23.639
26	23.833	rBB	0.087	505657	23.786	23.873
27	23.900	rBB	0.067	82747	23.873	23.940
28	24.054	rBB	0.234	10408502	23.947	24.182
29	24.269	rBB	0.114	100610	24.215	24.329
30	24.423	rBB	0.134	1786495	24.356	24.490
31	24.630	rBB	0.154	737059	24.570	24.724
32	24.811	rBB	0.154	2166517	24.744	24.898
33	24.965	rBB	0.147	7509100	24.898	25.045
34	25.112	rBB	0.127	1132916	25.059	25.186
35	25.233	rBB	0.107	1594442	25.186	25.293
36	25.568	rBB	0.121	1386482	25.514	25.635
37	25.822	rBB	0.208	1184731	25.722	25.929
38	26.017	rBB	0.114	66128	25.963	26.077
39	26.425	rBB	0.214	166020	26.298	26.512
40	26.746	rBB	0.114	67423	26.693	26.807
41	26.860	rBB	0.087	88048	26.813	26.900
42	27.101	rBB	0.208	1336210	27.008	27.215
43	27.409	rBB	0.134	146383	27.316	27.450
44	27.604	rBB	0.100	1029539	27.550	27.651
45	27.704	rBB	0.107	3680747	27.651	27.758
46	27.811	rBB	0.054	231161	27.771	27.825
47	27.858	rBB	0.074	649261	27.825	27.898
48	28.052	rBB	0.127	212161	27.999	28.126
49	28.193	rBB	0.087	1273639	28.139	28.226
50	28.267	rBB	0.127	1647686	28.226	28.354
51	28.622	rBB	0.134	1101760	28.535	28.668
52	28.729	rBB	0.107	160096	28.668	28.776
53	28.829	rBB	0.147	88301	28.776	28.923
54	29.104	rBB	0.134	279767	29.044	29.177
55	29.398	rBB	0.080	66533	29.352	29.432
56	29.807	rBB	0.134	110571	29.713	29.847

57	30.423	rBB	0.201	9592790	30.303	30.503
58	30.811	rBB	0.147	69845	30.758	30.905
59	31.046	rBB	0.141	4991555	30.986	31.126
60	31.220	rBB	0.121	98951	31.160	31.280
61	31.367	rBB	0.114	428083	31.307	31.421
62	31.501	rBB	0.141	12949404	31.421	31.562
63	31.615	rBB	0.107	3879988	31.562	31.669
64	31.762	rBB	0.087	140562	31.722	31.809
65	31.957	rBB	0.188	626654	31.903	32.091
66	32.780	rBB	0.161	631278	32.680	32.841
67	32.881	rBB	0.094	73201	32.841	32.934
68	33.109	rBB	0.228	1156883	32.948	33.175
69	33.249	rBB	0.154	1323341	33.175	33.330
70	33.376	rBB	0.127	301211	33.330	33.457
71	33.664	rBB	0.094	217471	33.611	33.705
72	33.731	rBB	0.074	103630	33.705	33.778
73	34.220	rBB	0.181	252325	34.120	34.301
74	34.414	rBB	0.047	100469	34.408	34.455
75	34.736	rBB	0.167	148750	34.649	34.816
76	35.031	rBB	0.147	536566	34.964	35.111
77	35.372	rBB	0.248	867059	35.285	35.533
78	35.720	rBB	0.114	146194	35.653	35.767
79	35.841	rBB	0.174	234064	35.767	35.941
80	36.758	rBB	0.127	100694	36.705	36.832
81	37.870	rBB	0.114	554329	37.816	37.930
82	40.502	rBB	0.174	1131828	40.422	40.596
83	40.843	rBB	0.121	100406	40.783	40.904
84	42.002	rBB	0.141	102297	41.935	42.076
85	42.437	rBB	0.107	1605969	42.390	42.498
86	43.824	rBB	0.067	184188	43.790	43.857

Library Search Compound Report

Data File : D:\C106\19011207.D
 Acq Time : 12 Jan 99 4:50 pm
 Sample : VS102-009-S034
 Misc : 50 TORR, DF=2
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
10.96	24.73 PPB	1286830	FLUOROBENZENE	24.06

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Acetaldehyde	108065	000075-07-0	83
2	Acetaldehyde	108064	000075-07-0	83
3	Acetaldehyde	430	000075-07-0	83

 Peak Number 2 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
11.26	16.30 PPB	848509	FLUOROBENZENE	24.06

Hit# of 14	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108673	000106-98-9	83
2	1-Butene	108672	000106-98-9	83
3	1-Butene	108671	000106-98-9	83
4	1-Propene, 2-methyl-	108463	000115-11-7	74
5	2-Butene, (E)-	108665	000624-64-6	72

 Peak Number 3 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
11.54	7.29 PPB	379502	FLUOROBENZENE	24.06

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Butane	3946	000106-97-8	64
2	Butane	109164	000106-97-8	59

 Peak Number 4 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
15.74	7.63 PPB	396904	FLUOROBENZENE	24.06

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Trichloromonofluoromethane	118725	000075-69-4	90

2 Trichloromonofluoromethane	44156 000075-69-4	90
3 Trichloromonofluoromethane	118723 000075-69-4	47
4 Trichloromonofluoromethane	118724 000075-69-4	47

Peak Number 5 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
16.02	7.16 PPB	372857	FLUOROBENZENE	24.06

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene	109031	000109-67-1	90
2	1-Pentene	109030	000109-67-1	90
3	1-Pentene	109032	000109-67-1	86
4	1-Pentene	3426	000109-67-1	78
5	Cyclopropane, ethyl-	3424	001191-96-4	78

Peak Number 6 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
16.27	6.64 PPB	345322	FLUOROBENZENE	24.06

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Propanal	108093	000123-38-6	78
2	Boron, trihydro(N-methylmethanamine	18467	000074-94-2	50
3	Propanal	108021	000123-38-6	43
4	Propanal	488	000123-38-6	43

Peak Number 7 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
16.43	19.06 PPB	992152	FLUOROBENZENE	24.06

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	86
2	Pentane	4653	000109-66-0	78
3	Pentane	109386	000109-66-0	50
4	Butane, 2-methyl-	109393	000078-78-4	39

Peak Number 8 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
18.33	7.02 PPB	365583	FLUOROBENZENE	24.06

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L	0	000000-00-0	0

 Peak Number 9 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
20.92	22.82 PPB	1187511	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexane	112279	000110-54-3	91
2	Hexane	112278	000110-54-3	83
3	Hexane	112277	000110-54-3	74
4	Hexane	16315	000110-54-3	74
5	Pentane, 2,4-dimethyl-	5552	000108-08-7	50

 Peak Number 10 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
22.09	7.80 PPB	405796	FLUOROBENZENE	24.06
Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Nitric acid, ethyl ester	110982	000625-58-1	83

 Peak Number 11 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
24.63	14.16 PPB	737059	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Heptene	108660	000592-76-7	93
2	1-Heptene	2183	000592-76-7	68
3	1-Heptene	111846	000592-76-7	64
4	1-Heptene	108686	000592-76-7	58
5	2-Heptene	2208	000592-77-8	53

 Peak Number 12 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
24.81	41.63 PPB	2166517	FLUOROBENZENE	24.06
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	Butanal, 3-methyl-	110504	000590-86-3	78
2	1-Octadecanamine, N-methyl-	10857	002439-55-6	64
3	Pentanal	110569	000110-62-3	53
4	Pentanal	10484	000110-62-3	50
5	Pentanal	110477	000110-62-3	40

 Peak Number 13 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
24.97	144.29 PPB	7509100	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane	4133	000142-82-5	58
2	Heptane	109303	000142-82-5	58
3	Heptane	109668	000142-82-5	58
4	Heptane	109598	000142-82-5	50
5	Hexane, 3-methyl-	109322	000589-34-4	40

Peak Number 14 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
25.11	21.77 PPB	1132916	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene, (E)-	108689	014686-14-7	95
2	3-Heptene, (E)-	108697	014686-14-7	94
3	2-Heptene	108687	000592-77-8	94
4	3-Heptene	2209	000592-78-9	91
5	3-Heptene	108688	000592-78-9	91

Peak Number 15 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
25.23	30.64 PPB	1594442	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	97
3	2-Heptene, (E)-	13656	014686-13-6	94
4	2-Heptene	108605	000592-77-8	91
5	(Z)-3-Heptene	2213	007642-10-6	76

Peak Number 16 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
25.57	26.64 PPB	1386482	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95
3	2-Heptene	108605	000592-77-8	91
4	3-Heptene	108688	000592-78-9	91
5	2-Heptene, (E)-	13656	014686-13-6	90

Peak Number 17 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
25.82	22.76 PPB	1184731	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopropane, butyl-	1931	000930-57-4	47
2	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	40
3	Hexane, 2-chloro-	1457	000638-28-8	38
4	1-Hexene	2192	000592-41-6	38
5	1-Decene	108684	000872-05-9	35

Peak Number 18 Rank in Relative Concentration: 10

R.T.	Conc	Area	Relative to ISTD	R.T.
27.10	25.68 PPB	1336210	FLUOROBENZENE	24.06
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,4-Heptadiene	31430	002454-31-1	74
2	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
3	2-Cyclopenten-1-one, 2-methyl-	113922	001120-73-6	72
4	2-Cyclopenten-1-one, 3-methyl-	118261	002758-18-1	64
5	2-Cyclopenten-1-one, 2-methyl-	21588	001120-73-6	64

Peak Number 19 Rank in Relative Concentration: 18

R.T.	Conc	Area	Relative to ISTD	R.T.
27.60	21.46 PPB	1029539	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Octene, (Z)-	111246	007642-04-8	64
2	Cyclooctane	111839	000292-64-8	64
3	2-Octene, (E)-	12956	013389-42-9	64
4	Toluene	117281	000108-88-3	53
5	Toluene	117282	000108-88-3	53

Peak Number 20 Rank in Relative Concentration: 3

R.T.	Conc	Area	Relative to ISTD	R.T.
27.70	76.74 PPB	3680747	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	109689	000589-81-1	91
2	Heptane, 3-methyl-	5681	000589-81-1	90
3	Hexane, 2-methyl-	109353	000591-76-4	72
4	Hexane, 1-(hexyloxy)-2-methyl-	7097	074421-17-3	64
5	Hexane, 2,4-dimethyl-	109686	000589-43-5	59

Peak Number 21

Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
27.81	4.82 PPB	231161	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	trans-1-Butyl-2-methylcyclopropane	13988	038851-70-6	93
2	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	93
3	3-Octene, (E)-	108599	014919-01-8	87
4	3-Octene, (E)-	108600	014919-01-8	83
5	2-Octene, (E)-	111293	013389-42-9	81

Peak Number 22 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
27.86	13.54 PPB	649261	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	116095	001119-65-9	96
2	2-Heptyne	31411	001119-65-9	86
3	1,4-Heptadiene	31572	005675-22-9	64
4	Cyclohexene, 4-methyl-	31569	000591-47-9	64
5	Cyclohexene, 4-methyl-	116094	000591-47-9	64

Peak Number 23 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
28.27	34.35 PPB	1647686	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1,2,4-trimethyl-, (1.	23858	004850-28-6	78
2	1,2-Oxaborolane, 2-ethyl-4,5-dimeth	23877	074685-45-3	78
3	Cyclopentane, 1,2,4-trimethyl-, (1.	23853	016883-48-0	72
4	Octane, 3-methyl-6-methylene-	23865	074630-07-2	72
5	Cyclobutane, 1,1,2,3,3-pentamethyl-	23882	057905-86-9	72

Peak Number 24 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
28.62	22.97 PPB	1101760	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane	109559	000111-65-9	91
2	Octane	110051	000111-65-9	91
3	Octane	109231	000111-65-9	87
4	Octane	5673	000111-65-9	81
5	Decane, 5,6-dimethyl-	110045	001636-43-7	72

 Peak Number 25 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
29.10	5.83 PPB	279767	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	cis-1-Butyl-2-methylcyclopropane	13987	038851-69-3	81
2	4-Octene, (E)-	13070	014850-23-8	74
3	Cyclopropane, butyl-	1931	000930-57-4	72
4	4-Octene, (Z)-	111286	007642-15-1	72
5	4-Octene, (E)-	111302	014850-23-8	72

 Peak Number 26 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
31.05	104.07 PPB	4991555	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109874	000123-19-3	91
2	4-Heptanone	109855	000123-19-3	91
3	4-Heptanone	114577	000123-19-3	91
4	4-Heptanone	6294	000123-19-3	91
5	3-Pentanone, 2,4-dimethyl-	109870	000565-80-0	78

 Peak Number 27 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
31.37	8.93 PPB	428083	CHLOROBENZENE-D5	30.42
Hit# of 12	Tentative ID	Ref#	CAS#	Qual
1	n-Butyl ether	112208	000142-96-1	72
2	n-Butyl ether	15788	000142-96-1	72
3	n-Butyl ether	112037	000142-96-1	72
4	Propane, 1-(1,1-dimethylethoxy)-2,2	15915	032970-46-0	42
5	Pentane, 1-butoxy-	16488	018636-66-3	39

 Peak Number 28 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
31.96	13.07 PPB	626654	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	109596	000111-84-2	94
2	Nonane	109597	000111-84-2	90
3	Nonane	109595	000111-84-2	90
4	Nonane	5495	000111-84-2	76
5	Octane	5673	000111-65-9	59

 Peak Number 29 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
32.78	13.16 PPB	631278	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	50
2	2,5-Pyrrolidinedione, 1-methyl-	107966	001121-07-9	47
3	Thiazole, 2,5-dimethyl-	51095	004175-66-0	38
4	Dicyclohexylmethanol	41489	004453-82-1	38
5	1H-2-Pyrrolone, 4-methoxy-2,5-dihyd	51055	1000196-86-0	27

 Peak Number 30 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
33.11	24.12 PPB	1156883	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	Hexanoic acid, anhydride	118546	002051-49-2	53
3	Hexanoic acid, anhydride	43066	002051-49-2	53
4	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
5	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	50

 Peak Number 31 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
33.25	27.59 PPB	1323341	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	83
2	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	64
3	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
4	3,5-Diamino-1,2,4-triazole	43053	000503-88-8	52
5	Glycocyanidine	43063	000503-86-6	45

 Peak Number 32 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
33.38	6.28 PPB	301211	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentene, 4,4-dimethyl-, (Z)-	116391	000762-63-0	53
2	Cyclopropane, 1,1,2,2-tetramethyl-	111640	004127-47-3	53
3	2-Pentene, 3,4-dimethyl-	14207	024910-63-2	53
4	3,3-Diethoxy-1-propyne	32833	010160-87-9	42
5	Phosphonous dibromide, cyclohexyl-	14252	086012-32-0	42

 Peak Number 33 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
33.66	4.53 PPB	217471	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Trifluoroacetic acid, n-heptadecyl	4324	1000216-79-2	23
2	5-Hexen-2-one, 5-methyl-	109317	003240-09-3	22
3	1-[1,2,4]Triazol-1-ylethanone	4685	1000195-06-1	22
4	11-Tricosene	4287	052078-56-5	17
5	2-Heptanone, 6-methyl-	109723	000928-68-7	17

 Peak Number 34 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
34.22	5.26 PPB	252325	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octanone	109631	000589-63-9	83
2	4-Octanone	109632	000589-63-9	50
3	4-Octanone	109634	000589-63-9	46
4	Cyclohexane, 1,1,2,3-tetramethyl-	22348	006783-92-2	45
5	3-Octene, 2,6-dimethyl-	13849	006874-28-8	38

 Peak Number 35 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
35.03	11.19 PPB	536566	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	109556	000124-18-5	94
2	Nonane	5495	000111-84-2	90
3	Dodecane	109660	000629-97-0	72
4	Nonane	109595	000111-84-2	72
5	Octane	109559	000111-65-9	72

 Peak Number 36 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
35.37	18.08 PPB	867059	CHLOROBENZENE-D5	30.42
Hit# of 9	Tentative ID	Ref#	CAS#	Qual
1	5-Hexen-1-ol	111145	000821-41-0	40
2	Hexanenitrile	108570	000628-73-9	36
3	1,8-Nonadiene	2340	004900-30-5	36
4	1,7-Octadiene	108571	003710-30-3	30

5 1-Pyrroline, 3-ethyl-

22470 001192-29-6 10

 Peak Number 37 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
35.84	4.88 PPB	234064	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	112637	000104-76-7	78
2	1-Hexanol, 2-ethyl-	112165	000104-76-7	72
3	1-Hexanol, 2-ethyl-	15889	000104-76-7	64
4	1-Pentanol, 2-ethyl-4-methyl-	112154	000106-67-2	53
5	Octane, 2,3-dimethyl-	112152	007146-60-3	53

 Peak Number 38 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
37.87	11.56 PPB	554329	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	109663	001120-21-4	95
2	Undecane	16533	001120-21-4	91
3	Undecane	112395	001120-21-4	91
4	Tetradecane	112357	000629-59-4	90
5	Tridecane	16403	000629-50-5	90

 Peak Number 39 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
40.50	23.60 PPB	1131828	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	16262	000112-40-3	93
2	Heptadecane	112319	000629-78-7	90
3	Tridecane	16403	000629-50-5	90
4	Undecane	16533	001120-21-4	83
5	Tridecane	112309	000629-50-5	83

 Peak Number 40 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
42.44	33.48 PPB	1605969	CHLORO BENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	16403	000629-50-5	91
2	Tridecane	112309	000629-50-5	91
3	Heptadecane	112319	000629-78-7	90

4 Tetradecane	112357 000629-59-4	90
5 Pentadecane	16493 000629-62-9	90

19011207.D VAP_NP7.M Wed Jan 20 13:46:42 1999

File : C:\HPCHEM\1\DATA\19011208.D
Operator : G. FIES
Acquired : 12 Jan 99 5:47 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS102-012-S041
Misc Info : 50 TORR, DF=2
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011208.D

Vial: 1

Acq On : 12 Jan 99 5:47 pm

Operator: G. FIES

Sample : VS102-012-S041

Inst : 5972 - MS

Misc : 50 TORR, DF=2

Multiplr: 2.00

Quant Time: Jan 13 9:22 1999

Method : C:\HPCHEM\1\METHODS\VAP P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.05	96	5167728	100.00	NG	0.12
17) CHLOROBENZENE-D5	30.42	117	2964781	100.00	NG	-0.04

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.83	45	923846	177.95	PPB m	100
3) ACETONITRILE	16.12	40	72703	5.64	PPB m	62
4) ACETONE	16.19	58	1404688	189.79	PPB m	1
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	16.67	45	98415	4.87	PPB m	91
7) 1-PROPANOL	19.39	31	167128	10.23	PPB	97
8) PROPANENITRILE	20.03	54	32140	2.67	PPB m	100
9) BUTANAL	20.61	72	679147	138.89	PPB	96
10) 2-BUTANONE	20.79	72	346135	46.29	PPB	86
11) TETRAHYDROFURAN	0.00	72		Not Detected		
12) 1-BUTANOL	23.57	56	593934	84.47	PPB m	96
13) BUTANENITRILE	23.83	41	352840	16.84	PPB m	100
14) 2-PENTANONE	24.42	43	949386	21.87	PPB	98
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	28.19	58	431350	27.18	PPB m	82
19) 3-HEPTANONE	31.50	114	735169	238.42	PPB	76
20) 2-HEPTANONE	31.61	58	1288779	59.20	PPB	92
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	0.00	58		Not Detected		

(#)= qualifier out of range (m) = manual integration

19011208.D VAP_P7.M

Wed Jan 13 09:23:15 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011208.D

Acq On : 12 Jan 99 5:47 pm

Sample : VS102-012-S041

Misc : 50 TORR, DF=2

Quant Time: Jan 13 9:26 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.05	96	5167728	100.00	NG	0.12
20) CHLOROBENZENE-D5	30.42	117	2964781	100.00	PPB	0.00

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.54	43	1144350	41.21	PPB	100
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.74	101	163921	6.61		99
7) N-PENTANE	16.43	72	53812	21.55	PPB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	19.56	43	103907	2.96	PPB #	76
10) 1-HEXENE	20.56	56	489498	30.77	PPB m	90
11) N-HEXANE	20.92	57	520136	22.33	PPB	86
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	0.00	78		Not Detected		
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	0.00	43		Not Detected		
16) N-HEPTANE	24.97	57	1495566	115.30	PPB m	92
17) TOLUENE	27.61	91	279698	7.08	PPB	95
18) N-OCTANE	28.61	57	201517	19.91	PPB #	76
19) TETRACHLOROETHYLENE	0.00	166		Not Detected		
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	31.96	43	281678	15.21	PPB	88
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	35.02	43	265393	16.24	PPB m	94
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19011208.D VAP_NP7.M Wed Jan 13 09:26:48 1999

TIC: 19011208.D

VS102-012-S041

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	10.962	rBB	0.221	1757780	10.928	11.149
2	11.263	rBB	0.181	1760627	11.169	11.350
3	11.544	rBB	0.094	1430496	11.491	11.584
4	12.669	rBB	0.134	180049	12.596	12.730
5	14.826	rBB	0.281	3103787	14.772	15.053
6	15.161	rBB	0.141	176209	15.107	15.248
7	15.737	rBB	0.147	368980	15.670	15.817
8	16.025	rBB	0.114	706485	15.971	16.085
9	16.192	rBB	0.107	5277152	16.132	16.239
10	16.272	rBB	0.080	697221	16.239	16.319
11	16.433	rBB	0.181	1635892	16.333	16.513
12	16.667	rBB	0.194	135531	16.614	16.808
13	17.364	rBB	0.107	209017	17.310	17.417
14	18.328	rBB	0.141	367385	18.261	18.402
15	19.085	rBB	0.147	115057	19.011	19.159
16	19.386	rBB	0.181	300411	19.306	19.487
17	19.554	rBB	0.134	306032	19.487	19.621
18	20.183	rBB	0.114	82667	20.116	20.230
19	20.612	rBB	0.080	2527582	20.578	20.659
20	20.793	rBB	0.134	2392270	20.732	20.866
21	20.920	rBB	0.127	2027069	20.866	20.994
22	22.085	rBB	0.107	437452	22.025	22.132
23	22.166	rBB	0.100	108623	22.132	22.233
24	22.869	rBB	0.027	196894	22.855	22.882
25	23.190	rBB	0.121	79997	23.143	23.264
26	23.378	rBB	0.114	132145	23.311	23.425
27	23.565	rBB	0.127	2466902	23.505	23.632
28	23.672	rBB	0.087	123377	23.632	23.719
29	23.833	rBB	0.074	240745	23.793	23.867
30	23.900	rBB	0.080	237479	23.867	23.947
31	24.054	rBB	0.254	10711661	23.947	24.201
32	24.268	rBB	0.100	134100	24.215	24.315
33	24.429	rBB	0.127	1464262	24.362	24.489
34	24.523	rBB	0.087	83958	24.489	24.576
35	24.630	rBB	0.147	1603210	24.576	24.724
36	24.818	rBB	0.161	3637079	24.744	24.905
37	24.972	rBB	0.141	15073464	24.905	25.045
38	25.119	rBB	0.127	2994340	25.059	25.186
39	25.233	rBB	0.107	4566706	25.186	25.293
40	25.568	rBB	0.127	3793785	25.507	25.635
41	25.822	rBB	0.214	2013261	25.722	25.936
42	26.016	rBB	0.121	113239	25.956	26.077
43	26.405	rBB	0.188	233328	26.304	26.492
44	26.619	rBB	0.161	86395	26.512	26.673
45	26.746	rBB	0.134	169996	26.673	26.807
46	26.860	rBB	0.094	169890	26.807	26.900
47	27.101	rBB	0.214	2649924	27.007	27.222
48	27.409	rBB	0.147	254231	27.309	27.456
49	27.603	rBB	0.100	1953146	27.550	27.650
50	27.704	rBB	0.114	6944333	27.650	27.764
51	27.811	rBB	0.054	476942	27.771	27.824
52	27.851	rBB	0.074	1193037	27.824	27.898
53	28.052	rBB	0.134	226040	27.999	28.133
54	28.193	rBB	0.080	1306711	28.146	28.226
55	28.266	rBB	0.127	3960231	28.226	28.354
56	28.615	rBB	0.134	1963930	28.534	28.668

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57	28.729	rBB	0.100	281649	28.668	28.769
58	28.829	rBB	0.141	126732	28.775	28.916
59	28.976	rBB	0.100	155533	28.923	29.023
60	29.104	rBB	0.154	568548	29.030	29.184
61	29.465	rBB	0.087	80284	29.432	29.519
62	29.807	rBB	0.107	132974	29.746	29.854
63	29.894	rBB	0.127	91014	29.854	29.981
64	30.055	rBB	0.141	104634	29.981	30.121
65	30.175	rBB	0.087	93960	30.128	30.215
66	30.423	rBB	0.201	8237390	30.309	30.510
67	30.811	rBB	0.141	132047	30.758	30.898
68	30.959	rBB	0.067	92337	30.918	30.985
69	31.046	rBB	0.141	5842406	30.985	31.126
70	31.220	rBB	0.121	109535	31.160	31.280
71	31.367	rBB	0.127	774332	31.293	31.421
72	31.501	rBB	0.141	14185824	31.421	31.561
73	31.615	rBB	0.107	4250496	31.561	31.668
74	31.756	rBB	0.080	234152	31.722	31.802
75	31.956	rBB	0.181	1212208	31.903	32.084
76	32.773	rBB	0.174	872485	32.666	32.840
77	32.881	rBB	0.094	107367	32.840	32.934
78	33.108	rBB	0.221	1659802	32.948	33.169
79	33.242	rBB	0.154	1898377	33.169	33.323
80	33.376	rBB	0.114	558698	33.323	33.436
81	33.664	rBB	0.080	351674	33.617	33.698
82	33.724	rBB	0.074	287299	33.698	33.771
83	33.972	rBB	0.087	107696	33.932	34.019
84	34.227	rBB	0.228	421068	34.093	34.320
85	35.024	rBB	0.194	1170076	34.916	35.111
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87	35.720	rBB	0.114	297424	35.653	35.767
88	35.841	rBB	0.181	394402	35.767	35.948
89	36.758	rBB	0.107	106763	36.711	36.818
90	37.642	rBB	0.167	101464	37.582	37.749
91	37.863	rBB	0.121	1143185	37.803	37.923
92	38.178	rBB	0.141	106717	38.084	38.225
93	38.915	rBB	0.114	114498	38.861	38.975
94	39.216	rBB	0.114	90252	39.156	39.269
95	39.578	rBB	0.141	80230	39.504	39.644
96	40.502	rBB	0.167	2296681	40.428	40.595
97	40.837	rBB	0.121	207895	40.776	40.897
98	41.995	rBB	0.134	201656	41.935	42.069
99	42.437	rBB	0.134	3624920	42.384	42.517
100	43.823	rBB	0.087	507667	43.783	43.870

Library Search Compound Report

Data File : D:\C106\19011208.D
 Acq Time : 12 Jan 99 5:47 pm Operator: G. FIES
 Sample : VS102-012-S041 Inst : 5972 - MS
 Misc : 50 TORR, DF=2 Multiplr: 2.00
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

 Peak Number 1 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
10.96	32.82 PPB	1757780	FLUOROBENZENE	24.05
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Acetaldehyde	108065	000075-07-0	83
2	Acetaldehyde	108064	000075-07-0	74
3	Acetaldehyde	430	000075-07-0	64

 Peak Number 2 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
11.26	32.87 PPB	1760627	FLUOROBENZENE	24.05
Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108673	000106-98-9	83
2	1-Butene	108672	000106-98-9	83
3	1-Butene	108671	000106-98-9	83
4	1-Propene, 2-methyl-	108669	000115-11-7	81
5	1-Propene, 2-methyl-	108463	000115-11-7	74

 Peak Number 3 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
14.83	57.95 PPB	3103787	FLUOROBENZENE	24.05
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	108332	000064-17-5	90
2	Ethanol	1076	000064-17-5	90
3	Ethanol	108331	000064-17-5	83

 Peak Number 4 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
16.02	13.19 PPB	706485	FLUOROBENZENE	24.05
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1	1-Pentene	109031	000109-67-1	90
2	1-Pentene	109030	000109-67-1	90
3	1-Pentene	109032	000109-67-1	86
4	Cyclopropane, ethyl-	109028	001191-96-4	78
5	1-Pentene	3426	000109-67-1	78

 Peak Number 5 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.	
16.19	98.53 PPB	5277152	FLUOROBENZENE	24.05	
Hit# of	3	Tentative ID	Ref#	CAS#	Qual
1	Acetone		109727	000067-64-1	72
2	Acetone		109703	000067-64-1	64
3	Acetone		5734	000067-64-1	50

 Peak Number 6 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.	
16.27	13.02 PPB	697221	FLUOROBENZENE	24.05	
Hit# of	4	Tentative ID	Ref#	CAS#	Qual
1	Propanal		488	000123-38-6	78
2	Propanal		108093	000123-38-6	78
3	Boron, trihydro(N-methylmethanamine		18467	000074-94-2	56
4	Trimethylene oxide		107971	000503-30-0	40

 Peak Number 7 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD		R.T.
20.61	47.19 PPB	2527582	FLUOROBENZENE		24.05
Hit# of	6	Tentative ID	Ref#	CAS#	Qual
1	Butanal		10682	000123-72-8	90
2	Butanal		110523	000123-72-8	90
3	Butanal		110540	000123-72-8	83
4	Ethene, ethoxy-		110542	000109-92-2	80
5	Butanal		107914	000123-72-8	64

 Peak Number 8 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.	
20.79	44.67 PPB	2392270	FLUOROBENZENE	24.05	
Hit# of 5		Tentative ID	Ref#	CAS#	Qual
1	2-Butanone		109957	000078-93-3	86
2	2-Butanone		109955	000078-93-3	86

3	2-Butanone	109956	000078-93-3	72
4	2-Butanone	6522	000078-93-3	50
5	Propanal, 2-methyl-	109228	000078-84-2	39

 Peak Number 9 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
22.09	8.17 PPB	437452	FLUOROBENZENE	24.05

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Nitric acid, ethyl ester	110982	000625-58-1	74
2	1,3-Propanediol, dinitrate	12246	003457-90-7	64
3	Nitric acid, ethyl ester	110980	000625-58-1	40

 Peak Number 10 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
23.57	46.06 PPB	2466902	FLUOROBENZENE	24.05

Hit# of 14	Tentative ID	Ref#	CAS#	Qual
1	1-Butanol	111808	000071-36-3	91
2	1-Butanol	111809	000071-36-3	91
3	1-Butanol	14960	000071-36-3	90
4	1-Butanol	108337	000071-36-3	68
5	1-Butanol	108338	000071-36-3	59

 Peak Number 11 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
24.43	27.34 PPB	1464262	FLUOROBENZENE	24.05

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1	2-Pentanone	7171	000107-87-9	90
2	2-Pentanone	109160	000107-87-9	72
3	2-Pentanone	109359	000107-87-9	64
4	2-Pentanone	110097	000107-87-9	53
5	2,3-Butanedione	110094	000431-03-8	40

 Peak Number 12 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
24.63	29.93 PPB	1603210	FLUOROBENZENE	24.05

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Heptene	108660	000592-76-7	91
2	1-Heptene	108686	000592-76-7	70
3	Cyclopentane, 1,3-dimethyl-, cis-	111950	002532-58-3	64

4 1-Heptene	111847 000592-76-7	64
5 Isopropylcyclobutane	15016 000872-56-0	64

 Peak Number 13 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
24.82	67.91 PPB	3637079	FLUOROBENZENE	24.05

Hit# of 10	Tentative ID	Ref#	CAS#	Qual
1	Butanal, 3-methyl-	110505	000590-86-3	64
2	Pentanal	110477	000110-62-3	53
3	Pentanal	110476	000110-62-3	53
4	Pentanal	10484	000110-62-3	37
5	Butanal, 3-methyl-	110571	000590-86-3	36

 Peak Number 14 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
25.12	55.91 PPB	2994340	FLUOROBENZENE	24.05

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	95
2	3-Heptene, (E)-	2212	014686-14-7	94
3	3-Heptene, (E)-	108697	014686-14-7	94
4	3-Heptene	108688	000592-78-9	93
5	3-Heptene	2209	000592-78-9	91

 Peak Number 15 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
25.23	85.27 PPB	4566706	FLUOROBENZENE	24.05

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	108687	000592-77-8	97
2	2-Heptene, (E)-	111908	014686-13-6	96
3	2-Heptene, (E)-	13656	014686-13-6	94
4	2-Heptene	108605	000592-77-8	91
5	2-Heptene	2208	000592-77-8	87

 Peak Number 16 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
25.57	70.83 PPB	3793785	FLUOROBENZENE	24.05

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	111908	014686-13-6	96
2	2-Heptene	108687	000592-77-8	95

3	2-Heptene	108605	000592-77-8	91
4	2-Heptene, (E)-	13656	014686-13-6	90
5	3-Heptene, (E)-	108689	014686-14-7	87

Peak Number 17 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
25.82	37.59 PPB	2013261	FLUOROBENZENE	24.05
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Octene	111259	000111-66-0	50
2	2H-Pyran-2-one, tetrahydro-3,6-dime	109044	003720-22-7	50
3	Hexane, 2-chloro-	1457	000638-28-8	50
4	Cyclopentane, 1,2-dimethyl-, cis-	23919	001192-18-3	47
5	Cyclopropane, butyl-	1931	000930-57-4	46

Peak Number 18 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
27.10	49.48 PPB	2649924	FLUOROBENZENE	24.05
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclopenten-1-one, 2-methyl-	113921	001120-73-6	74
2	Furan, 2,4-dimethyl-	41734	003710-43-8	72
3	2-Cyclopenten-1-one, 2-methyl-	113922	001120-73-6	72
4	2-Cyclopenten-1-one, 3-methyl-	118261	002758-18-1	64
5	Cyclohexene, 1-methyl-	31675	000591-49-1	59

Peak Number 19 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
27.70	168.61 PPB	6944333	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	109689	000589-81-1	91
2	Hexane, 2,4-dimethyl-	109686	000589-43-5	86
3	Heptane, 3-methyl-	5681	000589-81-1	83
4	Hexane, 2,4-dimethyl-	5467	000589-43-5	72
5	Hexane, 2-methyl-	109353	000591-76-4	64

Peak Number 20 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
27.81	11.58 PPB	476942	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Octene	111259	000111-66-0	91

2	2-Octene, (E)-	111293	013389-42-9	90
3	2-Octene, (E)-	111294	013389-42-9	83
4	2-Octene, (Z)-	13071	007642-04-8	81
5	2-Octene	111287	000111-67-1	80

Peak Number 21 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
27.85	28.97 PPB	1193037	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	116095	001119-65-9	96
2	2-Heptyne	31411	001119-65-9	83
3	1,4-Heptadiene	31572	005675-22-9	64
4	Cyclohexene, 4-methyl-	31569	000591-47-9	59
5	1,2-Butadiene	12655	000590-19-2	53

Peak Number 22 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
28.19	31.73 PPB	1306711	CHLOROBENZENE-D5	30.42
Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	109711	000591-78-6	91
2	2-Hexanone	109712	000591-78-6	87
3	2-Hexanone	5779	000591-78-6	86
4	Oxifane, 2-methyl-2-(1-methylethyl)	5754	072221-03-5	80
5	2-Hexanone, 4-hydroxy-5-methyl-3-pr	5762	061141-74-0	64

Peak Number 23 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
28.27	96.15 PPB	3960231	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1,2,4-trimethyl-, (1.	23858	004850-28-6	90
2	Cyclopentane, 1,2,4-trimethyl-, (1.	23853	016883-48-0	80
3	Heptane, 3-methylene-	114415	001632-16-2	72
4	Nonane, 3-methylene-	23869	051655-64-2	72
5	Octane, 3-methyl-6-methylene-	23865	074630-07-2	72

Peak Number 24 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
29.10	13.80 PPB	568548	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1	4-Octene, (E)-	13070	014850-23-8	87
2	trans-1-Butyl-2-methylcyclopropane	13988	038851-70-6	87
3	4-Octene, (E)-	111302	014850-23-8	83
4	3-Octene, (E)-	108600	014919-01-8	83
5	2-Octene, (Z)-	13071	007642-04-8	80

 Peak Number 25 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
31.05	141.85 PPB	5842406	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	109855	000123-19-3	91
2	4-Heptanone	109874	000123-19-3	91
3	4-Heptanone	6294	000123-19-3	91
4	4-Heptanone	114577	000123-19-3	91
5	3-Hexanone, 2-methyl-	109949	007379-12-6	72

 Peak Number 26 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
31.37	18.80 PPB	774332	CHLOROBENZENE-D5	30.42
Hit# of 9	Tentative ID	Ref#	CAS#	Qual
1	n-Butyl ether	15788	000142-96-1	72
2	n-Butyl ether	112208	000142-96-1	64
3	Pentane, 1-butoxy-	16488	018636-66-3	39
4	Ethanol, 2-butoxy-	112447	000111-76-2	38
5	Propane, 1-(chloromethoxy)-2-methyl	17371	034180-11-5	37

 Peak Number 27 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
31.50	344.43 PPB	14185824	CHLOROBENZENE-D5	30.42
Hit# of 18	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	15594	000106-35-4	90
2	3-Heptanone	112010	000106-35-4	90
3	3-Heptanone	112074	000106-35-4	86
4	3-Heptanone	112009	000106-35-4	78
5	3-Heptanone	112011	000106-35-4	64

 Peak Number 28 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
31.61	103.20 PPB	4250496	CHLOROBENZENE-D5	30.42
Hit# of 17	Tentative ID	Ref#	CAS#	Qual

1	2-Heptanone	109741	000110-43-0	91
2	2-Heptanone	109740	000110-43-0	90
3	2-Heptanone	5736	000110-43-0	90
4	2-Heptanone, 5-methyl-	109729	000110-12-3	74
5	2-Heptanone	109709	000110-43-0	64

Peak Number 29 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
32.77	21.18 PPB	872485	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	223	001121-07-9	50
2	Thiazole, 2,5-dimethyl-	51095	004175-66-0	38
3	Cyclohexanol, 4-methyl-1-(1-methyl-	120265	000470-65-5	35
4	(1-Ethyl-propenyl)-dimethyl-amine	51072	1000194-94-5	30
5	2-Thiophenemethanamine	51172	027757-85-3	27

Peak Number 30 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
33.11	40.30 PPB	1659802	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	78
2	Hexanoic acid, anhydride	118546	002051-49-2	53
3	Hexanoic acid, anhydride	43066	002051-49-2	53
4	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	53
5	1,3,2-Dioxaborolane, 2,4-diethyl-	43307	057633-63-3	50

Peak Number 31 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
33.24	46.09 PPB	1898377	CHLOROBENZENE-D5	30.42
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	43236	074793-02-5	83
2	1-Hydroxycyclohexanecarboxylic acid	43242	001123-28-0	64
3	3,5-Diamino-1,2,4-triazole	43045	001455-77-2	50
4	3,5-Diamino-1,2,4-triazole	43053	000503-88-8	50
5	Furan, tetrahydro-2,2-dimethyl-5-(1	32021	033978-70-0	50

Peak Number 32 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
33.38	13.56 PPB	558698	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Hexen-2-one, 3,4-dimethyl-	13565	053252-21-4	53
2	2-Pentene, 4,4-dimethyl-, (Z)-	116391	000762-63-0	53
3	2-Pentene, 2,4-dimethyl-	111644	000625-65-0	53
4	Cyclopropane, 1,1,2,2-tetramethyl-	111639	004127-47-3	53
5	1,5-Heptadien-4-one, 3,3,6-trimethyl	116418	000546-49-6	45

 Peak Number 33 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
33.66	8.54 PPB	351674	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Octen-2-one, (E)-	5082	018402-82-9	25
2	11-Tricosene	4287	052078-56-5	23
3	7-Octen-2-one	5786	003664-60-6	22
4	4,8-Dioxatricyclo[5.1.0.03,5]octane	3897	042569-58-4	16
5	1-Trifluoroacetoxydecane	4215	1000215-96-3	12

 Peak Number 34 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
34.23	10.22 PPB	421068	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Octanone	5601	000589-63-9	70
2	Cyclohexane, 1,1,2,3-tetramethyl-	22348	006783-92-2	55
3	2-Octene, 2,6-dimethyl-	114125	004057-42-5	43
4	Nonane, 3-methylene-	23869	051655-64-2	43
5	4-Octanone	109634	000589-63-9	38

 Peak Number 35 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
35.37	30.79 PPB	1267956	CHLOROBENZENE-D5	30.42

Hit# of 11	Tentative ID	Ref#	CAS#	Qual
1	2-Propenoic acid, 2-methyl-, 3-bute	22732	079964-12-8	42
2	5-Hexen-1-ol	111145	000821-41-0	40
3	Hexanenitrile	108570	000628-73-9	36
4	1,8-Nonadiene	2340	004900-30-5	36
5	1,7-Octadiene	108571	003710-30-3	30

 Peak Number 36 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
35.84	9.58 PPB	394402	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Hexanol, 2-ethyl-		15889	000104-76-7	72
2 1-Hexanol, 2-ethyl-		112637	000104-76-7	72
3 1-Hexanol, 2-ethyl-		112165	000104-76-7	64
4 1-Hexanol, 2-ethyl-		112147	000104-76-7	64
5 1-Pentanol, 2-ethyl-4-methyl-		112154	000106-67-2	53

 Peak Number 37 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
37.86	27.76 PPB	1143185	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Undecane		16533	001120-21-4	91
2 Undecane		112395	001120-21-4	91
3 Tetradecane		112357	000629-59-4	90
4 Tridecane		16403	000629-50-5	90
5 Tridecane		112309	000629-50-5	90

 Peak Number 38 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
40.50	55.76 PPB	2296681	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Dodecane		16262	000112-40-3	93
2 Heptadecane		112319	000629-78-7	90
3 Tridecane		16403	000629-50-5	90
4 Tridecane		112309	000629-50-5	90
5 Tetradecane		112355	000629-59-4	86

 Peak Number 39 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
42.44	88.01 PPB	3624920	CHLOROBENZENE-D5	30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Tridecane		112309	000629-50-5	94
2 Tridecane		16403	000629-50-5	91
3 Pentadecane		16493	000629-62-9	90
4 Hexadecane		112408	000544-76-3	90
5 Heptadecane		112319	000629-78-7	90

 Peak Number 40 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
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43.82 12.33 PPB 507667 CHLOROBENZENE-D5 30.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Tetradecane		16474	000629-59-4	91
2 Heptadecane		112319	000629-78-7	91
3 Hexadecane		112408	000544-76-3	91
4 Hexadecane		112406	000544-76-3	91
5 Tetradecane		112355	000629-59-4	90

19011208.D VAP_NP7.M Wed Jan 20 13:50:28 1999

File : C:\HPCHEM\1\DATA\19011104.D
Operator : G. FIES
Acquired : 11 Jan 99 12:19 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS702-003-S061
Misc Info : 50 TORR, DF=2
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011104.D

Vial: 1

Acq On : 11 Jan 99 12:19 pm

Operator: G. FIES

Sample : VS702-003-S061

Inst : 5972 - MS

Misc : 50 TORR, DF=2

Multipl: 2.00

Quant Time: Jan 12 16:31 1999

Method : C:\HPCHEM\1\METHODS\VAP P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI	on	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.10	96		5688376	100.00	NG	0.17
17) CHLOROBENZENE-D5	30.46	117		3703771	100.00	NG	0.00

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.97	45	224323	39.25	PPB m	100
3) ACETONITRILE	16.14	40	262221	26.61	PPB m	87
4) ACETONE	16.23	58	1053742	129.34	PPB m	90
5) FURAN	0.00	68			Not Detected	
6) 2-PROPANOL	0.00	45			Not Detected	
7) 1-PROPANOL	19.54	31	62228	3.46	PPB	99
8) PROPANENITRILE	20.06	54	212880	16.09	PPB m	99
9) BUTANAL	0.00	72			Not Detected	
10) 2-BUTANONE	20.84	72	124774	15.16	PPB m	86
11) TETRAHYDROFURAN	0.00	72			Not Detected	
12) 1-BUTANOL	23.67	56	34009	4.39	PPB m	97
13) BUTANENITRILE	23.88	41	242922	10.53	PPB m	100
14) 2-PENTANONE	0.00	43			Not Detected	
15) 1,4-DIOXANE	0.00	88			Not Detected	
16) 4-METHYL-2-PENTANONE	0.00	100			Not Detected	
18) 2-HEXANONE	0.00	58			Not Detected	
19) 3-HEPTANONE	0.00	114			Not Detected	
20) 2-HEPTANONE	0.00	58			Not Detected	
21) CYCLOHEXANONE	0.00	98			Not Detected	
22) 2-OCTANONE	0.00	58			Not Detected	

(#) = qualifier out of range (m) = manual integration
 19011104.D VAP_P7.M Tue Jan 12 16:31:37 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011104.D

Acq On : 11 Jan 99 12:19 pm

Sample : VS702-003-S061

Misc : 50 TORR, DF=2

Quant Time: Jan 12 16:27 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.10	96	5688376	100.00	NG	0.17
20) CHLOROBENZENE-D5	30.46	117	3703771	100.00	PPB	0.04

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected	
3) METHYL CHLORIDE	0.00	50		Not Detected	
4) N-BUTANE	11.61	43	111309	3.64 PPB m	95
5) ETHYL CHLORIDE	0.00	64		Not Detected	
6) FREON 11	15.78	101	607906	22.27	100
7) N-PENTANE	0.00	72		Not Detected	
8) DICHLOROMETHANE	0.00	49		Not Detected	
9) 2-METHYL-PENTANE	0.00	43		Not Detected	
10) 1-HEXENE	0.00	56		Not Detected	
11) N-HEXANE	0.00	57		Not Detected	
12) CHLOROFORM	0.00	83		Not Detected	
13) BENZENE	0.00	78		Not Detected	
14) CARBON TETRACHLORIDE	0.00	117		Not Detected	
15) 3-METHYL-HEXANE	0.00	43		Not Detected	
16) N-HEPTANE	0.00	57		Not Detected	
17) TOLUENE	0.00	91		Not Detected	
18) N-OCTANE	0.00	57		Not Detected	
19) TETRACHLOROETHYLENE	29.26	166	53000	3.04 PPB	89
21) CHLOROBENZENE	0.00	112		Not Detected	
22) ETHYLBENZENE	0.00	91		Not Detected	
23) M, P-XYLENE	0.00	91		Not Detected	
24) STYRENE	0.00	104		Not Detected	
25) N-NONANE	0.00	43		Not Detected	
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected	
27) O-XYLENE	0.00	91		Not Detected	
28) N-DECANE	0.00	43		Not Detected	
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected	

(#) = qualifier out of range (m) = manual integration

19011104.D VAP_NP7.M

Tue Jan 12 16:28:03 1999

TIC: 19011104.D

VS702-003-S061

Peak#	Ret. Time	Type	Width	Area	Start Time	End Time
1	11.050	rBB	0.127	349192	11.016	11.143
2	11.599	rBB	0.114	157456	11.552	11.666
3	14.961	rBB	0.261	447970	14.920	15.182
4	15.784	rBB	0.201	1430206	15.711	15.912
5	16.139	rBB	0.074	529277	16.106	16.179
6	16.226	rBB	0.188	3938003	16.179	16.367
7	16.481	rBB	0.107	122767	16.427	16.534
8	18.376	rBB	0.114	112861	18.322	18.436
9	20.064	rBB	0.154	374411	20.010	20.164
10	20.840	rBB	0.141	865402	20.780	20.921
11	20.968	rBB	0.114	104611	20.921	21.035
12	21.102	rBB	0.027	192859	21.095	21.122
13	22.126	rBB	0.100	156715	22.073	22.173
14	23.660	rBB	0.127	93249	23.620	23.747
15	23.881	rBB	0.174	324233	23.821	23.995
16	24.102	rBB	0.194	11525402	24.015	24.209
17	24.316	rBB	0.147	73952	24.256	24.403
18	25.850	rBB	0.147	77718	25.783	25.930
19	27.658	rBB	0.100	58295	27.604	27.705
20	29.258	rBB	0.188	323084	29.138	29.325
21	30.464	rBB	0.221	10393529	30.357	30.578
22	34.562	rBB	0.127	87361	34.495	34.623
23	36.799	rBB	0.141	455490	36.725	36.866
24	36.967	rBB	0.141	177190	36.886	37.027
25	37.904	rBB	0.127	60101	37.830	37.958
26	38.018	rBB	0.107	81493	37.958	38.065
27	38.956	rBB	0.114	72780	38.895	39.009
28	40.784	rBB	0.020	258661	40.777	40.797
29	42.210	rBB	0.100	97512	42.177	42.277
30	42.458	rBB	0.121	64794	42.398	42.518

Library Search Compound Report

Data File : D:\C106\19011104.D
 Acq Time : 11 Jan 99 12:19 pm
 Sample : VS702-003-S061
 Misc : 50 TORR, DF=2
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
11.05	6.06 PPB	349192	FLUOROBENZENE	24.10

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Acetaldehyde	108065	000075-07-0	83
2	Acetaldehyde	430	000075-07-0	83
3	Acetaldehyde	108064	000075-07-0	74

 Peak Number 2 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
11.60	2.73 PPB	157456	FLUOROBENZENE	24.10

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Butane	109164	000106-97-8	53
2	Butane	3946	000106-97-8	45

 Peak Number 3 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
15.78	24.82 PPB	1430206	FLUOROBENZENE	24.10

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Trichloromonofluoromethane	118725	000075-69-4	90
2	Trichloromonofluoromethane	118723	000075-69-4	90
3	Trichloromonofluoromethane	44156	000075-69-4	90
4	Trichloromonofluoromethane	118724	000075-69-4	90

 Peak Number 4 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
16.48	2.13 PPB	122767	FLUOROBENZENE	24.10

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	86
2	Pentane	4653	000109-66-0	86

3 Pentane

109386 000109-66-0 80

 Peak Number 5 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
21.10	3.35 PPB	192859	FLUOROBENZENE	24.10
Hit# of 0	Tentative ID		Ref# CAS#	Qual
1 No Hits From C:\DATABASE\NIST98.L			0 000000-00-0	0

 Peak Number 6 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
22.13	2.72 PPB	156715	FLUOROBENZENE	24.10
Hit# of 3	Tentative ID		Ref# CAS#	Qual
1 Nitric acid, ethyl ester			110982 000625-58-1	83
2 Nitric acid, ethyl ester			110980 000625-58-1	39
3 Nitric acid, propyl ester			12186 000627-13-4	39

 Peak Number 7 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
29.26	6.22 PPB	323084	CHLOROBENZENE-D5	30.46
Hit# of 7	Tentative ID		Ref# CAS#	Qual
1 Tetrachloroethylene			124581 000127-18-4	99
2 Tetrachloroethylene			73050 000127-18-4	99
3 Tetrachloroethylene			124589 000127-18-4	98
4 Tetrachloroethylene			124590 000127-18-4	98
5 Tetrachloroethylene			124591 000127-18-4	80

 Peak Number 8 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
36.80	8.76 PPB	455490	CHLOROBENZENE-D5	30.46
Hit# of 20	Tentative ID		Ref# CAS#	Qual
1 Undecane, 4,7-dimethyl-			5605 017301-32-5	86
2 Pentadecane			112371 000629-62-9	83
3 Decane, 3,7-dimethyl-			5589 017312-54-8	81
4 Eicosane			112344 000112-95-8	78
5 Eicosane, 10-methyl-			16468 054833-23-7	64

 Peak Number 9 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
36.97	3.41 PPB	177190	CHLOROBENZENE-D5	30.46
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 3,6-dimethyl-	16418	017312-53-7	81
2	Undecane, 5,7-dimethyl-	5598	017312-83-3	72
3	Decane, 2,3,7-trimethyl-	5626	062238-13-5	72
4	Undecane, 2,4-dimethyl-	5671	017312-80-0	64
5	Decane, 2,4,6-trimethyl-	5615	062108-27-4	64

Peak Number 10 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
40.78	4.98 PPB	258661	CHLOROBENZENE-D5	30.46
Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L	0	000000-00-0	0

19011104.D VAP_NP7.M Wed Jan 20 12:00:15 1999

File : C:\HPCHEM\1\DATA\19011105.D
Operator : G. FIES
Acquired : 11 Jan 99 1:28 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS702-005-S062
Misc Info : 50 TORR, DF=2
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011105.D

Acq On : 11 Jan 99 1:28 pm

Sample : VS702-005-S062

Misc : 50 TORR, DF=2

Quant Time: Jan 12 16:36 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) FLUOROBENZENE	24.10	96	5459039	100.00	NG	0.17
17) CHLOROBENZENE-D5	30.47	117	3446102	100.00	NG	0.01

System Monitoring Compounds

%Recovery

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ETHANOL	15.33	45	18009	3.28	PPB m	100
3) ACETONITRILE	0.00	40		Not Detected		
4) ACETONE	16.37	58	43811	5.60	PPB m	57
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	0.00	45		Not Detected		
7) 1-PROPANOL	0.00	31		Not Detected		
8) PROPANENITRILE	0.00	54		Not Detected		
9) BUTANAL	0.00	72		Not Detected		
10) 2-BUTANONE	0.00	72		Not Detected		
11) TETRAHYDROFURAN	0.00	72		Not Detected		
12) 1-BUTANOL	0.00	56		Not Detected		
13) BUTANENITRILE	0.00	41		Not Detected		
14) 2-PENTANONE	0.00	43		Not Detected		
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	0.00	58		Not Detected		
19) 3-HEPTANONE	0.00	114		Not Detected		
20) 2-HEPTANONE	0.00	58		Not Detected		
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	0.00	58		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19011105.D VAP_P7.M Tue Jan 12 16:37:14 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011105.D

Acq On : 11 Jan 99 1:28 pm

Sample : VS702-005-S062

Misc : 50 TORR, DF=2

Quant Time: Jan 12 16:38 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.10	96	5459039	100.00	NG	0.17
20) CHLOROBENZENE-D5	30.47	117	3446102	100.00	PPB	0.04

System Monitoring Compounds

%Recovery

Target Compounds				Qvalue
2) FREON 12	0.00	85	Not Detected	
3) METHYL CHLORIDE	0.00	50	Not Detected	
4) N-BUTANE	0.00	43	Not Detected	
5) ETHYL CHLORIDE	0.00	64	Not Detected	
6) FREON 11	0.00	101	Not Detected	
7) N-PENTANE	0.00	72	Not Detected	
8) DICHLOROMETHANE	0.00	49	Not Detected	
9) 2-METHYL-PENTANE	0.00	43	Not Detected	
10) 1-HEXENE	0.00	56	Not Detected	
11) N-HEXANE	0.00	57	Not Detected	
12) CHLOROFORM	0.00	83	Not Detected	
13) BENZENE	0.00	78	Not Detected	
14) CARBON TETRACHLORIDE	0.00	117	Not Detected	
15) 3-METHYL-HEXANE	0.00	43	Not Detected	
16) N-HEPTANE	0.00	57	Not Detected	
17) TOLUENE	0.00	91	Not Detected	
18) N-OCTANE	0.00	57	Not Detected	
19) TETRACHLOROETHYLENE	0.00	166	Not Detected	
21) CHLOROBENZENE	0.00	112	Not Detected	
22) ETHYLBENZENE	0.00	91	Not Detected	
23) M,P-XYLENE	31.26	91	79285	2.84 PPB 89
24) STYRENE	0.00	104	Not Detected	
25) N-NONANE	0.00	43	Not Detected	
26) 1,1,1,2,2-TETRACHLOROETHANE	0.00	83	Not Detected	
27) O-XYLENE	0.00	91	Not Detected	
28) N-DECANE	0.00	43	Not Detected	
29) 1,2,4-TRIMETHYLBENZENE	0.00	105	Not Detected	

(#) = qualifier out of range (m) = manual integration
 19011105.D VAP_NP7.M Tue Jan 12 16:39:21 1999

TIC: 19011105.D

VS702-005-S062

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	10.801	rBB	0.027	90887	10.788	10.815
2	16.366	rBB	0.134	102305	16.313	16.447
3	16.942	rBB	0.134	119105	16.895	17.029
4	24.101	rBB	0.188	11059210	24.028	24.215
5	27.657	rBB	0.114	154162	27.604	27.718
6	<u>30.463</u>	rBB	0.248	<u>9882704</u>	30.383	30.631
7	31.006	rBB	0.134	127854	30.946	31.079
8	31.260	rBB	0.134	224414	31.200	31.334
9	32.091	rBB	0.114	81764	32.044	32.158
10	35.741	rBB	0.114	58716	35.680	35.794
11	35.915	rBB	0.121	68167	35.854	35.975
12	36.296	rBB	0.121	84854	36.229	36.350

Library Search Compound Report

Data File : D:\C106\19011105.D
 Acq Time : 11 Jan 99 1:28 pm
 Sample : VS702-005-S062
 Misc : 50 TORR, DF=2
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

Operator: G. FIES
 Inst : 5972 - MS
 Multiplr: 2.00

 Peak Number 1 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
16.94	2.15 PPB	119105	FLUOROBENZENE	24.10

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,3-Butadiene, 2-methyl-	113813	000078-79-5	94
2	1,3-Pentadiene, (E)-	113689	002004-70-8	94
3	1,3-Butadiene, 2-methyl-	113774	000078-79-5	93
4	1,3-Butadiene, 2-methyl-	113773	000078-79-5	91
5	1,3-Pentadiene, (Z)-	21015	001574-41-0	91

 Peak Number 2 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
27.66	3.12 PPB	154162	CHLOROBENZENE-D5	30.47

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Toluene	117282	000108-88-3	94
2	Toluene	117281	000108-88-3	93
3	Toluene	37326	000108-88-3	91
4	Toluene	117292	000108-88-3	91
5	Sprio[2.4]hepta-4,6-diene	37322	000765-46-8	90

 Peak Number 3 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
31.01	2.59 PPB	127854	CHLOROBENZENE-D5	30.47

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethylbenzene	117388	000100-41-4	91
2	Benzene, 1,2-dimethyl-	37719	000095-47-6	87
3	Benzene, 1,2-dimethyl-	117409	000095-47-6	83
4	p-Xylene	117402	000106-42-3	83
5	Benzene, 1,3-dimethyl-	117394	000108-38-3	72

 Peak Number 4 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
------	------	------	------------------	------

31.26 4.54 PPB 224414 CHLOROBENZENE-D5 30.47

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	p-Xylene	117404	000106-42-3	97
2	p-Xylene	117400	000106-42-3	97
3	Benzene, 1,3-dimethyl-	117395	000108-38-3	97
4	Benzene, 1,3-dimethyl-	117394	000108-38-3	97
5	p-Xylene	117401	000106-42-3	97

19011105.D VAP_NP7.M Wed Jan 20 12:03:59 1999

File : C:\HPCHEM\1\DATA\19011106.D
Operator : G. FIES
Acquired : 11 Jan 99 2:27 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS702-008-S063
Misc Info : 50 TORR, DF=2
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011106.D

Acq On : 11 Jan 99 2:27 pm

Sample : VS702-008-S063

Misc : 50 TORR, DF=2

Quant Time: Jan 12 16:46 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.11	96	5635271	100.00	NG	0.18
17) CHLOROBENZENE-D5	30.47	117	3642174	100.00	NG	0.00

System Monitoring Compounds

%Recovery

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) ETHANOL	14.98	45	287756	50.83	PPB m	100
3) ACETONITRILE	16.16	40	203551	20.08	PPB m	31
4) ACETONE	16.23	58	981133	121.56	PPB m	84
5) FURAN	0.00	68		Not Detected		
6) 2-PROPANOL	0.00	45		Not Detected		
7) 1-PROPANOL	19.53	31	68022	3.82	PPB #	93
8) PROPANENITRILE	20.08	54	175291	13.37	PPB	97
9) BUTANAL	20.67	72	13397	2.51	PPB	98
10) 2-BUTANONE	20.85	72	127487	15.63	PPB	85
11) TETRAHYDROFURAN	0.00	72		Not Detected		
12) 1-BUTANOL	23.67	56	38836	5.06	PPB m	92
13) BUTANENITRILE	23.89	41	225518	9.87	PPB m	100
14) 2-PENTANONE	0.00	43		Not Detected		
15) 1,4-DIOXANE	0.00	88		Not Detected		
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected		
18) 2-HEXANONE	0.00	58		Not Detected		
19) 3-HEPTANONE	0.00	114		Not Detected		
20) 2-HEPTANONE	0.00	58		Not Detected		
21) CYCLOHEXANONE	0.00	98		Not Detected		
22) 2-OCTANONE	0.00	58		Not Detected		

(#) = qualifier out of range (m) = manual integration

19011106.D VAP_P7.M

Tue Jan 12 16:46:54 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011106.D

Acq On : 11 Jan 99 2:27 pm

Sample : VS702-008-S063

Misc : 50 TORR, DF=2

Quant Time: Jan 12 16:42 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.11	96	5635271	100.00	NG	0.18
20) CHLOROBENZENE-D5	30.47	117	3642174	100.00	PPB	0.04

System Monitoring Compounds

%Recovery

Target Compounds				Qvalue
2) FREON 12	0.00	85	Not Detected	
3) METHYL CHLORIDE	0.00	50	Not Detected	
4) N-BUTANE	11.60	43	219515	100
5) ETHYL CHLORIDE	0.00	64	Not Detected	
6) FREON 11	15.79	101	635249	100
7) N-PENTANE	0.00	72	Not Detected	
8) DICHLOROMETHANE	0.00	49	Not Detected	
9) 2-METHYL-PENTANE	0.00	43	Not Detected	
10) 1-HEXENE	0.00	56	Not Detected	
11) N-HEXANE	0.00	57	Not Detected	
12) CHLOROFORM	0.00	83	Not Detected	
13) BENZENE	0.00	78	Not Detected	
14) CARBON TETRACHLORIDE	0.00	117	Not Detected	
15) 3-METHYL-HEXANE	0.00	43	Not Detected	
16) N-HEPTANE	0.00	57	Not Detected	
17) TOLUENE	0.00	91	Not Detected	
18) N-OCTANE	0.00	57	Not Detected	
19) TETRACHLOROETHYLENE	29.26	166	53457	88
21) CHLOROBENZENE	0.00	112	Not Detected	
22) ETHYLBENZENE	0.00	91	Not Detected	
23) M,P-XYLENE	0.00	91	Not Detected	
24) STYRENE	0.00	104	Not Detected	
25) N-NONANE	0.00	43	Not Detected	
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83	Not Detected	
27) O-XYLENE	0.00	91	Not Detected	
28) N-DECANE	0.00	43	Not Detected	
29) 1,2,4-TRIMETHYLBENZENE	0.00	105	Not Detected	

(#)= qualifier out of range (m)= manual integration

19011106.D VAP_NP7.M

Tue Jan 12 16:43:15 1999

TIC: 19011106.D

VS702-008-S063

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	9.783	rBB	0.020	76504	9.776	9.796
2	11.062	rBB	0.188	604191	11.021	11.209
3	11.323	rBB	0.134	243507	11.269	11.403
4	11.604	rBB	0.141	379431	11.551	11.691
5	14.979	rBB	0.234	652168	14.939	15.174
6	15.790	rBB	0.161	1485142	15.709	15.870
7	16.165	rBB	0.060	198223	16.125	16.185
8	16.232	rBB	0.194	4088467	16.185	16.379
9	16.479	rBB	0.107	147097	16.433	16.540
10	18.381	rBB	0.147	118204	18.301	18.448
11	20.076	rBB	0.167	313391	20.015	20.183
12	20.665	rBB	0.100	71785	20.625	20.725
13	20.846	rBB	0.154	888202	20.772	20.926
14	20.973	rBB	0.114	101621	20.926	21.040
15	21.790	rBB	0.121	57078	21.737	21.857
16	22.132	rBB	0.114	162224	22.071	22.185
17	23.665	rBB	0.154	117098	23.612	23.766
18	23.886	rBB	0.167	299088	23.819	23.987
19	24.107	rBB	0.201	11398636	24.020	24.221
20	24.322	rBB	0.121	73631	24.261	24.382
21	25.855	rBB	0.188	92667	25.788	25.976
22	29.083	rBB	0.027	247297	29.076	29.103
23	29.264	rBB	0.201	309489	29.150	29.351
24	30.463	rBB	0.221	10285678	30.376	30.597
25	31.260	rBB	0.167	91842	31.186	31.353
26	34.561	rBB	0.127	63986	34.494	34.621
27	36.671	rBB	0.121	62708	36.604	36.724
28	36.798	rBB	0.141	421971	36.724	36.865
29	36.965	rBB	0.147	164805	36.878	37.026
30	38.017	rBB	0.100	72184	37.963	38.064
31	38.961	rBB	0.121	57536	38.894	39.015
32	42.209	rBB	0.107	96831	42.175	42.283
33	42.463	rBB	0.134	69225	42.396	42.530

Library Search Compound Report

Data File : D:\C106\19011106.D
 Acq Time : 11 Jan 99 2:27 pm Operator: G. FIES
 Sample : VS702-008-S063 Inst : 5972 - MS
 Misc : 50 TORR, DF=2 Multiplr: 2.00
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

 Peak Number 1 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
11.06	10.60 PPB	604191	FLUOROBENZENE	24.11

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Acetaldehyde	108065	000075-07-0	83
2	Acetaldehyde	108064	000075-07-0	74
3	Acetaldehyde	430	000075-07-0	74

 Peak Number 2 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
11.32	4.27 PPB	243507	FLUOROBENZENE	24.11

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	108669	000115-11-7	87
2	1-Butene	108673	000106-98-9	86
3	1-Butene	108672	000106-98-9	86
4	1-Butene	108671	000106-98-9	86
5	Cyclobutane	1471	000287-23-0	80

 Peak Number 3 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
11.60	6.66 PPB	379431	FLUOROBENZENE	24.11

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Butane	109164	000106-97-8	64
2	Butane	3946	000106-97-8	50

 Peak Number 4 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
15.79	26.06 PPB	1485142	FLUOROBENZENE	24.11

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Trichloromonofluoromethane	118725	000075-69-4	90

2 Trichloromonofluoromethane	118723 000075-69-4	90
3 Trichloromonofluoromethane	44156 000075-69-4	90
4 Trichloromonofluoromethane	118724 000075-69-4	59

 Peak Number 5 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
16.48	2.58 PPB	147097	FLUOROBENZENE	24.11

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	78
2	Pentane	4653	000109-66-0	78
3	Pentane	109386	000109-66-0	39

 Peak Number 6 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
18.38	2.07 PPB	118204	FLUOROBENZENE	24.11

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L	0	000000-00-0	0

 Peak Number 7 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
22.13	2.85 PPB	162224	FLUOROBENZENE	24.11

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Nitroglycerin	110985	000055-63-0	74
2	1,3-Propanediol, dinitrate	12246	003457-90-7	74
3	Nitric acid, ethyl ester	110980	000625-58-1	40

 Peak Number 8 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
29.08	4.81 PPB	247297	CHLOROBENZENE-D5	30.47

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NIST98.L	0	000000-00-0	0

 Peak Number 9 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
29.26	6.02 PPB	309489	CHLOROBENZENE-D5	30.47

Hit# of 8	Tentative ID	Ref#	CAS#	Qual
1	Tetrachloroethylene	124581	000127-18-4	99
2	Tetrachloroethylene	73050	000127-18-4	99
3	Tetrachloroethylene	124590	000127-18-4	98
4	Tetrachloroethylene	124589	000127-18-4	97
5	Tetrachloroethylene	124591	000127-18-4	95

 Peak Number 10 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
36.80	8.21 PPB	421971	CHLOROBENZENE-D5	30.47

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 3,7-dimethyl-	5589	017312-54-8	76
2	Triacotane	109665	000638-68-6	64
3	Undecane, 2,4-dimethyl-	5671	017312-80-0	50
4	Octane, 2,3,6,7-tetramethyl-	6367	052670-34-5	47
5	Tridecane, 4-methyl-	5620	026730-12-1	47

 Peak Number 11 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
36.97	3.20 PPB	164805	CHLOROBENZENE-D5	30.47

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2,7-dimethyl-	5644	017301-24-5	72
2	Undecane, 5,7-dimethyl-	5598	017312-83-3	72
3	Undecane, 2,4-dimethyl-	5671	017312-80-0	64
4	Heptane, 2,4-dimethyl-	110076	002213-23-2	64
5	Heptane, 2,4-dimethyl-	7092	002213-23-2	59

 19011106.D VAP_NP7.M Wed Jan 20 12:08:53 1999

File : C:\HPCHEM\1\DATA\19011107.D
Operator : G. FIES
Acquired : 11 Jan 99 3:25 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS702-011-S068
Misc Info : 50 TORR, DF=2
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011107.D

Vial: 1

Acq On : 11 Jan 99 3:25 pm

Operator: G. FIES

Sample : VS702-011-S068

Inst : 5972 - MS

Misc : 50 TORR, DF=2

Multiplr: 2.00

Quant Time: Jan 12 16:51 1999

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.10	96	5677351	100.00	NG	0.17
17) CHLOROBENZENE-D5	30.47	117	3686283	100.00	NG	0.00

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) ETHANOL	14.95	45	310763	54.49	PPB m	100
3) ACETONITRILE	16.15	40	198632	19.33	PPB m	93
4) ACETONE	16.23	58	1263693	155.41	PPB m	86
5) FURAN	0.00	68			Not Detected	
6) 2-PROPANOL	0.00	45			Not Detected	
7) 1-PROPANOL	19.52	31	75717	4.22	PPB	96
8) PROPANENITRILE	20.07	54	207011	15.68	PPB	98
9) BUTANAL	20.66	72	15259	2.84	PPB	96
10) 2-BUTANONE	20.84	72	164829	20.06	PPB	86
11) TETRAHYDROFURAN	0.00	72			Not Detected	
12) 1-BUTANOL	23.65	56	49074	6.35	PPB m	97
13) BUTANENITRILE	23.88	41	291231	12.65	PPB m	100
14) 2-PENTANONE	0.00	43			Not Detected	
15) 1,4-DIOXANE	0.00	88			Not Detected	
16) 4-METHYL-2-PENTANONE	0.00	100			Not Detected	
18) 2-HEXANONE	0.00	58			Not Detected	
19) 3-HEPTANONE	0.00	114			Not Detected	
20) 2-HEPTANONE	0.00	58			Not Detected	
21) CYCLOHEXANONE	0.00	98			Not Detected	
22) 2-OCTANONE	0.00	58			Not Detected	

(#) = qualifier out of range (m) = manual integration
 19011107.D VAP_P7.M Tue Jan 12 16:51:47 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011107.D

Acq On : 11 Jan 99 3:25 pm

Sample : VS702-011-S068

Misc : 50 TORR, DF=2

Quant Time: Jan 12 16:53 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.10	96	5677351	100.00	NG	0.17
20) CHLOROBENZENE-D5	30.47	117	3686283	100.00	PPB	0.04

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.59	43	273886	8.98	PPB	100
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.79	101	638237	23.43		99
7) N-PENTANE	0.00	72		Not Detected		
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	0.00	43		Not Detected		
10) 1-HEXENE	0.00	56		Not Detected		
11) N-HEXANE	0.00	57		Not Detected		
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	0.00	78		Not Detected		
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	0.00	43		Not Detected		
16) N-HEPTANE	0.00	57		Not Detected		
17) TOLUENE	0.00	91		Not Detected		
18) N-OCTANE	0.00	57		Not Detected		
19) TETRACHLOROETHYLENE	29.26	166	54727	3.14	PPB	88
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	0.00	43		Not Detected		
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	0.00	43		Not Detected		
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19011107.D VAP_NP7.M Tue Jan 12 16:54:36 1999

TIC: 19011107.D

VS702-011-S068

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.200	rBB	0.087	58593	7.180	7.267
2	9.524	rBB	0.027	61372	9.510	9.537
3	11.044	rBB	0.167	628119	11.011	11.178
4	11.319	rBB	0.147	337351	11.232	11.379
5	11.593	rBB	0.201	493530	11.533	11.734
6	12.035	rBB	0.060	75852	11.995	12.055
7	14.962	rBB	0.221	738739	14.922	15.143
8	15.785	rBB	0.161	1486650	15.718	15.879
9	16.154	rBB	0.060	273609	16.120	16.181
10	16.234	rBB	0.121	4390965	16.181	16.301
11	16.475	rBB	0.121	147546	16.428	16.549
12	18.377	rBB	0.134	116181	18.324	18.457
13	19.516	rBB	0.094	75742	19.475	19.569
14	20.065	rBB	0.221	394190	19.964	20.185
15	20.661	rBB	0.114	89325	20.607	20.721
16	20.842	rBB	0.134	1148997	20.781	20.915
17	20.962	rBB	0.114	97307	20.915	21.029
18	21.786	rBB	0.100	57692	21.732	21.833
19	22.127	rBB	0.107	164541	22.067	22.174
20	23.654	rBB	0.201	236511	23.561	23.761
21	23.882	rBB	0.194	398980	23.815	24.009
22	24.103	rBB	0.208	11490309	24.009	24.217
23	24.317	rBB	0.121	74432	24.270	24.391
24	25.851	rBB	0.167	92836	25.791	25.858
25	28.617	rBB	0.020	115701	28.610	28.630
26	29.260	rBB	0.127	283743	29.199	29.327
27	<u>30.465</u>	rBB	0.208	<u>10407932</u>	30.385	30.592
28	31.001	rBB	0.100	69892	30.954	31.054
29	31.255	rBB	0.141	129039	31.182	31.322
30	32.086	rBB	0.134	60469	32.025	32.159
31	34.557	rBB	0.121	114574	34.503	34.624
32	36.666	rBB	0.114	71160	36.606	36.720
33	36.794	rBB	0.147	432105	36.720	36.867
34	36.961	rBB	0.154	167872	36.867	37.021
35	38.012	rBB	0.114	82264	37.959	38.073
36	38.950	rBB	0.121	151603	38.890	39.010
37	42.205	rBB	0.107	147888	42.171	42.278
38	42.459	rBB	0.147	127797	42.386	42.533

Library Search Compound Report

Data File : D:\C106\19011107.D
 Acq Time : 11 Jan 99 3:25 pm Operator: G. FIES
 Sample : VS702-011-S068 Inst : 5972 - MS
 Misc : 50 TORR, DF=2 Multiplr: 2.00
 Method : D:\METHODS\VAP_NP7.M
 Title : NONPOLAR VAPOR STANDARD CALIBRATION
 Library : NIST98.L

 Peak Number 1 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
11.04	10.93 PPB	628119	FLUOROBENZENE	24.10
Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Acetaldehyde	108065	000075-07-0	83
2	Acetaldehyde	108064	000075-07-0	83
3	Acetaldehyde	430	000075-07-0	64
4	Acetaldehyde	108066	000075-07-0	56

 Peak Number 2 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
11.32	5.87 PPB	337351	FLUOROBENZENE	24.10
Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	108669	000115-11-7	87
2	1-Butene	108673	000106-98-9	86
3	1-Butene	108672	000106-98-9	86
4	1-Butene	108671	000106-98-9	86
5	Cyclobutane	107955	000287-23-0	80

 Peak Number 3 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
14.96	12.86 PPB	738739	FLUOROBENZENE	24.10
Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	108332	000064-17-5	90
2	Ethanol	1076	000064-17-5	90
3	Ethanol	108331	000064-17-5	83

 Peak Number 4 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
16.15	4.76 PPB	273609	FLUOROBENZENE	24.10
Hit# of 2	Tentative ID	Ref#	CAS#	Qual

1 Acetonitrile	108497 000075-05-8	74
2 Methane, isocyan-	1633 000593-75-9	74

 Peak Number 5 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
16.23	76.43 PPB	4390965	FLUOROBENZENE	24.10

Hit# of	Tentative ID	Ref#	CAS#	Qual
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1 Acetone	109727 000067-64-1	72
2 Acetone	109703 000067-64-1	64

 Peak Number 6 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
16.48	2.57 PPB	147546	FLUOROBENZENE	24.10

Hit# of	Tentative ID	Ref#	CAS#	Qual
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1 Pentane	109385 000109-66-0	78
2 Pentane	4653 000109-66-0	78

 Peak Number 7 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
18.38	2.02 PPB	116181	FLUOROBENZENE	24.10

Hit# of	Tentative ID	Ref#	CAS#	Qual
---------	--------------	------	------	------

1 No Hits From C:\DATABASE\NIST98.L	0 000000-00-0	0
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 Peak Number 8 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
20.06	6.86 PPB	394190	FLUOROBENZENE	24.10

Hit# of	Tentative ID	Ref#	CAS#	Qual
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1 Propanenitrile	107962 000107-12-0	86
2 Propanenitrile	164 000107-12-0	78

 Peak Number 9 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
20.84	20.00 PPB	1148997	FLUOROBENZENE	24.10

Hit# of 5	Tentative ID	Ref#	CAS#	Qual
1 2-Butanone		109957	000078-93-3	86
2 2-Butanone		109955	000078-93-3	86
3 2-Butanone		109956	000078-93-3	72
4 2-Butanone		6522	000078-93-3	50
5 Propanal, 2-methyl-		109228	000078-84-2	39

 Peak Number 10 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
22.13	2.86 PPB	164541	FLUOROBENZENE	24.10

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1 Nitric acid, ethyl ester		110982	000625-58-1	78
2 Nitric acid, propyl ester		12186	000627-13-4	74
3 Nitroglycerin		110985	000055-63-0	64
4 Nitric acid, ethyl ester		110980	000625-58-1	39

 Peak Number 11 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
23.65	4.12 PPB	236511	FLUOROBENZENE	24.10

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1 1-Butanol		111808	000071-36-3	78
2 1-Butanol		14960	000071-36-3	78
3 1-Butanol		111809	000071-36-3	78
4 1-Butanol		108337	000071-36-3	72
5 Formic acid, butyl ester		111810	000592-84-7	56

 Peak Number 12 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
23.88	6.94 PPB	398980	FLUOROBENZENE	24.10

Hit# of 7	Tentative ID	Ref#	CAS#	Qual
1 Butanenitrile		108435	000109-74-0	83
2 Butanenitrile		1478	000109-74-0	56
3 Butanenitrile		108437	000109-74-0	42
4 Butanenitrile		108436	000109-74-0	40
5 2-Propenenitrile, 2-methyl-		108465	000126-98-7	10

 Peak Number 13 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
28.62	2.22 PPB	115701	CHLOROBENZENE-D5	30.47

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1 No Hits From C:\DATABASE\NIST98.L		0	000000-00-0	0

Peak Number 14 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
29.26	5.45 PPB	283743	CHLOROBENZENE-D5	30.47

Hit# of 8	Tentative ID	Ref#	CAS#	Qual
1 Tetrachloroethylene		124581	000127-18-4	99
2 Tetrachloroethylene		73050	000127-18-4	99
3 Tetrachloroethylene		124590	000127-18-4	98
4 Tetrachloroethylene		124589	000127-18-4	97
5 Tetrachloroethylene		124591	000127-18-4	80

Peak Number 15 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
31.26	2.48 PPB	129039	CHLOROBENZENE-D5	30.47

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 p-Xylene		117400	000106-42-3	97
2 Benzene, 1,3-dimethyl-		117394	000108-38-3	97
3 Benzene, 1,2-dimethyl-		117410	000095-47-6	97
4 Benzene, 1,3-dimethyl-		117395	000108-38-3	97
5 p-Xylene		117401	000106-42-3	97

Peak Number 16 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
34.56	2.20 PPB	114574	CHLOROBENZENE-D5	30.47

Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1 Cyclotetrasiloxane, octamethyl-		97367	000556-67-2	90
2 7H-Dibenzo[b,g]carbazole, 7-methyl-		97365	003557-49-1	59
3 5H-Naphtho[2,3-c]carbazole, 5-methyl-		97364	100025-44-3	53
4 Cyclotetrasiloxane, octamethyl-		128142	000556-67-2	46
5 Cyclotetrasiloxane, octamethyl-		128141	000556-67-2	38

Peak Number 17 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
36.79	8.30 PPB	432105	CHLOROBENZENE-D5	30.47

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Eicosane		112344	000112-95-8	86

2	Undecane, 4,7-dimethyl-	5605	017301-32-5	80
3	Decane, 3,7-dimethyl-	5589	017312-54-8	76
4	Dodecane, 2,6,10-trimethyl-	17052	003891-98-3	50
5	Heptane, 2,4-dimethyl-	7092	002213-23-2	49

Peak Number 18 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
36.96	3.23 PPB	167872	CHLOROBENZENE-D5	30.47

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2,4-dimethyl-	5624	002801-84-5	72
2	Undecane, 4,7-dimethyl-	5605	017301-32-5	72
3	Heptadecane	112320	000629-78-7	64
4	Heptane, 2,4-dimethyl-	7092	002213-23-2	58
5	Decane, 5,6-dipropyl-	17110	119209-20-0	53

Peak Number 19 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
38.95	2.91 PPB	151603	CHLOROBENZENE-D5	30.47

Hit# of 7	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	115268	003789-85-3	45
2	Benzoic acid, 2-[(trimethylsilyl)ox	27665	003789-85-3	45
3	Tetrasiloxane, 1,1,3,3,5,5,7,7-octa	27274	001000-05-1	40
4	Benzenethanamine, N-[(pentafluorop	115266	055429-85-1	25
5	3,5-Dimethoxyphenylacetic acid, TMS	26113	1000071-82-4	10

Peak Number 20 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
42.20	2.84 PPB	147888	CHLOROBENZENE-D5	30.47

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 1-iodo-	16508	035599-77-0	83
2	Tetradecane	112358	000629-59-4	83
3	Decane, 2,3,7-trimethyl-	5626	062238-13-5	78
4	Tetradecane	16474	000629-59-4	78
5	Nonane, 5-(1-methylpropyl)-	17065	062185-54-0	72

Peak Number 21 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
42.46	2.46 PPB	127797	CHLOROBENZENE-D5	30.47

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
------------	--------------	------	------	------

HNF-3949 Rev. 0

1	Tridecane	112309	000629-50-5	93
2	Tridecane	16403	000629-50-5	93
3	Tridecane	112308	000629-50-5	93
4	Heptadecane	112319	000629-78-7	91
5	Hexadecane	112406	000544-76-3	86

19011107.D VAP_NP7.M Wed Jan 20 13:30:12 1999

File : C:\HPCHEM\1\DATA\19011108.D
Operator : G. FIES
Acquired : 11 Jan 99 4:24 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS702-014-S070
Misc Info : 50 TORR, DF=2
Vial Number: 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011108.D

Acq On : 11 Jan 99 4:24 pm

Sample : VS702-014-S070

Misc : 50 TORR, DF=2

Quant Time: Jan 26 10:05 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_P7.M

Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES

Last Update : Sat Jan 02 16:48:55 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.09	96	5632862	100.00	NG	0.16
17) CHLOROBENZENE-D5	30.46	117	3710070	100.00	NG	0.00

System Monitoring Compounds

%Recovery

Target Compounds					Qvalue
2) ETHANOL	14.93	45	346731	61.27 PPB	m 100
3) ACETONITRILE	16.15	40	222087	22.24 PPB	m 99
4) ACETONE	16.23	58	1205474	149.42 PPB	m 83
5) FURAN	0.00	68		Not Detected	
6) 2-PROPANOL	0.00	45		Not Detected	
7) 1-PROPANOL	19.50	31	89337	5.02 PPB	99
8) PROPANENITRILE	20.06	54	213213	16.27 PPB	m 99
9) BUTANAL	20.65	72	20284	3.81 PPB	96
10) 2-BUTANONE	20.83	72	184155	22.59 PPB	85
11) TETRAHYDROFURAN	0.00	72		Not Detected	
12) 1-BUTANOL	23.65	56	61002	7.96 PPB	m 96
13) BUTANENITRILE	23.87	41	346036	15.15 PPB	# 100
14) 2-PENTANONE	0.00	43		Not Detected	
15) 1,4-DIOXANE	0.00	88		Not Detected	
16) 4-METHYL-2-PENTANONE	0.00	100		Not Detected	
18) 2-HEXANONE	0.00	58		Not Detected	
19) 3-HEPTANONE	0.00	114		Not Detected	
20) 2-HEPTANONE	0.00	58		Not Detected	
21) CYCLOHEXANONE	0.00	98		Not Detected	
22) 2-OCTANONE	0.00	58		Not Detected	

(#) = qualifier out of range (m) = manual integration
 19011108.D VAP_P7.M Tue Jan 26 10:05:54 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\19011108.D

Acq On : 11 Jan 99 4:24 pm

Sample : VS702-014-S070

Misc : 50 TORR, DF=2

Quant Time: Jan 26 10:02 1999

Vial: 1

Operator: G. FIES

Inst : 5972 - MS

Multiplr: 2.00

Method : C:\HPCHEM\1\METHODS\VAP_NP7.M

Title : NONPOLAR VAPOR STANDARD CALIBRATION

Last Update : Sat Jan 02 14:22:01 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	24.09	96	5632862	100.00	NG	0.16
20) CHLOROBENZENE-D5	30.46	117	3710070	100.00	PFB	0.03

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) FREON 12	0.00	85		Not Detected		
3) METHYL CHLORIDE	0.00	50		Not Detected		
4) N-BUTANE	11.59	43	411629	13.60	PFB	99
5) ETHYL CHLORIDE	0.00	64		Not Detected		
6) FREON 11	15.78	101	643061	23.79		100
7) N-PENTANE	16.47	72	6980	2.56	PFB #	100
8) DICHLOROMETHANE	0.00	49		Not Detected		
9) 2-METHYL-PENTANE	0.00	43		Not Detected		
10) 1-HEXENE	0.00	56		Not Detected		
11) N-HEXANE	0.00	57		Not Detected		
12) CHLOROFORM	0.00	83		Not Detected		
13) BENZENE	0.00	78		Not Detected		
14) CARBON TETRACHLORIDE	0.00	117		Not Detected		
15) 3-METHYL-HEXANE	0.00	43		Not Detected		
16) N-HEPTANE	0.00	57		Not Detected		
17) TOLUENE	0.00	91		Not Detected		
18) N-OCTANE	0.00	57		Not Detected		
19) TETRACHLOROETHYLENE	29.25	166	53748	3.11	PFB	88
21) CHLOROBENZENE	0.00	112		Not Detected		
22) ETHYLBENZENE	0.00	91		Not Detected		
23) M,P-XYLENE	0.00	91		Not Detected		
24) STYRENE	0.00	104		Not Detected		
25) N-NONANE	0.00	43		Not Detected		
26) 1,1,2,2-TETRACHLOROETHANE	0.00	83		Not Detected		
27) O-XYLENE	0.00	91		Not Detected		
28) N-DECANE	0.00	43		Not Detected		
29) 1,2,4-TRIMETHYLBENZENE	0.00	105		Not Detected		

(#) = qualifier out of range (m) = manual integration
 19011108.D VAP_NP7.M Tue Jan 26 10:02:51 1999

TIC: 19011108.D

VS702-014-S070

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	8.076	rBB	0.020	62557	8.069	8.089
2	11.029	rBB	0.181	903810	10.989	11.170
3	11.311	rBB	0.147	603598	11.237	11.384
4	11.592	rBB	0.147	742377	11.532	11.679
5	11.873	rBB	0.154	334201	11.833	11.987
6	12.703	rBB	0.087	76650	12.670	12.757
7	14.927	rBB	0.281	877139	14.887	15.168
8	15.777	rBB	0.174	1507731	15.697	15.871
9	16.146	rBB	0.060	337704	16.112	16.172
10	16.226	rBB	0.121	4641621	16.172	16.293
11	16.474	rBB	0.127	193163	16.420	16.547
12	18.369	rBB	0.174	132214	18.309	18.483
13	19.501	rBB	0.107	97314	19.461	19.568
14	20.063	rBB	0.161	389240	19.996	20.157
15	20.653	rBB	0.100	118505	20.606	20.706
16	20.834	rBB	0.134	1274164	20.773	20.907
17	20.961	rBB	0.121	109633	20.907	21.028
18	22.119	rBB	0.107	169597	22.066	22.173
19	23.646	rBB	0.234	299179	23.552	23.787
20	23.874	rBB	0.188	483805	23.800	23.988
21	24.095	rBB	0.181	11399108	24.008	24.189
22	24.309	rBB	0.127	78267	24.256	24.383
23	24.470	rBB	0.127	71518	24.410	24.537
24	25.843	rBB	0.174	102669	25.789	25.963
25	27.209	rBB	0.020	234687	27.202	27.222
26	27.731	rBB	0.121	77462	27.684	27.805
27	29.251	rBB	0.161	300611	29.158	29.318
28	30.457	rBB	0.174	10437012	30.370	30.544
29	34.549	rBB	0.114	110023	34.488	34.602
30	36.792	rBB	0.141	420099	36.719	36.859
31	36.960	rBB	0.188	177743	36.859	37.047
32	38.011	rBB	0.100	80041	37.957	38.058
33	38.942	rBB	0.134	130252	38.882	39.016
34	42.203	rBB	0.114	188239	42.170	42.284
35	42.458	rBB	0.121	118839	42.391	42.511

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\19011108.D Vial: 1
 Acq On : 11 Jan 99 4:24 pm Operator: G. FIES
 Sample : VS702-014-S070 Inst : 5972 - MS
 Misc : 50 TORR, DF=2 Multiplr: 2.00
 Method : C:\HPCHEM\1\METHODS\VAP P7.M
 Title : POLAR TARGET COMPOUNDS FOR TANK VAPOR ANALYSES
 Library : NIST98.L

 Peak Number 1 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
11.03	15.86 PPB	903811	FLUOROBENZENE	24.09

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Acetaldehyde	430	000075-07-0	83
2	Ethylene oxide	108063	000075-21-8	5
3	Propane	108017	000074-98-6	4

 Peak Number 2 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
11.31	10.59 PPB	603598	FLUOROBENZENE	24.09

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	108671	000106-98-9	83
2	1-Propene, 2-methyl-	108463	000115-11-7	74
3	Cyclobutane	1471	000287-23-0	72

 Peak Number 3 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
11.59	13.03 PPB	742378	FLUOROBENZENE	24.09

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Butane	109164	000106-97-8	59
2	Diazene, dimethyl-	107889	000503-28-6	5
3	Acetic acid, 2-propenyl ester	109304	000591-87-7	4

 Peak Number 4 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
11.87	5.86 PPB	334201	FLUOROBENZENE	24.09

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Methyl Alcohol	108316	000067-56-1	1
2	Hydrazine	108367	000302-01-2	1

3 Formaldehyde

108026 000050-00-0 1

 Peak Number 5 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
15.78	26.45 PPB	1507732	FLUOROBENZENE	24.09

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Trichloromonofluoromethane	118724	000075-69-4	90
2	Benzonitrile	118830	000100-47-0	7
3	1,3,4-Thiadiazol-2-amine	44065	004005-51-0	4

 Peak Number 6 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
16.47	3.39 PPB	193163	FLUOROBENZENE	24.09

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Pentane	109385	000109-66-0	90
2	Butanal	107914	000123-72-8	9
3	3-Buten-1-ol	3247	000627-27-0	9

 Peak Number 7 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
27.21	4.12 PPB	234687	FLUOROBENZENE	24.09

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Ethylene oxide	108063	000075-21-8	3
2	Carbon dioxide	110470	000124-38-9	3
3	Nitrous Oxide	110482	010024-97-2	3

 Peak Number 8 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
29.25	5.76 PPB	300611	CHLOROBENZENE-D5	30.46

Hit# of	Tentative ID	Ref#	CAS#	Qual
1	Tetrachloroethylene	124581	000127-18-4	99
2	Pyrimidine, 5-fluoro-2,4-dichloro-	73013	002927-71-1	43
3	2,5-Furandione, 3,4-dichloro-	73102	001122-17-4	38

 Peak Number 9 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
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-----
36.79      8.05 PPB      420099  CHLOROBENZENE-D5      30.46

Hit# of 3      Tentative ID      Ref#      CAS#      Qual
-----
1 Eicosane      112344  000112-95-8      86
2 Decane, 3,7-dimethyl-      5589  017312-54-8      76
3 Undecane, 4,7-dimethyl-      5605  017301-32-5      72

*****
Peak Number 10      Rank in Relative Concentration 10

R.T.      Conc      Area      Relative to ISTD      R.T.
-----
36.96      3.41 PPB      177743  CHLOROBENZENE-D5      30.46

Hit# of 3      Tentative ID      Ref#      CAS#      Qual
-----
1 Undecane, 2,7-dimethyl-      5644  017301-24-5      78
2 Undecane, 4,7-dimethyl-      5605  017301-32-5      78
3 Decane, 2,4,6-trimethyl-      5615  062108-27-4      78

*****
Peak Number 11      Rank in Relative Concentration 9

R.T.      Conc      Area      Relative to ISTD      R.T.
-----
42.20      3.61 PPB      188239  CHLOROBENZENE-D5      30.46

Hit# of 3      Tentative ID      Ref#      CAS#      Qual
-----
1 Tetradecane      112358  000629-59-4      90
2 Tridecane, 1-iodo-      16508  035599-77-0      87
3 Octadecane      112333  000593-45-3      78

*****
19011108.D  VAP_P7.M      Tue Jan 26 10:20:50 1999

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A. 12284283

HR. 42

CAS: 115-07-1

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : Propene

A 5709529
M4: 44
CAS: 74-98-6

Library Searched : C:\DATABASE\NIST98.L
Quality : 74
ID : Propane

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : 1-Propyne

770499 count
MW: 40
CAS: 74-99-7

813269
MW: 61
CAS: 624-91-9

Library Searched : C:\DATABASE\NIST98.L
Quality : 64
ID : Methyl nitrite

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : Cyclopropane

A: 1189534
CAS: 75-28-5
M: 58

Library Searched : C:\DATABASE\NIST98.L
Quality : 80
ID : Isobutane

Library Searched : C:\DATABASE\NIST98.L
Quality : 83
ID : Acetaldehyde

Library Searched : C:\DATABASE\NIST98.L
Quality : 87
ID : 1-Propene, 2-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 87
ID : 1-Butene

Library Searched : C:\DATABASE\NIST98.L
Quality : 72
ID : Butane

Library Searched : C:\DATABASE\NIST98.L
Quality : 87
ID : 1-Butene

Library Searched : C:\DATABASE\NIST98.L
Quality : 86
ID : 1-Propene, 2-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 87
ID : 1-Butene

A = 688803

File : D:\C106\19010405.D
Operator : G. FIES
Acquired : 4 Jan 99 1:40 pm using AcqMethod VAP_NP6
Instrument : 5972 - MS
Sample Name: VS006-051-S078
Misc Info : 50 TORR
Vial Number: 1

A = 565121

NW = 54

Library Searched : C:\DATABASE\NIST98.L

Quality : 87

ID : 1,2-Butadiene , 2-Butyne

MW: 70
A: 791608Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 1-Butene, 2-methyl-C₅ alkene / cycloalkane

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Butane, 2-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 1-Pentene

MW = 70
A = 2981147

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 1-Butene, 2-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 2-Pentene, (Z)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 2-Pentene, (Z)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 1-Pentene

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Cyclopropane, 1,2-dimethyl-, cis-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Spiropentane

Library Searched : C:\DATABASE\NIST98.L
Quality : 94
ID : 1,3-Pentadiene

1

Library Searched : C:\DATABASE\WILEY138.L
Quality : 25
ID : Formic acid, methyl ester

Library Searched : C:\DATABASE\NIST98.L
Quality : 72
ID : Butane, 2,2-dimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 1,3-Pentadiene, (Z)-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 40
ID : Nitric acid, methyl ester

Library Searched : C:\DATABASE\NIST98.L
Quality : 95
ID : 1,3-Butadiene, 2-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 72
ID : 1-Pentene, 4-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 74
ID : Cyclopentane

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 2-Butene, 2,3-dimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 78
ID : Silanol, trimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 86
ID : Propanenitrile

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : 1,5-Hexadiene

Library Searched : C:\DATABASE\NIST98.L
Quality : 87
ID : Pentane, 3-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 95
ID : 2,3-Pentadiene

Library Searched : C:\DATABASE\NIST98.L
Quality : 97
ID : Pentane, 3-methylene-

Library Searched : C:\DATABASE\NIST98.L
Quality : 94
ID : 3-Hexene, (E)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 2-Hexene

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Cyclopropane, 1,1,2-trimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Cyclopentene, 4-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 2-Hexene, (E)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Cyclopropane, propyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 87
ID : 1-Hexyne

Library Searched : C:\DATABASE\WILEY138.L
Quality : 50
ID : 1-Hexene

Library Searched : C:\DATABASE\WILEY138.L
Quality : 64
ID : Nitric acid, ethyl ester

Library Searched : C:\DATABASE\NIST98.L
Quality : 56
ID : 1-Pentyne, 3-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : 3-Hexene, 2-methyl-, (E)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Cyclopentene, 4-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 64
ID : 1-Hexene, 5-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 3-Hexene, 2-methyl-, (E)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 86
ID : Hexane, 2-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 93
ID : 2-Hexene, 5-methyl-, (E)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : 3-Heptene, (E)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 2-Hexyne

Library Searched : C:\DATABASE\NIST98.L
Quality : 81
ID : 5-Methyl-2-hexene,c&t

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Cyclohexene

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 1-Hexene, 2-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 94
ID : 1-Heptene

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 2-Pentenitrile

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 2,4-Hexadiene, 2-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 80
ID : Cyclopropane, butyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : Cyclohexane, methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 94
ID : Hexane, 2,4-dimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 93
ID : Cyclopentane, ethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : 3,4-Heptadiene

Library Searched : C:\DATABASE\NIST98.L

Quality : 74

ID : ~~1,2-Heptadiene~~ Unknown C & alkene / cycloalkane

Library Searched : C:\DATABASE\NIST98.L
Quality : 64
ID : 1-Heptene, 3-methyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 47
ID : 4-Octene, (E)-

Library Searched : C:\DATABASE\NIST98.L

Quality : 81

ID : (2-Cyclopenten-1-one, 3-methyl-) *C7 cyclopentenone/diene*

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Heptane, 3-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 87
ID : 2-Octene, (Z)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 97
ID : 2-Heptyne

Library Searched : C:\DATABASE\NIST98.L
Quality : 80
ID : 3-Hexanone

Library Searched : C:\DATABASE\NIST98.L
Quality : 86
ID : Heptane, 3-methylene-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 5-Methyl-3-heptene

Library Searched : C:\DATABASE\NIST98.L
Quality : 94
ID : 4-Octene, (E)-

Library Searched : C:\DATABASE\WILEY138.L

Quality : 60

ID : 2-Octene C8 alkene / cycloalkane

Library Searched : C:\DATABASE\NIST98.L
Quality : 76
ID : 2-Octene, (Z)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 95
ID : 2-Heptene, 3-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 74
ID : 2-Octene, (E)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 96
ID : 2-Octene, (Z)-

This page cannot be converted.
Please view the native document
for the original page.

Library Searched : C:\DATABASE\NIST98.L
Quality : 94
ID : Cyclohexane, ethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 83
ID : Cyclohexane, 1,1,3-trimethyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 59
ID : Heptane, 2,6-dimethyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 14
ID : Butane, 1-(ethenyloxy)-3-methyl- *Unknown*

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 4-Heptanone

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Hexanenitrile

Library Searched : C:\DATABASE\NIST98.L
Quality : 72
ID : n-Butyl ether

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : 3-Heptanol

Library Searched : C:\DATABASE\WILEY138.L
Quality : 47
ID : 2-Heptanol

Library Searched : C:\DATABASE\NIST98.L
Quality : 96
ID : 3-Nonene

Library Searched : C:\DATABASE\WILEY138.L
Quality : 62
ID : 3-Heptyne, 2,2-dimethyl-

Unknown

Library Searched : C:\DATABASE\NIST98.L

Quality : 86

ID : 8-Oxabicyclo[3.2.1]oct-6-en-3-one

Unknown

Library Searched : C:\DATABASE\WILEY138.L
Quality : 53
ID : Cyclohexane, 1-ethyl-4-methyl-, cis-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 52
ID : 2,5-Pyrrolidinedione, 1-methyl- (unknown)

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 4-Heptanone, 3-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 78
ID : 2,2'-Bioxepane Unknown

Library Searched : C:\DATABASE\WILEY138.L
Quality : 50
ID : 1,3-Diethyl-1,4-epoxybutane

Library Searched : C:\DATABASE\WILEY138.L
Quality : 58
ID : 2-Pentene, 2,4-dimethyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 32
ID : 3-Octen-2-one, (E)- Unknown

Library Searched : C:\DATABASE\WILEY138.L
Quality : 45
ID : Nonane, 2-methyl- (CCCCC(C)C)

Library Searched : C:\DATABASE\NIST98.L
Quality : 89
ID : 4-Octanone

Library Searched : C:\DATABASE\NIST98.L
Quality : 94
ID : Heptanenitrile

Library Searched : C:\DATABASE\WILEY138.L
Quality : 55
ID : 3-Octanone

Library Searched : C:\DATABASE\NIST98.L
Quality : 87
ID : 2-Octanone

Library Searched : C:\DATABASE\NIST98.L
Quality : 83
ID : Cyclohexane, 1-methyl-3-propyl-

Library Searched : C:\DATABASE\WILEY138.L

Quality : 58

ID : 1,1-DIMETHYL-3-CYCLOPENTENE-2-D1

Unknown

Library Searched : C:\DATABASE\NIST98.L
Quality : 87
ID : Decane, 4-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 83
ID : 1-Hexanol, 2-ethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 87
ID : Cyclohexane, (2-methylpropyl)-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 50
ID : 3-Undecene, (Z)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 93
ID : Decane, 3-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 96
ID : Octanenitrile

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : 3-Undecene, (Z)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 94
ID : Undecane

Library Searched : C:\DATABASE\WILEY138.L
Quality : 38
ID : 3-n-Butylcyclohexanone *Unknown*

Library Searched : C:\DATABASE\WILEY138.L

Quality : 58

ID : 4(1H)-Pyridinone, 2,3-dihydro-1-methyl- *Unknown*

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : Decane, 3,7-dimethyl-

Library Searched : C:\DATABASE\NIST98.L

Quality : 60

ID : 7-Azabicyclo[4.1.0]heptane, 2-methyl-

Unkown

Library Searched : C:\DATABASE\NIST98.L
Quality : 95
ID : trans-Decalin, 2-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 62
ID : (2-Methylbutyl)cyclohexane

Library Searched : C:\DATABASE\NIST98.L
Quality : 83
ID : Undecane, 6-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 98
ID : 1-Methyldecahydronaphthalene

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : Undecane, 2-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 83
ID : Undecane, 3-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 95
ID : 2-Dodecene, (Z)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 64
ID : Naphthalene, decahydro-2,3-dimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : Dodecane

Library Searched : C:\DATABASE\NIST98.L
Quality : 70
ID : Naphthalene, decahydro-2,3-dimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 95
ID : Dodecane, 6-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 98
ID : Cyclohexane, 2-butyl-1,1,3-trimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 81
ID : Cyclohexane, (4-methylpentyl)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 90
ID : Dodecane, 4-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 89
ID : Undecane, 2,10-dimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 72
ID : Dodecane, 4,6-dimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 94
ID : 6-Tridecene, (Z)-

Library Searched : C:\DATABASE\NIST98.L
Quality : 95
ID : Tridecane

Library Searched : C:\DATABASE\NIST98.L
Quality : 86
ID : Tridecane, 6-methyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 91
ID : Dodecane, 2,7,10-trimethyl-

Library Searched : C:\DATABASE\NIST98.L
Quality : 94
ID : Tetradecane

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**This document was too large to scan
as a single document; therefore, it has
been divided into smaller sections.**

Section 4 of 5

Document Information			
Document #	HNF-3949	Revision	0
Title	TANK VAPOR SAMPLING & ANALYSIS DATA PACKAGE FOR TANK 241C106 WASTE RETRIEVAL SLUICING SYS PROCESS TEST SAMPLED 12/16/1998		
Date	03/22/1999		
Originator	LOCKREM LL	Originator Co.	NHC
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Keywords			
Projects			
Other Information			

2.3 Volatile Organic Compounds in Triple Sorbent Trap Samples

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2.3.1 Narrative

This section contains descriptions of the analytical method and quality assurance used during analysis.

2.3.1.1 Determination of Volatile Organic Compounds in Triple Sorbent Trap Samples

The volatile organic compounds (VOCs) in triple sorbent trap (TST) samples are determined by GC-MS. TSTs capture VOCs from the tank headspace vapor on carbon-based adsorbents. The first step in the analysis of the TST samples is to “focus” the trapped VOCs onto a narrow-bore *thermal desorption* tube. This is accomplished by using the technique of thermal desorption. The TST is rapidly heated with a constant purge of helium gas flowing through the tube. The VOCs desorb from the TST and are subsequently trapped on the narrow-bore thermal desorption tube. Focusing improves the efficiency of the injection into a gas chromatograph. The thermal desorption tube is then heated to inject the VOCs into a gas chromatograph equipped with a fused silica column and mass-selective detector. The VOCs are separated on the column and detected by means of a mass-selective detector.

The instrumentation consists of a Hewlett-Packard model 5890 Series II gas chromatograph equipped with a 0.53-mm inside diameter by 105-m long RTX -502.2 fused-silica column and a Hewlett-Packard model 5972 mass-selective detector.

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2.3.1.2 Triple Sorbent Trap Volatile Organic Compounds Analytical Quality Assurance

Headspace samples collected on triple sorbent traps (TSTs) were analyzed following procedures LA-549-404, Rev. A-1, and LA-523-408, Rev. A-1. Standard and sample preparation is documented in logbook WHC-N-1411-1, pages 122-129. The thermal desorption GC/MS instrument maintenance and run log is documented in logbook WHC-N-943-1, pages 33-34.

The GC/MS system was tuned and calibrated prior to sample analysis. The tune and calibration were then checked daily against criteria established in LA-523-408. The initial calibration (ICAL) consisted of a 6-point calibration with 30, 70, 100, 200, 400, and 600 nanogram (ng) standards prepared on TST tubes. It was noted during sample analysis that some target compounds exceeded the calibration curve. Calibration standards at 1000 and 2000 ng were then run to expand the calibration range.

The calibration was performed using the internal standard method. The average response factor, over the range of calibration, and the percent relative standard deviation (%RSD) of the set of standards was calculated for each target compound. Procedure LA-523-408 requires a 5-point calibration curve with a %RSD of less than 25 %. The results are tabulated in the Response Factor Report.

Twenty-three of the 33 target list analytes met the initial calibration requirements using the average response factor method of calculation. Compounds with chains of 8 or more carbon atoms exhibited a trend toward higher response factors, however, these compounds fit a linear regression with a coefficient of determination (r^2) of 0.993 or better. As a further check on the linear regression calibration, the calibration standards were processed as samples and the results were used to calculate the recovery of each analyte compared to the amount in the standard. The results are tabulated in the Linear and Quadratic Calibration Verification Table.

Three of the hydrocarbons (undecane, dodecane, and tridecane) exhibited a trend toward a quadratic curve fit in the 30 - 600 nanogram range but meet the requirements for an average response factor calculation in the range of 600 - 2000 nanograms. A 4-point curve was established in the 600 - 2000 nanogram range. The samples in this set contained the 3 analytes at concentrations within or above the 600 - 2000 nanogram range, therefore, the average response factor calculation was used for the sample results. The quadratic equation was used to calculate the recoveries in daily calibration checks (CCVSs) and laboratory control samples (LCSSs).

CCVSs were analyzed daily to monitor instrument response. Procedure LA-523-408 requires that the daily response factor for each analyte be within 25 % of the average response factor established in the initial calibration. For compounds calibrated by the linear regression method, a recovery based on the known amount in the CCVS was calculated. With the exception of n-dodecane on 01/10/99 (62%) and 01/11/99 (62%), which was calculated from a quadratic equation, all the target analytes were within acceptable limits. The response factor deviations and analyte recoveries are tabulated in the TST Continuing Calibration Table.

A laboratory control sample (LCS) prepared with standards from an independent source was analyzed in duplicate. LA-523-408 requires that the recovery of each LCS analyte be within 65 - 135 % and the relative percent difference (RPD) be within 35 %. All of the LCS analytes met the requirement. The results are tabulated in the Laboratory Control Sample Results Table.

LA-523-408 requires that the internal standard area counts for samples must be within 50 - 150 % of the area counts for the daily CCVSs. The area counts for benzene-d6 and ethylbenzene-d10 were within acceptable limits. The area counts for dodecane-d26 exceeded the requirement, however, that measurement affects only the quantitation of dodecane and tridecane in the CCVS and LCS samples. Sample results were not affected because dodecane and tridecane were quantitated using ethylbenzene-d10 instead of dodecane-d26 as the internal standard in the samples. Internal standard area counts for samples and CCVSs are tabulated in the TST Internal Standards Area Counts Table.

Surrogates were added to TST tubes prior to sample collection. All surrogate recoveries were within acceptable limits. Surrogate recoveries for samples and blanks are tabulated in the Surrogate Compounds Results Table.

A method performance blank, trip blank, and field blank were analyzed with the sample set. Target analytes were not observed in the blanks at concentrations greater than one-half the VPRQL, the action limit (0.075 mg/m³), except n-tridecane (0.129 mg/m³) in the field blank. Results for the blank analysis are tabulated in the TST Blank Summary Table.

Sample VS006-053-TS02 was lost in analysis.

A large number of tentatively identified compounds (TICs) were observed in this sample set. A computer search was run to match the mass spectra of the TICs to library spectra of standard compounds. The concentrations of the TICs were calculated based on a response factor of 1 relative to hexafluorobenzene. TICs with an area count greater than 10% of the area of hexafluorobenzene were reported.

The TIC Library Search Reports in Section 2.3.4 list the 5 highest quality, computerized library search matches. The results listed in the TIC Summary Tables were based on the judgement of the analyst using both the computerized library search and manual search techniques to tentatively identify the non-target compounds.

TICs with responses greater than 10% of the nearest internal standard were not detected in the field blank, trip blank, method performance blank, or baseline ambient air sample.

n-Hexane and n-octane were flagged with an "*" in the Sample Summary Tables to indicate a difficulty encountered in quantitating these analytes. n-Hexane coeluted with 1-hexene and n-octane coeluted with 3-methylene heptane, TICs which contain the ions used to quantitate n-hexane and n-octane. Since there were no ions unique to the target analytes that were satisfactory for quantitative analysis, n-hexane and n-octane were not quantitated or reported above their VPRQLs.

2.3.2 TST Result Summary Tables

The result summary tables are organized by sample. All reported values have been corrected to 25 °C and 1 atmosphere pressure. The following are included:

- Sample Summary Tables for target analytes
- TIC Summary Tables
- Blank Summary Table.

TST Sample Summary Table (page 1 of 7)

296-C-006 Stack Triple Sorbent Traps Sample Summary Table		Sample Number		VS006-004-TS11			VS006-012-TS14		
		Analysis Date		01/08/99			01/09/99		
		Data File ID		39010623.D			39010629.D		
Target Analyte	CAS #	VPRQL mg/m ³	VPRQL ppbv	mg/m ³	ppbv	Flag	mg/m ³	ppbv	Flag
Methanol	67-56-1	0.15	110	0.15	110	M	0.15	110	M
Ethanol	64-17-5	0.15	80	0.15	80	M	0.15	80	Q
Acetone	67-64-1	0.15	63	0.15	63	M	0.15	63	Q
Acetonitrile	75-05-8	0.15	89	0.15	89	M	0.15	89	M
Dichloromethane	75-09-2	0.15	43	0.15	43	M	0.15	43	M
1-Propanol	71-23-8	0.15	61	0.15	61	M	0.15	61	Q
n-Hexane	110-54-3	0.15	43	0.15	43	M	0.15	43	Q*
Butanal	123-72-8	0.15	51	0.15	51	M	0.15	51	Q
Propanenitrile	107-12-0	0.15	67	0.15	67	M	0.15	67	M
Chloroform	67-66-3	0.15	31	0.15	31	M	0.15	31	M
Tetrahydrofuran	109-99-9	0.15	51	0.15	51	M	0.15	51	Q
1-Butanol	71-36-3	0.15	49	0.15	49	M	0.19	63	
n-Heptane	142-82-5	0.15	37	0.15	37	M	0.15	37	Q
Tetrachloromethane	56-23-5	0.15	24	0.15	24	M	0.15	24	M
Benzene	71-43-2	0.15	47	0.15	47	M	0.15	47	M
2-Pentanone	107-87-9	0.15	43	0.15	43	M	0.15	43	Q
Butanenitrile	109-74-0	0.15	53	0.15	53	M	0.15	53	M
n-Octane	111-65-9	0.15	32	0.15	32	M	0.15	32	Q*
Toluene	108-88-3	0.15	40	0.15	40	Q	0.15	40	Q
2-Hexanone	591-78-6	0.15	37	0.15	37	M	0.15	37	Q
Pentanenitrile	110-59-8	0.15	44	0.15	44	M	0.15	44	Q
Tetrachloroethylene	127-18-4	0.15	22	0.15	22	M	0.15	22	M
n-Nonane	111-84-2	0.15	29	0.15	29	M	0.15	29	Q
2-Heptanone	110-43-0	0.15	32	0.15	32	M	0.15	32	Q
Hexanenitrile	628-73-9	0.15	38	0.15	38	M	0.15	38	Q
o-Xylene	95-47-6	0.15	34	0.15	34	M	0.15	34	M
n-Decane	124-18-5	0.15	26	0.15	26	M	0.15	26	Q
2-Octanone	111-13-7	0.15	29	0.15	29	M	0.15	29	M
Heptanenitrile	629-08-3	0.15	33	0.15	33	M	0.15	33	Q
1,2,4-Trimethylbenzene	95-63-6	0.15	30	0.15	30	M	0.15	30	Q
n-Undecane	1120-21-4	0.15	23	0.15	23	M	0.39	62	
n-Dodecane	112-40-3	0.15	22	0.15	22	M	0.50	72	
n-Tridecane	629-50-5	0.15	20	0.15	20	F, M	0.51	68	F

All reported values have been corrected to 25 °C and 1 atmosphere pressure.

Data Flags:

F: Target analyte reported in sample was also found in field blank above action limit.

*: Data did not meet quality control requirements; refer to data package case narrative.

M: Target analyte was absent (not detected) in sample.

E: Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.

Q: Target analyte was detected, but at concentrations less than the VPRQL.

TST Sample Summary Table (page 2 of 7)

296-C-006 Stack Triple Sorbent Traps Sample Summary Table		Sample Number		VS006-020-TS16			VS006-027-TS07		
		Analysis Date		01/09/99			01/07/99		
		Data File ID		39010631.D			39010616.D		
Target Analyte	CAS #	VPRQL mg/m ³	VPRQL ppbv	mg/m ³	ppbv	Flag	mg/m ³	ppbv	Flag
Methanol	67-56-1	0.15	110	0.15	110	M	0.15	110	M
Ethanol	64-17-5	0.15	80	0.15	80	Q	0.15	80	Q
Acetone	67-64-1	0.15	63	0.15	63	Q	0.15	63	Q
Acetonitrile	75-05-8	0.15	89	0.15	89	M	0.15	89	M
Dichloromethane	75-09-2	0.15	43	0.15	43	M	0.15	43	M
1-Propanol	71-23-8	0.15	61	0.15	61	Q	0.15	61	Q
n-Hexane	110-54-3	0.15	43	0.15	43	Q*	0.15	43	Q*
Butanal	123-72-8	0.15	51	0.15	51	Q	0.15	51	Q
Propanenitrile	107-12-0	0.15	67	0.15	67	M	0.15	67	M
Chloroform	67-66-3	0.15	31	0.15	31	M	0.15	31	M
Tetrahydrofuran	109-99-9	0.15	51	0.15	51	M	0.15	51	M
1-Butanol	71-36-3	0.15	49	0.25	81		0.26	86	
n-Heptane	142-82-5	0.15	37	0.71	170		1.7	420	
Tetrachloromethane	56-23-5	0.15	24	0.15	24	M	0.15	24	M
Benzene	71-43-2	0.15	47	0.15	47	M	0.15	47	M
2-Pentanone	107-87-9	0.15	43	0.15	43	Q	0.15	43	Q
Butanenitrile	109-74-0	0.15	53	0.15	53	M	0.15	53	M
n-Octane	111-65-9	0.15	32	0.15	32	Q*	0.15	32	Q*
Toluene	108-88-3	0.15	40	0.15	40	Q	0.15	40	Q
2-Hexanone	591-78-6	0.15	37	0.15	37	Q	0.18	43	
Pentanenitrile	110-59-8	0.15	44	0.15	44	Q	0.21	61	
Tetrachloroethylene	127-18-4	0.15	22	0.15	22	M	0.15	22	M
n-Nonane	111-84-2	0.15	29	0.15	29	Q	0.28	54	
2-Heptanone	110-43-0	0.15	32	0.33	71		1.0	220	
Hexanenitrile	628-73-9	0.15	38	0.15	38	Q	0.24	61	
o-Xylene	95-47-6	0.15	34	0.15	34	Q	0.15	34	M
n-Decane	124-18-5	0.15	26	0.33	57		0.83	140	
2-Octanone	111-13-7	0.15	29	0.15	29	Q	0.15	29	Q
Heptanenitrile	629-08-3	0.15	33	0.15	33	Q	0.16	35	
1,2,4-Trimethylbenzene	95-63-6	0.15	30	0.15	30	M	0.15	30	M
n-Undecane	1120-21-4	0.15	23	1.1	170		1.8	290	
n-Dodecane	112-40-3	0.15	22	2.1	300	E	3.0	430	E
n-Tridecane	629-50-5	0.15	20	2.3	310	F, E	5.0	660	F, E

All reported values have been corrected to 25 °C and 1 atmosphere pressure.

Data Flags:

F: Target analyte reported in sample was also found in field blank above action limit.

*: Data did not meet quality control requirements; refer to data package case narrative.

M: Target analyte was absent (not detected) in sample.

E: Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.

Q: Target analyte was detected, but at concentrations less than the VPRQL.

TST Sample Summary Table (page 3 of 7)

296-C-006 Stack Triple Sorbent Traps Sample Summary Table		Sample Number		VS006-036-TS10			VS006-044-TS24		
		Analysis Date		01/08/99			01/09/99		
		Data File ID		39010622.D			39010632.D		
Target Analyte	CAS #	VPRQL mg/m ³	VPRQL ppbv	mg/m ³	ppbv	Flag	mg/m ³	ppbv	Flag
Methanol	67-56-1	0.15	110	0.15	110	M	0.15	110	M
Ethanol	64-17-5	0.15	80	0.16	83		0.24	130	
Acetone	67-64-1	0.15	63	0.15	63	Q	0.15	63	Q
Acetonitrile	75-05-8	0.15	89	0.15	89	Q	0.15	89	M
Dichloromethane	75-09-2	0.15	43	0.15	43	M	0.15	43	M
1-Propanol	71-23-8	0.15	61	0.15	61	Q	0.15	61	Q
n-Hexane	110-54-3	0.15	43	0.15	43	Q*	0.15	43	Q*
Butanal	123-72-8	0.15	51	0.15	51	Q	0.15	51	Q
Propanenitrile	107-12-0	0.15	67	0.15	67	M	0.15	67	M
Chloroform	67-66-3	0.15	31	0.15	31	M	0.15	31	M
Tetrahydrofuran	109-99-9	0.15	51	0.15	51	M	0.15	51	Q
1-Butanol	71-36-3	0.15	49	0.33	110		0.27	89	
n-Heptane	142-82-5	0.15	37	1.6	390		1.3	320	E
Tetrachloromethane	56-23-5	0.15	24	0.15	24	M	0.15	24	M
Benzene	71-43-2	0.15	47	0.15	47	M	0.15	47	M
2-Pentanone	107-87-9	0.15	43	0.15	43	Q	0.15	43	Q
Butanenitrile	109-74-0	0.15	53	0.15	53	Q	0.16	57	
n-Octane	111-65-9	0.15	32	0.15	32	Q*	0.15	32	Q*
Toluene	108-88-3	0.15	40	0.15	40	Q	0.15	40	Q
2-Hexanone	591-78-6	0.15	37	0.17	41		0.17	43	
Pentanenitrile	110-59-8	0.15	44	0.20	58		0.19	57	
Tetrachloroethylene	127-18-4	0.15	22	0.15	22	M	0.15	22	Q
n-Nonane	111-84-2	0.15	29	0.27	52		0.25	47	
2-Heptanone	110-43-0	0.15	32	1.1	230		0.94	200	
Hexanenitrile	628-73-9	0.15	38	0.23	59		0.18	46	
o-Xylene	95-47-6	0.15	34	0.15	34	Q	0.15	34	M
n-Decane	124-18-5	0.15	26	0.83	140		0.75	130	
2-Octanone	111-13-7	0.15	29	0.15	29	Q	0.15	29	Q
Heptanenitrile	629-08-3	0.15	33	0.18	39		0.15	33	Q
1,2,4-Trimethylbenzene	95-63-6	0.15	30	0.15	30	M	0.15	30	M
n-Undecane	1120-21-4	0.15	23	1.8	280	E	1.4	220	E
n-Dodecane	112-40-3	0.15	22	2.8	400	E	2.2	320	E
n-Tridecane	629-50-5	0.15	20	5.9	790	F, E	4.3	570	F, E

All reported values have been corrected to 25 °C and 1 atmosphere pressure.

Data Flags:

F: Target analyte reported in sample was also found in field blank above action limit.

*: Data did not meet quality control requirements; refer to data package case narrative.

M: Target analyte was absent (not detected) in sample.

E: Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.

Q: Target analyte was detected, but at concentrations less than the VPRQL.

TST Sample Summary Table (page 4 of 7)

296-C-006 Stack Triple Sorbent Traps Sample Summary Table		Sample Number		VS006-061-TS15			VS006-070-TS13		
		Analysis Date		01/09/99			01/09/99		
		Data File ID		39010630.D			39010628.D		
Target Analyte	CAS #	VPRQL mg/m ³	VPRQL ppbv	mg/m ³	ppbv	Flag	mg/m ³	ppbv	Flag
Methanol	67-56-1	0.15	110	0.15	110	M	0.15	110	M
Ethanol	64-17-5	0.15	80	0.23	120		0.29	150	
Acetone	67-64-1	0.15	63	0.15	63	Q	0.15	63	Q
Acetonitrile	75-05-8	0.15	89	0.15	89	Q	0.15	89	Q
Dichloromethane	75-09-2	0.15	43	0.15	43	M	0.15	43	M
1-Propanol	71-23-8	0.15	61	0.15	61	Q	0.15	61	Q
n-Hexane	110-54-3	0.15	43	0.15	43	Q*	0.15	43	Q*
Butanal	123-72-8	0.15	51	0.15	51	Q	0.15	51	Q
Propanenitrile	107-12-0	0.15	67	0.15	67	M	0.15	67	M
Chloroform	67-66-3	0.15	31	0.15	31	M	0.15	31	M
Tetrahydrofuran	109-99-9	0.15	51	0.15	51	M	0.15	51	Q
1-Butanol	71-36-3	0.15	49	0.49	160		0.50	170	
n-Heptane	142-82-5	0.15	37	2.8	670	E	3.1	750	E
Tetrachloromethane	56-23-5	0.15	24	0.15	24	M	0.15	24	M
Benzene	71-43-2	0.15	47	0.15	47	M	0.15	47	M
2-Pentanone	107-87-9	0.15	43	0.15	43	Q	0.15	43	Q
Butanenitrile	109-74-0	0.15	53	0.15	53	M	0.15	53	M
n-Octane	111-65-9	0.15	32	0.15	32	Q*	0.15	32	Q*
Toluene	108-88-3	0.15	40	0.21	57		0.22	59	
2-Hexanone	591-78-6	0.15	37	0.36	89		0.37	91	
Pentanenitrile	110-59-8	0.15	44	0.36	110		0.35	100	
Tetrachloroethylene	127-18-4	0.15	22	0.15	22	Q	0.15	22	M
n-Nonane	111-84-2	0.15	29	0.58	110		0.60	110	
2-Heptanone	110-43-0	0.15	32	1.7	370		1.9	420	
Hexanenitrile	628-73-9	0.15	38	0.42	100		0.44	110	
o-Xylene	95-47-6	0.15	34	0.15	34	Q	0.15	34	M
n-Decane	124-18-5	0.15	26	1.6	280		1.6	270	
2-Octanone	111-13-7	0.15	29	0.15	29		0.16	30	
Heptanenitrile	629-08-3	0.15	33	0.34	75		0.30	67	
1,2,4-Trimethylbenzene	95-63-6	0.15	30	0.15	30	M	0.15	30	M
n-Undecane	1120-21-4	0.15	23	2.6	400	E	2.7	420	E
n-Dodecane	112-40-3	0.15	22	3.7	520	E	3.9	560	E
n-Tridecane	629-50-5	0.15	20	7.2	960	F, E	7.8	1000	F, E

All reported values have been corrected to 25 °C and 1 atmosphere pressure.

Data Flags:

F: Target analyte reported in sample was also found in field blank above action limit.

*: Data did not meet quality control requirements; refer to data package case narrative.

M: Target analyte was absent (not detected) in sample.

E: Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.

Q: Target analyte was detected, but at concentrations less than the VPRQL.

TST Sample Summary Table (page 5 of 7)

296-C-006 Stack Triple Sorbent Traps Sample Summary Table		Sample Number		VS006-077-TS12			VS006-085-TS28		
		Analysis Date		01/09/99			01/10/99		
		Data File ID		39010627.D			39010636.D		
Target Analyte	CAS #	VPRQL mg/m ³	VPRQL ppbv	mg/m ³	ppbv	Flag	mg/m ³	ppbv	Flag
Methanol	67-56-1	0.15	110	0.15	110	M	0.15	110	M
Ethanol	64-17-5	0.15	80	0.27	140		0.21	110	
Acetone	67-64-1	0.15	63	0.15	63	Q	0.15	63	Q
Acetonitrile	75-05-8	0.15	89	0.15	89	Q	0.15	89	Q
Dichloromethane	75-09-2	0.15	43	0.15	43	Q	0.15	43	M
1-Propanol	71-23-8	0.15	61	0.15	61	Q	0.15	61	Q
n-Hexane	110-54-3	0.15	43	0.15	43	Q*	0.15	43	Q*
Butanal	123-72-8	0.15	51	0.15	51	Q	0.15	51	Q
Propanenitrile	107-12-0	0.15	67	0.15	67	M	0.15	67	M
Chloroform	67-66-3	0.15	31	0.15	31	M	0.15	31	M
Tetrahydrofuran	109-99-9	0.15	51	0.15	51	M	0.15	51	M
1-Butanol	71-36-3	0.15	49	0.47	160		0.54	180	
n-Heptane	142-82-5	0.15	37	3.0	740	E	2.6	640	E
Tetrachloromethane	56-23-5	0.15	24	0.15	24	M	0.15	24	M
Benzene	71-43-2	0.15	47	0.15	47	M	0.15	47	M
2-Pentanone	107-87-9	0.15	43	0.15	43	Q	0.15	43	Q
Butanenitrile	109-74-0	0.15	53	0.16	56		0.28	100	
n-Octane	111-65-9	0.15	32	0.15	32	Q*	0.15	32	Q*
Toluene	108-88-3	0.15	40	0.22	57		0.20	53	
2-Hexanone	591-78-6	0.15	37	0.39	96		0.39	95	
Pentanenitrile	110-59-8	0.15	44	0.37	110		0.41	120	
Tetrachloroethylene	127-18-4	0.15	22	0.15	22	Q	0.15	22	M
n-Nonane	111-84-2	0.15	29	0.57	110		0.58	110	
2-Heptanone	110-43-0	0.15	32	2.0	430	E	1.8	390	
Hexanenitrile	628-73-9	0.15	38	0.54	140		0.42	110	
o-Xylene	95-47-6	0.15	34	0.15	34	Q	0.15	34	Q
n-Decane	124-18-5	0.15	26	2.0	340	E	1.7	290	
2-Octanone	111-13-7	0.15	29	0.17	32		0.16	30	
Heptanenitrile	629-08-3	0.15	33	0.39	87		0.35	77	
1,2,4-Trimethylbenzene	95-63-6	0.15	30	0.15	30	Q	0.15	30	M
n-Undecane	1120-21-4	0.15	23	3.0	470	E	2.6	410	E
n-Dodecane	112-40-3	0.15	22	4.2	610	E	3.9	560	E
n-Tridecane	629-50-5	0.15	20	8.3	1100	F, E	7.5	990	F, E

All reported values have been corrected to 25 °C and 1 atmosphere pressure.

Data Flags:

F: Target analyte reported in sample was also found in field blank above action limit.

*: Data did not meet quality control requirements; refer to data package case narrative.

M: Target analyte was absent (not detected) in sample.

E: Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.

Q: Target analyte was detected, but at concentrations less than the VPRQL.

TST Sample Summary Table (page 6 of 7)

296-C-006 Stack Triple Sorbent Traps Sample Summary Table		Sample Number		VS006-092-TS25			VS006-100-TS50		
		Analysis Date		01/10/99			01/11/99		
		Data File ID		39010635.D			39010642.D		
Target Analyte	CAS #	VPRQL mg/m ³	VPRQL ppbv	mg/m ³	ppbv	Flag	mg/m ³	ppbv	Flag
Methanol	67-56-1	0.15	110	0.15	110	M	0.15	110	M
Ethanol	64-17-5	0.15	80	0.24	130		0.23	120	
Acetone	67-64-1	0.15	63	0.15	63	Q	0.15	63	Q
Acetonitrile	75-05-8	0.15	89	0.15	89	Q	0.15	89	Q
Dichloromethane	75-09-2	0.15	43	0.15	43	M	0.15	43	M
1-Propanol	71-23-8	0.15	61	0.15	61	Q	0.15	61	Q
n-Hexane	110-54-3	0.15	43	0.15	43	Q*	0.15	43	Q*
Butanal	123-72-8	0.15	51	0.15	51	Q	0.15	51	Q
Propanenitrile	107-12-0	0.15	67	0.15	67	M	0.15	67	M
Chloroform	67-66-3	0.15	31	0.15	31	M	0.15	31	M
Tetrahydrofuran	109-99-9	0.15	51	0.15	51	Q	0.15	51	M
1-Butanol	71-36-3	0.15	49	0.47	150		0.43	140	
n-Heptane	142-82-5	0.15	37	2.3	550	E	2.0	480	E
Tetrachloromethane	56-23-5	0.15	24	0.15	24	M	0.15	24	M
Benzene	71-43-2	0.15	47	0.15	47	M	0.15	47	M
2-Pentanone	107-87-9	0.15	43	0.15	43	Q	0.15	43	Q
Butanenitrile	109-74-0	0.15	53	0.15	53	Q	0.15	53	Q
n-Octane	111-65-9	0.15	32	0.15	32	Q*	0.15	32	Q*
Toluene	108-88-3	0.15	40	0.17	45		0.15	40	Q
2-Hexanone	591-78-6	0.15	37	0.32	77		0.31	77	
Pentanenitrile	110-59-8	0.15	44	0.30	90		0.28	83	
Tetrachloroethylene	127-18-4	0.15	22	0.15	22	Q	0.15	22	Q
n-Nonane	111-84-2	0.15	29	0.50	95		0.36	68	
2-Heptanone	110-43-0	0.15	32	1.7	370		1.5	320	
Hexanenitrile	628-73-9	0.15	38	0.37	92		0.33	83	
o-Xylene	95-47-6	0.15	34	0.15	34	Q	0.15	34	Q
n-Decane	124-18-5	0.15	26	1.4	240		1.2	210	
2-Octanone	111-13-7	0.15	29	0.15	29	Q	0.15	29	Q
Heptanenitrile	629-08-3	0.15	33	0.33	72		0.30	67	
1,2,4-Trimethylbenzene	95-63-6	0.15	30	0.15	30	M	0.15	30	M
n-Undecane	1120-21-4	0.15	23	2.5	390	E	2.1	330	E
n-Dodecane	112-40-3	0.15	22	3.7	530	E	3.0	440	E
n-Tridecane	629-50-5	0.15	20	7.0	920	F, E	5.9	780	F, E

All reported values have been corrected to 25 °C and 1 atmosphere pressure.

Data Flags:

F: Target analyte reported in sample was also found in field blank above action limit.

*: Data did not meet quality control requirements; refer to data package case narrative.

M: Target analyte was absent (not detected) in sample.

E: Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.

Q: Target analyte was detected, but at concentrations less than the VPRQL.

TST Sample Summary Table (page 7 of 7)

296-C-006 Stack Triple Sorbent Traps Sample Summary Table		Sample Number		VS006-107-TS43			VS006-115-TS30		
		Analysis Date		01/10/99			01/10/99		
		Data File ID		39010639.D			39010637.D		
Target Analyte	CAS #	VPRQL mg/m ³	VPRQL ppbv	mg/m ³	ppbv	Flag	mg/m ³	ppbv	Flag
Methanol	67-56-1	0.15	110	0.15	110	M	0.15	110	M
Ethanol	64-17-5	0.15	80	0.40	210		0.24	130	
Acetone	67-64-1	0.15	63	0.30	120		0.15	63	Q
Acetonitrile	75-05-8	0.15	89	0.15	89	Q	0.15	89	Q
Dichloromethane	75-09-2	0.15	43	0.15	43	M	0.15	43	M
1-Propanol	71-23-8	0.15	61	0.15	61	Q	0.15	61	Q
n-Hexane	110-54-3	0.15	43	0.15	43	Q*	0.15	43	Q*
Butanal	123-72-8	0.15	51	0.15	51	Q	0.15	51	Q
Propanenitrile	107-12-0	0.15	67	0.15	67	Q	0.15	67	M
Chloroform	67-66-3	0.15	31	0.15	31	M	0.15	31	M
Tetrahydrofuran	109-99-9	0.15	51	0.15	51	M	0.15	51	M
1-Butanol	71-36-3	0.15	49	0.42	140		0.42	140	
n-Heptane	142-82-5	0.15	37	1.8	450		1.6	380	
Tetrachloromethane	56-23-5	0.15	24	0.15	24	M	0.15	24	M
Benzene	71-43-2	0.15	47	0.15	47	M	0.15	47	M
2-Pentanone	107-87-9	0.15	43	0.15	43	Q	0.15	43	Q
Butanenitrile	109-74-0	0.15	53	0.22	76		0.23	80	
n-Octane	111-65-9	0.15	32	0.15	32	Q*	0.15	32	Q*
Toluene	108-88-3	0.15	40	0.15	40	Q	0.15	40	Q
2-Hexanone	591-78-6	0.15	37	0.30	73		0.29	72	
Pentanenitrile	110-59-8	0.15	44	0.28	81		0.24	69	
Tetrachloroethylene	127-18-4	0.15	22	0.15	22	Q	0.15	22	Q
n-Nonane	111-84-2	0.15	29	0.40	76		0.37	70	
2-Heptanone	110-43-0	0.15	32	1.4	300		1.4	300	
Hexanenitrile	628-73-9	0.15	38	0.35	89		0.26	65	
o-Xylene	95-47-6	0.15	34	0.15	34	Q	0.15	34	Q
n-Decane	124-18-5	0.15	26	1.2	210		0.95	160	
2-Octanone	111-13-7	0.15	29	0.15	29	Q	0.15	29	Q
Heptanenitrile	629-08-3	0.15	33	0.28	61		0.26	56	
1,2,4-Trimethylbenzene	95-63-6	0.15	30	0.15	30	M	0.15	30	M
n-Undecane	1120-21-4	0.15	23	2.0	320	E	1.9	290	
n-Dodecane	112-40-3	0.15	22	2.9	420	E	2.8	400	E
n-Tridecane	629-50-5	0.15	20	5.9	780	F, E	5.6	750	F, E

All reported values have been corrected to 25 °C and 1 atmosphere pressure.

Data Flags:

F: Target analyte reported in sample was also found in field blank above action limit.

*: Data did not meet quality control requirements; refer to data package case narrative.

M: Target analyte was absent (not detected) in sample.

E: Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.

Q: Target analyte was detected, but at concentrations less than the VPRQL.

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table			Sample Number: VS006-012-TS14 Analysis Date: 1/9/99 Data File ID: 39010629.D				
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
10.17	Pentane	109-66-0	53	72	0.073	25	J,N
12.99	1-hexene	592-41-9		84	0.037	11	J,N
16.56	2-Heptene	592-77-8	72	98	0.042	10	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	2.9	620	J,N
20.95	Formamide, N,N-dimethyl-	68-12-2	86	73	0.033	11	J,N
22.47	3-Heptanone	106-35-4	91	114	0.16	34	J,N
23.99	Unknown				0.033		J,N
24.30	Unknown				0.077		J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table			Sample Number: VS006-020-TS16				
			Analysis Date: 1/9/99				
			Data File ID: 39010631.D				
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.44	1-Propene	115-07-1	94	42	0.036	21	J,N
8.32	1-Propene, 2-methyl-	115-11-7	87	56	0.11	48	J,N
10.17	Butane, 2-methyl-	78-78-4	42	72	0.33	110	J,N
12.02	Pentane, 2-methyl-	107-83-5	52	86	0.038	11	J,N
13.40	1-Hexene	592-41-6	64	84	0.041	12	J,N
14.29	2-Butanone	78-93-3	55	72	0.035	12	J,N
15.44	3-Heptene	592-78-9	64	98	0.033	8.1	J,N
16.33	3-Heptene	592-78-9	97	98	1.3	330	J,N
16.90	2-Heptene	592-77-8	95	98	0.83	210	J,N
17.16	Unknown				0.060		J,N
17.30	Unknown				0.042		J,N
18.34	Heptane, 3-methyl-	589-81-1	49	114	0.49	110	J,N
18.52	2,3-Hexadiene, 2-methyl-	29212-09-7	86	96	0.36	91	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	0.78	170	J,N
19.19	2-Heptyne	1119-65-9	74	96	0.19	48	J,N
19.75	Trans-1-butyl-2-methylcyclopropane	38851-70-6	86	112	0.057	12	J,N
20.83	Cyclohexane, 1,1,3-trimethyl-	3073-66-3	53	126	0.040	7.7	J,N
21.01	Alkane				0.064		J,N
22.47	Alkene				1.5		J,N
22.97	Alkene				0.12		J,N
23.52	Unknown				0.093		J,N
23.65	1,3-Diethyl-1,4-Epoxybutane			128	0.19	36	J,N
23.76	Furan, 2,5-Diethyltetrahydro	41239-48-9	59	128	0.22	42	J,N
23.98	Multiple Peaks				0.35		J,N
24.61	Decane, 4-methyl-	2847-72-5	87	156	0.17	27	J,N
25.09	Cyclohexane, 1-methyl-3-propyl-	4291-80-9	43	140	0.043	7.4	J,N
25.27	Unknown				0.035		J,N
25.53	Unknown				0.072		J,N
25.63	Cycloalkane/alkene				0.060		J,N
25.72	1-Undecane	821-95-4	92	154	0.24	38	J,N
25.87	2-Azabicyclo[2.2.1]heptane	279-24-3	72	97	0.33	82	J,N
26.65	C-12 Hydrocarbon				0.051		J,N
26.94	C-12 Hydrocarbon				0.14		J,N
27.33	Naphthalene, decahydro- & others	91-17-8	95	138	0.28	50	J,N
27.44	Alkane				0.043		J,N
27.83	Undecane, 3-methyl-	1002-43-3	59	170	0.049	7.0	J,N
28.08	Cyclohexane, pentyl-	4292-92-6	87	154	0.071	11	J,N
28.25	Unknown				0.11		J,N
28.60	Undecane, 2,6-dimethyl-	17301-23-4	97	184	0.39	52	J,N
28.93	Naphthalene, decahydro-2-methyl-	2958-76-1	49	153	0.19	30	J,N
29.42	Naphthalene, decahydro-2,6-dimethyl	1618-22-0	55	166	0.17	25	J,N
29.74	Unknown				0.094		J,N
29.85	Naphthalene, decahydro-1,6-dimethyl	1750-51-2	93	166	0.19	28	J,N
30.07	Naphthalene, decahydro-1,6-dimethyl	1750-51-2	55	166	0.081	12	J,N
30.24	Cycloalkane/alkene				0.16		J,N
31.30	Cycloalkane/alkene				0.12		J,N
31.73	Unknown				0.044		J,N
32.30	Tetradecane	629-59-4	97	198	0.094	12	J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table		Sample Number: VS006-027-TS07 Analysis Date: 1/7/99 Data File ID: 39010616.D					
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.46	1-Propene	115-07-1	91	42	0.27	160	J,N
8.36	1-Propene, 2-methyl-	115-11-7	86	56	0.60	260	J,N
8.89	1-Propene, 2-methyl-	115-11-7	58	56	0.049	21	J,N
10.19	1-Pentene	109-67-1	59	70	0.058	20	J,N
10.61	1-Butene, 2-methyl-	563-46-2	74	70	0.039	14	J,N
12.01	Pentane, 2-methyl-	107-83-5	59	86	0.072	20	J,N
12.97	1-Hexene	592-41-6		84	1.1	310	J,N
13.42	2-Hexene	4050-45-7	59	60	0.085	35	J,N
15.45	3-Heptene	592-78-9	52	98	0.12	31	J,N
16.34	3-Heptene	592-78-9	97	98	2.6	640	J,N
16.91	2-Heptene	592-77-8	95	98	1.9	480	J,N
17.17	Unknown				0.17		J,N
17.32	Unknown				0.088		J,N
17.74	2-Pentenitrile	13284-42-9	49	81	0.061	18	J,N
18.36	Heptane, 3-methyl-	589-81-1	78	114	1.3	270	J,N
18.53	2,3-Hexadiene, 2-methyl-	29212-09-7	87	96	0.93	240	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	1.9	410	J,N
19.20	2-Heptyne	1119-65-9	90	96	0.51	130	J,N
21.03	Alkane				0.14		J,N
21.21	Unknown				0.049		J,N
22.50	3-Heptanone	106-35-4	80	114	3.1	660	J,N
23.17	Alkane				0.043		J,N
23.55	Unknown				0.26		J,N
23.68	1,3-Diethyl-1,4-Epoxybutane		72	128	0.50	96	J,N
23.78	Furan, 2,5-Diethyltetrahydro	41239-48-9	64	128	0.66	130	J,N
24.01	Multiple Peaks				0.91		J,N
24.63	Decane, 4-methyl-	2847-72-5	87	156	0.37	58	J,N
25.11	Cycloalkane/alkene				0.12		J,N
25.30	Unknown				0.076		J,N
25.56	Unknown				0.16		J,N
25.73	1-Hexanol, 2-ethyl-	104-76-7	90	130	1.5	280	J,N
25.89	2-Azabicyclo[2.2.1]heptane	279-24-3	72	97	0.87	220	J,N
26.67	C-12 Hydrocarbon				0.12		J,N
26.97	C-12 Hydrocarbon				0.29		J,N
27.36	Naphthalene, decahydro-& others	91-17-8	95	138	0.56	100	J,N
27.86	Undecane, 3-methyl-	1002-43-3	64	170	0.12	17	J,N
27.97	Unknown				0.064		J,N
28.11	Cyclohexane, pentyl-	4292-92-6	83	154	0.18	29	J,N
28.27	Unknown				0.36		J,N
28.62	Undecane, 2,6-dimethyl-	17301-23-4	97	184	0.98	130	J,N
28.95	Naphthalene, decahydro-2-methyl-	2958-76-1	49	152	0.40	65	J,N
29.45	Naphthalene, decahydro-2,6-dimethyl	1618-22-0	41	166	0.36	52	J,N
29.77	Tridecane, 7-methyl-	26730-14-3	91	198	1.1	140	J,N
30.10	Naphthalene, decahydro-1,6-dimethyl	1750-51-2	52	166	0.20	29	J,N
31.33	Cycloalkane/alkene				0.25		J,N
32.33	Tetradecane	629-59-4	96	198	0.41	50	J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table		Sample Number: VS006-036-TS10 Analysis Date: 1/8/99 Data File ID: 39010622.D					
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.51	1-Propene	115-07-1	91	42	0.20	120	J,N
8.39	1-Propene, 2-methyl-	115-11-7	86	56	0.13	55	J,N
10.25	Butane, 2-methyl-	78-78-4	53	72	0.51	170	J,N
12.07	Pentane, 2-methyl	107-83-5	58	86	0.071	20	J,N
13.00	1-Hexene	592-41-6		84	1.0	300	J,N
13.45	2-Hexene	4050-45-7	50	84	0.075	22	J,N
14.31	2-Butanone	78-93-3	72	72	0.065	22	J,N
15.07	Unkown				0.052		J,N
15.47	3-Heptene	592-78-9	50	98	0.13	32	J,N
16.34	3-Heptene	592-78-9	97	98	2.4	600	J,N
16.91	2-Heptene	592-77-8	95	98	1.9	460	J,N
17.17	Unknown				0.17		J,N
17.31	Unknown				0.11		J,N
17.74	2-Pentenitrile	13284-42-9	60	81	0.086	26	J,N
18.34	Heptane, 3-methyl-	589-81-1	72	114	1.2	250	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	1.8	390	J,N
19.19	2-Heptyne	1119-65-9	87	96	0.49	120	J,N
19.74	Trans-1-butyl-2-methylcyclopropane	38851-70-6	112	112	0.13	29	J,N
21.00	Alkane				0.13		J,N
21.18	Unknown				0.045		J,N
22.05	4-Heptanone	123-19-3	91	114	1.6	330	J,N
22.45	3-Heptanone	106-35-4	83	114	3.3	710	J,N
23.13	Unknown				0.047		J,N
23.24	Multiple Peaks				0.092		J,N
23.52	Unknown				0.30		J,N
23.64	1,3-Diethyl-1,4-Epoxybutane			128	0.60	110	J,N
23.75	Furan, 2,5-Diethyltetrahydro	41239-48-9	39	128	0.76	140	J,N
23.97	Multiple Peaks				1.0		J,N
24.28	Unknown				1.2		J,N
24.59	Decane, 4-methyl-	2847-72-5	83	156	0.36	56	J,N
25.06	Cyclohexane, 1-methyl-2-propyl-	4291-79-6	53	140	0.16	29	J,N
25.25	Unknown				0.079		J,N
25.51	Decane, 2-methyl-	6975-98-0	45	156	0.16	26	J,N
25.69	1-Hexanol, 2-ethyl-	104-76-7	86	130	2.6	480	J,N
25.85	2-Azabicyclo[2.2.1]heptane	279-24-3	72	97	1.0	250	J,N
26.51	Cyclohexanone,5-methyl-2-(1-methylethyl)	4941-53-1	64	154	0.070	11	J,N
26.63	C-12 Hydrocarbon				0.11		J,N
26.92	C-12 Hydrocarbon				0.28		J,N
27.32	Naphthalene, decahydro-, & others	91-17-8	95	166	0.47	69	J,N
27.81	Undecane, 3-methyl-	1002-43-3	72	170	0.11	15	J,N
28.06	Cyclohexane, pentyl-	4292-92-6	87	154	0.19	30	J,N
28.22	Unknown				0.50		J,N
28.90	Naphthalene, decahydro-2-methyl-	2958-76-1	76	152	0.39	63	J,N
29.40	Naphthalene, decahydro-2,6-dimethyl	1618-22-0	41	166	0.39	57	J,N
29.72	Unknown				1.5		J,N
30.05	Naphthalene, decahydro-1,6-dimethyl	1750-51-2	52	166	0.17	25	J,N
30.22	Cycloalkane/alkene				0.040		J,N
30.73	Alkane				0.098		J,N
31.29	Cycloalkane/alkene				0.30		J,N
31.71	Unknown				0.11		J,N
31.79	Unknown				0.16		J,N
32.28	Tetradecane	629-59-4	98	198	1.7	220	J,N

**296-C-006 Stack
Triple Sorbent Trap (TST)
Tentatively Identified Compounds
Summary Table**

Sample Number: VS006-044-TS24
Analysis Date: 1/9/99
Data File ID: 39010632.D

Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.55	1-Propene	115-07-1	91	42	0.028	16	J,N
7.68	1-Propene	115-07-1	87	42	0.031	18	J,N
8.44	1-Propene, 2-methyl-	115-11-7	87	56	0.12	53	J,N
10.30	Methylcyclobutane	598-61-8	49	70	0.11	39	J,N
10.46	1-Pentene	109-67-1	46	70	0.027	9.5	J,N
12.11	Pentane, 2-methyl-	107-83-5	58	86	0.064	18	J,N
12.42	Silanol, trimethyl-	1066-40-6	91	90	0.021	5.6	J,N
13.04	1-Hexene	592-41-6		84	0.92	270	J,N
13.49	2-Hexene	4050-45-7	59	84	0.071	21	J,N
14.41	2-Butanone	78-93-3	50	72	0.13	45	J,N
15.50	3-Heptene	592-78-9	68	98	0.12	31	J,N
16.37	3-Heptene	592-78-9	70	98	2.8	700	J,N
16.60	2-Heptene	592-77-8	96	98	3.0	750	J,N
16.95	2-Heptene	592-77-8	95	98	1.6	390	J,N
17.20	Unknown				0.15		J,N
17.35	Unknown				0.18		J,N
17.65	2,4-Hexadienal	142-83-6	80	96	0.022	5.7	J,N
17.77	2-Pentenitrile	13284-42-9	64	81	0.074	22	J,N
18.38	Heptane, 3-methyl-	589-81-1	86	114	1.1	230	J,N
18.56	2,3-Hexadiene, 2-methyl-	29212-09-7	87	96	0.80	200	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	1.5	330	J,N
19.22	2-Heptyne	1119-65-9	90	96	0.44	110	J,N
19.77	Trans-1-butyl-2-methylcyclopropane	38851-70-6	74	112	0.13	29	J,N
20.28	Hexanedinitrile	111-69-3	42	108	0.16	36	J,N
20.75	Unknown				0.040		J,N
21.04	Alkane				0.13		J,N
21.22	Unknown				0.043		J,N
22.50	3-Heptanone	106-35-4	80	114	2.9	610	J,N
23.19	Alkane				0.047		J,N
23.28	Multiple Peak				0.093		J,N
23.55	Unknown				0.31		J,N
23.67	1,3-Diethyl-1,4-Epoxybutane		59	128	0.61	120	J,N
23.78	Furan, 2,5-Diethyltetrahydro	41239-48-9	59	128	0.74	140	J,N
24.00	Multiple Peak				0.98		J,N
24.32	Unknown				1.1		J,N
24.62	Decane, 4-methyl-	2847-72-5	72	156	0.37	57	J,N
25.08	Unknown				0.16		J,N
25.29	Unknown				0.076		J,N
25.55	Unknown				0.15		J,N
25.73	1-Hexanol, 2-ethyl-	104-76-7	90	130	2.2	410	J,N
25.89	2-Azabicyclo[2.2.1]heptane	279-24-3	72	97	0.92	230	J,N
26.54	1-Ethyl-2,2,6-Trimethylcyclohexane	10458-14-7	64	154	0.078	12	J,N

**296-C-006 Stack
Triple Sorbent Trap (TST)
Tentatively Identified Compounds
Summary Table**

Sample Number: VS006-044-TS24
Analysis Date: 1/9/99
Data File ID: 39010632.D

Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
26.66	C-12 Hydrocarbon				0.11		J,N
26.95	C-12 Hydrocarbon				0.28		J,N
27.35	Naphthalene, decahydro- & others	91-17-8	95	138	0.42	75	J,N
27.84	Undecane, 3-methyl-	1002-43-3	72	170	0.12	17	J,N
27.96	Unknown				0.050		J,N
28.09	Cyclohexane, pentyl-	4292-92-6	68	154	0.17	26	J,N
28.26	Unknown				0.45		J,N
28.76	C-13 Alkene				0.13		J,N
28.94	Naphthalene, decahydro-2-methyl-	2958-76-1	59	152	0.35	57	J,N
29.75	Tridecane, 7-methyl-	26730-14-3	83	198	1.2	150	J,N
30.09	Naphthalene, decahydro-1,6-dimethyl	1750-51-2	46	166	0.16	24	J,N
30.26	Cycloalkane/alkene				0.36		J,N
31.33	Unknown				0.26		J,N
31.75	Unknown				0.080		J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table		Sample Number: VS006-061-TS15 Analysis Date: 1/9/99 Data File ID: 39010630.D					
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.43	1-Propene	115-07-1	94	42	0.055	32	J,N
8.31	1-Propene, 2-methyl-	115-11-7	87	56	0.19	81	J,N
10.18	Butane, 2-methyl-	78-78-4	58	72	0.23	78	J,N
12.03	Pentane, 2-methyl-	107-83-5	50	86	0.10	28	J,N
13.04	1-Hexene	592-41-6		84	1.6	470	J,N
13.42	2-Hexene	4050-45-7	58	84	0.13	39	J,N
14.37	2-Butanone	78-93-3	78	72	0.13	45	J,N
15.06	Unknown				0.084		J,N
15.46	3-Heptene	592-78-9	60	98	0.20	50	J,N
16.37	3-Heptene	592-78-9	70	98	0.31	78	J,N
16.57	2-Heptene	592-77-8	96	98	4.9	1200	J,N
16.91	2-Heptene	592-77-8	96	98	2.6	650	J,N
17.31	Unknown				0.27		J,N
17.62	2,4-Hexadienal	142-83-6	91	96	0.041	10	J,N
17.74	2-Pentenitrile	13284-42-9	49		0.14		J,N
18.35	Heptane, 3-methyl-	589-81-1	86	81	1.9	560	J,N
18.53	2,3-Hexadiene, 2-methyl-	29212-09-7	80	96	1.4	370	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	2.5	540	J,N
19.20	2-Heptyne	1119-65-9	91	96	0.91	230	J,N
19.75	Trans-1-butyl-2-methylcyclopropane	38851-70-6	90	112	0.22	48	J,N
20.74	Heptane, 2,3-dimethyl-	3074-71-3	49	128	0.068	13	J,N
21.19	Unknown				0.075		J,N
22.08	4-Heptanone	123-19-3	91	114	2.1	440	J,N
23.16	Alkane				0.074		J,N
23.44	Unknown				0.12		J,N
23.54	Unknown				0.35		J,N
23.66	1,3-Diethyl-1,4-Epoxybutane		56	128	1.1	210	J,N
23.77	Furan, 2,5-Diethyltetrahydro	41239-48-9	56	128	1.3	250	J,N
23.99	Multiple Peaks				1.5		J,N
24.31	Unknown				1.6		J,N
24.61	Decane, 4-methyl-	2847-72-5	72	156	0.55	86	J,N
25.08	Cyclohexane, 1-methyl-2-propyl-	4291-79-6	50	140	0.26	46	J,N
25.28	Unknown				0.13		J,N
25.54	Unknown				0.22		J,N
25.73	1-Hexanol, 2-ethyl-	104-76-7	64	130	3.1	580	J,N
25.88	2-Azabicyclo[2.2.1]heptane	279-24-3	78	97	1.5	380	J,N
26.54	Cyclohexanone,5-methyl-2-(1-methylethyl)	4941-53-1	62	154	0.094	15	J,N
26.65	C-12 Hydrocarbon				0.20		J,N
26.95	C-12 Hydrocarbon				0.38		J,N
27.34	Naphthalene, decahydro- & others	91-17-8	95	138	0.63	110	J,N
27.83	Undecane, 3-methyl-	1002-43-3	72	170	0.15	22	J,N
28.09	Cyclohexane, 1-propenyl-	5364-83-0	81	124	0.25	49	J,N
28.25	Unknown				0.69		J,N
28.61	Undecane, 2,6-dimethyl-	17301-23-4	95	184	1.2	160	J,N
28.75	Unknown				0.19		J,N
29.74	Unknown				1.6		J,N
30.25	Cycloalkane/alkene				0.48		J,N
31.32	Cycloalkane/alkene				0.36		J,N
32.31	Tetradecane	629-59-4	98	198	2.0	250	J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table		Sample Number: VS006-070-TS13 Analysis Date: 1/9/99 Data File ID: 39010628.D					
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.57	1-Propene	115-07-1	91	42	0.041	24	J,N
7.74	1-Propene	115-07-1	93	42	0.091	53	J,N
8.46	1-Propene, 2-methyl-	115-11-7	87	56	0.44	190	J,N
10.30	Pentane	109-66-0	47	72	0.33	110	J,N
13.07	1-Hexene	592-41-6		84	2.1	620	J,N
13.50	2-Hexene	4050-45-7	47	84	0.12	34	J,N
14.45	2,4-Hexadiene	592-46-1	72	82	0.10	30	J,N
15.12	1-Heptene	592-76-7	43	98	0.11	27	J,N
15.42	3-Heptene	592-78-9	64	98	0.073	18	J,N
15.52	3-Heptene	592-78-9	64	98	0.15	37	J,N
16.37	3-Heptene	592-78-9	70	98	0.50	120	J,N
16.61	2-Heptene	14686-13-6	96	98	7.1	1800	J,N
16.95	2-Heptene	592-77-8	95	98	3.7	920	J,N
17.21	Cyclopropane, Butyl	930-57-4	72	98	0.41	100	J,N
17.35	2,4-Hexadienal	142-83-6	64	96	0.31	79	J,N
17.66	2,4-Hexadienal	142-83-6	64	96	0.052	13	J,N
17.78	2-Pentenitrile	13284-42-9	58	81	0.19	56	J,N
18.38	Heptane, 3-methyl-	589-81-1	86	114	2.6	570	J,N
18.56	2,3-Hexadiene, 2-methyl-	29212-09-7	80	96	2.0	510	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	3.6	780	J,N
19.22	2-Heptyne	1119-65-9	90	96	2.0	510	J,N
19.77	Trans-1-butyl-2-methylcyclopropane	38851-70-6	70	112	0.30	66	J,N
20.76	Unknown				0.080		J,N
21.04	Unknown				0.28		J,N
21.21	Unknown				0.10		J,N
22.50	3-Heptanone	106-35-4	80	114	5.6	1200	J,N
23.16	Alkane				0.10		J,N
23.28	Multiple Peaks				0.15		J,N
23.67	1,3-Diethyl-1,4-Epoxybutane		72	128	1.3	250	J,N
23.78	Furan, 2,5-Diethyltetrahydro	41239-48-9	50	128	1.7	320	J,N
24.00	Multiple Peaks				2.0		J,N
24.62	Decane, 4-methyl-	2847-72-5	68	156	0.65	100	J,N
25.28	Unknown				0.15		J,N
25.54	Unknown				0.24		J,N
25.72	1-Hexanol, 2-ethyl-	104-76-7	86	130	4.0	750	J,N
25.88	2-Azabicyclo[2.2.1]heptane	279-24-3	78	97	1.9	470	J,N
26.65	C-12 Hydrocarbon				0.21		J,N
26.95	C-12 Hydrocarbon				0.42		J,N
27.34	Naphthalene, decahydro & others	91-17-8	95	138	0.93	170	J,N
27.95	Unknown				0.071		J,N
28.09	Cyclohexane, pentyl-	4292-92-6	72	154	0.26	41	J,N
28.26	Unknown				0.75		J,N
28.60	Undecane, 2,6-dimethyl-	17301-23-4	97	184	1.1	150	J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table		Sample Number: VS006-070-TS13 Analysis Date: 1/9/99 Data File ID: 39010628.D					
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
28.76	C-13 Alkene				0.23		J,N
28.93	Naphthalene, decahydro-2-methyl-	2958-76-1	81	152	0.53	85	J,N
29.44	Naphthalene, decahydro-2,6-dimethyl	1618-22-0	42	166	0.43	63	J,N
29.75	Tridecane, 7-methyl-	26730-14-3	83	198	1.6	190	J,N
30.08	Naphthalene, decahydro-1,6-dimethyl	1750-51-2	52	166	0.23	33	J,N
30.26	Cycloalkane/alkene				0.43		J,N
30.43	Tetradecane	629-59-4	86	198	8.0	1000	J,N
31.32	Cycloalkane/alkene				0.32		J,N
31.74	1,1,6-Trimethyldecahydronaphthalene	81983-72-4			0.11		J,N
32.32	Tetradecane	629-59-4	98	198	1.9	240	J,N
33.7	delta-Fenchane	629-59-4	38	198	0.11	13	J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table		Sample Number: VS006-077-TS12 Analysis Date: 1/9/99 Data File ID: 39010627.D					
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.52	1-Propene	115-07-1	91	42	0.082	48	J,N
8.39	1-Propene, 2-methyl-	115-11-7	86	56	0.23	100	J,N
12.09	Pentane, 2-methyl-	107-83-5	53	86	0.13	37	J,N
12.61	Unknown				0.033		J,N
13.03	1-Hexene	592-41-6		84	2.1	600	J,N
13.48	2-Hexene	4050-45-7	58	84	0.16	47	J,N
14.40	Cyclopentene, 1-methyl-	693-89-0	58	82	0.097	29	J,N
15.09	Unknown				0.11		J,N
15.49	3-Heptene	592-78-9	68	98	0.25	63	J,N
16.60	3-Heptene	592-78-9	96	98	6.2	1600	J,N
16.93	2-Heptene	592-77-8	96	98	3.4	840	J,N
17.33	Cyclopentene, 1,5-dimethyl	16491-15-9	96	160	0.26	40	J,N
17.77	2-Pentenitrile	13284-42-9	49	81	0.17	51	J,N
18.37	Heptane, 3-methyl-	589-81-1	86	114	2.4	520	J,N
18.55	3,4-Heptadiene	2454-31-1	80	96	1.9	470	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	3.3	710	J,N
19.21	2-Heptyne	1119-65-9	91	96	1.1	290	J,N
19.64	2-Heptene, 3-methyl-				0.49		J,N
19.76	Trans-1-butyl-2-methylcyclopropane	38851-70-6	87	112	0.29	64	J,N
20.76	Alkane				0.075		J,N
21.21	Unknown				0.091		J,N
22.09	4-Heptanone	123-19-3	91	114	2.7	580	J,N
22.27	4-Heptanol	589-55-9	43	116	0.036	7.6	J,N
23.16	Alkane				0.094		J,N
23.28	Alkane				0.16		J,N
23.55	Unknown				0.43		J,N
23.67	1,3-Diethyl-1,4-Epoxybutane		58	128	1.0	200	J,N
23.78	Furan, 2,5-Diethyltetrahydro	41239-48-9	59	128	1.8	340	J,N
24.00	Multiple Peaks				2.1		J,N
24.31	Unknown				2.1		J,N
24.62	Decane, 4-methyl-	2847-72-5	83	156	0.68	110	J,N
25.07	Unknown				0.33		J,N
25.28	Unknown				0.16		J,N
25.55	Unknown				0.28		J,N
25.73	1-Hexanol, 2-ethyl-	104-76-7	64	130	3.6	680	J,N
25.88	2-Azabicyclo[2.2.1]heptane	279-24-3	78	97	2.0	510	J,N
26.54	Cyclohexanone, 5-methyl-2-(1-methylethyl)	4941-53-1	93	154	0.099	16	J,N
26.65	C-12 Hydrocarbon			170	0.26	37	J,N
26.95	C-12 Hydrocarbon			170	0.45	65	J,N
27.34	Naphthalene, decahydro- & others	91-17-8	95	138	0.78	140	J,N
28.09	Cyclohexane, pentyl	5364-83-0	83	124	0.33	65	J,N
28.26	Unknown				0.87		J,N
28.61	Dodecane, 6-methyl-	6044-71-9	97	184	1.4	190	J,N
28.76	C-13 Alkane				0.29		J,N
28.94	Naphthalene, decahydro-2-methyl-	2958-76-1	87	152	0.66	110	J,N
29.75	Tridecane, 7-methyl-	26730-14-3	87	198	1.7	210	J,N
30.08	Naphthalene, decahydro-1,6-dimethyl	1750-51-2	60	166	0.27	39	J,N
30.26	Cyclopentane, (2-methylpropyl)-	3788-32-7	64	126	0.61	120	J,N
31.33	Cycloalkane/alkene				0.43		J,N
31.75	Multiple Peaks				0.16		J,N
32.32	Tetradecane	629-59-4	98	198	2.6	320	J,N
32.80	Unknown				0.11		J,N
34.74	Unknown				0.077		J,N

**296-C-006 Stack
Triple Sorbent Trap (TST)
Tentatively Identified Compounds
Summary Table**

Sample Number: VS006-085-TS28
Analysis Date: 1/10/99
Data File ID: 39010636.D

Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.42	1-Propene	115-07-1	91	42	0.058	34	J,N
7.58	1-Propene	115-07-1	72	42	0.065	38	J,N
8.31	1-Propene, 2-methyl-	115-11-7	87	56	0.31	130	J,N
10.17	1-Pentene	109-67-1	59	70	0.36	130	J,N
12.05	Pentane-2-methyl	107-83-5	50	86	0.088	25	J,N
12.98	1-hexene	592-41-6		84	1.8	540	J,N
13.42	2-Hexene	4050-45-7	45	84	0.12	34	J,N
14.38	2-Butanone	110-83-8	38	82	0.17	50	J,N
15.06	Unknown				0.10		J,N
15.45	3-Heptene	592-78-9	76	98	0.25	62	J,N
15.62	2-Heptene	14686-13-6	83	98	0.033	8.2	J,N
16.34	3-Heptene	14686-14-7	96	98	3.7	930	J,N
16.90	2-Heptene	14686-13-6	96	98	3.2	790	J,N
17.31	Pentene	16491-15-9	90	96	0.33	85	J,N
17.62	2,4-Hexadienal	142-83-6	83	96	0.049	13	J,N
17.74	2-Pentenitrile	13284-42-9	49	81	0.18	55	J,N
18.35	Heptane, 3-methyl-	589-81-1	86	114	2.3	490	J,N
18.53	2,3-Hexadiene, 2-methyl-	29212-09-7	80	96	1.7	440	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	3.1	670	J,N
19.20	2-Heptyne	1119-65-9	94	96	1.1	280	J,N
19.75	Trans-1-butyl-2-methylcyclopropane	38851-70-6	83	112	0.27	59	J,N
22.49	3-Heptanone	106-35-4	58	114	5.3	1100	J,N
23.16	Alkane				0.090		J,N
23.27	Multiple Peaks				0.15		J,N
23.45	Unknown				0.17		J,N
23.55	Unknown				0.41		J,N
23.67	1,3-Diethyl-1,4-Epoxybutane			128	1.4	260	J,N
23.78	Furan, 2,5-Diethyltetrahydro	41239-48-9	59	128	1.7	330	J,N
24.00	Multiple Peaks				2.0		J,N
24.32	Unknown				2.1		J,N
24.62	Decane, 4-methyl-	2847-72-5	64	156	0.62	97	J,N
25.28	Unknown				0.15		J,N
25.54	Unknown				0.25		J,N
25.73	1-Hexanol, 2-ethyl-	104-76-7	72	130	4.2	790	J,N
25.89	2-Azabicyclo[2.2.1]heptane	279-24-3	78	97	2.0	500	J,N
26.65	C-12 Hydrocarbon				0.24		J,N
26.95	C-12 Hydrocarbon				0.43		J,N
27.34	Naphthalene, decahydro & others	91-17-8	90	138	0.72	130	J,N
27.96	Unknown				0.092		J,N
28.09	Cyclohexane, pentyl-	4292-92-6	87	154	0.25	40	J,N
28.26	Unknown				0.91		J,N
28.61	C-13 Alkane				1.3		J,N
28.76	C-13 Alkane				0.32		J,N
28.94	Naphthalene, decahydro-2-methyl-	2958-76-1	64	152	0.61	97	J,N
29.75	Tridecane, 7-methyl-	26730-14-3	87	198	1.7	210	J,N
30.09	Cyclopentane, 1-pentyl-2-propyl-	62199-51-3	64	182	0.27	36	J,N
30.26	Cycloalkane/alkene				0.55		J,N
31.33	Cycloalkane/alkene				0.43		J,N
31.74	Naphthalene, decahydro-1,5-dimethyl-	66552-62-3	46	166	0.13	20	J,N
32.32	Tetradecane	629-59-4	98	198	2.5	310	J,N
32.81	4-Undecanone, 10-methyl-	29379-12-2	43	184	0.12	16	J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table		Sample Number: VS006-092-TS25					
		Analysis Date: 1/10/99					
		Data File ID: 39010635.D					
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.46	1-Propene	115-07-1	91	42	0.048	28	J,N
8.35	1-Propene, 2-methyl-	115-11-7	90	56	0.18	78	J,N
10.21	Butane, 2-methyl-	78-78-4	58	72	0.062	21	J,N
12.05	Pentane, 2-methyl-	107-83-5	50	86	0.085	24	J,N
12.40	Silanol, trimethyl-	1066-40-6	87	90	0.032	9	J,N
13.00	1-Hexene	592-41-6		84	1.3	390	J,N
14.31	2-Butanone	78-93-3	64	72	0.053	18	J,N
15.08	Unknown				0.070		J,N
15.39	1-Heptene	592-76-7	64	98	0.044	11	J,N
15.48	3-Heptene	592-78-9	50	98	0.094	23	J,N
16.37	3-Heptene	592-78-9	70	98	2.8	700	J,N
16.59	2-Heptene	592-77-8	96	98	4.3	1100	J,N
16.93	2-Heptene	592-77-8	95	98	2.3	570	J,N
17.19	Cyclopropane, butyl-	930-57-4	81	98	0.27	66	J,N
17.33	1,2-Hexadiene, 5-methyl-	13865-36-6	38	96	0.11	29	J,N
17.65	2,4-Hexadienal	142-83-6	90	96	0.034	8.7	J,N
17.76	2-Pentenitrile	13284-42-9	58	81	0.14	43	J,N
18.37	Heptane, 3-methyl-	589-81-1	86	114	1.6	350	J,N
18.55	2,3-Hexadiene, 2-methyl-	29212-09-7	76	96	1.3	320	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	2.2	490	J,N
19.22	2-Heptyne	1119-65-9	91	96	0.74	190	J,N
21.04	Alkane				0.19		J,N
21.23	Unknown				0.066		J,N
22.51	3-Heptanone	106-35-4	72	114	4.1	880	J,N
23.19	Alkane				0.068		J,N
23.47	Unknown				0.13		J,N
23.57	Unknown				0.33		J,N
23.68	1,3-Diethyl-1,4-Epoxybutane		58	128	1.0	200	J,N
23.79	Furan, 2,5-Diethyltetrahydro	41239-48-9	59	128	1.3	250	J,N
24.01	Multiple Peaks				1.5		J,N
24.33	Unknown				1.6		J,N
24.63	Decane, 4-methyl-	2847-72-5	81	156	0.47	73	J,N
25.30	Unknown				0.11		J,N
25.56	Unknown				0.18		J,N
25.74	1-Hexanol, 2-ethyl-	104-76-7	78	130	3.3	620	J,N
25.90	2-Azabicyclo[2.2.1]heptane	279-24-3	78	97	1.5	390	J,N
26.67	C-12 Hydrocarbon				0.19		J,N
26.97	C-12 Hydrocarbon				0.34		J,N
27.35	Naphthalene, decahydro & others	91-17-8	95	138	0.56	98	J,N
27.97	Unknown				0.070		J,N
28.10	Cyclohexane, pentyl-	4292-92-6	74	154	0.20	32	J,N
28.27	Unknown				0.70		J,N
28.62	Undecane, 2,6-dimethyl-	17301-23-4	95	184	0.96	130	J,N
28.95	Naphthalene, decahydro-2-methyl-	2958-76-1	68	152	0.48	78	J,N
29.76	Tridecane, 7-methyl-	26730-14-3	86	198	0.68	84	J,N
30.10	Naphthalene, decahydro-1,6-dimethyl	1750-51-2	90	166	0.19	27	J,N
30.27	Cycloalkane/alkene				0.43		J,N
32.33	Tetradecane	629-59-4	98	198	2.0	250	J,N
32.81	5-Dodecanone	19780-10-0	64	184	0.10	14	J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table				Sample Number: VS006-100-TS50 Analysis Date: 1/11/99 Data File ID: 39010642.D			
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.47	1-Propene	115-07-1	91	42	0.043	25	J,N
8.37	1-Propene, 2-methyl-	115-11-7	87	56	0.17	73	J,N
10.23	Butane, 2-methyl-	78-78-4	53	72	0.30	100	J,N
12.07	Pentane, 2-methyl-	107-83-5	53	86	0.078	22	J,N
13.03	1-Hexene	592-41-6	94	84	1.3	370	J,N
13.45	2-Hexene	4050-45-7	60	84	0.098	28	J,N
14.31	2-Butanone	78-93-3	64	72	0.067	23	J,N
15.08	Unknown				0.063		J,N
15.48	3-Heptene	592-78-9	70	98	0.15	38	J,N
16.37	3-Heptene	592-78-9	70	98	2.7	670	J,N
16.59	2-Heptene	592-77-8	95	98	4.0	1000	J,N
16.92	2-Heptene	592-77-8	95	98	2.1	530	J,N
17.19	Unknown				0.23		J,N
17.64	2,4-Hexadienal	142-83-6	90	96	0.031	7.8	J,N
17.76	2-Pentenitrile	13284-42-9	53	81	0.13	40	J,N
18.36	Heptane, 3-methyl-	589-81-1	86	114	1.4	310	J,N
18.54	2,3-Hexadiene, 2-methyl-	29212-09-7	76	96	1.1	290	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	2.0	440	J,N
19.21	2-Heptyne	1119-65-9	90	96	0.67	170	J,N
19.76	Trans-1-butyl-2-methylcyclopropane	38851-70-6	68	112	0.18	38	J,N
21.21	Unknown				0.060		J,N
21.59	Butane, 1, 1-oxybis	142-96-1	72	130	0.022	4.1	J,N
22.06	4-Heptanone	123-19-3	91	114	0.33	70	J,N
22.49	3-Heptanone	106-35-4	58	114	3.8	810	J,N
23.16	Alkane				0.062		J,N
23.27	Multiple Peaks				0.096		J,N
23.45	Unknown				0.12		J,N
23.55	Unknown				0.30		J,N
23.67	1,3-Diethyl-1,4-Epoxybutane		53	128	0.96	180	J,N
23.78	Furan, 2,5-Diethyltetrahydro	41239-48-9	59	128	1.2	230	J,N
23.99	Multiple Peaks				1.4		J,N
24.31	Unknown				1.5		J,N
24.61	Decane, 4-methyl-	2847-72-5	62	156	0.41	64	J,N
25.28	Unknown				0.099		J,N
25.54	Unknown				0.16		J,N
25.72	1-Hexanol, 2-ethyl-	104-76-7	72	130	3.0	570	J,N
25.88	2-Azabicyclo[2.2.1]heptane	279-24-3	78	97	1.4	360	J,N
26.54	Cyclohexanone,5-methyl-2-(1-methylethyl)	4941-53-1	74	154	0.070	11	J,N
26.65	C-12 Hydrocarbon				0.16		J,N
26.95	C-12 Hydrocarbon				0.27		J,N
27.35	Naphthalene, decahydro & others	91-17-8	97	138	0.48	86	J,N
27.95	Unknown				0.062		J,N
28.09	Cyclohexane, pentyl-	4292-92-6	74	154	0.17	27	J,N
28.25	Unknown				0.62		J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table		Sample Number: VS006-100-TS50 Analysis Date: 1/11/99 Data File ID: 39010642.D					
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
28.60	Undecane, 2,6-dimethyl-	17301-23-4	97	184	0.81	110	J,N
28.76	C-13 Alkene	930-68-7	45	96	0.18	46	J,N
28.93	Naphthalene, decahydro-2-methyl-	2958-76-1	81	152	0.38	61	J,N
29.44	Naphthalene, decahydro-2,6-dimethyl	1618-22-0	49	166	0.36	52	J,N
29.74	Tridecane, 7-methyl-	26730-14-3	72	198	0.62	76	J,N
30.08	Naphthalene, decahydro-1,6-dimethyl	1750-51-2	49	166	0.17	25	J,N
30.25	Cycloalkane/alkene				0.34		J,N
31.32	Cycloalkane/alkene				0.27		J,N
32.31	Tetradecane	629-59-4	96	198	2.4	290	J,N
32.79	5-Dodecanone	19780-10-0	55	184	0.060	7.9	J,N

**296-C-006 Stack
Triple Sorbent Trap (TST)
Tentatively Identified Compounds
Summary Table**

Sample Number: VS006-107-TS43
Analysis Date: 1/10/99
Data File ID: 39010639.D

Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.49	1-Propene	115-07-1	94	42	0.055	32	J,N
8.37	1-Propene, 2-methyl-	115-11-7	87	56	0.45	190	J,N
8.54	1-Propene, 2-methyl-	115-11-7	59	56	0.42	180	J,N
10.23	Butane, 2-methyl-	78-78-4	58	72	0.31	110	J,N
12.05	Pentane, 2-methyl-	107-83-5	52	86	0.074	21	J,N
12.39	Silanol, trimethyl-	1066-40-6	72	90	0.030	8.2	J,N
13	1-hexene	592-41-6		84	1.2	360	J,N
13.45	2-Hexene	4050-45-7	64	84	0.092	27	J,N
15.47	3-Heptene	592-78-9	58	98	0.16	40	J,N
16.37	3-Heptene	592-78-9	70	98	2.7	680	J,N
16.58	2-Heptene	14686-13-6	95	98	4.2	1100	J,N
16.92	2-Heptene	592-77-8	95	98	2.2	540	J,N
17.18	Unknown				0.20		J,N
17.63	Furan, 2-ethyl-	3208-16-0	92	96	0.030	7.7	J,N
17.75	2-Pentenitrile	13284-42-9	49	81	0.11	34	J,N
18.36	Heptane, 3-methyl-	589-81-1	78	114	1.4	310	J,N
18.54	2,3-Hexadiene, 2-methyl-	29212-09-7	80	96	1.2	300	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	2.1	460	J,N
19.20	2-Heptyne	1119-65-9	90	96	0.67	170	J,N
19.75	Trans-1-butyl-2-methylcyclopropane	38851-70-6	83	112	0.17	38	J,N
21.03	Alkane				0.17		J,N
21.20	Unknown				0.061		J,N
22.26	4-Heptanol	589-55-9	40	116	0.037	7.7	J,N
22.49	3-Heptanone	106-35-4	80	114	4.2	910	J,N
23.16	Alkane				0.063		J,N
23.26	Multiple Peaks				0.097		J,N
23.44	Unknown				0.13		J,N
23.54	Unknown				0.32		J,N
23.66	1,3-Diethyl-1,4-Epoxybutane			129	1.0	190	J,N
23.77	Furan, 2,5-Diethyltetrahydro	41239-48-9	59	128	1.2	240	J,N
23.99	Multiple Peaks				1.5		J,N
24.31	Unknown				1.6		J,N
24.61	Decane, 2-methyl-	6975-98-0	64	156	0.56	88	J,N
25.27	Unknown				0.098		J,N
25.54	Unknown				0.15		J,N
25.72	1-Hexanol, 2-ethyl-	104-76-7	72	130	3.4	630	J,N
25.88	2-Azabicyclo[2.2.1]heptane	279-24-3	78	97	1.5	380	J,N
26.64	C-12 Hydrocarbon				0.14		J,N
26.95	C-12 Hydrocarbon				0.28		J,N
27.34	Naphthalene, decahydro & others	91-17-8	91	138	0.51	90	J,N
27.83	Undecane, 3-methyl-	1002-43-3	83	170	0.15	22	J,N
27.95	Unknown			138	0.054	9.6	J,N
28.08	Cyclohexane, pentyl-	4292-92-6	83	154	0.18	28	J,N
28.25	Unknown				0.67		J,N

**296-C-006 Stack
Triple Sorbent Trap (TST)
Tentatively Identified Compounds
Summary Table**

Sample Number: VS006-107-TS43
Analysis Date: 1/10/99
Data File ID: 39010639.D

Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
28.60	Undecane, 2,6-dimethyl-	17301-23-4	97	184	0.81	110	J,N
28.75	C-13 Alkane			96	0.23	59	J,N
28.93	Naphthalene, decahydro-2-methyl-	2958-76-1	86	152	0.44	71	J,N
29.43	Naphthalene, decahydro-2,6-dimethyl	1618-22-0	38	166	0.35	52	J,N
29.74	Tridecane, 7-methyl-	26730-14-3	87	198	0.74	92	J,N
30.25	Cycloalkane/alkene				0.35		J,N
31.31	Cycloalkane/alkene				0.29		J,N
32.30	Tetradecane	629-59-4	96	198	2.7	340	J,N
32.79	5-Dodecanone	19780-10-0	55	184	0.097	13	J,N

296-C-006 Stack Triple Sorbent Trap (TST) Tentatively Identified Compounds Summary Table		Sample Number: VS006-115-TS30					
		Analysis Date: 1/10/99					
		Data File ID: 39010637.D					
Retention Time (min)	Tentative ID	CAS #	Library Match (%)	Molecular Weight	Estimated Concentration (mg/m3)	Estimated Concentration (ppbv)	Flag
7.50	1-Propene	115-07-1	94	42	0.062	36	J,N
7.63	1-Propene	115-07-1	38	42	0.045	26	J,N
8.38	1-Propene, 2-methyl-	115-11-7	87	56	0.23	100	J,N
10.25	Butane, 2-methyl-	78-78-4	56	72	0.36	120	J,N
12.07	Pentane, 2-methyl-	107-83-5	78	86	0.070	20	J,N
13.01	1-Hexene	592-41-6		84	1.1	320	J,N
13.46	2-Hexene	4050-45-7	60	84	0.087	25	J,N
14.32	2-Butanone	78-93-3	80	72	0.16	54	J,N
15.47	3-Heptene	592-78-9	64	98	0.070	17	J,N
16.58	2-Heptene	592-77-8	95	98	3.9	970	J,N
16.92	2-Heptene, (E)-	14686-13-6	96	98	1.9	480	J,N
17.19	Unknown				0.15		J,N
17.33	Cycloalkane/alkene				0.12		J,N
17.63	2,4-Hexadienal	142-83-6	86	96	0.032	8.1	J,N
17.76	2-Pentenitrile	13284-42-9	53	81	0.12	35	J,N
18.37	Heptane, 3-methyl-	589-81-1	72	114	1.2	260	J,N
18.54	3,4-Heptadiene	2454-31-1	83	96	1.0	260	J,N
19.04	Heptane, 3-methylene	1632-16-2	87	112	1.8	380	J,N
19.21	2-Heptyne	1119-65-9	90	96	0.66	170	J,N
19.76	Trans-1-butyl-2-methylcyclopropane	38851-70-6	87	112	0.14	30	J,N
21.04	Alkane				0.15		J,N
21.20	Unknown				0.056		J,N
22.50	3-Heptanone	106-35-4	80	114	4.2	900	J,N
23.17	Alkane				0.051		J,N
23.28	Multiple Peaks				0.083		J,N
23.45	Unknown				0.12		J,N
23.56	Unknown				0.28		J,N
23.67	1,3-Diethyl-1,4-Epoxybutane			128	0.90	170	J,N
23.78	Furan, 2,5-Diethyltetrahydro	41239-48-9	59	128	1.1	220	J,N
24.00	Multiple Peaks				1.4		J,N
24.62	Decane, 4-methyl-	2847-72-5	70	156	0.39	61	J,N
25.07	Cycloalkane/alkene				0.24		J,N
25.29	Unknown				0.097		J,N
25.55	Unknown				0.15		J,N
25.73	1-Hexanol, 2-ethyl-	104-76-7	64	130	3.4	640	J,N
25.89	2-Azabicyclo[2.2.1]heptane	279-24-3	78	97	1.4	350	J,N
26.65	C-12 Hydrocarbon				0.13		J,N
26.95	C-12 Hydrocarbon				0.26		J,N
27.35	Naphthalene, decahydro- & others	91-17-8	89	138	0.48	84	J,N
27.84	Undecane, 3-methyl-	1002-43-3	83	170	0.15	22	J,N
27.96	Unknown				0.071		J,N
28.10	Cyclohexane, pentyl-	4292-92-6	83	154	0.16	26	J,N
28.26	Unknown				0.70		J,N
28.61	Undecane, 2,6-dimethyl-	17301-23-4	97	184	0.74	99	J,N
28.77	C-13 Alkane				0.31		J,N
28.94	Naphthalene, decahydro-2-methyl-	2958-76-1	45	152	0.34	55	J,N
29.44	2(1H)-Naphthalenone, octahydro-4a-m	938-06-7	45	166	0.31	46	J,N
29.75	Tridecane, 7-methyl-	26730-14-3	87	198	0.66	81	J,N
30.09	Naphthalene, decahydro-1,6-dimethyl	1750-51-2	49	166	0.16	24	J,N
30.26	Cycloalkane/alkene				0.31		J,N
31.33	Cycloalkane/alkene				0.22		J,N
31.83	Alkane				0.27		J,N
32.32	Tetradecane	629-59-4	98	198	2.8	350	J,N

TST Blank Summary

SAS Laboratory
Instrument 3
D.B. Bortney

Sample ID.: VS006-MPB-TS63			VS006-135-TS62			VS006-140-TS35		
Sample Type: Method Performance Blank			Trip Blank			Field Blank		
Analysis Date: 01/06/99			01/11/99			01/10/99		
Analysis Time: 5:49 PM			1:42 PM			6:37 PM		
Analyte	CAS Number	mg/mL	ppb	mg/L	ppb	mg/L	ppb	mg/L
Methanol	67-56-1	0.15	110	M	0.15	110	M	0.15
Ethanol	64-17-5	0.15	80	M	0.15	80	M	0.15
Acetone	67-64-1	0.15	63	M	0.15	63	M	0.15
Acetonitrile	75-05-8	0.15	89	M	0.15	89	M	0.15
Dichloromethane	75-09-2	0.15	43	M	0.15	43	M	0.15
1-Propanol	71-23-8	0.15	61	M	0.15	61	M	0.15
n-Hexane	110-54-3	0.15	43	M	0.15	43	M	0.15
Butanol	123-72-8	0.15	51	M	0.15	51	M	0.15
Propanenitrile	107-12-0	0.15	67	M	0.15	67	M	0.15
Chloroform	67-66-3	0.15	31	M	0.15	31	M	0.15
Tetrahydrofuran	109-99-9	0.15	51	M	0.15	51	M	0.15
1-Butanol	71-36-3	0.15	49	M	0.15	49	M	0.15
n-Heptane	142-82-5	0.15	37	M	0.15	37	M	0.15
Tetrachloromethane	56-23-5	0.15	24	M	0.15	24	M	0.15
Benzene	71-43-2	0.15	47	M	0.15	47	M	0.15
2-Pentanone	107-87-9	0.15	43	M	0.15	43	M	0.15
Butanenitrile	109-74-0	0.15	53	M	0.15	53	M	0.15
n-Octane	111-65-9	0.15	32	M	0.15	32	M	0.15
Toluene	108-88-3	0.15	40	M	0.15	40	M	0.15
2-Hexanone	591-78-6	0.15	37	M	0.15	37	M	0.15
Pentanenitrile	110-59-8	0.15	44	M	0.15	44	M	0.15
Tetrachloroethylene	127-18-4	0.15	22	M	0.15	22	M	0.15
n-Nonane	111-84-2	0.15	29	M	0.15	29	M	0.15
2-Heptanone	110-43-0	0.15	32	M	0.15	32	M	0.15
Hexanenitrile	628-73-9	0.15	38	M	0.15	38	M	0.15
o-Xylene	95-47-6	0.15	34	M	0.15	34	M	0.15
n-Decane	124-18-5	0.15	26	M	0.15	26	M	0.15
2-Octanone	111-13-7	0.15	29	M	0.15	29	M	0.15
Heptanenitrile	629-08-3	0.15	33	M	0.15	33	M	0.15
1,2,4-Trimethylbenzene	95-63-6	0.15	30	M	0.15	30	M	0.15
n-Undecane	1120-21-4	0.15	23	M	0.15	23	M	0.15
n-Dodecane	112-40-3	0.15	22	M	0.15	22	Q	0.15
n-Tridecane	629-50-5	0.15	20	M	0.15	20	Q	0.15

2.3.3 TST Quality Control Summary Tables

This section contains 5 tables that summarize the quality control parameters used during analysis. It includes the following tables:

- Laboratory Control Sample Results
- Internal Standards Area Counts
- Surrogate Compounds Results
- Continuing Calibration
- Linear and Quadratic Calibration Verification.

Laboratory Control Sample Results Table

SAS Laboratory
Instrument 3
D.B. Bonfoey

Date Analyzed: Time Analyzed: Data File:	LCS-1 01/06/99 3:52 PM 39010607.D		LCS-2 01/07/99 2:56 PM 39010614.D		
	Recovery		Recovery		Precision
Compound	ng	%	ng	%	RPD (%)
n-Hexane	184.96	92	175.95	88	5.0
Benzene	193.07	97	189.81	95	1.7
Pentanenitrile	175.67	88	173.35	87	1.3
2-Hexanone	182.78	91	182.04	91	0.41
2-Heptanone	162.19	81	165.18	83	1.8
n-Undecane	155.75	78	160.72	80	3.1

Acceptance Criteria: 65 - 135 % Recovery and RPD $\leq$ 35%

TST Internal Standards Area Counts Table

SAS Laboratory
Instrument 3
D.B. Bonfoey

Benzene-d6, Ethylbenzene-d10, and Dodecane-d26 were used for internal standards.

Sample ID	Benzene-d6 Area Counts (% of CCVS)	Ethylbenzene-d10 Area Counts (% of CCVS)	Dodecane-d26 Area Counts (% of CCVS)	Analysis Date	Analysis Time	Data File
200 ng Std. 1411-1-128.09	3160247 (100%)	4434744 (100%)	243542 (100%)	01/06/99	1:45 PM	39010604.D
VS006-MPB-TS63	3434209 (109%)	4297970 (96.9%)	66441 (27.3%)	01/06/99	5:49 PM	39010609.D
200 ng Std. 1411-1-128.15	3280943 (100%)	4731382 (100%)	231535 (100%)	01/07/99	1:27 PM	39010612.D
VS006-027-TS07	4652499 (142%)	6417037 (136%)	446021 (193%)	01/07/99	5:08 PM	39010616.D
200 ng Std. 1411-1-129.01	4563022 (100%)	6290797 (100%)	423027 (100%)	01/08/99	6:44 PM	39010619.D
VS006-036-TS10	4809178 (105%)	6540938 (104%)	492790 (116%)	01/08/99	8:58 PM	39010622.D
VS006-004-TS11	5024174 (110%)	6468742 (103%)	172809 (40.9%)	01/08/99	9:44 PM	39010623.D
200 ng Std. 1411-1-129.03	4862981 (100%)	6327939 (100%)	306844 (100%)	01/09/99	3:35 PM	39010624.D
VS006-077-TS12	4635181 (95.3%)	5857428 (92.6%)	567957 (185%)	01/09/99	5:43 PM	39010627.D
VS006-070-TS13	4950304 (102%)	6685111 (106%)	666063 (217%)	01/09/99	6:33 PM	39010628.D
VS006-012-TS14	5117818 (105%)	7017366 (111%)	684696 (159%)	01/09/99	7:19 PM	39010629.D
VS006-061-TS15	4983410 (102%)	6580724 (104%)	684691 (223%)	01/09/99	8:00 PM	39010630.D
VS006-020-TS16	5519433 (113%)	7154964 (113%)	572860 (187%)	01/09/99	8:43 PM	39010631.D
VS006-044-TS24	4516132 (92.9%)	6578744 (104%)	741394 (242%)	01/09/99	9:27 PM	39010632.D
200 ng Std. 1411-1-129.05	4766870 (100%)	6181324 (100%)	356734 (100%)	01/10/99	3:39 PM	39010634.D
VS006-092-TS25	4749532 (99.6%)	6300306 (102%)	510597 (143%)	01/10/99	4:34 PM	39010635.D
VS006-085-TS28	5157711 (108%)	6687605 (108%)	700929 (196%)	01/10/99	5:15 PM	39010636.D
VS006-115-TS30	5707528 (120%)	7584620 (122%)	623453 (175%)	01/10/99	5:56 PM	39010637.D
VS006-140-TS35	5623530 (118%)	7638569 (124%)	481376 (129%)	01/10/99	6:37 PM	39010638.D
VS006-107-TS43	5534151 (116%)	7529798 (122%)	890048 (249%)	01/10/99	7:19 PM	39010639.D
200 ng Std. 1411-1-129.06	5635139 (100%)	7453407 (100%)	436049 (100%)	01/11/99	11:39 AM	39010641.D
VS006-100-TS50	5811721 (103%)	7679191 (103%)	597207 (137%)	01/11/99	12:57 PM	39010642.D
VS006-135-TS62	6092628 (108%)	8301288 (111%)	556682 (128%)	01/11/99	1:42 PM	39010643.D

Acceptance Criteria: Area counts for samples within 50 - 150 % of area counts for daily CCVS

TST Surrogate Compounds Results Table

SAS Laboratory
Instrument 3
D.B. Bonfoey

Hexafluorobenzene at 322 nanograms, toluene-d8 at 376 nanograms, and bromobenzene-d5 at 308 nanograms were used as surrogates for this analysis.

Sample ID	Hexafluorobenzene Recovery (%)	Toluene-d8 Recovery (%)	Bromobenzene-d5 Recovery (%)	Analysis Date	Analysis Time	Data File
VS006-MPB-TS63	101	105	122	01/08/99	5:49 PM	39010609.D
VS006-027-TS07	78	91	97	01/07/99	5:08 PM	39010616.D
VS006-036-TS10	76	85	86	01/08/99	8:58 PM	39010622.D
VS006-004-TS11	82	92	96	01/08/99	9:44 PM	39010623.D
VS006-077-TS12	82	91	102	01/09/99	5:43 PM	39010627.D
VS006-070-TS13	77	88	96	01/09/99	6:33 PM	39010628.D
VS006-012-TS14	84	89	97	01/09/99	7:19 PM	39010629.D
VS006-061-TS15	78	89	98	01/09/99	8:00 PM	39010630.D
VS006-020-TS16	81	88	92	01/09/99	8:43 PM	39010631.D
VS006-044-TS24	74	85	85	01/09/99	9:27 PM	39010632.D
VS006-092-TS25	76	85	95	01/10/99	4:34 PM	39010635.D
VS006-085-TS28	80	87	95	01/10/99	5:15 PM	39010636.D
VS006-115-TS30	74	83	88	01/10/99	5:56 PM	39010637.D
VS006-140-TS35	80	87	92	01/10/99	6:37 PM	39010638.D
VS006-107-TS43	75	83	91	01/10/99	7:19 PM	39010639.D
VS006-100-TS50	79	89	99	01/11/99	12:57 PM	39010642.D
VS006-135-TS62	81	88	93	01/11/99	1:42 PM	39010643.D

Acceptance Limit: 70 - 130 % Recovery

TST Continuing Calibration Table

SAS Laboratory
Instrument 3
D.B. Bonfoey

Standard Identification:

200 ng CCVS
1411-1-128.15
Date of Analysis: 01/07/99
Time of Analysis: 1:27 PM
Data File: 39010612.D
Samples batched with
the CCVS: VS006-027-TS07

200 ng CCVS

1411-1-129.01

01/08/99

6:44 PM

39010619.D

VS006-036-TS10

VS006-004-TS11

Analyte	Response Factor (% Deviation)	Linear Calibration (% Recovery)	Quad. Calibration (% Recovery)	Response Factor (% Deviation)	Linear Calibration (% Recovery)	Quad. Calibration (% Recovery)
Methanol	9.8			2.9		
Ethanol	-1.3			0.7		
Acetone	1.6			6.5		
Acetonitrile	-6.0			-10.1		
Dichloromethane	-11.6			1.0		
1-Propanol	0.3			-6.0		
n-Hexane	3.6			-0.3		
Hexafluorobenzene (S)	0.6			6.6		
Butanal	-1.1			9.9		
Propanenitrile	5.6			-2.9		
Chloroform	-0.6			3.8		
Tetrahydrofuran	4.0			-6.7		
1-Butanol		92			96	
n-Heptane	6.8			-7.8		
Tetrachloromethane	-5.6			2.2		
Benzene	4.9			-1.3		
2-Pentanone	1.0			-3.1		
Butanenitrile	5.5			-4.0		
n-Octane	0.7			-3.0		
Toluene-d8 (S)	1.7			2.1		
Toluene	1.6			-2.8		
2-Hexanone	-0.2			-5.3		
Pentanenitrile	4.7			-0.8		
Tetrachloroethylene	-3.4			0.9		
n-Nonane		90			95	
2-Heptanone		91			95	
Hexanenitrile		88			94	
o-Xylene	-0.8			-6.7		
n-Decane		87			94	
Bromobenzene-d5 (S)	5.9			3.1		
2-Octanone		87			97	
Heptanenitrile		89			94	
1,2,4-Trimethylbenzene		91			95	
n-Undecane			91			101
n-Dodecane			83			78
n-Tridecane			97			95

(S) = Surrogate

Acceptance Criteria: $\leq 25\%$ Deviation (absolute) or 75 - 125 % Recovery

TST Continuing Calibration Table

SAS Laboratory
Instrument 3
D.B. Bonfoey

Standard Identification:

Date of Analysis:

Time of Analysis:

Data File:

Samples batched with
the CCVS:

200 ng CCVS

1411-1-129.03

01/09/99

3:35 PM

39010624.D

VS006-077-TS12

VS006-070-TS13

VS006-012-TS14

VS006-061-TS15

VS006-020-TS16

VS006-044-TS24

200 ng CCVS

1411-1-129.05

01/10/99

3:39 PM

39010634.D

VS006-092-TS25

VS006-085-TS28

VS006-115-TS30

VS006-140-TS35

VS006-107-TS43

Analyte	Response Factor (% Deviation)	Linear Calibration (% Recovery)	Quad Calibration (% Recovery)	Response Factor (% Deviation)	Linear Calibration (% Recovery)	Quad Calibration (% Recovery)
Methanol	4.2			4.8		
Ethanol	7.0			8.4		
Acetone	10.2			9.4		
Acetonitrile	-13.9			-17.7		
Dichloromethane	-3.4			-14.5		
1-Propanol	0.2			0.4		
n-Hexane	3.7			3.5		
Hexafluorobenzene (S)	9.6			14.0		
Butanal	5.5			-6.5		
Propanenitrile	3.6			0.7		
Chloroform	7.7			9.2		
Tetrahydrofuran	2.1			0.0		
1-Butanol		92			92	
n-Heptane	4.0			0.8		
Tetrachloromethane	6.0			8.3		
Benzene	4.3			2.2		
2-Pentanone	2.7			2.2		
Butanenitrile	2.7			0.6		
n-Octane	1.5			-3.3		
Toluene-d8 (S)	6.1			7.3		
Toluene	3.3			-1.9		
2-Hexanone	1.3			1.0		
Pentanenitrile	6.1			3.9		
Tetrachloroethylene	3.8			0.2		
n-Nonane		90			94	
2-Heptanone		92			93	
Hexanenitrile		91			93	
o-Xylene	-7.5			-11.0		
n-Decane		91			94	
Bromobenzene-d5 (S)	3.8			6.0		
2-Octanone		92			95	
Heptanenitrile		87			88	
1,2,4-Trimethylbenzene		93			96	
n-Undecane			88			91
n-Dodecane			91			62
n-Tridecane			108			86

(S) = Surrogate

Acceptance Criteria: $\leq 25\%$ Deviation (absolute) or 75 - 125 % Recovery

TST Continuing Calibration Table

SAS Laboratory
Instrument 3
D.B. Bonfoey

Standard Identification:

200 ng CCVS
1411-1-129.06

Date of Analysis:

01/11/99

Time of Analysis:

11:39 AM

Data File:

39010641.D

Samples batched with
the CCVS:

VS006-100-TS50

VS006-135-TS62

Analyte	Response Factor (% Deviation)	Linear Calibration (% Recovery)	Quad. Calibration (% Recovery)
Methanol	9.8		
Ethanol	11.2		
Acetone	13.9		
Acetonitrile	-13.3		
Dichloromethane	-8.5		
1-Propanol	2.9		
n-Hexane	4.9		
Hexafluorobenzene (S)	11.5		
Butanal	-3.5		
Propanenitrile	4.5		
Chloroform	10.6		
Tetrahydrofuran	2.3		
1-Butanol		90	
n-Heptane	3.7		
Tetrachloromethane	8.5		
Benzene	2.5		
2-Pentanone	4.8		
Butanenitrile	3.2		
n-Octane	-1.5		
Toluene-d8 (S)	2.5		
Toluene	-0.1		
2-Hexanone	3.2		
Pentanenitrile	7.0		
Tetrachloroethylene	2.9		
n-Nonane		93	
2-Heptanone		93	
Hexanenitrile		90	
o-Xylene	-6.5		
n-Decane		94	
Bromobenzene-d5 (S)	3.6		
2-Octanone		93	
Heptanenitrile		84	
1,2,4-Trimethylbenzene		93	
n-Undecane			89
n-Dodecane			62
n-Tridecane			88

(S) = Surrogate

Acceptance Criteria: ≤ 25 % Deviation (absolute) or
75 - 125 % Recovery

Linear and Quadratic Calibration Verification Table

SAS Laboratory
Instrument 3
D.B. Bonfoey

Target Analyte	Percent Recoveries (%)					
	30 ng Std.	70 ng Std.	100 ng Std.	200 ng Std.	400 ng Std.	600 ng Std.
1-Butanol		93	96	92	95	103
n-Nonane		87	122	93	95	103
2-Heptanone		87	112	93	96	102
Hexanenitrile		91	108	94	97	102
n-Decane		66	128	91	94	103
2-Octanone		74	117	93	95	103
Heptanenitrile	52	87	101	92	99	102
1,2,4-Trimethylbenzene	50	78	122	95	98	101
n-Undecane		69	98	93	102	100
n-Dodecane	140	102	92	74	108	99
n-Tridecane	152	111	122	81	104	99

2.3.4 TST Supporting Data

This section contains relevant supporting data used for the tuning and calibration of the instrument, and the analysis and quantitation of the organic compounds. The following are included:

- Response Factor Reports
- Mass Spectrometer Tune Reports
- Sample Quantitation Reports and Chromatograms
- Library Search Compound Reports for TIC calculations
- Mass spectra of reported TICs.

Response Factor Report 5972 INST

Method : D:\390106CA.M
 Title :
 Last Update : Tue Jan 12 11:03:31 1999
 Response via : Initial Calibration

Calibration Files

200 =39010604.D 400 =39010605.D 600 =39010606.D
 100 =39010603.D 70 =39010602.D 30 =39010601.D

Compound	200	400	600	100	70	30	Avg	%RSD
1) Benzene-d6	-----ISTD-----							
2) Methanol	0.228	0.227	0.247	0.239	0.212	0.234	0.231	5.11
3) Ethanol	0.383	0.396	0.422	0.385	0.370	0.361	0.386	5.58
4) Acetone	0.863	0.915	0.940	0.913	0.900	0.890	0.904	2.87
5) Acetonitrile	0.367		0.253	0.383	0.358	0.390	0.350	15.98
6) Dichloromethane	0.268	0.231	0.217	0.251	0.271	0.266	0.251	8.88
7) 1-Propanol	0.398	0.419	0.438	0.387	0.355	0.355	0.392	8.57
8) n-Hexane	0.329	0.365	0.390	0.323	0.300	0.296	0.334	11.09
9) S Hexafluorobenzene	0.639	0.644	0.677	0.686	0.721	0.679	0.674	4.45
10) Butanal	0.072	0.069	0.070	0.069	0.073	0.077	0.072	4.45
11) Propanenitrile	0.256	0.283	0.297	0.254	0.247	0.221	0.260	10.36
12) Chloroform	0.688	0.733	0.743	0.710	0.663	0.664	0.700	4.87
13) Tetrahydrofuran	0.289	0.327	0.346	0.286	0.267	0.259	0.296	11.60
14) 1-Butanol	0.194	0.249	0.286	0.163	0.162		0.211	26.15
15) n-Heptane	0.351	0.432	0.482	0.348	0.323	0.290	0.371	19.39
16) Tetrachloroethane	0.654	0.705	0.708	0.678	0.623	0.560	0.655	8.59
17) Benzene	0.937	1.044	1.103	0.949	0.874	0.847	0.959	10.25
18) 2-Pentanone	0.838	0.966	1.055	0.801	0.746	0.643	0.842	17.73
19) Butanenitrile	0.479	0.552	0.599	0.482	0.434	0.400	0.491	15.00
20) n-Octane	0.200	0.229	0.248	0.197	0.171	0.149	0.199	18.20
21) S Toluene-d8	0.889	0.913	0.952	0.956	1.005	0.938	0.942	4.22
22) Toluene	1.063	1.197	1.285	1.054	0.964	0.824	1.064	15.39
23) 2-Hexanone	0.615	0.727	0.811	0.555	0.497	0.457	0.610	22.42
24) Pentanenitrile	0.360	0.424	0.465	0.356	0.325	0.286	0.369	17.64
25) Tetrachloroethylene	0.475	0.499	0.508	0.485	0.441	0.388	0.466	9.54
26) n-Nonane	0.322	0.405	0.459	0.296	0.227		0.342	26.78
27) Ethylbenzene-d10	-----ISTD-----							
28) 2-Heptanone	0.568	0.691	0.776	0.470	0.380		0.577	27.75
29) Hexanenitrile	0.279	0.329	0.362	0.243	0.212		0.285	21.55
30) o-Xylene	0.920	1.002	1.057	0.848	0.683	0.610	0.853	20.71
31) n-Decane	0.242	0.320	0.378	0.190	0.111		0.248	42.31
32) S Bromobenzene-d5	0.364	0.360	0.374	0.372	0.370	0.371	0.369	1.53
33) 2-Octanone	0.292	0.375	0.433	0.210	0.145		0.291	40.31
34) Heptanenitrile	0.409	0.496	0.530	0.301	0.263	0.214	0.369	35.07
35) 1,2,4-trimethylbenz	0.897	1.032	1.098	0.761	0.526	0.397	0.785	35.56
36) n-Undecane	0.187	0.315	0.377	0.108	0.085		0.214	59.58
37) Dodecane-d26	-----ISTD-----							
38) n-Dodecane	1.499	3.844	4.212	1.366	1.374	1.603	2.316	57.59
39) n-Tridecane	1.024	2.264	2.780	1.499	1.092	1.258	1.653	43.07

(#) = Out of Range

390106CA.M

Mon Feb 01 16:11:30 1999

Response Factor Report 5972 INST

Method : D:\390106CH.M
 Title :
 Last Update : Fri Jan 22 23:38:57 1999
 Response via : Initial Calibration

Calibration Files

200 =39010604.D 1000 =39010620.D 2000 =39010625.D
 100 =39010603.D 400 =39010605.D 600 =39010606.D

	Compound	200	1000	2000	100	400	600	Avg	%RSD
1)	Benzene-d6	-----ISTD-----							
2)	n-Heptane	0.363	0.528	0.461	0.338	0.432	0.473	0.433	16.48
3)	n-Octane	0.206	0.243	0.206	0.190	0.229	0.243	0.220	10.04
4)	n-Nonane	0.333	0.506	0.440	0.294	0.405	0.451	0.405	19.47
5)	Ethylbenzene-d10	-----ISTD-----							
6)	2-Heptanone	0.568	0.825	0.577	0.470	0.691	0.776	0.651	20.88
7)	n-Decane	0.242	0.431	0.372		0.320	0.378	0.348	20.54
8)	n-Undecane		0.448	0.378		0.315	0.377	0.380	14.37
9)	n-Dodecane		0.474	0.374		0.303	0.388	0.385	18.24
10)	n-Tridecane		0.312	0.258		0.178	0.256	0.251	21.93

(#) = Out of Range

390106CH.M

Tue Feb 02 08:11:39 1999

HP5972 Standard Spectra AutoTune

Instrument: 5972 INSTRUMENT 4 TEMP

Wed Jan 06 10:45:08 1999

C:\HPCHEM\4\5972\ATUNE.U

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
 277 peaks Base: 69.00 Abundance: 258688

1/7/99 tune check on 390106AT.U

Thu Jan 07 10:33:23 1999

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
295 peaks Base: 69.00 Abundance: 571264

Mass	Abund	Rel Abund	Iso	Mass	Iso	Abund	Iso	Ratio
69.00	571264	100.00		70.00		6864		1.20
219.00	252224	44.15		220.00		11856		4.70
501.95	40368	7.07		502.95		4365		10.81

1/8/99 tune checki on 390106AT.U

Fri Jan 08 17:39:25 1999

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
261 peaks Base: 69.00 Abundance: 309312

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	309312	100.00	69.90	4125	1.33
219.00	138048	44.63	220.00	6001	4.35
501.95	20800	6.72	502.95	2505	12.04

1/9/99 tune check on 390106AT.U

Sat Jan 09 15:04:29 1999

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
 309 peaks Base: 69.00 Abundance: 444864

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	444864	100.00	69.90	5204	1.17
219.00	190464	42.81	219.90	8994	4.72
501.95	27504	6.18	502.95	2897	10.53

1/10/99 tune check on 390106AT.U

Sun Jan 10 14:49:57 1999

1/11/99 tune check on 390106AT.U

Mon Jan 11 10:48:47 1999

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
281 peaks Base: 69.00 Abundance: 237248

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	237248	100.00	70.00	2766	1.17
219.00	104216	43.93	219.90	4964	4.76
501.95	12832	5.41	502.95	1266	9.87

Quantitation Report

Data File : C:\HPCHEM\3\39010623.D

Acq On : 8 Jan 99 9:44 pm

Sample : VS006-004-TS11

Misc :

Quant Time: Jan 23 20:38 1999

Vial: 21

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI on	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.35	84	5024174	200.00	ng	-0.04
27) Ethylbenzene-d10	22.09	98	6468742	200.00	ng	-0.05
37) Dodecane-d26	27.92	66	172809	200.00	ng	-0.05
System Monitoring Compounds						%Recovery
9) Hexafluorobenzene	13.68	186	4490268	265.04	ng	82.31%
21) Toluene-d8	19.46	98	8150072	344.33	ng	91.58%
32) Bromobenzene-d5	24.84	82	3511293	294.55	ng	95.63%
Target Compounds						Qvalue
3) Ethanol	9.69	31	1049	0.11	ng	# 58
4) Acetone	11.03	43	3995	0.18	ng	# 47
5) Acetonitrile	11.60	41	1385	0.16	ng	# 100
6) Dichloromethane	12.35	84	351	0.06	ng	# 81
7) 1-Propanol	12.60	31	323	0.03	ng	# 1
8) n-Hexane	12.90	57	1513	0.18	ng	# 87
10) Butanal	14.11	72	403	0.22	ng	# 80
11) Propanenitrile	14.36	54	213	0.03	ng	# 1
12) Chloroform	14.98	83	469	0.03	ng	# 16
13) Tetrahydrofuran	15.32	42	443	0.06	ng	# 85
15) n-Heptane	16.12	43	853	0.09	ng	# 72
16) Tetrachloroethane	16.13	117	614	0.04	ng	# 97
17) Benzene	16.41	78	1906	0.08	ng	# 1
18) 2-Pentanone	17.05	43	393	0.02	ng	# 51
19) Butanenitrile	17.29	41	341	0.03	ng	# 100
20) n-Octane	19.05	85	556	0.11	ng	# 1
22) Toluene	19.60	91	30130	1.13	ng	# 34
23) 2-Hexanone	19.94	43	628	0.04	ng	# 39
24) Pentanenitrile	20.26	41	2280	0.25	ng	# 50
25) Tetrachloroethylene	21.16	166	396	0.03	ng	# 96
30) o-Xylene	23.51	91	470	0.02	ng	# 92

(# = qualifier out of range (m) = manual integration

39010623.D 390106CA.M

Sun Jan 24 19:55:54 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010623.D
Operator : Bonfoey
Acquired : 8 Jan 99 9:44 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-004-TS11
Misc Info :
Vial Number: 21

Library Search Compound Report.

Data File : C:\HPCHEM\1\DATA\390106\39010623.D Vial: 21
 Acq On : 8 Jan 99 9:44 pm Operator: Bonfoey
 Sample : VS006-004-TS11 Inst : 5972 INST
 Misc : Multiplr: 1.00
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

 Peak Number 1 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
7.46	176.65 ng	8222901	Hexafluorobenzene	13.68

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Formaldehyde	115854	000050-00-0	7
2	Ethane	115857	000074-84-0	3
3	Nitrogen oxide (NO)	115865	010102-43-9	2
4	.ALPHA.,.BETA.-D2-ETHYLENE	115847	002813-62-9	2
5	HEXADEUTEROETHANE	115863	001632-99-1	1

 Peak Number 2 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
22.09	350.91 ng	16334790	Hexafluorobenzene	13.68

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Butenedioic acid (E)-	3329	000110-17-8	50
2	1,3-Cyclopentanedione	750	003859-41-4	42
3	2-XYLENE-D10	118572	000000-00-0	40
4	[1,1'-Bicyclohexyl]-2-one	25776	000090-42-6	36
5	Aziridine, 2-(1,1-dimethylethyl)-3-	2827	055669-76-6	33

 Peak Number 3 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
24.84	337.79 ng	15723963	Hexafluorobenzene	13.68

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,3-Isobenzofurandione, hexahydro-	124143	000085-42-7	47
2	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	9
3	Thiazole, 2-phenyl-	17212	001826-11-5	9
4	Pyrido[2,3-d]pyrimidine, 4-methoxy-	17153	028732-78-7	9
5	Benzene, 1-nitro-4-(1-propynyl)-	17180	028289-83-0	9

 39010623.D AREA.M Mon Feb 08 14:20:58 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010629.D

Acq On : 9 Jan 99 7:19 pm

Sample : VS006-012-TS14

Misc :

Quant Time: Jan 23 21:17 1999

Vial: 27

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI on	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.40	84	5117818	200.00	ng	0.00
27) Ethylbenzene-d10	22.13	98	7017366	200.00	ng	0.00
37) Dodecane-d26	27.96	66	486696	200.00	ng	-0.01

System Monitoring Compounds

	R.T.	QI on	Response	Conc	Units	%Recovery
9) Hexafluorobenzene	13.71	186	4656691	269.84	ng	83.80%
21) Toluene-d8	19.51	98	8102103	336.04	ng	89.37%
32) Bromobenzene-d5	24.89	82	3863458	298.75	ng	97.00%

Target Compounds

Target Compounds	R.T.	QI on	Response	Conc	Units	Qvalue
2) Methanol	8.33	31	2699	0.46	ng	# 1
3) Ethanol	9.78	31	750357	75.92	ng	m 44
4) Acetone	11.11	43	444487	19.22	ng	m 90
5) Acetonitrile	11.59	41	3664	0.41	ng	# 100
6) Dichloromethane	12.41	84	416	0.06	ng	# 94
7) 1-Propanol	12.65	31	501880	50.03	ng	m 62
8) n-Hexane	12.99	57	227207	26.61	ng	m 29
10) Butanal	14.14	72	74351	40.51	ng	m 1
11) Propanenitrile	14.35	54	2833	0.43	ng	# 73
12) Chloroform	14.99	83	1501	0.08	ng	# 55
13) Tetrahydrofuran	15.36	42	86022	11.37	ng	m 33
14) 1-Butanol	15.96	56	1151539	199.62	ng	# 92
15) n-Heptane	16.12	43	288868	30.41	ng	m 52
16) Tetrachloroethane	16.05	117	205	0.01	ng	# 98
17) Benzene	16.46	78	2740	0.11	ng	# 1
18) 2-Pentanone	17.06	43	139609	6.48	ng	m 74
20) n-Octane	19.05	85	84974	16.69	ng	m 1
22) Toluene	19.65	91	147595	5.42	ng	m 49
23) 2-Hexanone	19.97	43	182023	11.66	ng	# 69
24) Pentanenitrile	20.26	41	154875	16.38	ng	# 84
25) Tetrachloroethylene	20.83	166	3687	0.31	ng	# 1
26) n-Nonane	21.67	57	89911	56.17	ng	# 44
28) 2-Heptanone	22.61	43	630672	70.44	ng	m 73
29) Hexanenitrile	22.96	41	106820	49.01	ng	m 95
30) o-Xylene	23.22	91	520	0.02	ng	# 94
31) n-Decane	24.16	57	883147	125.32	ng	# 89
34) Heptanenitrile	25.37	82	87633	42.18	ng	m 64
35) 1,2,4-trimethylbenzene	25.54	105	435	33.48	ng	# 100
36) n-Undecane	26.35	57	4428303	408.72	ng	# 91
38) n-Dodecane	28.39	57	5018724	520.76	ng	# 97
39) n-Tridecane	30.41	57	3359244	534.57	ng	m 98

(#) = qualifier out of range (m) = manual integration

39010629.D 390106CA.M

Sat Jan 23 21:17:48 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010629.D
Operator : Bonfoey
Acquired : 9 Jan 99 7:19 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-012-TS14
Misc Info :
Vial Number: 27

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010629.D Vial: 27
 Acq On : 9 Jan 99 7:19 pm Operator: Bonfoey
 Sample : VS006-012-TS14 Inst : 5972 INST
 Misc : Multiplr: 1.00
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

 Peak Number 1 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
10.17	76.29 ng	3662774	Hexafluorobenzene	13.71

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane	116453	000109-66-0	53
2	Butane, 2-methyl-	116458	000078-78-4	52
3	ISOPROPYL ISOTHIOCYANATE	1265	000000-00-0	45
4	Propane, 1-chloro-2-methyl-	117426	000513-36-0	38
5	Pentane, 1,4-dichloro-	9029	000626-92-6	33

 Peak Number 2 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
12.99	38.11 ng	1829855	Hexafluorobenzene	13.71

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116024	000115-11-7	58
2	2-Butene, (E)-	116021	000624-64-6	53
3	1-Pentene, 4-methyl-	116900	000691-37-2	47
4	2-Butene	116020	000107-01-7	45
5	Butane, 2,3-dimethyl-	110	000079-29-8	43

 Peak Number 3 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
16.13	40.96 ng	1966355	Hexafluorobenzene	13.71

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane	1229	000142-82-5	91
2	2-Methyl-nonane	10241	000081-83-0	53
3	Azetidine, 2-methyl-	116361	019812-49-8	50
4	Hexane, 3-methyl-	118114	000589-34-4	43
5	Hydroxylamine, O-(2-methylpropyl)-	291	005618-62-2	43

 Peak Number 4 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
------	------	------	------------------	------

16.56	43.17 ng	2072591	Hexafluorobenzene	13.71
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclobutanone, 2-ethyl-	808	010374-14-8	72
2	4-Pentenol	116836	002100-17-6	64
3	3-Heptene	901	000592-78-9	53
4	Cycloheptane, methyl-	119116	004126-78-7	50
5	2-Pentene, 3-ethyl-	914	000816-79-5	50

Peak Number 5 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
19.51	486.97 ng	23379034	Hexafluorobenzene	13.71
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	58
2	3H-Pyrazol-3-one, 2,4-dihydro-5-met	735	000108-26-9	38
3	Mepivacaine	54866	000096-88-8	37
4	1-METHYL-5-AMINO-D2-1,2,4-TRIAZOLE	726	053778-60-2	22
5	Piperidine, 1-methyl-	117852	000626-67-5	9

Peak Number 6 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
20.95	34.29 ng	1646207	Hexafluorobenzene	13.71
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Formamide, N,N-dimethyl-	116480	000068-12-2	86
2	TRIDEUTEROACETONITRILE	115901	002206-26-0	9
3	2-Propanone, oxime	116485	000127-06-0	9
4	L-Alanine	117316	000056-41-7	9
5	3-METHYL-1,1-CYCLOBUTANEDICARBOXYLI	15961	057252-84-3	9

Peak Number 7 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
22.14	401.03 ng	19253144	Hexafluorobenzene	13.71
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Butenedioic acid (E)-	3329	000110-17-8	50
2	[1,1'-Bicyclohexyl]-2-one	25776	000090-42-6	40
3	2-XYLENE-D10	118572	000000-00-0	40
4	Piperidine, 1,2-dimethyl-	2840	000671-36-3	38
5	1H-1,2,4-Triazol-5-amine, 1-methyl-	117661	015795-39-8	38

Peak Number 8 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
------	------	------	------------------	------

22.47	165.28 ng	7935093	Hexafluorobenzene	13.71
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	119309	000106-35-4	91
2	3-Hexanone, 5-methyl-	3101	000623-56-3	58
3	Pentane, 2,2-dimethyl-	118117	000590-35-2	38
4	Butane, 2,2,3-trimethyl-	1241	000464-06-2	38
5	1-Hepten-3-ol	3129	004938-52-7	28

 Peak Number 9 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
23.99	34.25 ng	1644327	Hexafluorobenzene	13.71
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Penten-2-one, 4-methyl-	117726	000141-79-7	72
2	2-Pentene, 2,4-dimethyl-	117805	000625-65-0	64
3	tert-Butylketene	788	059005-31-1	64
4	2-Pentene, 3,4-dimethyl-, (Z)-	925	004914-91-4	50
5	2-Pentene, 3,4-dimethyl-, (E)-	926	004914-92-5	50

 Peak Number 10 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
24.16	101.77 ng	4885684	Hexafluorobenzene	13.71
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	122728	000124-18-5	94
2	Undecane	124548	001120-21-4	81
3	1-IODO-2-METHYLUDECANE	72274	073105-67-6	64
4	Tridecane	127252	000629-50-5	64
5	Dodecane	126005	000112-40-3	64

 Peak Number 11 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
24.30	79.55 ng	3819106	Hexafluorobenzene	13.71
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,2,4-trimethyl-, (1.a	5470	007667-60-9	50
2	Oxazole, trimethyl-	2343	020662-84-4	47
3	2(IH)-Pyridinone, 3-hydroxy-	2319	016867-04-2	47
4	3-MERCAPTOPYRIDINE	2327	016133-26-9	43
5	Carvomenthone	124281	000499-70-7	42

 Peak Number 12 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD		R.T.
24.89	357.97 ng	17185556	Hexafluorobenzene		13.71
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1,3-Isobenzofurandione, hexahydro-		124143	000085-42-7	38
2	1H-Pyrazole, 3-methyl-		116741	001453-58-3	9
3	3-BROMO-4-METHYL-1,2,4-TRIAZOLE		17081	016681-73-5	9
4	2-Cyclohexen-1-one, 3-methyl-		2193	001193-18-6	9
5	1-D6-PHENYL-1,2,3-TRIAZOLE		11016	000000-00-0	9

Peak Number 13 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD		R.T.
26.35	513.74 ng	24663859	Hexafluorobenzene		13.71
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Undecane		15622	001120-21-4	94
2	Dodecane		126001	000112-40-3	90
3	Tetradecane		128277	000629-59-4	86
4	Octadecane, 1-chloro-		69962	003386-33-2	86
5	Hexadecane		130123	000544-76-3	64

Peak Number 14 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD		R.T.
27.95	52.68 ng	2528956	Hexafluorobenzene		13.71
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1,4-Oxathian-2-one		119713	005512-70-9	83
2	PERDEUTERIO-PENTADECANE		40629	036340-20-2	78
3	n-Decane-D22		10240	000000-00-0	72
4	5,11-DIHYDROISOBELLENDINE		37988	072362-46-0	64
5	1,2,4-Metheno-1H-cyclobuta[cd]penta		123428	013351-15-0	12

Peak Number 15 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD		R.T.
30.41	396.74 ng	19046896	Hexafluorobenzene		13.71
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Tridecane		27731	000629-50-5	94
2	Tetradecane		128274	000629-59-4	90
3	Hexadecane		130123	000544-76-3	86
4	Undecane		15622	001120-21-4	86
5	Dodecane		126002	000112-40-3	86

39010629.D AREA.M Thu Feb 04 13:01:58 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010631.D

Vial: 29

Acq On : 9 Jan 99 8:43 pm

Operator: Bonfoey

Sample : VS006-020-TS16

Inst : 5972 INST

Misc :

Multiplr: 1.00

Quant Time: Jan 23 21:45 1999

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.39	84	5519433	200.00	ng	0.00
27) Ethylbenzene-d10	22.13	98	7154964	200.00	ng	-0.01
37) Dodecane-d26	27.95	66	572860	200.00	ng	-0.02
System Monitoring Compounds						%Recovery
9) Hexafluorobenzene	13.72	186	4857451	260.99	ng	81.05%
21) Toluene-d8	19.50	98	8567733	329.50	ng	87.63%
32) Bromobenzene-d5	24.88	82	3748433	284.28	ng	92.30%
Target Compounds						Qvalue
2) Methanol	8.22	31	2797	0.44	ng	# 1
3) Ethanol	9.75	31	1439294	135.04	ng	m 89
4) Acetone	11.13	43	963032	38.61	ng	m 83
5) Acetonitrile	11.58	41	5020	0.52	ng	# 100
6) Dichloromethane	12.35	84	339	0.05	ng	# 21
7) 1-Propanol	12.67	31	772143	71.37	ng	m 82
8) n-Hexane	13.01	57	1695769	184.14	ng	m 28
10) Butanal	14.15	72	129230	65.29	ng	m 71
11) Propanenitrile	14.38	54	1359	0.19	ng	# 1
13) Tetrahydrofuran	15.32	42	3634	0.45	ng	# 45
14) 1-Butanol	15.96	56	1738867	258.95	ng	m 97
16) Tetrachloroethane	16.22	117	924	0.05	ng	# 62
18) 2-Pentanone	17.06	43	524767	22.59	ng	m 88
20) n-Octane	19.04	85	686341	125.02	ng	m 1
22) Toluene	19.65	91	1415434	48.19	ng	m 100
23) 2-Hexanone	19.97	43	1201468	71.34	ng	m 97
24) Pentanenitrile	20.25	41	867184	85.05	ng	m 56
25) Tetrachloroethylene	20.85	166	2017	0.16	ng	# 1
26) n-Nonane	21.67	57	1189711	137.52	ng	m 39
28) 2-Heptanone	22.62	43	8097964	923.16	ng	# 93
29) Hexanenitrile	22.96	41	1058166	118.63	ng	m 65
30) o-Xylene	23.33	91	28078	0.92	ng	# 71
31) n-Decane	24.16	57	4379792	363.15	ng	m 96
33) 2-Octanone	25.02	58	202517	73.05	ng	m 81
34) Heptanenitrile	25.37	82	882160	82.01	ng	# 74

(#) = qualifier out of range (m) = manual integration
 39010631.D 390106CA.M Sat Jan 23 21:45:48 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010631.D

Acq On : 9 Jan 99 8:43 pm

Sample : VS006-020-TS16

Misc :

Quant Time: Jan 23 18:50 1999

Vial: 29

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M

Title :

Last Update : Fri Jan 22 23:38:57 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.39	84	5519433	200.00	ng	0.00
5) Ethylbenzene-d10	22.13	98	7154964	200.00	ng	-0.01

System Monitoring Compounds

%Recovery

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-Heptane	16.13	43	8943819	749.11	ng	m 72
6) 2-Heptanone	22.62	43	8097964	347.53	ng	# 93
7) n-Decane	24.16	57	4379792	351.38	ng	# 96
8) n-Undecane	26.35	57	15481485	1140.27	ng	# 88
9) n-Dodecane	28.39	57	29851836	2168.15	ng	# 92
10) n-Tridecane	30.40	57	22023531	2451.04	ng	# 79

(#)= qualifier out of range (m) = manual integration

39010631.D 390106CH.M

Sat Jan 23 18:53:36 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010631.D
Operator : Bonfoey
Acquired : 9 Jan 99 8:43 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-020-TS16
Misc Info :
Vial Number: 29

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010631.D Vial: 29
 Acq On : 9 Jan 99 8:43 pm Operator: Bonfoey
 Sample : VS006-020-TS16 Inst : 5972 INST
 Misc : Multiplr: 1.00
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

 Peak Number 1 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
7.44	37.61 ng	2062717	Hexafluorobenzene	13.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	94
2	Cyclopropane	115908	000075-19-4	80
3	2-Butenal, (E)-	116303	000123-73-9	74
4	3-Butenoic acid	14	000625-38-7	64
5	3,6-Pyridazinedione, 1,2-dihydro-4-	5103	005754-18-7	45

 Peak Number 2 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
8.32	116.33 ng	6379864	Hexafluorobenzene	13.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	87
2	1-Butene	116018	000106-98-9	72
3	Cyclobutane	116025	000287-23-0	47
4	Propane, 1-nitro-	117310	000108-03-2	38
5	2H-Pyran-2-one, tetrahydro-6,6-dime	120815	002610-95-9	38

 Peak Number 3 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
10.17	350.80 ng	19238949	Hexafluorobenzene	13.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butane, 2-methyl-	116461	000078-78-4	42
2	Oxirane, 2,2-dimethyl-	116433	000558-30-5	42
3	Pentane, 1-chloro-	118524	000543-59-9	40
4	Butane, 2-chloro-3-methyl-	1754	000631-65-2	40
5	Propane, 2-methyl-	116082	000075-28-5	38

 Peak Number 4 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD	R.T.
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11.13 36.88 ng 2022576 Hexafluorobenzene 13.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propanone	116053	000067-64-1	52
2	Ethanethioic acid, S-(dihydro-2,5-d	22710	006953-60-2	16
3	Acetic acid, 2-methylpropyl ester	119521	000110-19-0	16
4	Diazene, dimethyl-	116036	000503-28-6	9
5	Butane	116078	000106-97-8	9

Peak Number 5 Rank in Relative Concentration 58

R.T.	Conc	Area	Relative to ISTD	R.T.
12.02	40.18 ng	2203397	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane, 2-bromo-	12433	000107-81-3	64
2	Pentane, 2-methyl-	106	000107-83-5	50
3	Octane, 2,7-dimethyl-	122743	001072-16-8	38
4	Dodecane, 2-methyl-	127258	001560-97-0	38
5	Propane, 1-chloro-2-methyl-	117426	000513-36-0	38

Peak Number 6 Rank in Relative Concentration 56

R.T.	Conc	Area	Relative to ISTD	R.T.
13.40	43.31 ng	2375401	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexene, (E)-	116889	004050-45-7	55
2	2-Pentene, 4-methyl-, (E)-	116912	000674-76-0	53
3	2-Hexene	116887	000592-43-8	52
4	Cyclopentanone	116858	000120-92-3	49
5	2-Hexene, (Z)-	116886	007688-21-3	49

Peak Number 7 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
14.29	36.88 ng	2022580	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Butanone	116391	000078-93-3	72
2	Propanal, 2-methyl-	116387	000078-84-2	43
3	3(2H)-Furanone, dihydro-2-methyl-	117947	003188-00-9	28
4	Pentane	116453	000109-66-0	9
5	Pentane, 1,3-epoxy-4-methyl-	1206	015045-60-0	9

Peak Number 8 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD	R.T.
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15.44	34.39 ng	1886265	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	901	000592-78-9	64
2	2-Heptene	117785	000592-77-8	50
3	tert-Dodecanethiol	35629	025103-58-6	50
4	2-Undecanethiol, 2-methyl-	35630	010059-13-9	50
5	1-Hexene, 3-methyl-	903	003404-61-3	38

Peak Number 9 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
16.12	1069.74 ng	58667640	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane	1229	000142-82-5	94
2	Hexane, 3-methyl-	118114	000589-34-4	72
3	2-Methyl-nonane	10241	000081-83-0	59
4	Hexane, 3,3,4-trimethyl-	6062	016747-31-2	50
5	3-Hexanone	118000	000589-38-8	43

Peak Number 10 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
16.33	1392.14 ng	76348910	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	901	000592-78-9	97
2	3-Heptene, (E)-	900	014686-14-7	96
3	2-Heptene	117785	000592-77-8	90
4	2-Heptene, (E)-	117784	014686-13-6	90
5	1-Hexene	116880	000592-41-6	70

Peak Number 11 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
16.90	870.43 ng	47736931	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	117785	000592-77-8	95
2	2-Heptene, (E)-	898	014686-13-6	94
3	3-Heptene	901	000592-78-9	90
4	3-Heptene, (E)-	900	014686-14-7	90
5	Cycloheptane	945	000291-64-5	87

Peak Number 12 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
17.16	63.05 ng	3458076	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,2,3-trimethyl-, (1.a	120647	001678-81-5	72
2	4-Pentenal	116836	002100-17-6	72
3	1-Butene, 2-methyl-	116339	000563-46-2	72
4	Furan, 2,5-dihydro-	116326	001708-29-8	59
5	N-OCTAN-3-ENE	119057	000000-00-0	59

Peak Number 13 Rank in Relative Concentration 54

R.T.	Conc	Area	Relative to ISTD	R.T.
17.30	43.81 ng	2402871	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butanenitrile, 3-chloro-	1500	053778-71-5	25
2	3-Butenenitrile	116223	000109-75-1	25
3	2-Propenenitrile, 2-methyl-	116225	000126-98-7	10
4	Borane, ethyldimethyl-	116330	001113-22-0	10
5	3-Nonynoic acid	14372	056630-33-2	9

Peak Number 14 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
18.34	519.28 ng	28478815	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	119371	000589-81-1	49
2	Hexane, 1-(hexyloxy)-2-methyl-	34909	074421-17-3	38
3	Hexane, 3-ethyl-	3194	000619-99-8	38
4	Heptane, 4-ethyl-	6041	002216-32-2	35
5	Hexane, 2,4-dimethyl-	3197	000589-43-5	35

Peak Number 15 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
18.52	379.09 ng	20790275	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,4-Heptadiene	615	002454-31-1	86
2	2-Cyclopenten-1-one, 2-methyl-	593	001120-73-6	76
3	2-Cyclopenten-1-one, 3-methyl-	117591	002758-18-1	74
4	1,4-Hexadiene, 4-methyl-	618	001116-90-1	72
5	2,4-Hexadienal	575	000142-83-6	72

Peak Number 16 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
19.19	199.73 ng	10953926	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,2-Hexadiene, 5-methyl-	616	013865-36-6	74
2	2-Heptyne	602	001119-65-9	74
3	1,3-Pentadiene, 2,4-dimethyl-	627	001000-86-8	64
4	2,5-Heptadiene, (E,E)-	614	039619-60-8	64
5	2,4-Hexadienal	117579	000142-83-6	64

 Peak Number 17 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
19.50	370.12 ng	20298326	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	58
2	.GAMMA.-PICOLINE-D7	439	029372-29-0	25
3	2,3,4,5,6-D5-ANILINE	442	004165-61-1	25
4	1H-Imidazole-2-methanol	733	003724-26-3	25
5	1-Piperidineethanamine	5917	027578-60-5	25

 Peak Number 18 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
19.63	93.08 ng	5104839	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, methyl-	408	000108-88-3	90
2	1,3,5-Cycloheptatriene	117440	000544-25-2	72
3	1,5-Heptadien-3-yne	403	003511-27-1	72
4	METHYLFULVENE	405	000000-00-0	59
5	Cyclobutene, 2-propenylidene-	404	052097-85-5	52

 Peak Number 19 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD	R.T.
19.75	60.34 ng	3309290	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	86
2	2-Octene	119056	000111-67-1	70
3	4-Octene, (E)-	119059	014850-23-8	70
4	2-Octene, (E)-	2641	013389-42-9	70
5	Heptane, 3-methylene-	119065	001632-16-2	64

Peak Number 20 Rank in Relative Concentration 47

R.T.	Conc	Area	Relative to ISTD	R.T.
19.98	59.00 ng	3235710	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	117991	000591-78-6	91
2	2-Pentanone, 4-methyl-	118019	000108-10-1	83
3	Oxirane, 2-methyl-2-(1-methylethyl)	1198	072221-03-5	64
4	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	53
5	2-Hexanone, 4-hydroxy-3-propyl-	16134	062338-17-4	50

Peak Number 21 Rank in Relative Concentration 43

R.T.	Conc	Area	Relative to ISTD	R.T.
20.25	66.02 ng	3620902	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedinitrile	118677	000111-69-3	56
2	Pentanedinitrile	463	000544-13-8	43
3	1-Butyne	115987	000107-00-6	42
4	Pentanenitrile	116798	000110-59-8	38
5	2-Propenal, 2-methyl-	116304	000078-85-3	37

Peak Number 22 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
20.83	41.74 ng	2289110	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,1,3-trimethyl-	5465	003073-66-3	53
2	3-Hexene, 2,2,3,4,5,5-hexamethyl-,	20747	054290-40-3	50
3	2,5-PYRIDINEDIOL	2324	000000-00-0	50
4	Cyclohexane, 1,4-dimethyl-2-(2-meth	125804	054411-17-5	49
5	Cyclohexane, 1,3,5-trimethyl-, (1.a	5471	001795-27-3	47

Peak Number 23 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
21.01	67.11 ng	3680560	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 4-(1-methylethyl)-	10258	052896-87-4	42
2	Octane, 2,3-dimethyl-	10248	007146-60-3	38
3	Heptane, 2,5-dimethyl-	6045	002216-30-0	38
4	Heptane, 3-ethyl-	6040	015869-80-4	37
5	Heptane, 3-ethyl-2-methyl-	122745	014676-29-0	33

Peak Number 24 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
21.66	245.73 ng	13476318	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	120904	000111-84-2	47
2	2,4,6,8-TETRAMETHYL-1-UNDECENE	39728	059920-26-2	43
3	Octane	119366	000111-65-9	38
4	Decane, 2,5,6-trimethyl-	27783	062108-23-0	38
5	Pentane, 2,4-dimethyl-	118121	000108-08-7	35

Peak Number 25 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
22.47	1536.61 ng	84272395	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	119309	000106-35-4	91
2	3-Hexanone, 5-methyl-	119328	000623-56-3	59
3	1-Hepten-3-ol	3129	004938-52-7	53
4	2-Buten-1-ol	116407	006117-91-5	49
5	Pentane, 2,2-dimethyl-	1237	000590-35-2	38

Peak Number 26 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
22.62	380.63 ng	20875083	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone, 5-methyl-	3097	000110-12-3	90
2	2-Heptanone	119299	000110-43-0	90
3	2-Hexanone, 4-methyl-	3096	000105-42-0	64
4	5-Undecanone	21602	033083-83-9	38
5	(3a.alpha.,4.beta.,6a.alpha.)-Hexah	12810	079390-46-8	36

Peak Number 27 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
22.97	126.68 ng	6947672	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,6-Heptadiene, 3-methyl-	2237	050871-05-1	50
2	CYCLOOCTEN-5,6-DIONE	122246	000000-00-0	47
3	Cyclopropane, 1,1-dimethyl-2-(1-met	4903	074779-84-3	43
4	1,3-Pentadiene, (Z)-	116263	000504-60-9	38
5	9-Oxabicyclo[6.1.0]nonane	120610	000286-62-4	38

 Peak Number 28 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
23.52	97.76 ng	5361591	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 2-iodo-	52284	000557-36-8	38
2	Oxirane, 2-methyl-3-propyl-, trans-	1200	006124-91-0	38
3	2,5-Pyrrolidinedione, 1-methyl-	119134	001121-07-9	30
4	Nonane, 3-methyl-	122733	005911-04-6	27
5	Heptane, 3-ethyl-5-methyl-	10260	052896-90-9	27

 Peak Number 29 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
23.65	199.86 ng	10961185	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	33981	074793-02-5	83
2	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID	10615	001123-28-0	59
3	1,3,2-Dioxaborolane, 2,4-diethyl-	5771	057633-63-3	45
4	1-METHYL-3-HYDROXY-V-TRIAZOLE	952	000000-00-0	40
5	Thiazole, 4-methyl-	117830	000693-95-8	40

 Peak Number 30 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
23.76	234.07 ng	12837055	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,3,2-Dioxaborolane, 2,4-diethyl-	5771	057633-63-3	59
2	2,2'-Bioxepane	33981	074793-02-5	59
3	Hexane, 2,5-dimethyl-	3198	000592-13-2	59
4	Phenol-d5	478	000000-00-0	53
5	3-METHYL-5-PYRAZOLONE-1-D1	736	053778-58-8	42

 Peak Number 31 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
23.98	366.81 ng	20116865	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Penten-2-one, 4-methyl-	117730	000141-79-7	64
2	3-BROMO-1,1,2-TRIMETHYL-CYCLOPROPAN	17429	000000-00-0	59
3	tert-Butylketene	788	059005-31-1	59
4	3-Hexen-2-one	790	000763-93-9	53
5	2-Pentene, 3,4-dimethyl-, (E)-	926	004914-92-5	45

 Peak Number 32 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
24.15	446.42 ng	24483131	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	122727	000124-18-5	87
2	Tetradecane, 1-chloro-	49206	002425-54-9	78
3	Decane, 1,1'-oxybis-	73380	002456-28-2	78
4	Tetradecane	128277	000629-59-4	64
5	Octane	3190	000111-65-9	59

 Peak Number 33 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
24.30	499.96 ng	27419257	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(5H)-FURANONE, 4,5,5-TRIMETHYL-	5202	000000-00-0	50
2	3,6-DIHYDRO-6,6-DIMETHYL-2H-PYRAN-2	5218	072649-03-7	47
3	3-Octen-2-one	5297	001669-44-9	42
4	Oxazole, trimethyl-	2343	020662-84-4	42
5	Cyclohexane, 1,2,4-trimethyl-, (1.a	5470	007667-60-9	42

 Peak Number 34 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
24.61	179.36 ng	9836756	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	124557	002847-72-5	87
2	Heptane, 5-ethyl-2-methyl-	10261	013475-78-0	59
3	Heptane, 3,3,5-trimethyl-	10268	007154-80-5	59
4	Decane, 2-methyl-	124555	006975-98-0	58
5	Nonane, 5-propyl-	126026	000998-35-6	53

 Peak Number 35 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
24.88	318.21 ng	17451440	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1H-Pyrazole, 3-methyl-	116740	001453-58-3	9
2	Pyrido[2,3-d]pyrimidine, 4-methoxy-	17153	028732-78-7	9
3	Thiazole, 2-phenyl-	17212	001826-11-5	9
4	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	9

5 1-(PHENYL-D5)-1,2,3-TRIAZOLE

11017 000000-00-0 9

 Peak Number 36 Rank in Relative Concentration 53

R.T.	Conc	Area	Relative to ISTD	R.T.
25.09	44.83 ng	2458877	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1-methyl-3-propyl-	9506	004291-80-9	43
2	Cyclohexane, 1-methyl-4-(1-methylet	9510	006069-98-3	42
3	Cyclohexane, 1-methyl-4-(1-methylet	9511	001678-82-6	42
4	Cyclohexane, 1,3-dimethyl-, trans-	2725	002207-03-6	38
5	Cyclohexane, 1,1-dimethyl-	2721	000590-66-9	38

 Peak Number 37 Rank in Relative Concentration 60

R.T.	Conc	Area	Relative to ISTD	R.T.
25.27	37.02 ng	2030306	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane 4-cyclohexyl-	51968	013151-79-6	50
2	Undecane 3-cyclohexyl-	51969	013151-78-5	47
3	Undecane 5-cyclohexyl-	51967	013151-80-9	43
4	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	35
5	Cyclohexane, 1-propenyl-	120440	005364-83-0	27

 Peak Number 38 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
25.37	96.40 ng	5286706	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	118930	000629-08-3	50
2	2-Cyclohexen-1-one, 3-methyl-	118857	001193-18-6	46
3	Hexanedinitrile, 2-methyl-	4344	016525-39-6	32
4	Bicyclo[3.1.0]hexan-2-one, 3,3,6-tr	8671	053966-40-8	28
5	1H-Indole, octahydro-	5048	004375-14-8	23

 Peak Number 39 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
25.53	76.37 ng	4188505	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 2,6,11-trimethyl-	129244	031295-56-4	55
2	Octane, 2-methyl-	120909	003221-61-2	47
3	Undecane, 2,6-dimethyl-	27745	017301-23-4	35

4 Cyclohexanone, 4-methyl-	119037	000589-92-4	27
5 Azetidine, 2-methyl-	116361	019812-49-8	27

 Peak Number 40 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
25.63	63.24 ng	3468337	Hexafluorobenzene	13.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, 1-chloro-, (Z)-	6908	055638-53-4	40
2	1,6-Heptadiene, 2-methyl-	2236	013643-06-6	40
3	2-Nonynoic acid	14371	001846-70-4	38
4	Cycloheptanone, 3-methyl-, (R)-	5381	013609-58-0	38
5	Cyclohexanol, 2-(2-propynyloxy)-, t	14455	007229-32-5	38

 Peak Number 41 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
25.72	249.21 ng	13667425	Hexafluorobenzene	13.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Nonadecene	132005	018435-45-5	64
2	1-Hexanol, 2-ethyl-	121197	000104-76-7	50
3	1-Octadecene	131396	000112-88-9	50
4	9-Octadecen-1-ol, (Z)-	132077	000143-28-2	50
5	Tritetracontane	112525	007098-21-7	42

 Peak Number 42 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
25.87	343.17 ng	18820415	Hexafluorobenzene	13.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Azabicyclo[2.2.1]heptane	699	000279-24-3	72
2	Hexanenitrile	117638	000628-73-9	53
3	1H-Pyrrole-2,5-dione	117631	000541-59-3	43
4	1H-Imidazole, 4-methyl-	116748	000822-36-6	43
5	Nonanenitrile	122382	002243-27-8	39

 Peak Number 43 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
26.35	1509.05 ng	82760783	Hexafluorobenzene	13.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	15622	001120-21-4	97
2	Dodecane	126001	000112-40-3	90

3	Tridecane	127251	000629-50-5	78
4	Hexadecane	130127	000544-76-3	78
5	Decane, 6-ethyl-2-methyl-	27769	062108-21-8	72

Peak Number 44 Rank in Relative Concentration 55

R.T.	Conc	Area	Relative to ISTD	R.T.
26.54	43.68 ng	2395657	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	14851	000000-00-0	74
2	1,1-DIMETHYL-2-PROPYLCYCLOHEXANE	14847	081983-71-3	74
3	p-Menthone	124274	000089-80-5	52
4	Cyclopentane, (2-methylbutyl)-	9495	053366-38-4	43
5	1-Pentene, 2,3-dimethyl-	117795	003404-72-6	41

Peak Number 45 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD	R.T.
26.65	54.27 ng	2976093	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 5-methyl-	126018	001632-70-8	64
2	Decane, 2-methyl-	124555	006975-98-0	64
3	3,6-Dimethyldecane	21664	017312-53-7	53
4	Pentadecane, 2,6,10,14-tetramethyl-	132098	001921-70-6	50
5	Decane, 2,9-dimethyl-	21662	001002-17-1	47

Peak Number 46 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
26.94	143.20 ng	7853266	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane, 5-butyl-	127266	017312-63-9	58
2	Undecane, 2,8-dimethyl-	27747	017301-25-6	53
3	Nonane, 5-methyl-5-propyl-	27800	017312-75-3	52
4	Undecane, 3,4-dimethyl-	27751	017312-78-6	50
5	Nonane, 5-(2-methylpropyl)-	27796	062185-53-9	49

Peak Number 47 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
27.33	298.09 ng	16348271	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-	122335	000091-17-8	95

2 Bicyclo[2.2.1]heptane, 2-methyl-, e	2290	000872-78-6	83
3 Spiro[4.5]decane	122327	000176-63-6	70
4 Naphthalene, decahydro-, trans-	122343	000493-02-7	55
5 Bicyclo[3.1.0]hexan-2-one, 5-(1-met	8669	000513-20-2	55

Peak Number 48 Rank in Relative Concentration 52

R.T.	Conc	Area	Relative to ISTD	R.T.
27.44	45.63 ng	2502285	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2,5-dimethyl-	126023	017312-50-4	52
2	1-Dodecanol, 2-methyl-, (S)-	34901	057289-26-6	50
3	Octane, 2,3-dimethyl-	10248	007146-60-3	47
4	1,3,2-DIOXABOROLANE, 4,4-DIMETHYL-5	9847	000000-00-0	47
5	1-Octanol, 2-butyl-	127411	003913-02-8	47

Peak Number 49 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
27.83	51.70 ng	2835269	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 3-methyl-	21651	001002-43-3	59
2	Hexatriacontane	136998	000630-06-8	53
3	Undecane, 2,9-dimethyl-	27748	017301-26-7	50
4	Tetratetracontane	112899	007098-22-8	50
5	Decane, 3-bromo-	43497	030571-71-2	47

Peak Number 50 Rank in Relative Concentration 50

R.T.	Conc	Area	Relative to ISTD	R.T.
27.94	49.48 ng	2713533	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,4-Oxathian-2-one	119713	005512-70-9	83
2	ACETONE-D6	116059	000666-52-4	83
3	1,3,5-Trithiane	122168	000291-21-4	74
4	CYCLOPENTANE, 1-DEUTERO-2-METHYL-1-	2273	000000-00-0	74
5	1,6-Octadiene, 2,7-dimethyl-	122295	040195-09-3	74

Peak Number 51 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
28.08	75.14 ng	4121053	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Cyclohexane, pentyl-	14841	004292-92-6	87
2 Cyclohexane, octyl-	33191	001795-15-9	72
3 Cyclohexane, 1,1'-(1,3-propanediyl)	38787	003178-24-3	72
4 Cyclohexane, 1,1'-(1,4-butanediyl)b	129929	006165-44-2	72
5 Cyclohexane, (1-methylethyl)-	5458	000696-29-7	64

Peak Number 52 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
28.25	117.62 ng	6450572	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	(1RS,5SR,6SR)-6-Pentyl-2-oxabicyclo	32996	082934-95-0	35
2	Cyclohexene, 1-pentyl-	124043	015232-85-6	35
3	1,4-Undecadiene, (Z)-	13855	055976-14-2	30
4	Bicyclo[3.3.1]nonane	4929	000280-65-9	30
5	2-ETHYL-5-PENTYL-5-PYRROLINE	19967	061772-94-9	27

Peak Number 53 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
28.60	415.39 ng	22781470	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2,6-dimethyl-	127264	017301-23-4	97
2	Dodecane, 6-methyl-	27736	006044-71-9	90
3	Undecane, 3,6-dimethyl-	27753	017301-28-9	87
4	Tridecane, 7-methyl-	128289	026730-14-3	64
5	Nonane, 2-methyl-	10242	000871-83-0	59

Peak Number 54 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
28.93	200.23 ng	10981003	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Bicyclo[4.1.0]heptane, 3-methyl-	118911	041977-47-3	49
2	1H-Indene, octahydro-, cis-	120443	004551-51-3	49
3	Cyclohexanone, 5-methyl-2-(1-methyl	13692	015932-80-6	47
4	1,4-Pentadiene, 3-propyl-	2254	000996-83-8	38
5	4,5-Nonadiene	4871	000821-74-9	38

Peak Number 55 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
29.42	178.56 ng	9793020	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Naphthalene, decahydro-2,6-dimethyl	19761	001618-22-0	55
2 2(1H)-Naphthalenone, octahydro-4a-m	125593	000938-06-7	46
3 13-Oxabicyclo[10.1.0]tridecane	26828	000286-99-7	38
4 5,7-Dodecadiene, (E,Z)-	19718	021293-04-9	30
5 6,6-(D2)MENTH-2-ENE	8798	000000-00-0	30

Peak Number 56 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
29.74	99.41 ng	5451803	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Decene, 4-methyl-	14800	013151-29-6	81
2	Tridecane, 7-methyl-	128289	026730-14-3	81
3	Pentadecane, 2,6,10,14-tetramethyl-	132099	001921-70-6	78
4	Octadecane, 2,6-dimethyl-	67910	075163-97-2	78
5	Decane, 2,6,7-trimethyl-	27786	062108-25-2	78

Peak Number 57 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
29.85	198.99 ng	10912980	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-1,6-dimethyl	125614	001750-51-2	93
2	Naphthalene, decahydro-2,6-dimethyl	19761	001618-22-0	91
3	Naphthalene, decahydro-2-methyl-	124047	002958-76-1	58
4	Naphthalene, decahydro-1,5-dimethyl	19758	066552-62-3	53
5	TRANS-6-METHYLSPIRO(4.5)DECAN-1-ONE	125591	035653-44-2	52

Peak Number 58 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
30.07	85.27 ng	4676228	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1-butyl-2-propyl-	20759	062199-50-2	55
2	Cyclopentane, decyl-	39719	001795-21-7	47
3	Cyclopentane, (3-methylbutyl)-	9496	001005-68-1	46
4	PHOTOCITRAL B	13633	055253-27-5	46
5	1,6-Heptadiene, 3,3-dimethyl-	4889	068701-61-1	35

Peak Number 59 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
30.24	169.38 ng	9289067	Hexafluorobenzene	13.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, (2-methylpropyl)-	5449	003788-32-7	58
2	3-UNDECENE, 3-METHYL-, CIS/TRANS	20692	023381-94-4	46
3	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	46
4	Cyclohexane, 2-propenyl-	4917	002114-42-3	43
5	Cyclohexane, 1-propenyl-	120440	005364-83-0	43

Peak Number 60 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
30.40	2259.98 ng	123943837	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	127253	000629-50-5	94
2	Tetradecane	128277	000629-59-4	90
3	Pentadecane	129233	000629-62-9	90
4	Hexadecane	130127	000544-76-3	87
5	Dodecane	126006	000112-40-3	86

Peak Number 61 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
31.30	126.19 ng	6920814	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,2,3-trimethyl-	120646	001678-97-3	43
2	Cyclopentane, 1,2-dibutyl-	26865	062199-52-4	38
3	Cyclopentane, (2-methylbutyl)-	9495	053366-38-4	35
4	Propylene trimer	5432	000000-00-0	30
5	Cyclohexane, 1,1,3,5-tetramethyl-,	9521	050876-31-8	27

Peak Number 62 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD	R.T.
31.73	46.01 ng	2523529	Hexafluorobenzene	13.72
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,1,6,6-Tetramethylspiro[4.4]nonane	25868	074054-92-5	78
2	Isomer A of 1,1,6-Trimethyldecahydr	25875	081983-73-5	59
3	4,6-DIMETHYL-7-OXO-4,7-DIHYDRO-1,2,	18815	025623-77-2	43
4	AMORPHANE-B	38800	000000-00-0	43
5	Stannane, trimethyl(1-methylethyl)-	38094	003531-46-2	30

Peak Number 63 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
32.30	98.75 ng	5415873	Hexafluorobenzene	13.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128276	000629-59-4	97
2	Hexadecane	130123	000544-76-3	68
3	Tridecane	127253	000629-50-5	68
4	Dodecane	126002	000112-40-3	64
5	Heptadecane	130827	000629-78-7	64

39010631.D AREA.M Thu Feb 04 13:06:39 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010616.D

Acq On : 7 Jan 99 5:08 pm

Sample : VS006-027-TS07

Misc :

Quant Time: Jan 23 20:31 1999

Vial: 15

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.40	84	4652499	200.00	ng	0.02
27) Ethylbenzene-d10	22.15	98	6417037	200.00	ng	0.00
37) Dodecane-d26	27.98	66	446021	200.00	ng	0.00

System Monitoring Compounds

	R.T.	Q Ion	Response	Conc	Units	%Recovery
9) Hexafluorobenzene	13.73	186	3934233	250.77	ng	77.88%
21) Toluene-d8	19.52	98	7483471	341.43	ng	90.81%
32) Bromobenzene-d5	24.90	82	3522317	297.85	ng	96.71%

Target Compounds

	R.T.	Q Ion	Response	Conc	Units	Qvalue
3) Ethanol	9.75	31	1322378	147.19	ng	m 93
4) Acetone	11.13	43	1184024	56.32	ng	m 80
5) Acetonitrile	11.60	41	4867	0.60	ng	m 100
6) Dichloromethane	12.33	84	2747	0.47	ng	# 29
7) 1-Propanol	12.64	31	636468	69.80	ng	m 70
8) n-Hexane	13.00	57	2880606	371.08	ng	m 31
10) Butanal	14.15	72	151746	90.95	ng	m 90
12) Chloroform	14.98	83	1487	0.09	ng	# 24
13) Tetrahydrofuran	15.34	42	7076	1.03	ng	# 66
14) 1-Butanol	15.96	56	1540558	269.55	ng	m 91
16) Tetrachloroethane	16.22	117	820	0.05	ng	# 12
18) 2-Pentanone	17.06	43	751851	38.40	ng	m 83
22) Toluene	19.66	91	2664337	107.62	ng	m 100
23) 2-Hexanone	19.98	43	2580606	181.78	ng	m 99
24) Pentanenitrile	20.27	41	1857043	216.07	ng	m 91
25) Tetrachloroethylene	20.84	166	6326	0.58	ng	# 72
26) n-Nonane	21.60	57	2761847	292.87	ng	# 39
29) Hexanenitrile	22.98	41	2550546	249.61	ng	m 62
30) o-Xylene	23.35	91	21863	0.80	ng	m 96
33) 2-Octanone	25.05	58	532815	96.41	ng	m 71
34) Heptanenitrile	25.39	82	2263121	164.48	ng	m 69

(#)=qualifier out of range (m)=manual integration

39010616.D 390106CA.M

Sat Jan 23 20:32:08 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010616.D

Acq On : 7 Jan 99 5:08 pm

Sample : VS006-027-TS07

Misc :

Quant Time: Jan 23 18:42 1999

Vial: 15

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M

Title :

Last Update : Fri Jan 22 23:38:57 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.40	84	4652499	200.00	ng	0.02
4) Ethylbenzene-d10	22.15	98	6417037	200.00	ng	0.00

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) n-Heptane	16.14	43	17817674	1770.45	ng	m	77
5) 2-Heptanone	22.64	43	21807811	1043.51	ng	#	93
6) n-Decane	24.18	57	9615983	860.18	ng		89
7) n-Undecane	26.37	57	23335645	1916.40	ng	#	87
8) n-Dodecane	28.42	57	38627904	3128.18	ng	#	95
9) n-Tridecane	30.44	57	41788499	5185.54	ng	#	69

(#)= qualifier out of range (m) = manual integration

39010616.D 390106CH.M

Sat Jan 23 18:42:55 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010616.D
Operator : Bonfoey
Acquired : 7 Jan 99 5:08 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-027-TS07
Misc Info :
Vial Number: 15

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010616.D Vial: 15
 Acq On : 7 Jan 99 5:08 pm Operator: Bonfoey
 Sample : VS006-027-TS07 Inst : 5972 INST
 Misc : Multiplr: 1.00
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

 Peak Number 1 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
7.46	277.11 ng	13193491	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	91
2	3-Butenoic acid	14	000625-38-7	83
3	2-Furanmethanol	117683	000098-00-0	83
4	2-Butenal, (E)-	116303	000123-73-9	74
5	Furan, 2,5-dihydro-	116326	001708-29-8	64

 Peak Number 2 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
8.36	618.93 ng	29468036	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	86
2	1-Butene	116018	000106-98-9	80
3	2-Butene, (Z)-	116019	000590-18-1	50
4	2-Butene, (E)-	116021	000624-64-6	50
5	Cyclobutane	116025	000287-23-0	47

 Peak Number 3 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD	R.T.
8.89	50.31 ng	2395427	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	58
2	2-Butene	116020	000107-01-7	50
3	2,5-Furandione, 3,4-dimethyl-	5120	000766-39-2	50
4	1-Cyclohexene-1-methanol	2635	004845-04-9	47
5	2-Cyclopenten-1-one, 5-hydroxy-2,3-	5205	058649-31-3	47

 Peak Number 4 Rank in Relative Concentration 52

R.T.	Conc	Area	Relative to ISTD	R.T.
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9.76	91.69 ng	4365645	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	115964	000064-17-5	86
2	BIS(ETHOXO)(METHOXO)OXOVANADIUM	28919	062450-00-4	43
3	Formic acid, ethyl ester	116524	000109-94-4	43
4	Ethane, 1,1'-(methylenebis(oxy))bis	118450	000462-95-3	36
5	Sulfurous acid, diethyl ester	122175	000623-81-4	9

Peak Number 5 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
10.19	603.40 ng	28728539	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene	116331	000109-67-1	59
2	Oxirane, ethyl-	116432	000106-88-7	58
3	Butane, 2-methyl-	116458	000078-78-4	58
4	Pentane	116456	000109-66-0	50
5	Oxirane, 2,2-dimethyl-	116433	000558-30-5	50

Peak Number 6 Rank in Relative Concentration 67

R.T.	Conc	Area	Relative to ISTD	R.T.
10.61	40.73 ng	1938990	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butene, 2-methyl-	116339	000563-46-2	74
2	Cyclopropane, 1,2-dimethyl-, trans-	116345	002402-06-4	49
3	2-Propyn-1-ol	116009	000107-19-7	47
4	2-Butene, 2-methyl-	116341	000513-35-9	43
5	2-Pentene	116333	000109-68-2	43

Peak Number 7 Rank in Relative Concentration 56

R.T.	Conc	Area	Relative to ISTD	R.T.
12.01	74.69 ng	3555829	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexenal, (E)-	117698	006728-26-3	59
2	Pentane, 2-methyl-	117119	000107-83-5	40
3	Butane, 1-bromo-2-methyl-, (+-)-	12436	005973-11-5	38
4	2-Azido-2-methylpentane	5559	091633-21-5	37
5	Pentane, 2-bromo-	12433	000107-81-3	37

Peak Number 8 Rank in Relative Concentration 68

R.T.	Conc	Area	Relative to ISTD	R.T.
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12.63	32.99 ng	1570767	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propanol	116143	000071-23-8	90
2	Formic acid, propyl ester	117190	000110-74-7	40
3	1,4-Butanediol	117365	000110-63-4	36
4	Ethane, 1,1'-[methylenebis(oxy)]bis	118450	000462-95-3	9
5	Ethanol	115963	000064-17-5	9

Peak Number 9 Rank in Relative Concentration 53

R.T.	Conc	Area	Relative to ISTD	R.T.
13.42	88.45 ng	4211338	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentene, 4-methyl-, (E)-	116912	000674-76-0	59
2	2-Hexene, (E)-	116889	004050-45-7	58
3	Cyclopentanone	116856	000120-92-3	50
4	2-PENTENE, 3-METHYL- (CIS/TRANS)	116905	000000-00-0	50
5	2-Hexene	116887	000592-43-8	49

Peak Number 10 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
14.16	41.16 ng	1959626	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butanal	116378	000123-72-8	68
2	Hexanal	1129	000066-25-1	50
3	Ethene, ethoxy-	116428	000109-92-2	47
4	1-Hexyn-3-ol	117753	000105-31-7	38
5	Butanal, 3-methyl-	117036	000590-86-3	37

Peak Number 11 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
15.06	56.41 ng	2685922	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Nonynoic acid	14371	001846-70-4	47
2	tert-Dodecanethiol	35629	025103-58-6	42
3	4-Hexenoic acid, 6-hydroxy-4-methyl	16014	067884-44-0	40
4	Furan, tetrahydro-3-methyl-4-methyl	881	061142-01-6	35
5	CIS-3-HEXENAL	776	000000-00-0	35

Peak Number 12 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD		R.T.
15.45	127.89 ng	6088827	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	3-Heptene		901	000592-78-9	52
2	2-Undecanethiol, 2-methyl-		35630	010059-13-9	50
3	1-Dodecene		125788	000112-41-4	47
4	2-Heptene		117785	000592-77-8	47
5	3-Heptene, (E)-		900	014686-14-7	46

Peak Number 13 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD		R.T.
16.14	2327.24 ng	110802162	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Heptane		118107	000142-82-5	91
2	Hexane, 3-methyl-		118115	000589-34-4	64
3	2-Methyl-nonane		10241	000081-83-0	59
4	Propanoic acid, 2-methyl-, pentyl e		124718	002445-72-9	50
5	Pentane, 2,3,4-trimethyl-		119384	000565-75-3	50

Peak Number 14 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD		R.T.
16.34	2674.23 ng	127322521	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	3-Heptene		901	000592-78-9	97
2	3-Heptene, (E)-		900	014686-14-7	96
3	2-Heptene		117785	000592-77-8	91
4	2-Heptene, (E)-		898	014686-13-6	90
5	2-Hexene, 2-methyl-		906	002738-19-4	58

Peak Number 15 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD		R.T.
16.91	1996.39 ng	95050129	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene		117785	000592-77-8	95
2	2-Heptene, (E)-		898	014686-13-6	95
3	3-Heptene		901	000592-78-9	91
4	3-Heptene, (E)-		900	014686-14-7	90
5	1-Heptene		897	000592-76-7	87

Peak Number 16 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
17.17	180.15 ng	8577246	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,2,3-trimethyl-, (1.a	120647	001678-81-5	72
2	4-Pentenal	116836	002100-17-6	72
3	1-Butene, 2-methyl-	116339	000563-46-2	64
4	Furan, 2,5-dihydro-	116326	001708-29-8	59
5	N-OCTAN-3-ENE	119057	000000-00-0	59

Peak Number 17 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD	R.T.
17.32	91.70 ng	4366111	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butanenitrile, 3-chloro-	1500	053778-71-5	28
2	3-Butenenitrile	116223	000109-75-1	27
3	2-Propenenitrile, 2-methyl-	116225	000126-98-7	22
4	Propane, 2-bromo-1-chloro-	124421	003017-95-6	9
5	2,11-Dodecanedione	33921	007029-09-6	9

Peak Number 18 Rank in Relative Concentration 60

R.T.	Conc	Area	Relative to ISTD	R.T.
17.74	62.93 ng	2996230	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butyne	115986	000107-00-6	49
2	2-Putenenitrile	116729	013284-42-9	47
3	1,2-Butadiene	115994	000590-19-2	43
4	Butyronitrile, 4,4,4-trifluoro-	4509	000690-95-9	38
5	Propanenitrile	116002	000107-12-0	38

Peak Number 19 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
18.36	1331.06 ng	63372877	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	3192	000589-81-1	78
2	Hexane, 2,4-dimethyl-	3197	000589-43-5	50
3	4-METHYL-1-OCTENE	5416	000000-00-0	43
4	Heptane, 2,3-dimethyl-	6043	003074-71-3	43
5	Hexane, 3-ethyl-2-methyl-	6051	016789-46-1	40

Peak Number 20 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
18.53	960.13 ng	45712444	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,4-Heptadiene	615	002454-31-1	87
2	1,3-Pentadiene, 2,4-dimethyl-	627	001000-86-8	74
3	1,4-Hexadiene, 5-methyl-	619	000763-88-2	72
4	1,4-Hexadiene, 4-methyl-	618	001116-90-1	72
5	2-Butenal, 2-ethenyl-	576	020521-42-0	68

Peak Number 21 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
19.20	524.60 ng	24976555	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	602	001119-65-9	90
2	1,2-Hexadiene, 5-methyl-	616	013865-36-6	87
3	2-Octyne	2217	002809-67-8	78
4	2,5-Heptadiene, (E,E)-	614	039619-60-8	64
5	1-(2-Methyl-1-propenyl)cyclopropane	631	001003-33-4	59

Peak Number 22 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
19.52	287.46 ng	13686365	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	52
2	.GAMMA.-PICOLINE-D7	439	029372-29-0	38
3	Mepivacaine	54866	000096-88-8	37
4	1-METHYL-5-AMINO-D2-1,2,4-TRIAZOLE	726	053778-60-2	22
5	2,3,4,5,6-D5-ANILINE	442	004165-61-1	9

Peak Number 23 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
19.63	249.67 ng	11886955	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	SPIRO[2.4]HEPTA-2,6-DIENE	419	000000-00-0	43
2	Benzene, methyl-	117436	000108-88-3	43
3	1,3,5-Cycloheptatriene	416	000544-25-2	38
4	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	38
5	CIS-1-BUTYL-2-METHYLCYCLOPROPANE	2731	038851-69-3	35

 Peak Number 24 Rank in Relative Concentration 43

R.T.	Conc	Area	Relative to ISTD	R.T.
19.76	152.01 ng	7237220	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	N-OCTAN-3-ENE	119057	000000-00-0	81
2	2-Octene, (E)-	2641	013389-42-9	76
3	Cyclohexanone, 4-methyl-	119037	000589-92-4	72
4	4-Octene, (E)-	119059	014850-23-8	70
5	3-Octene, (Z)-	2642	014850-22-7	68

 Peak Number 25 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
19.98	146.29 ng	6965019	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	117991	000591-78-6	91
2	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	83
3	2-Pentanone, 4-methyl-	118017	000108-10-1	72
4	Oxirane, 2-methyl-2-(1-methylethyl)	1198	072221-03-5	64
5	1-Propen-2-ol, acetate	117926	000108-22-5	36

 Peak Number 26 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
20.27	153.07 ng	7287901	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedinitrile	118677	000111-69-3	56
2	2-Pentenitrile	116729	013284-42-9	50
3	SULFOLENE	3718	000116-88-8	47
4	Pentanedinitrile	463	000544-13-8	47
5	3-Butenenitrile	116224	000109-75-1	43

 Peak Number 27 Rank in Relative Concentration 66

R.T.	Conc	Area	Relative to ISTD	R.T.
20.75	40.84 ng	1944366	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 4-methyl-	6039	002216-34-4	53
2	Heptane, 2,3-dimethyl-	6043	003074-71-3	49
3	Octane, 2-methyl-	6037	003221-61-2	49
4	Hexane, 3-ethyl-2-methyl-	120927	016789-46-1	46
5	Heptane, 2,6-dimethyl-	6046	001072-05-5	46

 Peak Number 28 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
21.03	148.75 ng	7082124	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 4-propyl-	10257	003178-29-8	59
2	6-Methylundecane	21657	017302-33-9	53
3	Heptane, 3-ethyl-2-methyl-	10259	014676-29-0	50
4	Heptane, 3-ethyl-	6040	015869-80-4	43
5	Heptane, 4-(1-methylethyl)-	10258	052896-87-4	40

 Peak Number 29 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD	R.T.
21.21	51.28 ng	2441507	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,4-Octadiene, 7-methyl-	4880	037050-05-8	47
2	Cyclopentene	116272	000142-29-0	45
3	4-Octyne	118881	001942-45-6	43
4	Spiropentane, butyl-	4926	006191-90-8	38
5	Cyclohexane, 1,3,5-trimethyl-	5473	001839-63-0	38

 Peak Number 30 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
21.68	617.02 ng	29376802	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	120905	000111-84-2	53
2	Pentane, 2,4-dimethyl-	118121	000108-08-7	47
3	1-Heptene	117780	000592-76-7	43
4	4-METHYLPENTANENITRILE-3,3-D2	117642	019424-32-9	43
5	Heptane, 2,4-dimethyl-	120919	002213-23-2	40

 Peak Number 31 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
22.50	3202.75 ng	152485923	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	119307	000106-35-4	80
2	3-Hexanone, 5-methyl-	119328	000623-56-3	47
3	METHYL ESTER OF 2-OXO-HEXANOIC ACID	10564	000000-00-0	37
4	Propanal, propylhydrazone	3039	019718-39-9	25
5	2-Buten-1-ol	116410	006117-91-5	25

 Peak Number 32 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
22.64	1081.24 ng	51478968	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	119299	000110-43-0	91
2	2-Hexanone, 5-methyl-	119322	000110-12-3	90
3	2-Hexanone, 4-methyl-	3096	000105-42-0	78
4	2-Hexanone, 4-hydroxy-3-propyl-	16134	062338-17-4	43
5	2-Hexanone	117992	000591-78-6	40

 Peak Number 33 Rank in Relative Concentration 64

R.T.	Conc	Area	Relative to ISTD	R.T.
23.17	44.58 ng	2122460	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 5,6-dimethyl-	27763	017615-91-7	53
2	Dodecane, 2,6,11-trimethyl-	40639	031295-56-4	47
3	Undecane	124549	001120-21-4	47
4	Decane	122727	000124-18-5	43
5	Nonane, 2-methyl-	10242	000871-83-0	43

 Peak Number 34 Rank in Relative Concentration 54

R.T.	Conc	Area	Relative to ISTD	R.T.
23.28	81.96 ng	3901974	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane	119366	000111-65-9	53
2	Octane, 2,4,6-trimethyl-	15639	062016-37-9	53
3	Pentadecane	129235	000629-62-9	53
4	Decane, 1-iodo-	62498	002050-77-3	52
5	Tetradecane, 4-ethyl-	46981	055045-14-2	50

 Peak Number 35 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
23.55	272.16 ng	12958019	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	119135	001121-07-9	38
2	2-Propanone, diethylhydrazone	5905	016713-36-3	35
3	4,6-Nonanedione	15383	014090-88-1	35
4	1-NITROPYRAZOLE	2738	007119-95-1	30

5 Thiazole, 4,5-dimethyl-

119144 003581-91-7 27

 Peak Number 36 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
23.68	523.34 ng	24916639	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,1'-BICYCLOHEXYL-1,1'-BIS(TRIMETHY	85996	019009-71-3	72
2	Furan, 2,5-diethyltetrahydro-	6013	041239-48-9	64
3	1H-1,2,4-Triazole-3,5-diamine	117824	001455-77-2	53
4	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID	10615	001123-28-0	50
5	1,1'-BICYCLOHEXYL-1,1'-DIOL	34005	002888-11-1	50

 Peak Number 37 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
23.78	689.76 ng	32840213	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexane, 2,5-dimethyl-	3198	000592-13-2	64
2	3-METHYL-5-PYRAZOLONE-1-D1	736	053778-58-8	53
3	GLYCOCYANIDINE	955	000503-86-6	50
4	4-METHYL-2-PYRROLIDINONE	996	000000-00-0	47
5	Furan, 2,5-diethyltetrahydro-	6013	041239-48-9	42

 Peak Number 38 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
24.01	939.12 ng	44712114	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Methyl-2-cyclopenten-1-ol	844	040459-88-9	80
2	3-Penten-2-one, 4-methyl-	797	000141-79-7	64
3	Cyclohexane bromo-	125053	000108-85-0	64
4	3-BROMO-1,1,2-TRIMETHYL-CYCLOPROPAN	17429	000000-00-0	59
5	tert-Butylketene	788	059005-31-1	59

 Peak Number 39 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
24.18	1044.71 ng	49739689	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	10235	000124-18-5	90
2	Hydroxylamine, O-decyl-	22615	029812-79-1	83
3	Tetradecane	128277	000629-59-4	68

4 Octane	3190 000111-65-9	59
5 Decane, 2,9-dimethyl-	21662 001002-17-1	53

 Peak Number 40 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
24.32	1110.54 ng	52874046	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(5H)-FURANONE, 4,5,5-TRIMETHYL-	5202	000000-00-0	50
2	3,6-DIHYDRO-6,6-DIMETHYL-2H-PYRAN-2	5218	072649-03-7	47
3	Oxazole, trimethyl-	2343	020662-84-4	38
4	Acrylonitrile, 3-hydroxy-, acetate	2313	014268-54-3	35
5	2-Propenal, (1,1-dimethylethyl)meth	5295	072101-22-5	32

 Peak Number 41 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
24.63	387.25 ng	18437481	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	15626	002847-72-5	87
2	Nonane, 2,6-dimethyl-	15630	017302-28-2	83
3	Heptane, 5-ethyl-2-methyl-	10261	013475-78-0	59
4	Decane, 2-methyl-	124552	006975-98-0	55
5	2-Methyl-nonane	10241	000081-83-0	53

 Peak Number 42 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
24.91	358.42 ng	17064822	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1H-Imidazole, 2-methyl-	116746	000693-98-1	9
2	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	9
3	2-Cyclohexen-1-one, 3-methyl-	118860	001193-18-6	9
4	1H-Pyrazole, 3-methyl-	116740	001453-58-3	8
5	1H-Imidazole, 1-methyl-	116744	000616-47-7	7

 Peak Number 43 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
25.11	120.56 ng	5740071	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	5-Octen-4-one, 7-methyl-	122472	032064-78-1	47
2	Cyclohexane, 1-methyl-2-propyl-	9505	004291-79-6	46

3	Cyclohexane, 1-methyl-3-(1-methylethyl)-	9507	016580-24-8	43
4	Cyclohexane, 1-ethyl-2-methyl-, cis	120635	004923-77-7	43
5	Cyclopropanemethanol, 2,2,3,3-tetra	6009	002415-96-5	43

Peak Number 44 Rank in Relative Concentration 55

R.T.	Conc	Area	Relative to ISTD	R.T.
25.30	78.44 ng	3734606	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,1'-(1,4-butanediyl)b	45121	006165-44-2	38
2	Cyclohexane, 1,1'-(1,3-propanediyl)	38787	003178-24-3	35
3	Cyclohexane, (1-methylethyl)-	120633	000696-29-7	30
4	2-Hexenal	117700	000505-57-7	25
5	Furan, 2,5-dihydro-2,5-dimethyl-	879	059242-27-2	20

Peak Number 45 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
25.39	252.52 ng	12022634	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	118929	000629-08-3	62
2	1H-Imidazole-4-ethanamine	118920	000051-45-6	38
3	2-Cyclohexen-1-one, 3-methyl-	118857	001193-18-6	38
4	Bicyclo[3.1.0]hexan-2-one, 3,3,6-tr	8671	053966-40-8	25
5	2-Cyclohexen-1-one, 3,5,5-trimethyl	122270	000078-59-1	23

Peak Number 46 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
25.56	167.38 ng	7968882	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Undecene	124351	000821-95-4	38
2	Decane, 2-methyl-	124550	006975-98-0	38
3	Dodecane, 2,6,11-trimethyl-	129244	031295-56-4	35
4	Pentadecane, 2,6,10,14-tetramethyl-	132099	001921-70-6	35
5	Octane, 2-methyl-	120909	003221-61-2	35

Peak Number 47 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
25.73	1553.21 ng	73949621	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	121202	000104-76-7	90

2 Heptane, 1,1'-oxybis-	41379	000629-64-1	53
3 3-Undecene, 6-methyl-, (E)-	20695	074630-52-7	49
4 1-Decanol	124746	000112-30-1	47
5 1-Pentene, 4,4-dimethyl-	117800	000762-62-9	38

Peak Number 48 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
25.89	898.96 ng	42800471	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Azabicyclo[2.2.1]heptane	699	000279-24-3	72
2	cis-1,2-Divinylcyclobutane	1955	016177-46-1	38
3	Hexanenitrile	117638	000628-73-9	38
4	1,2-Nonadiene	4866	022433-33-6	38
5	Isoxazole, 3,5-dimethyl-	676	000300-87-8	38

Peak Number 49 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
26.37	2543.83 ng	121114278	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	122726	000124-18-5	91
2	Undecane	15622	001120-21-4	90
3	Dodecane	126001	001112-40-3	90
4	1-iodo-2-METHYLUNDECANE	72274	073105-67-6	78
5	Pentadecane	129233	000629-62-9	72

Peak Number 50 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
26.56	70.09 ng	3337130	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	14851	000000-00-0	74
2	3-Undecene, (E)-	14794	001002-68-2	49
3	Cyclopentane, 1-methyl-2-propyl-	5451	003728-57-2	30
4	2-Pentene, 2-methyl-	116903	000625-27-4	25
5	2-Pentene, 3-methyl-, (E)-	116907	000616-12-6	25

Peak Number 51 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD	R.T.
26.67	121.46 ng	5782792	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Decane, 2,9-dimethyl-	21662	001002-17-1	59
2 3,6-Dimethyldecane	21664	017312-53-7	58
3 OCTANE, 2,3,3-TRIMETHYL-	15636	000000-00-0	50
4 Tetradecane	128277	000629-59-4	50
5 Octane, 3,6-dimethyl-	10255	015869-94-0	49

Peak Number 52 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
26.97	300.68 ng	14315769	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 4-methyl-	126017	002980-69-0	76
2	Undecane, 3,8-dimethyl-	27755	017301-30-3	59
3	Nonane, 5-butyl-	127266	017312-63-9	50
4	Decane, 4-methyl-	15626	002847-72-5	47
5	Carbonic acid, dipentyl ester	35526	002050-94-4	46

Peak Number 53 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
27.36	585.47 ng	27874659	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-	122335	000091-17-8	95
2	Naphthalene, decahydro-, trans-	122344	000493-02-7	91
3	Bicyclo[2.2.1]heptane, 2-methyl-, e	2290	000872-78-6	80
4	Spiro[4.5]decane	122327	000176-63-6	70
5	Naphthalene, decahydro-, cis-	122332	000493-01-6	55

Peak Number 54 Rank in Relative Concentration 47

R.T.	Conc	Area	Relative to ISTD	R.T.
27.86	125.06 ng	5954204	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 3-methyl-	126015	001002-43-3	64
2	Hexatriacontane	136997	000630-06-8	50
3	(R,R)-3,8-Dimethyldecane	21665	000000-00-0	47
4	Pentadecane	129234	000629-62-9	43
5	5,8-Dimethyldodecane	34142	090600-89-8	38

Peak Number 55 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
27.97	66.08 ng	3145895	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Furan, 2,5-dihydro-	116325	001708-29-8	90
2 1H-Imidazole, 4,5-dihydro-2,4-dimet	769	000930-61-0	90
3 1,4-Oxathian-2-one	119713	005512-70-9	90
4 CYCLOOCTEN-5,6-DIONE	122246	000000-00-0	90
5 3-Hexene, 2,5-dimethyl-, (E)-	2681	000692-70-6	83

Peak Number 56 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
28.11	190.13 ng	9052492	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, pentyl-	14841	004292-92-6	83
2	Cyclohexane, octyl-	33191	001795-15-9	72
3	Cyclohexane, 1,1'-(1,4-butanediyl)b	129929	006165-44-2	72
4	Cyclohexane, hexyl-	20760	004292-75-5	72
5	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	64

Peak Number 57 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
28.27	370.20 ng	17625779	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(1H)-Pyrimidinone, 4-amino-	2309	000071-30-7	55
2	Isoxazole, trimethyl-	118926	010557-82-1	49
3	Cyclododecanol	27697	001724-39-6	47
4	2-Cyclohexen-1-one, 4,4-dimethyl-	120409	001073-13-8	43
5	Bicyclo[4.1.0]heptane, 7-butyl-	13875	018645-10-8	41

Peak Number 58 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
28.62	1021.53 ng	48635963	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2,6-dimethyl-	127264	017301-23-4	97
2	Undecane, 3,6-dimethyl-	27753	017301-28-9	74
3	Dodecane, 6-methyl-	27736	006044-71-9	62
4	Nonane, 3-methyl-	10243	005911-04-6	59
5	Tridecane, 6-methyl-	34138	013287-21-3	59

Peak Number 59 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
28.95	419.98 ng	19995788	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-2-methyl-	124047	002958-76-1	49
2	Iridomyrmecin	125756	000485-43-8	46
3	Cyclodecene, 3-bromo-	41810	056325-56-5	42
4	Pulegone	123989	000089-82-7	41
5	4,5-Nonadiene	4871	000821-74-9	38

Peak Number 60 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
29.45	369.74 ng	17603613	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-2,6-dimethyl	19761	001618-22-0	41
2	Cyclododecane	125805	000294-62-2	38
3	Cyclohexanehexanol	27694	004354-58-9	35
4	1-Tetradecanol	129365	000112-72-1	27
5	1-Hentetracontanol	112195	040710-42-7	27

Peak Number 61 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
29.77	1154.47 ng	54965277	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 7-methyl-	34139	026730-14-3	91
2	Octadecane, 2,6-dimethyl-	67910	075163-97-2	78
3	Octane, 3,6-dimethyl-	122744	015869-94-0	72
4	DECANE, 2,3,5,8-TETRAMETHYL-	34143	000000-00-0	59
5	Octane, 2-bromo-	30585	000557-35-7	59

Peak Number 62 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
30.10	202.30 ng	9631793	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, decyl-	39719	001795-21-7	52
2	Cyclopentane, 1-pentyl-2-propyl-	26864	062199-51-3	50
3	Cyclopentane, (3-methylbutyl)-	9496	001005-68-1	49
4	Cyclopentane, 1-butyl-2-propyl-	20759	062199-50-2	46
5	3-Nonen-1-ol, (E)-	10184	010339-61-4	46

Peak Number 63 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
30.27	378.81 ng	18035524	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-UNDECENE, 5-METHYL-, CIS/TRANS	20694	000000-00-0	64
2	Cyclopentane, (2-methylpropyl)-	5449	003788-32-7	64
3	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	49
4	Cyclohexane, 1,1'-(1,4-butanediyl)b	45121	006165-44-2	47
5	3-CYCLOHEXYL-3-DEUTEROPROP-1-ENE	4918	055702-62-0	46

Peak Number 64 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
30.44	5154.61 ng	245415635	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2-methyl-	126010	007045-71-8	83
2	Tetradecane	128277	000629-59-4	80
3	Hexadecane	130123	000544-76-3	80
4	Tridecane	127254	000629-50-5	76
5	Nonane, 4,5-dimethyl-	15632	017302-23-7	74

Peak Number 65 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
31.33	256.38 ng	12206673	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,2,3-trimethyl-, (1.a	5466	007667-55-2	38
2	Cyclohexane, 1,2,3-trimethyl-	5467	001678-97-3	30
3	Propylene trimer	5432	000000-00-0	25
4	Cyclopentane, 1-butyl-2-propyl-	20759	062199-50-2	25
5	1R,2C,4T,5T-1,2,4,5-TETRAMETHYLCYCL	9530	019899-42-4	22

Peak Number 66 Rank in Relative Concentration 50

R.T.	Conc	Area	Relative to ISTD	R.T.
31.76	108.97 ng	5188248	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Isomer B of 1,1,6-Trimethyldecahydr	25876	081983-74-6	47
2	Naphthalene, decahydro-1,5-dimethyl	19758	066552-62-3	46
3	Cyclododecene	125605	001501-82-2	35
4	Naphthalene, decahydro-1,6-dimethyl	19759	001750-51-2	35
5	Isomer A of 1,1,6-Trimethyldecahydr	25875	081983-73-5	27

Peak Number 67 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
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32.33 421.81 ng 20082988 Hexafluorobenzene 13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128277	000629-59-4	96
2	Heptadecane	130827	000629-78-7	80
3	Tridecane	127252	000629-50-5	80
4	Hexadecane	130123	000544-76-3	74
5	Dodecane	126002	000112-40-3	72

 Peak Number 68 Rank in Relative Concentration 58

R.T.	Conc	Area	Relative to ISTD	R.T.
33.73	68.96 ng	3283095	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Bicyclo[4.1.0]heptane, 3-methyl-7-p	25870	041977-48-4	38
2	2-(1-PROPENYL)-3-VINYLOXIRAN	2174	070597-12-5	25
3	.alpha.-Thujone	123993	000546-80-5	16
4	Cyclopentane, 1,3-dimethyl-2-(1-met	8782	061142-30-1	16
5	Cyclohexane, 1-(cyclohexylmethyl)-3	32156	054823-95-9	15

 39010616.D AREA.M Wed Feb 03 17:54:02 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010622.D

Acq On : 8 Jan 99 8:58 pm

Sample : VS006-036-TS10

Misc :

Quant Time: Jan 25 20:35 1999

Vial: 20

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.41	84	4809178	200.00	ng	0.03
27) Ethylbenzene-d10	22.11	98	6540938	200.00	ng	-0.03
37) Dodecane-d26	27.93	66	492790	200.00	ng	-0.04

System Monitoring Compounds

						%Recovery
9) Hexafluorobenzene	13.75	186	3945390	243.29	ng	75.56%
21) Toluene-d8	19.50	98	7227835	319.02	ng	84.85%
32) Bromobenzene-d5	24.86	82	3179200	263.74	ng	85.63%

Target Compounds

						Qvalue
2) Methanol	8.34	31	2701	0.49	ng	# 1
3) Ethanol	9.72	31	1678399	180.73	ng	m 25
4) Acetone	11.17	43	1198018	55.13	ng	m 94
5) Acetonitrile	11.63	41	155814	18.51	ng	m 100
6) Dichloromethane	12.34	84	890	0.15	ng	# 29
7) 1-Propanol	12.68	31	950868	100.88	ng	m 68
10) Butanal	14.19	72	152306	88.31	ng	m 75
12) Chloroform	15.00	83	1259	0.07	ng	# 20
13) Tetrahydrofuran	15.33	42	2230	0.31	ng	# 46
14) 1-Butanol	15.97	56	2407204	381.19	ng	m 98
16) Tetrachloroethane	16.22	117	926	0.06	ng	# 39
18) 2-Pentanone	17.06	43	890138	43.99	ng	m 85
19) Butanenitrile	17.31	41	1769931	149.91	ng	m 100
22) Toluene	19.64	91	2718146	106.21	ng	m 100
23) 2-Hexanone	19.96	43	2857848	194.75	ng	m 100
24) Pentanenitrile	20.24	41	2037069	229.30	ng	m 92
25) Tetrachloroethylene	20.81	166	2812	0.25	ng	# 1
26) n-Nonane	21.66	57	3111988	314.84	ng	m 89
28) 2-Heptanone	22.60	43	26992600	1049.58	ng	m 89
29) Hexanenitrile	22.95	41	2884485	272.45	ng	m 65
30) o-Xylene	23.30	91	30906	1.11	ng	m 88
31) n-Decane	24.14	57	11363861	913.44	ng	m 78
33) 2-Octanone	25.01	58	784962	112.19	ng	m 78
34) Heptanenitrile	25.35	82	3070266	206.44	ng	m 69

(#) = qualifier out of range (m) = manual integration

39010622.D 390106CA.M

Mon Jan 25 20:36:07 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010622.D

Acq On : 8 Jan 99 8:58 pm

Sample : VS006-036-TS10

Misc :

Quant Time: Jan 25 20:28 1999

Vial: 20

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M

Title :

Last Update : Fri Jan 22 23:38:57 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.41	84	4809178	200.00	ng	0.03
5) Ethylbenzene-d10	22.11	98	6540938	200.00	ng	-0.03

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) n-Heptane	16.15	43	19422791	1867.07	ng	m	79
6) 2-Heptanone	22.60	43	26992600	1267.14	ng	#	89
7) n-Decane	24.14	57	11039967	968.85	ng	#	89
8) n-Undecane	26.33	57	26186138	2109.76	ng	#	88
9) n-Dodecane	28.38	57	40708027	3234.19	ng	#	92
10) n-Tridecane	30.38	57	56477898	6875.59	ng	m	40

(#)= qualifier out of range (m)= manual integration

39010622.D 390106CH.M

Mon Jan 25 20:29:13 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010622.D
Operator : Bonfoey
Acquired : 8 Jan 99 8:58 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-036-TS10
Misc Info :
Vial Number: 20

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010622.D Vial: 20
 Acq On : 8 Jan 99 8:58 pm Operator: Bonfoey
 Sample : VS006-036-TS10 Inst : 5972 INST
 Misc : Multiplr: 1.00
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

 Peak Number 1 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
7.51	230.83 ng	11067386	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	7H-1,4-Oxathiepin-7-one, tetrahydro	6785	005512-72-1	91
2	2-Furancarboxylic acid	118962	000088-14-2	91
3	1,3-Butadiene, 2-chloro-, dimer	23660	014523-89-8	91
4	1H-Pyrazole, 3-chloro-5-methyl-4-ni	17085	006814-58-0	90
5	1,4-Pentadiene	116266	000591-93-5	90

 Peak Number 2 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
8.39	147.55 ng	7074534	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	86
2	1-Butene	116017	000106-98-9	52
3	Cyclobutane	116025	000287-23-0	47
4	Butane, 1-isocyano-	116801	002769-64-4	38
5	1-Hexene	116883	000592-41-6	33

 Peak Number 3 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
10.25	589.87 ng	28281851	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Oxirane, 2,2-dimethyl-	116433	000558-30-5	53
2	Butane, 2-methyl-	116458	000078-78-4	53
3	Pentane	116456	000109-66-0	50
4	Propane, 2-methyl-	116082	000075-28-5	39
5	Bicyclo[3.3.1]nonan-2-one, 9-isopro	24893	018346-78-6	38

 Peak Number 4 Rank in Relative Concentration 67

R.T.	Conc	Area	Relative to ISTD	R.T.
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11.18 49.11 ng 2354707 Hexafluorobenzene 13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propanone	116053	000067-64-1	64
2	2-Hexanone	117991	000591-78-6	38
3	2-Propanone, oxime	116482	000127-06-0	32
4	Diazene, dimethyl-	116036	000503-28-6	25
5	2-Propanone, 1,1-dichloro-	5063	000513-88-2	12

Peak Number 5 Rank in Relative Concentration 60

R.T.	Conc	Area	Relative to ISTD	R.T.
12.07	81.90 ng	3926626	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane, 2-methyl-	106	000107-83-5	58
2	1-Propene	115904	000115-07-1	43
3	Pentane	116452	000109-66-0	43
4	Pentane, 2,3-dimethyl-	118119	000565-59-3	38
5	Butane, 1-chloro-3-methyl-	118532	000107-84-6	38

Peak Number 6 Rank in Relative Concentration 69

R.T.	Conc	Area	Relative to ISTD	R.T.
12.59	40.58 ng	1945602	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butanol, 2-methyl-	117273	000137-32-6	64
2	1-Butanol	116549	000071-36-3	59
3	2-TERT-BUTYL-3-METHOXYOXAZIRANE	6675	049680-37-7	47
4	1-Propene, 2-methyl-	116022	000115-11-7	43
5	Formic acid, butyl ester	1366	000592-84-7	42

Peak Number 7 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
13.45	87.42 ng	4191402	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentene, 3-methyl-, (E)-	116908	000616-12-6	50
2	2-Hexene, (E)-	116889	004050-45-7	49
3	Cyclopentanone	116858	000120-92-3	46
4	3,4-Dihydropyran	116875	000110-87-2	43
5	2-Hexene	116888	000592-43-8	43

Peak Number 8 Rank in Relative Concentration 70

R.T.	Conc	Area	Relative to ISTD	R.T.
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14.18	39.88 ng	1911985	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butanal	116378	000123-72-8	94
2	Hexanal	1129	000066-25-1	64
3	Ethene, ethoxy-	116429	000109-92-2	64
4	1-Hexyn-3-ol	117753	000105-31-7	50
5	2-Butanone	116392	000078-93-3	46

Peak Number 9 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD	R.T.
14.31	75.88 ng	3638281	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Butanone	116396	000078-93-3	72
2	Propanal, 2-methyl-	116388	000078-84-2	9
3	Ethene, ethoxy-	116431	000109-92-2	7
4	Butanal	116385	000123-72-8	5
5	Pentane	116455	000109-66-0	5

Peak Number 10 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD	R.T.
15.07	60.21 ng	2886602	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Penten-1-ol, 4-methyl-	1159	005362-55-0	47
2	2-Nonynoic acid	14371	001846-70-4	43
3	2-Propenenitrile, 2-methyl-	116225	000126-98-7	38
4	1-Hexene, 3-methyl-	117786	003404-61-3	38
5	3-Buten-1-ol, 3-methyl-2-methylene-	840	026431-13-0	35

Peak Number 11 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD	R.T.
15.47	149.19 ng	7153250	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexyn-1-ol	825	000764-60-3	50
2	3-Heptene, (E)-	900	014686-14-7	50
3	2-Undecanethiol, 2-methyl-	35630	010059-13-9	50
4	1-Propene, 1-(2-propenyloxy)-, (E)-	871	061142-13-0	38
5	1-Heptene	117780	000592-76-7	38

Peak Number 12 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD		R.T.
15.96	309.35 ng	14832185	Hexafluorobenzene		13.75
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Butanol		116554	000071-36-3	91
2	Furan, 2-propyl-		118853	004229-91-8	72
3	Formic acid, butyl ester		118234	000592-84-7	64
4	2-Butene, (E)-		116021	000624-64-6	49
5	Butane, 1-chloro-		117419	000109-69-3	38

 Peak Number 13 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD		R.T.
16.14	2475.23 ng	118677557	Hexafluorobenzene		13.75
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Heptane		118107	000142-82-5	91
2	Hexane, 3-methyl-		118114	000589-34-4	72
3	2-Methyl-nonane		10241	000081-83-0	59
4	Pentane, 2,3,4-trimethyl-		119384	000565-75-3	50
5	Hexane, 3,3,4-trimethyl-		6062	016747-31-2	50

 Peak Number 14 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD		R.T.
16.34	2809.07 ng	134683780	Hexafluorobenzene		13.75
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	3-Heptene		901	000592-78-9	97
2	3-Heptene, (E)-		900	014686-14-7	96
3	2-Heptene		117785	000592-77-8	91
4	2-Heptene, (E)-		898	014686-13-6	90
5	1-Hexene, 3-methyl-		117786	003404-61-3	59

 Peak Number 15 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD		R.T.
16.91	2155.61 ng	103353126	Hexafluorobenzene		13.75
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene		117785	000592-77-8	95
2	2-Heptene, (E)-		898	014686-13-6	95
3	3-Heptene		901	000592-78-9	91
4	3-Heptene, (E)-		900	014686-14-7	89
5	Cycloheptane		945	000291-64-5	87

 Peak Number 16 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
17.17	195.33 ng	9365232	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butene, 2-methyl-	116339	000563-46-2	72
2	Cyclohexane, 1,2,3-trimethyl-, (1.a	120647	001678-81-5	72
3	1-Pentene	116331	000109-67-1	64
4	2-Butenal	116300	004170-30-3	53
5	Cyclopropane, butyl-	931	000930-57-4	25

Peak Number 17 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD	R.T.
17.31	131.55 ng	6307526	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propenenitrile, 2-methyl-	116225	000126-98-7	22
2	Hexanedinitrile	1879	000111-69-3	9
3	3-Butenenitrile	116223	000109-75-1	9
4	Borane, ethyldimethyl-	116330	001113-22-0	9
5	1-Propene	115905	000115-07-1	9

Peak Number 18 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
17.74	100.32 ng	4809987	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenenitrile	116729	013284-42-9	60
2	2,5-Cyclohexadiene-1,4-dione	118669	000106-51-4	50
3	SULFOLENE	3718	000116-88-8	43
4	1,6-Heptadiene	117603	003070-53-9	37
5	2,5-Furandione, 3,4-dimethyl-	5120	000766-39-2	37

Peak Number 19 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
18.34	1358.47 ng	65133073	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	119373	000589-81-1	72
2	Hexane, 1-(hexyloxy)-2-methyl-	34909	074421-17-3	59
3	Hexane, 2,4-dimethyl-	3197	000589-43-5	53
4	Octane, 3,4-dimethyl-	10253	015869-92-8	50
5	Hexane, 3-ethyl-	3194	000619-99-8	50

Peak Number 20 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
19.19	569.44 ng	27302190	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	602	001119-65-9	87
2	1,2-Hexadiene, 5-methyl-	616	013865-36-6	87
3	2-Octyne	2217	002809-67-8	78
4	2,5-Heptadiene, (E,E)-	614	039619-60-8	64
5	2,4-Hexadienal	117579	000142-83-6	64

Peak Number 21 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
19.50	276.15 ng	13240195	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	58
2	.GAMMA.-PICOLINE-D7	439	029372-29-0	38
3	Mepivacaine	54866	000096-88-8	25
4	L-Proline, 1-methyl-5-oxo-, methyl	15732	042435-88-1	25
5	2,3,4,5,6-D5-ANILINE	442	004165-61-1	25

Peak Number 22 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
19.61	251.25 ng	12046505	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-HEPTENE, 3-METHYL-	2651	000000-00-0	50
2	Benzene, methyl-	117438	000108-88-3	38
3	2-Butenal	116300	004170-30-3	35
4	1-Butene, 2-methyl-	116339	000563-46-2	35
5	1,3,5-Cycloheptatriene	117444	000544-25-2	35

Peak Number 23 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD	R.T.
19.74	155.47 ng	7453946	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	N-OCTAN-3-ENE	119057	000000-00-0	81
2	2-Octene, (E)-	2641	013389-42-9	76
3	Heptane, 3-methylene-	119065	001632-16-2	74
4	2-Octene	119054	000111-67-1	72
5	Cyclooctane	2729	000292-64-8	72

 Peak Number 24 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
19.96	165.92 ng	7955326	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	117991	000591-78-6	91
2	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	74
3	2-Pentanone, 4-methyl-	118019	000108-10-1	72
4	2-Hexanone, 4-methyl-	3096	000105-42-0	50
5	Oxirane, 2-methyl-2-(1-methylethyl)	1198	072221-03-5	50

 Peak Number 25 Rank in Relative Concentration 43

R.T.	Conc	Area	Relative to ISTD	R.T.
20.24	180.36 ng	8647714	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedinitrile	118677	000111-69-3	56
2	SULFOLENE	3718	000116-88-8	47
3	Pentanedinitrile	463	000544-13-8	47
4	1-Butyne	115986	000107-00-6	42
5	1,1'-Bicyclopropyl	116791	005685-46-1	40

 Peak Number 26 Rank in Relative Concentration 68

R.T.	Conc	Area	Relative to ISTD	R.T.
20.74	44.18 ng	2118494	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 4-methyl-	6039	002216-34-4	49
2	Decane, 2,4,6-trimethyl-	27782	062108-27-4	38
3	Heptane, 2,3-dimethyl-	120918	003074-71-3	38
4	Decane, 5,6-dimethyl-	126024	001636-43-7	38
5	Tetradecane	128274	000629-59-4	38

 Peak Number 27 Rank in Relative Concentration 47

R.T.	Conc	Area	Relative to ISTD	R.T.
21.00	151.53 ng	7265171	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 4-propyl-	10257	003178-29-8	53
2	Heptane, 4-(1-methylethyl)-	10258	052896-87-4	50
3	Octane, 2,3-dimethyl-	10248	007146-60-3	45
4	Heptane, 2,5-dimethyl-	6045	002216-30-0	43
5	Heptane, 3-ethyl-	6040	015869-80-4	43

Peak Number 28 Rank in Relative Concentration 66

R.T.	Conc	Area	Relative to ISTD	R.T.
21.18	52.58 ng	2521144	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,6-Octadiene, (E)-	2222	019036-81-8	50
2	1,4-Hexadiene, 2,5-dimethyl-	2243	000927-97-9	50
3	Cyclopropane, 1,2-dimethyl-3-methyl	116779	062338-02-7	43
4	1,6-Octadiene	2223	003710-41-6	40
5	Cyclohexane, 1,2,3-trimethyl-, (1.a	5466	007667-55-2	38

Peak Number 29 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
21.65	686.35 ng	32908000	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	120905	000111-84-2	52
2	1-Decanol, 2-ethyl-	28569	021078-65-9	47
3	2,4,6,8-TETRAMETHYL-1-UNDECENE	39728	059920-26-2	43
4	1-Heptene	117780	000592-76-7	43
5	2-Azido-2-methylbutane	2780	032872-42-7	43

Peak Number 30 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
22.45	3848.25 ng	184508436	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	3091	000106-35-4	83
2	METHYL ESTER OF 2-OXO-HEXANOIC ACID	10564	000000-00-0	43
3	3-Hexanone, 5-methyl-	119328	000623-56-3	38
4	Butanoic acid, 3-methyl-, 2-propeny	10005	002835-39-4	37
5	Propanal, propylhydrazone	3039	019718-39-9	25

Peak Number 31 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
22.61	1389.89 ng	66639571	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	119299	000110-43-0	90
2	2-Hexanone, 5-methyl-	119322	000110-12-3	90
3	2-Octanone	120852	000111-13-7	40
4	2-Hexanone, 4-hydroxy-3-propyl-	16134	062338-17-4	40
5	5-Undecanone	21602	033083-83-9	40

 Peak Number 32 Rank in Relative Concentration 64

R.T.	Conc	Area	Relative to ISTD	R.T.
23.13	53.98 ng	2588131	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 5,6-dimethyl-	27763	017615-91-7	53
2	Octane, 4-ethyl-	10247	015869-86-0	46
3	Nonane, 2-methyl-	10242	000871-83-0	43
4	Undecane	124547	001120-21-4	38
5	Dodecane, 2,7,10-trimethyl-	40640	074645-98-0	38

 Peak Number 33 Rank in Relative Concentration 56

R.T.	Conc	Area	Relative to ISTD	R.T.
23.24	107.01 ng	5130747	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,4-dimethyl-	6044	002213-23-2	59
2	Nonane	6035	000111-84-2	59
3	Nonane, 2-methyl-	122732	000871-83-0	58
4	[1'-13C]-Octyne	2216	000000-00-0	53
5	Tridecane, 5-methyl-	34137	025117-31-1	53

 Peak Number 34 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
23.52	348.42 ng	16705162	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Isothiazole, 3,4-dimethyl-	2777	027330-46-7	43
2	Thiazole, 2,4-dimethyl-	119142	000541-58-2	43
3	2,5-Pyrrolidinedione, 1-methyl-	119134	001121-07-9	38
4	Thiazole, 4,5-dimethyl-	119144	003581-91-7	38
5	Octane, 2-bromo-	30585	000557-35-7	38

 Peak Number 35 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
23.64	701.69 ng	33643246	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,1'-BICYCLOHEXYL-1,1'-BIS(TRIMETHY	85996	019009-71-3	72
2	Furan, 2,5-diethyltetrahydro-	6013	041239-48-9	64
3	1H-1,2,4-Triazole-3,5-diamine	117824	001455-77-2	58
4	1,1'-BICYCLOHEXYL-1,1'-DIOL	34005	002888-11-1	56

5 2,2'-Bioxepane

33981 074793-02-5 50

 Peak Number 36 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
23.75	876.74 ng	42036117	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	GLYCOCYANIDINE	955	000503-86-6	59
2	3-METHYL-5-PYRAZOLONE-1-D1	736	053778-58-8	59
3	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID	10615	001123-28-0	50
4	3-Oxepanemethanol	6493	056666-73-0	50
5	1-Ethylcyclohexanol	6017	001940-18-7	47

 Peak Number 37 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
23.97	1200.70 ng	57568813	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Penten-2-one, 4-methyl-	117726	000141-79-7	64
2	3-BROMO-1,1,2-TRIMETHYL-CYCLOPROPAN	17429	000000-00-0	59
3	tert-Butylketene	788	059005-31-1	59
4	Cyclopropane, 1,1,2,2-tetramethyl-	932	004127-47-3	59
5	2-Pentene, 4,4-dimethyl-, (Z)-	927	000762-63-0	45

 Peak Number 38 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
24.14	1213.03 ng	58159751	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	122728	000124-18-5	94
2	Decane, 1,1'-oxybis-	73380	002456-28-2	78
3	Tetradecane	128277	000629-59-4	62
4	Decane, 2,9-dimethyl-	21662	001002-17-1	59
5	Nonane	120905	000111-84-2	53

 Peak Number 39 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
24.28	1360.07 ng	65210194	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,6-DIHYDRO-6,6-DIMETHYL-2H-PYRAN-2	5218	072649-03-7	50
2	2(5H)-FURANONE, 4,5,5-TRIMETHYL-	5202	000000-00-0	50
3	Oxazole, trimethyl-	2343	020662-84-4	40

4 1-Undecene, 8-methyl-	20675	074630-40-3	37
5 2-Propenal, (1,1-dimethylethyl)meth	5295	072101-22-5	35

 Peak Number 40 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
24.59	412.92 ng	19797747	Hexafluorobenzene	13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	15626	002847-72-5	83
2	Decane, 2-methyl-	124556	006975-98-0	81
3	Nonane, 2,6-dimethyl-	15630	017302-28-2	80
4	2-Methyl-nonane	10241	000081-83-0	53
5	Octane, 2,3,7-trimethyl-	15638	062016-34-6	50

 Peak Number 41 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
24.87	354.98 ng	17019988	Hexafluorobenzene	13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	38
2	1H-Pyrazole, 3-methyl-	116742	001453-58-3	9
3	1H-Imidazole, 2-methyl-	116746	000693-98-1	9
4	Benzene, 1-nitro-4-(1-propynyl)-	17180	028289-83-0	9
5	Pyrido[2,3-d]pyrimidine, 4-methoxy-	17153	028732-78-7	9

 Peak Number 42 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
25.06	190.22 ng	9120227	Hexafluorobenzene	13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1-methyl-2-propyl-	9505	004291-79-6	53
2	Cyclohexane, 1-ethyl-2-methyl-, tra	5461	004923-78-8	47
3	Cyclohexane, 1-ethyl-4-methyl-, cis	5462	004926-78-7	43
4	Cyclohexane, 1-ethyl-4-methyl-, tra	120640	006236-88-0	43
5	Cyclohexane, 1-bromo-2-methyl-	23639	006294-39-9	38

 Peak Number 43 Rank in Relative Concentration 58

R.T.	Conc	Area	Relative to ISTD	R.T.
25.25	91.19 ng	4372134	Hexafluorobenzene	13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	DODECANE, 6-CYCLOHEXYL-	57566	013151-86-5	38
2	Cyclohexane, (1-methylethyl)-	120632	000696-29-7	30

3 Phosphonous dichloride, [methyl(1-m	52332	074792-87-3	22
4 5,6-DIHYDRO-4,5-DIMETHYL-2H-PYRAN-2	5219	030217-33-5	22
5 3-Heptene, 2,2,3,5,5,6,6-heptamethy	128066	054845-26-0	14

Peak Number 44 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
25.35	319.34 ng	15311145	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	2359	000629-08-3	53
2	2-Cyclohexen-1-one, 3-methyl-	118857	001193-18-6	28
3	1H-Imidazole-4-ethanamine	118920	000051-45-6	28
4	CYCLOPENTANE, 1-DEUTERO-2-METHYL-1-	2273	000000-00-0	10
5	9-Azabicyclo[6.1.0]nonane, 9,9'-azo	65742	066387-81-3	10

Peak Number 45 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
25.51	190.94 ng	9154704	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2-methyl-	124550	006975-98-0	45
2	Heptadecane, 2,6,10,14-tetramethyl-	133325	018344-37-1	38
3	Pentadecane, 2,6,10,14-tetramethyl-	132099	001921-70-6	35
4	Heptane, 2,6-dimethyl-	6046	001072-05-5	35
5	1-Octanol, 2-butyl-	127412	003913-02-8	27

Peak Number 46 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
25.69	2975.61 ng	142668780	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	121202	000104-76-7	86
2	1-Decene, 2,4-dimethyl-	20729	055170-80-4	50
3	4,4-Dimethyl-2,2-bis(1,1-dimethylet	47810	000000-00-0	38
4	Heptane, 1,1'-oxybis-	41379	000629-64-1	38
5	1-Pentene, 4,4-dimethyl-	117800	000762-62-9	38

Peak Number 47 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
25.85	1159.15 ng	55576478	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Azabicyclo[2.2.1]heptane	699	000279-24-3	72

2 Isoxazole, 3,5-dimethyl-	676	000300-87-8	40
3 Hexanenitrile	117638	000628-73-9	40
4 1,2-Nonadiene	4866	022433-33-6	38
5 Pentanedinitrile, 2-methyl-	118678	004553-62-2	36

Peak Number 48 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
26.33	2807.77 ng	134621344	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	15622	001120-21-4	94
2	Decane	122728	000124-18-5	87
3	Nonane, 2-methyl-	10242	000871-83-0	80
4	Tridecane	127251	000629-50-5	78
5	Dodecane	126001	000112-40-3	64

Peak Number 49 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
26.51	81.71 ng	3917556	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	14851	000000-00-0	81
2	3-Dodecene, (Z)-	20665	007239-23-8	64
3	5-Undecene, (E)-	14798	000764-97-6	53
4	5-Dodecene, (Z)-	20668	007206-28-2	52
5	1-Decene, 5-methyl-	14801	054244-79-0	50

Peak Number 50 Rank in Relative Concentration 50

R.T.	Conc	Area	Relative to ISTD	R.T.
26.63	132.01 ng	6329559	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,6-dimethyl-	6046	001072-05-5	53
2	3,6-Dimethyldecane	21664	017312-53-7	53
3	Decane, 1,1'-oxybis-	73380	002456-28-2	53
4	Decane, 2,9-dimethyl-	21662	001002-17-1	50
5	Decane, 2-methyl-	124550	006975-98-0	49

Peak Number 51 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
26.92	330.61 ng	15851439	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Undecane, 4-methyl-	126017	002980-69-0	74
2 Nonane, 5-butyl-	127266	017312-63-9	58
3 Decane, 4-methyl-	124557	002847-72-5	50
4 Nonane, 5-(2-methylpropyl)-	27796	062185-53-9	50
5 Heptane, 3,3,5-trimethyl-	122748	007154-80-5	47

 Peak Number 52 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
27.32	541.69 ng	25971684	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-, trans-	122344	000493-02-7	95
2	Naphthalene, decahydro-	122339	000091-17-8	95
3	Naphthalene, decahydro-, cis-	8834	000493-01-6	70
4	Spiro[4.5]decane	8822	000176-63-6	55
5	Bicyclo[2.2.1]heptane, 2-methyl-, e	2290	000872-78-6	42

 Peak Number 53 Rank in Relative Concentration 53

R.T.	Conc	Area	Relative to ISTD	R.T.
27.81	123.84 ng	5937488	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 3-methyl-	126015	001002-43-3	72
2	(R,R)-3,8-Dimethyldecane	21665	000000-00-0	53
3	Decane, 3-bromo-	43497	030571-71-2	50
4	Triacotane	136343	000638-68-6	50
5	Tridecane, 3-methyl-	128288	006418-41-3	50

 Peak Number 54 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
27.93	53.68 ng	2573959	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	HEPT-TRANS-4-ENAL	2634	000929-22-6	91
2	1R,3-TRANS-DIMETHOXY-2-METHYLCYCLOH	16179	059013-86-4	90
3	CITRONELLA	124179	000106-23-0	90
4	Cyclohexanone, 3-methyl-, (R)-	2569	013368-65-5	90
5	2-ISOPROPYL-1-HEXENE	5433	000000-00-0	90

 Peak Number 55 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
28.06	220.07 ng	10551538	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Cyclohexane, pentyl-	14841	004292-92-6	87
2 Cyclohexane, hexyl-	20760	004292-75-5	74
3 Cyclohexane, undecyl-	51966	054105-66-7	72
4 Cyclohexane, 1,1'-(1,4-butanediyl)b	129929	006165-44-2	72
5 Cyclohexane, (1-methylethyl)-	120632	000696-29-7	64

Peak Number 56 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
28.22	582.34 ng	27921099	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(1H)-Pyrimidinone, 4-amino-	118915	000071-30-7	49
2	3-Buten-2-one, 4-(1-aziridinyl)-	2342	018277-57-1	47
3	2-Cyclohexen-1-one, 4,4-dimethyl-	120409	001073-13-8	46
4	2-Cyclohexen-1-one, 4,5-dimethyl-	4801	005715-25-3	38
5	E3-TETRADECENYLACETATE	58220	000000-00-0	30

Peak Number 57 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
28.38	4822.45 ng	231217478	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	126000	000112-40-3	87
2	Undecane	124547	001120-21-4	72
3	Undecane, 4,6-dimethyl-	27759	017312-82-2	70
4	Tetradecane	128274	000629-59-4	59
5	Heptadecane	130827	000629-78-7	59

Peak Number 58 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
28.73	162.02 ng	7768115	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclohexen-1-one	117593	000930-68-7	53
2	2,5-Pyrrolidinedione, 3-ethylidene-	8879	016395-79-2	42
3	1H-Imidazole, 2,4-dimethyl-	117574	000930-62-1	37
4	1H-1,2,4-Triazole, 3-ethyl-	666	007411-16-7	25
5	3-AZIDO-1-DEUTERIO-5-DIMETHYLAMINO-	13903	000000-00-0	23

Peak Number 59 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
28.90	455.00 ng	21815230	Hexafluorobenzene	13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-2-methyl-	124049	002958-76-1	76
2	CIS-SYN-2-METHYL-DECAHYDRONAPHTHALE	13879	000000-00-0	76
3	2-METHYL-3-(2-THIENYL)-2-PROPENAL	13324	063362-06-1	59
4	1H-Indene, octahydro-, cis-	120443	004551-51-3	45
5	(1.alpha.,2.beta.,3.beta.)-2,3-dime	123963	074164-10-6	43

Peak Number 60 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
29.40	447.05 ng	21434070	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclododecane	125805	000294-62-2	41
2	Cyclohexanhexanol	27694	004354-58-9	38
3	2(1H)-Naphthalenone, octahydro-4a-m	125593	000938-06-7	35
4	2(1H)-Naphthalenone, octahydro-4a-m	125595	000938-07-8	35
5	Cyclopentane, 1,1,3-trimethyl-	119103	004516-69-2	30

Peak Number 61 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
29.72	1789.40 ng	85794714	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 7-methyl-	34139	026730-14-3	87
2	Decane, 4-methyl-	15626	002847-72-5	72
3	Octane, 3-ethyl-	10246	005881-17-4	64
4	Octane, 2,3,7-trimethyl-	15638	062016-34-6	64
5	Heptadecane, 7-methyl-	58321	020959-33-5	64

Peak Number 62 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
30.05	199.88 ng	9583277	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, decyl-	129143	001795-21-7	52
2	Cyclopentane, 1-butyl-2-propyl-	20759	062199-50-2	46
3	Cyclopentanemethanol	118073	003637-61-4	43
4	3-Pentenol, 4-methyl-	780	005362-50-5	35
5	1,6-Heptadiene, 2,5,5-trimethyl-	8751	062238-28-2	35

Peak Number 63 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
30.22	461.59 ng	22131362	Hexafluorobenzene	13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 2-butyl-1,1,3-trimethyl	26872	054676-39-0	56
2	3-UNDECENE, 5-METHYL-, CIS/TRANS	20694	000000-00-0	53
3	Cyclohexane, 1,1'-(1,4-butanediyl)b	45121	006165-44-2	50
4	3-CYCLOHEXYL-3-DEUTEROPROP-1-ENE	4918	055702-62-0	49
5	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	49

Peak Number 64 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
30.40	7486.90 ng	358966980	Hexafluorobenzene	13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	126006	000112-40-3	86
2	Tridecane	127251	000629-50-5	60
3	2-Hexanone, 1,1,1-trifluoro-	14216	000360-34-9	38
4	1-Heptene	897	000592-76-7	30
5	1R-4C-AMINO-5C,6T-DIMETHOXY-2-CYCLO	22570	000000-00-0	27

Peak Number 65 Rank in Relative Concentration 55

R.T.	Conc	Area	Relative to ISTD	R.T.
30.73	113.63 ng	5448005	Hexafluorobenzene	13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 6-methyl-	34138	013287-21-3	64
2	Tetradecane, 2,5-dimethyl-	46982	056292-69-4	53
3	Undecane	124548	001120-21-4	50
4	Tetradecane	34133	000629-59-4	50
5	Decane	122728	000124-18-5	50

Peak Number 66 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
31.29	350.82 ng	16820488	Hexafluorobenzene	13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1-butyl-2-pentyl-	33190	061142-52-7	70
2	Cyclohexane, 1,2,3-trimethyl-, (1.a	5468	001678-81-5	43
3	1-Nonanol, 4,8-dimethyl-	22410	033933-80-1	38
4	Cyclohexane, 1,2,3-trimethyl-	5467	001678-97-3	38
5	Cyclohexanone, 3-methyl-	2631	000591-24-2	38

Peak Number 67 Rank in Relative Concentration 52

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.71 127.18 ng 6097854 Hexafluorobenzene 13.75

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	(-)-TRANS PINANE	122328	000473-55-2	46
2	Naphthalene, decahydro-1,2-dimethyl	19757	003604-14-6	38
3	Isomer B of 1,1,6-Trimethyldecahydr	25876	081983-74-6	35
4	4,6-DIMETHYL-7-OXO-4,7-DIHYDRO-1,2,	18815	025623-77-2	30
5	6H-Purin-6-one, 2-amino-3,7-dihydro	18800	002958-98-7	27

Peak Number 68 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
31.79	192.01 ng	9206194	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 2,6,10-trimethyl-	40638	003891-98-3	80
2	Tetradecane, 4-methyl-	40632	025117-24-2	80
3	Tetradecane, 2-methyl-	129240	001560-95-8	53
4	OCTANE, 2,3,3-TRIMETHYL-	15636	000000-00-0	50
5	Octane, 2,3,6-trimethyl-	15637	062016-33-5	50

Peak Number 69 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
32.28	2028.09 ng	97238945	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128277	000629-59-4	98
2	Heptadecane	130827	000629-78-7	91
3	Pentadecane	129233	000629-62-9	90
4	Tridecane	127251	000629-50-5	90
5	Hexadecane	130127	000544-76-3	87

Peak Number 70 Rank in Relative Concentration 54

R.T.	Conc	Area	Relative to ISTD	R.T.
33.67	117.83 ng	5649356	Hexafluorobenzene	13.75
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Bicyclo[4.1.0]heptane, 3-methyl-7-p	25870	041977-48-4	43
2	Bicyclo[4.1.0]heptane, 2-methyl-7-p	25869	055937-92-3	35
3	2-(1-PROPENYL)-3-VINYLOXIRAN	2174	070597-12-5	25
4	Cyclohexane, 1-(cyclohexylmethyl)-4	32158	054823-98-2	25
5	Cyclohexanemethanol, 4-methyl-, cis	6025	003937-48-2	22

39010622.D AREA.M Wed Feb 03 17:29:48 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010632.D

Acq On : 9 Jan 99 9:27 pm

Sample : VS006-044-TS24

Misc :

Quant Time: Jan 23 21:51 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI on	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.45	84	4516132	200.00	ng	0.06
27) Ethylbenzene-d10	22.15	98	6578744	200.00	ng	0.01
37) Dodecane-d26	27.96	66	741394	200.00	ng	0.00

System Monitoring Compounds

						%Recovery
9) Hexafluorobenzene	13.80	186	3630702	238.41	ng	74.04%
21) Toluene-d8	19.54	98	6795762	319.41	ng	84.95%
32) Bromobenzene-d5	24.90	82	3162551	260.86	ng	84.69%

Target Compounds

						Qvalue
3) Ethanol	9.93	31	3221927	369.44	ng	m 56
4) Acetone	11.24	43	2344669	114.89	ng	m 89
6) Dichloromethane	12.41	84	493	0.09	ng	83
7) 1-Propanol	12.85	31	1052484	118.90	ng	m 4
8) n-Hexane	13.09	57	3593431	476.89	ng	m 31
10) Butanal	14.27	72	87741	54.17	ng	m 85
11) Propanenitrile	14.35	54	2221	0.38	ng	# 69
12) Chloroform	15.06	83	5527	0.35	ng	# 25
13) Tetrahydrofuran	15.35	42	8857	1.33	ng	# 54
14) 1-Butanol	15.98	56	2553603	423.96	ng	# 48
16) Tetrachloroethane	16.21	117	200	0.01	ng	# 82
18) 2-Pentanone	17.09	43	1244406	65.48	ng	m 71
19) Butanenitrile	17.37	41	2792307	251.86	ng	m 100
20) n-Octane	19.08	85	1565151	348.44	ng	m 1
22) Toluene	19.68	91	3385195	140.86	ng	100
23) 2-Hexanone	20.00	43	3760664	272.91	ng	# 96
24) Pentanenitrile	20.28	41	2534650	303.82	ng	94
25) Tetrachloroethylene	20.87	166	38042	3.61	ng	m 28
26) n-Nonane	21.61	57	3746720	389.84	ng	# 39
29) Hexanenitrile	22.99	41	3043286	283.79	ng	# 67
30) o-Xylene	23.01	91	1197	0.04	ng	99
33) 2-Octanone	25.04	58	1012172	126.64	ng	m 76
34) Heptanenitrile	25.38	82	3544450	231.38	ng	# 69

(#) = qualifier out of range (m) = manual integration
 39010632.D 390106CA.M Sat Jan 23 21:51:47 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010632.D
 Acq On : 9 Jan 99 9:27 pm
 Sample : VS006-044-TS24
 Misc :
 Quant Time: Jan 23 18:55 1999

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M
 Title :
 Last Update : Fri Jan 22 23:38:57 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.45	84	4516132	200.00	ng	0.06
5) Ethylbenzene-d10	22.15	98	6578744	200.00	ng	0.01

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-Heptane	16.18	43	20273007	2075.26	ng	m 78
4) n-Nonane	21.61	57	3746720	409.84 409.84	ng	# 39
6) 2-Heptanone	22.65	43	31649246	1477.20	ng	m 83
7) n-Decane	24.17	57	13550906	1182.37	ng	m 86
8) n-Undecane	26.37	57	28065568	2248.19	ng	m 89
9) n-Dodecane	28.41	57	43648811	3447.90	ng	m 94
10) n-Tridecane	30.42	57	55829323	6757.58	ng	m 40

(#) = qualifier out of range (m) = manual integration
 39010632.D 390106CH.M Sat Jan 23 18:56:12 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010632.D
Operator : Bonfoey
Acquired : 9 Jan 99 9:27 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-044-TS24
Misc Info :
Vial Number: 30

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010632.D Vial: 30
 Acq On : 9 Jan 99 9:27 pm Operator: Bonfoey
 Sample : VS006-044-TS24 Inst : 5972 INST
 Misc : Multiplr: 1.00
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

 Peak Number 1 Rank in Relative Concentration 66

R.T.	Conc	Area	Relative to ISTD	R.T.
7.55	44.38 ng	1955264	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	91
2	3-Butenoic acid	14	000625-38-7	83
3	Cyclopropane	115908	000075-19-4	80
4	2-Butenal	116296	004170-30-3	78
5	Furan, 2,5-dihydro-	116324	001708-29-8	74

 Peak Number 2 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
7.68	48.22 ng	2124800	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	87
2	2-Butenoic acid, (Z)-	116968	000503-64-0	64
3	2H-Pyran, 2-(2,5-hexadiynyloxy)tetr	24659	040924-58-1	59
4	Cyclopropanecarboxylic acid	116979	001759-53-1	50
5	2-Butenal, (E)-	116303	000123-73-9	50

 Peak Number 3 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
7.76	75.37 ng	3320770	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,4-Oxathian-2-one	119713	005512-70-9	91
2	Hydrazine, (2,4-dinitrophenyl)-	33469	000119-26-6	91
3	Benzene, 1-chloro-2-methoxy-3-nitro	28699	080866-77-9	91
4	6-Thiocarbamoylthieno[2,3-b]pyridin	31514	086344-92-5	91
5	1-(O-NITROPHENYL)-4,5-DIDEUTEROIMID	29517	000000-00-0	91

 Peak Number 4 Rank in Relative Concentration 47

R.T.	Conc	Area	Relative to ISTD	R.T.
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8.44 191.10 ng 8420123 Hexafluorobenzene 13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butene	116017	000106-98-9	87
2	2-Butene	116020	000107-01-7	80
3	1-Propene, 2-methyl-	116022	000115-11-7	62
4	Cyclobutane	116025	000287-23-0	49
5	Borane, ethyldimethyl-	116329	001113-22-0	17

 Peak Number 5 Rank in Relative Concentration 50

R.T.	Conc	Area	Relative to ISTD	R.T.
10.30	174.43 ng	7685662	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Oxirane, 2,2-dimethyl-	116433	000558-30-5	64
2	Butane, 2-methyl-	116458	000078-78-4	53
3	Pentane	116456	000109-66-0	47
4	1-Pentene	116331	000109-67-1	45
5	Cyclopentane	116348	000287-92-3	43

 Peak Number 6 Rank in Relative Concentration 67

R.T.	Conc	Area	Relative to ISTD	R.T.
10.46	42.84 ng	1887525	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane	116456	000109-66-0	52
2	Butane, 2-methyl-	116458	000078-78-4	49
3	1-Pentene	116331	000109-67-1	47
4	Cyclopropane, 1,2-dimethyl-, trans-	116345	002402-06-4	46
5	Pentane, 1-chloro-	1748	000543-59-9	42

 Peak Number 7 Rank in Relative Concentration 55

R.T.	Conc	Area	Relative to ISTD	R.T.
11.25	118.63 ng	5226855	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propanone	116057	000067-64-1	59
2	2-Pentanone, 4-hydroxy-4-methyl-	119530	000123-42-2	40
3	Diazene, dimethyl-	116036	000503-28-6	33
4	Acetic acid, 2-methylpropyl ester	119521	000110-19-0	9
5	2-Pentanone, 4-methyl-	118020	000108-10-1	9

 Peak Number 8 Rank in Relative Concentration 58

R.T.	Conc	Area	Relative to ISTD	R.T.
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12.11	99.83 ng	4398360	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane, 2-methyl-	106	000107-83-5	58
2	Pentane	116456	000109-66-0	46
3	Pentane, 2-bromo-	12433	000107-81-3	45
4	Pentane, 2,3-dimethyl-	118119	000565-59-3	38
5	Hydroxylamine, O-(3-methylbutyl)-	1530	019411-65-5	32

Peak Number 9 Rank in Relative Concentration 69

R.T.	Conc	Area	Relative to ISTD	R.T.
12.42	32.26 ng	1421188	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Silanol, trimethyl-	324	001066-40-6	91
2	Hexanoic acid, trimethylsilyl ester	29079	014246-15-2	64
3	Propane, 1,1,3,3-tetramethoxy-	18268	000102-52-3	50
4	Acetic acid, dimethoxy-, methyl est	121501	000089-91-8	45
5	1-(1,1-DIMETHOXY-2-ETHYL)-BICYCLO[3	46606	000000-00-0	38

Peak Number 10 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
13.49	111.23 ng	4900916	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenal, (E)-	116834	001576-87-0	59
2	2-Hexene, (E)-	116889	004050-45-7	53
3	1-Hexene	116883	000592-41-6	50
4	2-PENTENE, 3-METHYL- (CIS/TRANS)	116905	000000-00-0	50
5	2-Pentene, 3-methyl-, (E)-	116908	000616-12-6	50

Peak Number 11 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
14.41	208.94 ng	9205975	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Butanone	116395	000078-93-3	50
2	Propanal, 2-methyl-	116387	000078-84-2	47
3	Pentane	116455	000109-66-0	9
4	Butanal	116385	000123-72-8	9
5	Propane, 1-nitro-	274	000108-03-2	9

Peak Number 12 Rank in Relative Concentration 60

R.T.	Conc	Area	Relative to ISTD	R.T.
15.11	78.28 ng	3448904	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	((2R*)-2-METHYL-2-((2S*)-2-OXIRANY)	5232	068034-46-8	40
2	Tetrahydro-2-methyl-3-methylene-fur	882	000000-00-0	38
3	1-Undecene	124351	000821-95-4	38
4	2-Hexenal, (E)-	117698	006728-26-3	35
5	Furan, tetrahydro-3-methyl-4-methyl	881	061142-01-6	35

Peak Number 13 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD	R.T.
15.50	195.49 ng	8613541	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	901	000592-78-9	68
2	Cyclopentane, 1,2-dimethyl-, trans-	939	000822-50-4	58
3	CYCLOBUTANE, ISOPROPYL-	934	000000-00-0	53
4	Cyclopentane, 1,2-dimethyl-, cis-	938	001192-18-3	50
5	Cyclobutane, 1,2-diethyl-, cis-	2698	061141-50-2	47

Peak Number 14 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
15.98	378.07 ng	16658027	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butanol	116554	000071-36-3	93
2	Formic acid, butyl ester	118234	000592-84-7	64
3	Furan, 2-propyl-	118853	004229-91-8	59
4	2-Butene, (E)-	116021	000624-64-6	49
5	1-Hexanol	118278	000111-27-3	38

Peak Number 15 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
16.18	2771.93 ng	122133183	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane	118106	000142-82-5	91
2	Hexane, 3-methyl-	118113	000589-34-4	58
3	2-Methyl-nonane	10241	000081-83-0	53
4	Dodecane, 2-methyl-	127258	001560-97-0	50
5	Hexane, 3,3,4-trimethyl-	6062	016747-31-2	50

Peak Number 16 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD		R.T.
16.60	4738.42 ng	208777657	Hexafluorobenzene		13.80
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene, (E)-		898	014686-13-6	96
2	2-Heptene		899	000592-77-8	93
3	3-Heptene, (E)-		900	014686-14-7	89
4	Cycloheptane		945	000291-64-5	87
5	3-Heptene		901	000592-78-9	76

 Peak Number 17 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD		R.T.
16.95	2446.89 ng	107811558	Hexafluorobenzene		13.80
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene		117785	000592-77-8	95
2	2-Heptene, (E)-		898	014686-13-6	95
3	3-Heptene		901	000592-78-9	91
4	3-Heptene, (E)-		900	014686-14-7	89
5	1-Heptene		897	000592-76-7	87

 Peak Number 18 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD		R.T.
17.20	240.76 ng	10608215	Hexafluorobenzene		13.80
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Cyclohexane, 1,2,3-trimethyl-, (1.a		120647	001678-81-5	72
2	4-Pentenal		116836	002100-17-6	72
3	1-Propene		115905	000115-07-1	59
4	1-Hexene		116880	000592-41-6	50
5	Cyclopropane, butyl-		931	000930-57-4	46

 Peak Number 19 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD		R.T.
17.35	286.09 ng	12605329	Hexafluorobenzene		13.80
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Propenenitrile, 2-methyl-		116225	000126-98-7	11
2	1,5-Hexadiene		116769	000592-42-7	9
3	1-Heptyne		601	000628-71-7	9
4	3-Butenenitrile		116223	000109-75-1	9
5	1-Propene		115905	000115-07-1	9

Peak Number 20 Rank in Relative Concentration 68

R.T.	Conc	Area	Relative to ISTD	R.T.
17.65	34.89 ng	1537374	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexene, 4-methyl-	117619	000591-47-9	80
2	1-(2-Methyl-1-propenyl)cyclopropane	631	001003-33-4	80
3	1,4-Hexadiene, 2-methyl-	617	001119-14-8	76
4	Cyclohexene, 3-methyl-	645	000591-48-0	72
5	2,4-Hexadienal, (E,E)-	117578	004488-48-6	72

Peak Number 21 Rank in Relative Concentration 56

R.T.	Conc	Area	Relative to ISTD	R.T.
17.77	116.70 ng	5141933	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenitrile	116729	013284-42-9	64
2	1,2-Butadiene	115994	000590-19-2	37
3	1,6-Heptadiene	117603	003070-53-9	37
4	SULFOLENE	3718	000116-88-8	37
5	3-CYCLOHEXENE-1-CARBONITRILE	1834	000100-45-8	33

Peak Number 22 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
18.38	1683.29 ng	74166879	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	119371	000589-81-1	86
2	Octane	119368	000111-65-9	83
3	Octane, 3,4-dimethyl-	10253	015869-92-8	78
4	Hexane, 1-(hexyloxy)-2-methyl-	34909	074421-17-3	64
5	Hexane, 2,4-dimethyl-	119377	000589-43-5	59

Peak Number 23 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
18.56	1258.21 ng	55437603	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclopenten-1-one, 3-methyl-	117591	002758-18-1	87
2	2,3-Hexadiene, 2-methyl-	622	029212-09-7	76
3	2-Cyclopenten-1-one, 2-methyl-	593	001120-73-6	64
4	2-Butenal, 2-ethenyl-	576	020521-42-0	58
5	3,4-Heptadiene	615	002454-31-1	58

 Peak Number 24 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
19.22	693.52 ng	30557017	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	602	001119-65-9	90
2	1,2-Hexadiene, 5-methyl-	616	013865-36-6	87
3	2-Octyne	2217	002809-67-8	83
4	2,5-Heptadiene, (E,E)-	614	039619-60-8	59
5	Cyclohexene, 4-methyl-	117619	000591-47-9	55

 Peak Number 25 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
19.54	267.92 ng	11804911	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	58
2	.GAMMA.-PICOLINE-D7	439	029372-29-0	27
3	1-METHYL-5-AMINO-D2-1,2,4-TRIAZOLE	726	053778-60-2	10
4	2-Butenoic acid, 2-methyl-	117897	013201-46-2	9
5	Pyrrolidine, 1-nitroso-	117889	000930-55-2	9

 Peak Number 26 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
19.65	334.63 ng	14743795	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, methyl-	408	000108-88-3	42
2	2-HEPTENE, 3-METHYL-	2651	000000-00-0	42
3	1,3,5-Cycloheptatriene	416	000544-25-2	38
4	CIS-1-BUTYL-2-METHYLCYCLOPROPANE	2731	038851-69-3	35
5	Heptane, 3-methylene-	119065	001632-16-2	35

 Peak Number 27 Rank in Relative Concentration 43

R.T.	Conc	Area	Relative to ISTD	R.T.
19.77	206.56 ng	9101293	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	74
2	CIS-1-BUTYL-2-METHYLCYCLOPROPANE	2731	038851-69-3	74
3	2-Octene, (E)-	2641	013389-42-9	70
4	3-Octene, (E)-	2643	014919-01-8	64
5	2-Octene, (Z)-	2640	007642-04-8	64

 Peak Number 28 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
20.00	237.81 ng	10477841	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	117991	000591-78-6	91
2	2-Pentanone, 4-methyl-	118019	000108-10-1	80
3	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	78
4	2-Hexanone, 4-hydroxy-3-propyl-	16134	062338-17-4	74
5	Oxirane, 2-methyl-2-(1-methylethyl)	1198	072221-03-5	64

 Peak Number 29 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
20.28	250.53 ng	11038567	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedinitrile	118677	000111-69-3	42
2	Pentanedinitrile	463	000544-13-8	38
3	1-Butyne	115986	000107-00-6	38
4	Pentanenitrile	116798	000110-59-8	35
5	1,1'-Bicyclopropyl	116791	005685-46-1	28

 Peak Number 30 Rank in Relative Concentration 64

R.T.	Conc	Area	Relative to ISTD	R.T.
20.75	62.04 ng	2733310	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane	3190	000111-65-9	47
2	Heptane, 2,3-dimethyl-	6043	003074-71-3	47
3	Octane, 4-methyl-	120913	002216-34-4	43
4	Decane, 5,6-dimethyl-	21667	001636-43-7	43
5	Octane, 3-ethyl-2,7-dimethyl-	21670	062183-55-5	38

 Peak Number 31 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
21.04	197.80 ng	8715371	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	6-Methylundecane	21657	017302-33-9	50
2	3-Heptanone, 4-methyl-	5948	006137-11-7	47
3	Octane, 3-methyl-	120911	002216-33-3	47
4	Heptane, 3-ethyl-	6040	015869-80-4	47
5	Heptane, 3-ethyl-2-methyl-	122745	014676-29-0	45

 Peak Number 32 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD		R.T.
21.22	68.09 ng	2999964	Hexafluorobenzene		13.80
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	3-Octen-2-one, (E)-		120575	018402-82-9	72
2	Cyclohexane, 1,3,5-trimethyl-, (1.a		5472	001795-26-2	60
3	Cyclohexane, 1,3,5-trimethyl-		5473	001839-63-0	53
4	Cyclohexane, 1,3,5-trimethyl-, (1.a		120648	001795-27-3	46
5	Cyclohexane, 1-ethyl-1,4-dimethyl-,		9516	062238-32-8	43

 Peak Number 33 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD		R.T.
21.68	893.74 ng	39378621	Hexafluorobenzene		13.80
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Nonane		120904	000111-84-2	53
2	[1'-13C]-Octyne		2216	000000-00-0	50
3	Pentane, 2,4-dimethyl-		118121	000108-08-7	47
4	4-METHYLPENTANENITRILE-3,3-D2		117642	019424-32-9	43
5	1-Heptene		117780	000592-76-7	43

 Peak Number 34 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD		R.T.
22.50	4482.15 ng	197486449	Hexafluorobenzene		13.80
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	3-Heptanone		3091	000106-35-4	80
2	3-Hexanone, 5-methyl-		119328	000623-56-3	43
3	Butanoic acid, 3-methyl-, 2-propeny		10005	002835-39-4	38
4	METHYL ESTER OF 2-OXO-HEXANOIC ACID		10564	000000-00-0	32
5	5-Nonanone		10170	000502-56-7	32

 Peak Number 35 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD		R.T.
22.65	1730.87 ng	76263235	Hexafluorobenzene		13.80
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptanone		119305	000110-43-0	90
2	2-Hexanone, 5-methyl-		119321	000110-12-3	86
3	2-Octanone		120852	000111-13-7	56
4	2-Hexanone, 4-methyl-		3096	000105-42-0	50

5 Propanamide, N,2-dimethyl-

1276 002675-88-9 45

 Peak Number 36 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD		R.T.
23.19	73.11 ng	3221235	Hexafluorobenzene		13.80
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Undecane, 5,6-dimethyl-		27763	017615-91-7	53
2	Decane		122727	000124-18-5	47
3	Dodecane		126000	000112-40-3	38
4	Octane, 4-ethyl-		10247	015869-86-0	38
5	Undecane		15622	001120-21-4	38

 Peak Number 37 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD		R.T.
23.28	145.91 ng	6428666	Hexafluorobenzene		13.80
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Pentadecane		129235	000629-62-9	53
2	Decane, 1-iodo-		62498	002050-77-3	52
3	Heptane, 2,4-dimethyl-		6044	002213-23-2	50
4	Undecane, 5,7-dimethyl-		27764	017312-83-3	47
5	Hexane, 3-ethyl-4-methyl-		6053	003074-77-9	46

 Peak Number 38 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.	
23.55	488.43 ng	21520418	Hexafluorobenzene	13.80	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Octane, 2,6-dimethyl-		122742	002051-30-1	42
2	Isothiazole, 3,4-dimethyl-		2777	027330-46-7	35
3	Isothiazole, 3,5-dimethyl-		2776	024260-24-0	35
4	2,3-Pentanediol, 2,4-dimethyl-		6920	066225-53-4	35
5	Thiazole, 4,5-dimethyl-		119144	003581-91-7	30

 Peak Number 39 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.	
23.67	950.06 ng	41860130	Hexafluorobenzene	13.80	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1H-1,2,4-Triazole-3,5-diamine		117824	001455-77-2	59
2	2,2'-Bioxepane		33981	074793-02-5	56
3	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID		10615	001123-28-0	45

4	1,4-Dioxaspiro[4.5]decan-8-ol	16050	022428-87-1	39
5	3-Oxepanemethanol	6493	056666-73-0	39

 Peak Number 40 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
23.78	1154.38 ng	50862663	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	33981	074793-02-5	59
2	2(3H)-Furanone, dihydro-4,4-dimethyl	2999	013861-97-7	50
3	3-Oxepanemethanol	6493	056666-73-0	45
4	Hexane, 2,5-dimethyl-	3198	000592-13-2	45
5	4-METHYL-2-PYRROLIDINONE	996	000000-00-0	43

 Peak Number 41 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
24.00	1544.07 ng	68032631	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Methyl-2-cyclopenten-1-ol	844	040459-88-9	80
2	3-Penten-2-one, 4-methyl-	797	000141-79-7	64
3	Cyclopropane, 1,1,2,2-tetramethyl-	932	004127-47-3	59
4	3-BROMO-1,1,2-TRIMETHYL-CYCLOPROPAN	17429	000000-00-0	59
5	2,4-Azetidinedione, 3,3-diethyl-	122529	042282-85-9	59

 Peak Number 42 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
24.17	1470.94 ng	64810540	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	10235	000124-18-5	90
2	Nonane	6035	000111-84-2	72
3	Octadecane, 1-chloro-	69962	003386-33-2	64
4	Decane, 1,1'-oxybis-	73380	002456-28-2	64
5	Decane, 2,9-dimethyl-	21662	001002-17-1	59

 Peak Number 43 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
24.32	1719.35 ng	75755818	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Aminopyrimidin-1-oxide	2307	035034-15-2	43
2	Cyclohexane, 1,2,4-trimethyl-, (1.a	5470	007667-60-9	42

3 Oxazole, trimethyl-	2343 020662-84-4	40
4 Cyclohexane, 1,1,3-trimethyl-	120645 003073-66-3	40
5 2(3H)-Furanone, 5-ethenyldihydro-5-	120556 001073-11-6	37

 Peak Number 44 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
24.62	572.61 ng	25229470	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	15626	002847-72-5	72
2	Undecane, 2,5-dimethyl-	127263	017301-22-3	64
3	Decane, 2-methyl-	124552	006975-98-0	55
4	Dodecane, 4,6-dimethyl-	34141	061141-72-8	53
5	2-Methyl-nonane	10241	000081-83-0	53

 Peak Number 45 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
24.91	386.09 ng	17011206	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	47
2	Pyrido[2,3-d]pyrimidine, 4-methoxy-	17153	028732-78-7	9
3	Thiazole, 2-phenyl-	17212	001826-11-5	9
4	1H-Pyrazole-3-ethanamine	2332	000105-20-4	9
5	1H-Imidazole, 2-methyl-	116745	000693-98-1	9

 Peak Number 46 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
25.08	253.90 ng	11187159	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1-ethyl-4-methyl-, cis	5462	004926-78-7	47
2	Cyclohexane, 1-ethyl-4-methyl-, tra	5463	006236-88-0	47
3	5-Nonen-4-one	9333	032064-77-0	47
4	2-Pentene, 2,3,4-trimethyl-	119088	000565-77-5	47
5	Cyclohexane, 1-methyl-2-propyl-	9505	004291-79-6	43

 Peak Number 47 Rank in Relative Concentration 54

R.T.	Conc	Area	Relative to ISTD	R.T.
25.29	118.64 ng	5227341	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane 5-cyclohexyl-, 5-cyclohexyl-	46074	013151-76-3	46

2	DODECANE, 4-CYCLOHEXYL-	57568	013151-84-3	35
3	Cyclohexane, (1-methylethyl)-	120632	000696-29-7	30
4	Cyclohexane, (1-methylpropyl)-	122510	007058-01-7	25
5	Cyclohexane, 1,1'-(1,2-ethanediy)b	32160	003321-50-4	22

Peak Number 48 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
25.38	427.77 ng	18847789	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	118931	000629-08-3	59
2	2-Cyclohexen-1-one, 3-methyl-	118857	001193-18-6	43
3	1H-Imidazole-4-ethanamine	118920	000051-45-6	28
4	Hexanenitrile	117638	000628-73-9	14
5	9-Azabicyclo[6.1.0]nonane, 9,9'-azo	65742	066387-81-3	12

Peak Number 49 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
25.55	230.58 ng	10159497	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 5-methyl-	126021	001632-70-8	47
2	Diphosphoric acid, diisooctyl ester	98160	072101-07-6	43
3	Decane, 2-methyl-	15624	006975-98-0	43
4	Triaccontane	136343	000638-68-6	38
5	Octane, 2-methyl-	6037	003221-61-2	38

Peak Number 50 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
25.73	3453.58 ng	152167016	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	121202	000104-76-7	90
2	1-Decene, 2,4-dimethyl-	20729	055170-80-4	45
3	4,4-Dimethyl-2,2-bis(1,1-dimethylet	47810	000000-00-0	38
4	1-Pentene, 4,4-dimethyl-	117800	000762-62-9	38
5	3-Undecene, 6-methyl-, (E)-	20695	074630-52-7	32

Peak Number 51 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
25.89	1448.33 ng	63814262	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 2-Azabicyclo[2.2.1]heptane	699	000279-24-3	72
2 Propanoic acid, 3-cyano-, methyl es	2755	004107-62-4	50
3 Isoxazole, 3,5-dimethyl-	676	000300-87-8	40
4 Pentanedinitrile, 2-methyl-	118678	004553-62-2	36
5 Hexanenitrile	117636	000628-73-9	33

Peak Number 52 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
26.37	3219.44 ng	141850376	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	126001	000112-40-3	91
2	Undecane	15622	001120-21-4	91
3	Tridecane	127251	000629-50-5	78
4	3,6-Dimethyldecane	21664	017312-53-7	74
5	Decane	122726	000124-18-5	72

Peak Number 53 Rank in Relative Concentration 53

R.T.	Conc	Area	Relative to ISTD	R.T.
26.54	121.63 ng	5358913	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	14851	000000-00-0	68
2	Cyclohexanone, 5-methyl-2-(1-methyl	14684	010458-14-7	68
3	1-Undecene, 10-methyl-	20677	022370-55-4	49
4	Cyclooctane, 1,4-dimethyl-, cis-	9536	013151-99-0	43
5	Cyclopentane, ethyl-	117813	001640-89-7	43

Peak Number 54 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
26.66	175.20 ng	7719543	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,6-Dimethyldecane	21664	017312-53-7	64
2	Decane, 2-methyl-	124550	006975-98-0	53
3	Undecane, 2-methyl-	126010	007045-71-8	52
4	Heptane, 2,6-dimethyl-	6046	001072-05-5	50
5	Octane, 2-methyl-	6037	003221-61-2	50

Peak Number 55 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
26.95	431.53 ng	19013669	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Undecane, 4-methyl-	126017	002980-69-0	76
2 Octane, 5-ethyl-2-methyl-	15633	062016-18-6	50
3 Undecane, 2,9-dimethyl-	27748	017301-26-7	50
4 Nonane, 2-methyl-5-propyl-	27797	031081-17-1	47
5 Nonane, 5-methyl-5-propyl-	27800	017312-75-3	47

Peak Number 56 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
27.35	662.63 ng	29195796	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-	122339	000091-17-8	95
2	Naphthalene, decahydro-, trans-	122344	000493-02-7	91
3	Bicyclo[2.2.1]heptane, 2-methyl-, e	2290	000872-78-6	86
4	Naphthalene, decahydro-, cis-	122334	000493-01-6	70
5	9-Borabicyclo[3.3.1]nonane, 9-hydro	8584	063366-65-4	55

Peak Number 57 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD	R.T.
27.84	184.17 ng	8114441	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 3-methyl-	126015	001002-43-3	72
2	Tridecane, 2,5-dimethyl-	40635	056292-66-1	59
3	Decane, 3-bromo-	43497	030571-71-2	59
4	DIETHYL(DECYLOXY)-BORANE	46850	000000-00-0	53
5	Dodecane, 2-methyl-	27732	001560-97-0	53

Peak Number 58 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
27.96	79.11 ng	3485715	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,6-Octadiene, 2,7-dimethyl-	122295	040195-09-3	90
2	Cyclohexane, chloro-	119760	000542-18-7	83
3	trans-3,6,9-Trioxatetracyclo[6.1.0(	5140	039078-13-2	83
4	2-NITROBENZOIC ACID -1-Cl3	19801	041398-24-7	83
5	1,4-Oxathian-2-one	119713	005512-70-9	83

Peak Number 59 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
28.09	260.86 ng	11493505	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, pentyl-	14841	004292-92-6	68
2	Cyclohexane, 1,1'-(1,4-butanediyl)b	45121	006165-44-2	64
3	Cyclohexane, (4-methylpentyl)-	20762	061142-20-9	64
4	Acetic acid, mercapto-, cyclohexyl	22810	016849-98-2	59
5	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	59

Peak Number 60 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
28.26	700.86 ng	30880505	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Buten-2-one, 4-(1-aziridinyl)-	2342	018277-57-1	52
2	Oxazole, trimethyl-	118925	020662-84-4	43
3	2-ETHYL-5-PENTYL-5-PYRROLINE	19967	061772-94-9	40
4	2(1H)-Pyrimidinone, 4-amino-	118915	000071-30-7	38
5	4(1H)-Pyridinone, 2,3-dihydro-1-met	2353	035488-00-7	35

Peak Number 61 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
28.41	5091.83 ng	224349013	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	126000	000112-40-3	87
2	Undecane	124547	001120-21-4	72
3	Heptadecane	130827	000629-78-7	59
4	Decane, 2,3,8-trimethyl-	27781	062238-14-6	53
5	Hexane, 3,3-dimethyl-	3199	000563-16-6	50

Peak Number 62 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
28.76	196.18 ng	8644019	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 3-ethylidene-	8879	016395-79-2	38
2	2-Cyclohexen-1-one	117595	000930-68-7	37
3	3-AZIDO-1-DEUTERO-5-DIMETHYLAMINO-	13903	000000-00-0	25
4	1H-1,2,4-Triazole, 3-ethyl-	666	007411-16-7	25
5	4H-Pyran-4-one	117567	000108-97-4	17

Peak Number 63 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
28.94	551.29 ng	24290292	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-METHYL-3-(2-THIENYL)-2-PROPENAL	13324	063362-06-1	59
2	CIS-SYN-1-METHYL-DECAHYDRONAPHTHALE	13877	000000-00-0	59
3	1H-Indene, octahydro-, cis-	120443	004551-51-3	45
4	Iridomyrmecin	125756	000485-43-8	43
5	METHYLENECYCLOOCTANE	4932	003618-18-6	38

Peak Number 64 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
29.75	1866.34 ng	82232235	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 7-methyl-	34139	026730-14-3	83
2	Dodecane, 2,6,11-trimethyl-	129244	031295-56-4	83
3	Octane, 2,3,7-trimethyl-	15638	062016-34-6	72
4	Decane, 4-methyl-	15626	002847-72-5	72
5	Octane, 1,1'-oxybis-	130929	000629-82-3	72

Peak Number 65 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
30.09	255.58 ng	11261051	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1-butyl-2-propyl-	20759	062199-50-2	46
2	1,6-Heptadiene, 2,5,5-trimethyl-	8751	062238-28-2	46
3	3-Decene, 2,2-dimethyl-, (E)-	20732	055499-02-0	35
4	1-Hexene, 3-methyl-	903	003404-61-3	35
5	Cyclopentane, 1-pentyl-2-propyl-	26864	062199-51-3	35

Peak Number 66 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
30.26	558.20 ng	24594477	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 2-butyl-1,1,3-trimethyl	127048	054676-39-0	83
2	Cyclopentane, (2-methylpropyl)-	5449	003788-32-7	53
3	1-Tridecene	127044	002437-56-1	49
4	Cyclododecane	125809	000294-62-2	46
5	Cyclopropane, 1-butyl-2-pentyl-, ci	20752	074663-88-0	45

Peak Number 67 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
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30.44 7683.07 ng 338520969 Hexafluorobenzene 13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128277	000629-59-4	86
2	Dodecane	126006	000112-40-3	86
3	Tridecane	27731	000629-50-5	64
4	Undecane, 3,4-dimethyl-	27751	017312-78-6	59
5	Decane, 2,3,5-trimethyl-	27778	062238-11-3	52

Peak Number 68 Rank in Relative Concentration 29R.T. Conc Area Relative to ISTD R.T.

Quantitation Report

Data File : C:\HPCHEM\3\39010630.D

Acq On : 9 Jan 99 8:00 pm

Sample : VS006-061-TS15

Misc :

Quant Time: Jan 23 21:27 1999

Vial: 28

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.41	84	4983410	200.00	ng	0.02
27) Ethylbenzene-d10	22.13	98	6580724	200.00	ng	0.00
37) Dodecane-d26	27.95	66	684691	200.00	ng	-0.01
System Monitoring Compounds						%Recovery
9) Hexafluorobenzene	13.74	186	4213821	250.76	ng	77.88%
21) Toluene-d8	19.52	98	7873457	335.37	ng	89.19%
32) Bromobenzene-d5	24.89	82	3662214	301.98	ng	98.05%
Target Compounds						Qvalue
2) Methanol	8.34	31	2417	0.42	ng	# 1
3) Ethanol	9.76	31	2388043	248.15	ng	m 22
4) Acetone	11.15	43	1956277	86.87	ng	# 44
5) Acetonitrile	11.64	41	330054	37.84	ng	m 100
6) Dichloromethane	12.34	84	717	0.11	ng	# 47
7) 1-Propanol	12.68	31	1018595	104.28	ng	m 78
8) n-Hexane	13.02	57	6204760	746.23	ng	m 32
10) Butanal	14.18	72	177754	99.46	ng	m 71
12) Chloroform	14.99	83	3941	0.23	ng	# 24
14) 1-Butanol	15.97	56	3593141	526.48	ng	m 42
16) Tetrachloroethane	16.21	117	664	0.04	ng	# 75
18) 2-Pentanone	17.06	43	1640415	78.23	ng	m 84
22) Toluene	19.66	91	6151773	231.98	ng	m 100
23) 2-Hexanone	19.98	43	5995675	394.30	ng	m 96
24) Pentanenitrile	20.26	41	3627299	394.02	ng	m 1994
25) Tetrachloroethylene	20.83	166	30869	2.66	ng	# 75
26) n-Nonane	21.59	57	6916553	619.24	ng	# 39
29) Hexanenitrile	22.98	41	5149351	451.67	ng	# 65
30) o-Xylene	23.34	91	187882	6.69	ng	m 47
33) 2-Octanone	25.03	58	1610807	165.46	ng	m 85
34) Heptanenitrile	25.38	82	6033079	367.28	ng	# 69

(#) = qualifier out of range (m) = manual integration

39010630.D 390106CA.M

Sat Jan 23 21:27:32 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010630.D

Acq On : 9 Jan 99 8:00 pm

Sample : VS006-061-TS15

Misc :

Quant Time: Jan 23 18:48 1999

Vial: 28

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M

Title :

Last Update : Fri Jan 22 23:38:57 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.41	84	4983410	200.00	ng	0.02
5) Ethylbenzene-d10	22.13	98	6580724	200.00	ng	0.00

System Monitoring Compounds

%Recovery

Target Compounds						Qvalue
2) n-Heptane	16.15	43	32215672	2988.55	ng	m 77
4) n-Nonane	21.67	57	6373691	631.82	ng	m 39
6) 2-Heptanone	22.64	43	40245191	1877.84	ng	m 61
7) n-Decane	24.17	57	20482742	1786.66	ng	m 87
8) n-Undecane	26.36	57	34837845	2789.84	ng	m 91
9) n-Dodecane	28.40	57	50171018	3961.91	ng	m 29
10) n-Tridecane	30.40	57	64614602	7818.59	ng	m 52

(#) = qualifier out of range (m) = manual integration

39010630.D 390106CH.M

Sat Jan 23 18:49:22 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010630.D
Operator : Bonfoey
Acquired : 9 Jan 99 8:00 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-061-TS15
Misc Info :
Vial Number: 28

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010630.D Vial: 28
 Acq On : 9 Jan 99 8:00 pm Operator: Bonfoey
 Sample : VS006-061-TS15 Inst : 5972 INST
 Misc : Multiplr: 1.00
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

 Peak Number 1 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD	R.T.
7.43	59.76 ng	3711679	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	94
2	2-Butenoic acid, (Z)-	116968	000503-64-0	78
3	3-Butenoic acid	14	000625-38-7	78
4	2-Furanmethanol	117683	000098-00-0	78
5	Cyclopropane	115908	000075-19-4	74

 Peak Number 2 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
8.31	202.55 ng	12579949	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Butene, (Z)-	116019	000590-18-1	87
2	1-Butene	116017	000106-98-9	87
3	1-Propene, 2-methyl-	116022	000115-11-7	62
4	2-Butene	116020	000107-01-7	53
5	Cyclobutane	116025	000287-23-0	49

 Peak Number 3 Rank in Relative Concentration 56

R.T.	Conc	Area	Relative to ISTD	R.T.
9.76	100.91 ng	6267431	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	115957	000064-17-5	86
2	Carbamic acid, ethyl ester	278	000051-79-6	42
3	BIS(ETHOXY)(METHOXY)OXOVANADIUM	28919	062450-00-4	40
4	Propanal, 3-ethoxy-	1371	002806-85-1	40
5	1-Butanol	116556	000071-36-3	9

 Peak Number 4 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
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10.18 248.88 ng 15457375 Hexafluorobenzene 13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Oxirane, ethyl-		116432	000106-88-7	58
2 Pentane		116456	000109-66-0	50
3 Cyclobutane, methyl-		116346	000598-61-8	47
4 Oxirane, 2,2-dimethyl-		116433	000558-30-5	45
5 Butane, 2-methyl-		116458	000078-78-4	42

Peak Number 5 Rank in Relative Concentration 60

R.T.	Conc	Area	Relative to ISTD	R.T.
11.15	73.66 ng	4575042	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Propanone		116057	000067-64-1	72
2 Hexane, 4-ethyl-2,2-dimethyl-		10271	052896-99-8	40
3 Acetic acid, ethyl ester		117187	000141-78-6	38
4 2-Hexanone		1134	000591-78-6	33
5 Butane		116078	000106-97-8	9

Peak Number 6 Rank in Relative Concentration 54

R.T.	Conc	Area	Relative to ISTD	R.T.
12.03	108.37 ng	6730456	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Pentane, 2-methyl-		117117	000107-83-5	50
2 1-Octene		119048	000111-66-0	42
3 Cyclopropane, butyl-		931	000930-57-4	42
4 Pentane, 2,3-dimethyl-		118119	000565-59-3	38
5 Pentane, 2-bromo-		12433	000107-81-3	38

Peak Number 7 Rank in Relative Concentration 50

R.T.	Conc	Area	Relative to ISTD	R.T.
13.42	144.49 ng	8973590	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Hexene, (E)-		116889	004050-45-7	58
2 2-Pentene, 3-methyl-, (E)-		116908	000616-12-6	53
3 2-PENTENE, 3-METHYL- (CIS/TRANS)		116905	000000-00-0	53
4 2-Pentene, 4-methyl-, (E)-		116912	000674-76-0	53
5 2-Hexene		116887	000592-43-8	49

Peak Number 8 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
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14.19	34.32 ng	2131293	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butanal	116378	000123-72-8	91
2	Ethene, ethoxy-	116430	000109-92-2	59
3	Butanal, 3-methyl-	117036	000590-86-3	50
4	Hexanal	1129	000066-25-1	50
5	1-Hexyn-3-ol	829	000105-31-7	47

Peak Number 9 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD	R.T.
14.37	144.11 ng	8950514	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexyne	116759	000693-02-7	78
2	Cyclohexene	116786	000110-83-8	64
3	Cyclopropane, (1-methylethenyl)-	116777	004663-22-3	59
4	Cyclopropane, 1,2-dimethyl-3-methyl	116779	062338-02-7	56
5	Cyclopentane, ethenyl-	641	003742-34-5	53

Peak Number 10 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
15.06	90.59 ng	5626223	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene, 5-nitro-	3227	023542-51-0	47
2	2-Nonynoic acid	14371	001846-70-4	43
3	1-Undecene	124351	000821-95-4	38
4	2-Heptene, (E)-	898	014686-13-6	35
5	CIS-3-HEXENAL	776	000000-00-0	35

Peak Number 11 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
15.46	219.15 ng	13610561	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene, (E)-	900	014686-14-7	60
2	2-Heptene	117785	000592-77-8	53
3	CYCLOBUTANE, ISOPROPYL-	934	000000-00-0	53
4	1-Heptene	117782	000592-76-7	49
5	2-Butene	116020	000107-01-7	47

Peak Number 12 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD		R.T.
15.97	348.00 ng	21613615	Hexafluorobenzene		13.74
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Butanol		116554	000071-36-3	94
2	Furan, 2-propyl-		118853	004229-91-8	59
3	2-Butene, (E)-		116021	000624-64-6	49
4	Butane, 1-chloro-		117417	000109-69-3	38
5	Cyclobutane		116025	000287-23-0	38

 Peak Number 13 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD		R.T.
16.14	3132.82 ng	194571039	Hexafluorobenzene		13.74
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Heptane		118107	000142-82-5	91
2	Hexane, 3-methyl-		118114	000589-34-4	72
3	2-Methyl-nonane		10241	000081-83-0	59
4	Dodecane, 2-methyl-		127258	001560-97-0	50
5	Pentane, 2,3,4-trimethyl-		119384	000565-75-3	50

 Peak Number 14 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD		R.T.
16.57	5292.27 ng	328688448	Hexafluorobenzene		13.74
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene, (E)-		898	014686-13-6	96
2	2-Heptene		117785	000592-77-8	94
3	3-Heptene		901	000592-78-9	87
4	Cycloheptane		117822	000291-64-5	81
5	3-Heptene, (E)-		900	014686-14-7	76

 Peak Number 15 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD		R.T.
16.91	2838.64 ng	176299820	Hexafluorobenzene		13.74
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene, (E)-		117784	014686-13-6	96
2	2-Heptene		117785	000592-77-8	95
3	3-Heptene		901	000592-78-9	91
4	3-Heptene, (E)-		900	014686-14-7	90
5	Cycloheptane		117822	000291-64-5	81

 Peak Number 16 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
17.31	290.65 ng	18051730	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Borane, ethyldimethyl-	116329	001113-22-0	33
2	3-Butenenitrile	116223	000109-75-1	23
3	2-Propenenitrile, 2-methyl-	116225	000126-98-7	10
4	2-Butenal, 2-ethenyl-	576	020521-42-0	9
5	1-Propene	115905	000115-07-1	9

Peak Number 17 Rank in Relative Concentration 64

R.T.	Conc	Area	Relative to ISTD	R.T.
17.62	44.05 ng	2735552	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,4-Hexadienal	117579	000142-83-6	91
2	2,4-Hexadienal, (E,E)-	117578	004488-48-6	87
3	Cyclohexene, 1-methyl-	644	000591-49-1	86
4	1,4-Hexadiene, 4-methyl-	618	001116-90-1	81
5	1,4-Hexadiene, 2-methyl-	617	001119-14-8	81

Peak Number 18 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
17.74	147.54 ng	9163300	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenitrile	116729	013284-42-9	49
2	1,2-Butadiene	115992	000590-19-2	43
3	2,5-Cyclohexadiene-1,4-dione	118671	000106-51-4	42
4	1-Butyne	115987	000107-00-6	38
5	2,3-DIMETHYLTHIURENE 1,1-DIOXIDE	3715	030646-57-2	38

Peak Number 19 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
18.35	2011.41 ng	124923099	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	119371	000589-81-1	86
2	Octane, 3,4-dimethyl-	10253	015869-92-8	78
3	Hexane, 1-(hexyloxy)-2-methyl-	34909	074421-17-3	72
4	Hexane, 2,4-dimethyl-	3197	000589-43-5	59
5	Butane, 2,2,3-trimethyl-	118124	000464-06-2	53

Peak Number 20

Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
18.53	1558.40 ng	96788157	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,4-Heptadiene	615	002454-31-1	80
2	2,3-Hexadiene, 2-methyl-	622	029212-09-7	76
3	2-Cyclopenten-1-one, 2-methyl-	593	001120-73-6	76
4	2-Butenal, 2-ethenyl-	576	020521-42-0	74
5	Cyclohexene, 1-methyl-	644	000591-49-1	64

 Peak Number 21 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
19.20	985.37 ng	61198847	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	602	001119-65-9	91
2	1,2-Hexadiene, 5-methyl-	616	013865-36-6	81
3	1,4-Hexadiene, 4-methyl-	618	001116-90-1	59
4	2,5-Heptadiene, (E,E)-	614	039619-60-8	53
5	2,4-Heptadiene, (E,E)-	613	002384-94-3	53

 Peak Number 22 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
19.52	179.93 ng	11174895	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	38
2	.GAMMA.-PICOLINE-.ALPHA.,.OMEGA.-D5	438	029372-32-5	25
3	.GAMMA.-PICOLINE-D7	439	029372-29-0	12
4	1-METHYL-5-AMINO-D2-1,2,4-TRIAZOLE	726	053778-60-2	10
5	Pyrrrolidine, 1-nitroso-	117889	000930-55-2	10

 Peak Number 23 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
19.63	444.41 ng	27601126	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-HEPTENE, 3-METHYL-	2651	000000-00-0	50
2	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	49
3	CIS-1-BUTYL-2-METHYLCYCLOPROPANE	2731	038851-69-3	47
4	Heptane, 3-methylene-	119065	001632-16-2	43
5	1,3,5-Cycloheptatriene	117444	000544-25-2	38

 Peak Number 24 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
19.75	239.41 ng	14868842	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	CIS-1-BUTYL-2-METHYLCYCLOPROPANE	2731	038851-69-3	90
2	2-Octene	119055	000111-67-1	76
3	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	76
4	2-Octene, (E)-	2641	013389-42-9	76
5	N-OCTAN-3-ENE	119057	000000-00-0	74

 Peak Number 25 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
19.98	259.43 ng	16112463	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	117992	000591-78-6	91
2	2-Pentanone, 4-methyl-	118019	000108-10-1	80
3	2-Hexanone, 4-hydroxy-3-propyl-	16134	062338-17-4	56
4	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	42
5	2-Pentanone, 3-methyl-	118009	000565-61-7	12

 Peak Number 26 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
20.26	262.66 ng	16313386	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butyne	115987	000107-00-6	52
2	SULFOLENE	3718	000116-88-8	43
3	2-Pentenenitrile	116729	013284-42-9	40
4	Hexanedinitrile	118677	000111-69-3	40
5	Pentanedinitrile	463	000544-13-8	38

 Peak Number 27 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
20.74	73.59 ng	4570772	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,3-dimethyl-	6043	003074-71-3	49
2	Octane, 4-methyl-	6039	002216-34-4	47
3	Heptane, 2,4-dimethyl-	120919	002213-23-2	47
4	Hexane, 2,3,5-trimethyl-	120933	001069-53-0	46
5	Undecane, 2,4-dimethyl-	127262	017312-80-0	43

 Peak Number 28 Rank in Relative Concentration 58

R.T.	Conc	Area	Relative to ISTD	R.T.
21.19	81.76 ng	5077930	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,4-Octadiene, 7-methyl-	4880	037050-05-8	64
2	4-METHYLENE-5-HEXENAL	2163	000000-00-0	55
3	4-Octyne	2219	001942-45-6	50
4	2-Hexyne	116761	000764-35-2	38
5	2,5-Heptadien-1-ol, (Z,E)-	2589	041368-47-2	35

 Peak Number 29 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
21.67	1120.06 ng	69563820	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	120904	000111-84-2	52
2	Decane, 2,5,6-trimethyl-	27783	062108-23-0	47
3	2,4,6,8-TETRAMETHYL-1-UNDECENE	39728	059920-26-2	47
4	[1'-13C]-Octyne	2216	000000-00-0	43
5	2-Azido-2-methylbutane	2780	032872-42-7	43

 Peak Number 30 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
22.08	2250.94 ng	139799723	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanone	3092	000123-19-3	91
2	3-Pentanone, 2,4-dimethyl-	119335	000565-80-0	72
3	3-Hexanone, 2-methyl-	3099	007379-12-6	72
4	3-Buten-2-ol, 2-methyl-	117081	000115-18-4	59
5	Pentane, 3-bromo-	12434	001809-10-5	58

 Peak Number 31 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
22.64	1798.98 ng	111729974	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	119304	000110-43-0	86
2	2-Hexanone, 5-methyl-	119322	000110-12-3	64
3	2-Hexanone, 4-methyl-	3096	000105-42-0	36
4	Pentane, 1-propoxy-	6581	018641-82-2	10
5	3-Pentanone, 2,4-dimethyl-	3105	000565-80-0	10

 Peak Number 32 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
23.16	80.60 ng	5005675	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	124549	001120-21-4	53
2	Nonane, 2-methyl-	10242	000871-83-0	52
3	1-Decene, 4-methyl-	124356	01351-29-6	50
4	Decane, 2-methyl-	124550	006975-98-0	49
5	Tridecane	127251	000629-50-5	47

 Peak Number 33 Rank in Relative Concentration 47

R.T.	Conc	Area	Relative to ISTD	R.T.
23.27	155.08 ng	9631307	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	6035	000111-84-2	72
2	Octane	3190	000111-65-9	72
3	1-Octanol, 2-butyl-	127412	003913-02-8	53
4	Tetradecane, 5-methyl-	40633	025117-32-2	53
5	Hexane, 3-ethyl-2-methyl-	120927	016789-46-1	53

 Peak Number 34 Rank in Relative Concentration 53

R.T.	Conc	Area	Relative to ISTD	R.T.
23.44	131.91 ng	8192389	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Piperidinecarboxaldehyde	119156	002591-86-8	43
2	2,5-Pyrrolidinedione, 1-methyl-	119134	001121-07-9	37
3	1-NITROPYRAZOLE	119124	007119-95-1	35
4	7-METHOXY-1-AZA-8-OXABICYCLO(5.1.3)	10359	035009-23-5	25
5	N-METHYL-3-HYDROXY-.DELTA.4-PYRROLI	2758	058823-17-9	22

 Peak Number 35 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
23.54	377.90 ng	23470282	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Thiazole, 4,5-dimethyl-	2775	003581-91-7	38
2	Thiazole, 2,4-dimethyl-	2773	000541-58-2	38
3	N-METHYL-3-HYDROXY-.DELTA.4-PYRROLI	2758	058823-17-9	35
4	1-Piperidinecarboxaldehyde	119156	002591-86-8	25

5 Isothiazole, 3,4-dimethyl-

2777 027330-46-7 25

 Peak Number 36 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
23.66	1181.05 ng	73351848	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	33981	074793-02-5	56
2	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID	10615	001123-28-0	53
3	1H-1,2,4-Triazole-3,5-diamine	117824	001455-77-2	53
4	1,4-Dioxaspiro[4.5]decan-8-ol	16050	022428-87-1	39
5	2(3H)-Furanone, dihydro-4,4-dimethyl	2999	013861-97-7	39

 Peak Number 37 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
23.77	1405.25 ng	87275917	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	33981	074793-02-5	59
2	2(3H)-Furanone, dihydro-4,4-dimethyl	2999	013861-97-7	50
3	1-Ethylcyclohexanol	6017	001940-18-7	47
4	3-Oxepanemethanol	6493	056666-73-0	45
5	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID	10615	001123-28-0	42

 Peak Number 38 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
23.99	1666.67 ng	103512086	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Penten-2-one, 4-methyl-	117730	000141-79-7	59
2	2-Pentene, 4,4-dimethyl-, (Z)-	927	000762-63-0	59
3	tert-Butylketene	788	059005-31-1	59
4	1-Pentyne, 3-methoxy-3-methyl-	2614	022802-35-3	50
5	2,4-Azetidinedione, 3,3-diethyl-	122529	042282-85-9	45

 Peak Number 39 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
24.16	1581.68 ng	98233651	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	122728	000124-18-5	90
2	Decane, 1,1'-oxybis-	73380	002456-28-2	72
3	Nonane	6035	000111-84-2	72

4 Octane	119366	000111-65-9	53
5 Decane, 2,9-dimethyl-	21662	001002-17-1	53

 Peak Number 40 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
24.31	1768.66 ng	109846791	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,6-DIHYDRO-6,6-DIMETHYL-2H-PYRAN-2	5218	072649-03-7	50
2	2,4,4-TRIMETHYLBUT-2-ENOLIDE	5243	004182-41-6	40
3	Oxazole, trimethyl-	2343	020662-84-4	40
4	2-Aminopyrimidin-1-oxide	2307	035034-15-2	38
5	2(1H)-Pyrimidinone, 4-amino-	118913	000071-30-7	37

 Peak Number 41 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
24.61	599.09 ng	37207604	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	15626	002847-72-5	72
2	Nonane, 4-methyl-5-propyl-	27799	062185-55-1	64
3	Heptane, 2,6-dimethyl-	120923	001072-05-5	53
4	1-Decene, 4-methyl-	14800	013151-29-6	53
5	2-Methyl-nonane	10241	000081-83-0	53

 Peak Number 42 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
24.89	335.82 ng	20856728	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	47
2	1H-Pyrazole, 3-methyl-	116740	001453-58-3	10
3	Benzene, 1-nitro-4-(1-propynyl)-	17180	028289-83-0	9
4	1H-Imidazole, 1-methyl-	116744	000616-47-7	9
5	1H-Pyrazole-3-ethanamine	2332	000105-20-4	9

 Peak Number 43 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
25.08	283.74 ng	17622070	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1-methyl-2-propyl-	9505	004291-79-6	50
2	Cyclohexane, 1-ethyl-4-methyl-, tra	120640	006236-88-0	47

3 Cyclohexane, 1-ethyl-4-methyl-, cis	5462	004926-78-7	43
4 Cyclohexane, 1-methyl-4-(1-methylet	122512	006069-98-3	38
5 2-Pentene, 2,4,4-trimethyl-	119091	000107-40-4	38

Peak Number 44 Rank in Relative Concentration 52

R.T.	Conc	Area	Relative to ISTD	R.T.
25.28	136.23 ng	8460901	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	8-Azabicyclo[3.2.1]octan-3-ol, 8-me	122559	000120-29-6	22
2	Ethanone, 1-cyclohexyl-	120604	000823-76-7	18
3	Cyclohexane, (1-methylethyl)-	5458	000696-29-7	18
4	Cyclohexane, (1-methylpropyl)-	122509	007058-01-7	12
5	Decane, 3-methyl-	15625	013151-34-3	11

Peak Number 45 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
25.38	481.18 ng	29884640	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	118929	000629-08-3	58
2	2-Hexenoic acid, 3-hexenyl ester, (	32930	053398-87-1	38
3	2-Cyclohexen-1-one, 3-methyl-	118857	001193-18-6	38
4	1H-Pyrazole, 3-methyl-	116740	001453-58-3	28
5	1H-Imidazole-4-ethanamine	118920	000051-45-6	28

Peak Number 46 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
25.54	234.30 ng	14551769	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	126007	000112-40-3	43
2	Heptadecane, 2,6,10,15-tetramethyl-	72677	054833-48-6	35
3	Undecane, 5-methyl-	126018	001632-70-8	27
4	Tridecane, 7-methyl-	34139	026730-14-3	22
5	Undecane, 2-methyl-	21649	007045-71-8	22

Peak Number 47 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
25.73	3375.05 ng	209614914	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	121196	000104-76-7	64

2 Octane, 4-chloro-	11934	000999-07-5	47
3 1-Pentene, 4,4-dimethyl-	117800	000762-62-9	46
4 2-Nonenal, (Z)-	9318	060784-31-8	43
5 2-Heptene	117785	000592-77-8	43

Peak Number 48 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
25.88	1644.97 ng	102164797	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Azabicyclo[2.2.1]heptane	699	000279-24-3	78
2	Propanoic acid, 3-cyano-, methyl es	2755	004107-62-4	50
3	1,2-Nonadiene	4866	022433-33-6	28
4	2-PYRONE-6-D	555	020357-66-8	10
5	Hexanenitrile, 5-methyl-	118933	019424-34-1	10

Peak Number 49 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
26.36	3077.39 ng	191127947	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	15622	001120-21-4	91
2	Heptane, 2,6-dimethyl-	6046	001072-05-5	78
3	Octadecane, 1-chloro-	69962	003386-33-2	78
4	Tridecane	127251	000629-50-5	72
5	Tetradecane	128277	000629-59-4	64

Peak Number 50 Rank in Relative Concentration 55

R.T.	Conc	Area	Relative to ISTD	R.T.
26.54	101.76 ng	6319944	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,1-DIMETHYL-2-PROPYLCYCLOHEXANE	14847	081983-71-3	62
2	1-Undecene	124353	000821-95-4	55
3	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	14851	000000-00-0	46
4	Cyclopentane, ethyl-	936	001640-89-7	41
5	2-Hexenal, (E)-	774	006728-26-3	38

Peak Number 51 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
26.65	215.28 ng	13370482	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Undecane, 5-methyl-	126018	001632-70-8	60
2 3,6-Dimethyldecane	21664	017312-53-7	53
3 Heptane, 2,6-dimethyl-	6046	001072-05-5	50
4 Undecane, 2-methyl-	126010	007045-71-8	49
5 Dodecane	126008	000112-40-3	46

Peak Number 52 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
26.95	409.62 ng	25440186	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Undecane, 4-methyl-		126017	002980-69-0	76
2 Nonane, 3,7-dimethyl-		15631	017302-32-8	49
3 Nonane, 2,6-dimethyl-		15630	017302-28-2	47
4 Decane, 4-methyl-		124557	002847-72-5	47
5 Undecane, 2-methyl-		126011	007045-71-8	47

Peak Number 53 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
27.34	681.92 ng	42352074	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Naphthalene, decahydro-		122339	000091-17-8	95
2 Naphthalene, decahydro-, trans-		122344	000493-02-7	95
3 Naphthalene, decahydro-, cis-		8834	000493-01-6	70
4 Spiro[4.5]decane		122327	000176-63-6	55
5 Bicyclo[2.2.1]heptane, 2-methyl-, e		2290	000872-78-6	42

Peak Number 54 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD	R.T.
27.83	162.76 ng	10108498	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Undecane, 3-methyl-		126015	001002-43-3	72
2 Decane, 3-bromo-		43497	030571-71-2	59
3 Tridecane, 7-propyl-		46987	055045-09-5	59
4 Dodecane, 2-methyl-6-propyl-		46988	055045-08-4	59
5 (R,R)-3,8-Dimethyldecane		21665	000000-00-0	53

Peak Number 55 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD	R.T.
27.95	58.50 ng	3633312	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1	5,6-DIDEUTERIO-8-TRANS-METHYLHYDRIN	13749	000000-00-0	64
2	PERDEUTERIO-PENTADECANE	40629	036340-20-2	45
3	9-Azabicyclo[6.1.0]non-4-ene, (1.al	4605	066512-22-9	38
4	Cyclooctene	118907	000931-88-4	33
5	Bicyclo[2.2.1]heptan-2-one	118865	000497-38-1	27

Peak Number 56 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
28.09	270.26 ng	16785117	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1-propenyl-	120440	005364-83-0	81
2	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	72
3	Cyclohexane, 1,1'-(1,4-butanediyl)b	129929	006165-44-2	64
4	Cyclohexane, pentyl-	14841	004292-92-6	64
5	Cyclohexane, butyl-	9501	001678-93-9	59

Peak Number 57 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
28.25	744.96 ng	46267298	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Buten-2-one, 4-(1-aziridinyl)-	2342	018277-57-1	49
2	2-Cyclohexen-1-one, 4,4-dimethyl-	120409	001073-13-8	43
3	2(1H)-Pyrimidinone, 4-amino-	118915	000071-30-7	41
4	2-ETHYL-5-PENTYL-5-PYRROLINE	19967	061772-94-9	38
5	2-Aminopyrimidin-1-oxide	2307	035034-15-2	38

Peak Number 58 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
28.61	1288.50 ng	80025033	Hexafluorobenzene	13.74
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 6-methyl-	27736	006044-71-9	95
2	Undecane, 2,6-dimethyl-	127264	017301-23-4	81
3	Decane, 2,5,9-trimethyl-	27784	062108-22-9	59
4	Decane, 2,6,8-trimethyl-	27787	062108-26-3	58
5	Octane, 3,6-dimethyl-	122744	015869-94-0	53

Peak Number 59 Rank in Relative Concentration 43

R.T.	Conc	Area	Relative to ISTD	R.T.
28.75	203.40 ng	12632395	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclohexen-1-one	117595	000930-68-7	50
2	2,5-Pyrrolidinedione, 3-ethylidene-	8879	016395-79-2	40
3	1H-1,2,4-Triazole, 3-ethyl-	666	007411-16-7	32
4	2,3-Pentadiene	116267	000591-96-8	25
5	Quinoline, decahydro-, cis-	8980	010343-99-4	12

 Peak Number 60 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
29.74	1752.36 ng	108834013	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 7-methyl-	128289	026730-14-3	83
2	Octane, 3,6-dimethyl-	122744	015869-94-0	72
3	Octane, 2-bromo-	30585	000557-35-7	64
4	Decane, 4-methyl-	15626	002847-72-5	64
5	Butane, 2,2-dimethyl-	117127	000075-83-2	59

 Peak Number 61 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
30.25	518.02 ng	32172932	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 2-butyl-1,1,3-trimethyl	127048	054676-39-0	83
2	1-Tridecene	127044	002437-56-1	55
3	Cyclopentane, (2-methylpropyl)-	5449	003788-32-7	49
4	Cyclododecane	125809	000294-62-2	46
5	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	45

 Peak Number 62 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
30.44	7007.09 ng	435191127	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	127251	000629-50-5	70
2	Decane	122728	000124-18-5	64
3	Dodecane	126006	000112-40-3	53
4	1,3,2-Oxazaborolane, 2-butyl-	5562	031748-10-4	30
5	1-Heptene	897	000592-76-7	30

 Peak Number 63 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
31.32	386.75 ng	24019838	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-PROPYL-1,1,3-TRIMETHYLCYCLOHEXANE	20773	081983-70-2	46
2	1-Dodecanol, 3,7,11-trimethyl-	130247	006750-34-1	41
3	CYCLOHEXANE, 1,1,4,4-TETRAMETHYL-	9532	000000-00-0	38
4	Cyclopentane, ethyl-	936	001640-89-7	35
5	Cyclopentane, propyl-	119100	002040-96-2	35

Peak Number 64 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD	R.T.
31.74	151.97 ng	9438402	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	(-)-TRANS PINANE	8827	000473-55-2	38
2	4,6-DIMETHYL-7-OXO-4,7-DIHYDRO-1,2,	18815	025623-77-2	30
3	Decanenitrile	14111	001975-78-6	27
4	6H-Purin-6-one, 1,7-dihydro-2-(meth	18803	010030-78-1	27
5	2,6-DIMETHYL-7-OXO-4,6-DIHYDRO-1,2,	18811	000000-00-0	22

Peak Number 65 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
32.31	1986.78 ng	123393136	Hexafluorobenzene	13.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128277	000629-59-4	98
2	Pentadecane	129234	000629-62-9	95
3	Heptadecane	130827	000629-78-7	91
4	Hexadecane	130127	000544-76-3	91
5	Tridecane	127254	000629-50-5	90

39010630.D AREA.M Wed Feb 03 11:03:25 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010628.D

Acq On : 9 Jan 99 6:33 pm

Sample : VS006-070-TS13

Misc :

Quant Time: Jan 23 21:11 1999

Vial: 26

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.48	84	4950304	200.00	ng	0.09
27) Ethylbenzene-d10	22.15	98	6685111	200.00	ng	0.00
37) Dodecane-d26	27.96	66	666063	200.00	ng	-0.01

System Monitoring Compounds

	R.T.	QIon	Response	Conc	Units	%Recovery
9) Hexafluorobenzene	13.80	186	4118779	246.74	ng	76.63%
21) Toluene-d8	19.54	98	7719395	331.01	ng	88.03%
32) Bromobenzene-d5	24.89	82	3645053	295.87	ng	96.06%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Methanol	8.29	31	2481	0.43	ng	m 1
3) Ethanol	9.82	31	2352030	246.04	ng	m 38
4) Acetone	11.22	43	2482114	110.96	ng	m 98
5) Acetonitrile	11.69	41	227757	26.28	ng	m 100
6) Dichloromethane	12.34	84	976	0.16	ng	m 68
7) 1-Propanol	12.74	31	885401	91.25	ng	m 81
8) n-Hexane	13.10	57	5048527	611.23	ng	m 30
10) Butanal	14.24	72	67922	38.26	ng	m 1
11) Propanenitrile	14.36	54	2006	0.31	ng	m 69
12) Chloroform	15.09	83	14419	0.83	ng	m 24
13) Tetrahydrofuran	15.37	42	13547	1.85	ng	m 33
14) 1-Butanol	16.00	56	2805303	424.78	ng	m 1
16) Tetrachloroethane	16.31	117	782	0.05	ng	m 93
18) 2-Pentanone	17.10	43	1447978	69.51	ng	m 87
22) Toluene	19.68	91	4936976	187.42	ng	m 100
23) 2-Hexanone	19.99	43	4726650	312.93	ng	m 98
24) Pentanenitrile	20.27	41	2706937	296.01	ng	m 93
25) Tetrachloroethylene	20.85	166	2385	0.21	ng	m 16
26) n-Nonane	21.60	57	5495209	505.08	ng	m 39
29) Hexanenitrile	22.99	41	4191435	370.06	ng	m 65
30) o-Xylene	22.97	91	2233	0.08	ng	m 88
33) 2-Octanone	25.04	58	1118687	132.40	ng	# 85
34) Heptanenitrile	25.38	82	4071181	256.63	ng	m 69

(#)=qualifier out of range (m)=manual integration

39010628.D 390106CA.M

Sat Jan 23 21:11:41 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010628.D
 Acq On : 9 Jan 99 6:33 pm
 Sample : VS006-070-TS13
 Misc :
 Quant Time: Jan 23 18:33 1999

Vial: 26
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M
 Title :
 Last Update : Fri Jan 22 23:38:57 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.48	84	4974808	200.00	ng	0.09
5) Ethylbenzene-d10	22.15	98	6685111	200.00	ng	0.00

System Monitoring Compounds

Target Compounds

Target Compounds	R.T.	Q Ion	Response	Conc	Units	Dev(Min)	Recovery	Qvalue
2) n-Heptane	16.19	43	27812474	2584.54	ng	m	73	
4) n-Nonane	21.69	57	4722473	468.94	ng	m	39	
6) 2-Heptanone	22.65	43	35770046	1642.97	ng	m	71	
7) n-Decane	24.17	57	15563073	1336.33	ng	m	88	
8) n-Undecane	26.36	57	28692994	2261.87	ng	m	88	
9) n-Dodecane	28.40	57	42310386	3289.00	ng	m	93	
10) n-Tridecane	30.41	57	55156109	6569.87	ng	m	40	

(#) = qualifier out of range (m) = manual integration
 39010628.D 390106CH.M Sat Jan 23 18:33:45 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010628.D
Operator : Bonfoey
Acquired : 9 Jan 99 6:33 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-070-TS13
Misc Info :
Vial Number: 26

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010628.D Vial: 26
 Acq On : 9 Jan 99 6:33 pm Operator: Bonfoey
 Sample : VS006-070-TS13 Inst : 5972 INST
 Misc : Multiplr: 1.00
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

 Peak Number 1 Rank in Relative Concentration 70

R.T.	Conc	Area	Relative to ISTD	R.T.
7.57	34.96 ng	1731628	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	91
2	2-Furanmethanol	117683	000098-00-0	83
3	Propane, 2-bromo-1-chloro-	124421	003017-95-6	78
4	2-Butenal, (E)-	116303	000123-73-9	74
5	2-Butenal	116296	004170-30-3	72

 Peak Number 2 Rank in Relative Concentration 64

R.T.	Conc	Area	Relative to ISTD	R.T.
7.74	76.48 ng	3788380	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	93
2	3-Butenoic acid	14	000625-38-7	72
3	2-Butenal, (E)-	116303	000123-73-9	59
4	Cyclopropane	115908	000075-19-4	50
5	1-Propyne, 3-bromo-	119710	000106-96-7	50

 Peak Number 3 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
8.46	373.15 ng	18484638	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	87
2	1-Butene	116017	000106-98-9	86
3	Cyclobutane	116025	000287-23-0	49
4	1,3-Butadiene	115996	000106-99-0	47
5	Borane, ethyldimethyl-	116330	001113-22-0	23

 Peak Number 4 Rank in Relative Concentration 68

R.T.	Conc	Area	Relative to ISTD	R.T.
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9.83	44.44 ng	2201419	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethanol, 2-(ethenyloxy)-	117207	000764-48-7	43
2	Ethanol, 2,2'-[1,2-ethanediylbis(ox	123551	000112-27-6	23
3	Ethanol, 2-bromo-	120329	000540-51-2	16
4	Carbamic acid, ethylnitroso-, ethyl	123069	000614-95-9	14
5	Ethanol, 2-chloro-	116702	000107-07-3	14

 Peak Number 5 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
10.30	278.87 ng	13814189	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane	116456	000109-66-0	47
2	1-Pentene	116331	000109-67-1	45
3	Oxirane, 2,2-dimethyl-	116433	000558-30-5	42
4	Butane, 2-methyl-	116461	000078-78-4	42
5	Bicyclo[3.3.1]nonan-2-one, 9-isopro	24893	018346-78-6	38

 Peak Number 6 Rank in Relative Concentration 56

R.T.	Conc	Area	Relative to ISTD	R.T.
11.23	98.40 ng	4874267	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propanone	116053	000067-64-1	72
2	2-Pentanone, 4-hydroxy-4-methyl-	119530	000123-42-2	40
3	1-Propen-2-ol, acetate	1067	000108-22-5	39
4	Acetic acid, 2-methylpropyl ester	119521	000110-19-0	33
5	Acetic acid, 2-propenyl ester	1066	000591-87-7	33

 Peak Number 7 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD	R.T.
12.14	78.36 ng	3881532	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexene	116880	000592-41-6	40
2	1-Octene	119048	000111-66-0	40
3	Pentane, 2-methyl-	117119	000107-83-5	38
4	Heptane	118106	000142-82-5	38
5	2-Azido-2-methylpentane	5559	091633-21-5	38

 Peak Number 8 Rank in Relative Concentration 55

R.T.	Conc	Area	Relative to ISTD	R.T.
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13.50	98.91 ng	4899731	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene, 3-methyl-	116897	000760-20-3	47
2	2-Hexene, (E)-	116890	004050-45-7	43
3	2-Hexene	116885	000592-43-8	43
4	Cyclopentanone	116856	000120-92-3	38
5	3-Hexene, (E)-	116893	013269-52-8	38

 Peak Number 9 Rank in Relative Concentration 60

R.T.	Conc	Area	Relative to ISTD	R.T.
14.45	84.27 ng	4174374	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,4-Hexadiene	116773	000592-46-1	72
2	Cyclopropane, 1,2-dimethyl-3-methyl	116779	062338-02-7	64
3	1,4-Hexadiene	116766	000592-45-0	64
4	3-Hexyne	116764	000928-49-4	58
5	1,3-Pentadiene, 3-methyl-, (Z)-	116774	002787-45-3	53

 Peak Number 10 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
15.12	91.90 ng	4552689	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	117785	000592-77-8	43
2	2-Heptene, (E)-	898	014686-13-6	43
3	2-Azido-2,3-dimethylbutane	5560	091633-20-4	40
4	tert-Dodecanethiol	35629	025103-58-6	40
5	1-Hexene, 3-methyl-	117786	003404-61-3	38

 Peak Number 11 Rank in Relative Concentration 66

R.T.	Conc	Area	Relative to ISTD	R.T.
15.42	61.23 ng	3033392	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Heptene	897	000592-76-7	64
2	3-Heptene	901	000592-78-9	53
3	1-Hexene, 5-methyl-	117787	003524-73-0	50
4	Cyclopentane, 1,2-dimethyl-, trans-	939	000822-50-4	50
5	2-Heptene, (E)-	898	014686-13-6	49

 Peak Number 12 Rank in Relative Concentration 52

R.T.	Conc	Area	Relative to ISTD	R.T.
15.52	123.71 ng	6128144	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	901	000592-78-9	64
2	2-Undecanethiol, 2-methyl-	35630	010059-13-9	50
3	Cyclobutanone, 2,2-dimethyl-	117736	001192-14-9	50
4	Cyclopentanecarboxaldehyde	117711	000872-53-7	50
5	1-Pentene, 2,3-dimethyl-	915	003404-72-6	49

 Peak Number 13 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
16.00	277.21 ng	13731953	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butanol	116554	000071-36-3	81
2	Furan, 2-propyl-	118853	004229-91-8	64
3	2H-Pyran-2-one, tetrahydro-6,6-dime	120815	002610-95-9	50
4	Formic acid, butyl ester	1366	000592-84-7	50
5	1-Hexene	116883	000592-41-6	38

 Peak Number 14 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
16.18	3517.33 ng	174237949	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane	1229	000142-82-5	91
2	2-Methyl-nonane	10241	000081-83-0	59
3	Hexane, 3,3,4-trimethyl-	6062	016747-31-2	53
4	Hexane, 3-methyl-	118113	000589-34-4	53
5	Pentane, 2,3,4-trimethyl-	119384	000565-75-3	50

 Peak Number 15 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
16.61	6019.12 ng	298169136	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	898	014686-13-6	96
2	2-Heptene	117785	000592-77-8	95
3	3-Heptene	901	000592-78-9	87
4	Cycloheptane	945	000291-64-5	81
5	3-Heptene, (E)-	900	014686-14-7	81

 Peak Number 16 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
16.95	3117.08 ng	154411135	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	117785	000592-77-8	95
2	2-Heptene, (E)-	898	014686-13-6	95
3	3-Heptene	901	000592-78-9	91
4	3-Heptene, (E)-	900	014686-14-7	90
5	1-Heptene	897	000592-76-7	87

 Peak Number 17 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
17.21	344.43 ng	17062122	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,2,3-trimethyl-, (1.a	120647	001678-81-5	72
2	4-Pentenal	116836	002100-17-6	72
3	1-Pentene	116331	000109-67-1	64
4	1-Butene, 2-methyl-	116339	000563-46-2	64
5	1-Propene	115905	000115-07-1	59

 Peak Number 18 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
17.35	262.13 ng	12985383	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,4-Pentadiene, 3,3-dimethyl-	628	001112-35-2	64
2	Cyclopentene, 1,5-dimethyl-	637	016491-15-9	64
3	Bicyclo[2.1.0]pentane-5-carboxylic	14460	074810-55-2	53
4	1,4-Hexadiene, 5-methyl-	619	000763-88-2	45
5	Cyclohexene, 3-bromo-	16576	001521-51-3	45

 Peak Number 19 Rank in Relative Concentration 69

R.T.	Conc	Area	Relative to ISTD	R.T.
17.66	44.11 ng	2184835	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,4-Hexadiene, 4-methyl-	618	001116-90-1	87
2	1,4-Hexadiene, 5-methyl-	619	000763-88-2	87
3	1,3-Pentadiene, 2,4-dimethyl-	627	001000-86-8	83
4	Furan, 2-ethyl-	590	003208-16-0	76
5	2,4-Hexadienal, (E,E)-	117578	004488-48-6	72

Peak Number 20 Rank in Relative Concentration 50

R.T.	Conc	Area	Relative to ISTD	R.T.
17.78	156.38 ng	7746548	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenenitrile	116729	013284-42-9	58
2	1,2-Butadiene	115994	000590-19-2	43
3	2,3-DIMETHYLTHIIRENE 1,1-DIOXIDE	3715	030646-57-2	38
4	2,5-Furandione, 3,4-dimethyl-	5120	000766-39-2	38
5	1-Butyne	115987	000107-00-6	38

Peak Number 21 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
18.38	2230.97 ng	110515538	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	119371	000589-81-1	86
2	Octane	119368	000111-65-9	72
3	Hexane, 1-(hexyloxy)-2-methyl-	34909	074421-17-3	64
4	Octane, 3,4-dimethyl-	10253	015869-92-8	64
5	Hexane, 2,4-dimethyl-	119377	000589-43-5	59

Peak Number 22 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
18.56	1690.28 ng	83731407	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,4-Heptadiene	615	002454-31-1	80
2	2-Cyclopenten-1-one, 2-methyl-	593	001120-73-6	76
3	2,3-Hexadiene, 2-methyl-	622	029212-09-7	76
4	2-Butenal, 2-ethenyl-	576	020521-42-0	74
5	1,4-Hexadiene, 4-methyl-	618	001116-90-1	58

Peak Number 23 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
19.22	958.63 ng	47487538	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	602	001119-65-9	90
2	1,2-Hexadiene, 5-methyl-	616	013865-36-6	87
3	2-Octyne	2217	002809-67-8	83
4	1-(2-Methyl-1-propenyl)cyclopropane	631	001003-33-4	59
5	Cyclohexene, 4-methyl-	117619	000591-47-9	55

 Peak Number 24 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
19.54	242.39 ng	12007431	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	50
2	.GAMMA.-PICOLINE-D7	439	029372-29-0	22
3	1-METHYL-5-AMINO-D2-1,2,4-TRIAZOLE	726	053778-60-2	14
4	Pyrrolidine, 1-nitroso-	117889	000930-55-2	9
5	Methyldiazoacetate	1034	006832-16-2	9

 Peak Number 25 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
19.65	435.33 ng	21565194	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-HEPTENE, 3-METHYL-	2651	000000-00-0	50
2	1,3,5-Cycloheptatriene	117444	000544-25-2	38
3	Benzene, methyl-	117438	000108-88-3	38
4	2-Pentene, (E)-	116338	000646-04-8	35
5	Cyclopropane, 1,2-dimethyl-, trans-	116345	002402-06-4	30

 Peak Number 26 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
19.77	255.84 ng	12673596	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Octene, (E)-	2641	013389-42-9	70
2	3-Octene, (E)-	2643	014919-01-8	70
3	N-OCTAN-3-ENE	119057	000000-00-0	68
4	Heptane, 3-methylene-	119065	001632-16-2	64
5	2-Octene	119056	000111-67-1	64

 Peak Number 27 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
20.00	266.07 ng	13180508	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	117991	000591-78-6	91
2	2-Pentanone, 4-methyl-	118019	000108-10-1	80
3	Oxirane, 2-methyl-2-(1-methylethyl)	1198	072221-03-5	64
4	2-Hexanone, 4-hydroxy-3-propyl-	16134	062338-17-4	56
5	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	42

 Peak Number 28 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
20.27	250.85 ng	12426374	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butyne	115987	000107-00-6	47
2	SULFOLENE	3718	000116-88-8	43
3	Hexanedinitrile	118677	000111-69-3	40
4	1,6-Octadiene, (E)-	2222	019036-81-8	36
5	Pentanenitrile	116798	000110-59-8	35

 Peak Number 29 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
20.76	67.91 ng	3364229	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 4-methyl-	120913	002216-34-4	47
2	Heptane, 2,3-dimethyl-	6043	003074-71-3	46
3	Heptane, 2,6-dimethyl-	6046	001072-05-5	43
4	Tridecane, 5-methyl-	34137	025117-31-1	38
5	Hexane, 2,3,5-trimethyl-	120933	001069-53-0	38

 Peak Number 30 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
21.04	233.15 ng	11549407	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 3-methyl-	6038	002216-33-3	50
2	3-Hexanone, 2,2-dimethyl-	5956	005405-79-8	47
3	Heptane, 2,5-dimethyl-	120920	002216-30-0	47
4	Heptane, 3-ethyl-2-methyl-	122745	014676-29-0	45
5	Heptane, 3,5-dimethyl-	120926	000926-82-9	43

 Peak Number 31 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD	R.T.
21.21	81.74 ng	4049209	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,3,5-trimethyl-, (1.a	5472	001795-26-2	42
2	Cyclohexane, 1,2,4-trimethyl-, (1.a	5470	007667-60-9	42
3	Cyclohexane, 1,3,5-trimethyl-	5473	001839-63-0	38
4	3-Nonen-1-ol, (Z)-	10185	010340-23-5	27
5	Thiacyclonon-2-ene	10097	077566-15-5	25

 Peak Number 32 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
21.68	1105.69 ng	54772772	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	120904	000111-84-2	52
2	2,4,6,8-TETRAMETHYL-1-UNDECENE	39728	059920-26-2	47
3	1-Heptene	117780	000592-76-7	43
4	[1'-13C]-Octyne	2216	000000-00-0	43
5	2-Azido-2-methylbutane	2780	032872-42-7	38

 Peak Number 33 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
22.50	4723.26 ng	233976428	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	119309	000106-35-4	80
2	2-Hexene, 2-methoxy-	3135	061142-45-8	43
3	5-Nonanone	10170	000502-56-7	40
4	1,5-Heptadiene-3,4-diol, 2,5-dimeth	15394	022607-16-5	40
5	Propanal, propylhydrazone	3039	019718-39-9	37

 Peak Number 34 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
22.65	1969.64 ng	97570241	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	119303	000110-43-0	86
2	2-Hexanone, 4-methyl-	3096	000105-42-0	47
3	5-Undecanone	21602	033083-83-9	39
4	2-Hexanone, 5-methyl-	119320	000110-12-3	37
5	2,3-Pentanedione, 4-methyl-	2973	007493-58-5	22

 Peak Number 35 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
23.16	83.03 ng	4113107	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octadecane, 6-methyl-	62978	010544-96-4	53
2	Undecane	124549	001120-21-4	50
3	Nonane, 2-methyl-	122732	000871-83-0	49
4	Decane	10235	000124-18-5	43

5 Undecane, 5,6-dimethyl-

27763 017615-91-7 43

 Peak Number 36 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD	R.T.
23.28	123.97 ng	6140948	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,3-dimethyl-	120917	003074-71-3	72
2	Ether, heptyl hexyl	34907	007289-40-9	59
3	Hexane, 3-ethyl-2-methyl-	120927	016789-46-1	59
4	Tetradecane, 5-methyl-	40633	025117-32-2	53
5	Undecane, 2,4-dimethyl-	127262	017312-80-0	50

 Peak Number 37 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
23.56	593.64 ng	29407023	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Isothiazole, 3,4-dimethyl-	2777	027330-46-7	35
2	4-Piperidinone, 1-methyl-	119157	001445-73-4	25
3	N-METHYL-3-METHYLSOXAZOL-5-ONE	2763	007713-67-9	22
4	Thiazole, 2,5-dimethyl-	2774	004175-66-0	16
5	1-Piperidinecarboxaldehyde	119155	002591-86-8	14

 Peak Number 38 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
23.67	1111.70 ng	55070315	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	33981	074793-02-5	72
2	1H-1,2,4-Triazole-3,5-diamine	117824	001455-77-2	58
3	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID	10615	001123-28-0	53
4	2(3H)-Furanone, dihydro-4,4-dimethyl	2999	013861-97-7	39
5	1,4-Dioxaspiro[4.5]decan-8-ol	16050	022428-87-1	39

 Peak Number 39 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
23.78	1414.53 ng	70071840	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(3H)-Furanone, dihydro-4,4-dimethyl	2999	013861-97-7	50
2	GLYCOCYANIDINE	955	000503-86-6	45
3	3-Oxepanemethanol	6493	056666-73-0	42

4	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID	10615	001123-28-0	42
5	.beta.-(Dimethylamino)acrolein	983	000927-63-9	36

 Peak Number 40 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
24.00	1696.66 ng	84047342	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Methyl-2-cyclopenten-1-ol	844	040459-88-9	80
2	3-Penten-2-one, 4-methyl-	117726	000141-79-7	64
3	tert-Butylketene	788	059005-31-1	59
4	2-Pentene, 4,4-dimethyl-	117807	026232-98-4	59
5	Cyclopropane, 1,1,2,2-tetramethyl-	932	004127-47-3	59

 Peak Number 41 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
24.17	1544.34 ng	76501785	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	10235	000124-18-5	87
2	Nonane	6035	000111-84-2	78
3	Decane, 1,1'-oxybis-	73380	002456-28-2	64
4	Tetradecane	128277	000629-59-4	58
5	Pentadecane	129233	000629-62-9	52

 Peak Number 42 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
24.32	1809.05 ng	89615190	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(5H)-FURANONE, 4,5,5-TRIMETHYL-	5202	000000-00-0	50
2	3,6-DIHYDRO-6,6-DIMETHYL-2H-PYRAN-2	5218	072649-03-7	47
3	2,4,4-TRIMETHYLBUT-2-ENOLIDE	5243	004182-41-6	40
4	1-Undecene, 8-methyl-	20675	074630-40-3	38
5	Oxazole, trimethyl-	2343	020662-84-4	38

 Peak Number 43 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
24.62	550.54 ng	27271899	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	15626	002847-72-5	68
2	Decane, 2-methyl-	124555	006975-98-0	60

3 Heptane, 5-ethyl-2-methyl-	10261 013475-78-0	53
4 Nonane, 5-propyl-	126026 000998-35-6	53
5 Tetradecane, 2-methyl-	129239 001560-95-8	50

Peak Number 44 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
24.90	404.92 ng	20058363	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	47
2	1H-Imidazole, 2-methyl-	116745	000693-98-1	9
3	1H-Pyrazole, 3-methyl-	116740	001453-58-3	9
4	1H-Pyrazole-3-ethanamine	2332	000105-20-4	9
5	Octanenitrile	5025	000124-12-9	9

Peak Number 45 Rank in Relative Concentration 43

R.T.	Conc	Area	Relative to ISTD	R.T.
25.08	242.21 ng	11998452	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Hepten-2-one, (Z)-	2544	069668-88-8	47
2	Cyclohexane, 1-ethyl-4-methyl-, tra	5463	006236-88-0	38
3	Cyclohexane, 1-methyl-2-propyl-	9505	004291-79-6	38
4	3-Penten-1-ol, 2,2,4-trimethyl-	5979	005842-53-5	38
5	Cyclopropanemethanol, 2,2,3,3-tetra	6009	002415-96-5	38

Peak Number 46 Rank in Relative Concentration 53

R.T.	Conc	Area	Relative to ISTD	R.T.
25.28	122.87 ng	6086792	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	DODECANE, 6-CYCLOHEXYL-	57566	013151-86-5	38
2	Ethanone, 1-cyclohexyl-	120604	000823-76-7	35
3	3-Heptene, 2,2,3,5,5,6,6-heptamethyl	128066	054845-26-0	35
4	Undecane 5-cyclohexyl-	51967	013151-80-9	32
5	Cyclopropane, 1,1,2,3-tetramethyl-	117812	074752-93-5	18

Peak Number 47 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
25.38	393.37 ng	19486551	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	118929	000629-08-3	58

2 1H-Pyrazole, 3-methyl-	116740	001453-58-3	28
3 1H-Imidazole-4-ethanamine	118920	000051-45-6	28
4 Hexanoic acid, 3-hexenyl ester, (Z)	128195	031501-11-8	25
5 2H-Azepin-2-one, 1,5,6,7-tetrahydro	2356	002228-79-7	10

Peak Number 48 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD	R.T.
25.54	198.50 ng	9833193	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 1,1'-oxybis-	130930	000629-82-3	43
2	Hexadecane, 2,6,10,14-tetramethyl-	132694	000638-36-8	38
3	Heptadecane, 2,6,10,15-tetramethyl-	72677	054833-48-6	35
4	Pentadecane, 2,6,10,14-tetramethyl-	132099	001921-70-6	35
5	Nonane, 2,3-dimethyl-	15628	002884-06-2	35

Peak Number 49 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
25.72	3360.34 ng	166461444	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	121202	000104-76-7	86
2	1-Heptene	897	000592-76-7	43
3	2-Heptenal, (E)-	119018	018829-55-5	40
4	Octane, 2-chloro-	11932	000628-61-5	38
5	1-Pentene, 4,4-dimethyl-	117800	000762-62-9	38

Peak Number 50 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
25.88	1586.91 ng	78610573	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Azabicyclo[2.2.1]heptane	699	000279-24-3	78
2	Pentanedinitrile, 2-methyl-	118678	004553-62-2	36
3	1,2-Nonadiene	4866	022433-33-6	33
4	Butanedinitrile, 2,3-dimethyl-	1881	016411-13-5	25
5	1-Pentene, 3-ethyl-	117792	004038-04-4	10

Peak Number 51 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
26.36	2995.09 ng	148367730	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
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1	Undecane	15622	001120-21-4	91
2	Decane	122726	000124-18-5	72
3	Tetradecane	128274	000629-59-4	64
4	Dodecane	126001	000112-40-3	64
5	Pentadecane	129233	000629-62-9	64

Peak Number 52 Rank in Relative Concentration 54

R.T.	Conc	Area	Relative to ISTD	R.T.
26.55	101.98 ng	5051788	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	14851	000000-00-0	76
2	1,1-DIMETHYL-2-PROPYLCYCLOHEXANE	14847	081983-71-3	68
3	4-Undecene, (Z)-	14795	000821-98-7	41
4	1-Pentene, 2,3-dimethyl-	117795	003404-72-6	38
5	Cyclopentane, ethyl-	936	001640-89-7	38

Peak Number 53 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
26.65	176.63 ng	8749634	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,6-Dimethyldecane	21664	017312-53-7	55
2	Heptane, 2,6-dimethyl-	6046	001072-05-5	53
3	Undecane, 2-methyl-	126010	007045-71-8	52
4	Decane, 2-methyl-	124554	006975-98-0	50
5	Dodecane, 2,6,11-trimethyl-	129244	031295-56-4	43

Peak Number 54 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
26.95	354.00 ng	17536341	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 4-methyl-	126017	002980-69-0	58
2	Hexadecane, 2,6,10,14-tetramethyl-	132694	000638-36-8	53
3	Decane, 2,3,4-trimethyl-	27777	062238-15-7	50
4	Decane, 4-methyl-	124557	002847-72-5	50
5	1-Octanol, 2,2-dimethyl-	16256	002370-14-1	50

Peak Number 55 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
27.34	783.92 ng	38833016	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Naphthalene, decahydro-, trans-	122344	000493-02-7	95
2 Bicyclo[2.2.1]heptane, 2-methyl-, e	2290	000872-78-6	83
3 Naphthalene, decahydro-	122335	000091-17-8	78
4 Spiro[4.5]decane	122327	000176-63-6	70
5 Naphthalene, decahydro-, cis-	122337	000493-01-6	70

Peak Number 56 Rank in Relative Concentration 67

R.T.	Conc	Area	Relative to ISTD	R.T.
27.95	59.84 ng	2964237	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Penten-1-one, 2-methyl-	117714	029336-29-6	90
2	3-Pentenal, 4-methyl-	780	005362-50-5	90
3	Bicyclo[3.1.0]hexan-2-one, 3,3,6-tr	8671	053966-40-8	90
4	2,4-Octadien-1-ol	5324	069668-94-6	83
5	Decane 2-cyclohexyl-, 2-cyclohexyl-	46071	013151-73-0	83

Peak Number 57 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
28.09	215.56 ng	10678151	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,1'-(1,4-butanediyl)b	129929	006165-44-2	72
2	Cyclohexane, (1-methylethyl)-	5458	000696-29-7	64
3	Cyclohexane, 1,1'-methylenebis-	126866	003178-23-2	64
4	Cyclohexane, pentyl-	14841	004292-92-6	64
5	Cyclohexane, hexyl-	20760	004292-75-5	64

Peak Number 58 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
28.26	630.26 ng	31221310	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Buten-2-one, 4-(1-aziridinyl)-	2342	018277-57-1	47
2	2-Cyclohexen-1-one, 4,4-dimethyl-	120411	001073-13-8	43
3	2(1H)-Pyrimidinone, 4-amino-	118915	000071-30-7	42
4	CYCLOPENTANE, 1-DEUTERO-2-METHYL-1-	2273	000000-00-0	38
5	Bicyclo[4.1.0]heptane, 7-butyl-	124045	018645-10-8	35

Peak Number 59 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
28.60	936.84 ng	46408307	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2,6-dimethyl-	127264	017301-23-4	97
2	Dodecane, 6-methyl-	27736	006044-71-9	95
3	Undecane, 3,6-dimethyl-	27753	017301-28-9	87
4	Dodecane, 2,7,10-trimethyl-	40640	074645-98-0	72
5	Decane, 2,6,8-trimethyl-	27787	062108-26-3	72

 Peak Number 60 Rank in Relative Concentration 47

R.T.	Conc	Area	Relative to ISTD	R.T.
28.76	190.91 ng	9457261	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclohexen-1-one	117593	000930-68-7	59
2	2,5-Pyrrolidinedione, 3-ethylidene-	8879	016395-79-2	42
3	1H-Imidazole, 2,4-dimethyl-	117574	000930-62-1	38
4	Quinoline, decahydro-, trans-	8981	000767-92-0	27
5	Quinoline, decahydro-, cis-	8980	010343-99-4	27

 Peak Number 61 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
28.93	444.84 ng	22035917	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-METHYLDECALIN (PROBABLY TRANS)	13881	002958-76-1	81
2	CIS-SYN-2-METHYL-DECAHYDRONAPHTHALE	13879	000000-00-0	64
3	Bicyclo[4.3.1]decan-10-one	124035	020440-21-5	64
4	Spiro[5.5]undecane	124050	000180-43-8	58
5	(E)-6,6-Dimethylcyclooct-4-en-1-one	13710	091531-49-6	58

 Peak Number 62 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
29.44	363.68 ng	18015535	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	CITRONELLA	124183	000106-23-0	42
2	Naphthalene, decahydro-2,6-dimethyl	19761	001618-22-0	27
3	Cyclododecane	125805	000294-62-2	27
4	5-Hexadecyne	45099	071899-37-1	22
5	2-Nitro-1-undecene	34284	080255-14-7	22

 Peak Number 63 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
29.75	1323.63 ng	65568880	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane, 3-methyl-	122736	005911-04-6	83
2	Tridecane, 7-methyl-	34139	026730-14-3	83
3	Dodecane, 2,6,11-trimethyl-	129244	031295-56-4	78
4	Octane, 2,3,6-trimethyl-	15637	062016-33-5	72
5	Decane, 4-methyl-	15626	002847-72-5	72

 Peak Number 64 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD	R.T.
30.08	190.07 ng	9415553	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, decyl-	129143	001795-21-7	52
2	PHOTOCITRAL B	13633	055253-27-5	46
3	Cyclopentane, 1-butyl-2-propyl-	20759	062199-50-2	46
4	7-Octenal, 3,7-dimethyl-	14550	000141-26-4	46
5	3-Decene, 2,2-dimethyl-, (E)-	20732	055499-02-0	38

 Peak Number 65 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
30.26	365.02 ng	18081956	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, (2-methylpropyl)-	5449	003788-32-7	64
2	Cyclopentane, 1,2-dibutyl-	26865	062199-52-4	58
3	3-UNDECENE, 5-METHYL-, CIS/TRANS	20694	000000-00-0	49
4	Cyclohexane, (1-methylethyl)-	5458	000696-29-7	49
5	3-CYCLOHEXYL-3-DEUTEROPROP-1-ENE	4918	055702-62-0	49

 Peak Number 66 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
30.43	7074.02 ng	350426065	Hexafluorobenzene	13.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128277	000629-59-4	86
2	Dodecane	126006	000112-40-3	86
3	Hexadecane	130127	000544-76-3	72
4	Tridecane	127251	000629-50-5	60
5	Decane, 2,3,5-trimethyl-	27778	062238-11-3	58

 Peak Number 67 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.32	268.32 ng	13291696	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclododecane, ethyl-	33201	028981-49-9	43
2	1-Nonanol, 4,8-dimethyl-	22410	033933-80-1	38
3	Cyclohexane, 1,2,3-trimethyl-	5467	001678-97-3	35
4	DECAHYDRO-2-ETHYL-NAPHTHALENE	19756	000000-00-0	30
5	3-Hexene, 2-methyl-, (E)-	910	000692-24-0	30

Peak Number 68 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
31.74	90.62 ng	4488846	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,1,6-Trimethyldecahydronaphthalene	25874	081983-72-4	38
2	Isomer B of 1,1,6-Trimethyldecahydr	25876	081983-74-6	35
3	Isomer A of 1,1,6-Trimethyldecahydr	25875	081983-73-5	35
4	4,6-DIMETHYL-7-OXO-4,7-DIHYDRO-1,2,	18815	025623-77-2	25
5	(-)-TRANS PINANE	122329	000473-55-2	22

Peak Number 69 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
32.32	1628.33 ng	80662634	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128277	000629-59-4	98
2	Pentadecane	129234	000629-62-9	93
3	Heptadecane	130827	000629-78-7	91
4	Tridecane	127253	000629-50-5	90
5	Hexadecane	130123	000544-76-3	87

Peak Number 70 Rank in Relative Concentration 58

R.T.	Conc	Area	Relative to ISTD	R.T.
33.70	91.18 ng	4516693	Hexafluorobenzene	13.80
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	.delta.-Fenchane	8823	006248-88-0	38
2	(1S*,3.ALPHA.,6.ALPHA.)-3-METHYLTRI	31973	062617-75-8	35
3	2-(1-PROPENYL)-3-VINYLOXIRAN	2174	070597-12-5	30
4	Cyclopentane, 1,3-dimethyl-2-(1-met	8782	061142-30-1	27
5	(+)-(3a,R,7aS)-3a,7a-Dimethylindan-	25659	079897-27-1	18

39010628.D AREA.M Thu Feb 04 12:58:07 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010627.D

Vial: 25

Acq On : 9 Jan 99 5:43 pm

Operator: Bonfoey

Sample : VS006-077-TS12

Inst : 5972 INST

Misc :

Multiplr: 1.00

Quant Time: Jan 23 20:54 1999

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.44	84	4635181	200.00	ng	0.05
27) Ethylbenzene-d10	22.15	98	5857428	200.00	ng	0.00
37) Dodecane-d26	27.97	66	567957	200.00	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	%Recovery
9) Hexafluorobenzene	13.79	186	4142563	265.04	ng	82.31%
21) Toluene-d8	19.53	98	7447938	341.08	ng	90.71%
32) Bromobenzene-d5	24.90	82	3385100	313.60	ng	101.82%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Methanol	8.38	31	4521	0.84	ng	# 1
3) Ethanol	9.78	31	2561617	286.19	ng	m 39
4) Acetone	11.21	43	2236898	106.80	ng	m 83
5) Acetonitrile	11.68	41	277570	34.21	ng	m 100
6) Dichloromethane	12.33	84	2131	0.37	ng	# 12
7) 1-Propanol	12.72	31	945426	104.06	ng	m 70
8) n-Hexane	13.08	57	6135373	793.32	ng	m 287
10) Butanal	14.21	72	187260	112.65	ng	m 1
12) Chloroform	14.91	83	1156	0.07	ng	# 23
14) 1-Butanol	15.98	56	3206341	507.18	ng	m 55
16) Tetrachloroethane	16.05	117	255	0.02	ng	m 92
18) 2-Pentanone	17.08	43	1553470	79.65	ng	m 87
19) Butanenitrile	17.33	41	1927340	169.37	ng	m 100
22) Toluene	19.67	91	5705187	231.30	ng	m 100
23) 2-Hexanone	19.99	43	5971283	422.20	ng	m 99
24) Pentanenitrile	20.27	41	3436893	401.39	ng	m 94
25) Tetrachloroethylene	20.86	166	26575	2.46	ng	m 79
26) n-Nonane	21.60	57	6671860	640.99	ng	# 39
29) Hexanenitrile	22.99	41	6039266	582.11	ng	m 65
30) o-Xylene	23.35	91	45922	1.84	ng	m 88
33) 2-Octanone	25.05	58	1641788	180.62	ng	m 75
34) Heptanenitrile	25.38	82	6267676	422.38	ng	m 69
35) 1,2,4-trimethylbenzene	25.70	105	106381	36.63	ng	m 69

(# = qualifier out of range (m) = manual integration

39010627.D 390106CA.M

Sat Jan 23 20:54:19 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010627.D

Vial: 25

Acq On : 9 Jan 99 5:43 pm

Operator: Bonfoey

Sample : VS006-077-TS12

Inst : 5972 INST

Misc :

Multiplr: 1.00

Quant Time: Jan 23 18:36 1999

Method : C:\HPCHEM\3\390106CH.M

Title :

Last Update : Fri Jan 22 23:38:57 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.44	84	4635181	200.00	ng	0.05
5) Ethylbenzene-d10	22.15	98	5857428	200.00	ng	0.00

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) n-Heptane	16.17	43	32734278	3264.80	ng	m	77
4) n-Nonane	21.68	57	5711053	608.66	ng	m	39
6) 2-Heptanone	22.65	43	40900564	2144.08	ng	m	30
7) n-Decane	24.17	57	21462752	2103.33	ng	m	86
8) n-Undecane	26.37	57	36130754	3250.66	ng	m	92
9) n-Dodecane	28.40	57	51179436	4540.60	ng	m	29
10) n-Tridecane	30.41	57	65893896	8957.97	ng	m	40

(#) = qualifier out of range (m) = manual integration

39010627.D 390106CH.M

Sat Jan 23 18:37:22 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010627.D
Operator : Bonfoey
Acquired : 9 Jan 99 5:43 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-077-TS12
Misc Info :
Vial Number: 25

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 1 Rank in Relative Concentration 67

R.T.	Conc	Area	Relative to ISTD	R.T.
7.22	62.69 ng	3335127	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(1H)-Naphthalenone, octahydro-4a-m	19650	000938-07-8	95
2	5-NITROANTHRANILAMIDE	25959	000000-00-0	94
3	4-AMINO-6-ETHYL-3-METHYLISOTHIAZOLO	31526	058648-92-3	94
4	12exo-Hydroxy-7-oxatetracyclo[6.4.0	31788	078630-86-1	94
5	Benzoic acid, 2-chloro-	124441	000118-91-2	91

 Peak Number 2 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD	R.T.
7.52	81.37 ng	4329434	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	91
2	Cyclopropane	115908	000075-19-4	81
3	2-Butenoic acid, (Z)-	116968	000503-64-0	78
4	2-Furanmethanol	117683	000098-00-0	78
5	Acetamide, 2-chloro-N,N-di-2-propen	22543	000093-71-0	72

 Peak Number 3 Rank in Relative Concentration 69

R.T.	Conc	Area	Relative to ISTD	R.T.
7.62	41.51 ng	2208549	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Oxirane, ethenyl-	116318	000930-22-3	59
2	Cyclopropanecarboxylic acid	116979	001759-53-1	59
3	3-Butenoic acid	14	000625-38-7	50
4	Furan, 2,5-dihydro-	116324	001708-29-8	45
5	2-Butenal, (E)-	116303	000123-73-9	42

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 4 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
8.39	228.38 ng	12150752	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	86
2	2-Butene	116020	000107-01-7	80
3	Cyclobutane	116025	000287-23-0	49
4	1,3-Butadiene	115996	000106-99-0	47
5	Borane, ethyldimethyl-	116329	001113-22-0	25

 Peak Number 5 Rank in Relative Concentration 54

R.T.	Conc	Area	Relative to ISTD	R.T.
9.77	133.46 ng	7100591	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	BISETHOXO (METHOXO) OXOVANADIUM	28919	062450-00-4	72
2	Ethanol	115963	000064-17-5	59
3	Formic acid, ethyl ester	116524	000109-94-4	40
4	1-Propanol	116148	000071-23-8	36
5	Adenosine, 2-methyl-	132624	016526-56-0	9

 Peak Number 6 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD	R.T.
10.27	197.16 ng	10489488	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Octene	119048	000111-66-0	64
2	Pentane	116456	000109-66-0	50
3	Butane, 2-methyl-	116460	000078-78-4	43
4	Oxirane, 2,2-dimethyl-	116433	000558-30-5	42
5	Bicyclo[3.3.1]nonan-2-one, 9-isopro	24893	018346-78-6	38

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
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 Peak Number 7 Rank in Relative Concentration 64

R.T.	Conc	Area	Relative to ISTD	R.T.	
11.21	80.86 ng	4301967	Hexafluorobenzene	13.79	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Propanone		116053	000067-64-1	64
2	2-Pentanone, 4-hydroxy-4-methyl-		119530	000123-42-2	56
3	Acetic acid, 2-methylpropyl ester		119521	000110-19-0	40
4	2-Propanone, oxime		116482	000127-06-0	38
5	Butane		116078	000106-97-8	9

 Peak Number 8 Rank in Relative Concentration 55

R.T.	Conc	Area	Relative to ISTD		R.T.
12.09	130.18 ng	6926298	Hexafluorobenzene		13.79
Hit# of 20		Tentative ID	Ref#	CAS#	Qual
1 Pentane, 2-methyl-			117117	000107-83-5	53
2 Pentane, 2-bromo-			12433	000107-81-3	40
3 Cyclopropane, butyl-			931	000930-57-4	40
4 Butane, 2-methyl-			116461	000078-78-4	38
5 Pentane, 2,3-dimethyl-			118119	000565-59-3	37

 Peak Number 9 Rank in Relative Concentration 72

R.T.	Conc	Area	Relative to ISTD		R.T.
12.61	33.06 ng	1758723	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Propene, 2-methyl-		116022	000115-11-7	64
2	2-Butene, (E)-		116021	000624-64-6	43
3	1-Butene		116017	000106-98-9	43
4	Cyclobutane		116025	000287-23-0	43
5	1-Butanol, 2-methyl-		117273	000137-32-6	42

Library Search Compound Report

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 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
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 Peak Number 10 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD	R.T.	
13.48	158.39 ng	8427164	Hexafluorobenzene	13.79	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Hexene, (E)-		116889	004050-45-7	58
2	2-PENTENE, 3-METHYL- (CIS/TRANS)		116905	000000-00-0	58
3	2-Pentene, 4-methyl-, (E)-		116912	000674-76-0	53
4	2-Pentene, 3-methyl-, (E)-		116908	000616-12-6	50
5	Cyclopentanone		116856	000120-92-3	47

 Peak Number 11 Rank in Relative Concentration 71

R.T.	Conc	Area	Relative to ISTD		R.T.
14.23	34.77 ng	1849700	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Butanal		116378	000123-72-8	81
2	Hexanal		1129	000066-25-1	72
3	Ethene, ethoxy-		116428	000109-92-2	59
4	Propane		115929	000074-98-6	49
5	1-Hexyn-3-ol		117753	000105-31-7	46

 Peak Number 12 Rank in Relative Concentration 60

R.T.	Conc	Area	Relative to ISTD	R.T.	
14.40	96.19 ng	5117588	Hexafluorobenzene	13.79	
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Cyclopentene, 1-methyl-		116780	000693-89-0	58
2	Cyclopropane, (1-methylethenyl)-		116777	004663-22-3	50
3	1-Hexyne		116756	000693-02-7	45
4	Cyclopentane, methylene-		116785	001528-30-9	40
5	Cyclohexene		116787	000110-83-8	37

Library Search Compound Report

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 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
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 Peak Number 13 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
15.09	105.05 ng	5588878	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Pentene, 5-nitro-	3227	023542-51-0	43
2	2-Propenenitrile, 2-methyl-	116225	000126-98-7	35
3	CIS-3-HEXENAL	776	000000-00-0	35
4	3-Heptene, (E)-	900	014686-14-7	35
5	2-Pentene, 3-methyl-, (E)-	116908	000616-12-6	32

 Peak Number 14 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
15.49	249.90 ng	13295744	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	901	000592-78-9	68
2	2-Hexyn-1-ol	825	000764-60-3	53
3	CYCLOBUTANE, ISOPROPYL-	934	000000-00-0	50
4	Cyclopentane, 1,3-dimethyl-, trans-	941	001759-58-6	47
5	3-Heptene, (E)-	900	014686-14-7	46

 Peak Number 15 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
15.99	376.43 ng	20027782	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butanol	116554	000071-36-3	81
2	Furan, 2-propyl-	118853	004229-91-8	59
3	2-Butene, (E)-	116021	000624-64-6	47
4	Cyclobutane	116025	000287-23-0	38
5	1-Propanol, 2-methyl-	116575	000078-83-1	38

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
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 Peak Number 16 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
16.16	3745.16 ng	199257905	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane	118106	000142-82-5	91
2	Hexane, 3-methyl-	118114	000589-34-4	72
3	2-Methyl-nonane	10241	000081-83-0	59
4	Pentane, 2,3,4-trimethyl-	119384	000565-75-3	50
5	2-Penten-1-ol, 2-methyl-, (E)-	1155	016958-19-3	43

 Peak Number 17 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
16.60	6151.78 ng	327300037	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	898	014686-13-6	96
2	2-Heptene	117785	000592-77-8	94
3	3-Heptene	901	000592-78-9	87
4	Cycloheptane	945	000291-64-5	81
5	3-Heptene, (E)-	900	014686-14-7	76

 Peak Number 18 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
16.93	3325.80 ng	176946026	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	117784	014686-13-6	96
2	2-Heptene	117785	000592-77-8	95
3	3-Heptene	901	000592-78-9	91
4	3-Heptene, (E)-	900	014686-14-7	90
5	Cycloheptane	945	000291-64-5	81

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
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 Peak Number 19 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
17.33	260.11 ng	13838865	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexene, 3-bromo-	16576	001521-51-3	53
2	Cyclopentene, 1,5-dimethyl-	637	016491-15-9	52
3	Cyclopentene, 4,4-dimethyl-	638	019037-72-0	49
4	Cyclopentane, 1-methyl-2-methylene-	643	041158-41-2	47
5	1,4-Pentadiene, 3,3-dimethyl-	628	001112-35-2	43

 Peak Number 20 Rank in Relative Concentration 68

R.T.	Conc	Area	Relative to ISTD	R.T.
17.64	45.71 ng	2432091	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,4-Hexadienal	117579	000142-83-6	90
2	1-(2-Methyl-1-propenyl)cyclopropane	631	001003-33-4	86
3	2,4-Hexadienal, (E,E)-	117578	004488-48-6	86
4	Cyclohexene, 4-methyl-	117619	000591-47-9	86
5	1,4-Hexadiene, 2-methyl-	617	001119-14-8	83

 Peak Number 21 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
17.77	165.80 ng	8821072	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenitrile	116729	013284-42-9	49
2	1-Butyne	115986	000107-00-6	46
3	1,2-Butadiene	115994	000590-19-2	43
4	2-Butyne	115989	000503-17-3	43
5	1,2-DIMETHYL-CYCLOBUTEN-3,4-DIONE	2125	000000-00-0	38

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
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 Peak Number 22 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD		R.T.
18.37	2405.45 ng	127980024	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Heptane, 3-methyl-		119371	000589-81-1	86
2	Octane		119368	000111-65-9	72
3	Octane, 3,4-dimethyl-		10253	015869-92-8	64
4	Hexane, 1-(hexyloxy)-2-methyl-		34909	074421-17-3	64
5	Hexane, 2,4-dimethyl-		119377	000589-43-5	59

 Peak Number 23 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD		R.T.
18.55	1836.19 ng	97692702	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	3,4-Heptadiene		615	002454-31-1	80
2	2,3-Hexadiene, 2-methyl-		622	029212-09-7	76
3	2-Cyclopenten-1-one, 2-methyl-		593	001120-73-6	76
4	2-Butenal, 2-ethenyl-		576	020521-42-0	74
5	1,4-Hexadiene, 2-methyl-		617	001119-14-8	58

 Peak Number 24 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD		R.T.
19.21	1111.52 ng	59137572	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptyne		602	001119-65-9	91
2	1,2-Hexadiene, 5-methyl-		616	013865-36-6	81
3	1,4-Hexadiene, 4-methyl-		618	001116-90-1	59
4	2,5-Heptadiene, (E,E)-		614	039619-60-8	53
5	2,4-Heptadiene, (E,E)-		613	002384-94-3	53

Library Search Compound Report

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 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

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 Peak Number 25 Rank in Relative Concentration 47

R.T.	Conc	Area	Relative to ISTD	R.T.
19.53	185.93 ng	9892130	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	50
2	.GAMMA.-PICOLINE-.ALPHA.,.OMEGA.-D5	438	029372-32-5	32
3	.GAMMA.-PICOLINE-D7	439	029372-29-0	12
4	Pyrrolidine, 1-nitroso-	117889	000930-55-2	10
5	1H-1,2,4-Triazol-3-amine, 1-methyl-	722	049607-51-4	9

 Peak Number 26 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
19.64	507.72 ng	27012985	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-HEPTENE, 3-METHYL-	2651	000000-00-0	50
2	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	46
3	CIS-1-BUTYL-2-METHYLCYCLOPROPANE	2731	038851-69-3	43
4	2-Octene	119054	000111-67-1	43
5	Heptane, 3-methylene-	119065	001632-16-2	43

 Peak Number 27 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
19.76	289.78 ng	15417309	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclooctane	2729	000292-64-8	87
2	2-Octene, (E)-	2641	013389-42-9	70
3	N-OCTAN-3-ENE	119057	000000-00-0	68
4	Heptane, 3-methylene-	119065	001632-16-2	68
5	Cycloheptanone	119040	000502-42-1	64

Library Search Compound Report

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 Acq On : 9 Jan 99 5:43 pm
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 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
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 Peak Number 28 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
19.99	291.41 ng	15504073	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	117991	000591-78-6	91
2	2-Pentanone, 4-methyl-	118019	000108-10-1	80
3	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	50
4	2-Hexanone, 4-hydroxy-3-propyl-	16134	062338-17-4	50
5	Oxirane, 2-methyl-2-(1-methylethyl)	1198	072221-03-5	50

 Peak Number 29 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
20.27	296.47 ng	15773465	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	SULFOLENE	3718	000116-88-8	43
2	Hexanedinitrile	118677	000111-69-3	40
3	1-Butyne	115987	000107-00-6	40
4	Pentanedinitrile	463	000544-13-8	38
5	1,6-Octadiene, (E)-	2222	019036-81-8	36

 Peak Number 30 Rank in Relative Concentration 66

R.T.	Conc	Area	Relative to ISTD	R.T.
20.76	74.35 ng	3955710	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 4-methyl-	6039	002216-34-4	58
2	Heptane, 2,3-dimethyl-	6043	003074-71-3	52
3	Octane, 2-methyl-	6037	003221-61-2	47
4	Hexane, 2,3,5-trimethyl-	120933	001069-53-0	46
5	Hexane, 2,3,4-trimethyl-	6059	000921-47-1	43

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Vial: 25
 Operator: Bonfoey
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 Multiplr: 1.00

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 Peak Number 31 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD		R.T.
21.21	89.97 ng	4786927	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Cyclohexane, 1,3,5-trimethyl-		5473	001839-63-0	53
2	Cyclohexane, 1,3,5-trimethyl-, (1.a		5472	001795-26-2	45
3	Cyclohexane, 2-ethyl-1,3-dimethyl-		9519	007045-67-2	43
4	1-Butyne, 3-methyl-3-propoxy-		5334	053907-64-5	43
5	1,6-OCTADIENE, 3,7-DIMETHYL-		8731	000000-00-0	43

 Peak Number 32 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD		R.T.
21.68	1324.49 ng	70468460	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Nonane		120904	000111-84-2	64
2	2-Azido-2-methylbutane		2780	032872-42-7	52
3	Tetradecane		128274	000629-59-4	47
4	2,4,6,8-TETRAMETHYL-1-UNDECENE		39728	059920-26-2	47
5	1-Hexene		116880	000592-41-6	38

 Peak Number 33 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD		R.T.
22.09	2677.47 ng	142452608	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	4-Heptanone		3092	000123-19-3	91
2	3-Hexanone, 2-methyl-		3099	007379-12-6	72
3	3-Pentanone, 2,4-dimethyl-		119335	000565-80-0	72
4	3-Buten-2-ol, 2-methyl-		117081	000115-18-4	59
5	Pentane, 3-bromo-		12434	001809-10-5	58

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D

Vial: 25

Acq On : 9 Jan 99 5:43 pm

Operator: Bonfoey

Sample : VS006-077-TS12

Inst : 5972 INST

Misc :

Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M

Title : TST Calibration

Library : C:\DATABASE\WILEY138.L

 Peak Number 34 Rank in Relative Concentration 70

R.T.	Conc	Area	Relative to ISTD	R.T.
22.27	35.80 ng	1904672	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanol	119626	000589-55-9	43
2	1-Heptyn-4-ol	2582	022127-83-9	40
3	3-Hexanol, 2-methyl-	119631	000617-29-8	38
4	2,2-Dimethyl-4-penten-1-ol	3121	003420-42-6	25
5	3-Pentanol, 2,4-dimethyl-	119643	000600-36-2	10

 Peak Number 35 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
22.65	2181.66 ng	116073088	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	119305	000110-43-0	90
2	2-Hexanone, 5-methyl-	119322	000110-12-3	78
3	2-Hexanone, 4-methyl-	3096	000105-42-0	33
4	3-Pentanone, 2,4-dimethyl-	3105	000565-80-0	10
5	Pentane, 1-propoxy-	6581	018641-82-2	10

 Peak Number 36 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
23.16	93.02 ng	4948981	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane, 2-methyl-	122732	000871-83-0	52
2	Decane	10235	000124-18-5	43
3	Heptadecane, 2,6,10,15-tetramethyl-	72677	054833-48-6	43
4	Butane, 2-iodo-2-methyl-	33461	000594-38-7	38
5	Undecane, 5-methyl-	21655	001632-70-8	38

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\39010627\39010627.D

Vial: 25

Acq On : 9 Jan 99 5:43 pm

Operator: Bonfoey

Sample : VS006-077-TS12

Inst : 5972 INST

Misc :

Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M

Title : TST Calibration

Library : C:\DATABASE\WILEY138.L

 Peak Number 37 Rank in Relative Concentration 50

R.T.	Conc	Area	Relative to ISTD		R.T.
23.28	161.38 ng	8586074	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Octane		3190	000111-65-9	78
2	Nonane		6035	000111-84-2	72
3	Heptane, 2,3-dimethyl-		120917	003074-71-3	64
4	Ether, heptyl hexyl		34907	007289-40-9	53
5	[1'-13C]-Octyne		2216	000000-00-0	53

 Peak Number 38 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD		R.T.
23.45	175.07 ng	9314218	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Propanone, diethylhydrazone		5905	016713-36-3	47
2	Furan, tetrahydro-2,5-dipropyl-		15561	004457-62-9	47
3	1-Piperidinecarboxaldehyde		119156	002591-86-8	38
4	METHYL VALEROLACTAM		2817	000000-00-0	37
5	2-Heptene		117785	000592-77-8	27

 Peak Number 39 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD		R.T.
23.55	423.31 ng	22522104	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Thiazole, 4,5-dimethyl-		119144	003581-91-7	38
2	Isothiazole, 3,4-dimethyl-		2777	027330-46-7	38
3	Pentane, 2,3-dimethyl-		118120	000565-59-3	38
4	Isothiazole, 3,5-dimethyl-		2776	024260-24-0	32
5	1-Piperidinecarboxaldehyde		119155	002591-86-8	27

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D

Acq On : 9 Jan 99 5:43 pm

Sample : VS006-077-TS12

Misc :

Vial: 25

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M

Title : TST Calibration

Library : C:\DATABASE\WILEY138.L

 Peak Number 40 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD		R.T.
23.67	1389.27 ng	73914688	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1H-1,2,4-Triazole-3,5-diamine		117824	001455-77-2	58
2	2,2'-Bioxepane		33981	074793-02-5	56
3	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID		10615	001123-28-0	53
4	2(3H)-Furanone, dihydro-4,4-dimethy		2999	013861-97-7	39
5	1,4-Dioxaspiro[4.5]decan-8-ol		16050	022428-87-1	39

 Peak Number 41 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD		R.T.
23.78	1772.32 ng	94294959	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2,2'-Bioxepane		33981	074793-02-5	59
2	2(3H)-Furanone, dihydro-4,4-dimethy		2999	013861-97-7	50
3	3-Oxepanemethanol		6493	056666-73-0	45
4	GLYCOCYANIDINE		955	000503-86-6	45
5	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID		10615	001123-28-0	40

 Peak Number 42 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD		R.T.
24.00	2032.76 ng	108150956	Hexafluorobenzene		13.79
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Methyl-2-cyclopenten-1-ol		844	040459-88-9	80
2	3-BROMO-1,1,2-TRIMETHYL-CYCLOPROPAN		17429	000000-00-0	59
3	Cyclopropane, 1,1,2,2-tetramethyl-		117811	004127-47-3	59
4	3-Penten-2-one, 4-methyl-		117724	000141-79-7	59
5	Cyclohexane, bromo-		125053	000108-85-0	45

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D

Vial: 25

Acq On : 9 Jan 99 5:43 pm

Operator: Bonfoey

Sample : VS006-077-TS12

Inst : 5972 INST

Misc :

Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M

Title : TST Calibration

Library : C:\DATABASE\WILEY138.L

 Peak Number 43 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
24.17	1928.12 ng	102583908	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	122728	000124-18-5	87
2	Pentadecane	129233	000629-62-9	72
3	Hexadecane	130127	000544-76-3	64
4	Dodecane, 2-methyl-	127257	001560-97-0	59
5	Decane, 2,9-dimethyl-	21662	001002-17-1	59

 Peak Number 44 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
24.31	2123.88 ng	112998964	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,6-DIHYDRO-6,6-DIMETHYL-2H-PYRAN-2	5218	072649-03-7	50
2	2(5H)-FURANONE, 4,5,5-TRIMETHYL-	5202	000000-00-0	50
3	2-Aminopyrimidin-1-oxide	2307	035034-15-2	43
4	Cyclohexane, 1,2,4-trimethyl-, (1.a	5470	007667-60-9	40
5	Oxazole, trimethyl-	2343	020662-84-4	40

 Peak Number 45 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
24.62	676.54 ng	35994921	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	15626	002847-72-5	83
2	Heptane, 5-ethyl-2-methyl-	10261	013475-78-0	64
3	Heptane, 3,3,5-trimethyl-	122747	007154-80-5	59
4	Decane, 2-methyl-	124552	006975-98-0	55
5	1,2-Cyclohexanediol, 1-methyl-, tra	6491	019534-08-8	53

Library Search Compound Report

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 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
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 Peak Number 46 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
24.91	386.89 ng	20583978	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	38
2	1H-Imidazole, 2-methyl-	116745	000693-98-1	9
3	Pyrido[2,3-d]pyrimidine, 4-methoxy-	17153	028732-78-7	9
4	2-(Chloroethynyl)benzonitrile	17178	087954-05-0	9
5	Thiazole, 2-phenyl-	17212	001826-11-5	9

 Peak Number 47 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
25.07	326.42 ng	17366687	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Aziridinone, 1-tert-butyl-3-(1-me	45341	026944-18-3	38
2	3-Hepten-2-one, (Z)-	2544	069668-88-8	38
3	2-Octanone	120847	000111-13-7	38
4	3-Hepten-2-one, (E)-	2545	005609-09-6	35
5	Silane, trichloroicosyl-	99977	018733-57-8	32

 Peak Number 48 Rank in Relative Concentration 52

R.T.	Conc	Area	Relative to ISTD	R.T.
25.28	155.26 ng	8260592	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	DODECANE, 6-CYCLOHEXYL-	57566	013151-86-5	38
2	1-Octadecanol	132224	000112-92-5	38
3	Ethanone, 1-cyclohexyl-	120604	000823-76-7	30
4	2H-1,3-Benzoxazine, 6-tert-butyl-3-	64695	005451-32-1	27
5	Nitrous acid, cyclohexyl ester	6150	005156-40-1	27

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
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 Peak Number 49 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
25.38	593.62 ng	31583214	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	118930	000629-08-3	59
2	Octanenitrile	5025	000124-12-9	39
3	1H-Imidazole-4-ethanamine	118920	000051-45-6	38
4	2-Hexenoic acid, 3-hexenyl ester, (	32930	053398-87-1	38
5	Hexanoic acid, 3-hexenyl ester, (Z)	128195	031501-11-8	25

 Peak Number 50 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
25.55	280.53 ng	14925326	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Undecene	124351	000821-95-4	43
2	Nonane, 3-methyl-	10243	005911-04-6	38
3	Nonane, 3,7-dimethyl-	15631	017302-32-8	30
4	Heptadecane, 2,6-dimethyl-	62988	054105-67-8	27
5	1-Undecene, 4-methyl-	20672	074630-39-0	25

 Peak Number 51 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
25.73	4039.69 ng	214928136	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	121193	000104-76-7	64
2	1-Pentene, 4,4-dimethyl-	117800	000762-62-9	46
3	2-Heptene	117785	000592-77-8	43
4	1-Heptene	897	000592-76-7	38
5	Octane, 2-chloro-	11932	000628-61-5	38

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
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 Peak Number 52 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
25.88	2006.50 ng	106754153	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Azabicyclo[2.2.1]heptane	699	000279-24-3	78
2	1,2-Nonadiene	120434	022433-33-6	33
3	Hexanenitrile, 5-methyl-	118933	019424-34-1	10
4	4-Hexen-3-one, 4,5-dimethyl-	5318	017325-90-5	10
5	1-Pentene, 3-ethyl-	117792	004038-04-4	10

 Peak Number 53 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
26.37	3667.26 ng	195113450	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	15622	001120-21-4	87
2	Octadecane, 1-chloro-	69962	003386-33-2	78
3	Heptane, 2,6-dimethyl-	6046	001072-05-5	72
4	Tridecane	127251	000629-50-5	64
5	Tetradecane	128277	000629-59-4	64

 Peak Number 54 Rank in Relative Concentration 58

R.T.	Conc	Area	Relative to ISTD	R.T.
26.54	98.50 ng	5240686	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	14851	000000-00-0	93
2	1,1-DIMETHYL-2-PROPYLCYCLOHEXANE	14847	081983-71-3	76
3	3-Undecene, (E)-	14794	001002-68-2	76
4	CITRONELLA	124183	000106-23-0	64
5	3-Undecene, (Z)-	14793	000821-97-6	62

Library Search Compound Report

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 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
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 Peak Number 55 Rank in Relative Concentration 43

R.T.	Conc	Area	Relative to ISTD	R.T.
26.65	253.85 ng	13505930	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,6-dimethyl-	120921	001072-05-5	64
2	Undecane, 2-methyl-	126010	007045-71-8	58
3	Undecane, 2,7-dimethyl-	27746	017301-24-5	47
4	Undecane, 3,7-dimethyl-	27754	017301-29-0	47
5	Nonane, 3-methyl-	10243	005911-04-6	45

 Peak Number 56 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
26.95	450.21 ng	23952888	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 4-methyl-	21653	002980-69-0	53
2	Nonane, 5-(2-methylpropyl)-	27796	062185-53-9	53
3	Decane, 4-methyl-	124557	002847-72-5	47
4	Nonane, 2,6-dimethyl-	15630	017302-28-2	47
5	1,1-DIMETHYLPROPYL 2-ETHYLHEXANOATE	41299	005421-13-6	47

 Peak Number 57 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
27.34	773.93 ng	41176440	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-	122339	000091-17-8	95
2	Naphthalene, decahydro-, trans-	122344	000493-02-7	89
3	Naphthalene, decahydro-, cis-	122337	000493-01-6	87
4	Spiro[4.5]decane	8822	000176-63-6	50
5	Bicyclo[2.2.1]heptane, 2-methyl-, e	2290	000872-78-6	42

Library Search Compound Report

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 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
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 Peak Number 58 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
27.96	96.61 ng	5140277	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	n-Decane-D22	10240	000000-00-0	47
2	4-Hydroxyoctahydro-1,3,5-metheno-1H	23861	088669-66-3	38
3	PERDEUTERIO-PENTADECANE	40629	036340-20-2	36
4	Cyclooctene	118907	000931-88-4	32
5	9-Azabicyclo[6.1.0]non-4-ene, (1.alpha.)	4605	066512-22-9	32

 Peak Number 59 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
28.09	324.55 ng	17267664	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1-propenyl-	120440	005364-83-0	83
2	Cyclohexane, pentyl-	14841	004292-92-6	81
3	Cyclohexane, (1-ethylpropyl)-	14842	026321-98-2	80
4	3-CYCLOHEXYL-3-DEUTEROPROP-1-ENE	4918	055702-62-0	72
5	Cyclohexane, 1,1'-(1,4-butanediyl)b	45121	006165-44-2	72

 Peak Number 60 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
28.26	860.01 ng	45756180	Hexafluorobenzene	13.79

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Buten-2-one, 4-(1-aziridinyl)-	2342	018277-57-1	58
2	2-Cyclohexen-1-one, 4,4-dimethyl-	120409	001073-13-8	43
3	2-ETHYL-5-PENTYL-5-PYRROLINE	19967	061772-94-9	40
4	2(1H)-Pyrimidinone, 4-amino-	118915	000071-30-7	38
5	Z8-DODECENYLACETATE	46804	000000-00-0	38

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
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 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
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 Peak Number 61 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
28.61	1387.60 ng	73825942	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 6-methyl-	27736	006044-71-9	97
2	Undecane, 2,6-dimethyl-	127264	017301-23-4	93
3	Undecane, 3,6-dimethyl-	27753	017301-28-9	83
4	Undecane, 4,6-dimethyl-	27759	017312-82-2	72
5	Decane, 2,6,8-trimethyl-	27787	062108-26-3	72

 Peak Number 62 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
28.76	288.82 ng	15366406	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 3-ethylidene-	8879	016395-79-2	40
2	4H-Pyran-4-one	117567	000108-97-4	38
3	CYCLOPENT-2-EN-1,4-DIONE	550	000000-00-0	35
4	2H-Azepin-2-one, hexahydro-5-methyl	5606	002210-07-3	25
5	1H-1,2,4-Triazole, 3-ethyl-	666	007411-16-7	16

 Peak Number 63 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
28.94	653.82 ng	34785751	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-METHYLDECALIN (PROBABLY TRANS)	13881	002958-76-1	87
2	(Z)-6,6-Dimethylcyclooct-4-en-1-one	13709	091531-64-5	62
3	Cyclohexane, 1-methyl-4-(1-methylet	8809	001124-25-0	50
4	Spiro[5.5]undecane	13883	000180-43-8	43
5	Spiropentane, propyl-	2287	006191-88-4	38

Library Search Compound Report

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Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
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 Peak Number 64 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
29.75	1558.56 ng	82921672	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 7-methyl-	34139	026730-14-3	87
2	Octadecane, 2,6-dimethyl-	67910	075163-97-2	83
3	Heptadecane, 7-methyl-	58321	020959-33-5	78
4	Octane, 3,6-dimethyl-	122744	015869-94-0	72
5	DECANE, 2,3,5,8-TETRAMETHYL-	34143	000000-00-0	64

 Peak Number 65 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
30.08	262.88 ng	13986189	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,2-Epoxy-1-vinylcyclododecene	38702	053601-11-9	60
2	Cyclopentane, 1-butyl-2-propyl-	20759	062199-50-2	46
3	Cyclopropane, 1,1-dimethyl-2-(2-met	4904	069147-03-1	43
4	4,8,8-TRIMETHYLCYCLOOCT-3-ENONE	19617	058643-97-3	41
5	Cyclohexanone, 5-methyl-2-(1-methyl	124271	000491-07-6	38

 Peak Number 66 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
30.26	601.44 ng	31999322	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, (2-methylpropyl)-	5449	003788-32-7	64
2	Cyclohexane, 2-butyl-1,1,3-trimethy	26872	054676-39-0	50
3	Cyclohexane, (1-methylethyl)-	5458	000696-29-7	49
4	4-Undecene, 3-methyl-, (Z)-	20703	074645-87-7	49
5	3-CYCLOHEXYL-3-DEUTEROPROP-1-ENE	4918	055702-62-0	46

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 67 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
30.44	7953.90 ng	423180240	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	127251	000629-50-5	62
2	Dodecane	126006	000112-40-3	59
3	Decane, 2,3,5-trimethyl-	27778	062238-11-3	49
4	1-Heptene	897	000592-76-7	42
5	Tetradecane, 4-methyl-	40632	025117-24-2	38

 Peak Number 68 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
31.33	424.18 ng	22568063	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Nonanol, 4,8-dimethyl-	22410	033933-80-1	43
2	4-Nonene, 3-methyl-, (Z)-	9448	063830-69-3	27
3	1-Pentene, 2,3-dimethyl-	117796	003404-72-6	25
4	6-Tridecene, 7-methyl-	33177	024949-42-6	25
5	1-Dodecanol, 3,7,11-trimethyl-	130247	006750-34-1	25

 Peak Number 69 Rank in Relative Concentration 53

R.T.	Conc	Area	Relative to ISTD	R.T.
31.75	154.07 ng	8197269	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,13-Tetradecadiene	32141	021964-49-8	47
2	Nonanenitrile	8963	002243-27-8	43
3	1,11-Dodecadiene	19714	005876-87-9	38
4	9-DODECENOL	27704	035237-62-8	38
5	12-CHLORODODECANAL DIMETHYL ACETAL	61169	063073-04-1	27

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010627.D
 Acq On : 9 Jan 99 5:43 pm
 Sample : VS006-077-TS12
 Misc :

Vial: 25
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 70 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
32.32	2530.66 ng	134641455	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128277	000629-59-4	98
2	Tridecane	127252	000629-50-5	95
3	Heptadecane	130827	000629-78-7	91
4	Dodecane	126006	000112-40-3	90
5	Pentadecane	129233	000629-62-9	90

 Peak Number 71 Rank in Relative Concentration 86

R.T.	Conc	Area	Relative to ISTD	R.T.
32.80	105.78 ng	5628131	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Undecanone, 10-methyl-	27675	029379-12-2	64
2	5-Dodecanone	27669	019780-10-0	55
3	4-Dodecanone	27668	006137-26-4	49
4	Tridecane	127252	000629-50-5	30
5	Heptacosane	94436	000593-49-7	25

 Peak Number 72 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
34.74	75.75 ng	4030406	Hexafluorobenzene	13.79
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 4-methyl-	34136	026730-12-1	43
2	5-Tridecanone	34071	030692-16-1	43
3	2-Undecanone, 6,10-dimethyl-	34076	001604-34-8	38
4	5-Undecanone	21602	033083-83-9	38
5	5-Dodecanone	27669	019780-10-0	38

Quantitation Report

Data File : C:\HPCHEM\3\39010636.D

Acq On : 10 Jan 99 5:15 pm

Sample : VS006-085-TS28

Misc :

Quant Time: Jan 23 22:06 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.41	84	5157711	200.00	ng	0.03
27) Ethylbenzene-d10	22.14	98	6687505	200.00	ng	0.00
37) Dodecane-d26	27.96	66	700929	200.00	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	%Recovery
9) Hexafluorobenzene	13.73	186	4485728	257.92	ng	80.10%
21) Toluene-d8	19.51	98	7974183	328.18	ng	87.28%
32) Bromobenzene-d5	24.89	82	3598829	292.01	ng	94.81%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Methanol	8.27	31	3229	0.54	ng	# 1
3) Ethanol	9.77	31	2096829	210.53	ng	m 44
4) Acetone	11.12	43	2936246	125.98	ng	m 52
5) Acetonitrile	11.62	41	420240	46.55	ng	m 100
6) Dichloromethane	12.07	84	927	0.14	ng	m 89
7) 1-Propanol	12.69	31	1352936	133.83	ng	m 84
8) n-Hexane	13.01	57	5656539	657.30	ng	m 31
10) Butanal	14.17	72	160088	86.55	ng	m 1
14) 1-Butanol	15.97	56	3809771	538.10	ng	m 51
16) Tetrachloroethane	16.22	117	455	0.03	ng	# 61
18) 2-Pentanone	17.06	43	1749193	80.60	ng	m 83
19) Butanenitrile	17.35	41	3563289	281.42	ng	m 100
20) n-Octane	19.06	85	2250270	438.64	ng	m 1
22) Toluene	19.66	91	5435249	198.03	ng	m 99
23) 2-Hexanone	19.98	43	6085220	386.67	ng	m 94
24) Pentanenitrile	20.26	41	3908363	410.21	ng	m 94
25) Tetrachloroethylene	20.84	166	3763	0.31	ng	# 1
26) n-Nonane	21.59	57	6614855	575.93	ng	# 39
29) Hexanenitrile	22.99	41	4762320	414.74	ng	# 67
30) o-Xylene	23.35	91	138602	4.86	ng	m 36
33) 2-Octanone	25.04	58	1509646	157.33	ng	# 79
34) Heptanenitrile	25.38	82	5777289	348.27	ng	# 69

(#) = qualifier out of range (m) = manual integration

39010636.D 390106CA.M

Sat Jan 23 22:07:04 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010636.D

Acq On : 10 Jan 99 5:15 pm

Sample : VS006-085-TS28

Misc :

Quant Time: Jan 23 19:01 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M

Title :

Last Update : Fri Jan 22 23:38:57 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.41	84	5157711	200.00	ng	0.03
5) Ethylbenzene-d10	22.14	98	6687505	200.00	ng	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue	Recovery
2) n-Heptane	16.14	43	29129157	2610.90	ng	m	77
4) n-Nonane	21.67	57	5162909	494.50	ng	m	39
6) 2-Heptanone	22.64	43	38975449	1789.56	ng	m	1
7) n-Decane	24.17	57	19131317	1642.14	ng	m	86
8) n-Undecane	26.37	57	32994200	2600.01	ng	#	90
9) n-Dodecane	28.40	57	49829516	3872.11	ng	m	1
10) n-Tridecane	30.41	57	62252827	7412.53	ng	m	61

(#)=qualifier out of range (m)=manual integration

39010636.D 390106CH.M

Sat Jan 23 19:01:19 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010636.D
Operator : Bonfoey
Acquired : 10 Jan 99 5:15 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-085-TS28
Misc Info :
Vial Number: 30

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010636.D

Vial: 30

Acq On : 10 Jan 99 5:15 pm

Operator: Bonfoey

Sample : VS006-085-TS28

Inst : 5972 INST

Misc :

Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M

Title : TST Calibration

Library : WILEY138.L

 Peak Number 1 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
7.42	57.17 ng	2864747	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	91
2	3-Butenoic acid	14	000625-38-7	83
3	Furan, 2,5-dihydro-	116326	001708-29-8	83
4	2-Butenal, (E)-	116303	000123-73-9	83
5	Cyclopropane	115908	000075-19-4	83

 Peak Number 2 Rank in Relative Concentration 64

R.T.	Conc	Area	Relative to ISTD	R.T.
7.58	64.67 ng	3240161	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Butenoic acid	14	000625-38-7	72
2	2,5-Furandione, dihydro-3-methyl-	2904	004100-80-5	59
3	2,5-Furandione, 3-methyl-	118965	000616-02-4	59
4	1-Propyne, 3-bromo-	119711	000106-96-7	58
5	1-Propyne, 3-chloro-	116510	000624-65-7	53

 Peak Number 3 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
8.31	302.66 ng	15165534	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	87
2	1-Butene	116018	000106-98-9	72
3	Cyclobutane	116025	000287-23-0	49
4	Borane, ethyldimethyl-	116330	001113-22-0	25
5	Propane, 1-nitro-	274	000108-03-2	25

 Peak Number 4 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
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10.17 357.78 ng 17927172 Hexafluorobenzene 13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Pentene		116331	000109-67-1	59
2 Butane, 2-methyl-		116461	000078-78-4	53
3 Oxirane, ethyl-		116432	000106-88-7	52
4 Pentane		116456	000109-66-0	50
5 Butane, 2-chloro-3-methyl-		1754	000631-65-2	50

Peak Number 5 Rank in Relative Concentration 53

R.T.	Conc	Area	Relative to ISTD	R.T.
11.15	142.70 ng	7150352	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 2-Propanone		116053	000067-64-1	64
2 2-Pentanone, 4-hydroxy-4-methyl-		119530	000123-42-2	43
3 Hexane, 4-ethyl-2,2-dimethyl-		10271	052896-99-8	40
4 Diazene, dimethyl-		116036	000503-28-6	9
5 Acetic acid, 2-methylpropyl ester		119521	000110-19-0	9

Peak Number 6 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD	R.T.
12.05	86.85 ng	4351913	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 1-Hexene		116880	000592-41-6	53
2 Pentane, 2-methyl-		117119	000107-83-5	50
3 CIS-3-HEXENAL		776	000000-00-0	47
4 Pentane		116452	000109-66-0	38
5 Pentane, 1-chloro-		1748	000543-59-9	38

Peak Number 7 Rank in Relative Concentration 56

R.T.	Conc	Area	Relative to ISTD	R.T.
13.42	117.43 ng	5884187	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1 Cyclopentanone		116853	000120-92-3	45
2 2(5H)-FURANONE		116823	000000-00-0	43
3 2-Hexene, (E)-		116890	004050-45-7	38
4 3,4-Dihydropyran		116876	000110-87-2	38
5 2-Hexene		116885	000592-43-8	38

Peak Number 8 Rank in Relative Concentration 68

R.T.	Conc	Area	Relative to ISTD	R.T.
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14.17	46.35 ng	2322612	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butanal	116378	000123-72-8	94
2	Ethene, ethoxy-	116429	000109-92-2	68
3	Butanal, 3-methyl-	117036	000590-86-3	50
4	1-Hexyn-3-ol	117753	000105-31-7	49
5	Hexanal	117978	000066-25-1	35

 Peak Number 9 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
14.38	166.50 ng	8342789	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexene	116787	000110-83-8	38
2	1-Pentyne	116257	000627-19-0	25
3	1-Hexyne	116757	000693-02-7	25
4	Cyclopropane, (1-methylethenyl)-	116777	004663-22-3	17
5	Cyclopropane, 1,2-dimethyl-3-methyl	116779	062338-02-7	10

 Peak Number 10 Rank in Relative Concentration 58

R.T.	Conc	Area	Relative to ISTD	R.T.
15.06	102.43 ng	5132492	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Butene	116020	000107-01-7	43
2	TRANS-2-DODECENAL	26777	081149-96-4	42
3	2-Heptene	117785	000592-77-8	38
4	2-Undecanethiol, 2-methyl-	35630	010059-13-9	38
5	1-Propene, 1-(2-propenyloxy)-, (E)-	871	061142-13-0	38

 Peak Number 11 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
15.45	246.91 ng	12371957	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	901	000592-78-9	76
2	3-Heptene, (E)-	900	014686-14-7	60
3	CYCLOBUTANE, ISOPROPYL-	934	000000-00-0	53
4	2-Heptene	117785	000592-77-8	53
5	1-Pentene, 2-methyl-	116894	000763-29-1	50

 Peak Number 12 Rank in Relative Concentration 69

R.T.	Conc	Area	Relative to ISTD	R.T.
15.62	32.51 ng	1628883	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclobutanone, 2,2-dimethyl-	117736	001192-14-9	83
2	Furan, 3-butyltetrahydro-2-methyl-,	10224	036712-20-6	78
3	Cycloheptane	117822	000291-64-5	72
4	2-Octenal, (E)-	120569	002548-87-0	64
5	2-Decenal, (E)-	124174	003913-81-3	59

Peak Number 13 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
15.97	450.15 ng	22555388	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butanol	116554	000071-36-3	93
2	Furan, 2-propyl-	118853	004229-91-8	59
3	2-Butene, (E)-	116021	000624-64-6	49
4	Cyclobutane	116025	000287-23-0	38
5	Butane, 1-chloro-	117419	000109-69-3	32

Peak Number 14 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
16.13	3493.62 ng	175053956	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane	1229	000142-82-5	93
2	2-Methyl-nonane	10241	000081-83-0	59
3	Pentane, 2,3,4-trimethyl-	3208	000565-75-3	53
4	Dodecane, 2-methyl-	127258	001560-97-0	53
5	Hexane, 3,3,4-trimethyl-	6062	016747-31-2	53

Peak Number 15 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
16.34	3687.76 ng	184781833	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene, (E)-	900	014686-14-7	96
2	3-Heptene	901	000592-78-9	95
3	2-Heptene	117785	000592-77-8	91
4	2-Heptene, (E)-	117784	014686-13-6	90
5	2-Hexene, 5-methyl-, (E)-	909	007385-82-2	83

Peak Number 16 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD		R.T.
16.90	3123.59 ng	156513089	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene, (E)-		117784	014686-13-6	96
2	2-Heptene		117785	000592-77-8	95
3	3-Heptene		901	000592-78-9	91
4	3-Heptene, (E)-		900	014686-14-7	90
5	Cycloheptane		945	000291-64-5	87

Peak Number 17 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD		R.T.
17.31	330.50 ng	16560520	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Furan, 2-ethyl-		117583	003208-16-0	27
2	Cyclopentene, 1,5-dimethyl-		637	016491-15-9	25
3	3-Butenenitrile		116223	000109-75-1	25
4	CYCLOBUTANE, ISOPROPYLIDEN-		633	000000-00-0	16
5	2,4-Hexadiene, 2-methyl-		117606	028823-41-8	14

Peak Number 18 Rank in Relative Concentration 67

R.T.	Conc	Area	Relative to ISTD		R.T.
17.62	48.86 ng	2448221	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2,4-Hexadienal, (E,E)-		117578	004488-48-6	83
2	2,4-Hexadienal		117580	000142-83-6	83
3	Cyclohexene, 1-methyl-		644	000591-49-1	81
4	1-(2-Methyl-1-propenyl)cyclopropane		631	001003-33-4	80
5	Cyclohexene, 4-methyl-		117619	000591-47-9	80

Peak Number 19 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD		R.T.
17.74	179.32 ng	8985044	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Pentenitrile		116729	013284-42-9	49
2	1-Butyne		115986	000107-00-6	49
3	1,2-Butadiene		115992	000590-19-2	47
4	2-Butyne		115989	000503-17-3	43
5	SULFOLENE		3718	000116-88-8	43

Peak Number 20 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
18.35	2255.25 ng	113003423	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	119371	000589-81-1	86
2	Octane	119368	000111-65-9	72
3	Hexane, 1-(hexyloxy)-2-methyl-	34909	074421-17-3	64
4	Hexane, 2,4-dimethyl-	119377	000589-43-5	59
5	Hexane, 3-ethyl-	3194	000619-99-8	53

Peak Number 21 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
18.53	1728.89 ng	86629196	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,4-Heptadiene	615	002454-31-1	80
2	2,3-Hexadiene, 2-methyl-	622	029212-09-7	76
3	2-Cyclopenten-1-one, 2-methyl-	593	001120-73-6	76
4	2-Butenal, 2-ethenyl-	576	020521-42-0	74
5	Cyclohexene, 1-methyl-	644	000591-49-1	64

Peak Number 22 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
19.20	1101.92 ng	55213627	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	602	001119-65-9	94
2	2-Octyne	2217	002809-67-8	83
3	1,2-Hexadiene, 5-methyl-	616	013865-36-6	81
4	2,5-Heptadiene, (E,E)-	614	039619-60-8	53
5	Furan, 2-ethyl-	117583	003208-16-0	50

Peak Number 23 Rank in Relative Concentration 47

R.T.	Conc	Area	Relative to ISTD	R.T.
19.51	227.81 ng	11414809	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	38
2	1-METHYL-5-AMINO-D2-1,2,4-TRIAZOLE	726	053778-60-2	12
3	.GAMMA.-PICOLINE-D7	439	029372-29-0	9
4	1H-1,2,4-Triazol-3-amine, 1-methyl-	722	049607-51-4	9
5	2,3,4,5,6-D5-ANILINE	442	004165-61-1	9

 Peak Number 24 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
19.63	464.74 ng	23286612	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	SPIRO[2.4]HEPTA-2,6-DIENE	419	000000-00-0	46
2	Benzene, methyl-	117432	000108-88-3	42
3	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	38
4	CIS-1-BUTYL-2-METHYLCYCLOPROPANE	2731	038851-69-3	35
5	Heptane, 3-methylene-	119065	001632-16-2	35

 Peak Number 25 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
19.75	268.90 ng	13473863	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methylene-	119065	001632-16-2	83
2	CIS-1-BUTYL-2-METHYLCYCLOPROPANE	2731	038851-69-3	74
3	2-Octene, (E)-	2641	013389-42-9	70
4	2-Octene, (Z)-	2640	007642-04-8	70
5	3-Octene, (E)-	2643	014919-01-8	70

 Peak Number 26 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
19.98	323.55 ng	16211895	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	117991	000591-78-6	91
2	2-Pentanone, 4-methyl-	118019	000108-10-1	80
3	2-Hexanone, 4-hydroxy-3-propyl-	16134	062338-17-4	56
4	Propanal	116041	000123-38-6	43
5	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	42

 Peak Number 27 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
20.26	304.82 ng	15273559	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenitrile	116729	013284-42-9	52
2	1-Butyne	115987	000107-00-6	52
3	SULFOLENE	3718	000116-88-8	43
4	Pentanedinitrile	463	000544-13-8	38
5	1,6-Octadiene, (E)-	2222	019036-81-8	36

 Peak Number 28 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD	R.T.
20.74	73.08 ng	3662021	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 4-methyl-	120913	002216-34-4	53
2	Octane, 3,4-dimethyl-	10253	015869-92-8	53
3	Dodecane, 5-methyl-	27735	017453-93-9	53
4	Heptane, 2,3-dimethyl-	6043	003074-71-3	50
5	4-Decene, 7-methyl-, (E)-	14820	062338-48-1	50

 Peak Number 29 Rank in Relative Concentration 60

R.T.	Conc	Area	Relative to ISTD	R.T.
21.20	90.18 ng	4518873	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,7-OCTADIENE, 4-METHYL-, CIS/TRANS	4879	000000-00-0	43
2	Cyclohexane, 1,2,4-trimethyl-, (1.a	5470	007667-60-9	43
3	Cyclohexane, 1,3,5-trimethyl-	120650	001839-63-0	38
4	2-Methyl-3-methylene-5-hexene	2257	000760-75-8	38
5	Cyclohexane, 2-ethyl-1,3-dimethyl-	9519	007045-67-2	35

 Peak Number 30 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
21.67	1261.89 ng	63229511	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	120904	000111-84-2	52
2	1-Heptene	117780	000592-76-7	43
3	2-Azido-2-methylbutane	2780	032872-42-7	43
4	Tetradecane	128274	000629-59-4	43
5	Hexane, 2,4-dimethyl-	119377	000589-43-5	43

 Peak Number 31 Rank in Relative Concentration 66

R.T.	Conc	Area	Relative to ISTD	R.T.
22.27	50.58 ng	2534270	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptanol	119626	000589-55-9	37
2	1-Hepten-4-ol	3132	003521-91-3	25
3	3-Hexanol, 2-methyl-	119631	000617-29-8	16
4	3-Pentanol, 2,4-dimethyl-	119645	000600-36-2	12
5	3-Butyn-2-ol	116314	002028-63-9	9

Peak Number 32 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
22.49	5198.55 ng	260482783	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	119309	000106-35-4	58
2	METHYL ESTER OF 2-OXO-HEXANOIC ACID	10564	000000-00-0	38
3	2-Hexene, 2-methoxy-	3135	061142-45-8	35
4	Butanal	116378	000123-72-8	35
5	Oxirane, 2-methyl-2-pentyl-	6000	053907-75-8	33

Peak Number 33 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
22.63	2193.90 ng	109929520	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	119305	000110-43-0	86
2	5-Undecanone	21602	033083-83-9	43
3	2-Hexanone, 5-methyl-	119323	000110-12-3	39
4	3-Pentanone, 2,4-dimethyl-	3105	000565-80-0	10
5	Pentane, 1-propoxy-	6581	018641-82-2	10

Peak Number 34 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
23.16	89.10 ng	4464333	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 4-ethyl-	10247	015869-86-0	68
2	Undecane	124549	001120-21-4	59
3	Dodecane, 2,7,10-trimethyl-	40640	074645-98-0	53
4	Tridecane, 6-methyl-	34138	013287-21-3	50
5	Octane, 3,6-dimethyl-	10255	015869-94-0	49

Peak Number 35 Rank in Relative Concentration 52

R.T.	Conc	Area	Relative to ISTD	R.T.
23.27	145.00 ng	7265736	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,3-dimethyl-	120917	003074-71-3	72
2	Hexane, 3-ethyl-2-methyl-	120927	016789-46-1	59
3	Heptane, 2,4-dimethyl-	120919	002213-23-2	59
4	Tridecane, 5-methyl-	34137	025117-31-1	53

5 Decane, 3-ethyl-3-methyl-

27767 017312-66-2 53

 Peak Number 36 Rank in Relative Concentration 50

R.T.	Conc	Area	Relative to ISTD		R.T.
23.45	166.44 ng	8339599	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-		119135	001121-07-9	49
2	2-Propanone, diethylhydrazone		5905	016713-36-3	47
3	1-Piperidinecarboxaldehyde		119156	002591-86-8	43
4	Furan, tetrahydro-2,5-dipropyl-		15561	004457-62-9	43
5	1H-Pyrazole, 4-nitro-		119126	002075-46-9	32

 Peak Number 37 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD		R.T.
23.55	406.29 ng	20357874	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-		2760	001121-07-9	37
2	Thiazole, 4,5-dimethyl-		119144	003581-91-7	35
3	Isothiazole, 3,4-dimethyl-		2777	027330-46-7	35
4	Thiazole, 2,4-dimethyl-		2773	000541-58-2	35
5	Isothiazole, 4,5-dimethyl-		119145	027330-47-8	16

 Peak Number 38 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD		R.T.
23.67	1342.95 ng	67290921	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2,2'-Bioxepane		33981	074793-02-5	64
2	1H-1,2,4-Triazole-3,5-diamine		117824	001455-77-2	59
3	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID		10615	001123-28-0	53
4	1,1'-BICYCLOHEXYL-1,1'-BIS(TRIMETHY		85996	019009-71-3	47
5	2(3H)-Furanone, dihydro-4,4-dimethy		2999	013861-97-7	45

 Peak Number 39 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD		R.T.
23.78	1688.35 ng	84597996	Hexafluorobenzene		13.73
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2,2'-Bioxepane		33981	074793-02-5	59
2	2(3H)-Furanone, dihydro-4,4-dimethy		2999	013861-97-7	50
3	GLYCOCYANIDINE		955	000503-86-6	45

4 3-Oxepanemethanol 6493 056666-73-0 45
 5 2-Pyrrolidinone, 1-methyl- 117840 000872-50-4 40

 Peak Number 40 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
24.00	2011.93 ng	100811338	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Methyl-2-cyclopenten-1-ol	844	040459-88-9	80
2	2,4-Azetidinedione, 3,3-diethyl-	122529	042282-85-9	59
3	2-Pentene, 4,4-dimethyl-, (Z)-	927	000762-63-0	59
4	2-Pentene, 4,4-dimethyl-	117807	026232-98-4	59
5	Cyclopropane, 1,1,2,2-tetramethyl-	932	004127-47-3	59

 Peak Number 41 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
24.17	1818.48 ng	91118489	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	122728	000124-18-5	87
2	Nonane	6035	000111-84-2	78
3	Hydroxylamine, O-decyl-	22615	029812-79-1	74
4	Undecane	124547	001120-21-4	64
5	Decane, 6-ethyl-2-methyl-	27769	062108-21-8	59

 Peak Number 42 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
24.32	2045.27 ng	102481908	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Hepten-2-one, 3-methyl-	5303	039899-08-6	53
2	Cyclohexane, 1,2,4-trimethyl-, (1.a	5470	007667-60-9	42
3	1-Undecene, 8-methyl-	20675	074630-40-3	38
4	2(3H)-Furanone, 5-ethenyldihydro-5-	120556	001073-11-6	37
5	Acrylonitrile, 3-hydroxy-, acetate	2313	014268-54-3	35

 Peak Number 43 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
24.62	614.15 ng	30773268	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	15626	002847-72-5	64
2	Heptane, 5-ethyl-2-methyl-	10261	013475-78-0	53

3 Decane, 2-methyl-	124555	006975-98-0	50
4 2-Methyl-nonane	10241	000081-83-0	50
5 Heptadecane, 2,6,10,15-tetramethyl-	72677	054833-48-6	47

Peak Number 44 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
24.90	422.94 ng	21192118	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	47
2	1H-Pyrazole, 3-methyl-	116740	001453-58-3	10
3	Pyrido[2,3-d]pyrimidine, 4-methoxy-	17153	028732-78-7	9
4	Benzene, 1-nitro-4-(1-propynyl)-	17180	028289-83-0	9
5	Thiazole, 2-phenyl-	17212	001826-11-5	9

Peak Number 45 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
25.07	336.10 ng	16841144	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Octanone	120847	000111-13-7	41
2	5-Undecanone, 2-methyl-	27676	050639-02-6	35
3	8-Nonen-2-one	9331	005009-32-5	35
4	3-Hepten-2-one, (Z)-	2544	069668-88-8	35
5	Cyclohexane, 1-bromo-2-methyl-	23639	006294-39-9	30

Peak Number 46 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD	R.T.
25.28	152.45 ng	7638651	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, (1-methylethyl)-	5458	000696-29-7	35
2	Cyclohexane, (1-methylpropyl)-	122509	007058-01-7	27
3	Cyclopropane, 1,1,2,3-tetramethyl-	117812	074752-93-5	18
4	Cyclohexane, propyl-	120631	001678-92-8	18
5	2-Hexenal	117700	000505-57-7	18

Peak Number 47 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
25.38	543.92 ng	27254101	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	118929	000629-08-3	93

2	1H-Imidazole-4-ethanamine	118920	000051-45-6	38
3	Hexanoic acid, 3-hexenyl ester, (Z)	128195	031501-11-8	25
4	CYCLOPENTANE, 1-DEUTERO-2-METHYL-1-	2273	000000-00-0	14
5	Hexanenitrile	117639	000628-73-9	9

Peak Number 48 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
25.54	243.38 ng	12194773	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclodecanone	14730	001502-06-3	35
2	Hexadecane, 2,6,10,14-tetramethyl-	132695	000638-36-8	35
3	Dodecane, 2,6,11-trimethyl-	129244	031295-56-4	27
4	Borane, tributyl-	127032	000122-56-5	27
5	2-Hexanone, 3-methyl-4-methylene-	5320	020690-71-5	27

Peak Number 49 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
25.73	4148.94 ng	207890059	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	121202	000104-76-7	72
2	Octane, 4-chloro-	11934	000999-07-5	47
3	1-Decanol	124746	000112-30-1	47
4	1-Heptene	897	000592-76-7	46
5	1-Pentene, 4,4-dimethyl-	117800	000762-62-9	46

Peak Number 50 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
25.89	1963.56 ng	98387831	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Azabicyclo[2.2.1]heptane	699	000279-24-3	78
2	1,2-Nonadiene	120434	022433-33-6	40
3	Nonanenitrile	122382	002243-27-8	39
4	Butanedinitrile, 2,3-dimethyl-	1681	016411-13-5	25
5	Hexanenitrile, 5-methyl-	118933	019424-34-1	10

Peak Number 51 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
26.36	3513.53 ng	176051904	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Undecane	15622	001120-21-4	94
2 Dodecane	126001	000112-40-3	91
3 Octadecane, 1-chloro-	69962	003386-33-2	78
4 Decane	122726	000124-18-5	72
5 Tridecane	127251	000629-50-5	72

Peak Number 52 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
26.55	107.22 ng	5372352	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-ETHYL-2,6-TRIMETHYLCYCLOHEXANE	14851	000000-00-0	76
2	5-Undecene	124355	004941-53-1	70
3	1,1-DIMETHYL-2-PROPYLCYCLOHEXANE	14847	081983-71-3	68
4	Cyclopropane, 1,2-dibutyl-	124360	041977-32-6	58
5	1-Undecene, 5-methyl-	20673	074630-38-9	49

Peak Number 53 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD	R.T.
26.65	232.94 ng	11672037	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,6-dimethyl-	120922	001072-05-5	64
2	Decane, 2-methyl-	124554	006975-98-0	64
3	3,6-Dimethyldecane	21664	017312-53-7	60
4	Dodecane	126008	000112-40-3	47
5	Undecane, 5-methyl-	126019	001632-70-8	43

Peak Number 54 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
26.95	426.31 ng	21361095	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 4-methyl-	126017	002980-69-0	83
2	Octane, 6-ethyl-2-methyl-	15634	062016-19-7	59
3	Undecane, 2-methyl-	126011	007045-71-8	45
4	Heptacosane	135672	000593-49-7	43
5	Tetradecane, 2-methyl-	129239	001560-95-8	43

Peak Number 55 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
27.34	709.90 ng	35570858	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Naphthalene, decahydro-, trans-	122344	000493-02-7	90
2 Naphthalene, decahydro-	122339	000091-17-8	89
3 Bicyclo[2.2.1]heptane, 2-methyl-, e	2290	000872-78-6	80
4 Naphthalene, decahydro-, cis-	8834	000493-01-6	64
5 Spiro[4.5]decane	8822	000176-63-6	55

Peak Number 56 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
27.96	90.91 ng	4555218	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentene, 3-methyl-, (E)-	116907	000616-12-6	90
2	5,6-DIHYDRO-5-METHYL-2H-PYRAN-2-ONE	2482	072649-00-4	90
3	1,1'-Bicyclopentyl	122326	001636-39-1	90
4	Cyclohexanone, 2,2-dimethyl-	120603	001193-47-1	90
5	CYCLOOCTEN-5,6-DIONE	8527	000000-00-0	90

Peak Number 57 Rank in Relative Concentration 43

R.T.	Conc	Area	Relative to ISTD	R.T.
28.09	246.97 ng	12374919	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, pentyl-	14841	004292-92-6	87
2	Cyclohexane, hexyl-	20760	004292-75-5	74
3	Cyclohexane, (1-methylethyl)-	120632	000696-29-7	64
4	Cyclohexane, eicosyl-	91307	004443-55-4	64
5	Cyclohexane, octyl-	128069	001795-15-9	59

Peak Number 58 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
28.26	897.43 ng	44967391	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(1H)-Pyrimidinone, 4-amino-	118915	000071-30-7	45
2	Oxazole, trimethyl-	118925	020662-84-4	43
3	CYCLOPENTANE, 1-DEUTERO-2-METHYL-1-	2273	000000-00-0	38
4	2-Cyclohexen-1-one, 4,5-dimethyl-	4801	005715-25-3	38
5	2-Cyclohexen-1-one, 4,4-dimethyl-	120409	001073-13-8	38

Peak Number 59 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
28.61	1282.06 ng	64239955	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 6-methyl-	27736	006044-71-9	95
2	Undecane, 2,6-dimethyl-	127264	017301-23-4	93
3	Undecane, 3,6-dimethyl-	27753	017301-28-9	81
4	Decane, 2,5,9-trimethyl-	27784	062108-22-9	59
5	Undecane, 2,5-dimethyl-	127263	017301-22-3	59

Peak Number 60 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
28.76	313.62 ng	15714467	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclohexen-1-one	117596	000930-68-7	53
2	2,5-Pyrrolidinedione, 3-ethylidene-	8879	016395-79-2	40
3	1H-1,2,4-Triazole, 3-ethyl-	666	007411-16-7	32
4	2,3-Pentadiene	116267	000591-96-8	25
5	Quinoline, decahydro-, cis-	8980	010343-99-4	12

Peak Number 61 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
28.94	600.14 ng	30071220	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Bicyclo[4.3.1]decan-10-one	124035	020440-21-5	64
2	2-METHYLDECALIN (PROBABLY TRANS)	13881	002958-76-1	59
3	2-METHYL-3-(2-THIENYL)-2-PROPENAL	13324	063362-06-1	59
4	(Z)-6,6-Dimethylcyclooct-4-en-1-one	13709	091531-64-5	58
5	Spiro[4.5]decane	122327	000176-63-6	38

Peak Number 62 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
29.75	1703.67 ng	85365564	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 7-methyl-	34139	026730-14-3	87
2	Nonane, 3-methyl-	122735	005911-04-6	83
3	Octane, 2,3,6-trimethyl-	15637	062016-33-5	72
4	Decane, 4-methyl-	15626	002847-72-5	72
5	Octane, 2-bromo-	30585	000557-35-7	59

Peak Number 63 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
30.09	263.41 ng	13198436	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1-pentyl-2-propyl-	26864	062199-51-3	64
2	Cyclopentane, decyl-	39719	001795-21-7	52
3	Undecane, 1,2-dibromo-2-methyl-	81562	055334-43-5	47
4	Cyclopentane, 1-butyl-2-propyl-	20759	062199-50-2	46
5	Cyclopropane, 1,1-dimethyl-2-(2-met	4904	069147-03-1	43

Peak Number 64 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
30.26	547.00 ng	27408448	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, (2-methylpropyl)-	5449	003788-32-7	64
2	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	53
3	3-CYCLOHEXYL-3-DEUTEROPROP-1-ENE	4918	055702-62-0	49
4	Cyclohexane, 1,1'-(1,4-butanediyl)b	45121	006165-44-2	47
5	6-Tridecene	127045	024949-38-0	45

Peak Number 65 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
30.44	8212.01 ng	411477702	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	127251	000629-50-5	70
2	Decane, 2,3,5-trimethyl-	27778	062238-11-3	49
3	Cyclooctane, 1,5-dimethyl-	9538	021328-57-4	30
4	1,3,2-Oxazaborolane, 2-butyl-	5562	031748-10-4	30
5	1-Heptene	117780	000592-76-7	30

Peak Number 66 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
31.33	427.11 ng	21400944	Hexafluorobenzene	13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-PROPYL-1,1,3-TRIMETHYLCYCLOHEXANE	20773	081983-70-2	42
2	CYCLOHEXANE, 1,1,4,4-TETRAMETHYL-	9532	000000-00-0	38
3	6-Tridecene, 7-methyl-	33177	024949-42-6	30
4	1-Dodecanol, 3,7,11-trimethyl-	130247	006750-34-1	30
5	4-Nonene, 3-methyl-, (Z)-	9448	063830-69-3	27

Peak Number 67 Rank in Relative Concentration 54

R.T.	Conc	Area	Relative to ISTD	R.T.
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31.74 132.80 ng 6654045 Hexafluorobenzene 13.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonanenitrile	8963	002243-27-8	46
2	9-DODECENOL	27704	035237-62-8	43
3	Decanenitrile	14111	001975-78-6	38
4	1-Hexadecyne	45097	000629-74-3	38
5	Cyclohexanehexanol	27694	004354-58-9	35

Peak Number 68 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
32.32	2457.32 ng	123128570	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128277	000629-59-4	98
2	Heptadecane	130827	000629-78-7	91
3	Pentadecane	129233	000629-62-9	90
4	Hexadecane	46975	000544-76-3	86
5	Tridecane	127251	000629-50-5	86

Peak Number 69 Rank in Relative Concentration 55

R.T.	Conc	Area	Relative to ISTD	R.T.
32.81	117.82 ng	5903799	Hexafluorobenzene	13.73
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Undecanone, 10-methyl-	27675	029379-12-2	43
2	4-Dodecanone	27668	006137-26-4	43
3	4-Octanone	120862	000589-63-9	38
4	5-Dodecanone	27669	019780-10-0	38
5	Oxirane, 2-ethyl-2-methyl-	90	030095-63-7	30

39010636.D AREA.M Wed Feb 03 17:40:23 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010635.D

Acq On : 10 Jan 99 4:34 pm

Sample : VS006-092-TS25

Misc :

Quant Time: Jan 23 22:00 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.44	84	4749532	200.00	ng	0.05
27) Ethylbenzene-d10	22.16	98	6300306	200.00	ng	0.02
37) Dodecane-d26	27.97	66	510597	200.00	ng	0.00
System Monitoring Compounds						%Recovery
9) Hexafluorobenzene	13.76	186	3933998	245.64	ng	76.28%
21) Toluene-d8	19.53	98	7148433	319.48	ng	84.97%
32) Bromobenzene-d5	24.91	82	3399469	292.79	ng	95.06%
Target Compounds						Qvalue
2) Methanol	8.34	31	1600	0.29	ng	# 1
3) Ethanol	9.84	31	2414041	263.20	ng	m 0
4) Acetone	11.16	43	2068850	96.40	ng	m 82
5) Acetonitrile	11.67	41	181960	21.89	ng	m 100
6) Dichloromethane	12.33	84	624	0.10	ng	# 44
7) 1-Propanol	12.69	31	921434	98.98	ng	m 93
8) n-Hexane	13.04	57	4490925	566.70	ng	# 33
10) Butanal	14.20	72	222662	130.72	ng	# 25
12) Chloroform	14.99	83	673	0.04	ng	# 11
13) Tetrahydrofuran	15.33	42	7743	1.10	ng	# 33
14) 1-Butanol	15.98	56	3252133	502.56	ng	m 7
16) Tetrachloroethane	16.21	117	312	0.02	ng	# 6
18) 2-Pentanone	17.09	43	1428874	71.50	ng	m 87
19) Butanenitrile	17.34	41	1410635	120.98	ng	m 100
20) n-Octane	19.08	85	1992850	421.85	ng	m 1
22) Toluene	19.68	91	4591739	181.68	ng	m 100
23) 2-Hexanone	20.00	43	4958968	342.18	ng	# 96
24) Pentanenitrile	20.28	41	2891026	329.51	ng	# 95
25) Tetrachloroethylene	20.85	166	30001	2.71	ng	m 23
26) n-Nonane	21.61	57	5643250	537.16	ng	# 39
29) Hexanenitrile	23.01	41	4258082	395.70	ng	# 68
30) o-Xylene	23.36	91	90518	3.37	ng	# 59
33) 2-Octanone	25.05	58	1406429	156.26	ng	# 80
34) Heptanenitrile	25.39	82	5557517	354.82	ng	# 70

(#)= qualifier out of range (m)= manual integration

39010635.D 390106CA.M

Sat Jan 23 22:00:43 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010635.D

Acq On : 10 Jan 99 4:34 pm

Sample : VS006-092-TS25

Misc :

Quant Time: Jan 23 18:58 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M

Title :

Last Update : Fri Jan 22 23:38:57 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.44	84	4749532	200.00	ng	0.05
5) Ethylbenzene-d10	22.16	98	6300306	200.00	ng	0.02

System Monitoring Compounds

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue
2) n-Heptane	16.17	43	25226758	2455.45	ng	m	78
4) n-Nonane	21.69	57	4483192	466.30	ng	m	39
6) 2-Heptanone	22.66	43	38164561	1860.02	ng	m	64
7) n-Decane	24.18	57	16831096	1533.48	ng	m	87
8) n-Undecane	26.38	57	32423671	2712.08	ng	m	90
9) n-Dodecane	28.42	57	48033331	3961.92	ng	m	1
10) n-Tridecane	30.42	57	59492607	7519.22	ng	m	40

(#) = qualifier out of range (m) = manual integration

39010635.D 390106CH.M

Sat Jan 23 18:58:40 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010635.D
Operator : Bonfoey
Acquired : 10 Jan 99 4:34 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-092-TS25
Misc Info :
Vial Number: 30

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010635.D
 Acq On : 10 Jan 99 4:34 pm
 Sample : VS006-092-TS25
 Misc :
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

 Peak Number 1 Rank in Relative Concentration 67

R.T.	Conc	Area	Relative to ISTD	R.T.
7.46	52.26 ng	2889107	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	91
2	2-Butenoic acid, (Z)-	116968	000503-64-0	78
3	2-Furanmethanol	117682	000098-00-0	78
4	2-Butenal	116296	004170-30-3	72
5	Cyclopropane	115908	000075-19-4	72

 Peak Number 2 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
8.35	193.86 ng	10716688	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	90
2	1-Butene	116018	000106-98-9	58
3	Cyclobutane	116025	000287-23-0	52
4	Borane, ethyldimethyl-	116330	001113-22-0	32
5	Propane, 1-nitro-	274	000108-03-2	23

 Peak Number 3 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD	R.T.
9.82	67.20 ng	3714750	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	115964	000064-17-5	45
2	Ethanol, 2-ethoxy-	117374	000110-80-5	42
3	BISETHOXO (METHOXO) OXOVANADIUM	28919	062450-00-4	40
4	TRIDEUTEROETHENE	115848	002680-01-5	9
5	Ethanol, 2-chloro-	116702	000107-07-3	9

 Peak Number 4 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
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10.21 453.84 ng 25088155 Hexafluorobenzene 13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane	116456	000109-66-0	58
2	Oxirane, 2,2-dimethyl-	116433	000558-30-5	56
3	Butane, 2-methyl-	116458	000078-78-4	53
4	Pentane, 1-chloro-	1748	000543-59-9	50
5	Propanal, 2-methyl-	116386	000078-84-2	43

Peak Number 5 Rank in Relative Concentration 64

R.T.	Conc	Area	Relative to ISTD	R.T.
11.18	60.35 ng	3335852	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propanone	116053	000067-64-1	64
2	Oxetane, 2,2-dimethyl-	94	006245-99-4	38
3	2-Butanone	116395	000078-93-3	38
4	2-Propanone, oxime	116482	000127-06-0	25
5	Butane	116078	000106-97-8	9

Peak Number 6 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
12.05	92.24 ng	5099131	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane, 2-methyl-	117117	000107-83-5	50
2	Pentane, 2-bromo-	12433	000107-81-3	50
3	Pentane, 2,3-dimethyl-	1238	000565-59-3	38
4	Cyclopropane, butyl-	931	000930-57-4	38
5	Pentane	116456	000109-66-0	38

Peak Number 7 Rank in Relative Concentration 72

R.T.	Conc	Area	Relative to ISTD	R.T.
12.40	34.40 ng	1901676	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Silanol, trimethyl-	324	001066-40-6	87
2	Acetic acid, (trimethylsilyl)-	6814	002345-38-2	74
3	Hexanoic acid, trimethylsilyl ester	29079	014246-15-2	64
4	3-Hexanone, 1,5,6,6-tetramethoxy-	43479	053914-29-7	40
5	1-BROMO-3-CHLORO-2-FLUOROPROPANE	22687	000000-00-0	9

Peak Number 8 Rank in Relative Concentration 70

R.T.	Conc	Area	Relative to ISTD	R.T.
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12.59	43.81 ng	2421874	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	49
2	2-Butene, (E)-	116021	000624-64-6	47
3	2H-Pyran-2-one, tetrahydro-5,6-dime	5859	024405-16-1	43
4	2-Butene, (Z)-	116019	000590-18-1	38
5	1-Hexene	116883	000592-41-6	38

Peak Number 9 Rank in Relative Concentration 52

R.T.	Conc	Area	Relative to ISTD	R.T.
13.45	120.59 ng	6666101	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-PENTENE, 3-METHYL- (CIS/TRANS)	116905	000000-00-0	64
2	2-Pentenal, (E)-	116834	001576-87-0	59
3	2-Hexene, (E)-	116889	004050-45-7	58
4	Cyclopentanone	116854	000120-92-3	52
5	2-Hexene	116887	000592-43-8	52

Peak Number 10 Rank in Relative Concentration 68

R.T.	Conc	Area	Relative to ISTD	R.T.
14.19	48.99 ng	2708343	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butanal	116378	000123-72-8	91
2	1-Hexyn-3-ol	117753	000105-31-7	53
3	Ethene, ethoxy-	116431	000109-92-2	53
4	Hexanal	1129	000066-25-1	50
5	Ethane, 1,1-diethoxy-	119804	000105-57-7	45

Peak Number 11 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
14.31	56.90 ng	3145576	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Butanone	116395	000078-93-3	64
2	Propanal, 2-methyl-	116388	000078-84-2	33
3	2,4-Pentanedione	117934	000123-54-6	9
4	Ethene, ethoxy-	116431	000109-92-2	7
5	2-Hexanone, 3,4-dimethyl-	120877	019550-10-8	7

Peak Number 12 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD		R.T.
15.08	75.93 ng	4197423	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Pentene, 5-nitro-		3227	023542-51-0	43
2	2-Nonynoic acid		14371	001846-70-4	43
3	2-Azido-2,3-dimethylbutane		5560	091633-20-4	38
4	Oxirane, 3-butenyl-		894	010353-53-4	37
5	1-Hexene, 3-methyl-		117786	003404-61-3	35

 Peak Number 13 Rank in Relative Concentration 69

R.T.	Conc	Area	Relative to ISTD		R.T.
15.39	47.01 ng	2598763	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Heptene		897	000592-76-7	64
2	2-Heptene		117785	000592-77-8	49
3	2-Hexene, 5-methyl-, (E)-		909	007385-82-2	49
4	Cyclopentane, 1,2-dimethyl-		117817	002452-99-5	47
5	3-Heptene, (E)-		900	014686-14-7	47

 Peak Number 14 Rank in Relative Concentration 56

R.T.	Conc	Area	Relative to ISTD		R.T.
15.48	101.77 ng	5625749	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Furan, tetrahydro-3-methyl-4-methyl		117770	061142-01-6	50
2	3-Heptene, (E)-		900	014686-14-7	49
3	1-Butene		116018	000106-98-9	47
4	Cyclopentanecarboxaldehyde		117711	000872-53-7	43
5	1-Heptene		117780	000592-76-7	43

 Peak Number 15 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD		R.T.
15.98	339.19 ng	18750342	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Butanol		116554	000071-36-3	91
2	Furan, 2-propyl-		118853	004229-91-8	59
3	2-Butene, (E)-		116021	000624-64-6	47
4	1-Propanol, 2-methyl-		116575	000078-83-1	38
5	Formic acid, propyl ester		191	000110-74-7	38

 Peak Number 16 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD		R.T.
16.16	2771.88 ng	153227425	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Heptane		118104	000142-82-5	91
2	Hexane, 3-methyl-		118114	000589-34-4	72
3	2-Methyl-nonane		10241	000081-83-0	59
4	Hexane, 3,3,4-trimethyl-		6062	016747-31-2	53
5	Dodecane, 2-methyl-		127258	001560-97-0	50

Peak Number 17 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD		R.T.
16.59	4675.32 ng	258448731	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene, (E)-		898	014686-13-6	96
2	2-Heptene		117785	000592-77-8	95
3	3-Heptene		901	000592-78-9	87
4	Cycloheptane		945	000291-64-5	81
5	3-Heptene, (E)-		900	014686-14-7	81

Peak Number 18 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD		R.T.
16.93	2484.05 ng	137316556	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene		117785	000592-77-8	95
2	2-Heptene, (E)-		898	014686-13-6	95
3	3-Heptene		901	000592-78-9	91
4	3-Heptene, (E)-		900	014686-14-7	90
5	Cycloheptane		945	000291-64-5	87

Peak Number 19 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD		R.T.
17.19	288.20 ng	15931363	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Cyclopropane, butyl-		931	000930-57-4	81
2	Cyclohexane, 1,2,3-trimethyl-, (1.a		120647	001678-81-5	53
3	4-Pentenal		116836	002100-17-6	53
4	Cyclopentane, 1,2-dimethyl-, cis-		938	001192-18-3	52
5	3-METHYL-1-OCTENE		5415	000000-00-0	50

Peak Number 20 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD	R.T.
17.33	121.36 ng	6708932	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,2-Hexadiene, 5-methyl-	616	013865-36-6	38
2	2,4-Hexadienal, (E,E)-	117578	004488-48-6	35
3	2,4-Hexadienal	117580	000142-83-6	35
4	Butanenitrile, 3-chloro-	1500	053778-71-5	32
5	1-Propene	115905	000115-07-1	27

Peak Number 21 Rank in Relative Concentration 71

R.T.	Conc	Area	Relative to ISTD	R.T.
17.65	36.90 ng	2039856	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,4-Hexadienal, (E,E)-	117578	004488-48-6	90
2	2,4-Hexadienal	117580	000142-83-6	90
3	1,4-Hexadiene, 4-methyl-	618	001116-90-1	83
4	1,3-Pentadiene, 2,4-dimethyl-	627	001000-86-8	83
5	1,3-PENTADIENE, 2,3-DIMETHYL-	626	000000-00-0	81

Peak Number 22 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD	R.T.
17.76	152.28 ng	8417897	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenitrile	116729	013284-42-9	58
2	2,5-Cyclohexadiene-1,4-dione	118667	000106-51-4	47
3	1,2-Butadiene	115994	000590-19-2	46
4	2-Butyne	115990	000503-17-3	43
5	Pentanedinitrile	463	000544-13-8	43

Peak Number 23 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
18.37	1740.67 ng	96222800	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	119371	000589-81-1	86
2	Octane, 3,4-dimethyl-	10253	015869-92-8	78
3	Hexane, 1-(hexyloxy)-2-methyl-	34909	074421-17-3	64
4	3,4,5-TRIMETHYL-HEPTANE	10270	000000-00-0	59
5	Hexane, 2,4-dimethyl-	119377	000589-43-5	59

 Peak Number 24 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
18.55	1356.44 ng	74983166	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,3-Hexadiene, 2-methyl-	622	029212-09-7	76
2	2-Cyclopenten-1-one, 2-methyl-	593	001120-73-6	64
3	3,4-Heptadiene	615	002454-31-1	58
4	2-METHYL-3-HEXYNE	607	036566-80-0	58
5	2-Butenal, 2-ethenyl-	576	020521-42-0	58

 Peak Number 25 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
19.22	804.42 ng	44467632	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	602	001119-65-9	91
2	1,2-Hexadiene, 5-methyl-	616	013865-36-6	87
3	2,5-Heptadiene, (E,E)-	614	039619-60-8	64
4	1,4-Hexadiene, 4-methyl-	618	001116-90-1	64
5	2,4-Heptadiene, (E,E)-	613	002384-94-3	59

 Peak Number 26 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD	R.T.
19.54	193.68 ng	10706261	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	50
2	Methyldiazoacetate	1034	006832-16-2	9
3	2,3,4,5,6-D5-ANILINE	442	004165-61-1	9
4	1-METHYL-5-AMINO-D2-1,2,4-TRIAZOLE	726	053778-60-2	9
5	1H-1,2,4-Triazol-3-amine, 1-methyl-	722	049607-51-4	9

 Peak Number 27 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
19.64	359.63 ng	19880191	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-HEPTENE, 3-METHYL-	2651	000000-00-0	55
2	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	49
3	Heptane, 3-methylene-	119065	001632-16-2	43
4	2-Pentene, (E)-	116338	000646-04-8	38
5	1-Butene, 2-methyl-	116340	000563-46-2	35

 Peak Number 28 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
19.77	206.23 ng	11400496	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	N-OCTAN-3-ENE	119057	000000-00-0	72
2	2-Octene, (E)-	2641	013389-42-9	70
3	2-Octene, (Z)-	2640	007642-04-8	70
4	Heptane, 3-methylene-	119065	001632-16-2	64
5	CIS-1-BUTYL-2-METHYLCYCLOPROPANE	2731	038851-69-3	64

 Peak Number 29 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
20.00	247.11 ng	13660125	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	117991	000591-78-6	91
2	2-Pentanone, 4-methyl-	118019	000108-10-1	80
3	Oxirane, 2-methyl-2-(1-methylethyl)	1198	072221-03-5	64
4	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	96
5	2-Hexanone, 4-hydroxy-3-propyl-	16134	062338-17-4	56

 Peak Number 30 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
20.28	237.58 ng	13133191	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butyne	115987	000107-00-6	50
2	SULFOLENE	3718	000116-88-8	43
3	Hexanedinitrile	118677	000111-69-3	42
4	Pentanedinitrile	117500	000544-13-8	37
5	1,6-Octadiene, (E)-	2222	019036-81-8	33

 Peak Number 31 Rank in Relative Concentration 66

R.T.	Conc	Area	Relative to ISTD	R.T.
20.75	53.73 ng	2969971	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,3-dimethyl-	120917	003074-71-3	47
2	Cyclopropane, 1,1,2-trimethyl-	116924	004127-45-1	43
3	Ether, hexyl pentyl	22420	032357-83-8	43
4	2-Pentene, 4-methyl-, (E)-	116912	000674-76-0	43
5	Octane, 4-methyl-	6039	002216-34-4	38

 Peak Number 32 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
21.04	205.05 ng	11335221	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-ethyl-2-methyl-	122745	014676-29-0	45
2	Octane, 3-methyl-	6038	002216-33-3	43
3	6-Methylundecane	21657	017302-33-9	42
4	Undecane, 2,6-dimethyl-	127264	017301-23-4	39
5	Hexane, 2,5-dimethyl-	119379	000592-13-2	38

 Peak Number 33 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD	R.T.
21.23	71.32 ng	3942384	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,4,4-Trimethyl-2-pentenal	5293	065275-95-8	83
2	3-Octen-2-one, (E)-	120575	018402-82-9	59
3	Cyclohexane, 1,3,5-trimethyl-	5473	001839-63-0	35
4	Cyclohexane, 2-ethyl-1,3-dimethyl-	9519	007045-67-2	35
5	1H-Imidazole, 2-ethyl-4,5-dihydro-	768	000930-52-9	27

 Peak Number 34 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
21.69	984.89 ng	54443814	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	120904	000111-84-2	50
2	[1'-13C]-Octyne	2216	000000-00-0	43
3	1-Decanol, 2-ethyl-	28569	021078-65-9	43
4	1-Heptene	117780	000592-76-7	43
5	Octane	119366	000111-65-9	43

 Peak Number 35 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
22.51	4446.48 ng	245798207	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	119306	000106-35-4	72
2	Butanoic acid, 3-methyl-, 2-propeny	10005	002835-39-4	40
3	METHYL ESTER OF 2-OXO-HEXANOIC ACID	10564	000000-00-0	40

Quantitation Report

Data File : C:\HPCHEM\3\39010642.D

Acq On : 11 Jan 99 12:57 pm

Sample : VS006-100-TS50

Misc :

Quant Time: Jan 23 22:30 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.43	84	5811721	200.00	ng	0.04
27) Ethylbenzene-d10	22.14	98	7679191	200.00	ng	0.00
37) Dodecane-d26	27.96	66	597207	200.00	ng	-0.01

System Monitoring Compounds

						%Recovery
9) Hexafluorobenzene	13.76	186	4985011	254.37	ng	79.00%
21) Toluene-d8	19.52	98	9196280	335.88	ng	89.33%
32) Bromobenzene-d5	24.89	82	4333205	306.20	ng	99.41%

Target Compounds

						Qvalue
2) Methanol	8.34	31	4664	0.69	ng	# 1
3) Ethanol	9.78	31	2800581	249.54	ng	m 0
4) Acetone	11.17	43	2475636	94.27	ng	m 82
5) Acetonitrile	11.67	41	329295	32.37	ng	m 100
6) Dichloromethane	12.32	84	875	0.12	ng	# 52
7) 1-Propanol	12.70	31	1175916	103.23	ng	m 89
8) n-Hexane	13.04	57	4783806	493.33	ng	# 32
10) Butanal	14.19	72	285604	137.03	ng	# 1
12) Chloroform	15.06	83	15973	0.78	ng	# 24
13) Tetrahydrofuran	15.32	42	5535	0.64	ng	# 37
14) 1-Butanol	15.98	56	3599558	459.49	ng	m 88
16) Tetrachloroethane	16.22	117	710	0.04	ng	# 14
18) 2-Pentanone	17.08	43	1768344	72.31	ng	m 86
19) Butanenitrile	17.33	41	1895745	132.87	ng	100
20) n-Octane	19.07	85	2060206	356.40	ng	m 1
22) Toluene	19.67	91	4873477	157.58	ng	99
23) 2-Hexanone	19.99	43	5960903	336.14	ng	m 94
24) Pentanenitrile	20.27	41	3256166	303.30	ng	95
25) Tetrachloroethylene	20.84	166	35331	2.61	ng	m 84
26) n-Nonane	21.68	57	4735398	383.75	ng	m 39
29) Hexanenitrile	22.99	41	4554922	352.30	ng	# 68
30) o-Xylene	23.36	91	126761	3.87	ng	m 79
33) 2-Octanone	25.04	58	1503010	144.52	ng	# 86
34) Heptanenitrile	25.38	82	6113420	323.90	ng	m 69

(#)= qualifier out of range (m)= manual integration

39010642.D 390106CA.M

Sat Jan 23 22:30:27 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010642.D

Acq On : 11 Jan 99 12:57 pm

Sample : VS006-100-TS50

Misc :

Quant Time: Jan 23 19:39 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M

Title :

Last Update : Fri Jan 22 23:38:57 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.43	84	5811721	200.00	ng	0.04
5) Ethylbenzene-d10	22.14	98	7679191	200.00	ng	0.00

System Monitoring Compounds

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)	Recovery	Qvalue
2) n-Heptane	16.16	43	26735385	2126.68	ng	#	78	
4) n-Nonane	21.59	57	6023424	513.00	ng	#	39	
6) 2-Heptanone	22.63	43	39826100	1592.47	ng	m	1	
7) n-Decane	24.17	57	17693933	1322.63	ng	#	86	
8) n-Undecane	26.36	57	32553217	2233.98	ng	#	91	
9) n-Dodecane	28.39	57	47956338	3245.31	ng	m	29	
10) n-Tridecane	30.40	57	60645060	6288.57	ng	m	40	

(#) = qualifier out of range (m) = manual integration

39010642.D 390106CH.M

Sat Jan 23 19:40:09 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010642.D
Operator : Bonfoey
Acquired : 11 Jan 99 12:57 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-100-TS50
Misc Info :
Vial Number: 30

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010642.D
 Acq On : 11 Jan 99 12:57 pm
 Sample : VS006-100-TS50
 Misc :
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

 Peak Number 1 Rank in Relative Concentration 67

R.T.	Conc	Area	Relative to ISTD	R.T.
7.47	45.85 ng	3011592	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	91
2	2-Furanmethanol	117683	000098-00-0	78
3	Furan, 2,5-dihydro-	116324	001708-29-8	78
4	2-Butenal	116296	004170-30-3	72
5	Acetamide, 2-chloro-N,N-di-2-propen	22543	000093-71-0	72

 Peak Number 2 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
8.37	177.85 ng	11680562	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	87
2	Cyclobutane	116025	000287-23-0	49
3	Propane, 1-nitro-	274	000108-03-2	25
4	Borane, ethyldimethyl-	116330	001113-22-0	25
5	Butane, 1-isocyano-	116801	002769-64-4	22

 Peak Number 3 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
10.23	321.11 ng	21090241	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane	116456	000109-66-0	64
2	Oxirane, 2,2-dimethyl-	116433	000558-30-5	64
3	Butane, 2-methyl-	116458	000078-78-4	53
4	Pentane, 1-chloro-	1748	000543-59-9	50
5	Propanal, 2-methyl-	116386	000078-84-2	47

 Peak Number 4 Rank in Relative Concentration 58

R.T.	Conc	Area	Relative to ISTD	R.T.
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11.19 70.53 ng 4632524 Hexafluorobenzene 13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propanone	116053	000067-64-1	64
2	Butane	116078	000106-97-8	9
3	3-Oxetanol, 2,2,3-trimethyl-	3477	025910-96-7	9
4	2-Hexanone, 5-methyl-	119323	000110-12-3	9
5	OXETANE, 2-HYDROXY-1,1,2-TRIMETHYL-	3473	000000-00-0	9

Peak Number 5 Rank in Relative Concentration 55

R.T.	Conc	Area	Relative to ISTD	R.T.
12.07	83.44 ng	5480380	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane, 2-methyl-	106	000107-83-5	53
2	1-Octene	119048	000111-66-0	45
3	Pentane	116452	000109-66-0	43
4	Propane, 1-chloro-2-methyl-	117425	000513-36-0	43
5	Pentane, 2,3-dimethyl-	118119	000565-59-3	38

Peak Number 6 Rank in Relative Concentration 66

R.T.	Conc	Area	Relative to ISTD	R.T.
12.60	47.96 ng	3150231	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butanol, 2-methyl-	117272	000137-32-6	53
2	2-Butene, (E)-	116021	000624-64-6	50
3	1-Butanol	116551	000071-36-3	49
4	Formic acid, butyl ester	118238	000592-84-7	47
5	1-Propene, 2-methyl-	116024	000115-11-7	47

Peak Number 7 Rank in Relative Concentration 53

R.T.	Conc	Area	Relative to ISTD	R.T.
13.45	104.00 ng	6830525	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexene, (E)-	116889	004050-45-7	60
2	2-Pentenal, (E)-	116834	001576-87-0	53
3	2-Pentene, 4-methyl-, (E)-	116912	000674-76-0	53
4	2-Pentene, 3-methyl-, (E)-	116908	000616-12-6	50
5	Cyclopentanone	116854	000120-92-3	50

Peak Number 8 Rank in Relative Concentration 64

R.T.	Conc	Area	Relative to ISTD	R.T.
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14.20	54.13 ng	3555172	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butanal	116378	000123-72-8	94
2	Ethene, ethoxy-	116430	000109-92-2	64
3	Hexanal	1129	000066-25-1	56
4	1-Hexyn-3-ol	117753	000105-31-7	50
5	Propane	115929	000074-98-6	50

 Peak Number 9 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
14.31	71.48 ng	4694464	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Butanone	116395	000078-93-3	64
2	Propanal, 2-methyl-	116388	000078-84-2	33
3	Butanal	116385	000123-72-8	7
4	2-Hexanone, 3,4-dimethyl-	120877	019550-10-8	7
5	Pentane	116453	000109-66-0	7

 Peak Number 10 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
15.08	67.11 ng	4407960	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Undecene	124351	000821-95-4	38
2	2-Hexenal, (E)-	774	006728-26-3	35
3	2-Heptene	117785	000592-77-8	35
4	CIS-3-HEXENAL	776	000000-00-0	35
5	2-Heptene, (E)-	898	014686-13-6	35

 Peak Number 11 Rank in Relative Concentration 47

R.T.	Conc	Area	Relative to ISTD	R.T.
15.48	161.76 ng	10624162	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	901	000592-78-9	70
2	2-Heptene	117785	000592-77-8	50
3	CYCLOBUTANE, ISOPROPYL-	934	000000-00-0	47
4	1-Heptene	897	000592-76-7	45
5	Cycloheptane	945	000291-64-5	43

 Peak Number 12 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD		R.T.
16.15	2516.67 ng	165290342	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Heptane		118107	000142-82-5	91
2	Hexane, 3-methyl-		118114	000589-34-4	72
3	Hexane, 3,3,4-trimethyl-		6062	016747-31-2	50
4	Hydroxylamine, O-(2-methylpropyl)-		291	005618-62-2	46
5	2-Penten-1-ol, 2-methyl-		118064	001610-29-3	43

Peak Number 13 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD		R.T.
16.59	4271.78 ng	280563222	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene, (E)-		898	014686-13-6	95
2	2-Heptene		117785	000592-77-8	95
3	3-Heptene, (E)-		900	014686-14-7	81
4	Cycloheptane		945	000291-64-5	81
5	1-Heptene		897	000592-76-7	72

Peak Number 14 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD		R.T.
16.92	2243.50 ng	147349109	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	2-Heptene, (E)-		898	014686-13-6	96
2	2-Heptene		117785	000592-77-8	95
3	3-Heptene		901	000592-78-9	91
4	3-Heptene, (E)-		900	014686-14-7	90
5	Cycloheptane		945	000291-64-5	87

Peak Number 15 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD		R.T.
17.19	244.35 ng	16048379	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Cyclohexane, 1,2,3-trimethyl-, (1.a		120647	001678-81-5	72
2	4-Pentenol		116836	002100-17-6	72
3	1-Butene, 2-methyl-		116339	000563-46-2	64
4	Furan, 2,5-dihydro-		116326	001708-29-8	59
5	1-Propene		115905	000115-07-1	59

Peak Number 16 Rank in Relative Concentration 50

R.T.	Conc	Area	Relative to ISTD	R.T.
17.32	114.18 ng	7499252	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butanenitrile, 3-chloro-	1500	053778-71-5	38
2	2,4-Hexadienal	117580	000142-83-6	32
3	2,4-Hexadienal, (E,E)-	117578	004488-48-6	32
4	Furan, 2-ethyl-	117583	003208-16-0	30
5	2-Propenenitrile, 2-methyl-	116225	000126-98-7	22

Peak Number 17 Rank in Relative Concentration 68

R.T.	Conc	Area	Relative to ISTD	R.T.
17.64	32.48 ng	2133252	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,4-Hexadienal, (E,E)-	117578	004488-48-6	90
2	2,4-Hexadienal	117580	000142-83-6	90
3	1,3-Pentadiene, 2,4-dimethyl-	627	001000-86-8	87
4	1,4-Hexadiene, 4-methyl-	618	001116-90-1	87
5	1,4-Hexadiene, 5-methyl-	619	000763-88-2	87

Peak Number 18 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD	R.T.
17.76	140.62 ng	9235595	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenitrile	116729	013284-42-9	53
2	1-Butyne	115987	000107-00-6	43
3	1,2-Butadiene	115992	000590-19-2	43
4	2,3-DIMETHYLTHIURENE 1,1-DIOXIDE	3715	030646-57-2	38
5	Butyronitrile, 4,4,4-trifluoro-	4509	000690-95-9	37

Peak Number 19 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
18.36	1534.30 ng	100770249	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	119371	000589-81-1	86
2	Octane	119368	000111-65-9	83
3	Hexane, 1-(hexyloxy)-2-methyl-	34909	074421-17-3	64
4	Hexane, 2,4-dimethyl-	119377	000589-43-5	59
5	Hexane, 3-ethyl-	3194	000619-99-8	53

Peak Number 20 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
18.54	1215.25 ng	79815803	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,3-Hexadiene, 2-methyl-	622	029212-09-7	76
2	2-Butenal, 2-ethenyl-	576	020521-42-0	58
3	2-Cyclopenten-1-one, 2-methyl-	593	001120-73-6	58
4	3,4-Heptadiene	615	002454-31-1	58
5	2-Cyclopenten-1-one, 3-methyl-	594	002758-18-1	50

Peak Number 21 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
19.21	710.32 ng	46652907	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	602	001119-65-9	90
2	1,2-Hexadiene, 5-methyl-	616	013865-36-6	87
3	2-Octyne	2217	002809-67-8	78
4	2,5-Heptadiene, (E,E)-	614	039619-60-8	64
5	1-(2-Methyl-1-propenyl)cyclopropane	631	001003-33-4	59

Peak Number 22 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
19.52	216.55 ng	14222710	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	53
2	.GAMMA.-PICOLINE-D7	439	029372-29-0	27
3	1-METHYL-5-AMINO-D2-1,2,4-TRIAZOLE	726	053778-60-2	22
4	.GAMMA.-PICOLINE-.ALPHA.,.OMEGA.-D5	438	029372-32-5	9
5	Methyldiazoacetate	1034	006832-16-2	9

Peak Number 23 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
19.64	303.66 ng	19943743	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, methyl-	117432	000108-88-3	50
2	2-HEPTENE, 3-METHYL-	2651	000000-00-0	46
3	1,3,5-Cycloheptatriene	416	000544-25-2	43
4	1,5-Heptadien-3-yne	403	003511-27-1	35
5	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	25

Peak Number 24 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
19.76	187.45 ng	12311279	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	N-OCTAN-3-ENE	119057	000000-00-0	74
2	3-Octene, (E)-	2643	014919-01-8	70
3	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	68
4	CIS-1-BUTYL-2-METHYLCYCLOPROPANE	2731	038851-69-3	68
5	Cyclooctane	2729	000292-64-8	68

Peak Number 25 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
19.99	237.98 ng	15630000	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	117991	000591-78-6	91
2	2-Pentanone, 4-methyl-	118019	000108-10-1	80
3	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	42
4	Propanal	116041	000123-38-6	37

Peak Number 26 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
20.27	220.47 ng	14480163	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenenitrile	116729	013284-42-9	52
2	1-Butyne	115987	000107-00-6	47
3	SULFOLENE	3718	000116-88-8	43
4	Hexanedinitrile	118677	000111-69-3	40
5	1,6-Octadiene, (E)-	2222	019036-81-8	36

Peak Number 27 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
20.76	48.02 ng	3153619	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-UNDECENE, 7-METHYL-, CIS/TRANS	20710	076441-79-7	50
2	Octane, 3,4-dimethyl-	10253	015869-92-8	50
3	Octane, 4-methyl-	120913	002216-34-4	50
4	Decane, 5,6-dimethyl-	126024	001636-43-7	50
5	Hexane, 2,3,5-trimethyl-	120933	001069-53-0	43

 Peak Number 28 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD	R.T.
21.21	63.46 ng	4168003	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, 1,2,4-trimethyl-	5469	002234-75-5	53
2	Cyclohexane, 1,3,5-trimethyl-	5473	001839-63-0	49
3	Cyclooctane, butyl-	20778	016538-93-5	47
4	Cyclohexane, 1,3,5-trimethyl-, (1.a	5472	001795-26-2	46
5	3-Nonen-1-ol, (E)-	10184	010339-61-4	46

 Peak Number 29 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
21.67	860.17 ng	56494624	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	126001	000112-40-3	78
2	Nonane	120904	000111-84-2	64
3	Octane	119366	000111-65-9	47
4	1-Heptene	117780	000592-76-7	43
5	[1'-13C]-Octyne	2216	000000-00-0	43

 Peak Number 30 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
22.49	4037.46 ng	265173441	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	3091	000106-35-4	58
2	3-Hexanone, 5-methyl-	119328	000623-56-3	45
3	Butanal	116378	000123-72-8	38
4	2H-Pyran, tetrahydro-2-methyl-	1221	010141-72-7	25
5	1-Propene, 3-methoxy-	116426	000627-40-7	25

 Peak Number 31 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
22.65	1708.21 ng	112192072	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	119298	000110-43-0	78
2	5-Undecanone	21602	033083-83-9	43
3	2-Hexanone, 4-methyl-	3096	000105-42-0	38
4	2,3-Pentanedione, 4-methyl-	2973	007493-58-5	10
5	Pentane, 1-propoxy-	6581	018641-82-2	10

 Peak Number 32 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
23.16	66.24 ng	4350658	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 4-ethyl-	10247	015869-86-0	59
2	1-Decene, 4-methyl-	124356	013151-29-6	47
3	Octadecane, 6-methyl-	62978	010544-96-4	47
4	Hexadecane, 2,6,10,14-tetramethyl-	132695	000638-36-8	43
5	Nonane, 2-methyl-	122732	000871-83-0	43

 Peak Number 33 Rank in Relative Concentration 54

R.T.	Conc	Area	Relative to ISTD	R.T.
23.27	102.03 ng	6701394	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane	3190	000111-65-9	78
2	Heptane	118108	000142-82-5	64
3	Hexane, 3-ethyl-2-methyl-	120927	016789-46-1	59
4	Ether, heptyl hexyl	34907	007289-40-9	59
5	Heptane, 2,4-dimethyl-	6044	002213-23-2	59

 Peak Number 34 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
23.45	131.29 ng	8623137	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	119134	001121-07-9	46
2	1-NITROPYRAZOLE	119124	007119-95-1	35
3	p-Menthan-4-ol	15577	000470-65-5	35
4	CIS-MENTH-4-OL	15574	003239-02-9	35
5	1-Pentene, 3,4-dimethyl-	921	007385-78-6	35

 Peak Number 35 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
23.55	318.70 ng	20931573	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,5-Pyrrolidinedione, 1-methyl-	119135	001121-07-9	43
2	Isothiazole, 4,5-dimethyl-	119145	027330-47-8	38
3	Thiazole, 4,5-dimethyl-	2775	003581-91-7	35
4	Isothiazole, 3,4-dimethyl-	2777	027330-46-7	35
5	Thiazole, 2,4-dimethyl-	2773	000541-58-2	35

 Peak Number 36 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
23.67	1021.19 ng	67069971	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1H-1,2,4-Triazole-3,5-diamine	117824	001455-77-2	53
2	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID	10615	001123-28-0	53
3	2,2'-Bioxepane	33981	074793-02-5	50
4	3-METHYL-5-PYRAZOLONE-1-D1	736	053778-58-8	45
5	Thiazole, 2-propyl-	120683	017626-75-4	43

 Peak Number 37 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
23.78	1298.93 ng	85311287	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	33981	074793-02-5	59
2	2(3H)-Furanone, dihydro-4,4-dimethy	2999	013861-97-7	50
3	GLYCOCYANIDINE	955	000503-86-6	45
4	Hexane, 2,5-dimethyl-	3198	000592-13-2	45
5	3-Oxepanemethanol	6493	056666-73-0	45

 Peak Number 38 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
23.99	1540.93 ng	101205416	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Methyl-2-cyclopenten-1-ol	844	040459-88-9	80
2	3-Penten-2-one, 4-methyl-	117726	000141-79-7	64
3	tert-Butylketene	788	059005-31-1	59
4	2-Pentene, 4,4-dimethyl-, (Z)-	927	000762-63-0	59
5	Cyclopropane, 1,1,2,2-tetramethyl-	932	004127-47-3	59

 Peak Number 39 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
24.17	1293.46 ng	84952014	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	122728	000124-18-5	87
2	Decane, 1,1'-oxybis-	73380	002456-28-2	64
3	Tetradecane	128277	000629-59-4	64
4	Decane, 2,9-dimethyl-	21662	001002-17-1	59

5 Hexadecane

130127 000544-76-3 59

 Peak Number 40 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
24.31	1588.50 ng	104329806	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Aminopyrimidin-1-oxide	2307	035034-15-2	43
2	Cyclohexane, 1,4-dimethyl-2-octadec	91309	055282-02-5	38
3	2(3H)-Furanone, 5-ethenyldihydro-5-	120556	001073-11-6	38
4	1-Undecene, 8-methyl-	20675	074630-40-3	37
5	2,4,4-TRIMETHYLBUT-2-ENOLIDE	5243	004182-41-6	33

 Peak Number 41 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
24.61	436.29 ng	28655115	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	15626	002847-72-5	62
2	Decane, 2-methyl-	124551	006975-98-0	60
3	Nonane, 2,6-dimethyl-	15630	017302-28-2	53
4	Octane, 2,3,6-trimethyl-	15637	062016-33-5	53
5	Octane, 2-iodo-	52284	000557-36-8	52

 Peak Number 42 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
24.89	376.12 ng	24703125	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	50
2	1,3-Isobenzofurandione, hexahydro-	124143	000085-42-7	32
3	1H-Pyrazole, 3-methyl-	116740	001453-58-3	10
4	Heptanenitrile	118929	000629-08-3	9
5	1H-Pyrazole-3-ethanamine	2332	000105-20-4	9

 Peak Number 43 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
25.07	242.47 ng	15924944	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Silane, [(11-fluoroundecyl)oxy]trim	60385	026305-81-7	43
2	2-Aziridinone, 1-tert-butyl-3-(1-me	45341	026944-18-3	38
3	3-Hepten-2-one, (E)-	2545	005609-09-6	38

4 3-Hepten-2-one, (Z)-	2544 069668-88-8	38
5 Silane, [(11-bromoundecyl)oxy]trime	80502 026305-83-9	35

 Peak Number 44 Rank in Relative Concentration 52

R.T.	Conc	Area	Relative to ISTD	R.T.
25.28	105.05 ng	6899823	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane 3-cyclohexyl-	51969	013151-78-5	35
2	Cyclohexane, (1-methylethyl)-	5458	000696-29-7	35
3	Cyclohexane, 1,1'-(1-methyl-1,2-eth	38786	041851-34-7	27
4	Oxacyclotetradecan-2-one	40447	001725-04-8	27
5	Ethanone, 1-cyclohexyl-	120604	000823-76-7	25

 Peak Number 45 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
25.38	415.76 ng	27306470	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	118929	000629-08-3	70
2	1H-Imidazole-4-ethanamine	118920	000051-45-6	38
3	1H-Pyrazole, 3-methyl-	116740	001453-58-3	28
4	2-Cyclohexen-1-one, 3,5,5-trimethyl	122271	000078-59-1	25
5	CYCLOPENTANE, 1-DEUTERO-2-METHYL-1-	2273	000000-00-0	14

 Peak Number 46 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD	R.T.
25.54	165.61 ng	10877111	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Hexene, 2,2-dimethyl-, (E)-	119080	000690-93-7	35
2	Dodecane, 2,6,10-trimethyl-	129243	003891-98-3	27
3	Triacotane	136347	000638-68-6	22
4	Hexatriacontane	136998	000630-06-8	22
5	Tridecane, 7-methyl-	34139	026730-14-3	22

 Peak Number 47 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
25.72	3226.03 ng	211880483	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	121197	000104-76-7	72
2	1-Decene, 2,4-dimethyl-	20729	055170-80-4	72

3 1-Nonanol	122960	000143-08-8	50
4 Octane, 2-chloro-	11932	000628-61-5	47
5 Octane, 3-chloro-	11933	001117-79-9	47

 Peak Number 48 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
25.88	1515.06 ng	99506704	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Azabicyclo[2.2.1]heptane	699	000279-24-3	78
2	1,2-Nonadiene	4866	022433-33-6	28
3	Butanedinitrile, 2,3-dimethyl-	1881	016411-13-5	25
4	4-Hexen-3-one, 4,5-dimethyl-	5318	017325-90-5	10
5	1-Pentene, 3-ethyl-	117792	004038-04-4	10

 Peak Number 49 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
26.36	2667.89 ng	175222745	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	15622	001120-21-4	91
2	Decane, 2,9-dimethyl-	21662	001002-17-1	72
3	Tridecane	127251	000629-50-5	72
4	Hexadecane	130130	000544-76-3	59
5	3,6-Dimethyldecane	21664	017312-53-7	53

 Peak Number 50 Rank in Relative Concentration 56

R.T.	Conc	Area	Relative to ISTD	R.T.
26.54	73.95 ng	4857154	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	14851	000000-00-0	76
2	5-Undecene	124355	004941-53-1	74
3	Cyclooctane, 1,4-dimethyl-, trans-	9537	013151-98-9	47
4	1-Undecene, 5-methyl-	20673	074630-38-9	43
5	Cyclopropane, 1-butyl-2-(2-methylpr	14833	041977-35-9	43

 Peak Number 51 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
26.65	171.76 ng	11280895	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2-methyl-	124550	006975-98-0	64

2	3,6-Dimethyldecane	21664	017312-53-7	55
3	Undecane, 2-methyl-	126010	007045-71-8	52
4	Tetradecane	128274	000629-59-4	47
5	Octane, 2,6-dimethyl-	122741	002051-30-1	46

Peak Number 52 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
26.95	291.97 ng	19176079	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 4-methyl-	126017	002980-69-0	58
2	Undecane, 3,8-dimethyl-	27755	017301-30-3	53
3	Nonane, 3-methyl-5-propyl-	27798	031081-18-2	47
4	Pentane, 1,1'-oxybis-	124769	000693-65-2	43
5	Undecane, 2-methyl-	126011	007045-71-8	43

Peak Number 53 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
27.35	514.42 ng	33786324	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-	122339	000091-17-8	97
2	Naphthalene, decahydro-, trans-	122344	000493-02-7	95
3	Bicyclo[2.2.1]heptane, 2-methyl-, e	2290	000872-78-6	78
4	2-Cyclohexen-1-one, 4,4,6-trimethyl	8624	013395-73-8	49
5	Spiro[4.5]decane	8822	000176-63-6	49

Peak Number 54 Rank in Relative Concentration 60

R.T.	Conc	Area	Relative to ISTD	R.T.
27.95	66.37 ng	4359059	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Hexen-3-one, 5-methyl-	2555	013905-10-7	90
2	Bicyclo[2.2.1]hept-5-ene-2-carbonit	119925	000095-11-4	90
3	3-Heptene, 2-methyl-, (E)-	2653	000692-96-6	90
4	Cyclopentanone, 3-methyl-	817	001757-42-2	90
5	1-Undecene	124352	000821-95-4	90

Peak Number 55 Rank in Relative Concentration 43

R.T.	Conc	Area	Relative to ISTD	R.T.
28.09	182.00 ng	11953384	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Cyclohexane, pentyl-	14841 004292-92-6	74
2 Cyclohexane, hexyl-	20760 004292-75-5	72
3 Cyclohexane, 1,1'-(1,4-butanediyl)b	129929 006165-44-2	72
4 Acetic acid, mercapto-, cyclohexyl	22810 016849-98-2	64
5 Cyclohexane, (1-methylethyl)-	5458 000696-29-7	64

Peak Number 56 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
28.25	661.26 ng	43430456	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Buten-2-one, 4-(1-aziridinyl)-	2342	018277-57-1	49
2	2-Cyclohexen-1-one, 4,4-dimethyl-	120409	001073-13-8	46
3	2-ETHYL-5-PENTYL-5-PYRROLINE	19967	061772-94-9	43
4	2(1H)-Pyrimidinone, 4-amino-	118915	000071-30-7	41
5	Oxazole, trimethyl-	118925	020662-84-4	38

Peak Number 57 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
28.60	865.37 ng	56836241	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2,6-dimethyl-	127264	017301-23-4	97
2	Undecane, 3,6-dimethyl-	27753	017301-28-9	90
3	Dodecane, 6-methyl-	27736	006044-71-9	89
4	Decane, 2,6,8-trimethyl-	27787	062108-26-3	72
5	Decane, 2,5,9-trimethyl-	27784	062108-22-9	72

Peak Number 58 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
28.76	190.28 ng	12497432	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Cyclohexen-1-one	117596	000930-68-7	45
2	2,5-Pyrrolidinedione, 3-ethylidene-	8879	016395-79-2	42
3	1H-1,2,4-Triazole, 3-ethyl-	666	007411-16-7	25
4	2,3-Pentadiene	116267	000591-96-8	12
5	2,3-Nonadiene	4868	022433-34-7	12

Peak Number 59 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
28.93	401.58 ng	26374856	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual

1 Naphthalene, decahydro-2-methyl-	124047	002958-76-1	81
2 CIS-SYN-1-METHYL-DECAHYDRONAPHTHALE	13877	000000-00-0	64
3 4,7-Methano-1H-inden-1-ol, octahydr	13840	055255-97-5	46
4 2-Methyl-4-isopropylcyclohex-3-en-1	13671	063028-18-2	43
5 Pulegone	123990	000089-82-7	38

Peak Number 60 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
29.44	377.95 ng	24823096	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-2,6-dimethyl	19761	001618-22-0	49
2	Cyclododecane	125805	000294-62-2	46
3	2(1H)-Naphthalenone, octahydro-4a-m	19649	000938-06-7	35
4	2(1H)-Naphthalenone, octahydro-4a-m	125595	000938-07-8	35
5	GERMACRANE-A	129144	000645-10-3	22

Peak Number 61 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
29.74	654.41 ng	42980517	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 7-methyl-	34139	026730-14-3	72
2	Nonane, 2,6-dimethyl-	15630	017302-28-2	64
3	Decane, 5-propyl-	27766	017312-62-8	64
4	Nonane, 3-methyl-	122734	005911-04-6	53
5	Octane, 1-iodo-	52283	000629-27-6	53

Peak Number 62 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
30.08	183.75 ng	12068443	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclododecane	20781	000294-62-2	49
2	Cyclopentane, 1-butyl-2-propyl-	20759	062199-50-2	46
3	Cyclopentane, decyl-	39719	001795-21-7	46
4	11-Dodecen-1-ol, 2,4,6-trimethyl-,	130118	027829-54-5	43
5	6-Octen-1-ol, 3,7-dimethyl-, format	127181	000105-85-1	43

Peak Number 63 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD	R.T.
30.25	358.60 ng	23552122	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, (2-methylpropyl)-	5449	003788-32-7	72
2	Cyclohexane, 2-butyl-1,1,3-trimethyl	26872	054676-39-0	52
3	3-UNDECENE, 5-METHYL-, CIS/TRANS	20694	000000-00-0	49
4	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	49
5	Cyclohexane, 1,1'-(1,4-butanediyl)b	45121	006165-44-2	47

Peak Number 64 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
30.43	6020.66 ng	395426674	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	127251	000629-50-5	76
2	Tetradecane	128277	000629-59-4	64
3	Dodecane	126000	000112-40-3	53
4	Octane	119366	000111-65-9	49
5	Decane, 2,3,5-trimethyl-	27778	062238-11-3	46

Peak Number 65 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
31.32	290.15 ng	19056383	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	7-Octenal, 3,7-dimethyl-	14550	000141-26-4	43
2	1-Hexene, 3,5,5-trimethyl-	120620	004316-65-8	42
3	Cyclopentane, propyl-	119100	002040-96-2	27
4	1-Dodecanol, 3,7,11-trimethyl-	47808	006750-34-1	27
5	CIS-TETRAHYDROIONOL	34089	004361-23-3	27

Peak Number 66 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD	R.T.
31.74	107.77 ng	7078297	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Isomer B of 1,1,6-Trimethyldecahydr	25876	081983-74-6	35
2	1,4-DIMETHYL-7-OXO-4,7-DIHYDRO-1,2,	18808	061402-40-2	27
3	3-CYCLOHEXYL-PROPANOL	10228	001124-63-6	25
4	endo-d2-2-exo-Acetoxynorbornan-7-on	20248	079640-28-1	25
5	2,4-Hexadiene, 2,5-dimethyl-	118889	000764-13-6	25

Peak Number 67 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
32.31	2513.63 ng	165091249	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128277	000629-59-4	96
2	Heptadecane	130827	000629-78-7	91
3	Pentadecane	129233	000629-62-9	90
4	Hexadecane	130127	000544-76-3	87
5	Undecane	15622	001120-21-4	86

 Peak Number 68 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD	R.T.
32.79	63.53 ng	4172588	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	5-Dodecanone	27669	019780-10-0	55
2	4-Dodecanone	27668	006137-26-4	46
3	4-Decanone	124521	000624-16-8	43
4	2,6-NONANEDIONE	15380	000000-00-0	38
5	Heptane, 2,6-dimethyl-	6046	001072-05-5	38

 39010642.D AREA.M Wed Feb 03 17:50:16 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010639.D

Acq On : 10 Jan 99 7:19 pm

Sample : VS006-107-TS43

Misc :

Quant Time: Jan 23 22:22 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.42	84	5534151	200.00	ng	0.03
27) Ethylbenzene-d10	22.14	98	7529798	200.00	ng	0.00
37) Dodecane-d26	27.95	66	890048	200.00	ng	-0.02

System Monitoring Compounds

	R.T.	QIon	Response	Conc	Units	%Recovery
9) Hexafluorobenzene	13.76	186	4508325	241.59	ng	75.03%
21) Toluene-d8	19.52	98	8175304	313.57	ng	83.40%
32) Bromobenzene-d5	24.89	82	3874606	279.22	ng	90.66%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Methanol	8.28	31	5647	0.88	ng	# 1
3) Ethanol	9.81	31	4670250	437.01	ng	m 0
4) Acetone	11.19	43	8103005	324.02	ng	m 86
5) Acetonitrile	11.66	41	422506	43.61	ng	m 100
6) Dichloromethane	12.33	84	2872	0.41	ng	# 12
7) 1-Propanol	12.70	31	1408982	129.89	ng	m 72
8) n-Hexane	13.04	57	4175103	452.16	ng	# 31
10) Butanal	14.21	72	202850	102.21	ng	m 1
11) Propanenitrile	14.46	54	973169	135.44	ng	m 74
12) Chloroform	14.98	83	823	0.04	ng	# 13
13) Tetrahydrofuran	15.30	42	5368	0.66	ng	# 28
14) 1-Butanol	15.97	56	3426483	459.35	ng	m 54
16) Tetrachloroethane	16.22	117	1280	0.07	ng	# 54
18) 2-Pentanone	17.07	43	1609113	69.10	ng	m 65
19) Butanenitrile	17.32	41	3207572	236.09	ng	m 100
20) n-Octane	19.08	85	1930575	350.73	ng	# 1
22) Toluene	19.66	91	4366177	148.26	ng	m 100
23) 2-Hexanone	19.98	43	5532782	327.65	ng	# 95
24) Pentanenitrile	20.26	41	3080576	301.33	ng	m 95
25) Tetrachloroethylene	20.85	166	35546	2.76	ng	m 48
26) n-Nonane	21.59	57	5229804	437.25	ng	# 39
29) Hexanenitrile	22.98	41	4960087	386.72	ng	m 67
30) o-Xylene	23.34	91	101101	3.15	ng	# 45
33) 2-Octanone	25.04	58	1413873	141.12	ng	# 82
34) Heptanenitrile	25.38	82	5601060	305.11	ng	# 69

(#) = qualifier out of range (m) = manual integration

39010639.D 390106CA.M

Sat Jan 23 22:22:50 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010639.D

Acq On : 10 Jan 99 7:19 pm

Sample : VS006-107-TS43

Misc :

Quant Time: Jan 23 19:37 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M

Title :

Last Update : Fri Jan 22 23:38:57 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.42	84	5534151	200.00	ng	0.03
5) Ethylbenzene-d10	22.14	98	7529798	200.00	ng	0.00

System Monitoring Compounds

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)	Recovery	Qvalue
2) n-Heptane	16.16	43	23876218	1994.50	ng	#	92	
4) n-Nonane	21.59	57	5229804	1466.89	ng	#	39	
6) 2-Heptanone	22.63	43	37960634	1547.99	ng	#	63	
7) n-Decane	24.17	57	17320782	1320.42	ng	m	85	
8) n-Undecane	26.35	57	31660019	2215.79	ng	m	89	
9) n-Dodecane	28.39	57	46533920	3211.53	ng	m	1	
10) n-Tridecane	30.40	57	60672402	6416.22	ng	m	40	

(#) = qualifier out of range (m) = manual integration

39010639.D 390106CH.M

Sat Jan 23 19:38:26 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010639.D
Operator : Bonfoey
Acquired : 10 Jan 99 7:19 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-107-TS43
Misc Info :
Vial Number: 30

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010639.D Vial: 30
 Acq On : 10 Jan 99 7:19 pm Operator: Bonfoey
 Sample : VS006-107-TS43 Inst : 5972 INST
 Misc : Multiplr: 1.00
 Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : WILEY138.L

 Peak Number 1 Rank in Relative Concentration 67

R.T.	Conc	Area	Relative to ISTD	R.T.
7.49	59.92 ng	3347455	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	94
2	2-Butenoic acid, (Z)-	116968	000503-64-0	78
3	2-Furanmethanol	117683	000098-00-0	78
4	2-Butenal	116296	004170-30-3	72
5	Cyclopropane	115908	000075-19-4	72

 Peak Number 2 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
8.37	487.00 ng	27205170	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	87
2	1-Butene	116018	000106-98-9	80
3	Cyclobutane	116025	000287-23-0	49
4	Propane, 1-nitro-	274	000108-03-2	25
5	2-Butene	116020	000107-01-7	9

 Peak Number 3 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
8.54	463.59 ng	25897465	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	59
2	1,3-Butadiene	115996	000106-99-0	47
3	1-Hexene	116880	000592-41-6	45
4	Cyclobutane	116025	000287-23-0	43
5	1-Butanamine, 2-methyl-	146	000096-15-1	38

 Peak Number 4 Rank in Relative Concentration 66

R.T.	Conc	Area	Relative to ISTD	R.T.
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9.73	61.58 ng	3439914	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethanol	115963	000064-17-5	90
2	Carbamic acid, ethyl ester	278	000051-79-6	42
3	Ethane, 1,1'-oxybis-	116595	000060-29-7	40
4	Formic acid, ethyl ester	116524	000109-94-4	40
5	1-Propanol, 3-ethoxy-	1629	000111-35-3	39

Peak Number 5 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
10.23	344.36 ng	19237144	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Oxirane, ethyl-	116432	000106-88-7	58
2	Pentane	116454	000109-66-0	43
3	Oxirane, 2,2-dimethyl-	116433	000558-30-5	42
4	Butane, 2-methyl-	116461	000078-78-4	42
5	Butane, 2-chloro-3-methyl-	1754	000631-65-2	40

Peak Number 6 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
11.19	277.45 ng	15499037	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propanone	116057	000067-64-1	80
2	2-Pentanone, 4-hydroxy-4-methyl-	119530	000123-42-2	40
3	Acetic acid, 2-propenyl ester	1066	000591-87-7	9
4	Butane	116077	000106-97-8	7
5	Diazene, dimethyl-	116036	000503-28-6	7

Peak Number 7 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
12.05	81.28 ng	4540654	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane, 2-methyl-	106	000107-83-5	52
2	Pentane, 2-bromo-	12433	000107-81-3	50
3	Pentane, 2,3-dimethyl-	118119	000565-59-3	38
4	Butane, 2-methyl-	116461	000078-78-4	32
5	Pentane	116456	000109-66-0	32

Peak Number 8 Rank in Relative Concentration 73

R.T.	Conc	Area	Relative to ISTD	R.T.
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12.39	32.97 ng	1841847	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Silanol, trimethyl-	324	001066-40-6	72
2	3-Hexanone, 1,5,6,6-tetramethoxy-	43479	053914-29-7	40
3	Acetic acid, (trimethylsilyl)-	6814	002345-38-2	40
4	1,1-DIMETHOXY-2-PHENYLPROPANE	25619	000000-00-0	40
5	Hexanoic acid, trimethylsilyl ester	29079	014246-15-2	39

 Peak Number 9 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
12.60	64.89 ng	3624795	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butanol	116552	000071-36-3	72
2	2-Butene, (E)-	116021	000624-64-6	42
3	Propanal, 3-ethoxy-	1371	002806-85-1	42
4	Formic acid, butyl ester	118234	000592-84-7	40
5	Formic acid, propyl ester	117190	000110-74-7	38

 Peak Number 10 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
13.45	100.92 ng	5637862	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenal, (E)-	116834	001576-87-0	64
2	2-Hexene, (E)-	116889	004050-45-7	58
3	2-PENTENE, 3-METHYL- (CIS/TRANS)	116905	000000-00-0	53
4	2-Pentene, 3-methyl-, (E)-	116908	000616-12-6	53
5	Cyclopentanone	116856	000120-92-3	50

 Peak Number 11 Rank in Relative Concentration 71

R.T.	Conc	Area	Relative to ISTD	R.T.
14.20	35.34 ng	1974377	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butanal	116378	000123-72-8	81
2	Ethene, ethoxy-	116429	000109-92-2	53
3	Hexanal	1129	000066-25-1	52
4	2-Butanone	116395	000078-93-3	43
5	Propane	115929	000074-98-6	38

 Peak Number 12 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD	R.T.
15.08	71.95 ng	4019137	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-(1-Nitro-2-oxocyclohexyl)propanal	34227	095338-26-4	40
2	2-Propenenitrile, 2-methyl-	116225	000126-98-7	38
3	2-Nonynoic acid	14371	001846-70-4	38
4	CIS-3-HEXENAL	776	000000-00-0	35
5	1-Hexene, 3-methyl-	117786	003404-61-3	35

Peak Number 13 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
15.47	175.94 ng	9828767	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene	901	000592-78-9	58
2	2-Undecanethiol, 2-methyl-	35630	010059-13-9	53
3	2-Hexyn-1-ol	825	000764-60-3	50
4	1-Undecene	14790	000821-95-4	50
5	CYCLOBUTANE, ISOPROPYL-	934	000000-00-0	50

Peak Number 14 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD	R.T.
16.16	2651.26 ng	148107213	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane	118107	000142-82-5	90
2	Hexane, 3-methyl-	118114	000589-34-4	72
3	2-Methyl-nonane	10241	000081-83-0	59
4	Hexane, 3,3,4-trimethyl-	6062	016747-31-2	53
5	Pentane, 2,3,4-trimethyl-	119384	000565-75-3	53

Peak Number 15 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
16.58	4570.65 ng	255330569	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	898	014686-13-6	95
2	2-Heptene	117785	000592-77-8	95
3	Cycloheptane	945	000291-64-5	87
4	3-Heptene, (E)-	900	014686-14-7	76
5	1-Heptene	897	000592-76-7	72

Peak Number 16 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
16.92	2359.91 ng	131831563	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	117785	000592-77-8	95
2	2-Heptene, (E)-	898	014686-13-6	95
3	3-Heptene	901	000592-78-9	91
4	3-Heptene, (E)-	900	014686-14-7	90
5	1-Heptene	897	000592-76-7	87

 Peak Number 17 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
17.18	213.39 ng	11920469	Hexafluorobenzene	13.76

Quantitation Report

Data File : C:\HPCHEM\3\39010637.D

Acq On : 10 Jan 99 5:56 pm

Sample : VS006-115-TS30

Misc :

Quant Time: Jan 23 22:11 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.43	84	5707528	200.00	ng	0.04
27) Ethylbenzene-d10	22.15	98	7564620	200.00	ng	0.00
37) Dodecane-d26	27.96	66	623453	200.00	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	%Recovery
9) Hexafluorobenzene	13.76	186	4611085	239.59	ng	74.41%
21) Toluene-d8	19.53	98	8354734	310.72	ng	82.64%
32) Bromobenzene-d5	24.90	82	3770841	270.49	ng	87.82%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Methanol	8.38	31	1569	0.24	ng	# 1
3) Ethanol	9.76	31	2690605	244.12	ng	m 0
4) Acetone	11.17	43	2739459	106.22	ng	m 65
5) Acetonitrile	11.65	41	491475	49.19	ng	m 100
6) Dichloromethane	12.35	84	977	0.14	ng	# 25
7) 1-Propanol	12.70	31	1249481	111.69	ng	m 92
8) n-Hexane	13.05	57	3433893	360.59	ng	m 31
10) Butanal	14.20	72	251367	122.80	ng	m 91
12) Chloroform	15.00	83	1183	0.06	ng	# 23
14) 1-Butanol	15.98	56	3286065	430.75	ng	m 60
16) Tetrachloroethane	16.23	117	1189	0.06	ng	# 52
18) 2-Pentanone	17.08	43	1412449	58.81	ng	m 84
19) Butanenitrile	17.33	41	3269649	233.35	ng	m 100
20) n-Octane	19.08	85	1595923	281.12	ng	m 1
22) Toluene	19.67	91	4168985	137.26	ng	m 100
23) 2-Hexanone	19.99	43	5287096	303.59	ng	# 95
24) Pentanenitrile	20.27	41	2579562	244.66	ng	m 97
25) Tetrachloroethylene	20.85	166	35464	2.67	ng	m 56
26) n-Nonane	21.60	57	4619863	381.54	ng	m 39
29) Hexanenitrile	22.99	41	3293044	269.47	ng	# 69
30) o-Xylene	23.36	91	245409	7.60	ng	m 72
33) 2-Octanone	25.05	58	1311170	134.96	ng	m 84
34) Heptanenitrile	25.39	82	4773838	264.57	ng	# 70

(#) = qualifier out of range (m) = manual integration

39010637.D 390106CA.M

Sat Jan 23 22:12:03 1999

TST

Quantitation Report

Data File : C:\HPCHEM\3\39010637.D

Acq On : 10 Jan 99 5:56 pm

Sample : VS006-115-TS30

Misc :

Quant Time: Jan 23 19:35 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CH.M

Title :

Last Update : Fri Jan 22 23:38:57 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QI	on	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.43	84	5707528	200.00	ng	0.04	
5) Ethylbenzene-d10	22.15	98	7564620	200.00	ng	0.00	

System Monitoring Compounds

Target Compounds

2) n-Heptane	16.16	43	20131160	1630.57	ng	m	77
4) n-Nonane	21.60	57	4619863	399.86 ng		#	39
6) 2-Heptanone	22.65	43	35160385	1427.20	ng	#	71
7) n-Decane	24.17	57	12997444	986.28	ng	#	88
8) n-Undecane	26.37	57	27895642	1943.35	ng	#	89
9) n-Dodecane	28.41	57	41568087	2855.60	ng	#	92
10) n-Tridecane	30.41	57	55530623	5845.44	ng	m	40

QAB
2/2/99
%Recovery
Qvalue

(#) = qualifier out of range (m) = manual integration

39010637.D 390106CH.M

Sat Jan 23 19:35:29 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010637.D
Operator : Bonfoey
Acquired : 10 Jan 99 5:56 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-115-TS30
Misc Info :
Vial Number: 30

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 1 Rank in Relative Concentration 64

R.T.	Conc	Area	Relative to ISTD	R.T.
7.50	64.31 ng	3420136	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene	115905	000115-07-1	94
2	2-Furanmethanol	117683	000098-00-0	83
3	Furan, 2,5-dihydro-	116326	001708-29-8	83
4	Cyclopropane	115908	000075-19-4	83
5	3-Butenoic acid	14	000625-38-7	74

 Peak Number 2 Rank in Relative Concentration 71

R.T.	Conc	Area	Relative to ISTD	R.T.
7.63	46.94 ng	2496212	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,6-Pyridazinedione, 1,2-dihydro-4-	5103	005754-18-7	38
2	2-Furancarboxaldehyde	117559	000098-01-1	32
3	1H-Imidazole	116247	000288-32-4	25
4	DIHYDROPYRANNO(3,2-F) COUMARANONE	29969	062662-72-0	25
5	Propane, 2-bromo-1-chloro-	124419	003017-95-6	23

 Peak Number 3 Rank in Relative Concentration 40

R.T.	Conc	Area	Relative to ISTD	R.T.
8.38	242.31 ng	12886057	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	87
2	1-Butene	116018	000106-98-9	80
3	2-Butene	116020	000107-01-7	50
4	Cyclobutane	116025	000287-23-0	47
5	Propane, 1-chloro-2-methyl-	117426	000513-36-0	9

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 4 Rank in Relative Concentration 74

R.T.	Conc	Area	Relative to ISTD	R.T.
8.91	32.34 ng	1719876	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Propene, 2-methyl-	116022	000115-11-7	72
2	1-Butene	116017	000106-98-9	64
3	2-Butene, (Z)-	116019	000590-18-1	64
4	N-BUTYL 2-CHLOROETHYL SULFOXIDE	20048	000000-00-0	64
5	2-Butene, (E)-	116021	000624-64-6	59

 Peak Number 5 Rank in Relative Concentration 27

R.T.	Conc	Area	Relative to ISTD	R.T.
10.25	377.28 ng	20063917	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Oxirane, 2,2-dimethyl-	116433	000558-30-5	56
2	Butane, 2-methyl-	116461	000078-78-4	53
3	Propanal, 2-methyl-	116386	000078-84-2	47
4	Pentane	116454	000109-66-0	43
5	Propane, 2-methyl-	116082	000075-28-5	39

 Peak Number 6 Rank in Relative Concentration 57

R.T.	Conc	Area	Relative to ISTD	R.T.
11.18	100.29 ng	5333503	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propanone	116057	000067-64-1	72
2	2-Pentanone, 4-hydroxy-4-methyl-	119530	000123-42-2	40
3	1-Propen-2-ol, acetate	1067	000108-22-5	36
4	Acetic acid, 2-methylpropyl ester	119521	000110-19-0	33
5	Acetic acid, 2-propenyl ester	1066	000591-87-7	33

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 7 Rank in Relative Concentration 63

R.T.	Conc	Area	Relative to ISTD	R.T.
12.07	72.55 ng	3858433	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID		Ref# CAS#	Qual
1	Pentane, 2-methyl-		106 000107-83-5	78
2	Pentane		116456 000109-66-0	52
3	Pentane, 2,3-dimethyl-		118119 000565-59-3	50
4	Propane, 1-chloro-2-methyl-		117425 000513-36-0	50
5	Pentane, 2-bromo-		12433 000107-81-3	50

 Peak Number 8 Rank in Relative Concentration 58

R.T.	Conc	Area	Relative to ISTD	R.T.
13.46	89.80 ng	4775702	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID		Ref# CAS#	Qual
1	2-Hexene, (E)-		116889 004050-45-7	60
2	2-Pentene, 3-methyl-, (E)-		116908 000616-12-6	49
3	2-PENTENE, 3-METHYL- (CIS/TRANS)		116905 000000-00-0	49
4	Cyclopentanone		116856 000120-92-3	47
5	2-Hexene		116887 000592-43-8	47

 Peak Number 9 Rank in Relative Concentration 65

R.T.	Conc	Area	Relative to ISTD	R.T.
14.21	61.71 ng	3281917	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID		Ref# CAS#	Qual
1	Butanal		116378 000123-72-8	94
2	Ethene, ethoxy-		116428 000109-92-2	58
3	Propane		115929 000074-98-6	53
4	Butanal, 3-methyl-		117036 000590-86-3	50
5	2-Butanone		116397 000078-93-3	49

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 10 Rank in Relative Concentration 46

R.T.	Conc	Area	Relative to ISTD	R.T.
14.32	165.15 ng	8782774	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Butanone	116394	000078-93-3	80
2	Butanal	116385	000123-72-8	9
3	Propanal, 2-methyl-	116387	000078-84-2	9
4	3(2H)-Furanone, dihydro-2-methyl-	1081	003188-00-9	9
5	1,3-Dioxolane, 2,2,4-trimethyl-	119559	001193-11-9	9

 Peak Number 11 Rank in Relative Concentration 67

R.T.	Conc	Area	Relative to ISTD	R.T.
15.09	58.27 ng	3098827	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Heptenal, (Z)-	119020	006728-31-0	50
2	2-Azido-2,3-dimethylbutane	5560	091633-20-4	49
3	2,4-Hexadien-1-ol	835	000111-28-4	38
4	CIS-3-HEXENAL	776	000000-00-0	38
5	2-Propenenitrile, 2-methyl-	116225	000126-98-7	35

 Peak Number 12 Rank in Relative Concentration 70

R.T.	Conc	Area	Relative to ISTD	R.T.
15.39	48.49 ng	2578533	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	CYCLOBUTANE, ISOPROPYL-	934	000000-00-0	38
2	1-Heptene	117783	000592-76-7	38
3	1-Hexene, 5-methyl-	117787	003524-73-0	27
4	Cyclopentane, 1,3-dimethyl-, cis-	940	002532-58-3	27
5	2-Heptene	117785	000592-77-8	25

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 13 Rank in Relative Concentration 62

R.T.	Conc	Area	Relative to ISTD		R.T.
15.47	72.58 ng	3860119	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	3-Heptene, (E)-		900	014686-14-7	64
2	Cyclobutanone, 2,2-dimethyl-		117736	001192-14-9	53
3	3-Heptene		901	000592-78-9	53
4	1-Pentene, 2,3-dimethyl-		915	003404-72-6	52
5	Butane, 1-isocyanato-		117833	000111-36-4	49

 Peak Number 14 Rank in Relative Concentration 29

R.T.	Conc	Area	Relative to ISTD		R.T.
15.97	347.65 ng	18488243	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	1-Butanol		116554	000071-36-3	96
2	Furan, 2-propyl-		118853	004229-91-8	72
3	Formic acid, butyl ester		118234	000592-84-7	64
4	2-Butene, (E)-		116021	000624-64-6	47
5	1-Propanol, 2-methyl-		116575	000078-83-1	38

 Peak Number 15 Rank in Relative Concentration 7

R.T.	Conc	Area	Relative to ISTD		R.T.
16.15	2287.58 ng	121656001	Hexafluorobenzene		13.76
Hit# of 20	Tentative ID		Ref#	CAS#	Qual
1	Heptane		118106	000142-82-5	91
2	Hexane, 3-methyl-		118114	000589-34-4	72
3	Hexane, 3,3,4-trimethyl-		6062	016747-31-2	50
4	Pentane, 2,3,4-trimethyl-		119384	000565-75-3	50
5	Hexane		117111	000110-54-3	43

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 16 Rank in Relative Concentration 3

R.T.	Conc	Area	Relative to ISTD	R.T.
16.58	4033.00 ng	214479650	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene	117785	000592-77-8	95
2	2-Heptene, (E)-	898	014686-13-6	95
3	3-Heptene	901	000592-78-9	90
4	3-Heptene, (E)-	900	014686-14-7	89
5	Cycloheptane	945	000291-64-5	87

 Peak Number 17 Rank in Relative Concentration 8

R.T.	Conc	Area	Relative to ISTD	R.T.
16.92	1998.03 ng	106257303	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptene, (E)-	898	014686-13-6	96
2	2-Heptene	117785	000592-77-8	95
3	3-Heptene	901	000592-78-9	91
4	3-Heptene, (E)-	900	014686-14-7	89
5	1-Heptene	897	000592-76-7	87

 Peak Number 18 Rank in Relative Concentration 47

R.T.	Conc	Area	Relative to ISTD	R.T.
17.19	160.14 ng	8516211	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Butene, 2-methyl-	116339	000563-46-2	72
2	2-Butenal	116295	004170-30-3	53
3	1-Hexene	116880	000592-41-6	50
4	CYCLOBUTANE, ISOPROPYL-	934	000000-00-0	45
5	Cyclopropane, 1,2-dimethyl-, trans-	116344	002402-06-4	18

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 19 Rank in Relative Concentration 53

R.T.	Conc	Area	Relative to ISTD	R.T.
17.33	125.17 ng	6656722	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propenenitrile, 2-methyl-	116225	000126-98-7	10
2	Borane, ethyldimethyl-	116329	001113-22-0	9
3	DIETHYLPROPYL-BORANE	2637	000000-00-0	9
4	1-Propene	115905	000115-07-1	9
5	Butanenitrile, 3-chloro-	1500	053778-71-5	9

 Peak Number 20 Rank in Relative Concentration 73

R.T.	Conc	Area	Relative to ISTD	R.T.
17.63	32.91 ng	1749995	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-(2-Methyl-1-propenyl)cyclopropane	631	001003-33-4	86
2	1,3-Pentadiene, 2,4-dimethyl-	627	001000-86-8	83
3	2,4-Hexadienal, (E,E)-	574	004488-48-6	81
4	1,4-Hexadiene, 4-methyl-	618	001116-90-1	80
5	1,4-Hexadiene, 5-methyl-	619	000763-88-2	72

 Peak Number 21 Rank in Relative Concentration 55

R.T.	Conc	Area	Relative to ISTD	R.T.
17.76	120.80 ng	6424385	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentenitrile	116729	013284-42-9	53
2	Pentanedinitrile	117500	000544-13-8	43
3	1,2-Butadiene	115994	000590-19-2	43
4	Propanenitrile	116002	000107-12-0	38
5	1-Butyne	115987	000107-00-6	38

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 22 Rank in Relative Concentration 13

R.T.	Conc	Area	Relative to ISTD	R.T.
18.37	1237.87 ng	65831251	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-methyl-	119371	000589-81-1	72
2	Octane, 3,4-dimethyl-	10253	015869-92-8	72
3	Hexane, 2,4-dimethyl-	3197	000589-43-5	50
4	Hexane, 2,3,5-trimethyl-	120933	001069-53-0	50
5	Hexane, 3-ethyl-	3194	000619-99-8	43

 Peak Number 23 Rank in Relative Concentration 16

R.T.	Conc	Area	Relative to ISTD	R.T.
18.54	1045.91 ng	55622775	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,4-Heptadiene	615	002454-31-1	83
2	2,3-Hexadiene, 2-methyl-	622	029212-09-7	76
3	2-Butenal, 2-ethenyl-	576	020521-42-0	74
4	2-Cyclopenten-1-one, 2-methyl-	593	001120-73-6	64
5	1,3-Pentadiene, 2,4-dimethyl-	627	001000-86-8	62

 Peak Number 24 Rank in Relative Concentration 21

R.T.	Conc	Area	Relative to ISTD	R.T.
19.21	681.44 ng	36239790	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptyne	602	001119-65-9	90
2	1,2-Hexadiene, 5-methyl-	616	013865-36-6	87
3	2,5-Heptadiene, (E,E)-	614	039619-60-8	64
4	2,4-Heptadiene, (E,E)-	613	002384-94-3	59
5	2,4-Hexadienal, (E,E)-	117577	004488-48-6	50

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 25 Rank in Relative Concentration 34

R.T.	Conc	Area	Relative to ISTD	R.T.
19.53	287.48 ng	15288474	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	TOLUOL, PERDEUTERO-	414	000000-00-0	52
2	.GAMMA.-PICOLINE-D7	439	029372-29-0	35
3	1-METHYL-5-AMINO-D2-1,2,4-TRIAZOLE	726	053778-60-2	22
4	2,3,4,5,6-D5-ANILINE	442	004165-61-1	9
5	2-Butenoic acid, 2-methyl-	117897	013201-46-2	9

 Peak Number 26 Rank in Relative Concentration 36

R.T.	Conc	Area	Relative to ISTD	R.T.
19.65	276.51 ng	14705355	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, methyl-	117438	000108-88-3	70
2	1,3,5-Cycloheptatriene	416	000544-25-2	58
3	1,5-Heptadien-3-yne	403	003511-27-1	50
4	Cyclobutene, 2-propenylidene-	404	052097-85-5	43
5	METHYLFLUVENE	405	000000-00-0	43

 Peak Number 27 Rank in Relative Concentration 51

R.T.	Conc	Area	Relative to ISTD	R.T.
19.76	143.36 ng	7624304	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Octene, (E)-	2643	014919-01-8	87
2	2-Octene	119055	000111-67-1	87
3	TRANS-1-BUTYL-2-METHYLCYCLOPROPANE	2732	038851-70-6	70
4	4-Octene, (Z)-	2644	007642-15-1	64
5	2-Octene, (E)-	2641	013389-42-9	62

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 28 Rank in Relative Concentration 38

R.T.	Conc	Area	Relative to ISTD	R.T.
19.99	265.93 ng	14142338	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Hexanone	1134	000591-78-6	91
2	2-Pentanone, 4-methyl-	118019	000108-10-1	80
3	Oxirane, 2-methyl-2-(1-methylethyl)	1198	072221-03-5	59
4	2-Hexanone, 4-hydroxy-5-methyl-3-pr	22328	061141-74-0	45
5	Propanal	116041	000123-38-6	37

 Peak Number 29 Rank in Relative Concentration 43

R.T.	Conc	Area	Relative to ISTD	R.T.
20.27	215.03 ng	11435488	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	SULFOLENE	3718	000116-88-8	43
2	1-Butyne	115986	000107-00-6	40
3	1,2-Butadiene	115992	000590-19-2	40
4	Hexanedinitrile	118674	000111-69-3	38
5	Pentanedinitrile	117500	000544-13-8	32

 Peak Number 30 Rank in Relative Concentration 72

R.T.	Conc	Area	Relative to ISTD	R.T.
20.71	46.13 ng	2453251	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	CIS/CIS-PHOTONEROL	14641	060619-36-5	38
2	(-)-Isopulegol	124287	000089-79-2	38
3	2-Methyl-6-methylene-1,7-octadiene-	13593	000000-00-0	27
4	7-Oxabicyclo[4.1.0]heptane, 3-oxira	9258	000106-87-6	25
5	5-Hepten-2-ol, 6-methyl-	5971	001569-60-4	25

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

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 Peak Number 31 Rank in Relative Concentration 48

R.T.	Conc	Area	Relative to ISTD	R.T.
21.04	159.19 ng	8465672	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 4-(1-methylethyl)-	10258	052896-87-4	38
2	3-Hexanone, 5-methyl-	119328	000623-56-3	37
3	Hexane, 2,5-dimethyl-	119379	000592-13-2	37
4	Heptane, 4-propyl-	10257	003178-29-8	36
5	Heptane, 3-ethyl-	6040	015869-80-4	35

 Peak Number 32 Rank in Relative Concentration 66

R.T.	Conc	Area	Relative to ISTD	R.T.
21.20	58.50 ng	3110934	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	5,6-DIHYDRO-4,5-DIMETHYL-2H-PYRAN-2	5219	030217-33-5	72
2	Cyclopropane, 1,2-dimethyl-3-methyl	116779	062338-02-7	58
3	2,5-OCTADIENE	2226	000000-00-0	50
4	3,4-Heptadiene	615	002454-31-1	50
5	1,5-Hexadiene, 2-methyl-	620	004049-81-4	50

 Peak Number 33 Rank in Relative Concentration 18

R.T.	Conc	Area	Relative to ISTD	R.T.
21.68	779.06 ng	41431430	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Silane, trichloroecicosyl-	99977	018733-57-8	50
2	Nonane	120904	000111-84-2	47
3	Butane, 2-iodo-2-methyl-	33461	000594-38-7	42
4	2-Undecanethiol, 2-methyl-	35630	010059-13-9	37
5	4-Pentenal, 2-methyl-	117709	005187-71-3	35

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

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 Peak Number 34 Rank in Relative Concentration 2

R.T.	Conc	Area	Relative to ISTD	R.T.
22.50	4362.75 ng	232015938	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptanone	119309	000106-35-4	80
2	3-Hexanone, 5-methyl-	119328	000623-56-3	53
3	METHYL ESTER OF 2-OXO-HEXANOIC ACID	10564	000000-00-0	40
4	2-Hexene, 2-methoxy-	3135	061142-45-8	38
5	Propanal, propylhydrazone	3039	019718-39-9	37

 Peak Number 35 Rank in Relative Concentration 9

R.T.	Conc	Area	Relative to ISTD	R.T.
22.65	1762.04 ng	93707218	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptanone	119303	000110-43-0	86
2	2-Hexanone, 5-methyl-	119322	000110-12-3	78
3	Pentanal, 2-methyl-	117981	000123-15-9	56
4	2-Hexanone, 4-methyl-	3096	000105-42-0	47
5	5-Undecanone	21602	033083-83-9	43

 Peak Number 36 Rank in Relative Concentration 68

R.T.	Conc	Area	Relative to ISTD	R.T.
23.17	53.30 ng	2834497	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Decene, 4-methyl-	124356	013151-29-6	50
2	Nonane, 4,5-dimethyl-	124562	017302-23-7	50
3	Decane	122727	000124-18-5	47
4	Nonane, 2-methyl-	10242	000871-83-0	46
5	Octane, 4-ethyl-	10247	015869-86-0	43

Library Search Compound Report

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 Misc :

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 Operator: Bonfoey
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 Peak Number 37 Rank in Relative Concentration 59

R.T.	Conc	Area	Relative to ISTD	R.T.
23.28	85.74 ng	4559741	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,3-dimethyl-	120917	003074-71-3	72
2	2-Butene, 1,4-diethoxy-	122926	007250-85-3	50
3	Heptane, 2,4-dimethyl-	6044	002213-23-2	50
4	Undecane, 2,4-dimethyl-	127262	017312-80-0	50
5	DECANE, 2,3,5,8-TETRAMETHYL-	34143	000000-00-0	38

 Peak Number 38 Rank in Relative Concentration 54

R.T.	Conc	Area	Relative to ISTD	R.T.
23.45	121.33 ng	6452384	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Propanone, diethylhydrazone	5905	016713-36-3	53
2	1-Piperidinecarboxaldehyde	119156	002591-86-8	46
3	Furan, tetrahydro-2,5-dipropyl-	15561	004457-62-9	38
4	p-Menthan-4-ol	15577	000470-65-5	27
5	CIS-MENTH-4-OL	15574	003239-02-9	27

 Peak Number 39 Rank in Relative Concentration 33

R.T.	Conc	Area	Relative to ISTD	R.T.
23.56	292.64 ng	15563084	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Isothiazole, 3,4-dimethyl-	2777	027330-46-7	38
2	Thiazole, 4,5-dimethyl-	2775	003581-91-7	38
3	2,5-Pyrrolidinedione, 1-methyl-	2760	001121-07-9	38
4	Thiazole, 2,4-dimethyl-	2773	000541-58-2	35
5	Isothiazole, 4,5-dimethyl-	119145	027330-47-8	35

Library Search Compound Report

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 Peak Number 40 Rank in Relative Concentration 17

R.T.	Conc	Area	Relative to ISTD	R.T.
23.67	936.73 ng	49816547	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	33981	074793-02-5	72
2	1H-1,2,4-Triazole-3,5-diamine	117824	001455-77-2	59
3	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID	10615	001123-28-0	59
4	1,3,2-Dioxaborolane, 2,4-diethyl-	5771	057633-63-3	45
5	1,4-Dioxaspiro[4.5]decan-8-ol	16050	022428-87-1	39

 Peak Number 41 Rank in Relative Concentration 15

R.T.	Conc	Area	Relative to ISTD	R.T.
23.78	1187.60 ng	63158082	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,2'-Bioxepane	33981	074793-02-5	59
2	3-METHYL-5-PYRAZOLONE-1-D1	736	053778-58-8	53
3	Hexane, 2,5-dimethyl-	3198	000592-13-2	50
4	4-METHYL-2-PYRROLIDINONE	996	000000-00-0	43
5	1-HYDROXYCYCLOHEXANECARBOXYLIC ACID	10615	001123-28-0	42

 Peak Number 42 Rank in Relative Concentration 11

R.T.	Conc	Area	Relative to ISTD	R.T.
24.00	1498.61 ng	79697609	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Penten-2-one, 4-methyl-	797	000141-79-7	64
2	2-Pentene, 4,4-dimethyl-, (Z)-	927	000762-63-0	59
3	Cyclopropane, 1,1,2,2-tetramethyl-	932	004127-47-3	59
4	tert-Butylketene	788	059005-31-1	59
5	3-BROMO-1,1,2-TRIMETHYL-CYCLOPROPAN	17429	000000-00-0	59

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 Peak Number 43 Rank in Relative Concentration 14

R.T.	Conc	Area	Relative to ISTD	R.T.
24.17	1228.64 ng	65340275	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	122727	000124-18-5	81
2	Octadecane, 1-chloro-	69962	003386-33-2	64
3	Heptane, 2,6-dimethyl-	120921	001072-05-5	53
4	Nonane	120905	000111-84-2	53
5	Octane, 2,4,6-trimethyl-	15639	062016-37-9	53

 Peak Number 44 Rank in Relative Concentration 10

R.T.	Conc	Area	Relative to ISTD	R.T.
24.32	1536.43 ng	81708819	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(5H)-FURANONE, 4,5,5-TRIMETHYL-	5202	000000-00-0	50
2	3,6-DIHYDRO-6,6-DIMETHYL-2H-PYRAN-2	5218	072649-03-7	47
3	Cyclohexane, 1,2,4-trimethyl-, (1.a	5470	007667-60-9	42
4	Oxazole, trimethyl-	2343	020662-84-4	38
5	2(3H)-Furanone, 5-ethenyldihydro-5-	120556	001073-11-6	37

 Peak Number 45 Rank in Relative Concentration 25

R.T.	Conc	Area	Relative to ISTD	R.T.
24.62	401.49 ng	21351739	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 4-methyl-	124557	002847-72-5	70
2	Decane, 2-methyl-	124555	006975-98-0	60
3	Heptane, 3,3,5-trimethyl-	122747	007154-80-5	50
4	2-Undecene, 5-methyl-	20682	056851-34-4	47
5	Undecane, 2-methyl-	126012	007045-71-8	43

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 Acq On : 10 Jan 99 5:56 pm
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 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

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 Peak Number 46 Rank in Relative Concentration 26

R.T.	Conc	Area	Relative to ISTD	R.T.
24.90	395.48 ng	21032286	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-BROMO-4-METHYL-1,2,4-TRIAZOLE	17081	016681-73-5	47
2	1,3-Isobenzofurandione, hexahydro-	124143	000085-42-7	32
3	1H-Pyrazole, 3-methyl-	116740	001453-58-3	10
4	1H-Imidazole, 2-methyl-	116746	000693-98-1	9
5	7,7a-Dihydro-cis-1H,3H,5H-thiazolo[	17093	095631-76-8	9

 Peak Number 47 Rank in Relative Concentration 39

R.T.	Conc	Area	Relative to ISTD	R.T.
25.07	250.34 ng	13313207	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, (1-methylbutyl)-	9494	004737-43-3	38
2	8-Nonen-2-one	9331	005009-32-5	35
3	2-Octanone	120847	000111-13-7	35
4	3-Hepten-2-one	119022	001119-44-4	27
5	3-Penten-1-ol, 2,2,4-trimethyl-	5979	005842-53-5	27

 Peak Number 48 Rank in Relative Concentration 56

R.T.	Conc	Area	Relative to ISTD	R.T.
25.29	100.78 ng	5359690	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 2-cyclohexyl-	33192	002883-05-8	38
2	DODECANE, 5-CYCLOHEXYL-	57567	013151-85-4	35
3	Cyclohexanone, 2,2-dimethyl-	120603	001193-47-1	30
4	Cyclohexane, (1-methylethyl)-	5458	000696-29-7	30
5	Cyclohexane, (1-methylpropyl)-	122510	007058-01-7	22

Library Search Compound Report

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Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

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 Peak Number 49 Rank in Relative Concentration 24

R.T.	Conc	Area	Relative to ISTD	R.T.
25.39	401.61 ng	21358303	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptanenitrile	118931	000629-08-3	83
2	2-Hexenoic acid, 3-hexenyl ester, (	32930	053398-87-1	40
3	1H-Imidazole-4-ethanamine	118920	000051-45-6	38
4	CYCLOPENTANE, 1-DEUTERO-2-METHYL-1-	2273	000000-00-0	14
5	Hexanenitrile	117637	000628-73-9	10

 Peak Number 50 Rank in Relative Concentration 49

R.T.	Conc	Area	Relative to ISTD	R.T.
25.55	156.38 ng	8316309	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentadecane, 2,6,10,14-tetramethyl-	132098	001921-70-6	38
2	Heptadecane, 2,6,10,15-tetramethyl-	72677	054833-48-6	27
3	1-Octadecanol	132225	000112-92-5	27
4	3-Hexene, 2,2-dimethyl-, (E)-	119080	000690-93-7	27
5	Hexadecane, 2,6,10,14-tetramethyl-	67906	000638-36-8	22

 Peak Number 51 Rank in Relative Concentration 4

R.T.	Conc	Area	Relative to ISTD	R.T.
25.73	3549.98 ng	188792038	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	121198	000104-76-7	64
2	1-Nonanol	122960	000143-08-8	47
3	1-Pentene, 4,4-dimethyl-	117800	000762-62-9	43
4	Octane, chloro-	11936	026655-49-2	38
5	Octane, 2-chloro-	11932	000628-61-5	38

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 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multipir: 1.00

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 Peak Number 52 Rank in Relative Concentration 12

R.T.	Conc	Area	Relative to ISTD	R.T.
25.89	1454.43 ng	77347958	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Azabicyclo[2.2.1]heptane	699	000279-24-3	78
2	Propanoic acid, 3-cyano-, methyl es	2755	004107-62-4	50
3	1,2-Nonadiene	120434	022433-33-6	33
4	Butanedinitrile, 2,3-dimethyl-	1881	016411-13-5	25
5	1-Pentene, 3-ethyl-	117792	004038-04-4	10

 Peak Number 53 Rank in Relative Concentration 6

R.T.	Conc	Area	Relative to ISTD	R.T.
26.36	2739.45 ng	145686987	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	124548	001120-21-4	91
2	Octadecane, 1-chloro-	69962	003386-33-2	78
3	Tridecane	127251	000629-50-5	78
4	Decane	122726	000124-18-5	72
5	Tetradecane	128274	000629-59-4	64

 Peak Number 54 Rank in Relative Concentration 69

R.T.	Conc	Area	Relative to ISTD	R.T.
26.55	50.10 ng	2664550	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	14851	000000-00-0	74
2	5-Undecene	124355	004941-53-1	70
3	1,1-DIMETHYL-2-PROPYLCYCLOHEXANE	14847	081983-71-3	68
4	4-Undecene, (E)-	14796	000693-62-9	60
5	3-Dodecene, (Z)-	20665	007239-23-8	49

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 Operator: Bonfoey
 Inst : 5972 INST
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 Peak Number 55 Rank in Relative Concentration 52

R.T.	Conc	Area	Relative to ISTD	R.T.
26.65	136.78 ng	7274036	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2-methyl-	124550	006975-98-0	55
2	Nonane, 3-methyl-	10243	005911-04-6	49
3	Undecane, 2-methyl-	126010	007045-71-8	49
4	Undecane, 5-methyl-	126018	001632-70-8	49
5	3,6-Dimethyldecane	21664	017312-53-7	49

 Peak Number 56 Rank in Relative Concentration 37

R.T.	Conc	Area	Relative to ISTD	R.T.
26.95	268.84 ng	14296947	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 4-methyl-	126017	002980-69-0	81
2	Nonane, 5-(2-methylpropyl)-	27796	062185-53-9	59
3	Nonane, 5-butyl-	27794	017312-63-9	53
4	Undecane, 2-methyl-	126011	007045-71-8	49
5	Dodecane, 2,6,10-trimethyl-	40638	003891-98-3	47

 Peak Number 57 Rank in Relative Concentration 23

R.T.	Conc	Area	Relative to ISTD	R.T.
27.35	492.87 ng	26211456	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, decahydro-	122339	000091-17-8	89
2	Naphthalene, decahydro-, trans-	122344	000493-02-7	55
3	2-Cyclohexen-1-one, 4,4,6-trimethyl	8624	013395-73-8	53
4	Naphthalene, decahydro-, cis-	122334	000493-01-6	53
5	9-Borabicyclo[3.3.1]nonane, 9-hydro	8584	063366-65-4	45

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Vial: 30
 Operator: Bonfoey
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 Peak Number 58 Rank in Relative Concentration 50

R.T.	Conc	Area	Relative to ISTD	R.T.
27.84	156.36 ng	8315375	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 3-methyl-	21651	001002-43-3	83
2	DIETHYL(DECYLOXY)-BORANE	46850	000000-00-0	59
3	Undecane, 2,7-dimethyl-	27746	017301-24-5	53
4	Decane, 1-iodo-	62498	002050-77-3	53
5	Undecane, 5,7-dimethyl-	27764	017312-83-3	53

 Peak Number 59 Rank in Relative Concentration 61

R.T.	Conc	Area	Relative to ISTD	R.T.
27.96	73.92 ng	3931259	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,4-Oxathian-2-one	119713	005512-70-9	90
2	Bicyclo[2.2.1]heptan-2-one	118864	000497-38-1	90
3	1,6-Octadiene, 2,7-dimethyl-	122295	040195-09-3	90
4	Cyclohexanecarboxylic acid, 2-hydro	39328	024372-06-3	83
5	Cyclohexanone, 2,2-dimethyl-	120603	001193-47-1	83

 Peak Number 60 Rank in Relative Concentration 44

R.T.	Conc	Area	Relative to ISTD	R.T.
28.10	168.43 ng	8957052	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, pentyl-	14841	004292-92-6	83
2	Cyclohexane, 1-propenyl-	120440	005364-83-0	72
3	Cyclohexane, undecyl-	51966	054105-66-7	72
4	Cyclohexane, (1-methylethyl)-	120632	000696-29-7	72
5	Cyclohexane, octyl-	33191	001795-15-9	64

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Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 61 Rank in Relative Concentration 20

R.T.	Conc	Area	Relative to ISTD	R.T.
28.26	728.70 ng	38753228	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(1H)-Pyrimidinone, 4-amino-	118915	000071-30-7	45
2	3-Buten-2-one, 4-(1-aziridinyl)-	2342	018277-57-1	43
3	2-ETHYL-5-PENNYL-5-PYRROLINE	19967	061772-94-9	43
4	Oxazole, trimethyl-	118925	020662-84-4	43
5	4(1H)-Pyridinone, 2,3-dihydro-1-met	2353	035488-00-7	38

 Peak Number 62 Rank in Relative Concentration 19

R.T.	Conc	Area	Relative to ISTD	R.T.
28.61	771.30 ng	41018361	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2,6-dimethyl-	127264	017301-23-4	97
2	Dodecane, 6-methyl-	27736	006044-71-9	86
3	Undecane, 3,6-dimethyl-	27753	017301-28-9	81
4	Decane, 2,5,9-trimethyl-	27784	062108-22-9	59
5	Decane, 2,6,8-trimethyl-	27787	062108-26-3	58

 Peak Number 63 Rank in Relative Concentration 32

R.T.	Conc	Area	Relative to ISTD	R.T.
28.77	320.61 ng	17050251	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-AMINO-1,2,4-TRIAZINE	117555	001120-99-6	59
2	2-Cyclohexen-1-one	117595	000930-68-7	40
3	1H-Imidazole, 2,4-dimethyl-	117574	000930-62-1	38
4	4(1H)-Pyrimidinone	546	004562-27-0	32
5	1H-Pyrazole, 1-ethyl-3,5-dimethyl-	4742	017629-26-4	32

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D

Acq On : 10 Jan 99 5:56 pm

Sample : VS006-115-TS30

Misc :

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M

Title : TST Calibration

Library : C:\DATABASE\WILEY138.L

 Peak Number 64 Rank in Relative Concentration 28

R.T.	Conc	Area	Relative to ISTD	R.T.
28.94	357.24 ng	18998321	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexanone, 5-methyl-2-(1-methyl	13692	015932-80-6	45
2	(-)-TRANS-CARANON-(3)	124001	004176-04-9	43
3	4,7-Methano-1H-inden-1-ol, octahydr	13840	055255-97-5	43
4	Naphthalene, decahydro-2-methyl-	124049	002958-76-1	43
5	CIS-SYN-2-METHYL-DECAHYDRONAPHTHALE	13879	000000-00-0	43

 Peak Number 65 Rank in Relative Concentration 31

R.T.	Conc	Area	Relative to ISTD	R.T.
29.44	321.89 ng	17118600	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2(1H)-Naphthalenone, octahydro-4a-m	125593	000938-06-7	45
2	BORNANE-2,6-DIONE	19493	001935-17-7	43
3	Cyclododecane	125805	000294-62-2	30
4	Cyclopentane, 1,1,3-trimethyl-	119103	004516-69-2	25
5	Cyclopentane, 2-isopropyl-1,3-dimet	9499	032281-85-9	20

 Peak Number 66 Rank in Relative Concentration 22

R.T.	Conc	Area	Relative to ISTD	R.T.
29.75	680.94 ng	36213215	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 7-methyl-	128289	026730-14-3	87
2	Nonane, 2,3-dimethyl-	15628	002884-06-2	72
3	Heptane, 5-ethyl-2-methyl-	10261	013475-78-0	72
4	Heptadecane, 7-methyl-	58321	020959-33-5	72
5	Hexadecane, 2,6,10-trimethyl-	62976	055000-52-7	64

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D

Acq On : 10 Jan 99 5:56 pm

Sample : VS006-115-TS30

Misc :

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M

Title : TST Calibration

Library : C:\DATABASE\WILEY138.L

 Peak Number 67 Rank in Relative Concentration 45

R.T.	Conc	Area	Relative to ISTD	R.T.
30.09	166.31 ng	8844461	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, decyl-	39719	001795-21-7	49
2	Cyclopentane, 1-butyl-2-propyl-	20759	062199-50-2	46
3	Bicyclo[3.1.1]heptan-3-one, 2,6,6-t	124028	015358-88-0	43
4	6-Octen-1-ol, 3,7-dimethyl-, format	127181	000105-85-1	43
5	7-Octenal, 3,7-dimethyl-	14550	000141-26-4	41

 Peak Number 68 Rank in Relative Concentration 30

R.T.	Conc	Area	Relative to ISTD	R.T.
30.26	322.74 ng	17163778	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, (2-methylpropyl)-	5449	003788-32-7	64
2	Cyclohexane, 2-butyl-1,1,3-trimethyl	26872	054676-39-0	56
3	Cyclohexane, (1-methylethyl)-	120634	000696-29-7	49
4	Cyclohexane, 1-propenyl-	120440	005364-83-0	47
5	Cyclohexane, 2-propenyl-	4917	002114-42-3	47

 Peak Number 69 Rank in Relative Concentration 1

R.T.	Conc	Area	Relative to ISTD	R.T.
30.44	6795.80 ng	361408193	Hexafluorobenzene	13.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	126006	000112-40-3	86
2	Tridecane	127251	000629-50-5	64
3	Tetradecane	128275	000629-59-4	53
4	Pentadecane	129233	000629-62-9	47
5	Octane, 2,4,6-trimethyl-	15639	062016-37-9	43

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 70 Rank in Relative Concentration 41

R.T.	Conc	Area	Relative to ISTD	R.T.
31.33	231.44 ng	12307991	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexadecanol, 3,7,11,15-tetramethyl	133427	000645-72-7	30
2	4-Undecanone	21601	014476-37-0	22
3	Octane, 5-ethyl-2-methyl-	15633	062016-18-6	18
4	2,4-Pyridinedicarboxylic acid, dime	32261	025658-36-0	14
5	Nonane, 4,5-dimethyl-	15632	017302-23-7	14

 Peak Number 71 Rank in Relative Concentration 60

R.T.	Conc	Area	Relative to ISTD	R.T.
31.75	84.83 ng	4511481	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonanenitrile	8963	002243-27-8	46
2	Cyclohexanhexanol	27694	004354-58-9	35
3	Isomer A of 1,1,6-Trimethyldecahydr	25875	081983-73-5	27
4	Naphthalene, decahydro-1,2-dimethyl	19757	003604-14-6	25
5	2,4-Hexadiene, 2,5-dimethyl-	118889	000764-13-6	25

 Peak Number 72 Rank in Relative Concentration 35

R.T.	Conc	Area	Relative to ISTD	R.T.
31.83	277.45 ng	14755159	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 5-propyl-	27766	017312-62-8	74
2	Nonane, 3-methyl-5-propyl-	27798	031081-18-2	72
3	Dodecane, 2,6,10-trimethyl-	40638	003891-98-3	72
4	Dodecane, 2,6,11-trimethyl-	40639	031295-56-4	64
5	Dodecane, 2,7,10-trimethyl-	40640	074645-98-0	64

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\390106\39010637.D
 Acq On : 10 Jan 99 5:56 pm
 Sample : VS006-115-TS30
 Misc :

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\AREA.M
 Title : TST Calibration
 Library : C:\DATABASE\WILEY138.L

 Peak Number 73 Rank in Relative Concentration 5

R.T.	Conc	Area	Relative to ISTD	R.T.
32.32	2935.50 ng	156113090	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	128277	000629-59-4	98
2	Tridecane	127255	000629-50-5	93
3	Heptadecane	130827	000629-78-7	91
4	Pentadecane	129233	000629-62-9	90
5	Hexadecane	130127	000544-76-3	86

 Peak Number 74 Rank in Relative Concentration 42

R.T.	Conc	Area	Relative to ISTD	R.T.
32.81	229.77 ng	12219555	Hexafluorobenzene	13.76
Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-Dodecanone	27668	006137-26-4	60
2	5-Dodecanone	27669	019780-10-0	55
3	4-Undecanone, 10-methyl-	27675	029379-12-2	55
4	4-Undecanone	21601	014476-37-0	53
5	Oxirane, 2-ethyl-2-methyl-	90	030095-63-7	30

Quantitation Report

Data File : C:\HPCHEM\3\39010643.D
 Acq On : 11 Jan 99 1:42 pm
 Sample : VS006-135-TS62
 Misc :
 Quant Time: Jan 23 22:32 1999

Vial: 30
 Operator: Bonfoey
 Inst : 5972 INST
 Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M
 Title :
 Last Update : Tue Jan 12 11:03:31 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.39	84	6092628	200.00	ng	0.00
27) Ethylbenzene-d10	22.14	98	8301288	200.00	ng	0.00
37) Dodecane-d26	27.97	66	556682	200.00	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	%Recovery
9) Hexafluorobenzene	13.72	186	5335261	259.69	ng	80.65%
21) Toluene-d8	19.51	98	9516436	331.55	ng	88.18%
32) Bromobenzene-d5	24.90	82	4397660	287.46	ng	93.33%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Methanol	8.31	31	764	0.11	ng	1
3) Ethanol	9.71	31	598	0.05	ng	4
4) Acetone	11.07	43	42419	1.54	ng	92
5) Acetonitrile	11.60	41	813	0.08	ng	100
6) Dichloromethane	12.34	84	240	0.03	ng	1
7) 1-Propanol	12.64	31	175	0.01	ng	1
8) n-Hexane	12.97	57	758	0.07	ng	42
10) Butanal	14.11	72	428	0.20	ng	99
11) Propanenitrile	14.38	54	88	0.01	ng	1
12) Chloroform	14.97	83	550	0.03	ng	57
13) Tetrahydrofuran	15.42	42	1499	0.17	ng	94
15) n-Heptane	16.12	43	638	0.06	ng	1
16) Tetrachloroethane	16.22	117	71	0.00	ng	1
17) Benzene	16.47	78	1108	0.04	ng	50
18) 2-Pentanone	17.04	43	461	0.02	ng	68
19) Butanenitrile	17.30	41	1421	0.10	ng	100
20) n-Octane	19.05	85	469	0.08	ng	1
22) Toluene	19.51	91	961	0.03	ng	87
23) 2-Hexanone	19.91	43	727	0.04	ng	39
24) Pentanenitrile	20.25	41	616	0.05	ng	1
25) Tetrachloroethylene	20.84	166	450	0.03	ng	26
26) n-Nonane	21.68	57	733	0.06	ng	32
30) o-Xylene	23.42	91	1282	0.04	ng	91
38) n-Dodecane	28.41	57	122316	56.85	ng	45
39) n-Tridecane	30.43	57	214913	71.91	ng	52

(#) = qualifier out of range (m) = manual integration
 39010643.D 390106CA.M Sat Jan 23 22:33:05 1999 TST

File : C:\HPCHEM\1\DATA\390106\39010643.D
Operator : Bonfoey
Acquired : 11 Jan 99 1:42 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-135-TS62
Misc Info :
Vial Number: 30

Library Search Compound Report

Data File	: C:\HPCHEM\1\DATA\390106\39010643.D	Vial	: 30
Acq On	: 11 Jan 99 1:42 pm	Operator	: Bonfoey
Sample	: VS006-135-TS62	Inst	: 5972 INST
Misc	:	Multiplr	: 1.00
Method	: C:\HPCHEM\2\METHODS\AREA.M		
Title	: TST Calibration		
Library	: WILEY138.L		

No Library Search Compounds Detected

39010643.D AREA.M Mon Feb 08 14:43:49 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010638.D

Acq On : 10 Jan 99 6:37 pm

Sample : VS006-140-TS35

Misc :

Quant Time: Jan 23 22:17 1999

Vial: 30

Operator: Bonfoey

Inst : 5972 INST

Multiplr: 1.00

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.39	84	5623530	200.00	ng	0.00
27) Ethylbenzene-d10	22.14	98	7638569	200.00	ng	0.00
37) Dodecane-d26	27.97	66	461376	200.00	ng	0.00

System Monitoring Compounds

						%Recovery
9) Hexafluorobenzene	13.72	186	4880496	257.37	ng	79.93%
21) Toluene-d8	19.51	98	8656181	326.74	ng	86.90%
32) Bromobenzene-d5	24.89	82	3970534	282.06	ng	91.58%

Target Compounds

						Qvalue
2) Methanol	8.34	31	735	0.11	ng	# 60
3) Ethanol	9.70	31	925	0.09	ng	# 1
4) Acetone	11.08	43	48874	1.92	ng	m 92
5) Acetonitrile	11.58	41	1477	0.15	ng	100
6) Dichloromethane	12.19	84	329	0.05	ng	84
7) 1-Propanol	12.59	31	263	0.02	ng	# 1
8) n-Hexane	12.98	57	1667	0.18	ng	# 51
10) Butanal	14.17	72	557	0.28	ng	97
11) Propanenitrile	14.38	54	670	0.09	ng	# 1
12) Chloroform	14.99	83	373	0.02	ng	# 81
13) Tetrahydrofuran	15.50	42	480	0.06	ng	95
15) n-Heptane	16.07	43	1864	0.18	ng	# 56
16) Tetrachloroethane	16.21	117	191	0.01	ng	# 8
18) 2-Pentanone	17.05	43	636	0.03	ng	# 1
19) Butanenitrile	17.30	41	582	0.04	ng	100
20) n-Octane	19.05	85	146	0.03	ng	# 1
22) Toluene	19.66	91	1210	0.04	ng	97
23) 2-Hexanone	19.97	43	1597	0.09	ng	# 39
24) Pentanenitrile	20.25	41	582	0.06	ng	# 8
25) Tetrachloroethylene	20.85	166	217	0.02	ng	# 14
26) n-Nonane	21.67	57	784	0.01	ng	# 13
30) o-Xylene	23.26	91	354	0.01	ng	87
38) n-Dodecane	28.42	57	182771	70.87	ng	m 14
39) n-Tridecane	30.44	57	363197	129.32	ng	m 50

(#) = qualifier out of range (m) = manual integration

39010638.D 390106CA.M Sun Jan 24 20:22:13 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010638.D
Operator : Bonfoey
Acquired : 10 Jan 99 6:37 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-140-TS35
Misc Info :
Vial Number: 30

Library Search Compound Report

Data File	: C:\HPCHEM\1\DATA\390106\39010638.D	Vial	: 30
Acq On	: 10 Jan 99 6:37 pm	Operator	: Bonfoey
Sample	: VS006-140-TS35	Inst	: 5972 INST
Misc	:	Multiplr	: 1.00
Method	: C:\HPCHEM\2\METHODS\AREA.M		
Title	: TST Calibration		
Library	: WILEY138.L		

No Library Search Compounds Detected

39010638.D AREA.M Mon Feb 08 14:44:20 1999

Quantitation Report

Data File : C:\HPCHEM\3\39010609.D

Vial: 9

Acq On : 6 Jan 99 5:49 pm

Operator: Bonfoey

Sample : VS006-MPB-TS63

Inst : 5972 INST

Misc :

Multiplr: 1.00

Quant Time: Jan 24 19:36 1999

Method : C:\HPCHEM\3\390106CA.M

Title :

Last Update : Tue Jan 12 11:03:31 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev(Min)
1) Benzene-d6	16.37	84	3434209	200.00	ng	-0.02
27) Ethylbenzene-d10	22.13	98	4297970	200.00	ng	-0.01
37) Dodecane-d26	28.02	66	66441	200.00	ng	0.05

System Monitoring Compounds

	R.T.	Q Ion	Response	Conc	Units	%Recovery
9) Hexafluorobenzene	13.70	186	3773563	325.86	ng	101.20%
21) Toluene-d8	19.50	98	6363303	393.31	ng	104.60%
32) Bromobenzene-d5	24.88	82	2975821	375.71	ng	121.98%

Target Compounds

	R.T.	Q Ion	Response	Conc	Units	Qvalue
2) Methanol	8.34	31	3605	0.91	ng	# 21
3) Ethanol	9.69	31	1190	0.18	ng	# 25
4) Acetone	11.13	43	362	0.02	ng	# 1
5) Acetonitrile	11.59	41	390	0.06	ng	100
6) Dichloromethane	12.37	84	292	0.07	ng	90
7) 1-Propanol	12.58	31	667	0.10	ng	# 10
8) n-Hexane	12.95	57	265	0.05	ng	# 41
10) Butanal	14.13	72	144	0.12	ng	96
11) Propanenitrile	14.37	54	263	0.06	ng	# 1
12) Chloroform	14.98	83	484	0.04	ng	# 48
13) Tetrahydrofuran	15.18	42	283	0.06	ng	92
15) n-Heptane	16.32	43	1057	0.17	ng	93
16) Tetrachloroethane	15.82	117	147	0.01	ng	90
17) Benzene	16.41	78	5879	0.36	ng	95
18) 2-Pentanone	17.03	43	434	0.03	ng	# 85
19) Butanenitrile	17.29	41	365	0.04	ng	100
20) n-Octane	19.05	85	385	0.11	ng	# 1
22) Toluene	19.24	91	339	0.02	ng	91
23) 2-Hexanone	19.88	43	544	0.05	ng	# 39
24) Pentanenitrile	19.94	41	618	0.10	ng	97
25) Tetrachloroethylene	20.62	166	283	0.04	ng	93
30) o-Xylene	23.31	91	305	0.02	ng	94

(#) = qualifier out of range (m) = manual integration

39010609.D 390106CA.M

Sun Jan 24 19:37:33 1999

TST

File : C:\HPCHEM\1\DATA\390106\39010609.D
Operator : Bonfoey
Acquired : 6 Jan 99 5:49 pm using AcqMethod 390106AQ
Instrument : 5972 INST
Sample Name: VS006-MPB-TS63
Misc Info :
Vial Number: 9

Library Search Compound Report

Data File	: C:\HPCHEM\1\DATA\390106\39010609.D	Vial	: 9
Acq On	: 6 Jan 99 5:49 pm	Operator	: Bonfoey
Sample	: VS006-MPB-TS63	Inst	: 5972 INST
Misc	:	Multiplr	: 1.00
Method	: C:\HPCHEM\2\METHODS\AREA.M		
Title	: TST Calibration		
Library	: WILEY138.L		

No Library Search Compounds Detected

39010609.D AREA.M Mon Feb 08 14:44:56 1999

Library Searched : C:\DATABASE\WILEY138.L
Quality : 81
ID : 1-Propene

Library Searched : C:\DATABASE\WILEY138.L
Quality : 90
ID : 1-Propene, 2-methyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 58
ID : Butane, 2-methyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 64
ID : Pentane, 2-methyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 94
ID : 1-Hexene

Library Searched : C:\DATABASE\WILEY138.L
Quality : 52
ID : 2-Hexene

Library Searched : C:\DATABASE\WILEY138.L
Quality : 87
ID : 2-Butanone

Library Searched : C:\DATABASE\WILEY138.L
Quality : 76
ID : 3-Heptene

Library Searched : C:\DATABASE\WILEY138.L
Quality : 95
ID : 2-Heptene

Library Searched : C:\DATABASE\WILEY138.L
Quality : 95
ID : 2-Heptene

Library Searched : C:\DATABASE\WILEY138.L
Quality : 46
ID : Cyclopropane, butyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 90
ID : 2,4-Hexadienal

Library Searched : C:\DATABASE\WILEY138.L
Quality : 52
ID : 2-Pentenitrile

Library Searched : C:\DATABASE\WILEY138.L
Quality : 72
ID : Heptane, 3-methyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 46
ID : 2,3-Hexadiene, 2-methyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 90
ID : Heptane, 3-methylene-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 46
ID : 2-Heptyne

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Please view the native document
for the original page.

Library Searched : C:\DATABASE\WILEY138.L
Quality : 72
ID : Butane, 1,1'-oxybis-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 91
ID : 4-Heptanone

Library Searched : C:\DATABASE\WILEY138.L
Quality : 58
ID : 3-Heptanone

Library Searched : C:\DATABASE\WILEY138.L
Quality : 33
ID : 1,3-Diethyl-1,4-epoxybutane

Library Searched : C:\DATABASE\WILEY138.L
Quality : 36
ID : Furan, 2,5-diethyltetrahydro-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 62
ID : Decane, 4-methyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 64
ID : 1-Hexanol, 2-ethyl-

Library Searched : C:\DATABASE\WILEY138.L

Quality : 80

ID : Cyclohexanone, 5-methyl-2-(1-methylethyl)-, cis-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 95
ID : Naphthalene, decahydro-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 50
ID : Cyclohexane, pentyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 58
ID : Undecane, 2,6-dimethyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 83
ID : Naphthalene, decahydro-2-methyl-

Library Searched : C:\DATABASE\WILEY138.L

Quality : 55

ID : Naphthalene, decahydro-2,6-dimethyl-

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Please view the native document
for the original page.

Library Searched : C:\DATABASE\WILEY138.L
Quality : 53
ID : Naphthalene, decahydro-1,6-dimethyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 20
ID : Cyclohexane, 2-butyl-1,1,3-trimethyl-

Library Searched : C:\DATABASE\WILEY138.L
Quality : 96
ID : Tetradecane

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2.4 Total Non-Methane Organic Carbon in SUMMA Canister Samples (T0-12 Method)

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2.4.1 Narrative

This section contains descriptions of the analytical method and quality assurance used during analysis.

2.4.1.1 Determination of Total Non-Methane Organic Carbon (TO-12 Method) in SUMMA Canister Samples

This method is based on the U.S. Environmental Protection Agency TO-12 method for the analysis of samples collected in SUMMA canisters. A tank vapor subsample is drawn from the SUMMA canister through a cryogenic vapor concentration system. The concentrated subsample is subsequently analyzed by gas chromatography - flame ionization detection. The chromatograph is calibrated to provide a gross carbon-hydrogen bond response using a multilevel calibration curve generated with a commercially supplied propane standard. The calibration is verified with a propane standard traceable to NIST.

The instrumentation consists of a Hewlett-Packard model 5890 Series II gas chromatograph equipped with a fused silica capillary column and a flame ionization detector.

To facilitate subsampling of the SUMMA canister, the canister was pressurized to 2.0 atmospheres. This pressurization step diluted the sample by a factor of 2.0; the reported concentrations are corrected for sample dilution.

2.4.1.2 Total Non-methane Organic Carbon (TO-12 Method) Analytical Quality Assurance

Method LA-523-407, Rev. A-0, is used for quantitative gas chromatographic analysis of total non-methane organic carbon in waste tank headspace samples collected in SUMMA canisters. The method does not measure specific analytes but integrates all non-methane organic compounds as a single, reportable analyte.

The gas chromatographic system is calibrated initially prior to starting sample analysis and each time continuing calibration criteria cannot be met for subsequent analysis. At least 5 propane standard concentration levels are used for initial calibration, or ICAL. The validity of the initial calibration is demonstrated by meeting deviation or curve fit criteria and through the satisfactory analysis of a "check standard" gas, the ICVS. Initial calibration gas blanks are measured to demonstrate system cleanliness. Each day that the GC system is used for analysis, the continuing calibration of the system is verified through the measurement of a mid-level check propane standard, or CCVS. The measurement must meet criteria for percent recovery of the propane standard. Continuing calibration blanks, CCBs, are used to document the continued cleanliness of the GC system.

With each tank sample reporting batch, the analysis of a laboratory control sample (LCS) and LCS duplicate is conducted. The recovery of the LCS analyte must meet accuracy (percent recovery - %R) and precision (relative percent difference - RPD) requirements. Also, with each tank sample reporting batch, an actual tank sample is analyzed in duplicate, the "laboratory sample duplicate". The RPD between the sample analyte concentrations measured above reporting limits and its laboratory sample duplicate must meet precision requirement or the resulting data is flagged.

No deviations from the analytical QC procedures occurred.

2.4.2 Result Summary Tables

The result summary tables summarize the results of the Total Non-methane Organic Carbon analysis. All reported values have been corrected to 25 °C and 1 atmosphere pressure.

TNMOC Analysis

Waste Tank

C-106

Laboratory Sample Number	VS006	Sample Analysis Date	1/28/99	Laboratory Notebook Number	WHC-N-1319 pages		Sample Datafile Identifier	21690128A
Target Analyte	Sample Number	Expected Retention Time (min)	Sample Retention Time (min)	Diluted Sample Concentration (ppbv)	Sample Concentration (ppmv)	Diluted Sample Concentration (mg/m ³)	Sample Concentration (mg/m ³)	Flags
TNMOC	VS006-002-S019	1.70	1.70	75	0.15	0.037	0.074	M
	VS006-010-S036	1.70	1.70	1472	2.9	0.72	1.4	
	VS006-018-S045	1.70	1.70	15402	31	7.6	15	
	VS006-025-S064	1.70	1.70	632	1.3	0.31	0.62	
	VS006-033-S053	1.70	1.70	38537	77	19	38	E
	VS006-034-S057	1.70	1.70	39091	78	19	38	E
	VS006-041-S074	1.70	1.70	38284	77	19	38	E
	VS006-041-S074 Dup.	1.70	1.70	31063	62	15	30	
	VS006-042-S075	1.70	1.70	35522	71	17	35	
	VS006-050-S077	1.70	1.70	35051	70	17	34	
	VS006-051-S078	1.70	1.70	33554	67	16	33	
	VS006-058-S080	1.70	1.70	38473	77	19	38	E
	VS006-059-S081	1.70	1.70	32244	64	16	32	
	VS006-067-S082	1.70	1.70	32896	66	16	32	
	VS006-068-S091	1.70	1.70	32916	66	16	32	
	VS006-128-S096	1.70	1.70	26361	53	13	26	

Notes:

The samples were diluted to 2.0 atmospheres when received by the Analytical Laboratory.

Dilution Factor 2.00

Flags:

- E Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.
- M Target analyte was absent (not detected) in sample.

TNMOC Analysis

Waste Tank

AY-101
AZ-702Laboratory
Sample
NumberVS102
VS702Sample
Analysis
Date

1/14/99

Laboratory
Notebook
NumberWHC-N-1319
pagesSample
Datafile
Identifier

67

21690114

Target
Analyte
NumberSample
NumberExpected
Retention
Time (min)Sample
Retention
Time (min)Diluted
Sample
Concentration (ppbv)Sample
Concentration (ppmv)Diluted
Sample
Concentration (mg/m³)Sample
Concentration (mg/m³)

Flags

TNMOC

VS102-003-S021

1.00

1.007

691

1.4

0.34

0.68

VS102-006-S022

1.00

1.007

1444

2.9

0.71

1.4

VS102-009-S034

1.00

1.007

1912

3.8

0.94

1.9

E

VS102-012-S041

1.00

1.007

2668

5.3

1.3

2.6

VS702-003-S061

1.00

1.007

456

0.91

0.22

0.45

VS702-005-S062

1.00

1.007

128

0.26

0.063

0.13

*

VS702-008-S063

1.00

1.007

426

0.85

0.21

0.42

VS702-008-S063 Dup

1.00

1.007

470

0.94

0.23

0.46

VS702-011-S068

1.00

1.007

465

0.93

0.23

0.46

VS702-014-S070

1.00

1.007

432

0.86

0.21

0.42

Notes:

The sample was diluted to 2 atmospheres when received by the Analytical Laboratory

Dilution Factor

2.00

2.4.3 Quality Control Summary Table

The QC summary table describes each analysis by run number. The table includes the following:

- CCVS results
- LCS and duplicate results
- Analytical results of the waste tank sample.

C-106
TNMOC

Project Number: VS006

Instrument #6. TNMOC (TO-12) Gas GC, located in Analysis Trailer #2

Data File: 21690128A

Instrument Method:

21690128.MTH

Data Acquired on: 1/28/99

Analyst:

L.A. Pingel

Laboratory Notebook:

WHC-N-1319

page 69

FLAGS

141-1-22.01	Zero Air					
1319-1-86.02	CCVS @	1700 ppbv		1720 ppbv	4.53 %D	P
1319-1-86.02	LCS Dup @	1700 ppbv		1739 ppbv	5.85 %D	P
141-1-22.01	Zero Air					

Sample Number	Run #	Analyzed Concentrations			FLAGS
		ppbv	mg/m ³		
VS006-002-S019	012 R 1001 .D	-36	<0.074		M
VS006-010-S036	013 R 1001 .D	1472	0.722		
VS006-018-S045	014 R 1001 .D	15402	7.6		
VS006-025-S064	015 R 1001 .D	632	0.31		
VS006-033-S053	016 R 1001 .D	38537	18.9		E
VS006-034-S057	017 R 1001 .D	39091	19.2		E
VS006-041-S074	018 R 1001 .D	38284	18.8		E
VS006-041-S074 Dup	019 R 1001 .D	31063	15.2		
VS006-042-S075	020 R 1001 .D	35522	17.4		
VS006-050-S077	021 R 1001 .D	35051	17.2		
VS006-051-S078	022 R 1001 .D	33554	16.5		
VS006-058-S080	023 R 1001 .D	38473	18.9		E
VS006-059-S081	024 R 1001 .D	32244	15.8		
VS006-067-S082	025 R 1001 .D	32896	16.1		
VS006-068-S091	026 R 1001 .D	32916	16.2		
VS006-128-S096	027 R 1001 .D	26361	12.9		

The samples were diluted to 2.0 atmospheres when received by the Analytical Laboratory.

Flags:

- P Passed calibration verification
 E Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.
 M Target analyte was absent (not detected) in sample.

HNF-3949 Rev. 0

AY-102 & AZ-702
TNMOC

Project Number: VS102
VS702

Instrument #6:

TNMOC (TO-12) Gas GC, located in Analysis Trailer #2

Data File:

2\690114

Instrument Method:

2\690114.MTH

Data Acquired on:

1/14/99

Analyst:

L.A. Pingel

Laboratory Notebook:

WHC-N-1319

page 67

FLAGS

141-1-22.01

Zero Air

1319-1-66.01

CCVS @ 500 ppbC

522 ppbC

3.39 %D

P

1319-1-66.01

LCS Dup @ 500 ppbC

575 ppbC

13.30 %D

P

141-1-22.01

Zero Air

Sample Number

Run #

Analyzed Concentrations

ppbv

mg/m³

VS102-003-S021

014 R 0101 .D

691

0.339

VS102-006-S022

015 R 0101 .D

1444

0.709

VS102-009-S034

019 R 0101 .D

1912

0.939

VS102-012-S041

023 R 0101 .D

2668

1.31

E

VS702-003-S061

016 R 0101 .D

456

0.224

VS702-005-S062

017 R 0101 .D

128

0.063

VS702-008-S063

021 R 0101 .D

426

0.209

VS702-008-S063 Dup

022 R 0101 .D

470

0.230

VS702-011-S068

020 R 0101 .D

465

0.228

VS702-014-S070

018 R 0101 .D

432

0.212

Flags

- P Passed Calibration Verification
- E Target analyte concentration reported is greater than the highest calibration standard, but the analysis could not be repeated.

2.4.4 Supporting Data

This section contains chromatograms and quantitation reports for all analyses including waste tank samples, calibration verifications, and blanks. This section is organized by tank and analysis run numbers.

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690128A\008R0801.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 8
 Sample Name : ICB Injection Number : 1
 Run Time Bar Code: Sequence Line : 8
 Acquired on : 28 Jan 99 11:19 AM Instrument Method: 690128.MTH
 Report Created on: 29 Jan 99 11:02 AM Analysis Method : 690128.MTH
 Last Recalib on : 29 JAN 99 09:38 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\008R0801.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	22381	BB + 0.000	1	-84.011	TNMOC	

=====

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690128A\009R0901.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 9
 Sample Name : ICVS Injection Number : 1
 Run Time Bar Code: Sequence Line : 9
 Acquired on : 28 Jan 99 11:26 AM Instrument Method: 690128A.MTH
 Report Created on: 29 Jan 99 11:03 AM Analysis Method : 690128.MTH
 Last Recalib on : 29 JAN 99 09:38 AM Sample Amount : 0
 Multiplier : 1 ISD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\009R0901.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	1215099	BB + 0.000	1	1720.379	TNMOC	

=====

1319 -1-66.02 @ 1700 ppbC

$$RF = \frac{1700}{1215099} = 1.3991 \text{ E-3}$$

$$\%D = 4.53 \%$$

$$ARF = 1.3385 \text{ E-3}$$

LAP 2/2/99

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690128A\010R0901.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 10
 Sample Name : ICVS Dup Injection Number : 1
 Run Time Bar Code: Sequence Line : 9
 Acquired on : 28 Jan 99 11:38 AM Instrument Method: 690128A.MTH
 Report Created on: 29 Jan 99 11:03 AM Analysis Method : 690128.MTH
 Last Recalib on : 29 JAN 99 09:38 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\010R0901.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	1227362	BB + 0.000	1	1738.932	TNMOC	

=====

1319-1-66.02 @ 1700 ppbC

$$RF = \frac{1738.9}{1227362} = 1.416\% \text{ E-3}$$

$$\%D = 5.85\%$$

$$ARF = 1.3385 \text{ E-3}$$

LAP 2/2/99

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690128A\011R1001.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 11
 Sample Name : CCB Injection Number : 1
 Run Time Bar Code: Sequence Line : 10
 Acquired on : 28 Jan 99 11:52 AM Instrument Method: 690128A.MTH
 Report Created on: 29 Jan 99 10:11 AM Analysis Method : 690128.MTH
 Last Recalib on : 29 JAN 99 09:38 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\011R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	4929	BB + 0.000	1	-96.230	TNMOC	

Calibration table contains at least one peak with amt = 0

=====

=====

External Standard Report

=====

```

Data File Name   : C:\HPCHEM\1\DATA\690128A\012R1001.D
Operator        : L.A. Pingel
Instrument       : TNMOC
Sample Name      : VS006-002-S019
Run Time Bar Code:
Acquired on     : 28 Jan 99 12:00 PM
Report Created on: 29 Jan 99 10:13 AM
Last Recalib on : 29 JAN 99 09:38 AM
Multiplier      : 1
Page Number     : 1
Vial Number     : 12
Injection Number: 1
Sequence Line   : 10
Instrument Method: 690128A.MTH
Analysis Method : 690128.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\690128A\012R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	53879	BB + 0.000	1	-36.359	TNMOC	

=====

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\690128A\013R1001.D	Page Number	: 1
Operator	: L.A. Pingel	Vial Number	: 13
Instrument	: TNMOC	Injection Number	: 1
Sample Name	: VS006-010-S036	Sequence Line	: 10
Run Time Bar Code:		Instrument Method:	690128A.MTH
Acquired on:	28 Jan 99 12:07 PM	Analysis Method	: 690128.MTH
Report Created on:	29 Jan 99 10:14 AM	Sample Amount	: 0
Last Recalib on:	29 JAN 99 09:38 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 2 in C:\HPCHEM\1\DATA\690128A\013R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	1050613	BB + 0.000	1	1471.539	TNMOC	

=====

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690128A\014R1001.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 14
 Sample Name : VS006-018-S045 Injection Number : 1
 Run Time Bar Code: Sequence Line : 10
 Acquired on : 28 Jan 99 12:16 PM Instrument Method: 690128A.MTH
 Report Created on: 29 Jan 99 10:14 AM Analysis Method : 690128.MTH
 Last Recalib on : 29 JAN 99 09:38 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\014R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	1.02585E+007	BBA+	0.000	1	15401.56	TNMOC

=====

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\690128A\015R1001.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 15
 Sample Name : VS006-025-S064 Injection Number : 1
 Run Time Bar Code: Sequence Line : 10
 Acquired on : 28 Jan 99 12:23 PM Instrument Method: 690128A.MTH
 Report Created on: 29 Jan 99 10:14 AM Analysis Method : 690128.MTH
 Last Recalib on : 29 JAN 99 09:38 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\015R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	495343	BB +	0.000	1	631.505	TNMOC

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\690128A\016R1001.D	Page Number	: 1
Operator	: L.A. Pingel	Vial Number	: 16
Instrument	: TNMOC	Injection Number	: 1
Sample Name	: VS006-033-S053	Sequence Line	: 10
Run Time Bar Code:		Instrument Method:	690128A.MTH
Acquired on	: 28 Jan 99 12:31 PM	Analysis Method	: 690128.MTH
Report Created on:	29 Jan 99 10:14 AM	Sample Amount	: 0
Last Recalib on	: 29 JAN 99 09:38 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 2 in C:\HPCHEM\1\DATA\690128A\016R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	2.5551E+007	BB	+ 0.000	1	38536.71	TNMOC

=====

=====

External Standard Report

=====

```

Data File Name   : C:\HPCHEM\1\DATA\690128A\017R1001.D
Operator        : L.A. Pingel                      Page Number     : 1
Instrument       : TNMOC                            Vial Number      : 17
Sample Name     : VS006-034-S057                   Injection Number : 1
Run Time Bar Code:                               Sequence Line   : 10
Acquired on    : 28 Jan 99 12:39 PM                 Instrument Method: 690128A.MTH
Report Created on: 29 Jan 99 10:15 AM               Analysis Method  : 690128.MTH
Last Recalib on : 29 JAN 99 09:38 AM                Sample Amount    : 0
Multiplier     : 1                                 ISTD Amount      :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\690128A\017R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	2.59171E+007	BB + 0.000	1	39090.55	TNMOC	

=====

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\690128A\018R1001.D	Page Number	: 1
Operator	: L.A. Pingel	Vial Number	: 18
Instrument	: TNMOC	Injection Number	: 1
Sample Name	: VS006-041-S074 <i>74 cap</i>	Sequence Line	: 10
Run Time Bar Code:	<i>original entry correct</i>	Instrument Method	: 690128A.MTH
Acquired on	: 28 Jan 99 12:47 PM	Analysis Method	: 690128.MTH
Report Created on	: 29 Jan 99 10:15 AM	Sample Amount	: 0
Last Recalib on	: 29 JAN 99 09:38 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 2 in C:\HPCHEM\1\DATA\690128A\018R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	2.53837E+007	BB	+ 0.000	1	38283.50	TNMOC

=====

=====

External Standard Report

=====

```

Data File Name   : C:\HPCHEM\1\DATA\690128A\019R1001.D
Operator        : L.A. Pingel
Instrument       : TNMOC
Sample Name     : VS006-041-S085 D
Run Time Bar Code:
Acquired on    : 28 Jan 99 12:55 PM
Report Created on: 29 Jan 99 10:15 AM
Last Recalib on : 29 JAN 99 09:38 AM
Multiplier     : 1
Page Number    : 1
Vial Number    : 19
Injection Number: 1
Sequence Line  : 10
Instrument Method: 690128A.MTH
Analysis Method : 690128.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\690128A\019R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	2.06106E+007	BB + 0.000	1	31062.59	TNMOC	

=====

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\690128A\020R1001.D	
Operator	: L.A. Pingel	Page Number : 1
Instrument	: TNMOC	Vial Number : 20
Sample Name	: VS006-042-S075	Injection Number : 1
Run Time Bar Code:		Sequence Line : 10
Acquired on	: 28 Jan 99 01:03 PM	Instrument Method: 690128A.MTH
Report Created on:	01 Feb 99 09:22 AM	Analysis Method : 690128.MTH
Last Recalib on	: 29 JAN 99 09:38 AM	Sample Amount : 0
Multiplier	: 1	ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\020R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	2.3558E+007	BB + 0.000	1	35521.57	TNMOC	

=====

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690128A\021R1001.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 21
 Sample Name : VS006-050-S077 Injection Number : 1
 Run Time Bar Code: Sequence Line : 10
 Acquired on : 28 Jan 99 01:10 PM Instrument Method: 690128A.MTH
 Report Created on: 29 Jan 99 10:59 AM Analysis Method : 690128.MTH
 Last Recalib on : 29 JAN 99 09:38 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\021R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	2.32469E+007	BV + 0.000	1	35050.86	TNMOC	

=====

=====

External Standard Report

=====

```

Data File Name   : C:\HPCHEM\1\DATA\690128A\022R1001.D
Operator        : L.A. Pingel
Instrument       : TNMOC
Sample Name     : VS006-051-S078
Run Time Bar Code:
Acquired on    : 28 Jan 99  01:18 PM
Report Created on: 29 Jan 99  10:59 AM
Last Recalib on : 29 JAN 99  09:38 AM
Multiplier     : 1
Page Number    : 1
Vial Number    : 22
Injection Number: 1
Sequence Line  : 10
Instrument Method: 690128A.MTH
Analysis Method : 690128.MTH
Sample Amount   : 0
ISTD Amount     :

```

Sig. 2 in C:\HPCHEM\1\DATA\690128A\022R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	2.22574E+007	BB + 0.000	1	33553.99	TNMOC	

=====

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\690128A\023R1001.D	
Operator	: L.A. Pingel	Page Number : 1
Instrument	: TNMOC	Vial Number : 23
Sample Name	: VS006-058-S080	Injection Number : 1
Run Time Bar Code:		Sequence Line : 10
Acquired on	: 28 Jan 99 01:26 PM	Instrument Method: 690128A.MTH
Report Created on:	: 29 Jan 99 11:00 AM	Analysis Method : 690128.MTH
Last Recalib on	: 29 JAN 99 09:38 AM	Sample Amount : 0
Multiplier	: 1	ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\023R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	2.55086E+007	BB + 0.000	1	38472.57	TNMOC	

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External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690128A\024R1001.D

Operator : L.A. Fingel Page Number : 1

Instrument : TNMOC Vial Number : 24

Sample Name : VS006-059-S081 Injection Number : 1

Run Time Bar Code: Sequence Line : 10

Acquired on : 28 Jan 99 01:34 PM Instrument Method: 690128A.MTH

Report Created on: 29 Jan 99 11:00 AM Analysis Method : 690128.MTH

Last Recalib on : 29 JAN 99 09:38 AM Sample Amount : 0

Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\024R1001.D

Ret Time Area Type Width Ref# ppbC Name

1.700 2.13913E+007 BB + 0.000 1 32243.66 TNMOC

=====

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External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\690128A\025R1001.D	
Operator	: L.A. Pingel	Page Number : 1
Instrument	: TNMOC	Vial Number : 25
Sample Name	: VS006-067-S082	Injection Number : 1
Run Time Bar Code:		Sequence Line : 10
Acquired on	: 28 Jan 99 01:42 PM	Instrument Method: 690128A.MTH
Report Created on:	: 29 Jan 99 11:00 AM	Analysis Method : 690128.MTH
Last Recalib on	: 29 JAN 99 09:38 AM	Sample Amount : 0
Multiplier	: 1	ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\025R1001.D

Ret.Time	Area	Type	Width	Ref#	ppbC	Name
1.700	2.18228E+007	BB + 0.000	1	32896.49	TNMOC	

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External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690128A\026R1001.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 26
 Sample Name : VS006-068-S091 Injection Number : 1
 Run Time Bar Code: Sequence Line : 10
 Acquired on : 28 Jan 99 01:50 PM Instrument Method: 690128A.MTH
 Report Created on: 29 Jan 99 11:01 AM Analysis Method : 690128.MTH
 Last Recalib on : 29 JAN 99 09:38 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690128A\026R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	2.18356E+007	BB + 0.000	1	32915.90	TNMOC	

=====

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External Standard Report

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```

Data File Name   : C:\HPCHEM\1\DATA\690128A\027R1001.D
Operator        : L.A. Pingel
Instrument       : TNMOC
Sample Name     : VS006-128-S096
Run Time Bar Code:
Acquired on    : 28 Jan 99 01:58 PM
Report Created on: 29 Jan 99 11:01 AM
Last Recalib on : 29 JAN 99 09:38 AM
Multiplier     : 1
Page Number    : 1
Vial Number    : 27
Injection Number: 1
Sequence Line  : 10
Instrument Method: 690128A.MTH
Analysis Method : 690128.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\690128A\027R1001.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.700	1.75031E+007	BB + 0.000	1	26361.46	TNMOC	

=====

=====
 Calibration Report
 =====

Data File Name : C:\HPCHEM\2\DATA\690128A\038R0101.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 38
 Sample Name : 37500 ppbC std Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 28 Jan 99 04:37 PM Instrument Method: 690128.MTH
 Report Created on: 28 Jan 99 04:43 PM Analysis Method : 690128.MTH
 Last Recalib on : 28 JAN 99 04:33 PM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Calibration Table

Pk#	RT	Lvl	ppbC	Amt/Area	Ref Istd I#	Name
1	1.700	1	250.0	1.0044e-003	1	TNMOC
		2	500.0	1.0492e-003		
		3	1000.0	1.3422e-003		
		4	3000.0	1.3637e-003		
		5	6000.0	1.6199e-003		
		6	15000.0	1.4815e-003		
		7	37500.0	1.5087e-003		

ARF = 1.3385 e - 03
 LAD
 2/2/99

Calibration Settings

Title:

Total Non-Methane Organic Carbon

Reference window: 5.000 %
 Non-reference window: 5.000 %
 Units of amount: ppbC
 Multiplier: 1.0
 RF uncal peaks: 0.0
 Sample Amount: 0.0

Sample ISTD Information

No Sample ISTD Amounts

Multilevel Information

Fit: Linear
 Origin: Ignore

TNMOC

01 Feb 99 09:48 AM
Sequence: A:\690128.SEQ

page 1

Sample Table

Vial Num.	Sample Name	Sample Amount	Multiplier	ISTD Amount
--------------	-------------	------------------	------------	----------------

1	141-1-21.01			
---	-------------	--	--	--

ZERO AIR

2	158 ppbC std			
3	500 ppbC std			
4	1000 ppbC std			
5	2500 ppbC std			
6	5000 ppbC std			
7	15000 ppbC std			
8	ICB			
9	ICVS			
10	ICVS Dup			
11	CCB			
12	VS006-002-S019			
13	VS006-010-S036			
14	VS006-018-S045			
15	VS006-025-S064			
16	VS006-033-S053			
17	VS006-034-S057			
18	VS006-041-S074			
19	VS006-041-S047 ⁷⁴ _D			
20	VS006-042-S075			
21	VS006-050-S077			
22	VS006-051-S078			
23	VS006-058-S080			
24	VS006-059-S081			
25	VS006-067-S082			
26	VS006-068-S091			
27	VS006-128-S096			
28	CCVS			
29	CCB			
30	37500 ppbC std			
31	CCB			
32	250 ppbC std			
33	500 ppbC std			
34	1000 ppbC std			
35	3000 ppbC std			
36	6000 ppbC std			
37	15000 ppbC std			
38	37500 ppbC std			
39	CCB			
40	ICVS			
41	CCB			

GAF 02/04/99

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External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690114\009R0101.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 9
 Sample Name : 141-1-22.01 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 14 Jan 99 04:41 PM Instrument Method: 690114.MTH
 Report Created on: 02 Feb 99 02:42 PM Analysis Method : 690114D.MTH
 Last Recalib on : 01 FEB 99 11:51 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\009R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	5607	BV +	0.000	1	68.201	TNMOC

=====

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\690114\010R0101.D	
Operator	: L.A. Pingel	Page Number : 1
Instrument	: TNMOC	Vial Number : 10
Sample Name	: 1319-1-45.01	Injection Number : 1
Run Time Bar Code:		Sequence Line : 1
Acquired on	: 14 Jan 99 04:49 PM	Instrument Method: 690114.MTH
Report Created on:	: 02 Feb 99 02:42 PM	Analysis Method : 690114D.MTH
Last Recalib on	: 01 FEB 99 11:51 AM	Sample Amount : 0
Multiplier	: 1	ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\010R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	457291	BB + 0.000	1	521.691	TNMOC	

=====

$$RF = \frac{500}{457291} = 1.0934 \text{ E-3}$$

$$ARF = 1.1305 \text{ E-3}$$

$$\%D = 3.39\%$$

LAD.
2/2/99

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\690114\012R0101.D	
Operator	: L.A. Pingel	Page Number : 1
Instrument	: TNMOC	Vial Number : 12
Sample Name	: 1319-1-45.01	Injection Number : 1
Run Time Bar Code:		Sequence Line : 1
Acquired on	: 14 Jan 99 05:23 PM	Instrument Method: 690114.MTH
Report Created on:	: 02 Feb 99 02:43 PM	Analysis Method : 690114D.MTH
Last Recalib on	: 01 FEB 99 11:51 AM	Sample Amount : 0
Multiplier	: 1	ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\012R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	510220	BV + 0.000	1	574.832	TNMOC	

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=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690114\013R0101.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 13
 Sample Name : 141-1-22.01 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 14 Jan 99 05:45 PM Instrument Method: 690114.MTH
 Report Created on: 02 Feb 99 02:43 PM Analysis Method : 690114D.MTH
 Last Recalib on : 01 FEB 99 11:51 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\013R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	5542	BB + 0.000	1	68.136	TNMOC	

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=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690114\014R0101.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 14
 Sample Name : VS102-003-S021 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 14 Jan 99 05:53 PM Instrument Method: 690114.MTH
 Report Created on: 02 Feb 99 02:43 PM Analysis Method : 690114D.MTH
 Last Recalib on : 01 FEB 99 11:51 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\014R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	625792	BV + 0.000	1	690.866	TNMOC	

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External Standard Report

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Data File Name : C:\HPCHEM\1\DATA\690114\015R0101.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 15
 Sample Name : VS102-006-S022 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 14 Jan 99 06:01 PM Instrument Method: 690114.MTH
 Report Created on: 02 Feb 99 02:44 PM Analysis Method : 690114D.MTH
 Last Recalib on : 01 FEB 99 11:51 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\015R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	1375644	BV + 0.000	1	1443.714	TNMOC	

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External Standard Report

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Data File Name	: C:\HPCHEM\1\DATA\690114\016R0101.D	Page Number	: 1
Operator	: L.A. Pingel	Vial Number	: 16
Instrument	: TNMOC	Injection Number	: 1
Sample Name	: VS702-003-S061	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	690114.MTH
Acquired on	: 14 Jan 99 06:08 PM	Analysis Method	: 690114D.MTH
Report Created on:	02 Feb 99 02:44 PM	Sample Amount	: 0
Last Recalib on	: 01 FEB 99 11:51 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 2 in C:\HPCHEM\1\DATA\690114\016R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	392086	BB + 0.000	1	456.225	TNMOC	

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External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690114\017R0101.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 17
 Sample Name : VS702-005-S062 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 14 Jan 99 06:16 PM Instrument Method: 690114.MTH
 Report Created on: 02 Feb 99 02:44 PM Analysis Method : 690114D.MTH
 Last Recalib on : 01 FEB 99 11:51 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\017R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	65211	BB + 0.000	1	128.044	TNMOC	

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External Standard Report

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Data File Name   : C:\HPCHEM\1\DATA\690114\018R0101.D
Operator        : L.A. Fingel
Instrument       : TNMOC
Sample Name     : VS702-014-S070
Run Time Bar Code:
Acquired on    : 14 Jan 99 06:23 PM
Report Created on: 02 Feb 99 02:44 PM
Last Recalib on : 01 FEB 99 11:51 AM
Multiplier     : 1
Page Number    : 1
Vial Number    : 18
Injection Number: 1
Sequence Line  : 1
Instrument Method: 690114.MTH
Analysis Method : 690114D.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\690114\018R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	367753	BB + 0.000	1	431.796	TNMOC	

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External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\690114\019R0101.D	
Operator	: L.A. Pingel	Page Number : 1
Instrument	: TNMOC	Vial Number : 19
Sample Name	: VS102-009-S034	Injection Number : 1
Run Time Bar Code:		Sequence Line : 1
Acquired on	: 14 Jan 99 06:30 PM	Instrument Method: 690114.MTH
Report Created on:	02 Feb 99 02:44 PM	Analysis Method : 690114D.MTH
Last Recalib on	: 01 FEB 99 11:51 AM	Sample Amount : 0
Multiplier	: 1	ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\019R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	1842445	BV + 0.000	1	1912.381	TNMOC	

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External Standard Report

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Data File Name	: C:\HPCHEM\1\DATA\690114\020R0101.D	Page Number	: 1
Operator	: L.A. Pingel	Vial Number	: 20
Instrument	: TNMOC	Injection Number	: 1
Sample Name	: VS702-011-S068	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	690114.MTH
Acquired on	: 14 Jan 99 06:37 PM	Analysis Method	: 690114D.MTH
Report Created on:	02 Feb 99 02:45 PM	Sample Amount	: 0
Last Recalib on	: 01 FEB 99 11:51 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 2 in C:\HPCHEM\1\DATA\690114\020R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	400823	BV + 0.000	1	464.997	TNMOC	

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External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690114\021R0101.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 21
 Sample Name : VS702-008-S063 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 14 Jan 99 06:44 PM Instrument Method: 690114.MTH
 Report Created on: 02 Feb 99 02:45 PM Analysis Method : 690114D.MTH
 Last Recalib on : 01 FEB 99 11:51 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\021R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	362330	BV + 0.000	1	426.351	TNMOC	

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External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690114\022R0101.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 22
 Sample Name : VS702-008-S063 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 14 Jan 99 06:52 PM Instrument Method: 690114.MTH
 Report Created on: 02 Feb 99 02:45 PM Analysis Method : 690114D.MTH
 Last Recalib on : 01 FEB 99 11:51 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\022R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	405366	BB + 0.000	1	469.559	TNMOC	

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External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\690114\023R0101.D
 Operator : L.A. Pingel Page Number : 1
 Instrument : TNMOC Vial Number : 23
 Sample Name : VS102-012-S041 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 14 Jan 99 07:00 PM Instrument Method: 690114.MTH
 Report Created on: 02 Feb 99 02:45 PM Analysis Method : 690114D.MTH
 Last Recalib on : 01 FEB 99 11:51 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\690114\023R0101.D

Ret Time	Area	Type	Width	Ref#	ppbC	Name
1.007	2594867	BB + 0.000	1	2667.811	TNMOC	

=====

02 Feb 99 02:47 PM
Method: C:\HPCHEM\1\METHODS\690114D.MTH

page 1

Report Specification

Destination: Report/Chromatogram to Printer
Based on: Area
Calculations: ESTD
Printer Output: Combined Chromatogram and Report
Report Header: None

Calibration Table

Pk#	RT	Lvl	ppbC	Amt/Area	Ref Istd I#	Name
1	1.007	1	301.0	1.2832e-003	1	TNMOG
		2	501.0	9.885e-004		
		3	753.0	1.3319e-003		
		4	1003.0	1.014e-003		
		5	2006.0	1.0349e-003		

ARF = 1.1305 E-3

Calibration Settings

2/2/99

Title:

Reference window: 5.000 %
Non-reference window: 5.000 %
Units of amount: ppbC
Multiplier: 1.0
RF uncal peaks: 0.0
ISTD# to adjust uncal peaks: 0
Sample Amount: 0.0

Sample ISTD Information

No Sample ISTD Amounts

Multilevel Information

Fit: Linear
Origin: Ignore

TNMOC

01 Feb 99 12:33 PM

page 1

Sequence: C:\HPCHEM\1\SEQUENCE\DEFAULT.SEQ

Sample Table

Vial Num.	Sample Name	Sample Amount	Multiplier	ISTD Amount
1	141-1-22.01			
2	zero air			
3	1318-1-43.01	100		
4	1319-1-41.01	301		
5	1319-1-41.02	753		
6	1319-1-43.02	1003		
7	1319-1-43.02	2006		
8	1319-1-43.02	501		
9	zero air			
10	1319-1-66.01			
12	1319-1-66.01			
13	CCB			
14	VS102-003-S021			
15	VS102-006-S022			
16	VS702-003-S061			
17	VS702-005-S062			
18	VS702-014-S070			
19	VS102-009-S034			
20	VS702-011-S068			
21	VS702-008-S063			
22	VS702-008-S063			
23	VS102-012-S041			

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**This document was too large to scan
as a single document; therefore, it has
been divided into smaller sections.**

Section 5 of 5

Document Information

Document #	HNF-3949	Revision	0
Title	TANK VAPOR SAMPLING & ANALYSIS DATA PACKAGE FOR TANK 241C106 WASTE RETRIEVAL SLUICING SYS PROCESS TEST SAMPLED 12/16/1998		
Date	03/22/1999		
Originator	LOCKREM LL	Originator Co.	NHC
Recipient		Recipient Co.	
References			
Keywords			
Projects			
Other Information			

2.5 Permanent Gases in SUMMA Canister Samples

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2.5.1 Narrative

This section contains descriptions of the analytical method and quality assurance used during analysis.

2.5.1.1 Determination of Permanent Gases in SUMMA Canister Samples

The permanent gas target analytes are carbon dioxide, carbon monoxide, hydrogen, methane, and nitrous oxide. These target analytes are determined in aliquots of tank headspace vapor collected in SUMMA canisters by means of a gas chromatograph equipped with a thermal conductivity detector (GC/TCD). The permanent gas target analytes are identified by matching their sample peak-retention times with those from standard gas mixtures. Target analyte concentrations are determined by calibrating the GC/TCD with standard gas mixtures; the integrated area of the chromatographic peak is proportional to the analyte concentration. The instrument detection limit for this method is typically on the order of 20 parts per million by volume.

To facilitate subsampling of the SUMMA canisters, the canisters were pressurized to approximately 2.0 atmospheres. This pressurization step diluted the samples by a factor of 2.0; the reported concentrations are corrected for sample dilution.

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2.5.1.2 Permanent Gas Analytical Quality Assurance

Method LA-523-409, Rev. A-0, is used for the qualitative and quantitative gas chromatographic determination of selected permanent gases in waste tank headspace samples collected in SUMMA canisters.

The gas chromatographic system is calibrated initially prior to starting sample analysis and each time continuing calibration criteria cannot be met for subsequent analysis. At least 3 standard concentration levels containing each target analyte is used for initial calibration (ICAL). The initial calibration standards, or calibration verification standard, are measured to determine analyte chromatographic column retention times and to compute target analyte retention time windows. The validity of the initial calibration is demonstrated by meeting deviation or curve fit criteria and through the satisfactory analysis of a "check standard" gas, the ICVS. Initial calibration gas blanks are measured to demonstrate system cleanliness. Each day that the GC system is used for analysis, the continuing calibration of the system is verified through the measurement of a mid-level check standard gas, or CCV. Criteria for the CCV that must be met are target analyte retention time windows and percent recovery of the CCV analytes. Method blanks (MBs) are analyzed to document the continued cleanliness of the GC system.

With each tank sample reporting batch, the analysis of a laboratory control sample (LCS) and LCS duplicate is conducted. The recovery of the LCS analytes must meet accuracy (percent recovery - %R) and precision (relative percent difference - RPD) requirements. Also, with each tank sample reporting batch, an actual tank sample is analyzed in duplicate (laboratory sample duplicate). The RPD between sample analyte concentrations measured above reporting limits and the sample duplicate analyte concentrations must meet precision requirements or the resulting data is flagged.

Due to instrument complications, both the method detection limits and lower calibration limits exceeded the limits established for the Vapor Program. The reporting limits were raised in order to ensure confidence in the reported results and are indicated in parenthesis in the VPRQL columns of the data summaries. Affected results are flagged with an asterisk (*).

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2.5.2 Result Summary Tables

The result summary tables are separated into hydrogen and permanent gases. The permanent gas summary table lists analytes by increasing retention times. All reported values have been corrected to 25 °C and 1 atmosphere pressure.

C-106 Hydrogen Data Summary		Sample Number	VS006-002-S019	VS006-010-S036	VS006-018-S045	VS006-033-S053				
Analysis Date		1/4/99	1/4/99	1/4/99	1/4/99	1/4/99				
Data File ID		1749	1341	1350	1359					
		3\data\59010400220101.d	3\data\59010400060101.d	3\data\5901040070101.d	3\data\5901040080101.d					
Analyte	CAS #	VPROL ppmv	VPROL mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag
Hydrogen	1333-74-0	50 (150)	4.1 (12)	M*	150	12	M*	150	12	M*
C-106 Permanent Gas Data Summary		Sample Number	VS006-002-S019	VS006-010-S036	VS006-018-S045	VS006-034-S057				
Analysis Date		1/8/99	1/8/99	1/8/99	1/8/99	1/8/99				
Data File ID		1256	1335	1359	1451					
		1\data\59010800060101.d	1\data\5901080070101.d	1\data\5901080080101.d	1\data\59010801000101.d					
Analyte	CAS #	VPROL ppmv	VPROL mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag
Carbon Dioxide	124-38-9	50 (170)	90 (310)		290	520		260	470	
Nitrous Oxide	10024-97-2	50 (68)	90 (120)	M*	68	120	M*	68	120	M*
Methane	74-83-8	50 (210)	33 (140)	M*	210	140	M*	210	140	M*
Carbon Monoxide	630-08-0	50 (300)	57 (340)	M*	300	340	M*	300	340	M*

Data Flag:

M: Target Analyte not detected

M: Data did not meet control requirements; refer to data package case narrative.

Data Flag:

M: Target Analyte not detected

*: Data did not meet quality control requirements; refer to data package case narrative.

C-106 Hydrogen Data Summary			Sample Number 1/4/99		VS006-034-S057 1/4/99		VS006-025-S064 1/4/99		VS006-041-S074 1/4/99		VS006-042-S075 1/4/99	
Analysis Time Data File ID			1511 3\data\S901040090101.d		1511 3\data\S901040090101.d		1541 3\data\S901040110101.d		1552 3\data\S901040120101.d		1601 3\data\S901040130101.d	
Analyte	CAS #	VPROL ppmv	VPROL mg/m ³	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag
Hydrogen	1333-74-0	50 (150)	4.1 (12)	150	12	M*	150	12	M*	150	12	M*

C-106 Permanent Gas Data Summary			Sample Number 1/8/99		VS006-034-S057 1/8/99		VS006-025-S064 1/8/99		VS006-041-S074 1/8/99		VS006-042-S075 1/8/99	
Analysis Time Data File ID			1451 1\data\S901080100101.d		1451 1\data\S901080100101.d		1516 1\data\S901080110101.d		1540 1\data\S901080120101.d		1605 1\data\S901080130101.d	
Analyte	CAS #	VPROL ppmv	VPROL mg/m ³	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag
Carbon Dioxide	124-38-9	50 (170)	90 (310)	200	360	*	330	590		230	410	
Nitrous Oxide	10024-97-2	50 (68)	90 (120)	80	140	*	68	120	M*	100	180	*
Methane	74-83-8	50 (210)	33 (140)	210	140	M*	210	140	M*	210	140	M*
Carbon Monoxide	630-08-0	50 (300)	57 (340)	300	340	M*	300	340	M*	300	340	M*

Data flag:

M: Target Analyte not detected

*: Data did not meet quality control requirements, refer to data package case

Data Flag:

M: Target Analyte not detected

*: Data did not meet quality control requirements; refer to data package case

C-106 Hydrogen Data Summary			Sample Number		VS006-050-S077		VS006-051-S078		VS006-058-S080		VS006-059-S081	
Analysis Date			1/4/99		1/4/99		1/4/99		1/4/99		1/4/99	
Data File ID			1611		1733		1635		1706			
3\data\59010401\4d101.d			3\data\59010401\4d101.d		3\data\59010401\4d101.d		3\data\59010401\4d101.d		3\data\59010401\4d101.d		3\data\59010401\4d101.d	
Analyte	CAS #	VPROL ppmv	VPROL mg/m ³	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag
Hydrogen	1333-74-0	50 (150)	4.1 (12)	150	12	M*	150	12	M*	150	12	M*
C-106 Permanent Gas Data Summary			Sample Number		VS006-050-S077		VS006-051-S078		VS006-058-S080		VS006-059-S081	
Analysis Date			1/8/99		1/8/99		1/8/99		1/8/99		1/8/99	
Data File ID			1630		1655		1719		1746			
1\data\59010801\5d101.d			1\data\59010801\5d101.d		1\data\59010801\5d101.d		1\data\59010801\5d101.d		1\data\59010801\5d101.d		1\data\59010801\5d101.d	
Analyte	CAS #	VPROL ppmv	VPROL mg/m ³	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag
Carbon Dioxide	124-38-9	50 (170)	90 (310)	240	430		170	310	M*	170	310	M*
Nitrous Oxide	10024-97-2	50 (68)	90 (120)	130	230	*	68	120	M*	90	160	*
Methane	74-83-8	50 (210)	33 (140)	210	140	M*	210	140	M*	210	140	M*
Carbon Monoxide	630-08-0	50 (300)	57 (340)	300	340	M*	300	340	M*	300	340	M*

Data Flags:

M: Target Analyte not detected

* : Data did not meet quality control requirements; refer to data package case

Data Flags:

M: Target Analyte not detected

*: Data did not meet quality control requirements; refer to data package case

C-106 Hydrogen		Sample Number		VS006-067-S082		VS006-068-S091		VS006-128-S096	
Data Summary		Analysis Date		1/4/99		1/4/99		1/4/99	
		Data File ID		1530		1716		1625	
		3\data\S9010401060101.d		3\data\S90104010200101.d		3\data\S9010401500101.d			
Analyte	CAS #	VRQL ppmv	VRQL mg/m ³	ppmv	mg/m ³	ppmv	mg/m ³	ppmv	mg/m ³
Hydrogen	1333-74-0	50 (150)	4.1 (12)	150	12	M*	150	12	M*
C-106 Permanent Gas		Sample Number		VS006-067-S082		VS006-068-S091		VS006-128-S096	
Data Summary		Analysis Date		1/8/99		1/8/99		1/8/99	
		Data File ID		1811		1836		1900	
		1\data\S9010801800101.d		1\data\S9010801900101.d		1\data\S901080200101.d			
Analyte	CAS #	VRQL ppmv	VRQL mg/m ³	ppmv	mg/m ³	ppmv	mg/m ³	ppmv	mg/m ³
Carbon Dioxide	124-38-9	50 (170)	90 (310)	170	310	M*	190	340	*
Nitrous Oxide	10024-97-2	50 (68)	90 (120)	100	190	*	68	120	M*
Methane	74-83-8	50 (210)	33 (140)	210	140	M*	210	140	M*
Carbon Monoxide	630-08-0	50 (300)	57 (340)	300	340	M*	300	340	M*

Data Flags:

M: Target Analyte not detected

*: Data did not meet quality control requirements; refer to data package case

AY-102 Hydrogen Data Summary		Sample Number	VS102-003-S021	VS102-006-S022	VS102-009-S034	VS102-012-S041				
Analysis Date		1/14/99	1/14/99	1/14/99	1/14/99	1/14/99				
Analysis Time		1402	1402	1411	1554	1436				
Data File ID		3\data\S90114006d0101.d								
Analyte	CAS #	VPROL (ppmv)	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag
Hydrogen	1333-74-0	50 (150)	4.1 (12)	M*	150	12	M*	150	12	M*
AY-102 Permanent Gas Data Summary		Sample Number	VS102-003-S021	VS102-006-S022	VS102-009-S034	VS102-012-S041				
Analysis Date		1/12/99	1/12/99	1/12/99	1/12/99	1/12/99				
Analysis Time		1247	1247	1315	1339	1403				
Data File ID		1\data\S90112006d0101.d								
Analyte	CAS #	VPROL (ppmv)	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag
Carbon Dioxide	124-38-9	50 (170)	90 (310)	M*	170	310	M*	170	310	M*
Nitrous Oxide	10024-97-2	50 (68)	90 (120)	M*	68	120	M*	68	120	M*
Methane	74-83-8	50 (210)	33 (140)	M*	210	140	M*	210	140	M*
Carbon Monoxide	630-08-0	50 (300)	57 (340)	M*	300	340	M*	300	340	M*

Data Flags:

M: Target Analyte not detected

D: Data did not meet quality control requirements; refer to data package case narrative.

Data Flag:

M: Target Analyte not detected

*: Data did not meet quality control requirements; refer to data package case narrative.

AZ-702 Hydrogen Data Summary		Sample Number	VS702-003-S061				VS702-005-S062				VS702-008-S063				VS702-011-S068				VS702-014-S070			
		Analysis Date	1/14/99				1/14/99				1/14/99				1/14/99				1/14/99			
		Analysis Time	1451				1501				1513				1523				1532			
		Data File ID	3\data\S901140100101.d				3\data\S901140110101.d				3\data\S901140120101.d				3\data\S901140130101.d				3\data\S901140140101.d			
	Analyte	CAS #	VRQL (ppmv)	VRQL (mg/m ³)	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag		
	Hydrogen	1333-74-0	50 (150)	4.1 (12)	M*	150	12	M*	150	12	M*	150	12	M*	150	12	M*	150	12	M*		
AZ-702 Permanent Gas Data Summary		Sample Number	VS702-003-S061				VS702-005-S062				VS702-008-S063				VS702-011-S068				VS702-014-S070			
		Analysis Date	1/12/99				1/12/99				1/12/99				1/12/99				1/12/99			
		Analysis Time	1434				1458				1523				1550				1615			
		Data File ID	1\data\S9011201100101.d				1\data\S901120120101.d				1\data\S901120130101.d				1\data\S901120140101.d				1\data\S901120150101.d			
	Analyte	CAS #	VRQL (ppmv)	VRQL (mg/m ³)	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag	ppmv	mg/m ³	Flag		
	Carbon Dioxide	124-38-9	50 (170)	90 (310)	M*	170	310	M*	850	1520		270	490		170	310	M*	230	420			
	Nitrous Oxide	10024-97-2	50 (68)	90 (120)	M*	68	120	M*	68	120	M*	68	120	M*	68	120	M*	68	120	M*		
	Methane	74-83-8	50 (210)	33 (140)	M*	210	140	M*	210	140	M*	210	140	M*	210	140	M*	210	140	M*		
	Carbon Monoxide	630-08-0	50 (300)	57 (340)	M*	300	340	M*	300	340	M*	300	340	M*	300	340	M*	300	340	M*		
Data Flags:		M: Target Analyte not detected																				
* :		Data did not meet quality control requirements; refer to data package case narrative.																				

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2.5.3 Quality Control Summary Tables

Quality control summary tables are organized by analyte. The tables include the following:

- CCV results
- LCS and duplicate results
- Method blank results.

C-106.AY-102.AZ-702 Hydrogen CCV/LCS Summary	Standard Type	CCV				CCV/LCS D				CCV				CCV				CCV			
	Analysis Date	1/4/99				1320				14/99				14/99				14/99			
	Analysis Time	1310				1828				1853											
	Data File ID	3\data\S9010400250101.d				3\data\S901040040101.d				3\data\S9010400250101.d				3\data\S9010400270101.d							
	Standard ID	141-I-30.01				141-I-30.01				141-I-30.01				141-I-30.01				141-I-30.01			
	VPRQL ppmv	VPRQL mg/m ³	Found (ppm)	Actual (ppm)	% Std. Recovery	Batch	Found (ppm)	Actual (ppm)	% Std. Recovery	Batch	Found (ppm)	Actual (ppm)	% Std. Recovery	Batch	Found (ppm)	Actual (ppm)	% Std. Recovery	Batch			
Hydrogen	1333-74-0	50	4	968	1185	82	C-106	1041	1185	88	7.3	C-106	994	1185	119	C-106	1027	1185	87	C-106	
C-106.AY-102.AZ-702 Permanent Gas CCV/LCS Summary	Standard Type	CCV				CCV/LCS D				CCV				CCV				CCV			
	Analysis Date	1/8/99				1125				18/99				1/12/99				1040			
	Analysis Time					1150				2015											
	Data File ID	1\data\S900803040101.d				1\data\S900803040101.d				1\data\S90080230101.d				1\data\S90112003030101.d							
	Standard ID	1397-I-87.01				1397-I-87.01				1397-I-87.01				1397-I-87.01				1397-I-87.01			
	VPRQL ppmv	VPRQL mg/m ³	Found (ppm)	Actual (ppm)	% Std. Recovery	Batch	Found (ppm)	Actual (ppm)	% Std. Recovery	Batch	Found (ppm)	Actual (ppm)	% Std. Recovery	Batch	Found (ppm)	Actual (ppm)	% Std. Recovery	Batch			
Carbon Dioxide	124-38-9	50	90	433	405	107	C-106	426	405	105	1.6	C-106	425	405	105	C-106	456	405	108	AZ-702	
Nitrous Oxide	0024-97-2	50	90	439	406	108	C-106	431	406	106	1.7	C-106	421	406	104	C-106	439	406	108	AZ-702	
Methane	74-82-8	50	33	410	402	102	C-106	412	402	102	0.4	C-106	462	402	115	C-106	408	402	102	AZ-702	
Carbon Monoxide	630-08-0	50	57	358	400	90	C-106	491	400	123	31.2	C-106	445	400	111	C-106	410	400	102	AZ-702	

C-106,AY-102,AZ-702 Hydrogen		CCV		CCV/LCSD		LCS/CCV	
Analysis Date		1/14/99		1/14/99		1/14/99	
Analysis Time		1259		1330		1652	
Data File ID		3\data\S901140040101.d		3\data\S901140040101.d		3\data\S901140180101.d	
Standard ID		141-121.01		141-121.01		1397-1-87.01	
Analyte	CAS #	Found (ppm)	Actual (ppm)	% Std. Recovery	LCS Precision (%RPD)	Found (ppm)	% Std. Recovery
Hydrogen	1333-74-0	863	1031	84	AY-102,AZ-702	326	400
Standard Type		CCV/LCSD		CCV		AY-102	
Analysis Date		1/12/99		1/12/99		AZ-702	
Analysis Time		1158		1712		AZ-702	
Data File ID		1\data\S901120040101.d		1\data\S901120170101.d		AZ-702	
Standard ID		1397-1-87.01		1397-1-87.01		AZ-702	
Analyte	CAS #	Found (ppm)	Actual (ppm)	% Std. Recovery	LCS Precision (%RPD)	Found (ppm)	% Std. Recovery
Carbon Dioxide	124-38-9	50	90	446	405	430	405
Nitrous Oxide	0024-97-2	50	90	457	406	436	406
Methane	74-82-8	50	33	406	402	353	402
Carbon Monoxide	630-08-0	50	57	414	400	355	400

C-106, AY-102, AZ-702 Hydrogen	Analysis Date	1/4/99	1/4/99	1/14/99			
	Analysis Time	7/23/03	1332	1914			
	Data File ID	3\data\5901040020101.d	3\data\5901040020101.d	3\data\5901040020101.d			
Method Blank Summary							
Analyte	CAS #	Method Blank ID	141-1-22.01				
			VPQOL (ppmv)	VPQOL (ppmv)			
Hydrogen	1333-74-0	50	4	Found	Blank	Found	Blank
				VPQOL (ppmv)	VPQOL (ppmv)	VPQOL (ppmv)	VPQOL (ppmv)
C-106, AY-102, AZ-702 Hydrogen							
C-106, AY-102, AZ-702 Hydrogen	Analysis Date	1/8/99	1/8/99	1/8/99			
	Analysis Time	1100	1220	1949			
	Data File ID	1\data\590080020101.d	1\data\590080020101.d	1\data\590080020101.d			
Method Blank Summary							
Analyte	CAS #	Method Blank ID	141-1-22.01				
			VPQOL (ppmv)	VPQOL (ppmv)			
Carbon Dioxide	124-38-9	50	90	Found	Blank	Found	Blank
				VPQOL (ppmv)	VPQOL (ppmv)	VPQOL (ppmv)	VPQOL (ppmv)
Nitrous Oxide	0024-97-2	50	90	Found	Blank	Found	Blank
				VPQOL (ppmv)	VPQOL (ppmv)	VPQOL (ppmv)	VPQOL (ppmv)
Methane	74-82-8	50	33	Found	Blank	Found	Blank
				VPQOL (ppmv)	VPQOL (ppmv)	VPQOL (ppmv)	VPQOL (ppmv)
Carbon Monoxide	630-08-0	50	57	Found	Blank	Found	Blank
				VPQOL (ppmv)	VPQOL (ppmv)	VPQOL (ppmv)	VPQOL (ppmv)

C-106,AY-102,AZ-702 Hydrogen		Analysis Date	1/14/99		1/14/99		1/14/99				
		Analysis Time	1248		1353		1607				
Method Blank Summary		Data File ID	3\data\590114002\0101.d		3\data\590114005\0101.d		3\data\590114016\0101.d				
		Method Blank ID	141-1-22.01		141-1-22.01		141-1-22.01				
Analyte	CAS #	VRPQL	Blank								
		ppmv	Found (ppm)	MDL (ppm)	Batch	Found (ppm)	MDL (ppm)	Batch	Found (ppm)	MDL (ppm)	
mg/m ³		not detected	73	25	not detected	73	25	not detected	73	25	
Hydrogen		1333-74-0		50		4					
C-106,AY-102,AZ-702 Hydrogen		Analysis Date		1/12/99		1223		1/12/99			
		Analysis Time		1006		1223					
Method Blank Summary		Data File ID	1\data\590112002\0101.d		1\data\590112005\0101.d		1\data\590112005\0101.d				
		Method Blank ID	141-1-22.01		141-1-22.01		141-1-22.01				
Analyte	CAS #	VRPQL	Blank								
		ppmv	Found (ppm)	MDL (ppm)	Batch	Found (ppm)	MDL (ppm)	Batch	Found (ppm)	MDL (ppm)	
mg/m ³		-6 not detected	86	25	AY-102 AZ-702	18	25	86	AY-102 AZ-702	25	32
Carbon Dioxide	124-38-9	50	90	not detected	25	32	AY-102 AZ-702	not detected	25	100	
Nitrous Oxide	0024-97-2	50	90	33	7	25	100	AY-102 AZ-702	not detected	25	150
Methane	74-82-8	50	57	16	25	150	AY-102 AZ-702	41	25	150	AY-102 AZ-702
Carbon Monoxide	630-08-0	50	57								

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2.5.4 Supporting Data

This section contains chromatograms and quantitation reports for all analyses including waste tank samples, calibration verifications, blanks, and initial calibration data. This section is organized by analysis (hydrogen and permanent gases).

External Standard Report

Data File Name : C:\HPCHEM\3\DATA\590104\002R0101.D
 Operator : ko pennock Page Number : 1
 Instrument : HYDROGEN Vial Number : 2
 Sample Name : 141-1-22.01 (CCP) 1/2-3-99 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 04 Jan 99 01:00 PM Instrument Method: 590104.MTH
 Report Created on: 03 Feb 99 09:35 AM Analysis Method : DESKCP.MTH
 Last Recalib on : 14 DEC 98 10:58 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\3\DATA\590104\002R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

External Standard Report

Data File Name : C:\HPCHEM\3\DATA\590104\003R0101.D
 Operator : ko pennock
 Instrument : HYDROGEN
 Sample Name : 141-1-30.01 (1185 ppm CCV) ^{NP/23-N}
 Run Time Bar Code:
 Acquired on : 04 Jan 99 01:10 PM
 Report Created on: 03 Feb 99 09:35 AM
 Last Recalib on : 14 DEC 98 10:58 AM
 Multiplier : 1

Page Number : 1
 Vial Number : 3
 Injection Number : 1
 Sequence Line : 1
 Instrument Method: 590104.MTH
 Analysis Method : DESKPP.MTH
 Sample Amount : 0
 ISTD Amount :

Sig. 2 in C:\HPCHEM\3\DATA\590104\003R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
6.838	2942	BV	0.263	1	967.610	hydrogen

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590104\004R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 4
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: 141-1-30.01(1185 ppm CCV) Kf/23-99	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590104.MTH
Acquired on	: 04 Jan 99 01:20 PM	Analysis Method	: DESKFP.MTH
Report Created on	: 03 Feb 99 09:36 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 2 in C:\HPCHEM\3\DATA\590104\004R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
6.836	3167	BV	0.253	1	1041.291	hydrogen

=====

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590104\005R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 5
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: 141-1-22.01 (CCB) K ⁹ /23-99	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590104.MTH
Acquired on	: 04 Jan 99 01:32 PM	Analysis Method	: DESKKP.MTH
Report Created on:	: 03 Feb 99 09:37 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 2 in C:\HPCHEM\3\DATA\590104\005R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

 External Standard Report

Data File Name	: C:\HPCHEM\3\DATA\590104\022R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 22
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS006-002-S019	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	590104.MTH
Acquired on	: 04 Jan 99 05:49 PM	Analysis Method	: DESKKP.MTH
Report Created on:	03 Feb 99 09:57 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590104\022R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

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External Standard Report

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Data File Name	: C:\HPCHEM\3\DATA\590104\006R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 6
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS006-010-S036	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590104.MTH
Acquired on	: 04 Jan 99 01:41 PM	Analysis Method	: DESKPP.MTH
Report Created on	: 03 Feb 99 09:41 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	: 0
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590104\006R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

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External Standard Report

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Data File Name	: C:\HPCHEM\3\DATA\590104\007R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 7
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS006-018-S045	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	590104.MTH
Acquired on	: 04 Jan 99 01:50 PM	Analysis Method	: DESKKP.MTH
Report Created on:	03 Feb 99 09:43 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	: 0
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590104\007R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590104\008R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 8
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS006-033-S053	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590104.MTH
Acquired on	: 04 Jan 99 01:59 PM	Analysis Method	: DESKPP.MTH
Report Created on	: 03 Feb 99 09:41 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	: 0
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590104\008R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

=====

External Standard Report

=====

```

Data File Name   : C:\HPCHEM\3\DATA\590104\009R0101.D
Operator        : ko pennock
Instrument       : HYDROGEN
Sample Name     : VS006-034-S057
Run Time Bar Code:
Acquired on    : 04 Jan 99 03:11 PM
Report Created on: 03 Feb 99 09:46 AM
Last Recalib on : 14 DEC 98 10:58 AM
Multiplier     : 2

Page Number      : 1
Vial Number     : 9
Injection Number : 1
Sequence Line   : 1
Instrument Method: 590104.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\3\DATA\590104\009R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\3\DATA\590104\011R0101.D
Operator        : ko pennock
Instrument       : HYDROGEN
Sample Name     : VS006-025-S064
Run Time Bar Code:
Acquired on    : 04 Jan 99 03:41 PM
Report Created on: 03 Feb 99 09:47 AM
Last Recalib on : 14 DEC 98 10:58 AM
Multiplier    : 2
Page Number     : 1
Vial Number    : 11
Injection Number : 1
Sequence Line  : 1
Instrument Method: 590104.MTH
Analysis Method : DESKKP.MTH
Sample Amount  : 0
ISTD Amount    : 0
  
```

Sig. 2 in C:\HPCHEM\3\DATA\590104\011R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

=====

```

Data File Name   : C:\HPCHEM\3\DATA\590104\012R0101.D
Operator        : ko pennock
Instrument       : HYDROGEN
Sample Name     : VS006-041-S074
Run Time Bar Code:
Acquired on    : 04 Jan 99 03:52 PM
Report Created on: 03 Feb 99 09:48 AM
Last Recalib on : 14 DEC 98 10:58 AM
Multiplier    : 2
Page Number    : 1
Vial Number    : 12
Injection Number : 1
Sequence Line  : 1
Instrument Method: 590104.MTH
Analysis Method : DESKKP.MTH
Sample Amount  : 0
ISTD Amount    : 0
  
```

Sig. 2 in C:\HPCHEM\3\DATA\590104\012R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590104\013R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 13
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS006-042-S075	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590104.MTH
Acquired on	: 04 Jan 99 04:01 PM	Analysis Method	: DESKKP.MTH
Report Created on:	: 03 Feb 99 09:49 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	: 0
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590104\013R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590104\014R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 14
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS006-050-S077	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	590104.MTH
Acquired on	: 04 Jan 99 04:11 PM	Analysis Method	: DESKKP.MTH
Report Created on:	03 Feb 99 09:49 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590104\014R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

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External Standard Report

=====

```

Data File Name   : C:\HPCHEM\3\DATA\590104\021R0101.D
Operator        : ko pennock
Instrument       : HYDROGEN
Sample Name      : VS006-051-S078
Run Time Bar Code:
Acquired on     : 04 Jan 99 05:33 PM
Report Created on: 03 Feb 99 09:57 AM
Last Recalib on : 14 DEC 98 10:58 AM
Multiplier      : 2

Page Number      : 1
Vial Number      : 21
Injection Number : 1
Sequence Line    : 1
Instrument Method: 590104.MTH
Analysis Method  : DESKKP.MTH
Sample Amount    : 0
ISTD Amount      :
  
```

Sig. 2 in C:\HPCHEM\3\DATA\590104\021R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\3\DATA\590104\016R0101.D
Operator        : ko pennock
Instrument       : HYDROGEN
Sample Name      : VS006-058-S080
Run Time Bar Code:
Acquired on     : 04 Jan 99 04:35 PM
Report Created on: 03 Feb 99 09:51 AM
Last Recalib on : 14 DEC 98 10:58 AM
Multiplier      : 2

Page Number      : 1
Vial Number      : 16
Injection Number : 1
Sequence Line    : 1
Instrument Method: 590104.MTH
Analysis Method  : DESKKP.MTH
Sample Amount    : 0
ISTD Amount      :
  
```

Sig. 2 in C:\HPCHEM\3\DATA\590104\016R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	*	not found	*	1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590104\019R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 19
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS006-059-S081	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590104.MTH
Acquired on	: 04 Jan 99 05:06 PM	Analysis Method	: DESKKP.MTH
Report Created on:	03 Feb 99 09:55 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	: 0
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590104\019R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590104\010R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 10
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS006-067-S082	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590104.MTH
Acquired on	: 04 Jan 99 03:30 PM	Analysis Method	: DESKKP.MTH
Report Created on:	: 03 Feb 99 09:46 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	: 0
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590104\010R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\3\DATA\590104\020R0101.D
Operator        : ko pennock
Instrument       : HYDROGEN
Sample Name     : VS006-068-S091
Run Time Bar Code:
Acquired on    : 04 Jan 99 05:16 PM
Report Created on: 03 Feb 99 09:56 AM
Last Recalib on : 14 DEC 98 10:58 AM
Multiplier     : 2
Page Number    : 1
Vial Number    : 20
Injection Number : 1
Sequence Line  : 1
Instrument Method: 590104.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\3\DATA\590104\020R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590104\015R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 15
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS006-128-S096	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590104.MTH
Acquired on	: 04 Jan 99 04:25 PM	Analysis Method	: DESKKP.MTH
Report Created on:	: 03 Feb 99 09:50 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590104\015R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\3\DATA\590104\025R0101.D
 Operator : ko pennock
 Instrument : HYDROGEN (1185 ppm CCV) #1234
 Sample Name : 141-1-30.01
 Run Time Bar Code:
 Acquired on : 04 Jan 99 06:28 PM
 Report Created on: 03 Feb 99 10:00 AM
 Last Recalib on : 14 DEC 98 10:58 AM
 Multiplier : 1

Page Number : 1
 Vial Number : 25
 Injection Number : 1
 Sequence Line : 1
 Instrument Method: 590104.MTH
 Analysis Method : DESKRP.MTH
 Sample Amount : 0
 ISTD Amount :

Sig. 2 in C:\HPCHEM\3\DATA\590104\025R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
6.992	3021	BV	0.244	1	993.510	hydrogen

=====

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590104\027R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 27
Instrument	: HYDROGEN (1185 gm CCV) 4/25/99	Injection Number	: 1
Sample Name	: 141-1-30.01	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590104.MTH
Acquired on	: 04 Jan 99 06:53 PM	Analysis Method	: DESKPP.MTH
Report Created on:	: 03 Feb 99 10:02 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 2 in C:\HPCHEM\3\DATA\590104\027R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
6.989	3122	BV	0.270	1	1026.595	hydrogen

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\3\DATA\590104\028R0101.D
Operator        : ko pennock
Instrument       : HYDROGEN (G.B) K2/2-3-99
Sample Name     : 141-1-22.01
Run Time Bar Code:
Acquired on    : 04 Jan 99 07:14 PM
Report Created on: 03 Feb 99 10:02 AM
Last Recalib on : 14 DEC 98 10:58 AM
Multiplier     : 1

Page Number      : 1
Vial Number     : 28
Injection Number : 1
Sequence Line   : 1
Instrument Method: 590104.MTH
Analysis Method : DESKPP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\3\DATA\590104\028R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	*	not found	*	1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590114\002R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 2
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: 141-1-22.01 (ccB) KP/2-3-99	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590114.MTH
Acquired on	: 14 Jan 99 12:48 PM	Analysis Method	: DESKKP.MTH
Report Created on	: 03 Feb 99 10:19 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 2 in C:\HPCHEM\3\DATA\590114\002R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

Data File Name : C:\HPCHEM\3\DATA\590114\003R0101.D
 Operator : ko pennock
 Instrument : HYDROGEN
 Sample Name : 141-1-21.01 (1021 ²⁷⁻⁹⁹ 1023 ppm CCV) ¹⁹⁻⁹⁹
 Run Time Bar Code:
 Acquired on : 14 Jan 99 12:59 PM
 Report Created on: 03 Feb 99 10:04 AM
 Last Recalib on : 14 DEC 98 10:58 AM
 Multiplier : 1

Page Number : 1
 Vial Number : 3
 Injection Number : 1
 Sequence Line : 1
 Instrument Method: 590114.MTH
 Analysis Method : DESKKP.MTH
 Sample Amount : 0
 ISTD Amount :

Sig. 2 in C:\HPCHEM\3\DATA\590114\003R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.008	2623	BV	0.343	1	863.329	hydrogen

External Standard Report

Data File Name : C:\HPCHEM\3\DATA\590114\004R0101.D
 Operator : ko pennock
 Instrument : HYDROGEN ¹⁰³¹ ₁₀₃₁ ¹⁰³¹ ₁₀₃₁
 Sample Name : 141-1-21.01 (1033 ppm CCV) ¹⁰³¹ ₁₀₃₁ ¹⁰³¹ ₁₀₃₁
 Run Time Bar Code :
 Acquired on : 14 Jan 99 01:30 PM
 Report Created on: 03 Feb 99 10:04 AM
 Last Recalib on : 14 DEC 98 10:58 AM
 Multiplier : 1

Page Number : 1
 Vial Number : 4
 Injection Number : 1
 Sequence Line : 1
 Instrument Method: 590114.MTH
 Analysis Method : DESKKP.MTH
 Sample Amount : 0
 ISTD Amount :

Sig. 2 in C:\HPCHEM\3\DATA\590114\004R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.004	2867	BV	0.331	1	943.147	hydrogen

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590114\005R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 5
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: 141-1-22.01 (LB)	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590114.MTH
Acquired on	: 14 Jan 99 01:53 PM	Analysis Method	: DESKKP.MTH
Report Created on:	03 Feb 99 10:05 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 2 in C:\HPCHEM\3\DATA\590114\005R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590114\006R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 6
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS012-003-S021	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	590114.MTH
Acquired on	: 14 Jan 99 02:02 PM	Analysis Method	: DESKKP.MTH
Report Created on:	03 Feb 99 10:07 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590114\006R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590114\007R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 7
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS102-006-S022	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590114.MTH
Acquired on	: 14 Jan 99 02:11 PM	Analysis Method	: DESKPP.MTH
Report Created on:	: 03 Feb 99 10:08 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590114\007R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590114\008R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 8
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS102-009-S034	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590114.MTH
Acquired on	: 14 Jan 99 03:54 PM	Analysis Method	: DESKRP.MTH
Report Created on:	: 03 Feb 99 10:23 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	: 0
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590114\008R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	*	not found	*	1		hydrogen

Not all calibrated peaks were found

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590114\009R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 9
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS006-012-S041	Sequence Line	: 1
Run Time Bar Code:	102 0144	Instrument Method:	590114.MTH
Acquired on	: 14 Jan 99 02:36 PM	Analysis Method	: DESKRP.MTH
Report Created on:	03 Feb 99 10:09 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	: 0
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590114\009R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590114\010R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 10
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS702-003-S061	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590114.MTH
Acquired on	: 14 Jan 99 02:51 PM	Analysis Method	: DESKKP.MTH
Report Created on	: 03 Feb 99 10:10 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590114\010R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

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External Standard Report

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```

Data File Name   : C:\HPCHEM\3\DATA\590114\011R0101.D
Operator        : ko pennock
Instrument       : HYDROGEN
Sample Name      : VS702-005-S062
Run Time Bar Code:
Acquired on     : 14 Jan 99  03:01 PM
Report Created on: 03 Feb 99  10:11 AM
Last Recalib on : 14 DEC 98  10:58 AM
Multiplier      : 2

Page Number      : 1
Vial Number      : 11
Injection Number : 1
Sequence Line    : 1
Instrument Method: 590114.MTH
Analysis Method  : DESKKP.MTH
Sample Amount    : 0
ISTD Amount      : 0
  
```

Sig. 2 in C:\HPCHEM\3\DATA\590114\011R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

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External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590114\012R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 12
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS702-008-S063	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590114.MTH
Acquired on	: 14 Jan 99 03:13 PM	Analysis Method	: DESKKP.MTH
Report Created on	: 03 Feb 99 10:22 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590114\012R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\3\DATA\590114\013R0101.D
Operator        : ko pennock
Instrument       : HYDROGEN
Sample Name     : VS702-011-S068
Run Time Bar Code:
Acquired on    : 14 Jan 99  03:23 PM
Report Created on: 03 Feb 99  10:24 AM
Last Recalib on : 14 DEC 98 10:58 AM
Multiplier     : 2

Page Number      : 1
Vial Number     : 13
Injection Number : 1
Sequence Line   : 1
Instrument Method: 590114.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\3\DATA\590114\013R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\3\DATA\590114\014R0101.D	Page Number	: 1
Operator	: ko pennock	Vial Number	: 14
Instrument	: HYDROGEN	Injection Number	: 1
Sample Name	: VS702-014-S070	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590114.MTH
Acquired on	: 14 Jan 99 03:32 PM	Analysis Method	: DESKKP.MTH
Report Created on	: 03 Feb 99 10:24 AM	Sample Amount	: 0
Last Recalib on	: 14 DEC 98 10:58 AM	ISTD Amount	:
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\3\DATA\590114\014R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

Data File Name : C:\HPCHEM\3\DATA\590114\016R0101.D	
Operator : ko pennock	Page Number : 1
Instrument : HYDROGEN	Vial Number : 16
Sample Name : 141-1-22.01 (CLB) Kp/2-3-99	Injection Number : 1
Run Time Bar Code:	Sequence Line : 1
Acquired on : 14 Jan 99 04:07 PM	Instrument Method: 590114.MTH
Report Created on: 03 Feb 99 10:27 AM	Analysis Method : DESKKP.MTH
Last Recalib on : 14 DEC 98 10:58 AM	Sample Amount : 0
Multiplier : 1	ISTD Amount : 0

Sig. 2 in C:\HPCHEM\3\DATA\590114\016R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
7.005	* not found *			1		hydrogen

Not all calibrated peaks were found

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\3\DATA\590114\018R0101.D
 Operator : ko pennock Page Number : 1
 Instrument : HYDROGEN Vial Number : 18
 Sample Name : 1397-1-87.01 (400 ppm CCV) ^{kg/22-99} Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 14 Jan 99 04:52 PM Instrument Method: 590114.MTH
 Report Created on: 03 Feb 99 10:28 AM Analysis Method : DESKKP.MTH
 Last Recalib on : 14 DEC 98 10:58 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\3\DATA\590114\018R0101.D

Ret Time	Area	Type	Width	Ref#	ppm	Name
6.958	983	BV	0.274	1	326.241	hydrogen

=====

01 Feb 99 01:21 PM

page 1

Method: C:\HPCHEM\3\METHODS\DESKKP.MTH

Integration Events

Events:	Value:	Time:
Initial Area Reject	1	INITIAL
Initial Peak Width	0.400	INITIAL
Shoulder Detection	OFF	INITIAL
Initial Threshold	-2	INITIAL
Integrator OFF		0.010
Area Sum ON		5.807
Integrator ON		6.500
Baseline Now		6.650
Baseline Now		6.677
Area Sum OFF		7.240
Integrator OFF		7.500

Calibration Table

Pk#	RT	Lvl	ppm	Amt/Area	Ref Istd I#	Name
1	7.005	1	250.0	0.384		1 hydrogen
		2	500.0	0.3109		
		3	1003.0	0.32638		
		4	2507.0	0.3288		

ARF = 0.3370 10/2-2-99

Calibration Settings

Title:

Hydrogen Analysis

Reference window:	5.000 %
Non-reference window:	5.000 %
Units of amount:	ppm
Multiplier:	1.0
RF uncal peaks:	0.0
Sample Amount:	0.0

Sample ISTD Information

No Sample ISTD Amounts

Multilevel Information

Fit: Linear
Origin: Ignore

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\590108\002R0101.D
 Operator : KO Pennock
 Instrument : PERMANENT
 Sample Name : 141-1-22.01 (CCP) 2-24/99
 Run Time Bar Code:
 Acquired on : 08 Jan 99 11:00 AM
 Report Created on: 01 Feb 99 04:40 PM
 Last Recalib on : 25 AUG 98 10:32 AM
 Multiplier : 1

Page Number : 1
 Vial Number : 2
 Injection Number : 1
 Sequence Line : 1
 Instrument Method: 590106.MTH
 Analysis Method : DESKKP.MTH
 Sample Amount : 0
 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590108\002R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	155	BB + 0.000	1	-8.453		Carbon Dioxide
8.860	* not found *					
16.702	137	BB + 0.000	1	7.200		Methane
22.575	30	BB + 0.000	1	-34.054		Carbon Monoxide

Not all calibrated peaks were found

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\590108\003R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 3
 Sample Name : 1397-1-87.01 (400 ppm CCV) 11/23/99 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 08 Jan 99 11:25 AM Instrument Method: 590106.MTH
 Report Created on: 01 Feb 99 04:40 PM Analysis Method : DESKKP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590108\003R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	2691	BB + 0.000	1	433.261	Carbon Dioxide	
8.925	2524	BB + 0.000	1	438.993	Nitrous Oxide	
16.702	1581	BB + 0.000	1	410.064	Methane	
22.575	2082	BB + 0.000	1	358.032	Carbon Monoxide

External Standard Report

```

Data File Name   : C:\HPCHEM\1\DATA\590108\004R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : 1397-1-87.01 (400 ppm CCV) 10/2-3-99
Run Time Bar Code:
Acquired on    : 08 Jan 99 11:50 AM
Report Created on: 01 Feb 99 04:41 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier     : 1

Page Number     : 1
Vial Number     : 4
Injection Number: 1
Sequence Line   : 1
Instrument Method: 590106.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590108\004R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	2651	BB + 0.000	1	426.246	Carbon Dioxide	
8.925	2483	BB + 0.000	1	431.457	Nitrous Oxide	
16.702	1586	BB + 0.000	1	411.576	Methane	
22.575	2776	PB + 0.000	1	490.623	Carbon Monoxide

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\590108\005R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 5
 Sample Name : 141-1-22.01 (CCB) K7/2-344 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 08 Jan 99 12:30 PM Instrument Method: 590106.MTH
 Report Created on: 01 Feb 99 04:50 PM Analysis Method : DESKKP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590108\005R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225		82 BB + 0.000	1	-21.251		Carbon Dioxide
8.860	* not found *		1			Nitrous Oxide
16.800	* not found *		1			Methane
22.575		90 BB + 0.000	1	-22.490		Carbon Monoxide

Not all calibrated peaks were found

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\1\DATA\590108\006R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : VS006-002-S019
Run Time Bar Code:
Acquired on    : 08 Jan 99 12:56 PM
Report Created on: 01 Feb 99 04:51 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier     : 2

Page Number      : 1
Vial Number     : 6
Injection Number : 1
Sequence Line   : 1
Instrument Method: 590106.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590108\006R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	1029	BB + 0.000	1	287.402		Carbon Dioxide
8.860	* not found *					
16.702	101	BB + 0.000	1	-6.135		Methane
22.575	13	BB + 0.000	1	-74.678		Carbon Monoxide

Not all calibrated peaks were found

=====

External Standard Report

=====

```

Data File Name   : C:\HPCHEM\1\DATA\590108\007R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : VS006-010-S036
Run Time Bar Code:
Acquired on    : 08 Jan 99  01:35 PM
Report Created on: 01 Feb 99  04:52 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier    : 2

Page Number     : 1
Vial Number    : 7
Injection Number: 1
Sequence Line  : 1
Instrument Method: 590106.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590108\007R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	959	BB + 0.000	1	262.968		Carbon Dioxide
8.860	* not found *					
16.702	182	BB + 0.000	1	39.103		Methane
22.575	129	BB + 0.000	1	-30.106		Carbon Monoxide

Not all calibrated peaks were found

=====

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External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\590108\008R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 8
 Sample Name : VS006-018-S045 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 08 Jan 99 01:59 PM Instrument Method: 590106.MTH
 Report Created on: 01 Feb 99 04:52 PM Analysis Method : DESKKP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 2 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590108\008R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	862	BB + 0.000	1	229.197	Carbon Dioxide	
8.925	157	BB + 0.000	1	24.111	Nitrous Oxide	
16.702	328	BB + 0.000	1	120.725	Methane	
22.575	324	BB + 0.000	1	44.418	Carbon Monoxide	

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\1\DATA\590108\009R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name      : VS006-033-S053
Run Time Bar Code:
Acquired on     : 08 Jan 99 02:27 PM
Report Created on: 01 Feb 99 04:52 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier      : 2

Page Number      : 1
Vial Number      : 9
Injection Number : 1
Sequence Line    : 1
Instrument Method: 590106.MTH
Analysis Method  : DESKKP.MTH
Sample Amount    : 0
ISTD Amount      :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590108\009R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	640	BB + 0.000	1	152.040		Carbon Dioxide
8.925	374	BB + 0.000	1	102.671		Nitrous Oxide
16.702	25	BB + 0.000	1	-48.025		Methane
22.575	389	BB + 0.000	1	69.039		Carbon Monoxide

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\590108\010R0101.D

Operator : KO Pennock

Page Number : 1

Instrument : PERMANENT

Vial Number : 10

Sample Name : VS006-034-S057

Injection Number : 1

Run Time Bar Code:

Sequence Line : 1

Acquired on : 08 Jan 99 02:51 PM

Instrument Method: 590106.MTH

Report Created on: 01 Feb 99, 04:53 PM

Analysis Method : DESKPP.MTH

Last Recalib on : 25 AUG 98 10:32 AM

Sample Amount : 0

Multiplier : 2

ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590108\010R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	773	BB + 0.000	1	198.446	Carbon Dioxide	
8.925	310	BB + 0.000	1	79.545	Nitrous Oxide	
16.800 * not found *			1		Methane	
22.575	386	BB + 0.000	1	68.080	Carbon Monoxide	

Not all calibrated peaks were found

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External Standard Report

=====

```

Data File Name   : C:\HPCHEM\1\DATA\590108\011R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : VS006-025-S064
Run Time Bar Code:
Acquired on    : 08 Jan 99 03:16 PM
Report Created on: 01 Feb 99 04:53 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier     : 2

Page Number      : 1
Vial Number     : 11
Injection Number : 1
Sequence Line   : 1
Instrument Method: 590106.MTH
Analysis Method : DESKPP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590108\011R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	1146	BB + 0.000	1	328.419		Carbon Dioxide
8.860	* not found *					
16.702	97	BB + 0.000	1	-8.156		Methane
22.575	90	BB + 0.000	1	-44.981		Carbon Monoxide

Not all calibrated peaks were found

=====

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External Standard Report

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```

Data File Name   : C:\HPCHEM\1\DATA\590108\012R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : VS006-041-S074
Run Time Bar Code:
Acquired on    : 08 Jan 99 03:40 PM
Report Created on: 01 Feb 99 04:54 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier     : 2
Page Number    : 1
Vial Number    : 12
Injection Number : 1
Sequence Line  : 1
Instrument Method: 590106.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590108\012R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name	
8.225	859	BB + 0.000	1	228.407		Carbon Dioxide	
8.925	361	BB + 0.000	1	97.671		Nitrous Oxide	
16.800	* not found *					1	Methane
22.700	* not found *					1	Carbon Monoxide

Not all calibrated peaks were found

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External Standard Report

=====

```

Data File Name   : C:\HPCHEM\1\DATA\590108\013R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name      : VS006-042-S075
Run Time Bar Code:
Acquired on     : 08 Jan 99 04:05 PM
Report Created on: 01 Feb 99 04:54 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier      : 2
Page Number     : 1
Vial Number     : 13
Injection Number: 1
Sequence Line   : 1
Instrument Method: 590106.MTH
Analysis Method : DESKKP.MTH
Sample Amount    : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590108\013R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	648	BB + 0.000	1	154.781		Carbon Dioxide
8.925	291	BV + 0.000	1	72.670		Nitrous Oxide
16.800	* not found *		1			Methane
22.575	136	BB + 0.000	1	-27.661		Carbon Monoxide

Not all calibrated peaks were found

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\1\DATA\590108\014R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : VS006-050-S077
Run Time Bar Code:
Acquired on    : 08 Jan 99 04:30 PM
Report Created on: 01 Feb 99 04:55 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier    : 2

Page Number     : 1
Vial Number    : 14
Injection Number : 1
Sequence Line  : 1
Instrument Method: 590106.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590108\014R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	887	BB + 0.000	1	238.023		Carbon Dioxide
8.925	446	BB + 0.000	1	128.658		Nitrous Oxide
16.702	17	BB + 0.000	1	-52.923		Methane
22.575	284	BB + 0.000	1	28.984		Carbon Monoxide

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\590108\015R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 15
 Sample Name : VS006-051-S078 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 08 Jan 99 04:55 PM Instrument Method: 590106.MTH
 Report Created on: 01 Feb 99 04:55 PM Analysis Method : DESKPP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 2 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590108\015R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	594	BB + 0.000	1	136.060	Carbon Dioxide	
8.925	245	BB + 0.000	1	55.939	Nitrous Oxide	
16.800	* not found *		1		Methane	
22.575	252	BB + 0.000	1	16.707	Carbon Monoxide	

Not all calibrated peaks were found

=====

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\590108\016R0101.D
 Operator : KO Pennock
 Instrument : PERMANENT
 Sample Name : VS006-058-S080
 Run Time Bar Code:
 Acquired on : 08 Jan 99 05:19 PM
 Report Created on: 01 Feb 99 04:55 PM
 Last Recalib on : 25 AUG 98 10:32 AM
 Multiplier : 2

Page Number : 1
 Vial Number : 16
 Injection Number : 1
 Sequence Line : 1
 Instrument Method: 590106.MTH
 Analysis Method : DESKKP.MTH
 Sample Amount : 0
 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590108\016R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	660	BB + 0.000	1	159.054		Carbon Dioxide
8.925	329	BB + 0.000	1	86.349		Nitrous Oxide
16.702	77	BB + 0.000	1	-19.305		Methane
22.575	14	BB + 0.000	1	-74.118		Carbon Monoxide

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\590108\017R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 17
 Sample Name : VS006-059-S081 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 08 Jan 99 05:46 PM Instrument Method: 590106.MTH
 Report Created on: 01 Feb 99 04:57 PM Analysis Method: DESKKP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 2 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590108\017R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	542	BB + 0.000	1	117.944	Carbon Dioxide	
8.925	258	BB + 0.000	1	60.554	Nitrous Oxide	
16.702	297	BB + 0.000	1	103.314	Methane	
22.575	192	BB + 0.000	1	-6.314	Carbon Monoxide

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\590108\018R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 18
 Sample Name : VS006-067-S082 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 08 Jan 99 06:11 PM Instrument Method: 590106.MTH
 Report Created on: 01 Feb 99 04:57 PM Analysis Method : DESKKP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 2 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590108\018R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name	
8.225	663	BB + 0.000	1	159.937		Carbon Dioxide	
8.925	376	BB + 0.000	1	103.368		Nitrous Oxide	
16.800	* not found *					1	Methane
22.700	* not found *					1	Carbon Monoxide

Not all calibrated peaks were found

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\1\DATA\590108\019R0101.D
Operator          : KO Pennock
Instrument         : PERMANENT
Sample Name       : VS006-068-S091
Run Time Bar Code:
Acquired on      : 08 Jan 99 06:36 PM
Report Created on: 01 Feb 99 04:57 PM
Last Recalib on  : 25 AUG 98 10:32 AM
Multiplier       : 2
Page Number      : 1
Vial Number      : 19
Injection Number  : 1
Sequence Line    : 1
Instrument Method : 590106.MTH
Analysis Method  : DESKPP.MTH
Sample Amount    : 0
ISTD Amount      : 0
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590108\019R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	748	BB + 0.000	1	189.666		Carbon Dioxide
8.925	196	BB + 0.000	1	38.304		Nitrous Oxide
16.800	* not found *			1		Methane
22.575	268	BB + 0.000	1	22.973		Carbon Monoxide

Not all calibrated peaks were found

=====

External Standard Report

=====

```

Data File Name   : C:\HPCHEM\1\DATA\590108\020R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : VS006-128-S096
Run Time Bar Code:
Acquired on    : 08 Jan 99 07:00 PM
Report Created on: 01 Feb 99 04:58 PM
Last Recalib on : 25 AUG-98 10:32 AM
Multiplier     : 2
Page Number    : 1
Vial Number    : 20
Injection Number : 1
Sequence Line  : 1
Instrument Method: 590106.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590108\020R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	578	BB + 0.000	1	130.393	Carbon Dioxide	
8.925	342	BB + 0.000	1	91.012	Nitrous Oxide	
16.800 *	not found *		1		Methane	
22.575	865	BB + 0.000	1	250.927	Carbon Monoxide	

Not all calibrated peaks were found

=====

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External Standard Report

=====

Data File Name : C:\NPCHEM\1\DATA\590108\022R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 22
 Sample Name : 141-1-22.01 (CCB) 19/2-3-99 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 08 Jan 99 07:49 PM Instrument Method: 590106.MTH
 Report Created on: 02 Feb 99 03:30 PM Analysis Method : DESKKP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\NPCHEM\1\DATA\590108\022R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	314	BB + 0.000	1	19.139		Carbon Dioxide
8.860	* not found *		1			Nitrous Oxide
16.800	* not found *		1			Methane
22.575	74	BB + 0.000	1	-25.649		Carbon Monoxide

Not all calibrated peaks were found

=====

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External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\590108\023R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 23
 Sample Name : 1397-1-87.01 (400ppm CCV) 1/23/99 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 08 Jan 99 08:15 PM Instrument Method: 590106.MTH
 Report Created on: 01 Feb 99 05:03 PM Analysis Method : DESKKP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590108\023R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	2643	BB + 0.000	1	424.899	Carbon Dioxide	
8.925	2422	BB + 0.000	1	420.555	Nitrous Oxide	
16.702	1769	BB + 0.000	1	462.401	Methane	
22.575	2540	BB + 0.000	1	445.389	Carbon Monoxide	

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\1\DATA\590112\002R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : 141-1-22.01 (CCB) 10/2-99
Run Time Bar Code:
Acquired on    : 12 Jan 99 10:06 AM
Report Created on: 01 Feb 99 05:04 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier     : 1

Page Number      : 1
Vial Number     : 2
Injection Number : 1
Sequence Line   : 1
Instrument Method: 590112.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     : 0
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590112\002R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	167	BB + 0.000	1	-6.340		Carbon Dioxide
8.860	* not found *					
16.702	88	BB + 0.000	1	-6.701		Methane
22.575	294	BB + 0.000	1	16.326		Carbon Monoxide

Not all calibrated peaks were found

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\590112\003R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 3
 Sample Name : 1397-1-87.01 (400 ppm CCV) ^{ppm}/₂₂₄₉ Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 12 Jan 99 10:40 AM Instrument Method: 590112.MTH
 Report Created on: 01 Feb 99 05:04 PM Analysis Method : DESKMP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590112\003R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	2705	BB + 0.000	1	435.653	Carbon Dioxide	RF = 405/2705 = 0.1497
8.925	2522	BB + 0.000	1	438.609	Nitrous Oxide	RF = 406/2522 = 0.1610 ✓
16.702	1574	BB + 0.000	1	408.093	Methane	RF = 402/1574 = 0.2554 ✓
22.575	2353	BB + 0.000	1	409.833	Carbon Monoxide	RF = 400/2353 = 0.1699 ✓

② 2.3-10

=====

External Standard Report

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Data File Name : C:\HPCHEM\1\DATA\590112\004R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 4
 Sample Name : 1397-1-87.01 (400ppm CCV) Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 12 Jan 99 11:58 AM Instrument Method: 590112.MTH
 Report Created on: 01 Feb 99 05:06 PM Analysis Method : DESKPP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590112\004R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	2763	BB + 0.000	1	445.896	Carbon Dioxide	$RF = 400/2763 = 0.1446$ ✓
8.925	2627	BB + 0.000	1	457.480	Nitrous Oxide	$RF = 400/2627 = 0.1545$ ✓
16.702	1567	BB + 0.000	1	406.178	Methane	$RF = 400/1567 = 0.2565$ ✓
22.575	2374	BB + 0.000	1	413.806	Carbon Monoxide	$RF = 400/2374 = 0.1685$ ✓

K9/2-9-99

=====

External Standard Report

=====

```

Data File Name   : C:\HPCHEM\1\DATA\590112\005R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name      : 141-1-22.01 (CCB) K2-249
Run Time Bar Code :
Acquired on     : 12 Jan 99 12:23 PM
Report Created on : 01 Feb 99 05:06 PM
Last Recalib on  : 25 AUG 98 10:32 AM
Multiplier      : 1

Page Number      : 1
Vial Number      : 5
Injection Number  : 1
Sequence Line    : 1
Instrument Method : 590112.MTH
Analysis Method  : DESKRP.MTH
Sample Amount    : 0
ISTD Amount      :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590112\005R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	308	BB + 0.000	1	18.117		Carbon Dioxide
8.925	13	BB + 0.000	1	-13.883		Nitrous Oxide
16.800	* not found *		1			Methane
22.575	422	BB + 0.000	1	40.929		Carbon Monoxide

Not all calibrated peaks were found

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\1\DATA\590112\006R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : VS102-003-S021
Run Time Bar Code:
Acquired on    : 12 Jan 99 12:47 PM
Report Created on: 01 Feb 99 05:07 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier     : 2
Page Number    : 1
Vial Number    : 6
Injection Number : 1
Sequence Line  : 1
Instrument Method: 590112.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590112\006R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	396	BB + 0.000	1	66.986	Carbon Dioxide	
8.925	122	BB + 0.000	1	11.682	Nitrous Oxide	
16.702	202	BB + 0.000	1	50.623	Methane	
22.575	21	BB + 0.000	1	-71.367	Carbon Monoxide

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\590112\007R0101.D	Page Number	: 1
Operator	: KO Penneck	Vial Number	: 7
Instrument	: PERMANENT	Injection Number	: 1
Sample Name	: VS102-006-S022	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590112.MTH
Acquired on	: 12 Jan 99 01:15 PM	Analysis Method	: DESKKP.MTH
Report Created on:	: 01 Feb 99 05:08 PM	Sample Amount	: 0
Last Recalib on	: 25 AUG 98 10:32 AM	ISTD Amount	: 0
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\1\DATA\590112\007R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	531	BB + 0.000	1	113.949		Carbon Dioxide
8.925	89	BB + 0.000	1	-0.361		Nitrous Oxide
16.800 *	not found *		1			Methane
22.575	130	BB + 0.000	1	-29.801		Carbon Monoxide

Not all calibrated peaks were found

=====

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\590112\008R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 8
 Sample Name : VS102-009-S034 Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 12 Jan 99 01:39 PM Instrument Method: 590112.MTH
 Report Created on: 01 Feb 99 05:08 PM Analysis Method : DESKRP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 2 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590112\008R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	572	BB + 0.000	1	128.349		Carbon Dioxide
8.860	* not found *		1			Nitrous Oxide
16.702	106	BB + 0.000	1	-2.936		Methane
22.575	209	BB + 0.000	1	0.305		Carbon Monoxide

Not all calibrated peaks were found

=====

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External Standard Report

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```

Data File Name   : C:\HPCHEM\1\DATA\590112\009R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : VS102-012-S041
Run Time Bar Code:
Acquired on    : 12 Jan 99 02:03 PM
Report Created on: 01 Feb 99 05:09 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier     : 2

Page Number      : 1
Vial Number     : 9
Injection Number : 1
Sequence Line   : 1
Instrument Method: 590112.MTH
Analysis Method : DESKKP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590112\009R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	511	BB + 0.000	1	106.935		Carbon Dioxide
8.925	133	BB + 0.000	1	15.745		Nitrous Oxide
16.800 *	not found *		1			Methane
22.575	239	BB + 0.000	1	11.664		Carbon Monoxide

Not all calibrated peaks were found

=====

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\590112\011R0101.D
 Operator : KO Pennock
 Instrument : PERMANENT
 Sample Name : VS702-003-S061
 Run Time Bar Code:
 Acquired on : 12 Jan 99 02:34 PM
 Report Created on: 01 Feb 99 05:09 PM
 Last Recalib on : 25 AUG 98 10:32 AM
 Multiplier : 2

Page Number : 1
 Vial Number : 11
 Injection Number : 1
 Sequence Line : 1
 Instrument Method: 590112.MTH
 Analysis Method : DESKKP.MTH
 Sample Amount : 0
 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590112\011R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	618	BB + 0.000	1	144.282		Carbon Dioxide
8.860	* not found *		1			Nitrous Oxide
16.702	30	BB + 0.000	1	-45.272		Methane
22.575	686	BB + 0.000	1	182.719		Carbon Monoxide

Not all calibrated peaks were found

External Standard Report

```

Data File Name   : C:\HPCHEM\1\DATA\590112\012R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : VS702-005-S062
Run Time Bar Code:
Acquired on    : 12 Jan 99 02:58 PM
Report Created on: 01 Feb 99 05:10 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier    : 2

Page Number     : 1
Vial Number    : 12
Injection Number : 1
Sequence Line  : 1
Instrument Method: 590112.MTH
Analysis Method : DESKKP.MTH
Sample Amount  : 0
ISTD Amount    :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590112\012R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	2635	BB + 0.000	1	847.150		Carbon Dioxide
8.925	56	BB + 0.000	1	-11.996		Nitrous Oxide
16.800	* not found *		1			Methane
22.575	54	BB + 0.000	1	-58.734		Carbon Monoxide

Not all calibrated peaks were found

=====

External Standard Report

=====

Data File Name	: C:\HPCHEM\1\DATA\590112\013R0101.D	Page Number	: 1
Operator	: KO Pennock	Vial Number	: 13
Instrument	: PERMANENT	Injection Number	: 1
Sample Name	: VS702-008-S063	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: 590112.MTH
Acquired on	: 12 Jan 99 03:23 PM	Analysis Method	: DESKKP.MTH
Report Created on:	: 01 Feb 99 05:10 PM	Sample Amount	: 0
Last Recalib on	: 25 AUG 98 10:32 AM	ISTD Amount	:
Multiplier	: 2		

Sig. 2 in C:\HPCHEM\1\DATA\590112\013R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	992	BB + 0.000	1		274.674	Carbon Dioxide
8.925	106	BB + 0.000	1		6.033	Nitrous Oxide
16.800 *	not found *		1			Methane
22.575	604	BB + 0.000	1		151.340	Carbon Monoxide

Not all calibrated peaks were found

=====

=====

External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\590112\014R0101.D

Operator : KO Pennock Page Number : 1

Instrument : PERMANENT Vial Number : 14

Sample Name : VS702-011-S068 Injection Number : 1

Run Time Bar Code: Sequence Line : 1

Acquired on : 12 Jan 99 03:50 PM Instrument Method: 590112.MTH

Report Created on: 01 Feb 99 05:11 PM Analysis Method : DESKMP.MTH

Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0

Multiplier : 2 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590112\014R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	673	BB + 0.000	1	163.514	Carbon Dioxide	
8.925	143	BB + 0.000	1	19.063	Nitrous Oxide	
16.702	46	BB + 0.000	1	-36.492	Methane	
22.575	916	BB + 0.000	1	270.437	Carbon Monoxide	

=====

External Standard Report

```

Data File Name   : C:\HPCHEM\1\DATA\590112\015R0101.D
Operator        : KO Pennock
Instrument       : PERMANENT
Sample Name     : VS702-014-S070
Run Time Bar Code:
Acquired on    : 12 Jan 99  04:15 PM
Report Created on: 02 Feb 99  05:47 PM
Last Recalib on : 25 AUG 98 10:32 AM
Multiplier     : 2

Page Number      : 1
Vial Number     : 15
Injection Number : 1
Sequence Line   : 1
Instrument Method: 590112.MTH
Analysis Method : DESKPP.MTH
Sample Amount   : 0
ISTD Amount     :
  
```

Sig. 2 in C:\HPCHEM\1\DATA\590112\015R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	872	BB + 0.000	1	232.727		Carbon Dioxide
8.860	* not found *		1			Nitrous Oxide
16.702	135	BB + 0.000	1	13.359		Methane
22.575	71	BB + 0.000	1	-52.571		Carbon Monoxide

Not all calibrated peaks were found

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\590112\017R0101.D
 Operator : KO Pennock Page Number : 1
 Instrument : PERMANENT Vial Number : 17
 Sample Name : 1397-1-87.01 (400 ppm CCV) $\frac{10}{100}$ Injection Number : 1
 Run Time Bar Code: Sequence Line : 1
 Acquired on : 12 Jan 99 05:12 PM Instrument Method: 590112.MTH
 Report Created on: 01 Feb 99 05:13 PM Analysis Method : DESKKP.MTH
 Last Recalib on : 25 AUG 98 10:32 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\590112\017R0101.D

Ret Time	Area	Type	Width	Ref#	PPM	Name
8.225	2670	BB + 0.000	1	429.614	Carbon Dioxide	$RF = 405/2670 = 0.156$ ✓
8.925	2509	BB + 0.000	1	436.253	Nitrous Oxide	$RF = 408/2509 = 0.162$ ✓
16.702	1377	BB + 0.000	1	353.201	Methane	$RF = 402/1377 = 0.291$ ✓
22.575	2065	BB + 0.000	1	354.804	Carbon Monoxide	$RF = 400/2065 = 0.193$ ✓

18/2-3-99

01 Feb 99 04:18 PM

page 1

Method: C:\HPCHEM\1\METHODS\DESKKP.MTH

Graphics Print Options

Layout: Full Size
 Title: Horizontal
 Include:
 Axes Units: On
 Retention Times: On
 Baselines: On
 Tick Marks: On
 Retention-Times Font: Default 16

Calibration Table

Pk#	RT	Lvl	PPM	Amt/Area	Ref Istd I#	Name
1	8.150	1	101.2	0.1346	1	Carbon Dioxide
		2	252.2	0.148		ARF = 0.1488
		3	504.8	0.1638		
2	8.860	1	100.0	0.1631	1	Nitrous Oxide
		2	249.4	0.1638		ARF = 0.1676
		3	499.1	0.1758		
3	16.800	1	99.69	0.2094	1	Methane
		2	248.4	0.2509		ARF = 0.2408
		3	497.1	0.262		
4	22.700	1	101.2	0.1473	1	Carbon Monoxide
		2	252.2	0.1567		ARF = 0.1610
		3	504.8	0.179		

Calibration Settings

K2-2-79

Title:
 Permanent gas

Reference window: 5.000 %
 Non-reference window: 5.000 %
 Units of amount: PPM
 Multiplier: 1.0
 RF uncal peaks: 0.0
 Sample Amount: 0.0

Sample ISTD Information

No Sample ISTD Amounts

Multilevel Information

Fit: Linear
 Origin: Ignore

Carbon Dioxide

Nitrous Oxide

Methane

Carbon Monoxide

2.6 Ammonia in Sorbent Tube Train Samples

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2.6.1 Narrative

This section contains descriptions of the analytical method and quality assurance used during analysis.

2.6.1.1 Determination of Ammonia in Sorbent Tube Train Samples

In the sorbent tube train, a sulfuric acid impregnated sorbent adsorbs ammonia from the sampled tank headspace gas and converts adsorbed ammonia to ammonium salt. To analyze the sample for ammonia, water is used to leach the ammonium salt from the sorbent. The leachate is then analyzed by 1 of 2 methods: 1) Direct analysis of the hydrated ammonium ion by an ion chromatograph (IC) equipped with a conductivity detector or 2) by converting ammonium ion to ammonia and subsequent analysis of ammonia by ion-selective electrode (ISE).

The IC method is considered as the primary analytical method because of its small sample size requirement, lower detection limit, and autosampling capability. The ion chromatographic eluent is a dilute solution of methanesulfonic acid. The ISE method is considered as the backup method. In the ISE method, conversion of ammonium ion to ammonia is achieved by addition of concentrated sodium hydroxide. The ammonia concentration in the headspace vapor is then determined by dividing the total mass of ammonia leached from the tube by the volume of tank headspace vapor pulled through the sorbent tube.

All samples from tank C-106 were analyzed exclusively by IC. The IC method was slightly modified to improve chromatographic separation between sodium and ammonium ions. The modified method incorporated gradient elution rather than isocratic elution of components. Gradient elution involves changing the concentration of the eluent during the chromatographic run in order to increase or decrease the separation of components. The following gradient conditions were used:

Pump

Pressure: Approximately 1400 psi

Flow Rate: 1.00 ml/min

Eluent

methanesulfonic acid

Gradient

<u>Time</u>	<u>Concentration</u>
Init.	0.01M (Start Run)
8.00	0.01M
8.01	0.02M
18.00	0.02M
18.01	0.01M
25.00	0.01M (End Run)

2.6.1.2 Ammonia Analytical Quality Assurance

Method LA-533-402, Rev. A-0, is used to conduct the quantitative ion chromatographic determination of ammonia in waste tank headspace samples collected in sorbent tube train samples (STTs).

The ion chromatographic system is calibrated initially prior to starting sample analysis and each time continuing calibration criteria cannot be met for subsequent analysis. At least 3 ammonia standard concentration levels are used for initial calibration (ICAL). The initial calibration standards are used to determine chromatographic column retention time and to compute ammonia retention time windows. The validity of the initial calibration is demonstrated by meeting linearity, deviation, or curve fit criteria and through the satisfactory analysis of an ammonia "check standard", the ICVS. Initial calibration blanks are used to demonstrate system cleanliness. Each day that the IC system is used for analysis, the continuing calibration of the system is verified through the analysis of a mid-level ammonia check standard, or CCVS. Criteria for the CCVS that must be met are target analyte retention time windows and percent ammonia recovery. Continuing calibration blanks, CCBs, are used to document the continued satisfactory cleanliness of the analytical system.

With each tank sample reporting batch, the analysis of a method blank (MB) or process blank is conducted and reported. The MB cannot exceed maximum allowable ammonia contamination levels. Also, with each tank sample reporting batch, the analysis of an ammonia laboratory control sample (LCS) is conducted. The LCS consists of a STT onto which ammonia gas is sorbed. The recovery of the LCS must meet accuracy (percent recovery - %R) requirements or the batch sample data is flagged. Because it represents new technology, this LCS is now under development. And also, with each tank sample reporting batch, the analysis of 2 actual STT samples "spiked" with ammonia is conducted. The recovery of ammonia from the 2 samples spiked with ammonia must meet precision (expressed as relative percent difference - RPD) and accuracy (expressed as percent recovery - %R) criteria or the resulting sample data batch is flagged.

There were no exceptions to the ammonia quality control.

2.6.2 Result Summary Tables

Result summary tables are organized by sample. All reported values have been corrected to 25 °C and 1 atmosphere pressure. Precision information can be derived from the matrix spike and matrix spike-duplicate results.

Sample Target Analyte Concentrations for Sorbent Train Number VS006-102-TR03

Laboratory Sample Number	VS006-102-TR03a	Laboratory Duplicate Number	n/a		
Sample Analysis Date	1/15/99	Sample Analysis Time	18:22:32		
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)
Ammonia	7664-41-7	6.6	6.77	10	14
					Q

(Breakthrough Section)

Laboratory Sample Number	VS006-102-TR03a2	Laboratory Duplicate Number	n/a		
Sample Analysis Date	1/16/99	Sample Analysis Time	5:02:09		
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)
Ammonia	7664-41-7	6.6	6.70	10	14
					Q

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-038-TR05

Laboratory Sample Number	VS006-038-TR05a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/15/99	Sample Analysis Time	19:15:55	Sample Data File Identifier	t05-a001.d17	
Target Analyte Name	TOAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³) ²	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.77	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-038-TR05a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	5:55:24	Sample Data File Identifier	t05-a201.d41	
Target Analyte Name	TOAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³) ²	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.73	10	14	Q

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-029-TR06

Laboratory Sample Number	VS006-029-TR06a	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/15/99	Sample Analysis Time	19:42:37	Sample Data File Identifier	106-a001.d18		
Target Analyte Name	TOAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L)	Sample Concentration (ppmv)	Flags	
Ammonia	7664-41-7	6.6	6.70	10	14	Q	

(Breakthrough Section)

Laboratory Sample Number	VS006-029-TR06a2	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/16/99	Sample Analysis Time	6:22:02	Sample Data File Identifier	106-a200.d42		
Target Analyte Name	TOAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L)	Sample Concentration (ppmv)	Flags	
Ammonia	7664-41-7	6.6	6.70	10	14	Q	

¹ Retention times are for NH₄⁺

² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-117-TR07

Laboratory Sample Number	VS006-117-TR07a	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/15/99	Sample Analysis Time	20:09:19	Sample Data File Identifier	107-a001.d19		
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags	
Ammonia	7664-41-7	6.6	6.70	10	14		Q

(Breakthrough Section)

Laboratory Sample Number	VS006-117-TR07a2	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/16/99	Sample Analysis Time	6:48:41	Sample Data File Identifier	107-a200.d43		
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags	
Ammonia	7664-41-7	6.6	6.73	10	14		Q

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-094-TR08

Laboratory Sample Number	VS006-094-TR08a	Laboratory Duplicate Number	n/a	Sample Data File Identifier	108-a001.d20
Sample Analysis Date	1/15/99	Sample Analysis Time	20:35:58	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Flags
Ammonia	7664-41-7	6.6	6.70	10	14
					Q

(Breakthrough Section)

Laboratory Sample Number	VS006-094-TR08a2	Laboratory Duplicate Number	n/a	Sample Data File Identifier	108-a200.d44
Sample Analysis Date	1/16/99	Sample Analysis Time	7:15:20	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Flags
Ammonia	7664-41-7	6.6	6.73	10	14
					Q

¹ Retention times are for NH₄⁺

² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-109-TR10

Laboratory Sample Number	VS006-109-TR10a	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/15/99	Sample Analysis Time	21:29:15	Sample Data File Identifier	t10-a001.d22		
Target Analyte Name	GAS	Expected Retention Time (min)		Sample Concentration (mg/M ³)		Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.77	10	14	Q	

(Breakthrough Section)

Laboratory Sample Number	VS006-109-TR10a2	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/16/99	Sample Analysis Time	8:08:40	Sample Data File Identifier	t10-a200.d46		
Target Analyte Name	GAS	Expected Retention Time (min)		Sample Concentration (mg/M ³)		Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.73	10	14	Q	

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-072-TR11

Laboratory Sample Number	VS006-072-TR11a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/15/99	Sample Analysis Time	22:49:02	Sample Data File Identifier	t11-a001.d25	
Target Analyte Name	COAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.67	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-072-TR11a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	9:28:20	Sample Data File Identifier	t11-a200.d49	
Target Analyte Name	COAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.70	10	14	Q

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-055-TR12

Laboratory Sample Number	VS006-055-TR12a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/15/99	Sample Analysis Time	23:15:45	Sample Data File Identifier	t12-a001.d26	
Target Analyte Name	oAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.67	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-055-TR12a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	9:54:57	Sample Data File Identifier	t12-a200.d50	
Target Analyte Name	oAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.70	10	14	Q

¹ Retention times are for NH₄⁺

² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-087-TR13

Laboratory Sample Number	VS006-087-TR13a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/15/99	Sample Analysis Time	23:42:27	Sample Data File Identifier	t13-a001.d27	
Target Analyte Name	TOAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.67	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-087-TR13a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	10:21:36	Sample Data File Identifier	t13-a200.d51	
Target Analyte Name	TOAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.70	10	14	Q

¹ Retention times are for NH₄⁺

² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-079-TR14

Laboratory Sample Number	VS006-079-TR14a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	0:09:10	Sample Data File Identifier	t14-a001.d28	
Target Analyte Name	COAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (ng/Ml) ²	Sample Concentration (ppmv) ²	Flags
Ammonia	7664-41-7	6.6	6.67	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-079-TR14a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	10:48:14	Sample Data File Identifier	t14-a200.d52	
Target Analyte Name	COAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (ng/Ml) ²	Sample Concentration (ppmv) ²	Flags
Ammonia	7664-41-7	6.6	6.73	10	14	Q

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-046-TR15

Laboratory Sample Number	VS006-046-TR15a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	0:35:51	Sample Data File Identifier	t15-a001.d29	Flags
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.67	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-046-TR15a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	11:14:54	Sample Data File Identifier	t15-a200.d53	Flags
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.70	10	14	Q

¹ Retention times are for NH₄⁺

² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-022-TR16

Laboratory Sample Number	VS006-022-TR16a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	1:02:29	Sample Data File Identifier	t16-a001.d30	
Target Analyte Name	GC/MS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M) ²	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.67	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-022-TR16a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	11:41:33	Sample Data File Identifier	t16-a200.d54	
Target Analyte Name	GC/MS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M) ²	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.73	10	14	Q

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-006-TR17

Laboratory Sample Number	VS006-006-TR17a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	1:29:11	Sample Data File Identifier	t17-a001.d31	
Target Analyte Name	COAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L) ¹	Sample Concentration (ppmv) ²	Flags
Ammonia	7664-41-7	6.6	6.67	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-006-TR17a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	12:08:09	Sample Data File Identifier	t17-a200.d55	
Target Analyte Name	COAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L) ¹	Sample Concentration (ppmv) ²	Flags
Ammonia	7664-41-7	6.6	6.70	10	14	Q

¹ Retention times are for NH₄⁺² mg/L¹ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-014-TR18

Laboratory Sample Number	VS006-014-TR18a	Laboratory Duplicate Number	n/a	Sample Data File Identifier	t18-a001.d32
Sample Analysis Date	1/16/99	Sample Analysis Time	1:55:49	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Flags
Ammonia	7664-41-7	6.6	6.67	10	14
					Q

(Breakthrough Section)

Laboratory Sample Number	VS006-014-TR18a2	Laboratory Duplicate Number	n/a	Sample Data File Identifier	t18-a200.d56
Sample Analysis Date	1/16/99	Sample Analysis Time	12:34:49	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Flags
Ammonia	7664-41-7	6.6	6.73	10	14
					Q

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-063-TR19

Laboratory Sample Number	VS006-063-TR19a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	2:22:27	Sample Retention Time (min)	6.67	
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L) ²	Sample Concentration (ppmv) ²	Flags
Ammonia	7664-41-7	6.6	6.67	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-063-TR19a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	13:01:25	Sample Retention Time (min)	6.70	
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L) ²	Sample Concentration (ppmv) ²	Flags
Ammonia	7664-41-7	6.6	6.70	10	14	Q

¹ Retention times are for NH₄⁺² mg/L³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

2.6.3 Quality Control Summary Tables

Quality control summary tables are organized by the quality control parameter. The ammonia chromatography methods measure concentrations of ammonium ion in solution, then converts the concentration of ammonium ion to corresponding amount of ammonia. Calibration standards and instrument blank results, therefore, are reported in terms of ammonium ion. Field blank and method performance blank samples have no tank vapor pulled through them, however, they are reported in terms of ammonia by basing the result on a "typical" sample size of 2000 ml tank vapor. The following tables are presented in this section in the following order:

- Target Analyte Initial Calibration Tables
- Initial and Continuing Calibration Verification Summary
- Initial and Continuing Blank Verification Summary
- Trip Blank, Field Blank and Method Performance Blank Summary
 - Trip Blanks
 - Field Blanks
 - Method Performance Blank
- Matrix Spike Summary Table.

Target Analyte Initial Calibration Tables

Instrument ID Number	WC48875	Initial Calibration Date	1/11/99	Initial Calibration File Identifiers		
		Initial Calibration Time	7:05 PM			
Operator ID	M. J. Duchsherer	Standard ID	5653-138-A			
Target Analyte Name	Instrument Calibration Range (mM)	No. of Calibration Points	Calibration Model	Instrument Response Factor	Intercept	Slope
Ammonium	0.125 - 5.00	6	Linear	1.43E+05	1.07E+04	0.997

Reference Samples				
VS006- -TR01a	VS006-072-TR11a	VS006- -TR01a2	VS006-109-TR10a2	VS006-022-TR16a MSD
VS006-142-TR02a	VS006-055-TR12a	VS006-142-TR02a2	VS006-072-TR11a2	VS006-022-TR16a MSD
VS006-102-TR03a	VS006-067-TR13a	VS006-102-TR03a2	VS006-055-TR12a2	
VS006- -TR04a	VS006-079-TR14a	VS006- -TR04a2	VS006-067-TR13a2	
VS006-038-TR05a	VS006-046-TR15a	VS006-038-TR05a2	VS006-079-TR14a2	
VS006-029-TR06a	VS006-022-TR16a	VS006-029-TR06a2	VS006-046-TR15a2	
VS006-117-TR07a	VS006-005-TR17a	VS006-117-TR07a2	VS006-022-TR16a2	
VS006-094-TR08a	VS006-014-TR18a	VS006-094-TR08a2	VS006-005-TR17a2	
VS006-137-TR09a	VS006-063-TR19a	VS006-137-TR09a2	VS006-014-TR18a2	
VS006-109-TR10a	VS006-MPB-TR20a	VS006-109-TR10a2	VS006-063-TR19a2	

Initial and Continuing Calibration Verification Summary

Instrument ID Number	WC48875	ICVS/CCVS Analysis Date	1/15/99	ICVS/CCVS Analysis Time	16:36		
Operator ID	M. J. Duchsherer	Standard ID	5653-139-d	ICVS/CCVS File Identifier	ccvs0000.d11		
Target Analyte Name	CCVS/Book Concentration (mg/L)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (mg/L)	Percent Recovery	Batched Samples	
Ammonium	0.625	1	1.67E+05	0.658	105	VS006-...TR01a VS006-142-TR02a VS006-102-TR03a VS006-...TR04a VS006-038-TR05a	VS006-029-TR06a VS006-094-TR08a VS006-137-TR09a VS006-109-TR10a

Instrument ID Number	WC48875	ICVS/CCVS Analysis Date	1/15/99	ICVS/CCVS Analysis Time	21:55		
Operator ID	M. J. Duchsherer	Standard ID	5653-139-d	ICVS/CCVS File Identifier	ccvs0001.d23		
Target Analyte Name	CCVS Book Concentration (mg/L)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (mg/L)	Percent Recovery	Batched Samples	
Ammonium	0.625	1	1.71E+05	0.674	108	V5006-072-TR11a V5006-055-TR12a V5006-087-TR13a V5006-078-TR14a V5006-048-TR15a	V5006-022-TR16a V5006-006-TR17a V5006-014-TR18a V5006-063-TR19a V5006-MPB-TR20a

Instrument ID Number	WC48875	ICVS/CCVS Analysis Date	1/16/99	ICVS/CCVS Analysis Time	3:15		
Operator ID	M. J. Duchsherer	Standard ID	5653-139-d	ICVS/CCVS File Identifier	ccvs0001.d35		
Target Analyte Name	CCVS/Book Concentration (mg/L)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (mg/L)	Percent Recovery	Batched Samples	
Ammonium	0.625	1	1.67E+05	0.655	105	VS006-17R01a2 VS006-142-TR02a2 VS006-102-TR03a2 VS006-094-TR03a2 VS006-17R04a2 VS006-038-TR05a2	VS006-029-TR06a2 VS006-117-TR07a2 VS006-094-TR08a2 VS006-137-TR09a2 VS006-109-TR10a2

Initial and Continuing Calibration Verification Summary

Instrument ID Number	WC48875	ICVS/CCVS Analysis Date	1/16/99	ICVS/CCVS Analysis Time	8:35		
Operator ID	M. J. Duchsherer	Standard ID	5653-139-d	ICVS/CCVS File Identifier	ccvs0000.d47		
Target Analyte Name	CCVS "Book" Concentration (mg/L)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (mg/L)	Percent Recovery	Batched Samples	
Ammonium	0.625	1	1.63E+05	0.640	102	V5006-072-TR11a2 V5006-055-TR12a2 V5006-087-TR13a2 V5006-079-TR14a2 V5006-046-TR15a2	V5006-022-TR16a2 V5006-006-TR17a2 V5006-014-TR18a2 V5006-063-TR19a2 V5006-04P8-TR20a2

Instrument ID Number	WC48875	ICVS/CCVS Analysis Date	1/16/99	ICVS/CCVS Analysis Time	13:54	
Operator ID	M. J. Duchsherer	Standard ID	5653-139-d	ICVS/CCVS File Identifier	ccvs0000.d59	
Target Analyte Name	CCVS "Book" Concentration (mg/L)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (mg/L)	Percent Recovery	Batched Samples
Ammonium	0.625	1	1.64E+05	0.645	103	END STANDARD

Instrument ID Number	WC48875	ICVS/CCVS Analysis Date	1/19/99	ICVS/CCVS Analysis Time	11:45		
Operator ID	M. J. Duchsherer	Standard ID	5653-139-d	ICVS/CCVS File Identifier	ccvs0000.d19		
Target Analyte Name	CCVS "Book" Concentration (mg/L)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (mg/L)	Percent Recovery	Batched Samples	
Ammonium	0.625	1	1.61E+05	0.629	101	V5006-022-TR16a MS V5006-022-TR16a MSD	

Initial and Continuing Calibration Verification Summary

Instrument ID Number	WC48875	ICVS/CCVS Analysis Date	1/19/99	ICVS/CCVS Analysis Time	13:31	
Operator ID	M. J. Duchsherer	Standard ID	5653-139-d	ICVS/CCVS File Identifier	ccvs0002.d23	
Target Analyte Name	CCVS "Book" Concentration (mg/L)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (mg/L)	Percent Recovery	Batched Samples
Ammonium	0.625	1	1.63E+05	0.639	102	END STANDARD

Initial and Continuing Calibration Blank Summary

Instrument ID Number	WC48875	ICB/CCB Analysis Date	1/15/99	ICB/CCB Analysis Time	17:02
Operator ID	M. J. Duchsherer	Blank ID	5653-126-A	ICB/CCB File Identifier	ccb00000.d12
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (mg/L)	Batched Samples
Ammonium	7664-41-7	6.6		< 0.125	V5006-008-TR01a V5006-008-TR06a V5006-112-TR02a V5006-112-TR07a V5006-102-TR03a V5006-094-TR09a V5006-008-TR04a V5006-137-TR09a V5006-038-TR05a V5006-106-TR10a

Instrument ID Number	WC48875	ICB/CCB Analysis Date	1/15/99	ICB/CCB Analysis Time	22:22
Operator ID	M. J. Duchsherer	Blank ID	5653-126-A	ICB/CCB File Identifier	ccb000001.d24
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (mg/L)	Batched Samples
Ammonium	7664-41-7	6.6		< 0.125	V5006-072-TR11a V5006-020-TR10a V5006-055-TR12a V5006-006-TR17a V5006-087-TR13a V5006-014-TR18a V5006-079-TR14a V5006-063-TR19a V5006-045-TR15a V5006-AP8-TR20a

Instrument ID Number	WC48875	ICB/CCB Analysis Date	1/16/99	ICB/CCB Analysis Time	3:42
Operator ID	M. J. Duchsherer	Blank ID	5653-126-A	ICB/CCB File Identifier	ccb000001.d36
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (mg/L)	Batched Samples
Ammonium	7664-41-7	6.6		< 0.125	V5006-008-TR01a2 V5006-020-TR06a2 V5006-112-TR02a2 V5006-117-TR07a2 V5006-102-TR03a2 V5006-094-TR09a2 V5006-008-TR04a2 V5006-137-TR09a2 V5006-038-TR05a2 V5006-106-TR10a2

Initial and Continuing Calibration Blank Summary

Instrument ID Number	WC48875	ICB/CCB Analysis Date	1/16/99	ICB/CCB Analysis Time	9:01
Operator ID	M. J. Duchsherer	Blank ID	5653-126-A	ICB/CCB File Identifier	ccb000000.d48
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (mg/L)	Batched Samples
Ammonium	7664-41-7	6.6		< 0.125	V5006-072-TR11a2 V5006-022-TR16a2 V5006-055-TR12a2 V5006-006-TR17a2 V5006-067-TR13a2 V5006-014-TR18a2 V5006-076-TR14a2 V5006-063-TR19a2 V5006-046-TR15a2 V5006-049-TR20a2

Instrument ID Number	WC48875	ICB/CCB Analysis Date	1/16/99	ICB/CCB Analysis Time	14:21
Operator ID	M. J. Duchsherer	Blank ID	5653-126-A	ICB/CCB File Identifier	ccb000000.d50
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (mg/L)	Batched Samples
Ammonium	7664-41-7	6.6		< 0.125	END BLANK

Instrument ID Number	WC48875	ICB/CCB Analysis Date	1/19/99	ICB/CCB Analysis Time	12:11
Operator ID	M. J. Duchsherer	Blank ID	5653-126-A	ICB/CCB File Identifier	ccb000000.d20
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (mg/L)	Batched Samples
Ammonium	7664-41-7	6.6		< 0.125	V5006-022-TR16a MS V5006-022-TR16a MS0

Initial and Continuing Calibration Blank Summary

Instrument ID Number	WC48875	ICB/CCB Analysis Date	1/19/99	ICB/CCB Analysis Time	13:57
Operator ID	M. J. Duchsherer	Blank ID	5553-126-A	ICB/CCB Batch File Identifier	ccz00002.d24
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (mg/L)	Batched Samples
Ammonium	7664-41-7	6.6		< 0.125	END BLANK

NH₃ Trip Blanks and Method Performance Blank Summary

Trip Blank

Laboratory Sample Number	VS006- -TR01a	Laboratory Duplicate Number	n/a	Sample Data File Identifier	101-a001.d13
Sample Analysis Date	1/15/99	Sample Analysis Time	17:29:15	Sample Concentration (mg/M) ¹	Sample Concentration (ppmv) ²
Target Analyte Name	GAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M) ¹	Sample Concentration (ppmv) ²
Ammonia	7664-41-7	6.6	6.67	10	14
					Q

(Breakthrough Section)

Laboratory Sample Number	VS006- -TR01a2	Laboratory Duplicate Number	n/a	Sample Data File Identifier	101-a201.d37
Sample Analysis Date	1/16/99	Sample Analysis Time	4:08:51	Sample Concentration (mg/M) ¹	Sample Concentration (ppmv) ²
Target Analyte Name	GAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M) ¹	Sample Concentration (ppmv) ²
Ammonia	7664-41-7	6.6	6.73	10	14
					Q

¹ Retention times are for NH₄⁺² mg/M¹ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

NH₃ Trip Blanks and Method Performance Blank Summary

Trip Blank

Laboratory Sample Number	VS006- -TR04a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/15/99	Sample Analysis Time	18:46:16	Sample Data File Identifier	104-a001.d16	
Target Analyte Name	GAS	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.73	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006- -TR04a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	5:28:47	Sample Data File Identifier	104-a201.d40	
Target Analyte Name	GAS	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.73	10	14	Q

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

NH₃ Trip Blanks and Method Performance Blank Summary

Trip Blank

Laboratory Sample Number	VS006-137-TR09a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/15/99	Sample Analysis Time	21:02:37	Sample Data File Identifier	109-a001.d21	
Target Analyte Name	GAS	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.70	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-137-TR09a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	7:42:01	Sample Data File Identifier	109-a200.d45	
Target Analyte Name	GAS	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Ammonia	7664-41-7	6.6	6.70	10	14	Q

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

NH₃ Trip Blanks and Method Performance Blank Summary

Field Blank

Laboratory Sample Number	VS006-142-TR02a	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/15/99	Sample Analysis Time	17:55:53	Sample Data File Identifier	102-a001.d14	
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³) ¹	Sample Concentration (ppmv) ²	Flags
Ammonia	7664-41-7	6.6	6.67	10	14	Q

(Breakthrough Section)

Laboratory Sample Number	VS006-142-TR02a2	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/16/99	Sample Analysis Time	4:35:31	Sample Data File Identifier	102-a201.d38	
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³) ¹	Sample Concentration (ppmv) ²	Flags
Ammonia	7664-41-7	6.6	6.73	10	14	Q

¹ Retention times are for NH₄⁺² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

NH₃ Trip Blanks and Method Performance Blank Summary

Method Performance Blank

Laboratory Sample Number	VS006-MPB-TR20a	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/16/99	Sample Analysis Time	2:49:09	Sample Data File Identifier	120-a001.434		
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L) ¹	Sample Concentration (ppmv) ²	Flags	
Ammonia	7664-41-7	6.6	6.67	10	14	Q	

(Breakthrough Section)

Laboratory Sample Number	VS006-MPB-TR20a2	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/16/99	Sample Analysis Time	13:28:06	Sample Data File Identifier	120-a200.458		
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L) ¹	Sample Concentration (ppmv) ²	Flags	
Ammonia	7664-41-7	6.6	6.70	10	14	Q	

¹ Retention times are for NH₃.

² mg/L³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

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2.6.4 Supporting Data

This section contains chromatograms and quantitation reports for all analyses including samples, initial calibrations, calibration verifications, blanks, and spikes. This section is organized by the run orders shown in the run sequence table. The general order is as follows:

- Run Sequence Table
- Initial Calibration Data
- Initial Calibration Verification Data
- Initial Blank Verification Data
- Sample Data.

PeakNet AS3500DX - SAMPLES2.AS3

Vial #	Inj. Pos	Inj. Vol.	Inj. Vial	Sample	Method (.MET)	Data	Dil.	Int. Std.	Template (.PRP)
1	A02								vap1
2	A05								vap2
3	A07	25	1	5653-126-A	hina-nh3	CCB	1	1	
4	A06	25	1	autocal1	hina-nh3	I-CAL1	1	1	
5	A05	25	1	autocal2	hina-nh3	I-CAL2	1	1	
6	A04	25	1	autocal3	hina-nh3	I-CAL3	1	1	
7	A03	25	1	autocal4	hina-nh3	I-CAL4	1	1	
8	A02	25	1	autocal5	hina-nh3	I-CAL5	1	1	
9	A08	25	1	autocal6	hina-nh3	I-CAL6	1	1	
10	B04	25	1	5653-139-d	hina-nh3	CCVS	1	1	
11	A07	25	1	5653-126-A	hina-nh3	CCB	1	1	
12	C01	25	1	VS006- -TR01a	hina-nh3	T01-a	1	1	
13	C02	25	1	VS006-142-TR02a	hina-nh3	T02-a	1	1	
14	C03	25	1	VS006-102 -TR03a	hina-nh3	T03-a	1	1	
15	C04	25	1	VS006- -TR04a	hina-nh3	T04-a	1	1	
16	C05	25	1	VS006-038-TR05a	hina-nh3	T05-a	1	1	
17	C06	25	1	VS006-029-TR06a	hina-nh3	T06-a	1	1	
18	C07	25	1	VS006-117-TR07a	hina-nh3	T07-a	1	1	
19	C08	25	1	VS006-094-TR08a	hina-nh3	T08-a	1	1	
20	C09	25	1	VS006-137-TR09a	hina-nh3	T09-a	1	1	
21	C10	25	1	VS006-109-TR10a	hina-nh3	T10-a	1	1	
22	B04	25	1	5653-139-d	hina-nh3	CCVS	1	1	
23	A07	25	1	5653-126-A	hina-nh3	CCB	1	1	
24	C11	25	1	VS006-072-TR11a	hina-nh3	T11-a	1	1	
25	C12	25	1	VS006-055-TR12a	hina-nh3	T12-a	1	1	
26	C13	25	1	VS006-087-TR13a	hina-nh3	T13-a	1	1	
27	C14	25	1	VS006-079-TR14a	hina-nh3	T14-a	1	1	
28	C15	25	1	VS006-046-TR15a	hina-nh3	T15-a	1	1	
29	C16	25	1	VS006-022-TR16a	hina-nh3	T16-a	1	1	
30	C17	25	1	VS006-006-TR17a	hina-nh3	T17-a	1	1	
31	C18	25	1	VS006-014-TR18a	hina-nh3	T18-a	1	1	
32	C19	25	1	VS006-063-TR19a	hina-nh3	T19-a	1	1	
33	C20	25	1	VS006-MPB-TR20a	hina-nh3	T20-a	1	1	
34	B04	25	1	5653-139-d	hina-nh3	CCVS	1	1	
35	A07	25	1	5653-126-A	hina-nh3	CCB	1	1	
36	C21	25	1	VS006- -TR01a2	hina-nh3	T01-a2	1	1	
37	C22	25	1	VS006-142-TR02a2	hina-nh3	T02-a2	1	1	
38	C23	25	1	VS006-102 -TR03a2	hina-nh3	T03-a2	1	1	
39	C24	25	1	VS006- -TR04a2	hina-nh3	T04-a2	1	1	
40	C25	25	1	VS006-038-TR05a2	hina-nh3	T05-a2	1	1	
41	C26	25	1	VS006-029-TR06a2	hina-nh3	T06-a2	1	1	
42	C27	25	1	VS006-117-TR07a2	hina-nh3	T07-a2	1	1	
43	C28	25	1	VS006-094-TR08a2	hina-nh3	T08-a2	1	1	
44	C29	25	1	VS006-137-TR09a2	hina-nh3	T09-a2	1	1	
45	C30	25	1	VS006-109-TR10a2	hina-nh3	T10-a2	1	1	
46	B04	25	1	5653-139-d	hina-nh3	CCVS	1	1	
47	A07	25	1	5653-126-A	hina-nh3	CCB	1	1	
48	C31	25	1	VS006-072-TR11a2	hina-nh3	T11-a2	1	1	
49	C32	25	1	VS006-055-TR12a2	hina-nh3	T12-a2	1	1	
50	C33	25	1	VS006-087-TR13a2	hina-nh3	T13-a2	1	1	
51	C34	25	1	VS006-079-TR14a2	hina-nh3	T14-a2	1	1	
52	C35	25	1	VS006-046-TR15a2	hina-nh3	T15-a2	1	1	
53	C36	25	1	VS006-022-TR16a2	hina-nh3	T16-a2	1	1	
54	C37	25	1	VS006-006-TR17a2	hina-nh3	T17-a2	1	1	
55	C38	25	1	VS006-014-TR18a2	hina-nh3	T18-a2	1	1	
56	C39	25	1	VS006-063-TR19a2	hina-nh3	T19-a2	1	1	
57	C40	25	1	VS006-MPB-TR20a2	hina-nh3	T20-a2	1	1	

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#	Vial Pos	Inj. Vol.	Inj./ Vial	Sample	Method (.MET)	Data	Dil.	Int. Std.	Template (.PRP)
58	B04	25	1	5653-139-d	hina-nh3	CCVS	1	1	
59	A07	25	1	5653-126-A	hina-nh3	CCB	1	1	
60	A07	0	1	STOP PUMPS	c-stop	CSTOP	1	1	

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#	Vial Pos	Inj. Vol.	Inj./ Vial	Sample	Method (.MET)	Data	Dil.	Int. Std.	Template (.PRP)
1	B04	25	1	5653-139-D	hina-nh3	CCVS	1	1	
2	A07	25	1	5653-126-A	hina-nh3	CCB	1	1	
3	B14	25	1	VS006-022-TR16a	hina-nh3	trl16aMS	1	1	
4	B15	25	1	VS006-022-TR16a	hina-nh3	trl16aMSD	1	1	
5	B04	25	1	5653-139-D	hina-nh3	CCVS	1	1	
6	A07	25	1	5653-126-A	hina-nh3	CCB	1	1	
7	A07	0	1	STOP PUMPS	c-stop	CSTOP	1	1	

More Run Parameters

#	Vial Pos	Oven Ctl	Oven Set	Cool Ctl	Cool Set	Cycle Time	Equil Time	Grad Delay	Visc Factor	Prep Visc	Inj Type	Needle Height
1	B04	Off	18	Off	0	0.00	0.00	0.00	Normal	Normal	Full	2.0
2	A07	Off	18	Off	0	0.00	0.00	0.00	Normal	Normal	Full	2.0
3	B14	Off	18	Off	0	0.00	0.00	0.00	Normal	Normal	Full	2.0
4	B15	Off	18	Off	0	0.00	0.00	0.00	Normal	Normal	Full	2.0
5	B04	Off	18	Off	0	0.00	0.00	0.00	Normal	Normal	Full	2.0
6	A07	Off	18	Off	0	0.00	0.00	0.00	Normal	Normal	Full	2.0
7	A07	Off	18	Off	0	0.00	0.00	0.00	Normal	Normal	Push	2.0

Comment:

Method Updated: 19:56 on Mon, 11 Jan 1999

Component: Ammonium

Fit Type: Linear

 $r^2 = 0.997063$ $\text{Amt} = \text{Resp} * 7.008\text{e-}006 + -0.07502$ $\text{Resp} = \text{Amt} * 1.427\text{e+}005 + 1.071\text{e+}004$

Standard: External

Calibration: Area

Component Table - Previous Modification: Mon Jan 11 19:56:45 1999					
☒ Retention Parameters ☐ Quantitation Parameters					
Sodium					
Comp #	Component Name	Ret. Time	Window (min +/-)	Window (% +/-)	Ret. Comp. #
1	Sodium	5.40	5.0	0	
2	Ammonium	6.63	5.0	0	

Groups
Add
Delete
Exit

0				*	
Level	Amount	Area	Height		
1	0	168138	11967		
2	0	108191	8254		
3	0	73654	5503		
4	0	101868	7157		
5	0	123364	9326		
6	0	40967	3159		

K0 = 0
K1 = 0

Amount = K0 + K1*Area

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***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File : I-CAL100.D04      Report Date: 01/11/1999 17:43:28
Sample Name: autocal1 - A06   Collected  : 01/11/1999 17:18:25
Inject #   : 4                Vial #       : A06
Method File: c:\peaknet\method\hina-nh3.met Last Update: 01/11/1999 14:09:31
System Name: Cations (WC48875) Detector    : CD20
Cal. Level : 1                Analyst     :
=====
  
```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
1	Sodium	5.40	5.37	5.37	8.062e+004	1.681e+005	1.681e+005
2	Ammonium	6.63	6.60	6.60	2.031e+004	1.323e+004	1.323e+004

```

=====
Data File : I-CAL100.D04      Report Date: 01/11/1999 17:43:28
Sample Name: autocal1 - A06   Collected  : 01/11/1999 17:18:25
Inject #   : 4                Vial #       : A06
Method File: c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 17:43:28
System Name: Cations (WC48875) Detector    : CD20
Column Type:                  Operator    : M. Duchsherer
=====
  
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37	Sodium	0.000	11967	168138	1	-0.62
2	6.60	Ammonium	0.125	810	13231	1	-0.50
Totals			0.125	12777	181369		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File : I-CAL201.D05      Report Date: 01/11/1999 18:10:02
Sample Name: autocal2 - A05    Collected : 01/11/1999 17:45:00
Inject # : 5                   Vial # : A05
Method File: c:\peaknet\method\hina-nh3.met Last Update: 01/11/1999 17:43:28
System Name: Cations (WC48875) Detector : CD20
Cal. Level : 2                 Analyst :
=====

```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
1	Sodium	5.37	5.40	5.40	6.277e+004	1.082e+005	1.082e+005
2	Ammonium	6.60	6.63	6.63	4.368e+004	3.767e+004	3.767e+004

```

=====
Data File : I-CAL201.D05      Report Date: 01/11/1999 18:10:02
Sample Name: autocal2 - A05    Collected : 01/11/1999 17:45:00
Inject # : 5                   Vial # : A05
Method File: c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 18:10:02
System Name: Cations (WC48875) Detector : CD20
Column Type:                   Operator : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	8254	108191	1	0.62
2	6.63	Ammonium	0.250	2197	37667	1	0.51
Totals			0.250	10451	145858		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File   : I-CAL301.D06           Report Date: 01/11/1999 18:36:55
Sample Name: autocal3 - A04          Collected  : 01/11/1999 18:11:33
Inject #    : 6                      Vial #       : A04
Method File : c:\peaknet\method\hina-nh3.met Last Update: 01/11/1999 18:10:02
System Name: Cations (WC48875)       Detector    : CD20
Cal. Level  : 3                      Analyst     :
=====

```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
1	Sodium	5.40	5.40	5.40	4.171e+004	7.365e+004	7.365e+004
2	Ammonium	6.63	6.63	6.63	1.135e+005	1.068e+005	1.068e+005

```

=====
Data File   : I-CAL301.D06           Report Date: 01/11/1999 18:36:55
Sample Name: autocal3 - A04          Collected  : 01/11/1999 18:11:33
Inject #    : 6                      Vial #       : A04
Method File : c:\peaknet\method\hina-nh3.met Calibrated : 01/11/1999 18:36:55
System Name: Cations (WC48875)       Detector    : CD20
Column Type:                          Operator     : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00		1000

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	5503	73654	1	0.00
2	6.63	Ammonium	0.625	5718	106759	1	0.00
Totals			0.625	11221	180413		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File : I-CAL400.D07          Report Date: 01/11/1999 19:03:30
Sample Name: autocal4 - A03       Collected : 01/11/1999 18:38:25
Inject # : 7                      Vial # : A03
Method File: c:\peaknet\method\hina-nh3.met Last Update: 01/11/1999 18:36:55
System Name: Cations (WC48875)    Detector : CD20
Cal. Level : 4                   Analyst :
=====

```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
1	Sodium	5.40	5.40	5.40	5.694e+004	1.019e+005	1.019e+005
2	Ammonium	6.63	6.67	6.67	2.113e+005	2.018e+005	2.018e+005

```

=====
Data File : I-CAL400.D07          Report Date: 01/11/1999 19:03:30
Sample Name: autocal4 - A03       Collected : 01/11/1999 18:38:25
Inject # : 7                      Vial # : A03
Method File: c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:03:30
System Name: Cations (WC48875)    Detector : CD20
Column Type:                      Operator : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	7157	101868	1	0.00
2	6.67	Ammonium	1.250	10340	201789	1	0.50
Totals			1.250	17497	303657		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File : I-CAL500.D08      Report Date: 01/11/1999 19:30:05
Sample Name: autocal5 - A02    Collected : 01/11/1999 19:05:02
Inject # : 8                   Vial # : A02
Method File: c:\peaknet\method\hina-nh3.met Last Update: 01/11/1999 19:03:30
System Name: Cations (WC48875) Detector : CD20
Cal. Level : 5                 Analyst :
=====

```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
1	Sodium	5.40	5.43	5.43	6.934e+004	1.234e+005	1.234e+005
2	Ammonium	6.67	6.67	6.67	3.911e+005	3.857e+005	3.857e+005

```

=====
Data File : I-CAL500.D08      Report Date: 01/11/1999 19:30:05
Sample Name: autocal5 - A02    Collected : 01/11/1999 19:05:02
Inject # : 8                   Vial # : A02
Method File: c:\peaknet\method\hina-nh3.met Calibrated : 01/11/1999 19:30:05
System Name: Cations (WC48875) Detector : CD20
Column Type:                   Operator : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43	Sodium	0.000	9326	123364	1	0.62
2	6.67	Ammonium	2.500	18220	385700	1	0.00
Totals			2.500	27547	509064		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File : I-CAL601.D09          Report Date: 01/11/1999 19:56:45
Sample Name: autocal6 - A08       Collected : 01/11/1999 19:31:38
Inject # : 9                      Vial # : A08
Method File: c:\peaknet\method\hina-nh3.met Last Update: 01/11/1999 19:30:05
System Name: Cations (WC48875)    Detector : CD20
Cal. Level : 6                   Analyst :
=====

```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
1	Sodium	5.43	5.40	5.40	2.354e+004	4.097e+004	4.097e+004
2	Ammonium	6.67	6.63	6.63	7.178e+005	7.104e+005	7.104e+005

```

=====
Data File : I-CAL601.D09          Report Date: 01/11/1999 19:56:45
Sample Name: autocal6 - A08       Collected : 01/11/1999 19:31:38
Inject # : 9                      Vial # : A08
Method File: c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name: Cations (WC48875)    Detector : CD20
Column Type:                      Operator : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00		1000

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	3159	40967	1	-0.61
2	6.63	Ammonium	5.000	31267	710391	1	-0.50
Totals			5.000	34426	751358		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : CCVS0000.D11                      Report Date: 01/15/1999 17:01:15
Sample Name : 5653-139-d - B04                  Collected  : 01/15/1999 16:36:13
Inject #    : 11                               Vial #     : B04
Method File : c:\peaknet\method\hina-nh3.met    Calibrated  : 01/11/1999 19:56:45
System Name : Cations (WC48875)                 Detector   : CD20
Column Type :                                  Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25             1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47	Sodium	0.000	2899	39232	1	1.23
2	6.73	Ammonium	0.658	5453	104665	1	1.51
Totals			0.658	8352	143897		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: CCVS0000.D11 Sample: 5653-139-d - B04

```

=====
Data File   : CCB00000.D12          Report Date: 01/15/1999 17:27:46
Sample Name : 5653-126-A - A07      Collected  : 01/15/1999 17:02:44
Inject #    : 12                   Vial #       : A07
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate  Start  Stop Area Reject
External           25                1  7500  5.00 Hz  0.00  25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.50	Sodium	0.000	591	7633	1	1.85
0	0.00	Ammonium	0.000	0	0	0	0.00
Totals			0.000	591	7633		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: CCB00000.D12 Sample: 5653-126-A - A07

```

=====
Data File   : T01-a001.D13          Report Date: 01/15/1999 17:54:17
Sample Name: VS006- -TR01a - C01    Collected  : 01/15/1999 17:29:15
Inject #    : 13                    Vial #       : C01
Method File: c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name: Cations (WC48875)       Detector    : CD20
Column Type:                          Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37	Sodium	0.000	65159	1208584	1	-0.62
2	6.67	Ammonium	0.371	3064	63600	1	0.50
Totals			0.371	68223	1272183		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : T02-a001.D14          Report Date: 01/15/1999 18:20:56
Sample Name : VS006-142-TR02a - C02 Collected  : 01/15/1999 17:55:53
Inject #    : 14                   Vial #       : C02
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37 Sodium	0.000	55588	1037707	1	-0.62
2	6.67 Ammonium	0.372	3035	63769	1	0.50
Totals		0.372	58623	1101476		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0

```

=====
Data File   : T03-a001.D15          Report Date: 01/15/1999 18:47:38
Sample Name : VS006-102 -TR03a - C03 Collected  : 01/15/1999 18:22:32
Inject #    : 15                   Vial #       : C03
Method File : c:\peaknet\method\hina-nh3.met Calibrated : 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47	Sodium	0.000	60202	1085664	1	1.23
2	6.77	Ammonium	4.033	23035	586142	1	2.01
Totals			4.033	83236	1671806		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : T04-a001.D16          Report Date: 01/15/1999 19:14:18
Sample Name: VS006- -TR04a - C04    Collected  : 01/15/1999 18:49:16
Inject #    : 16                    Vial #       : C04
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name: Cations (WC48875)       Detector    : CD20
Column Type:                          Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47	Sodium	0.000	58554	1070084	1	1.23
2	6.73	Ammonium	0.352	2882	60997	1	1.51
Totals			0.352	61436	1131081		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : T05-a001.D17          Report Date: 01/15/1999 19:41:01
Sample Name : VS006-038-TR05a - C05  Collected  : 01/15/1999 19:15:55
Inject #    : 17                    Vial #       : C05
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
External           25                1  7500  5.00 Hz  0.00  25.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47 Sodium	0.000	57235	1038429	1	1.23
2	6.77 Ammonium	3.180	18727	464475	1	2.01
Totals		3.180	75962	1502904		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0

```

=====
Data File   : T06-a001.D18                      Report Date: 01/15/1999 20:07:42
Sample Name : VS006-029-TR06a - C06             Collected  : 01/15/1999 19:42:37
Inject #    : 18                                Vial #      : C06
Method File : c:\peaknet\method\hina-nh3.met     Calibrated   : 01/11/1999 19:56:45
System Name : Cations (WC48875)                 Detector     : CD20
Column Type :                                    Operator      : M. Duchsherer
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25           1 7500 5.00 Hz 0.00 25.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40 Sodium	0.000	62638	1148353	1	0.00
2	6.70 Ammonium	3.128	18432	457056	1	1.01
Totals		3.128	81070	1605409		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0

```

=====
Data File   : T07-a001.D19          Report Date: 01/15/1999 20:34:21
Sample Name: VS006-117-TR07a - C07  Collected  : 01/15/1999 20:09:19
Inject #    : 19                    Vial #       : C07
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25             1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	52691	963662	1	0.00
2	6.70	Ammonium	4.285	24034	622136	1	1.01
Totals			4.285	76725	1585798		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T07-a001.D19 Sample: VS006-117-TR07a - C07

```

=====
Data File   : T08-a001.D20          Report Date: 01/15/1999 21:01:01
Sample Name : VS006-094-TR08a - C08 Collected  : 01/15/1999 20:35:58
Inject #    : 20                   Vial #       : C08
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	55691	1018551	1	0.00
2	6.70	Ammonium	4.100	23133	595780	1	1.01
Totals			4.100	78824	1614331		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T08-a001.D20 Sample: VS006-094-TR08a - C08

```

=====
Data File   : T09-a001.D21                      Report Date: 01/15/1999 21:27:40
Sample Name : VS006-137-TR09a - C09             Collected  : 01/15/1999 21:02:37
Inject #    : 21                               Vial #      : C09
Method File : c:\peaknet\method\hina-nh3.met     Calibrated   : 01/11/1999 19:56:45
System Name : Cations (WC48875)                 Detector    : CD20
Column Type :                                   Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	56226	1028364	1	0.00
2	6.70	Ammonium	0.334	2864	58434	1	1.01
Totals			0.334	59090	1086798		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T09-a001.D21 Sample: VS006-137-TR09a - C09

```

=====
Data File   : T10-a001.D22          Report Date: 01/15/1999 21:54:20
Sample Name : VS006-109-TR10a - C10 Collected  : 01/15/1999 21:29:15
Inject #    : 22                    Vial #       : C10
Method File : c:\peaknet\method\hina-nh3.met  Calibrated : 01/11/1999 19:56:45
System Name : Cations (WC48875)            Detector  : CD20
Column Type :                          Operator   : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47 Sodium	0.000	57604	1063136	1	1.23
2	6.77 Ammonium	4.113	23105	597653	1	2.01
Totals		4.113	80709	1660789		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0		

File: T10-a001.D22 Sample: VS006-109-TR10a - C10

```

=====
Data File   : CCVS0001.D23                      Report Date: 01/15/1999 22:20:59
Sample Name : 5653-139-d - B04                  Collected  : 01/15/1999 21:55:57
Inject #    : 23                               Vial #     : B04
Method File : c:\peaknet\method\hina-nh3.met    Calibrated  : 01/11/1999 19:56:45
System Name : Cations (WC48875)                 Detector   : CD20
Column Type :                                   Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47 Sodium	0.000	3026	42444	1	1.23
2	6.77 Ammonium	0.674	5580	106941	1	2.01
Totals		0.674	8607	149385		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0		

File: CCVS0001.D23 Sample: 5653-139-d - B04

```

=====
Data File   : CCB00001.D24           Report Date: 01/15/1999 22:47:34
Sample Name : 5653-126-A - A07       Collected  : 01/15/1999 22:22:28
Inject #    : 24                     Vial #       : A07
Method File : c:\peaknet\method\hina-nh3.met Calibrated : 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.50	Sodium	0.000	607	7946	1	1.85
0	0.00	Ammonium	0.000	0	0	0	0.00
Totals			0.000	607	7946		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: CCB00001.D24 Sample: 5653-126-A - A07

```

=====
Data File   : T11-a001.D25          Report Date: 01/15/1999 23:14:08
Sample Name : VS006-072-TR11a - C11 Collected  : 01/15/1999 22:49:02
Inject #    : 25                   Vial #       : C11
Method File : c:\peaknet\method\hina-nh3.met  Calibrated : 01/11/1999 19:56:45
System Name : Cations (WC48875)           Detector  : CD20
Column Type :                          Operator   : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37	Sodium	0.000	56502	1054558	1	-0.62
2	6.67	Ammonium	4.162	23336	604632	1	0.50
Totals			4.162	79838	1659189		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T11-a001.D25 Sample: VS006-072-TR11a - C11

```

=====
Data File   : T12-a001.D26           Report Date: 01/15/1999 23:40:50
Sample Name : VS006-055-TR12a - C12  Collected  : 01/15/1999 23:15:45
Inject #    : 26                     Vial #       : C12
Method File : c:\peaknet\method\hina-nh3.met Calibrated : 01/11/1999 19:56:45
System Name : Cations (WC48875)       Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

Calibration	Volume	Dilution Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00	1000

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	57399	1049916	1	0.00
2	6.67	Ammonium	4.207	23215	611053	1	0.50
Totals			4.207	80614	1660970		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T12-a001.D26 Sample: VS006-055-TR12a - C12

```

=====
Data File   : T13-a001.D27          Report Date: 01/16/1999 00:07:33
Sample Name : VS006-087-TR13a - C13 Collected  : 01/15/1999 23:42:27
Inject #    : 27                    Vial #       : C13
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                       Operator     : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	57805	1079712	1	0.00
2	6.67	Ammonium	4.288	23419	622533	1	0.50
Totals			4.288	81224	1702244		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : T14-a001.D28                      Report Date: 01/16/1999 00:34:14
Sample Name : VS006-079-TR14a - C14             Collected  : 01/16/1999 00:09:10
Inject #    : 28                               Vial #     : C14
Method File : c:\peaknet\method\hina-nh3.met     Calibrated   : 01/11/1999 19:56:45
System Name : Cations (WC48875)                 Detector    : CD20
Column Type :                                   Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37 Sodium	0.000	55543	1029078	1	-0.62
2	6.67 Ammonium	4.316	24095	626596	1	0.50
Totals		4.316	79638	1655674		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0		

File: T14-a001.D28 Sample: VS006-079-TR14a - C14

```

=====
Data File   : T15-a001.D29           Report Date: 01/16/1999 01:00:53
Sample Name : VS006-046-TR15a - C15  Collected  : 01/16/1999 00:35:51
Inject #    : 29                     Vial #       : C15
Method File : c:\peaknet\method\hina-nh3.met Calibrated : 01/11/1999 19:56:45
System Name : Cations (WC48875)       Detector    : CD20
Column Type :                         Operator     : M. Duchsherer
=====

```

```

Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25           1 7500 5.00 Hz 0.00 25.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37 Sodium	0.000	52649	986469	1	-0.62
2	6.67 Ammonium	3.431	19591	500317	1	0.50
Totals		3.431	72240	1486786		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0		

File: T15-a001.D29 Sample: VS006-046-TR15a - C15

```

=====
Data File   : T16-a001.D30          Report Date: 01/16/1999 01:27:34
Sample Name : VS006-022-TR16a - C16 Collected  : 01/16/1999 01:02:29
Inject #    : 30                    Vial #       : C16
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====
  
```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25             1 7500 5.00 Hz 0.00 25.00      1000
=====
  
```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37	Sodium	0.000	57053	1075250	1	-0.62
2	6.67	Ammonium	2.392	14366	352105	1	0.50
Totals			2.392	71419	1427355		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : T17-a001.D31       Report Date: 01/16/1999 01:54:13
Sample Name : VS006-006-TR17a - C17  Collected  : 01/16/1999 01:29:11
Inject #    : 31                  Vial #       : C17
Method File : c:\peaknet\method\hina-nh3.met Calibrated : 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector   : CD20
Column Type :                      Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37	Sodium	0.000	51896	973038	1	-0.62
2	6.67	Ammonium	0.369	3013	63406	1	0.50
Totals			0.369	54909	1036444		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T17-a001.D31 Sample: VS006-006-TR17a - C17

```

=====
Data File   : T18-a001.D32          Report Date: 01/16/1999 02:20:51
Sample Name : VS006-014-TR18a - C18 Collected  : 01/16/1999 01:55:49
Inject #    : 32                   Vial #       : C18
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25             1 7500 5.00 Hz 0.00 25.00 1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37	Sodium	0.000	55496	1038576	1	-0.62
2	6.67	Ammonium	1.671	10609	249185	1	0.50
Totals			1.671	66105	1287760		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : T19-a001.D33          Report Date: 01/16/1999 02:47:33
Sample Name : VS006-063-TR19a - C19 Collected  : 01/16/1999 02:22:27
Inject #    : 33                   Vial #       : C19
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37	Sodium	0.000	58760	1076771	1	-0.62
2	6.67	Ammonium	4.030	22823	585823	1	0.50
Totals			4.030	81583	1662594		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T19-a001.D33 Sample: VS006-063-TR19a - C19

```

=====
Data File   : T20-a001.D34          Report Date: 01/16/1999 03:14:12
Sample Name : VS006-MPB-TR20a - C20 Collected  : 01/16/1999 02:49:09
Inject #    : 34                   Vial #       : C20
Method File : c:\peaknet\method\hina-nh3.met  Calibrated : 01/11/1999 19:56:45
System Name : Cations (WC48875)           Detector  : CD20
Column Type :                          Operator   : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate  Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37 Sodium	0.000	53053	978466	1	-0.62
2	6.67 Ammonium	0.347	2892	60160	1	0.50
Totals		0.347	55945	1038627		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0

```

=====
Data File   : CCVS0001.D35          Report Date: 01/16/1999 03:40:50
Sample Name : 5653-139-d - B04      Collected  : 01/16/1999 03:15:48
Inject #    : 35                    Vial #       : B04
Method File : c:\peaknet\method\hina-nh3.met Calibrated : 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                       Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
=====
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47	Sodium	0.000	3226	45545	1	1.23
2	6.77	Ammonium	0.655	5497	104105	1	2.01
Totals			0.655	8723	149650		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: CCVS0001.D35 Sample: 5653-139-d - B04

```

=====
Data File   : CCB00001.D36           Report Date: 01/16/1999 04:07:23
Sample Name : 5653-126-A - A07       Collected  : 01/16/1999 03:42:18
Inject #    : 36                     Vial #       : A07
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.50 Sodium	0.000	611	7989	1	1.85
0	0.00 Ammonium	0.000	0	0	0	0.00
Totals		0.000	611	7989		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0		

File: CCB00001.D36 Sample: 5653-126-A - A07

```

=====
Data File   : T01-a201.D37          Report Date: 01/16/1999 04:33:56
Sample Name : VS006-                -TR01a2 - C21      Collected  : 01/16/1999 04:08:51
Inject #    : 37                    Vial #           : C21
Method File : c:\peaknet\method\hina-nh3.met          Calibrated   : 01/11/1999 19:56:45
System Name : Cations (WC48s75)      Detector        : CD20
Column Type :                        Operator         : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43 Sodium	0.000	60248	931267	1	0.62
2	6.73 Ammonium	0.208	2224	40404	1	1.51
Totals		0.208	62472	971671		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0

```

=====
Data File   : T02-a201.D38          Report Date: 01/16/1999 05:00:34
Sample Name : VS006-142-TR02a2 - C22 Collected  : 01/16/1999 04:35:31
Inject #    : 38                    Vial #       : C22
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25             1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. %	Delta Code
1	5.43	Sodium	0.000	62518	958582	1	0.62
2	6.73	Ammonium	0.178	2001	36035	1	1.51
Totals			0.178	64519	994617		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. %	Delta Code
Totals			0.000	0	0		

File: T02-a201.D38 Sample: VS006-142-TR02a2 - C22

```

=====
Data File   : T03-a201.D39          Report Date: 01/16/1999 05:27:11
Sample Name : VS006-102 -TR03a2 - C23  Collected  : 01/16/1999 05:02:09
Inject #    : 39                    Vial #       : C23
Method File : c:\peaknet\method\hina-nh3.met  Calibrated : 01/11/1999 19:56:45
System Name : Cations (WC48875)          Detector  : CD20
Column Type :                          Operator   : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	57313	927481	1	0.00
2	6.70	Ammonium	0.172	1919	35205	1	1.01
Totals			0.172	59232	962686		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T03-a201.D39 Sample: VS006-102 -TR03a2 - C23

```

=====
Data File   : T04-a201.D40          Report Date: 01/16/1999 05:53:49
Sample Name : VS006- -TR04a2 ~ C24  Collected  : 01/16/1999 05:28:47
Inject #    : 40                    Vial #       : C24
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43	Sodium	0.000	59364	920390	1	0.62
2	6.73	Ammonium	0.182	2024	36608	1	1.51
Totals			0.182	61388	956997		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : T05-a201.D41          Report Date: 01/16/1999 06:20:27
Sample Name : VS006-038-TR05a2 - C25 Collected  : 01/16/1999 05:55:24
Inject #    : 41                    Vial #       : C25
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43	Sodium	0.000	51620	789085	1	0.62
2	6.73	Ammonium	0.170	1927	35002	1	1.51
Totals			0.170	53547	824086		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T05-a201.D41 Sample: VS006-038-TR05a2 - C25

```

=====
Data File   : T06-a200.D42          Report Date: 01/16/1999 06:47:07
Sample Name : VS006-029-TR06a2 - C26 Collected  : 01/16/1999 06:22:02
Inject #    : 42                    Vial #       : C26
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40 Sodium	0.000	56048	909196	1	0.00
2	6.70 Ammonium	0.173	1902	35339	1	1.01
Totals		0.173	57950	944535		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0

```

=====
Data File   : T07-a200.D43          Report Date: 01/16/1999 07:13:45
Sample Name : VS006-117-TR07a2 - C27 Collected  : 01/16/1999 06:48:41
Inject #    : 43                    Vial #       : C27
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43	Sodium	0.000	57475	888138	1	0.62
2	6.73	Ammonium	0.172	1941	35214	1	1.51
Totals			0.172	59416	923352		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : T08-a200.D44          Report Date: 01/16/1999 07:40:26
Sample Name : VS006-094-TR08a2 - C28 Collected  : 01/16/1999 07:15:20
Inject #    : 44                   Vial #       : C28
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)    Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25           1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43	Sodium	0.000	61055	942056	1	0.62
2	6.73	Ammonium	0.159	1852	33401	1	1.51
Totals			0.159	62907	975458		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T08-a200.D44 Sample: VS006-094-TR08a2 - C28

```

=====
Data File   : T09-a200.D45          Report Date: 01/16/1999 08:07:05
Sample Name : VS006-137-TR09a2 - C29 Collected  : 01/16/1999 07:42:01
Inject #    : 45                    Vial #       : C29
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	49404	796927	1	0.00
2	6.70	Ammonium	0.177	1903	35925	1	1.01
Totals			0.177	51306	832852		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : T10-a200.D46          Report Date: 01/16/1999 08:33:42
Sample Name : VS006-109-TR10a2 - C30 Collected  : 01/16/1999 08:08:40
Inject #    : 46                    Vial #       : C30
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                       Operator     : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43 Sodium	0.000	61284	949705	1	0.62
2	6.73 Ammonium	0.191	2106	37924	1	1.51
Totals		0.191	63391	987629		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta

```

=====
Data File   : CCVS0000.D47          Report Date: 01/16/1999 09:00:21
Sample Name : 5653-139-d - B04      Collected  : 01/16/1999 08:35:18
Inject #    : 47                   Vial #       : B04
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25             1 7500 5.00 Hz 0.00 25.00 1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47	Sodium	0.000	3484	48577	1	1.23
2	6.77	Ammonium	0.640	5473	101991	1	2.01
Totals			0.640	8956	150568		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: CCVS0000.D47 Sample: 5653-139-d - B04

```

=====
Data File   : CCB00000.D48          Report Date: 01/16/1999 09:26:52
Sample Name : 5653-126-A - A07      Collected  : 01/16/1999 09:01:50
Inject #    : 48                    Vial #       : A07
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                       Operator     : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47	Sodium	0.000	603	8376	1	1.23
0	0.00	Ammonium	0.000	0	0	0	0.00
Totals			0.000	603	8376		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: CCB00000.D48 Sample: 5653-126-A - A07

```

=====
Data File   : T11-a200.D49          Report Date: 01/16/1999 09:53:22
Sample Name : VS006-072-TR11a2 - C31 Collected  : 01/16/1999 09:28:20
Inject #    : 49                    Vial #       : C31
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                       Operator     : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00    1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43 Sodium	0.000	51121	784790	1	0.62
2	6.70 Ammonium	0.165	1850	34308	1	1.01
Totals		0.165	52971	819098		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta

Totals		0.000	0	0		

File: T11-a200.D49 Sample: VS006-072-TR11a2 - C31

```

=====
Data File   : T12-a200.D50          Report Date: 01/16/1999 10:20:02
Sample Name : VS006-055-TR12a2 - C32 Collected  : 01/16/1999 09:54:57
Inject #    : 50                    This page intentionally left blank
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00		1000

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40	Sodium	0.000	56384	870608	1	0.00
2	6.70	Ammonium	0.190	2097	37841	1	1.01
Totals			0.190	58481	908450		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
---------	----------	----------------	---------------------	--------	------	----------	--------

File: T12-a200.D50 Sample: VS006-055-TR12a2 - C32

```

=====
Data File   : T13-a200.D51          Report Date: 01/16/1999 10:46:40
Sample Name : VS006-087-TR13a2 - C33 Collected  : 01/16/1999 10:21:36
Inject #    : 51                    Vial #       : C33
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40 Sodium	0.000	49538	801689	1	0.00
2	6.70 Ammonium	0.158	1796	33255	1	1.01
Totals		0.158	51334	834943		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0		

File: T13-a200.D51 Sample: VS006-087-TR13a2 - C33

```

=====
Data File   : T14-a200.D52      Report Date: 01/16/1999 11:13:20
Sample Name : VS006-079-TR14a2 - C34  Collected  : 01/16/1999 10:48:14
Inject #    : 52                Vial #       : C34
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)  Detector    : CD20
Column Type :                    Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate  Start  Stop Area Reject
-----
External           25                1 7500 5.00 Hz  0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43	Sodium	0.000	49950	769580	1	0.62
2	6.73	Ammonium	0.172	1946	35287	1	1.51
Totals			0.172	51897	804867		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T14-a200.D52 Sample: VS006-079-TR14a2 - C34

```

=====
Data File   : T15-a200.D53          Report Date: 01/16/1999 11:39:59
Sample Name : VS006-046-TR15a2 - C35 Collected  : 01/16/1999 11:14:54
Inject #    : 53                    Vial #       : C35
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25             1 7500 5.00 Hz 0.00 25.00 1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43	Sodium	0.000	56519	870874	1	0.62
2	6.70	Ammonium	0.158	1772	33197	1	1.01
Totals			0.158	58291	904071		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : T16-a200.D54          Report Date: 01/16/1999 12:06:35
Sample Name : VS006-022-TR16a2 - C36 Collected  : 01/16/1999 11:41:33
Inject #    : 54                    Vial #       : C36
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          25           1 7500 5.00 Hz 0.00 25.00 1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43	Sodium	0.000	56564	887272	1	0.62
2	6.73	Ammonium	0.172	1931	35282	1	1.51
Totals			0.172	58495	922554		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T16-a200.D54 Sample: VS006-022-TR16a2 - C36

```

=====
Data File   : T17-a200.D55          Report Date: 01/16/1999 12:33:14
Sample Name : VS006-006-TR17a2 - C37 Collected  : 01/16/1999 12:08:09
Inject #    : 55                    Vial #       : C37
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1 7500 5.00 Hz  0.00 25.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43	Sodium	0.000	61324	948803	1	0.62
2	6.70	Ammonium	0.185	1960	37050	1	1.01
Totals			0.185	63284	985852		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: T17-a200.D55 Sample: VS006-006-TR17a2 - C37

```

=====
Data File   : T18-a200.D56           Report Date: 01/16/1999 12:59:51
Sample Name : VS006-014-TR18a2 - C38 Collected  : 01/16/1999 12:34:49
Inject #    : 56                     Vial #       : C38
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.43 Sodium	0.000	52652	810105	1	0.62
2	6.73 Ammonium	0.163	1899	33914	1	1.51
Totals		0.163	54551	844019		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0		

File: T18-a200.D56 Sample: VS006-014-TR18a2 - C38

```

=====
Data File   : T19-a200.D57          Report Date: 01/16/1999 13:26:31
Sample Name : VS006-063-TR19a2 - C39 Collected  : 01/16/1999 13:01:25
Inject #    : 57                    Vial #       : C39
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40 Sodium	0.000	56876	902477	1	0.00
2	6.70 Ammonium	0.205	2166	39916	1	1.01
Totals		0.205	59042	942393		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0		

File: T19-a200.D57 Sample: VS006-063-TR19a2 - C39

```

=====
Data File   : T20-a200.D58          Report Date: 01/16/1999 13:53:11
Sample Name : VS006-MPB-TR20a2 - C40 Collected  : 01/16/1999 13:28:06
Inject #    : 58                    Vial #       : C40
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                       Operator     : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.40 Sodium	0.000	61897	988836	1	0.00
2	6.70 Ammonium	0.171	1920	35112	1	1.01
Totals		0.171	63818	1023948		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0

```

=====
Data File   : CCVS0000.D59           Report Date: 01/16/1999 14:19:50
Sample Name : 5653-139-d - B04       Collected  : 01/16/1999 13:54:46
Inject #    : 59                     Vial #       : B04
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                        Operator     : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
External           25                1  7500  5.00 Hz  0.00 25.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47	Sodium	0.000	3710	52558	1	1.23
2	6.77	Ammonium	0.645	5496	102751	1	2.01
Totals			0.645	9205	155308		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: CCVS0000.D59 Sample: 5653-139-d - B04

```

=====
Data File   : CCB00000.D60          Report Date: 01/16/1999 14:46:22
Sample Name : 5653-126-A - A07      Collected  : 01/16/1999 14:21:19
Inject #    : 60                    Vial #       : A07
Method File : c:\peaknet\method\hna-hn3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)     Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.50 Sodium	0.000	661	8674	1	1.85
0	0.00 Ammonium	0.000	0	0	0	0.00
Totals		0.000	661	8674		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals		0.000	0	0		

File: CCB00000.D60 Sample: 5653-126-A - A07

```

=====
Data File   : ccvs0000.d19                      Report Date: 01/19/1999 15:38:15
Sample Name : 5653-139-d - B04                  Collected  : 01/19/1999 11:45:03
Inject #    : 19                               Vial #     : B04
Method File : c:\peaknet\method\hina-nh3.met    Calibrated  : 01/11/1999 19:56:45
System Name : Cations (WC48875)                Detector   : CD20
Column Type :                                  Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate  Start  Stop Area Reject
-----
External           25                1   7500  5.00 Hz  0.00  25.00    1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.53	Sodium	0.000	1898	26302	1	2.47
2	6.83	Ammonium	0.629	5329	100527	1	3.02
Totals			0.629	7227	126829		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: ccvs0000.d19 Sample: 5653-139-d - B04

```

=====
Data File   : ccb00000.d20          Report Date: 01/19/1999 15:38:20
Sample Name : 5653-126-A - A07      Collected  : 01/19/1999 12:11:37
Inject #    : 20                    Vial #       : A07
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)      Detector    : CD20
Column Type :                       Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          25             1 7500 5.00 Hz 0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47	Sodium	0.000	395	5293	1	1.23
0	0.00	Ammonium	0.000	0	0	0	0.00
Totals			0.000	395	5293		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: ccb00000.d20 Sample: 5653-126-A - A07

```

=====
Data File   : tr16ams0.d21                      Report Date: 01/19/1999 15:38:24
Sample Name : VS006-022-TR16a MS                Collected  : 01/19/1999 12:38:06
Inject #    : 21                                Vial #       : B14
Method File : c:\peaknet\method\hina-nh3.met     Calibrated   : 01/11/1999 19:56:45
System Name : Cations (WC48875)                 Detector      : CD20
Column Type :                                     Operator     : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1 7500 5.00 Hz  0.00 25.00    1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37	Sodium	0.000	47654	871629	1	-0.62
2	6.67	Ammonium	2.907	17266	425526	1	0.50
Totals			2.907	64920	1297155		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File   : tr16amsd.d22          Report Date: 01/19/1999 15:38:30
Sample Name : VS006-022-TR16a  MSD  Collected  : 01/19/1999 13:04:46
Inject #    : 22                   Vial #       : B15
Method File : c:\peaknet\method\hina-nh3.met Calibrated: 01/11/1999 19:56:45
System Name : Cations (WC48875)    Detector    : CD20
Column Type :                      Operator     : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	25	1	7500	5.00 Hz	0.00	25.00		1000

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.37	Sodium	0.000	44641	823977	1	-0.62
2	6.67	Ammonium	2.931	17272	428985	1	0.50
Totals			2.931	61913	1252962		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: tr16amsd.d22 Sample: VS006-022-TR16a MSD

```

=====
Data File   : ccvs0002.d23                      Report Date: 01/19/1999 15:38:35
Sample Name : 5653-139-d - B04                  Collected  : 01/19/1999 13:31:23
Inject #    : 23                               Vial #     : B04
Method File : c:\peaknet\method\hina-nh3.met    Calibrated  : 01/11/1999 19:56:45
System Name : Cations (WC48875)                 Detector   : CD20
Column Type :                                   Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1  7500  5.00 Hz  0.00  25.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47	Sodium	0.000	1998	26386	1	1.23
2	6.73	Ammonium	0.639	5312	101946	1	1.51
Totals			0.639	7310	128331		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0

```

=====
Data File : ccb00002.d24          Report Date: 01/19/1999 15:38:39
Sample Name: 5653-126-A - A07      Collected : 01/19/1999 13:57:55
Inject # : 24                     Vial # : A07
Method File: c:\peaknet\method\hina-nh3.met Calibrated : 01/11/1999 19:56:45
System Name: Cations (WC48875)    Detector : CD20
Column Type:                      Operator : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           25                1 7500 5.00 Hz  0.00 25.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
1	5.47	Sodium	0.000	449	6280	1	1.23
0	0.00	Ammonium	0.000	0	0	0	0.00
Totals			0.000	449	6280.		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration ug/ml	Height	Area	Bl. Code	%Delta
Totals			0.000	0	0		

File: ccb00002.d24 Sample: 5653-126-A - A07

2.7 NO and NO₂ in Sorbent Tube Train Samples

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2.7.1 Narrative

This section contains descriptions of the analytical method and quality assurance used during analysis.

2.7.1.1 Determination of NO and NO₂ in Sorbent Tube Train Samples

Nitric oxide (NO) and nitrogen dioxide (NO₂) are trapped and quantitatively converted to nitrite and nitrate anion in the STT sorbent tubes. The sorbent tubes are then leached with triethanolamine/water solution and analyzed for nitrate and/or nitrite ion by ion chromatography. The ion chromatograph consists of a guard column, one or more analytical columns, a suppressor device, and a conductivity detector. The chromatographic eluent is a mixture of aqueous sodium carbonate and sodium bicarbonate.

No deviations from procedures were noted during the analysis of the sorbent tube train samples for NO and NO₂.

2.7.1.2 Nitrogen Oxides Analytical Quality Assurance

Method LA-533-400, Rev. A-0, is used to conduct the quantitative ion chromatographic determination of nitrate and nitrite ions in STT leaching solutions. The measurement of these analytes are used to calculate and report the concentration of nitric oxide (NO) and nitrogen dioxide (NO₂) in waste tank headspace samples collected in STTs.

The ion chromatographic system is calibrated initially prior to starting sample analysis and each time continuing calibration criteria cannot be met for subsequent analysis. At least 3 standard concentration levels containing the target analytes are used for initial calibration (ICAL). The initial calibration standards are used to determine chromatographic column retention times and to compute retention time windows. The validity of the initial calibration is demonstrated by meeting linearity, deviation, or curve fitting criteria and through the satisfactory analysis of a "check standard", the ICVS, for the target analytes. Initial calibration blanks are measured to demonstrate system cleanliness. Each day that the IC system is used for analysis, the continuing calibration of the system is verified through the measurement of a mid-level check standard, or CCVS. Criteria for the CCVS target analytes that must be met are retention time windows and percent recoveries. Continuing calibration blanks (CCBs) are used to document the continued cleanliness of the analytical system.

With each tank sample reporting batch, the analysis of a method blank (MB) or process blank is conducted and reported. The MB cannot exceed maximum allowable contamination levels for the target analytes. Also, with each tank sample reporting batch, the analysis of 2 actual samples "spiked" with the target analyte is conducted. The recovery of the matrix spike and matrix spike duplicate must meet precision (expressed as relative percent difference - RPD) and accuracy (expressed as percent recovery - %R) criteria. And also, with each tank sample reporting batch, the analysis of a laboratory control sample (LCS) is conducted. Because it represents new technology for this measurement system, the use of the LCS is now under development. The recovery of the LCS must meet accuracy (percent recovery - %R) requirements or the resulting data is flagged.

Matrix spike samples that were fortified at levels specified in the method (30-50%) provided unacceptable recoveries. When fortified to method specifications, the recoveries were approximately 57-59%. Recoveries were significantly better (83-95%) when the fortification level was increased (to 275%), which put the instrument response closer to the middle of the calibration curve. Matrix spikes fortified at the higher levels were not prepared in duplicate. Separate duplicate analyses, independent of the matrix spike analyses, were performed to provide precision estimates. There were no other exceptions to quality control requirements.

2.7.2 Result Summary Tables

Result summary tables are organized by sample. All reported values have been corrected to 25 °C and 1 atmosphere pressure. Precision information can be derived from the matrix spike and matrix spike duplicate results.

Sample Target Analyte Concentrations for Sorbent Train Number VS006-102-TR03

Laboratory Sample Number	VS006-102-TR03b	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/7/99	Sample Analysis Time	18:06:43	Sample Retention Time (min)	1.62	Sample Concentration (mg/M ³)	5.0
Target Analyte Name	QAS Number	Expected Retention Time (min)				Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67				2.7	Q

Laboratory Sample Number	VS006-102-TR03d	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/11/99	Sample Analysis Time	14:38:40	Sample Retention Time (min)	1.65	Sample Concentration (ppmv)	4.1
Target Analyte Name	QAS Number	Expected Retention Time (min)				Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67				4.1	Q

¹ Retention times are for NO₂.² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-038-TR05

Laboratory Sample Number	VS006-038-TR05b	Laboratory Duplicate Number	n/a	105-b001.d14			
Sample Analysis Date	1/7/99	Sample Analysis Time	18:26:31	Sample Data File Identifier	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.61	5.0	2.7	2.7	Q

Laboratory Sample Number	VS006-038-TR05d	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/11/99	Sample Analysis Time	15:01:25	Sample Data File Identifier	105-4000.438		
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (ng/M ³)	Sample Concentration (ppmv)	Flags	
Nitric Oxide	10102-43-9	1.67	1.61	5.0	4.1	Q	

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-029-TR06

Laboratory Sample Number	VS006-029-TR06b	Laboratory Duplicate Number	n/a						
Sample Analysis Date	1/7/99	Sample Analysis Time	18:36:25	Sample Data File Identifier	106-b001.d15				
Target Analyte Name	Gas Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags			
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7				Q

Laboratory Sample Number	VS006-029-TR06d	Laboratory Duplicate Number	n/a						
Sample Analysis Date	1/11/99	Sample Analysis Time	15:11:20	Sample Data File Identifier	106-d000.d39				
Target Analyte Name	Gas Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags			
Nitric Oxide	10102-43-9	1.67	1.63	5.0	4.1				Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-117-TR07

Laboratory Sample Number	VS006-117-TR07b	Laboratory Duplicate Number	n/a		
Sample Analysis Date	1/7/99	Sample Analysis Time	18:46:20	Sample Data File Identifier	107-b001.d16
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)
Nitrogen Dioxide	10102-44-0	1.67	1.62	5.0	2.7
					Q

Laboratory Sample Number	VS006-117-TR07d	Laboratory Duplicate Number	n/a		
Sample Analysis Date	1/11/99	Sample Analysis Time	16:21:14	Sample Data File Identifier	107-4000.d40
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)
Nitric Oxide	10102-43-9	1.67	1.62	5.0	4.1
					Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-094-TR08

Laboratory Sample Number	VS006-094-TR08b	Laboratory Duplicate Number	n/a		
Sample Analysis Date	1/7/99	Sample Analysis Time	18:56:13	Sample Data File Identifier	108-b001.d17
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7
					Q

Laboratory Sample Number	VS006-094-TR08d	Laboratory Duplicate Number	n/a		
Sample Analysis Date	1/11/99	Sample Analysis Time	15:31:08	Sample Data File Identifier	108-d000.d41
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)
Nitric Oxide	10102-43-9	1.67	1.63	5.0	4.1
					Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-109-TR10

Laboratory Sample Number	VS006-109-TR10b	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/7/99	Sample Analysis Time	19:16:01	Sample Data File Identifier	t10-b001.d19	
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L)	Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7	Q

Laboratory Sample Number	VS006-109-TR10d	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/11/99	Sample Analysis Time	15:50:55	Sample Data File Identifier	t10-d000.d43	
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L)	Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67	1.61	5.0	4.1	Q

¹ Retention times are for NO₂

² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-072-TR11

Laboratory Sample Number	VS006-072-TR11b	Laboratory Duplicate Number	n/a	Sample Data File Identifier	t11-0002.d22	Flags
Sample Analysis Date	1/1/99	Sample Analysis Time	12:14:26	Sample Concentration (mg/M) ²	5.0	2.7
Target Analyte Name	GAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (ppmv) ²	5.0	2.7
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7	Q

Laboratory Sample Number	VS006-072-TR11d	Laboratory Duplicate Number	n/a	Sample Data File Identifier	t11-0000.d46	Flags
Sample Analysis Date	1/1/99	Sample Analysis Time	16:20:01	Sample Concentration (mg/M) ²	5.0	4.1
Target Analyte Name	GAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (ppmv) ²	5.0	4.1
Nitric Oxide	10102-43-9	1.67	1.62	5.0	4.1	Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-055-TR12

Laboratory Sample Number	VS006-055-TR12b	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/11/99	Sample Analysis Time	12:24:18	Sample Data File Identifier	t12-b002.d23	Flags
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³) ²	Sample Concentration (ppmv) ²	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7	Q

Laboratory Sample Number	VS006-055-TR12d	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/11/99	Sample Analysis Time	16:29:55	Sample Data File Identifier	t12-4000.d47	Flags
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³) ²	Sample Concentration (ppmv) ²	Flags
Nitric Oxide	10102-43-9	1.67	1.63	5.0	4.1	Q

¹ Retention times are for NO₂.² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-087-TR13

Laboratory Sample Number	VS006-087-TR13b	Laboratory Duplicate Number	n/a	t13-0002.d24		
Sample Analysis Date	1/1/99	Sample Analysis Time	12:34:13	Sample Data File Identifier	Sample Concentration (ppmv)	Flags
Target Analyte Name	Gas Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7	Q

Laboratory Sample Number	VS006-087-TR13d	Laboratory Duplicate Number	n/a	t13-0000.d48		
Sample Analysis Date	1/1/99	Sample Analysis Time	16:39:46	Sample Data File Identifier	Sample Concentration (ppmv)	Flags
Target Analyte Name	Gas Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67	1.63	5.0	4.1	Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-079-TR14

Laboratory Sample Number	VS006-079-TR14b	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/11/99	Sample Analysis Time	12:44:06	Sample Data File Identifier	t14-b002.d25	
Target Analyte Name	GAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (ng/M ³)	Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7	Q

Laboratory Sample Number	VS006-079-TR14d	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/11/99	Sample Analysis Time	16:49:42	Sample Data File Identifier	t14-d000.d49	
Target Analyte Name	GAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (ng/M ³)	Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67	1.63	5.0	4.1	Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-046-TR15

Laboratory Sample Number	VS006-046-TR15d	Laboratory Duplicate Number	n/a	t15-b002.d26		
Sample Analysis Date	1/11/99	Sample Analysis Time	12:54:01	Sample Data File Identifier		
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M) ²	Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7	Q

Laboratory Sample Number	VS006-046-TR15d	Laboratory Duplicate Number	n/a	t15-d000.d50		
Sample Analysis Date	1/11/99	Sample Analysis Time	16:58:35	Sample Data File Identifier		
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M) ²	Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67	1.62	5.0	4.1	Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-022-TR16

Laboratory Sample Number	VS006-022-TR16b	Laboratory Duplicate Number	n/a	t16-b000.d27			
Sample Analysis Date	1/11/99	Sample Analysis Time	13:03:54	Sample Data File Identifier			
Target Analyte Name	Gas Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M) ²	Sample Concentration (ppmv) ¹	Flags	
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7	Q	

Laboratory Sample Number	VS006-022-TR16d	Laboratory Duplicate Number	n/a	t16-d000.d51			
Sample Analysis Date	1/11/99	Sample Analysis Time	17:05:30	Sample Data File Identifier			
Target Analyte Name	Gas Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M) ²	Sample Concentration (ppmv) ¹	Flags	
Nitric Oxide	10102-43-9	1.67	1.63	5.0	4.1	Q	

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-006-TR17

Laboratory Sample Number	VS006-006-TR17b	Laboratory Duplicate Number	n/a	t17-b000.d28		
Sample Analysis Date	1/11/99	Sample Analysis Time	13:13:47	Sample Data File Identifier		
Target Analyte Name	Gas Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³) ²	Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.62	5.0	2.7	Q

Laboratory Sample Number	VS006-006-TR17d	Laboratory Duplicate Number	n/a	t17-4000.d52		
Sample Analysis Date	1/11/99	Sample Analysis Time	17:19:22	Sample Data File Identifier		
Target Analyte Name	Gas Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³) ²	Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67	1.64	5.0	4.1	Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-014-TR18

Laboratory Sample Number	VS006-014-TR18b	Laboratory Duplicate Number	n/a	t18-b000.d29		
Sample Analysis Date	1/11/99	Sample Analysis Time	13:23:40	Sample Data File Identifier	Sample Concentration (ppmv) ²	Flags
Target Analyte Name	OAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7	Q

Laboratory Sample Number	VS006-014-TR18d	Laboratory Duplicate Number	n/a	t18-d000.d53		
Sample Analysis Date	1/11/99	Sample Analysis Time	17:28:17	Sample Data File Identifier	Sample Concentration (ppmv)	Flags
Target Analyte Name	OAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67	1.64	5.0	4.1	Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Sample Target Analyte Concentrations for Sorbent Train Number VS006-063-TR19

Laboratory Sample Number	VS006-063-TR19b	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/11/99	Sample Analysis Time	13:33:35	Sample Data File Identifier	t19-b000.d30	
Target Analyte Name	Gas Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M) ¹	Sample Concentration (ppmv) ²	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.61	5.0	2.7	Q

Laboratory Sample Number	VS006-063-TR19d	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/11/99	Sample Analysis Time	17:38:10	Sample Data File Identifier	t19-d000.d54	
Target Analyte Name	Gas Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M) ¹	Sample Concentration (ppmv) ²	Flags
Nitric Oxide	10102-43-9	1.67	1.63	5.0	4.1	Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

2.7.3 Quality Control Summary Tables

Quality control summary tables are organized by the quality control parameter. The NO_2/NO chromatography method determines the concentrations of nitrite ion in solution, then converts the concentration of nitrite ion to the corresponding amount of nitrogen dioxide and nitric oxide. Calibration standards and instrument blank results, therefore, are reported in terms of nitrite ion. Field blank and method performance blank samples have no tank vapor pulled through them, however, they are reported in terms of nitrogen dioxide and nitric oxide by basing the result on a "typical" sample size of 2000 ml tank vapor. The following tables are presented in this section in the following order:

- Target Analyte Initial Calibration Tables
- Initial and Continuing Calibration Verification Summary
- Initial and Continuing Blank Verification Summary
- TripBlank, Field Blank and Method Performance Blank Summary
 - Trip Blanks
 - Field Blanks
 - Method Performance Blanks
- Matrix Spike Summary
- Duplicates

Target Analyte Initial Calibration Tables

Instrument ID Number	WC48876	Initial Calibration Date	1/2/99	Initial Calibration File Identifiers	i-cal100.d06 i-cal200.d05 i-cal300.d04 i-cal400.d03 i-cal500.d02	
		Initial Calibration Time	1:41 PM			
Operator ID	M. J. Duchsherer	Standard ID	5653-137-A			
Target Analyte Name	Instrument Calibration Range (µg/mL)	No. of Calibration Points	Calibration Model	Instrument Response Factor (slope)	Intercept	r ²
Nitrite	0.125 - 2.50	5	Linear	9.99E+04	-2349	1.000

Batched Samples					
VS006- -TR01b	VS006-072-TR11b	VS006- -TR01d	VS006-072-TR11d	VS006-063-TR05d MS	
VS006-142-TR02b	VS006-055-TR12b	VS006-142-TR02d	VS006-055-TR12d	VS006-063-TR05d MSD	
VS006-102-TR03b	VS006-087-TR13b	VS006-102-TR03d	VS006-087-TR13d	VS006-063-TR19b MS	
VS006- -TR04b	VS006-079-TR14b	VS006- -TR04d	VS006-079-TR14d	VS006-063-TR19d MS	
VS006-038-TR05b	VS006-046-TR15b	VS006-038-TR05d	VS006-046-TR15d		
VS006-029-TR06b	VS006-022-TR16b	VS006-029-TR06d	VS006-022-TR16d		
VS006-117-TR07b	VS006-008-TR17b	VS006-117-TR07d	VS006-008-TR17d		
VS006-094-TR08b	VS006-014-TR18b	VS006-094-TR08d	VS006-014-TR18d		
VS006-137-TR09b	VS006-063-TR19b	VS006-137-TR09d	VS006-063-TR19d		
VS006-109-TR10b	VS006-MPB-TR20b	VS006-109-TR10d	VS006-MPB-TR20d		

Initial and Continuing Calibration Verification Summary

Instrument ID Number	WC48876	ICVS/CCVS Analysis Date	1/7/99	ICVS/CCVS Analysis Time	17:37		
Operator ID	M. J. Duchsherer	Standard ID	5653-137-C	ICVS/CCVS File Identifier	ccvs0000.d09		
Target Analyte Name	CCVS Book Concentration (µg/mL)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (µg/mL)	Percent Recovery	Batched Samples	
Nitrite	0.625	1	9.92E+04	0.644	103	VS006-029-TR00b	VS006-029-TR00b
						VS006-142-TR02b	VS006-117-TR07b
						VS006-102-TR03b	VS006-094-TR00b
						VS006-074-TR04b	VS006-137-TR09b
						VS006-038-TR05b	VS006-109-TR10b

Instrument ID Number	WC48876	ICVS/CCVS Analysis Date	1/7/99	ICVS/CCVS Analysis Time	19:25		
Operator ID	M. J. Duchsherer	Standard ID	5653-137-C	ICVS/CCVS File Identifier	ccvs0002.d20		
Target Analyte Name	CCVS Book Concentration (µg/mL)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (µg/mL)	Percent Recovery	Batched Samples	
Nitrite	0.625	1	9.68E+04	0.629	101	END STANDARD	

Instrument ID Number	WC48876	ICVS/CCVS Analysis Date	1/11/99	ICVS/CCVS Analysis Time	11:55		
Operator ID	M. J. Duchsherer	Standard ID	5653-137-C	ICVS/CCVS File Identifier	ccvs0003.d20		
Target Analyte Name	CCVS Book Concentration (ug/mL)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (ug/mL)	Percent Recovery	Batched Samples	
Nitrite	0.625	1	1.05E+05	0.680	109	VS006-072-TR11b	VS006-022-TR18b
						VS006-055-TR12b	VS006-006-TR17b
						VS006-087-TR13b	VS006-014-TR19b
						VS006-079-TR14b	VS006-063-TR16b
						VS006-046-TR15b	VS006-MP0-TR20b

Initial and Continuing Calibration Verification Summary

Instrument ID Number	WC48876	ICVS/CCVS Analysis Date	1/11/99	ICVS/CCVS Analysis Time	13:53		
Operator ID	M. J. Duchsherer	Standard ID	5653-137-C	ICVS/CCVS File Identifier	ccvs0000.d32		
Target Analyte Name	CCVS Book Concentration (µg/mL)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (µg/mL)	Percent Recovery	Batched Samples	
Nitrite	0.625	1	1.03E+05	0.667	107	VS006-029-TR06d VS006-142-TR02d VS006-102-TR03d VS006-137-TR09d VS006-036-TR05d	VS006-029-TR06d VS006-117-TR07d VS006-094-TR08d VS006-137-TR09d VS006-109-TR10d

Instrument ID Number	WC48876	ICVS/CCVS Analysis Date	1/11/99	ICVS/CCVS Analysis Time	16:00		
Operator ID	M. J. Duchsherer	Standard ID	5653-137-C	ICVS/CCVS File Identifier	ccvs0000.d44		
Target Analyte Name	CCVS Book Concentration (µg/mL)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (µg/mL)	Percent Recovery	Batched Samples	
Nitrite	0.625	1	1.02E+05	0.662	106	VS006-072-TR11d VS006-055-TR12d VS006-097-TR13d VS006-079-TR14d VS006-046-TR15d	VS006-022-TR18d VS006-006-TR17d VS006-014-TR18d VS006-063-TR19d VS006-APB-TR20d

Instrument ID Number	WC48876	ICVS/CCVS Analysis Date	1/11/99	ICVS/CCVS Analysis Time	17:59		
Operator (ID)	M. J. Duchsherer	Standard ID	5653-137-C	ICVS/CCVS File Identifier	ccvs0000.d56		
Target Analyte Name	CCVS Book Concentration (µg/mL)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (µg/mL)	Percent Recovery	Batched Samples	
Nitrite	0.625	1	1.01E+05	0.655	105	END STANDARD	

Initial and Continuing Calibration Verification Summary

Instrument ID Number	WC48876	ICVS/CCVS Analysis Date	1/19/99	ICVS/CCVS Analysis Time	9:39	
Operator ID	M. J. Duchsherer	Standard ID	5653-137-C	ICVS/CCVS File Identifier	ccvs0003.d08	
Target Analyte Name	CCVS Book Concentration (µg/mL)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (µg/mL)	Percent Recovery	Batched Samples
Nitrite	0.625	1	9.65E+04	0.627	100	VS006-063-TR05d MS VS006-063-TR05d MSD VS006-063-TR19b MS VS006-063-TR19d MS

Instrument ID Number	WC48876	ICVS/CCVS Analysis Date	1/19/99	ICVS/CCVS Analysis Time	10:58	
Operator ID	M. J. Duchsherer	Standard ID	5653-137-C	ICVS/CCVS File Identifier	ccvs0000.d16	
Target Analyte Name	CCVS Book Concentration (µg/mL)	No. of Verification Points	Instrument Response Factor	CCVS Analytical Result (µg/mL)	Percent Recovery	Batched Samples
Nitrite	0.625	1	9.47E+04	0.616	98	END STANDARD

Initial and Continuing Calibration Blank Summary

Instrument ID Number	WC48876	ICB/CCB Analysis Date	1/7/99	ICB/CCB Analysis Time	17:27
Operator ID	M. J. Duchsherer	Blank ID	5653-136-C	ICB/CCB File Identifier	ccb00001.d08
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (µg/mL)	Batched Samples
Nitrite	7664-41-7	1.67		< 0.125	V5006-129-TR06a V5006-142-TR02b V5006-102-TR09b V5006-137-TR09b V5006-038-TR05b V5006-029-TR06b V5006-117-TR07b V5006-094-TR06b V5006-106-TR10b

Instrument ID Number	WC48876	ICB/CCB Analysis Date	1/7/99	ICB/CCB Analysis Time	18:35
Operator ID	M. J. Duchsherer	Blank ID	5653-136-C	ICB/CCB File Identifier	ccb00001.d21
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (mg/mL)	Batched Samples
Nitrite	7664-41-7	1.67		< 0.125	END BLANK

Instrument ID Number	WC48876	ICB/CCB Analysis Date	1/11/99	ICB/CCB Analysis Time	12:04
Operator ID	M. J. Duchsherer	Blank ID	5653-136-C	ICB/CCB File Identifier	ccb00002.d21
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (µg/mL)	Batched Samples
Nitrite	7664-41-7	1.67		< 0.125	V5006-072-TR11b V5006-055-TR12b V5006-067-TR13b V5006-078-TR14b V5006-045-TR15b V5006-022-TR16b V5006-036-TR17b V5006-014-TR18b V5006-063-TR19b V5006-4479-TR20b

Initial and Continuing Calibration Blank Summary

Instrument ID Number	WC48876	ICB/CCB Analysis Date	1/11/99	ICB/CCB Analysis Time	14:03
Operator ID	M. J. Duchsherer	Blank ID	5653-136-C	ICB/CCB File Identifier	ccb00000.d33
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (µg/mL)	Batched Samples
Nitrite	7664-41-7	1.67		< 0.125	VS006-029-TR004 VS006-142-TR026 VS006-102-TR036 VS006-016-TR046 VS006-038-TR056 VS006-029-TR094 VS006-117-TR074 VS006-004-TR064 VS006-137-TR034 VS006-109-TR104

Instrument ID Number	WC48876	ICB/CCB Analysis Date	1/11/99	ICB/CCB Analysis Time	16:10
Operator ID	M. J. Duchsherer	Blank ID	5653-136-C	ICB/CCB File Identifier	ccb00000.d45
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (µg/mL)	Batched Samples
Nitrite	7664-41-7	1.67		< 0.125	VS006-072-TR116 VS006-055-TR126 VS006-097-TR136 VS006-079-TR146 VS006-046-TR156 VS006-022-TR166 VS006-006-TR176 VS006-014-TR186 VS006-063-TR196 VS006-449-B-TR204

Instrument ID Number	WC48876	ICB/CCB Analysis Date	1/11/99	ICB/CCB Analysis Time	18:08
Operator ID	M. J. Duchsherer	Blank ID	5653-136-C	ICB/CCB File Identifier	ccb00000.d57
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (µg/mL)	Batched Samples
Nitrite	7664-41-7	1.67		< 0.125	END BLANK

Initial and Continuing Calibration Blank Summary

Instrument ID Number	WC48876	ICB/CCB Analysis Date	1/19/99	ICB/CCB Analysis Time	9:49
Operator ID	M. J. Duchsherer	Blank ID	5653-136-C	ICB/CCB File Identifier	ccb00003.d09
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (ug/mL)	Batched Samples
Nitrite	7664-41-7	1.67		< 0.125	VS006-063-TR054.MS VS006-063-TR056.MS VS006-063-TR198.MS VS006-063-TR199.MS

Instrument ID Number	WC48876	ICB/CCB Analysis Date	1/19/99	ICB/CCB Analysis Time	9:49
Operator ID	M. J. Duchsherer	Blank ID	5653-136-C	ICB/CCB File Identifier	ccb00003.d09
Target Analyte Name	CAS Number	Expected Retention Time	ICB/CCB Retention Time	ICB/CCB Analytical Result (ug/mL)	Batched Samples
-Nitrite	7664-41-7	1.67		< 0.125	END BLANK

NO/NO₂ Trip Blank and Method Performance Blank Summary

Trip Blank

Laboratory Sample Number	VS006- -TR01b	Laboratory Duplicate Number	n/a	101-5001.d10		
Sample Analysis Date	1/7/99	Sample Analysis Time	17:46:57	Sample Data File Identifier	Sample Concentration (ppmv)	Flags
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7	Q

Laboratory Sample Number	VS006- -TR01d	Laboratory Duplicate Number	n/a	101-4000.d34		
Sample Analysis Date	1/11/99	Sample Analysis Time	14:13:01	Sample Data File Identifier	Sample Concentration (ppmv)	Flags
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67	1.62	5.0	4.1	Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

NO/NO₂ Trip Blank and Method Performance Blank Summary

Trip Blank

Laboratory Sample Number	VS006- -TR04b	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/7/99	Sample Analysis Time	18:16:35	Sample Data File Identifier	104-b001.d13		
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L)	Sample Concentration (ppmv)	Flags	
Nitrogen Dioxide	10102-44-0	1.67	1.61	5.0	2.7	Q	

Laboratory Sample Number	VS006- -TR04d	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/11/99	Sample Analysis Time	14:51:32	Sample Data File Identifier	104-4000.d37		
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/L)	Sample Concentration (ppmv)	Flags	
Nitric Oxide	10102-43-9	1.67	1.64	5.0	4.1	Q	

¹ Retention times are for NO₂² mg/L¹ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

NO/NO₂ Trip Blank and Method Performance Blank Summary

Trip Blank

Laboratory Sample Number	VS006-137-TR09b	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/7/99	Sample Analysis Time	19:06:05	Sample Data File Identifier	109-b001.d18	
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (ng/Ml)	Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.61	5.0	2.7	Q

Laboratory Sample Number	VS006-137-TR09d	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/11/99	Sample Analysis Time	15:41:04	Sample Data File Identifier	109-4000.d42	
Target Analyte Name	CAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (ng/Ml)	Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67	1.61	5.0	4.1	Q

¹ Retention times are for NO₂.² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

NO/NO₂ Trip Blank and Method Performance Blank Summary

Field Blank

Laboratory Sample Number	VS006-142-TR02b	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/7/99	Sample Analysis Time	17:56:49	Sample Data File Identifier	102-b001.d11		
Target Analyte Name	GAS	Expected Retention Time (min)		Sample Concentration (mg/M) ²		Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.62	5.0	2.7	Q	

Laboratory Sample Number	VS006-142-TR02d	Laboratory Duplicate Number	n/a				
Sample Analysis Date	1/11/99	Sample Analysis Time	14:25:52	Sample Data File Identifier	102-4000.d35		
Target Analyte Name	GAS	Expected Retention Time (min)		Sample Concentration (mg/M) ²		Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67	1.63	5.0	4.1	Q	

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

NO/NO₂ Trip Blank and Method Performance Blank Summary

Method Performance Blank

Laboratory Sample Number	VS006-MPB-TR20b	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/11/99	Sample Analysis Time	13:43:28	Sample Data File Identifier	120-5000.d31	
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Nitrogen Dioxide	10102-44-0	1.67	1.63	5.0	2.7	Q

Laboratory Sample Number	VS006-MPB-TR20d	Laboratory Duplicate Number	n/a			
Sample Analysis Date	1/11/99	Sample Analysis Time	17:49:05	Sample Data File Identifier	120-4000.d55	
Target Analyte Name	QAS Number	Expected Retention Time (min)	Sample Retention Time (min)	Sample Concentration (mg/M ³)	Sample Concentration (ppmv)	Flags
Nitric Oxide	10102-43-9	1.67	1.64	5.0	4.1	Q

¹ Retention times are for NO₂² mg/M³ and ppmv calculated at 25 °C and 101.3 kPa (one atmosphere)

Matrix Spike Summary

Instrument ID:	WC48878	Target Analyte Name:	Nitrite	Expected Retention Time:	1.67	Operator ID:	M. J. Duchesner
MS ID:	VS006-063-TR05d MS	MS File Identifier:	tr05dms0.d14	MS Analysis Date:	1/19/99	MS Analysis Time:	10:38:40
LSD ID:	VS006-063-TR05d MSD	MSD File Identifier:	tr05dmsd.d15	MSD Analysis Date:	1/19/99	MSD Analysis Time:	10:46:29
Sample ID:	VS006-038-TR05d	Sample Concentration:	0.298 mg/mL	Sample Volume:	0.800 mL	Diluent Volume:	0.000 mL
MS/MSD ID:	5653-137-C	MS/MSD Standard Conc:	0.625 mg/mL	MS/MSD Standard Volume:	0.115 mL		
MS Retention Time:	1.68	MS Analytical Result (ng/mL):	0.307	MS Recovery %:	56.9	RPD:	Batched Samples
	1.69	0.305	0.307	56.9	58.9	0.5	All

Matrix Spike Summary

Instrument ID Number	WC48876	Target Analyte Name	Nitrite	Expected Retention Time	1.67	Operator ID	M. J. Dichtler
MS ID	V5006-063-TR194 MS	MS File Identifier	119-4002.d13	MS Analysis Date	1/19/99	MS Analysis Time	10:28:46
MSD ID	N/A	MSD File Identifier	N/A	MSD Analysis Date	N/A	MSD Analysis Time	N/A
Sample ID	V5006-063-TR194	Sample Concentration	0.222 mg/mL	Sample Volume	1.000 mL	Diluent Volume	0.000 mL
MS/MSD Standard ID	5653-137-B	MS/MSD Standard Conc	25.000 mg/mL	MS/MSD Standard Volume	0.020 mL		
MS Retention Time	MSD Retention Time	MS/MSD Result (mg/mL)	MSD Analytical Result (mg/mL)	MS % Recovery	MSD % Recovery	RPD	Batched Samples
1.68	N/A	0.681	N/A	94.5	N/A	N/A	All

Matrix Spike Summary

Instrument ID	WC48876	Target Analyte Name	Nitrite	Expected Retention Time	1.67	Operator ID	M. J. Duchshener
MS ID	VS006-063-TR19b MS	MS File Identifier	119-0003.d11	MS Analysis Date	1/19/99	MS Analysis Time	10:08:58
MSD ID	N/A	MSD File Identifier	N/A	MSD Analysis Date	N/A	MSD Analysis Time	N/A
Sample ID	VS006-063-TR19b	Sample Concentration	0.182 mg/mL	Sample Volume	1.000 mL	Dilution Volume	0.000 mL
MS/MSD Standard ID	5653-137-B	MS/MSD Standard Concentration	25.000 mg/mL	MS/MSD Standard Volume	0.020 mL		
MS Retention Time	MSD Retention Time	MS Analytical Result (mg/mL)	MSD Analytical Result (mg/mL)	MS Recovery	MSD Recovery	RPD	Batched Samples
1.69	N/A	0.583	N/A	82.6	N/A	N/A	All

Duplicate Summary

Instrument ID Number	WC48876	Target Analyte Name	Nitrite	Expected Retention Time	1.67	Operator ID	M. J. Duchesneau
Sample ID	V5006-014-TR18b	File Identifier	t18-5000.d29	Sample Analysis Date	1/11/99	Sample Analysis Time	13:23:40
Duplicate ID	V5006-014-TR18b DUP	Duplicate Identifier	t18-5-d3.d10	Duplicate Analysis Date	1/1/999	Duplicate Analysis Time	9:59:05
CAS Number		Duplicate Retention Time	Sample leach solution Result (mg/L)	Duplicate leach solution Result (mg/L)	Average	RPD	Batched Samples
10102-44-0	1.63	1.66	0.176	0.146	0.161	18.19	All

Instrument ID Number	WC48876	Target Analyte Name	Nitrite	Expected Retention Time	1.67	Operator ID	M. J. Duchesneau
Sample ID	V5006-014-TR18d	File Identifier	t18-5000.d53	Sample Analysis Date	1/11/99	Sample Analysis Time	17:25:17
Duplicate ID	V5006-014-TR18d DUP	Duplicate Identifier	t18-5-d3.d12	Duplicate Analysis Date	1/1/999	Duplicate Analysis Time	10:18:54
CAS Number		Duplicate Retention Time	Sample leach solution Result (mg/L)	Duplicate leach solution Result (mg/L)	Average	RPD	Batched Samples
10102-44-0	1.64	1.67	0.356	0.319	0.338	10.93	All

2.7.4 Supporting Data

This section contains chromatograms and quantitation reports for all analyses including samples, initial calibrations, calibration verifications, blanks, and spikes. This section is organized by the run orders shown in the run sequence table. The general order is as follows:

- Run Sequence Table
- Initial Calibration Data
- Initial Calibration Verification Data
- Initial Blank Verification Data
- Sample Data.

PeakNet AS3500DX - SAMPLES.AS3

Vial #	Inj. Pos	Inj. Vol.	Inj. Vial	Sample	Method (.MET)	Data	Dil.	Int. Std.	Template (.PRP)
1	A02								vap1
2	A05								vap2
3	A07	50	1	5653-139-A	nox-vap	CCB	1	1	
4	A02	50	1	autocal5	nox-vap	I-CAL5	1	1	
5	A03	50	1	autocal4	nox-vap	I-CAL4	1	1	
6	A04	50	1	autocal3	nox-vap	I-CAL3	1	1	
7	A05	50	1	autocal2	nox-vap	I-CAL2	1	1	
8	A06	50	1	autocal1	nox-vap	I-CAL1	1	1	
9	A07	50	1	5653-139-A	nox-vap	CCB	1	1	
10	B04	50	1	5653-137-C	nox-vap	CCVS	1	1	
11	C01	50	1	VS006-~TR01b	nox-vap	T01-b	1	1	
12	C02	50	1	VS006-142-TR02b	nox-vap	T02-b	1	1	
13	C03	50	1	VS006-102 -TR03b	nox-vap	T03-b	1	1	
14	C04	50	1	VS006-~TR04b	nox-vap	T04-b	1	1	
15	C05	50	1	VS006-038-TR05b	nox-vap	T05-b	1	1	
16	C06	50	1	VS006-029-TR06b	nox-vap	T06-b	1	1	
17	C07	50	1	VS006-117-TR07b	nox-vap	T07-b	1	1	
18	C08	50	1	VS006-094-TR08b	nox-vap	T08-b	1	1	
19	C09	50	1	VS006-137-TR09b	nox-vap	T09-b	1	1	
20	C10	50	1	VS006-109-TR10b	nox-vap	T10-b	1	1	
21	B04	50	1	5653-137-C	nox-vap	CCVS	1	1	
22	A07	50	1	5653-139-A	nox-vap	CCB	1	1	
23	B04	50	1	5653-137-C	nox-vap	CCVS	1	1	
24	A07	50	1	5653-139-A	nox-vap	CCB	1	1	
25	C11	50	1	VS006-072-TR11b	nox-vap	T11-b	1	1	
26	C12	50	1	VS006-055-TR12b	nox-vap	T12-b	1	1	
27	C13	50	1	VS006-087-TR13b	nox-vap	T13-b	1	1	
28	C14	50	1	VS006-079-TR14b	nox-vap	T14-b	1	1	
29	C15	50	1	VS006-046-TR15b	nox-vap	T15-b	1	1	
30	C16	50	1	VS006-022-TR16b	nox-vap	T16-b	1	1	
31	C17	50	1	VS006-006-TR17b	nox-vap	T17-b	1	1	
32	C18	50	1	VS006-014-TR18b	nox-vap	T18-b	1	1	
33	C19	50	1	VS006-063-TR19b	nox-vap	T19-b	1	1	
34	C20	50	1	VS006-MPB-TR20b	nox-vap	T20-b	1	1	
35	B04	50	1	5653-137-C	nox-vap	CCVS	1	1	
36	A07	50	1	5653-139-A	nox-vap	CCB	1	1	
37	C21	50	1	VS006-~TR01d	nox-vap	T01-d	1	1	
38	C22	50	1	VS006-142-TR02d	nox-vap	T02-d	1	1	
39	C23	50	1	VS006-102 -TR03d	nox-vap	T03-d	1	1	
40	C24	50	1	VS006-~TR04d	nox-vap	T04-d	1	1	
41	C25	50	1	VS006-038-TR05d	nox-vap	T05-d	1	1	
42	C26	50	1	VS006-029-TR06d	nox-vap	T06-d	1	1	
43	C27	50	1	VS006-117-TR07d	nox-vap	T07-d	1	1	
44	C28	50	1	VS006-094-TR08d	nox-vap	T08-d	1	1	
45	C29	50	1	VS006-137-TR09d	nox-vap	T09-d	1	1	
46	C30	50	1	VS006-109-TR10d	nox-vap	T10-d	1	1	
47	B04	50	1	5653-137-C	nox-vap	CCVS	1	1	
48	A07	50	1	5653-139-A	nox-vap	CCB	1	1	
49	C31	50	1	VS006-072-TR11d	nox-vap	T11-d	1	1	
50	C32	50	1	VS006-055-TR12d	nox-vap	T12-d	1	1	
51	C33	50	1	VS006-087-TR13d	nox-vap	T13-d	1	1	
52	C34	50	1	VS006-079-TR14d	nox-vap	T14-d	1	1	
53	C35	50	1	VS006-046-TR15d	nox-vap	T15-d	1	1	
54	C36	50	1	VS006-022-TR16d	nox-vap	T16-d	1	1	
55	C37	50	1	VS006-006-TR17d	nox-vap	T17-d	1	1	
56	C38	50	1	VS006-014-TR18d	nox-vap	T18-d	1	1	
57	C39	50	1	VS006-063-TR19d	nox-vap	T19-d	1	1	

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Vial #	Inj. Pos	Inj./ Vol.	Inj/ Vial	Sample	Method (.MET)	Data	Dil.	Int. Std.	Template (.PRP)
58	C40	50	1	VS006-MPB-TR20d	nox-vap	T20-d	1	1	
59	B04	50	1	5653-137-C	nox-vap	CCVS	1	1	
60	A07	50	1	5653-139-A	nox-vap	CCB	1	1	
61	A07	0	1	STOP PUMPS	a-stop	aSTOP	1	1	

PeakNet AS3500DX - DUP-SPK.AS3

Vial #	Inj. Pos	Inj./ Vol.	Inj/ Vial	Sample	Method (.MET)	Data	Dil.	Int. Std.	Template (.PRP)
1	B04	50	1	5653-137-C	nox-vap	CCVS	1	1	
2	A07	50	1	5653-136-C	nox-vap	CCB	1	1	
3	C18	50	1	VS006-014-TR18b DUP	nox-vap	T18-b-d	1	1	
4	A16	50	1	VS006-063-TR19b MS	nox-vap	T19-b	1	1	
5	C38	50	1	VS006-014-TR18d DUP	nox-vap	T18-d-d	1	1	
6	A17	50	1	VS006-063-TR19d MS	nox-vap	T19-d	1	1	
7	A18	50	1	VS006-063-TR05d MS	nox-vap	Tr05dMS	1	1	
8	A19	50	1	VS006-063-TR05d MSD	nox-vap	Tr05dMSD	1	1	
9	B04	50	1	5653-137-C	nox-vap	CCVS	1	1	
10	A07	50	1	5653-136-C	nox-vap	CCB	1	1	
11	A07	0	1	Stop Pumps	a-stop	astop	1	1	

Method Updated: 13:03 on Thu, 07 Jan 1999

Component: Nitrite
 Fit Type: Linear
 $r^2 = 0.999706$
 $Amt = Resp * 1.001e-005 + 0.02351$
 $Resp = Amt * 9.993e+004 + -2349$
 Standard: External
 Calibration: Area

Component Table - Previous Modification: Thu Jan 07 13:03:31 1999

☒ Retention Parameters ☐ Quantitation Parameters

Comp #	Component Name	Ret. Time	Window (min +/-)	Window (2 +/-)	Ret. Comp. #
1	Nitrite	1.68	5.0	0	

Buttons: Groups, Add, Delete, Exit

Level	Amount	Area	Height
1	0.125	11895	3570
2	0.25	23372	7023
3	0.625	57968	17297
4	1.25	121205	35186
5	2.5	248487	73987

Amount = K0 + K1*Area

K0 = 0.0235
K1 = 1E-005

***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File   : I-CAL500.D02          Report Date: 01/02/1999 13:49:22
Sample Name: autocal5 - A02        Collected  : 01/02/1999 13:41:19
Inject #    : 2                    Vial #       : A02
Method File : c:\peaknet\method\nox-vap.met Last Update: 12/17/1998 17:38:22
System Name : Anions (WC48876)      Detector    : ED40:COND
Cal. Level  : 5                    Analyst     : M. J. Duchsherer
=====

```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
=====							
Data File : I-CAL500.D02				Report Date: 01/02/1999 13:49:22			
Sample Name: autocal5 - A02				Collected : 01/02/1999 13:41:19			
Inject # : 2				Vial # : A02			
Method File: c:\peaknet\method\nox-vap.met				Calibrated : 01/02/1999 13:49:22			
System Name: Anions (WC48876)				Detector : ED40:COND			
Column Type: Dionex AS4A-SC				Operator : M. Duchsherer			
=====							

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	50	1	2400	5.00 Hz	0.00	8.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.08	0.000	4391	10822	2	
2	1.14	0.000	5335	21365	2	
3	1.45	0.000	2300	25115	2	
4	1.68	0.000	74841	262643	2	
5	2.64	0.000	951	4453	1	
6	5.35	0.000	4623	47264	1	
Totals		0.000	92441	371662

***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File : I-CAL400.D03          Report Date: 01/02/1999 13:59:01
Sample Name: autocal4 - A03       Collected : 01/02/1999 13:50:59
Inject # : 3                      Vial # : A03
Method File: c:\peaknet\method\nox-vap.met Last Update: 01/02/1999 13:49:22
System Name: Anions (WC48876)     Detector : ED40:COND
Cal. Level : 4                   Analyst : M. J. Duchsherer
=====

```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
-------------	-------------------	-----------------	----------------------	-----------------	-----------------	----------------------	-----------------

```

=====
Data File : I-CAL400.D03          Report Date: 01/02/1999 13:59:01
Sample Name: autocal4 - A03       Collected : 01/02/1999 13:50:59
Inject # : 3                      Vial # : A03
Method File: c:\peaknet\method\nox-vap.met Calibrated : 01/02/1999 13:59:01
System Name: Anions (WC48876)     Detector : ED40:COND
Column Type: Dionex AS4A-SC       Operator : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	50	1	2400	5.00 Hz	0.00	8.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00	Nitrite	0.000	0	0	0	0.00
Totals			0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.08		0.000	4654	11470	2	
2	1.14		0.000	5578	23174	2	
3	1.45		0.000	2328	23034	2	
4	1.67		0.000	35957	136266	2	
5	2.63		0.000	607	2687	1	
6	5.35		0.000	5673	58669	1	
Totals			0.000	54797	255299

***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File : I-CAL300.D04          Report Date: 01/02/1999 14:08:43
Sample Name: autocal3 - A04       Collected : 01/02/1999 14:00:40
Inject # : 4                      Vial # : A04
Method File: c:\peaknet\method\nox-vap.met Last Update: 01/02/1999 13:59:01
System Name: Anions (WC48876)     Detector : ED40:COND
Cal. Level : 3                   Analyst : M. J. Duchsherer
=====

```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
=====							
Data File : I-CAL300.D04		Report Date: 01/02/1999 14:08:43					
Sample Name: autocal3 - A04		Collected : 01/02/1999 14:00:40					
Inject # : 4		Vial # : A04					
Method File: c:\peaknet\method\nox-vap.met		Calibrated : 01/02/1999 14:08:43					
System Name: Anions (WC48876)		Detector : ED40:COND					
Column Type: Dionex AS4A-SC		Operator : M. Duchsherer					
=====							

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	50	1	2400	5.00 Hz	0.00	8.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.07	0.000	4204	9741	2	
3	1.13	0.000	4776	20689	2	
4	1.44	0.000	1106	11626	1	
5	1.67	0.000	17285	57671	1	
6	2.62	0.000	419	1686	1	
7	5.34	0.000	5557	57779	1	
Totals		0.000	33347	159191

***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File : I-CAL200.D05          Report Date: 01/02/1999 14:18:25
Sample Name: autocal2 - A05       Collected : 01/02/1999 14:10:19
Inject # : 5                      Vial # : A05
Method File: c:\peaknet\method\nox-vap.met Last Update: 01/02/1999 14:08:43
System Name: Anions (WC48876)     Detector : ED40:COND
Cal. Level : 2                    Analyst : M. J. Duchsherer
=====

```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
=====							
Data File : I-CAL200.D05		Report Date: 01/02/1999 14:18:25					
Sample Name: autocal2 - A05		Collected : 01/02/1999 14:10:19					
Inject # : 5		Vial # : A05					
Method File: c:\peaknet\method\nox-vap.met		Calibrated : 01/02/1999 14:18:25					
System Name: Anions (WC48876)		Detector : ED40:COND					
Column Type: Dionex AS4A-SC		Operator : M. Duchsherer					
=====							

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	50	1	2400	5.00 Hz	0.00	8.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.08	0.000	4554	11011	2	
2	1.13	0.000	5064	21035	2	
3	1.45	0.000	2233	22705	2	
4	1.67	0.000	7591	34777	2	
5	2.63	0.000	335	1325	1	
6	5.35	0.000	6112	63852	1	
Totals		0.000	25889	154705

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***** AUTOMATIC CALIBRATION UPDATE *****

```

=====
Data File : I-CAL100.D06      Report Date: 01/02/1999 14:28:05
Sample Name: autocal1 - A06   Collected  : 01/02/1999 14:20:00
Inject #   : 6                Vial #       : A06
Method File: c:\peaknet\method\nox-vap.met Last Update: 01/02/1999 14:18:25
System Name: Anions (WC48876) Detector    : ED40:COND
Cal. Level : 1                Analyst     : M. J. Duchsherer
=====
  
```

***** COMPONENTS FOUND IN THIS RUN *****

COMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
=====							
Data File : I-CAL100.D06		Report Date: 01/02/1999 14:28:05					
Sample Name: autocal1 - A06		Collected : 01/02/1999 14:20:00					
Inject # : 6		Vial # : A06					
Method File: c:\peaknet\method\nox-vap.met		Calibrated : 01/02/1999 14:28:05					
System Name: Anions (WC48876)		Detector : ED40:COND					
Column Type: Dionex AS4A-SC		Operator : M. Duchsherer					
=====							

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	50	1	2400	5.00 Hz	0.00	8.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.09	0.000	5384	13996	2	
2	1.15	0.000	5439	23679	2	
3	1.45	0.000	2211	22179	2	
4	1.67	0.000	4076	22423	2	
5	2.63	0.000	261	1017	1	
6	5.37	0.000	5706	59031	1	
Totals		0.000	23077	142327

```

=====
Data File   : CCB00001.D08                      Report Date: 01/07/1999 17:35:47
Sample Name : 5653-139-A - A07                  Collected  : 01/07/1999 17:27:42
Inject #    : 8                                Vial #     : A07
Method File : c:\peaknet\method\nox-vap.met      Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)                  Detector   : ED40:COND
Column Type : Dionex AS4A-SC                     Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate  Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00   1000

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
3	1.47	0.000	968	2354	1	
5	2.65	0.000	361	1543	1	
7	5.30	0.000	5165	53973	1	
Totals		0.000	6495	57870		

File: CCB00001.D08 Sample: 5653-139-A - A07

```

=====
Data File   : CCVS0000.D09           Report Date: 01/07/1999 17:45:23
Sample Name : 5653-137-C - B04       Collected  : 01/07/1999 17:37:21
Inject #    : 9                     Vial #       : B04
Method File : c:\peaknet\method\nox-vap.met Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)       Detector    : ED40:COND
Column Type : Dionex AS4A-SC         Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          50           1 2400 5.00 Hz 0.00 8.00 1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.68	Nitrite	0.644	18502	61993	1	0.00
Totals			0.644	18502	61993		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
3	1.45		0.000	1896	5250	2	
5	2.63		0.000	745	3353	1	
6	5.30		0.000	1350	13739	1	
Totals			0.000	3992	22342		

File: CCVS0000.D09 Sample: 5653-137-C - B04

```

=====
Data File   : T01-b001.D10      Report Date: 01/07/1999 17:54:58
Sample Name: VS006-            -TR01b - C01   Collected : 01/07/1999 17:46:57
Inject #    : 10                Vial #       : C01
Method File : c:\peaknet\method\nox-vap.met   Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)   Detector   : ED40:COND
Column Type : Dionex AS4A-SC     Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
External          50           1 2400 5.00 Hz 0.00 8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63	Nitrite	0.080	1376	5694	1	-2.78
Totals			0.080	1376	5694		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43		0.000	282634	1309023	1	
3	2.29		0.000	543	4572	1	
4	2.58		0.000	6347	38295	1	
5	3.76		0.000	667602	8874030	2	
6	4.76		0.000	1552544	31062277	2	
7	6.63		0.000	4222	75489	1	
Totals			0.000	2513891	41363687

```

=====
Data File   : T02-b001.D11          Report Date: 01/07/1999 18:04:52
Sample Name : VS006-142-TR02b - C02 Collected  : 01/07/1999 17:56:49
Inject #    : 11                    Vial #       : C02
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)            Detector   : ED40:COND
Column Type : Dionex AS4A-SC              Operator    : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	50	1	2400	5.00 Hz	0.00	8.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.62 Nitrite	0.084	1362	6006	1	-3.57
Totals		0.084	1362	6006		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	289512	1374558	1	
3	2.27	0.000	627	5644	1	
4	2.57	0.000	6606	40095	1	
5	3.75	0.000	681072	9134888	2	
6	4.74	0.000	1592314	32501607	2	
7	6.63	0.000	1261	22183	1	
Totals		0.000	2571393	43078975		

File: T02-b001.D11 Sample: VS006-142-TR02b - C02

```

=====
Data File   : T03-b001.D12          Report Date: 01/07/1999 18:14:43
Sample Name : VS006-102 -TR03b - C03 Collected  : 01/07/1999 18:06:43
Inject #    : 12                    Vial #       : C03
Method File : c:\peaknet\method\nox-vap.met Calibrated: 01/07/1999 13:03:31
System Name : Anions (WC48876)       Detector    : ED40:COND
Column Type : Dionex AS4A-SC         Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          50           1 2400 5.00 Hz 0.00 8.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.62 Nitrite	0.083	1340	5897	1	-3.57
Totals		0.083	1340	5897		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	258819	1200836	1	
4	2.27	0.000	306	1625	1	
5	2.57	0.000	5926	35486	1	
7	3.77	0.000	638295	8350969	2	
8	4.77	0.000	1518943	30078315	2	
9	6.63	0.000	1385	24257	1	
Totals		0.000	2423673	39691488		

File: T03-b001.D12 Sample: VS006-102 -TR03b - C03

```

=====
Data File   : T04-b001.D13          Report Date: 01/07/1999 18:24:41
Sample Name : VS006- -TR04b - C04   Collected  : 01/07/1999 18:16:35
Inject #    : 13                    Vial #       : C04
Method File : c:\peaknet\method\nox-vap.met Calibrated: 01/07/1999 13:03:31
System Name : Anions (WC48876)      Detector    : ED40:COND
Column Type : Dionex AS4A-SC        Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          50           1 2400 5.00 Hz 0.00 8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.61 Nitrite	0.083	1328	5957	1	-4.37
Totals		0.083	1328	5957		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.41	0.000	257948	1194995	1	
4	2.25	0.000	289	1374	1	
6	2.55	0.000	6673	39137	2	
8	3.75	0.000	632115	8288467	2	
9	4.75	0.000	1501808	29662132	2	
10	6.63	0.000	1258	21617	1	
Totals		0.000	2400093	39207722

```

=====
Data File   : T05-b001.D14          Report Date: 01/07/1999 18:34:35
Sample Name : VS006-038-TR05b - C05 Collected  : 01/07/1999 18:26:31
Inject #    : 14                    Vial #       : C05
Method File : c:\peaknet\method\nox-vap.met Calibrated: 01/07/1999 13:03:31
System Name : Anions (WC48876)      Detector    : ED40:COND
Column Type : Dionex AS4A-SC         Operator    : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	50	1	2400	5.00 Hz	0.00	8.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.61 Nitrite	0.081	1318	5714	1	-4.37
Totals		0.081	1318	5714		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.41	0.000	259912	1213215	1	
4	2.25	0.000	310	1751	1	
6	2.55	0.000	5947	35671	2	
8	3.75	0.000	656254	8756071	2	
9	4.75	0.000	1507023	29972292	2	
10	6.63	0.000	1443	28806	2	
Totals		0.000	2430890	40007806		

File: T05-b001.D14 Sample: VS006-038-TR05b - C05

```

=====
Data File   : T06-b001.D15          Report Date: 01/07/1999 18:44:30
Sample Name : VS006-029-TR06b - C06 Collected  : 01/07/1999 18:36:25
Inject #    : 15                    Vial #       : C06
Method File : c:\peaknet\method\nox-vap.met Calibrated: 01/07/1999 13:03:31
System Name : Anions (WC48876)       Detector    : ED40:COND
Column Type : Dionex AS4A-SC         Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
External           50                1  2400  5.00 Hz  0.00   8.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
2	1.63 Nitrite	0.168	3423	14486	1 -3.17
Totals		0.168	3423	14486	

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
1	1.42	0.000	248281	1124516	1
5	2.56	0.000	4667	27281	2
7	3.76	0.000	632420	8386102	2
8	4.79	0.000	1421370	27300682	2
9	6.63	0.000	976	16312	1
Totals		0.000	2307714	36854892	

File: T06-b001.D15 Sample: VS006-029-TR06b - C06

```

=====
Data File   : T07-b001.D16          Report Date: 01/07/1999 18:54:23
Sample Name : VS006-117-TR07b - C07 Collected  : 01/07/1999 18:46:20
Inject #    : 16                   Vial #       : C07
Method File : c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)           Detector  : ED40:COND
Column Type : Dionex AS4A-SC             Operator   : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00       1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.62 Nitrite	0.245	4259	22115	4	-3.57
Totals		0.245	4259	22115		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.41	0.000	248192	1179517	3	
5	2.56	0.000	4856	29320	2	
7	3.75	0.000	660393	8885952	2	
8	4.78	0.000	1424399	27561188	2	
9	6.64	0.000	930	15727	1	
Totals		0.000	2338770	37671704		

File: T07-b001.D16 Sample: VS006-117-TR07b - C07

```

=====
Data File   : T08-b001.D17          Report Date: 01/07/1999 19:04:15
Sample Name : VS006-094-TR08b - C08 Collected  : 01/07/1999 18:56:13
Inject #    : 17                    Vial #       : C08
Method File : c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)           Detector  : ED40:COND
Column Type : Dionex AS4A-SC             Operator   : M. Duchsherer
=====

```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	50	1	2400	5.00 Hz	0.00	8.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
2	1.63 Nitrite	0.121	2339	9714	1 -3.17
Totals		0.121	2339	9714	

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
1	1.42	0.000	235629	1057754	1
5	2.56	0.000	5126	30458	2
7	3.77	0.000	623889	8237768	2
8	4.81	0.000	1340729	25071749	2
9	6.65	0.000	868	13912	1
Totals		0.000	2206241	34411641	

File: T08-b001.D17 Sample: VS006-094-TR08b - C08

```

=====
Data File   : T09-b001.D18          Report Date: 01/07/1999 19:14:11
Sample Name : VS006-137-TR09b - C09 Collected  : 01/07/1999 19:06:05
Inject #    : 18                    Vial #       : C09
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)           Detector   : ED40:COND
Column Type : Dionex AS4A-SC             Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.61 Nitrite	0.129	2188	10532	1	-3.97
Totals		0.129	2188	10532		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.41	0.000	213766	1141493	1	
5	2.55	0.000	4071	25372	2	
7	3.73	0.000	700205	9861734	2	
8	4.77	0.000	1439584	28627489	2	
9	6.63	0.000	868	15599	1	
Totals		0.000	2358494	39671687		

File: T09-b001.D18 Sample: VS006-137-TR09b - C09

```

=====
Data File   : T10-b001.D19          Report Date: 01/07/1999 19:24:03
Sample Name : VS006-109-TR10b - C10 Collected  : 01/07/1999 19:16:01
Inject #    : 19                   Vial #       : C10
Method File : c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)           Detector  : ED40:COND
Column Type : Dionex AS4A-SC             Operator   : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
External           50                1  2400  5.00 Hz  0.00   8.00   1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.156	2807	13241	2	-3.17
Totals		0.156	2807	13241		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	243850	1137036	2	
5	2.57	0.000	6802	40747	2	
7	3.75	0.000	668135	9117475	2	
8	4.79	0.000	1388960	26576124	2	
10	6.65	0.000	916	14668	2	
Totals		0.000	2308663	36886050

```

=====
Data File   : CCVS0002.D20          Report Date: 01/07/1999 19:33:53
Sample Name : 5653-137-C - B04      Collected  : 01/07/1999 19:25:53
Inject #    : 20                    Vial #       : B04
Method File : c:\peaknet\method\nox-vap.met Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)      Detector    : ED40:COND
Column Type : Dionex AS4A-SC        Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00       1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
5	1.68 Nitrite	0.629	18098	60503	1	0.00
Totals		0.629	18098	60503		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.46	0.000	1846	4864	2	
6	2.63	0.000	745	3318	1	
7	5.31	0.000	1318	13119	1	
Totals		0.000	3909	21301		

File: CCVS0002.D20 Sample: 5653-137-C - B04

```

=====
Data File   : CCB00001.D21          Report Date: 01/07/1999 19:43:29
Sample Name : 5653-139-A - A07      Collected  : 01/07/1999 19:35:26
Inject #    : 21                    Vial #       : A07
Method File : c:\peaknet\method\nox-vap.met Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)      Detector    : ED40:COND
Column Type : Dionex AS4A-SC        Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
External           50                1  2400  5.00 Hz  0.00   8.00       1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	0.14	0.000	2192	7071	2	
2	0.25	0.000	537	3433	2	
Totals		0.000	2730	10504

```

=====
Data File : CCVS0003.D20          Report Date: 01/11/1999 12:03:16
Sample Name: 5653-137-C - B04      Collected : 01/11/1999 11:55:10
Inject # : 20                     Vial # : B04
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)      Detector : ED40:COND
Column Type: Dionex AS4A-SC        Operator : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00   8.00   1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.67 Nitrite	0.680	19345	65631	1	-0.40
Totals		0.680	19345	65631		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
3	1.45	0.000	1824	5258	2	
5	2.65	0.000	870	4168	1	
6	4.09	0.000	363	2889	1	
7	5.21	0.000	1577	15778	1	
Totals		0.000	4635	28094		

File: CCVS0003.D20 Sample: 5653-137-C - B04

```

=====
Data File : CCB00002.D21          Report Date: 01/11/1999 12:12:52
Sample Name: 5653-139-A - A07      Collected : 01/11/1999 12:04:49
Inject # : 21                     Vial # : A07
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)      Detector : ED40:COND
Column Type: Dionex AS4A-SC        Operator : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00       1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.47	0.000	1370	3682	2	
6	2.67	0.000	433	2027	1	
7	5.22	0.000	2050	20796	1	
Totals		0.000	3853	26506		

File: CCB00002.D21 Sample: 5653-139-A - A07

```

=====
Data File   : T11-b002.D22          Report Date: 01/11/1999 12:22:29
Sample Name : VS006-072-TR11b - C11 Collected  : 01/11/1999 12:14:26
Inject #    : 22                   Vial #       : C11
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)           Detector   : ED40:COND
Column Type : Dionex AS4A-SC             Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00   1000

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.086	1600	6260	1	-2.78
Totals		0.086	1600	6260		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43	0.000	265911	1147609	1	
4	2.30	0.000	263	1317	1	
5	2.59	0.000	5994	35620	1	
7	3.72	0.000	636151	7976419	2	
8	4.72	0.000	1452518	26389723	2	
9	6.52	0.000	1460	23795	1	
Totals		0.000	2362298	35574483		

File: T11-b002.D22 Sample: VS006-072-TR11b - C11

```

=====
Data File : T12-b002.D23          Report Date: 01/11/1999 12:32:23
Sample Name: VS006-055-TR12b - C12 Collected : 01/11/1999 12:24:18
Inject # : 23                     Vial # : C12
Method File: c:\peaknet\method\nox-vap.met Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)      Detector : ED40:COND
Column Type: Dionex AS4A-SC        Operator : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
External           50                1 2400 5.00 Hz  0.00   8.00   1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.087	1592	6392	1	-3.17
Totals		0.087	1592	6392		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	263034	1141266	1	
4	2.59	0.000	7004	41397	1	
5	3.73	0.000	628124	7851349	2	
6	4.73	0.000	1440493	26129688	2	
7	6.53	0.000	1488	23739	1	
Totals		0.000	2340142	35187438		

File: T12-b002.D23 Sample: VS006-055-TR12b - C12

```

=====
Data File : T13-b002.D24      Report Date: 01/11/1999 12:42:16
Sample Name: VS006-087-TR13b - C13      Collected : 01/11/1999 12:34:13
Inject # : 24      Vial # : C13
Method File: c:\peaknet\method\nox-vap.met      Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)      Detector : ED40:COND
Column Type: Dionex AS4A-SC      Operator : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50           1 2400 5.00 Hz  0.00  8.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.088	1616	6466	1	-3.17
Totals		0.088	1616	6466		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	257819	1115472	1	
4	2.59	0.000	6860	40679	1	
6	3.73	0.000	611150	7587064	2	
7	4.73	0.000	1419598	25556244	2	
8	6.53	0.000	1626	26003	1	
Totals		0.000	2297053	34325462		

File: T13-b002.D24 Sample: VS006-087-TR13b - C13

```

=====
Data File   : T14-b002.D25          Report Date: 01/11/1999 12:52:11
Sample Name : VS006-079-TR14b - C14 Collected  : 01/11/1999 12:44:06
Inject #    : 25                   Vial #       : C14
Method File : c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)             Detector  : ED40:COND
Column Type : Dionex AS4A-SC              Operator   : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00   1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.086	1488	6221	1	-3.17
Totals		0.086	1488	6221		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43	0.000	261189	1104846	1	
3	2.29	0.000	495	5146	1	
4	2.59	0.000	6609	38926	1	
5	3.75	0.000	605392	7516496	2	
6	4.75	0.000	1389145	24761600	2	
7	6.55	0.000	1468	23760	1	
Totals		0.000	2264299	33450774		

File: T14-b002.D25 Sample: VS006-079-TR14b - C14

```

=====
Data File   : T15-b002.D26           Report Date: 01/11/1999 13:02:04
Sample Name : VS006-046-TR15b - C15   Collected  : 01/11/1999 12:54:01
Inject #    : 26                     Vial #       : C15
Method File : c:\peaknet\method\nox-vap.met Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)        Detector    : ED40:COND
Column Type : Dionex AS4A-SC          Operator     : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00    1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.087	1625	6393	1	-3.17
Totals		0.087	1625	6393		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	254643	1093045	1	
3	2.19	0.000	251	1064	1	
4	2.57	0.000	7497	44505	1	
5	3.74	0.000	612559	7644170	2	
6	4.75	0.000	1382883	24626328	2	
7	6.55	0.000	1509	24598	1	
Totals		0.000	2259343	33433709		

File: T15-b002.D26 Sample: VS006-046-TR15b - C15

```

=====
Data File : T16-b000.D27          Report Date: 01/11/1999 13:11:58
Sample Name: VS006-022-TR16b - C16  Collected : 01/11/1999 13:03:54
Inject # : 27                     Vial # : C16
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)         Detector : ED40:COND
Column Type: Dionex AS4A-SC           Operator : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400 5.00 Hz  0.00  8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.132	2729	10837	1	-2.78
Totals		0.132	2729	10837		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	185542	745089	1	
3	2.29	0.000	307	1557	1	
4	2.58	0.000	3746	21122	1	
5	3.80	0.000	480569	5534563	2	
6	4.83	0.000	1100567	17264749	2	
7	6.57	0.000	1154	16912	1	
Totals		0.000	1771885	23583993		

File: T16-b000.D27 Sample: VS006-022-TR16b - C16

```

=====
Data File   : T17-b000.D28           Report Date: 01/11/1999 13:21:51
Sample Name : VS006-006-TR17b - C17  Collected  : 01/11/1999 13:13:47
Inject #    : 28                     Vial #       : C17
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)          Detector   : ED40:COND
Column Type : Dionex AS4A-SC            Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate  Start  Stop Area Reject
-----
External           50              1 2400  5.00 Hz  0.00  8.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
2	1.62 Nitrite	0.145	2934	12104	1 -3.57
Totals		0.145	2934	12104	

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret: Component Time Name	Concentration	Height	Area	Bl. %Delta Code
1	1.41	0.000	235600	1013791	1
3	2.28	0.000	355	1752	1
4	2.56	0.000	5501	32371	1
5	3.74	0.000	605275	7556388	2
6	4.75	0.000	1364174	24177081	2
7	6.55	0.000	1113	17358	1
Totals		0.000	2212018	32798740	

File: T17-b000.D28 Sample: VS006-006-TR17b - C17

```

=====
Data File : T18-b000.D29          Report Date: 01/11/1999 13:31:45
Sample Name: VS006-014-TR18b - C18  Collected : 01/11/1999 13:23:40
Inject # : 29                     Vial # : C18
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)         Detector : ED40:COND
Column Type: Dionex AS4A-SC           Operator : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00  8.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.176	3654	15201	1	-3.17
Totals		0.176	3654	15201		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	233065	975190	1	
3	2.26	0.000	255	1569	1	
4	2.56	0.000	3936	23174	1	
6	3.75	0.000	581789	7191168	2	
7	4.77	0.000	1313026	22802648	2	
8	6.56	0.000	1048	16346	1	
Totals		0.000	2133119	31010095		

File: T18-b000.D29 Sample: VS006-014-TR18b - C18

```

=====
Data File   : T19-b000.D30          Report Date: 01/11/1999 13:41:38
Sample Name : VS006-063-TR19b - C19 Collected  : 01/11/1999 13:33:35
Inject #    : 30                   Vial #       : C19
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)            Detector   : ED40:COND
Column Type : Dionex AS4A-SC              Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00  8.00        1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.61 Nitrite	0.182	3719	15829	1	-3.97
Totals		0.182	3719	15829		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.41	0.000	243780	1060889	1	
3	2.25	0.000	286	1705	1	
4	2.55	0.000	4143	24263	1	
6	3.73	0.000	618027	7822408	2	
7	4.75	0.000	1361520	24221744	2	
8	6.55	0.000	1062	16494	1	
Totals		0.000	2228819	33147503		

File: T19-b000.D30 Sample: VS006-063-TR19b - C19

```

=====
Data File : T20-b000.D31          Report Date: 01/11/1999 13:51:34
Sample Name: VS006-MPB-TR20b - C20 Collected : 01/11/1999 13:43:28
Inject # : 31                     Vial # : C20
Method File: c:\peaknet\method\nox-vap.met Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)      Detector : ED40:COND
Column Type: Dionex AS4A-SC        Operator : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00  8.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.191	4121	16733	2	-2.78
Totals		0.191	4121	16733		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43	0.000	316509	1164030	2	
3	2.26	0.000	312	2032	1	
4	2.56	0.000	8533	46918	1	
6	3.83	0.000	393871	4207196	2	
7	4.77	0.000	1312043	22626752	1	
8	6.58	0.000	1004	14724	1	
Totals		0.000	2032273	28061651		

File: T20-b000.D31 Sample: VS006-MPB-TR20b - C20

```

=====
Data File : CCVS0000.D32          Report Date: 01/11/1999 14:01:29
Sample Name: 5653-137-C - B04      Collected : 01/11/1999 13:53:24
Inject # : 32                     Vial # : B04
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)      Detector : ED40:COND
Column Type: Dionex AS4A-SC        Operator : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
External           50                1  2400 5.00 Hz  0.00  8.00    1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.65 Nitrite	0.667	19136	64274	1	-1.59
Totals		0.667	19136	64274		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
3	1.44	0.000	1792	4916	2	
5	2.59	0.000	871	4009	1	
7	5.23	0.000	1196	11978	1	
Totals		0.000	3860	20903		

File: CCVS0000.D32 Sample: 5653-137-C - B04

```

=====
Data File   : CCB00000.D33          Report Date: 01/11/1999 14:11:07
Sample Name : 5653-139-A - A07      Collected  : 01/11/1999 14:03:02
Inject #    : 33                    Vial #       : A07
Method File : c:\peaknet\method\nox-vap.met Calibrated: 01/07/1999 13:03:31
System Name : Anions (WC48876)      Detector    : ED40:COND
Column Type : Dionex AS4A-SC        Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00  8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.46	0.000	1203	2956	1	
6	2.61	0.000	471	2149	1	
8	5.25	0.000	2113	21277	1	
Totals		0.000	3787	26381		

File: CCB00000.D33 Sample: 5653-139-A - A07

```

=====
Data File   : T01-d000.D34      Report Date: 01/11/1999 14:21:17
Sample Name : VS006-          -TR01d - C21   Collected  : 01/11/1999 14:13:01
Inject #    : 34              Vial #       : C21
Method File : c:\peaknet\method\nox-vap.met  Calibrated   : 01/07/1999 13:03:31
System Name : Anions (WC48876) Detector    : ED40:COND
Column Type : Dionex AS4A-SC   Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00       1000

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.62 Nitrite	0.084	1417	6031	1	-3.57
Totals		0.084	1417	6031		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	263533	1179929	1	
3	2.27	0.000	602	5516	1	
4	2.55	0.000	6634	38981	1	
5	3.75	0.000	622839	7925970	2	
6	4.74	0.000	1468766	27386853	2	
7	6.56	0.000	1422	23373	1	
Totals		0.000	2363796	36560622

```

=====
Data File   : T02-d000.D35           Report Date: 01/11/1999 14:34:10
Sample Name : VS006-142-TR02d - C22   Collected  : 01/11/1999 14:25:52
Inject #    : 35                     Vial #       : C22
Method File : c:\peaknet\method\nox-vap.met Calibrated: 01/07/1999 13:03:31
System Name : Anions (WC48876)        Detector    : ED40:COND
Column Type : Dionex AS4A-SC          Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00       1000

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.087	1512	6336	1	-2.78
Totals		0.087	1512	6336		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43	0.000	262380	1170345	1	
3	2.27	0.000	593	5237	1	
4	2.56	0.000	5972	35331	1	
5	3.76	0.000	647193	8349430	2	
6	4.76	0.000	1448441	26832655	2	
7	6.57	0.000	1389	22420	1	
Totals		0.000	2365968	36415418		

File: T02-d000.D35 Sample: VS006-142-TR02d - C22

```

=====
Data File   : T03-d000.D36          Report Date: 01/11/1999 14:47:03
Sample Name : VS006-102 -TR03d  - C23  Collected  : 01/11/1999 14:38:40
Inject #    : 36                    Vial #       : C23
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)           Detector   : ED40:COND
Column Type : Dionex AS4A-SC             Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50              1 2400 5.00 Hz  0.00   8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.65 Nitrite	0.206	4327	18222	1	-1.59
Totals		0.206	4327	18222		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.45	0.000	256460	1080032	1	
3	2.28	0.000	548	4806	1	
4	2.57	0.000	8313	48313	1	
5	3.80	0.000	576559	7160107	2	
6	4.80	0.000	1357330	24274339	2	
7	6.61	0.000	1823	29193	1	
Totals		0.000	2201033	32596791		

File: T03-d000.D36 Sample: VS006-102 -TR03d - C23

```

=====
Data File : T04-d000.D37      Report Date: 01/11/1999 14:59:34
Sample Name: VS006-          -TR04d - C24      Collected : 01/11/1999 14:51:32
Inject # : 37                Vial #           : C24
Method File: c:\peaknet\method\nox-vap.met      Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)                  Detector  : ED40:COND
Column Type: Dionex AS4A-SC                     Operator   : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. %Delta Code
2	1.64 Nitrite	0.086	1561	6261	1 -2.38
Totals		0.086	1561	6261	

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. %Delta Code
1	1.44	0.000	262397	1147387	1
3	2.27	0.000	591	5217	1
4	2.56	0.000	7740	45236	1
5	3.79	0.000	592953	7419790	2
6	4.79	0.000	1399452	25465473	2
7	6.59	0.000	1446	22699	1
Totals		0.000	2264578	34105802

```

=====
Data File : T05-d000.D38          Report Date: 01/11/1999 15:09:29
Sample Name: VS006-038-TR05d - C25  Collected : 01/11/1999 15:01:25
Inject # : 38                     Vial # : C25
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)         Detector : ED40:COND
Column Type: Dionex AS4A-SC           Operator : M. Duchsherer
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          50           1 2400 5.00 Hz 0.00 8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.61 Nitrite	0.298	6187	27448	1	-3.97
Totals		0.298	6187	27448		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.41	0.000	240584	1040613	1	
3	2.23	0.000	287	2067	1	
4	2.53	0.000	8322	48914	1	
5	3.76	0.000	600654	7608748	2	
6	4.78	0.000	1329057	23543565	2	
7	6.57	0.000	1154	18601	1	
Totals		0.000	2180058	32262507		

File: T05-d000.D38 Sample: VS006-038-TR05d - C25

```

=====
Data File : T06-d000.D39          Report Date: 01/11/1999 15:19:24
Sample Name: VS006-029-TR06d - C26 Collected : 01/11/1999 15:11:20
Inject # : 39                     Vial # : C26
Method File: c:\peaknet\method\nox-vap.met Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)      Detector : ED40:COND
Column Type: Dionex AS4A-SC        Operator : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00  8.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.342	7324	31784	1	-3.17
Totals		0.342	7324	31784		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	231627	982811	1	
3	2.23	0.000	262	1955	1	
4	2.54	0.000	8513	49746	1	
5	3.77	0.000	581680	7302186	2	
6	4.79	0.000	1304954	22894988	2	
7	6.59	0.000	1064	16409	1	
Totals		0.000	2128100	31248096

```

=====
Data File   : T07-d000.D40          Report Date: 01/11/1999 15:29:18
Sample Name : VS006-117-TR07d - C27 Collected  : 01/11/1999 15:21:14
Inject #    : 40                    Vial #       : C27
Method File : c:\peaknet\method\nox-vap.met Calibrated: 01/07/1999 13:03:31
System Name : Anions (WC48876)      Detector    : ED40:COND
Column Type : Dionex AS4A-SC        Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00   1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. %Delta Code
2	1.62 Nitrite	0.232	4924	20807	1 -3.57
Totals		0.232	4924	20807	

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. %Delta Code
1	1.41	0.000	248230	1087050	1
3	2.23	0.000	280	2094	1
4	2.53	0.000	7946	46793	1
5	3.75	0.000	640818	8329762	2
6	4.77	0.000	1370926	24849506	2
7	6.57	0.000	1302	21072	1
Totals		0.000	2269502	34336276

```

=====
Data File   : T08-d000.D41      Report Date: 01/11/1999 15:39:13
Sample Name : VS006-094-TR08d - C28  Collected  : 01/11/1999 15:31:08
Inject #    : 41                Vial #       : C28
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)   Detector    : ED40:COND
Column Type : Dionex AS4A-SC      Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
2	1.63 Nitrite	0.311	6632	28748	1 -3.17
Totals		0.311	6632	28748	

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
1	1.43	0.000	240254	1021666	1
3	2.23	0.000	247	2014	1
4	2.54	0.000	5492	32232	1
5	3.77	0.000	606704	7725326	2
6	4.79	0.000	1321563	23436158	2
7	6.59	0.000	1010	15327	1
Totals		0.000	2175271	32232723	

File: T08-d000.D41 Sample: VS006-094-TR08d - C28

```

=====
Data File   : T09-d000.D42          Report Date: 01/11/1999 15:49:05
Sample Name : VS006-137-TR09d - C29 Collected  : 01/11/1999 15:41:04
Inject #    : 42                    Vial #      : C29
Method File : c:\peaknet\method\nox-vap.met Calibrated: 01/07/1999 13:03:31
System Name : Anions (WC48876)       Detector   : ED40:COND
Column Type : Dionex AS4A-SC         Operator   : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
External           50                1  2400  5.00 Hz  0.00   8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
2	1.61 Nitrite	0.151	3008	12748	1 -3.97
Totals		0.151	3008	12748	

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
1	1.41	0.000	236687	1043647	1
4	2.25	0.000	455	2360	2
5	2.53	0.000	4804	28077	1
6	3.75	0.000	610725	7781143	2
7	4.77	0.000	1358992	24505391	2
8	6.57	0.000	1072	16850	1
Totals		0.000	2212735	33377468	

File: T09-d000.D42 Sample: VS006-137-TR09d - C29

```

=====
Data File   : T10-d000.D43          Report Date: 01/11/1999 15:58:56
Sample Name : VS006-109-TR10d - C30 Collected  : 01/11/1999 15:50:55
Inject #    : 43                    Vial #       : C30
Method File : c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)            Detector  : ED40:COND
Column Type : Dionex AS4A-SC              Operator   : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00  8.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.61	Nitrite	0.255	5272	23088	1	-3.97
Totals			0.255	5272	23088		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.41		0.000	236496	1025433	1	
3	2.23		0.000	271	1941	1	
4	2.53		0.000	6904	40302	1	
6	3.75		0.000	603746	7666080	2	
7	4.77		0.000	1348251	24185073	2	
8	6.57		0.000	1106	17848	1	
Totals			0.000	2196776	32936676		

File: T10-d000.D43 Sample: VS006-109-TR10d - C30

```

=====
Data File   : CCVS0000.D44
Sample Name : 5653-137-C - B04
Inject #    : 44
Method File : c:\peaknet\method\nox-vap.met
System Name : Anions (WC48876)
Column Type : Dionex AS4A-SC
Report Date : 01/11/1999 16:08:49
Collected  : 01/11/1999 16:00:46
Vial #      : B04
Calibrated  : 01/07/1999 13:03:31
Detector    : ED40:COND
Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00  8.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
5	1.66 Nitrite	0.662	19103	63784	1	-1.19
Totals		0.662	19103	63784		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.45	0.000	1512	3688	1	
6	2.58	0.000	861	3806	1	
7	4.15	0.000	152	1004	1	
8	5.25	0.000	1349	13385	1	
Totals		0.000	3875	21883		

File: CCVS0000.D44 Sample: 5653-137-C - B04

Data File : CCB00000.D45	Report Date: 01/11/1999 16:18:27
Sample Name: 5653-139-A - A07	Collected : 01/11/1999 16:10:23
Inject # : 45	Vial # : A07
Method File: c:\peaknet\method\nox-vap.met	Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)	Detector : ED40:COND
Column Type: Dionex AS4A-SC	Operator : M. Duchsherer

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	50	1	2400	5.00 Hz	0.00	8.00	1000	

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.46	0.000	1127	2631	1	
6	2.59	0.000	460	2054	1	
7	5.27	0.000	2000	19998	1	
Totals		0.000	3587	24683

```

=====
Data File   : T11-d000.D46           Report Date: 01/11/1999 16:28:04
Sample Name : VS006-072-TR11d - C31  Collected  : 01/11/1999 16:20:01
Inject #    : 46                     Vial #      : C31
Method File : c:\peaknet\method\nox-vap.met Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)       Detector    : ED40:COND
Column Type : Dionex AS4A-SC          Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00   8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.62 Nitrite	0.193	3878	16888	1	-3.57
Totals		0.193	3878	16888		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43	0.000	279159	1229073	1	
3	2.24	0.000	647	5396	1	
4	2.53	0.000	8622	50992	1	
5	3.75	0.000	657537	8591776	2	
6	4.74	0.000	1501251	28714456	2	
7	6.57	0.000	1400	23333	1	
Totals		0.000	2448615	38615027		

File: T11-d000.D46 Sample: VS006-072-TR11d - C31

```

=====
Data File   : T12-d000.D47
Sample Name : VS006-055-TR12d - C32
Inject #    : 47
Method File : c:\peaknet\method\nox-vap.met
System Name : Anions (WC48876)
Column Type : Dionex AS4A-SC
Report Date : 01/11/1999 16:37:56
Collected  : 01/11/1999 16:29:55
Vial #      : C32
Calibrated  : 01/07/1999 13:03:31
Detector    : ED40:COND
Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50              1 2400 5.00 Hz  0.00   8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.204	4384	18017	1	-2.78
Totals		0.204	4384	18017		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43	0.000	260277	1092332	1	
3	2.25	0.000	599	5241	1	
4	2.54	0.000	7470	43752	1	
6	3.79	0.000	572981	7118750	2	
7	4.78	0.000	1363874	24743184	2	
8	6.59	0.000	1389	22086	1	
Totals		0.000	2206589	33025346		

File: T12-d000.D47 Sample: VS006-055-TR12d - C32

```

=====
Data File   : T13-d000.D48          Report Date: 01/11/1999 16:47:51
Sample Name : VS006-087-TR13d - C33 Collected  : 01/11/1999 16:39:46
Inject #    : 48                    Vial #       : C33
Method File : c:\peaknet\method\nox-vap.met Calibrated: 01/07/1999 13:03:31
System Name : Anions (WC48876)       Detector    : ED40:COND
Column Type : Dionex AS4A-SC         Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00  8.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.232	4907	20879	1	-3.17
Totals		0.232	4907	20879		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	254608	1121232	1	
4	2.24	0.000	563	4441	2	
5	2.54	0.000	8740	51440	1	
6	3.76	0.000	620377	7955647	2	
7	4.77	0.000	1417019	26258999	2	
8	6.59	0.000	1417	22987	1	
Totals		0.000	2302724	35414746		

File: T13-d000.D48 Sample: VS006-087-TR13d - C33

```

=====
Data File : T14-d000.D49          Report Date: 01/11/1999 16:57:44
Sample Name: VS006-079-TR14d - C34 Collected : 01/11/1999 16:49:42
Inject # : 49                     Vial # : C34
Method File: c:\peaknet\method\nox-vap.met Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)      Detector : ED40:COND
Column Type: Dionex AS4A-SC        Operator : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          50           1 2400 5.00 Hz 0.00 8.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.179	3753	15504	1	-3.17
Totals		0.179	3753	15504		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.42	0.000	252326	1068348	1	
4	2.54	0.000	7653	45073	1	
6	3.77	0.000	577399	7216144	2	
7	4.77	0.000	1367308	24789452	2	
8	6.57	0.000	1441	23298	1	
Totals		0.000	2206127	33142315		

File: T14-d000.D49 Sample: VS006-079-TR14d - C34

```

=====
Data File   : T15-d000.D50          Report Date: 01/11/1999 17:07:39
Sample Name : VS006-046-TR15d - C35 Collected  : 01/11/1999 16:59:35
Inject #    : 50                   Vial #       : C35
Method File : c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name : Anions (WC48876)           Detector  : ED40:COND
Column Type : Dionex AS4A-SC             Operator   : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
External           50                1  2400  5.00 Hz  0.00   8.00   1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.62 Nitrite	0.297	6281	27345	1	-3.57
Totals		0.297	6281	27345		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.41	0.000	226345	973214	1	
5	2.55	0.000	5229	29945	2	
7	3.77	0.000	586607	7398776	2	
8	4.79	0.000	1266439	21984309	2	
9	6.58	0.000	1101	17248	1	
Totals		0.000	2085721	30403491

```

=====
Data File   : T16-d000.D51          Report Date: 01/11/1999 17:17:32
Sample Name : VS006-022-TR16d - C36 Collected  : 01/11/1999 17:09:30
Inject #    : 51                    Vial #       : C36
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)            Detector   : ED40:COND
Column Type : Dionex AS4A-SC              Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00  8.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.344	7273	32011	1	-2.78
Totals		0.344	7273	32011		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43	0.000	259744	1138689	1	
4	2.55	0.000	6703	39868	1	
6	3.73	0.000	659527	8703187	2	
7	4.75	0.000	1424831	26536346	2	
8	6.57	0.000	1044	16787	1	
Totals		0.000	2351850	36434876		

File: T16-d000.D51 Sample: VS006-022-TR16d - C36

```

=====
Data File : T17-d000.D52          Report Date: 01/11/1999 17:27:27
Sample Name: VS006-006-TR17d - C37  Collected : 01/11/1999 17:19:22
Inject # : 52                     Vial # : C37
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)         Detector : ED40:COND
Column Type: Dionex AS4A-SC           Operator : M. Duchsherer
=====

```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          50           1 2400 5.00 Hz 0.00 8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.64 Nitrite	0.173	3539	14960	1	-2.38
Totals		0.173	3539	14960		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43	0.000	241292	1029488	1	
5	2.57	0.000	5040	29309	2	
7	3.77	0.000	590066	7435492	2	
8	4.79	0.000	1328120	23671306	2	
9	6.59	0.000	1044	16515	1	
Totals		0.000	2165563	32182110		

File: T17-d000.D52 Sample: VS006-006-TR17d - C37

```

=====
Data File : T18-d000.D53          Report Date: 01/11/1999 17:37:19
Sample Name: VS006-014-TR18d - C38  Collected : 01/11/1999 17:29:17
Inject # : 53                     Vial # : C38
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)         Detector : ED40:COND
Column Type: Dionex AS4A-SC           Operator : M. Duchsherer
=====

```

```

=====
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          50           1 2400 5.00 Hz 0.00 8.00         1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.64 Nitrite	0.356	7790	33254	1	-2.38
Totals		0.356	7790	33254		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.44	0.000	257775	930094	1	
3	2.27	0.000	245	1592	1	
5	2.57	0.000	6086	35501	2	
7	3.78	0.000	567943	7093046	2	
8	4.80	0.000	1250113	21577314	2	
9	6.58	0.000	1013	16137	1	
Totals		0.000	2083175	29653684		

File: T18-d000.D53 Sample: VS006-014-TR18d - C38

```

=====
Data File   : T19-d000.D54          Report Date: 01/11/1999 17:47:14
Sample Name : VS006-063-TR19d - C39 Collected  : 01/11/1999 17:39:10
Inject #    : 54                    Vial #       : C39
Method File : c:\peaknet\method\nox-vap.met Calibrated: 01/07/1999 13:03:31
System Name : Anions (WC48876)       Detector    : ED40:COND
Column Type : Dionex AS4A-SC         Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.63 Nitrite	0.222	4669	19800	1	-2.78
Totals		0.222	4669	19800		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43	0.000	240096	1041880	1	
5	2.56	0.000	6722	39424	2	
7	3.73	0.000	628255	8097121	2	
8	4.75	0.000	1350756	24346313	2	
9	6.55	0.000	1104	17707	1	
Totals		0.000	2226932	33542444		

File: T19-d000.D54 Sample: VS006-063-TR19d - C39

```

=====
Data File   : T20-d000.D55          Report Date: 01/11/1999 17:57:10
Sample Name : VS006-MPB-TR20d - C40 Collected  : 01/11/1999 17:49:05
Inject #    : 55                    Vial #       : C40
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)            Detector   : ED40:COND
Column Type : Dionex AS4A-SC              Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00   8.00   1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.64 Nitrite	0.184	3889	16082	2	-2.38
Totals		0.184	3889	16082		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.43	0.000	271513	998003	2	
5	2.57	0.000	6620	35522	2	
8	3.84	0.000	379910	4033582	1	
9	4.79	0.000	1261560	21558753	1	
10	6.59	0.000	995	14601	1	
Totals		0.000	1920599	26640462		

File: T20-d000.D55 Sample: VS006-MPB-TR20d - C40

```

=====
Data File : CCVS0000.D56          Report Date: 01/11/1999 18:07:04
Sample Name: 5653-137-C - B04      Collected : 01/11/1999 17:59:00
Inject # : 56                     Vial # : B04
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)      Detector : ED40:COND
Column Type: Dionex AS4A-SC        Operator : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00  8.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
5	1.67 Nitrite	0.655	18546	63100	1	-0.40
Totals		0.655	18546	63100		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.45	0.000	1339	3223	1	
6	2.61	0.000	807	3703	1	
7	5.23	0.000	1011	9894	1	
Totals		0.000	3156	16820		

File: CCVS0000.D56 Sample: 5653-137-C - B04

```

=====
Data File : CCB00000.D57          Report Date: 01/11/1999 18:16:41
Sample Name: 5653-139-A - A07      Collected : 01/11/1999 18:08:38
Inject # : 57                      Vial # : A07
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)       Detector : ED40:COND
Column Type: Dionex AS4A-SC         Operator : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1 2400 5.00 Hz  0.00  8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.47	0.000	1120	2750	1	
6	2.64	0.000	437	1990	1	
7	5.25	0.000	1911	19071	1	
Totals		0.000	3468	23811		

File: CCB00000.D57 Sample: 5653-139-A - A07

```

=====
Data File : CCVS0003.D08                      Report Date: 01/19/1999 09:47:29
Sample Name: 5653-137-C - B04                  Collected : 01/19/1999 09:39:24
Inject # : 8                                   Vial # : B04
Method File: c:\peaknet\method\nox-vap.met      Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)                  Detector : ED40:COND
Column Type: Dionex AS4A-SC                     Operator : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00  8.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
5	1.70 Nitrite	0.627	15981	60289	1	1.19
Totals		0.627	15981	60289		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
4	1.47	0.000	516	1534	2	
6	2.75	0.000	402	1853	1	
7	5.16	0.000	2171	22265	1	
Totals		0.000	3089	25653		

File: CCVS0003.D08 Sample: 5653-137-C - B04

```

=====
Data File : CCB00003.D09          Report Date: 01/19/1999 09:57:16
Sample Name: 5653-136-C - A07      Collected : 01/19/1999 09:49:03
Inject # : 9                      Vial # : A07
Method File: c:\peaknet\method\nox-vap.met  Calibrated : 01/07/1999 13:03:31
System Name: Anions (WC48876)       Detector : ED40:COND
Column Type: Dionex AS4A-SC         Operator : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50              1 2400 5.00 Hz  0.00  8.00      1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00 Nitrite	0.000	0	0	0	0.00
Totals		0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.49	0.000	1247	3461	1	
4	2.75	0.000	411	1958	1	
5	5.19	0.000	1299	13230	1	
Totals		0.000	2957	18650		

File: CCB00003.D09 Sample: 5653-136-C - A07

```

=====
Data File   : T18-b-d3.D10      Report Date: 01/19/1999 10:07:09
Sample Name : VS006-014-TR18b DUP - C18  Collected  : 01/19/1999 09:59:05
Inject #    : 10                Vial #       : C18
Method File : c:\peaknet\method\nox-vap.met  Calibrated   : 01/07/1999 13:03:31
System Name : Anions (WC48876)  Detector     : ED40:COND
Column Type : Dionex AS4A-SC     Operator      : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.66 Nitrite	0.146	2870	12275	1	-1.19
Totals		0.146	2870	12275		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.44	0.000	213825	919173	1	
3	2.38	0.000	323	1779	1	
4	2.68	0.000	3587	21929	1	
5	3.71	0.000	559006	6832042	2	
6	4.72	0.000	1267987	21954524	2	
7	6.52	0.000	1008	15542	1	
Totals		0.000	2045736	29744989		

File: T18-b-d3.D10 Sample: VS006-014-TR18b DUP - C18

```

=====
Data File   : T19-b003.D11          Report Date: 01/19/1999 10:17:03
Sample Name : VS006-063-TR19b MS - A16  Collected  : 01/19/1999 10:08:58
Inject #    : 11                    Vial #       : A16
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)          Detector   : ED40:COND
Column Type : Dionex AS4A-SC            Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00       1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.69 Nitrite	0.583	12170	55953	1	0.79
Totals		0.583	12170	55953		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.47	0.000	230497	982304	1	
3	2.41	0.000	320	1693	1	
4	2.70	0.000	4604	28274	1	
5	3.73	0.000	582737	7251893	2	
6	4.75	0.000	1300607	22807354	2	
7	6.55	0.000	1113	18118	1	
Totals		0.000	2119878	31089637		

File: T19-b003.D11 Sample: VS006-063-TR19b MS - A16

```

=====
Data File   : T18-d-d3.D12          Report Date: 01/19/1999 10:26:56
Sample Name : VS006-014-TR18d DUP - C38  Collected  : 01/19/1999 10:18:54
Inject #    : 12                      Vial #       : C38
Method File : c:\peaknet\method\nox-vap.met  Calibrated   : 01/07/1999 13:03:31
System Name : Anions (WC48876)           Detector    : ED40:COND
Column Type : Dionex AS4A-SC             Operator     : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
2	1.67 Nitrite	0.319	6809	29565	1 -0.79
Totals		0.319	6809	29565	

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
1	1.45	0.000	239567	900704	1
3	2.37	0.000	300	1613	1
4	2.67	0.000	5722	35376	1
6	3.72	0.000	560167	6907514	2
7	4.74	0.000	1233394	21105057	2
8	6.53	0.000	1017	16330	1
Totals		0.000	2040166	28966593	

File: T18-d-d3.D12 Sample: VS006-014-TR18d DUP - C38

```

=====
Data File   : T19-d002.D13          Report Date: 01/19/1999 10:36:52
Sample Name : VS006-063-TR19d MS - A17  Collected  : 01/19/1999 10:28:46
Inject #    : 13                    Vial #       : A17
Method File : c:\peaknet\method\hox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)          Detector   : ED40:COND
Column Type : Dionex AS4A-SC            Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00    1000

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.68 Nitrite	0.681	13589	65673	2	0.00
Totals		0.681	13589	65673		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.46	0.000	235527	1032000	2	
3	2.37	0.000	248	1602	1	
4	2.67	0.000	7554	46544	1	
5	3.72	0.000	612759	7755575	2	
6	4.74	0.000	1322268	23535884	2	
7	6.53	0.000	1142	18354	1	
Totals		0.000	2179498	32389959		

File: T19-d002.D13 Sample: VS006-063-TR19d MS - A17

```

=====
Data File   : Tr05dMS0.D14          Report Date: 01/19/1999 10:46:41
Sample Name : VS006-063-TR05d MS - A18  Collected  : 01/19/1999 10:38:40
Inject #    : 14                    Vial #       : A18
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)          Detector   : ED40:COND
Column Type : Dionex AS4A-SC            Operator    : M. Duchsherer
=====

```

```

=====
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50              1  2400  5.00 Hz  0.00   8.00    1000
=====

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.69 Nitrite	0.305	6393	28169	1	0.40
Totals		0.305	6393	28169		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.47	0.000	208038	871026	1	
3	2.38	0.000	244	1451	1	
4	2.69	0.000	7187	43192	1	
5	3.77	0.000	528002	6361421	2	
6	4.80	0.000	1196287	20129760	2	
7	6.58	0.000	1167	17976	1	
Totals		0.000	1940925	27424825		

File: Tr05dMS0.D14 Sample: VS006-063-TR05d MS - A18

```

=====
Data File   : Tr05dMSD.D15          Report Date: 01/19/1999 10:56:34
Sample Name : VS006-063-TR05d MSD - A19  Collected  : 01/19/1999 10:48:29
Inject #    : 15                    Vial #       : A19
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)           Detector   : ED40:COND
Column Type : Dionex AS4A-SC             Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00       1000

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
2	1.68 Nitrite	0.307	6531	28330	1	0.00
Totals		0.307	6531	28330		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. Code	%Delta
1	1.46	0.000	211063	872369	1	
3	2.36	0.000	232	1477	1	
4	2.67	0.000	7198	43492	1	
5	3.76	0.000	529576	6372347	2	
6	4.78	0.000	1197353	20143246	2	
7	6.57	0.000	1179	17733	1	
Totals		0.000	1946600	27450664		

File: Tr05dMSD.D15 Sample: VS006-063-TR05d MSD - A19

```

=====
Data File   : CCVS0000.D16                      Report Date: 01/19/1999 11:06:25
Sample Name : 5653-137-C - B04                  Collected  : 01/19/1999 10:58:20
Inject #    : 16                               Vial #     : B04
Method File : c:\peaknet\method\nox-vap.met      Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)                 Detector   : ED40:COND
Column Type : Dionex AS4A-SC                   Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50              1  2400  5.00 Hz  0.00   8.00   1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
4	1.69 Nitrite	0.616	15921	59169	1 0.40
Totals		0.616	15921	59169	

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Component Time Name	Concentration	Height	Area	Bl. %Delta Code
5	2.69	0.000	417	1925	1
6	5.19	0.000	2331	23877	1
Totals		0.000	2747	25801	

File: CCVS0000.D16 Sample: 5653-137-C - B04

```

=====
Data File   : CCB00000.D17          Report Date: 01/19/1999 11:16:02
Sample Name : 5653-136-C - A07      Collected  : 01/19/1999 11:07:59
Inject #    : 17                    Vial #       : A07
Method File : c:\peaknet\method\nox-vap.met  Calibrated  : 01/07/1999 13:03:31
System Name : Anions (WC48876)         Detector   : ED40:COND
Column Type : Dionex AS4A-SC           Operator    : M. Duchsherer
=====

```

```

-----
Calibration Volume  Dilution Points  Rate Start  Stop Area Reject
-----
External           50                1  2400  5.00 Hz  0.00   8.00   1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
0	0.00	Nitrite	0.000	0	0	0	0.00
Totals			0.000	0	0		

***** Peak Report: Unknown Peaks *****

Pk. Num	Ret Time	Component Name	Concentration	Height	Area	Bl. Code	%Delta
3	1.49		0.000	1334	3630	2	
5	2.71		0.000	432	2094	1	
7	5.22		0.000	1355	13614	1	
Totals			0.000	3120	19339		

File: CCB00000.D17 Sample: 5653-136-C - A07

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2.8 Determination of Dibutyl Phosphate and Tributyl Phosphate in PUF Filters

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2.8.1 Narrative

This section contains descriptions of the analytical method and quality assurance used during analysis.

2.8.1.1 Determination of Dibutyl Phosphate and Tributyl Phosphate in PUF Filters

PUF filters were analyzed for dibutyl phosphate (DBP) and tributyl phosphate (TBP) following procedure LA-523-428. The analytes were not detected above reporting limits of 150 ppbv for samples VS006-064-P005 and VS006-080-P006 or 100 ppbv for samples VS006-015-P001, VS006-023-P002, VS006-030-P003, and VS006-138-P008.

Procedure LA-523-428 is based on EPA Method TO-10 which is a method designed to trap and determine the concentration of organochlorine pesticides in ambient air. DBP and TBP are collected by drawing headspace vapors through a polyurethane foam (PUF) filter. The PUF traps semi-volatile compounds which are extracted, using an organic solvent with continuous soxhlet extraction, and then analyzed using gas chromatography/mass spectroscopy.

The extraction apparatus consists of a soxhlet extractor with a 50 ml extractor capacity and a 125 ml flask. The PUF filters are continuously extracted for a period of 16 hours using methyl t-butyl ether (MTBE) as the extraction solvent.

After extraction, the solvent volume is reduced to approximately ½ ml using a Turbovap Evaporator. The extract is then diluted to 1 ml with MTBE. An aliquot of the extract is treated with BSTFA (N,O-bis(trimethylsilyl)trifluoroacetamide), a derivatization reagent, to convert DBP to a compound that is stable to conditions encountered in gas chromatographic analysis. BSTFA converts DBP to the trimethylsilyl ester (DBP-TMSE).

The instrumentation consists of a Hewlett-Packard model 5890 Series II gas chromatograph equipped with a 0.53-mm inside diameter by 15-m long DB-5 fused-silica column and a Hewlett-Packard model 5972 mass-selective detector.

2.8.1.2 Analytical Quality Assurance for the Analysis of PUF Filters

Headspace samples collected on PUF filters were analyzed following procedure LA-523-428. Standard and sample preparation was documented in logbook WHC-N-1411-1, pages 130-134. The GC/MS instrument maintenance and run log was documented in logbook WHC-N-943-1, pages 33-34.

The instrument was calibrated using the internal standard method with a 5-point calibration curve. One surrogate, diphenyl phosphate, was calibrated using a 3-point curve with a linear regression model. The average response factor was used for quantitation of surrogates and target analytes. The percent relative standard deviations (%RSD) of the calibration points was 20% or less for the target analytes and 27% or less for the surrogates.

DBP and TBP were calibrated down to 25 and 10 ug/sample respectively. A chromatogram showing the signal to noise for a 5 ug/sample is included in the Supporting Data section of this report. The 5 ug/sample was the minimum reporting level for samples. Assuming 100% recovery from the PUF filter, a 25 liter sample had reporting limits of 22 ppbv for DBP and 17 ppbv for TBP based on a 5 microgram detector response.

Two surrogates, octachloronaphthlene (OCN) and diphenyl phosphate (DPP) were spiked onto PUF filters prior to the extraction step. OCN is used in EPA Method TO-10 to monitor the recovery of nonpolar organochlorine compounds. DPP is derivatized along with DBP and, therefore, serves as both a surrogate for the derivatization step and a polar surrogate for the extraction of the phosphates from PUF filters.

Recovery of OCN from 12 extractions, both analytical standard and sample matrices, was 80% or better which indicated that the measurements involved in the analysis were in control.

Three PUF filters were spiked with OCN, DPP, DBP, and TBP. Recovery of DPP from those samples averaged 36% compared to 66% for DBP and 68% for TBP. The low recovery of the surrogate indicated there was an interaction between the PUF filters and the phosphate compounds that was not observed for organochlorine compounds. The recovery of the target analytes, DBP and TBP, were about twice the recovery of the surrogate (DPP), indicating that the chemistry of the phosphates also affects the recovery of those compounds.

Surrogate recovery from the Trip Blank (VS006-138-P010) was in the range observed for spiked PUF filters with OCN recovery at 94% and DPP at 38%. DBP and TBP were not observed above 5 micrograms, the lower reporting limit.

In the sample matrix, the DPP recoveries for 3 samples were in the range observed for spiked PUF filters. The surrogate recoveries from samples VS006-023-P002, VS006-030-P003, and VS006-138-P008 indicate that a 65 to 70% recovery of DBP and TBP could be expected. A 27% recovery from sample VS006-015-P001 indicates that a slightly reduced recovery of target compounds could be expected. A 50% recovery increases the reporting limit to 43 ppbv DBP and 34 ppbv TBP. The reporting level for these samples was set at 100 ppbv to include an

additional safety factor of 2 to 3 times the minimum value. DBP and TBP were not observed above 5 micrograms, the lower reporting limit.

The recoveries of DPP from samples VS006-064-P005 and VS006-080-P006, at 23 and 18% respectively, indicate that the recovery of DBP and TBP could be reduced by one-half. DBP and TBP were not observed above 5 micrograms in the samples. The reporting limit for these samples was set at 150 ppbv to reflect the lower surrogate recovery.

The DPP spike was not added to 2 samples, VS006-047-P004 and VS006-095-P007, and, therefore, the recovery of DBP and TBP could not be estimated for these samples.

Extrapolation below the minimum reporting value is not advisable because MDLs have not been completely established for this procedure.

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2.8.2 Sample Summary Table

The sample summary table summarizes the quality control and results of the DBP and TBP analysis. All reported values have been corrected to 25 °C and 1 atmosphere pressure.

Sample Summary Table

QC Sample Summary Table

Logbook Sample ID:	PUF Spike 133.01	PUF Spike 133.02	PUF Spike 133.03	Solvent Blank 132.11	(Trip Blank)	
Internal Standard (DDE)	1625761	1748761	1674379	1325332	VS006-138-P010	
Area Counts:	Amount Detected & %Recovery				Average	%Recovery
Surrogates:	Amount Detected & %Recovery				Range	
Octachloronaphthalene	159 ng (80%)	160ng (80%)	163 ng (82%)	< 5 ug	80%	2%
DPP-TMSE (Surrogate)	83 ng (42%)	71 ng (36%)	60 ng (30%)	< 5 ug	36%	12%
Target Analytes:	Amount Detected & %Recovery					
DBP-TMSE	138 ng (66%)	138 ng (66%)	130ng (65%)	< 5 ug	66%	1%
TBP	121 ng (62%)	150 ng (75%)	132 ng (66%)	< 5 ug	68%	13%
						1650330

Vapor Sample Summary Table

Sample Number:	VS006-015-P001	VS006-023-P002	VS006-030-P003	VS006-064-P005	VS006-080-P006	VS006-110-P008
Internal Standard (DDE)						
Area Counts:	1324009	1531795	1741106	1581898	1621512	1677762
Surrogates:	Amount Detected & %Recovery					
Octachloronaphthalene	167 ng (84%)	164 ng (82%)	169 ng (85%)	177 ng (88%)	193 ng (97%)	175 ng (88%)
DPP-TMSE (Surrogate)	58ng (27%)	82 ng (41%)	95 ng (48%)	46 ng (23%)	37 ng (18%)	78 ng (39%)
Target Analytes:	Reported Concentrations					
DBP-TMSE	<100 ppbv <0.93 mg/m ³	<100 ppbv <0.93 mg/m ³	<100 ppbv <0.93 mg/m ³	<150 ppbv <1.4 mg/m ³	<150 ppbv <1.4 mg/m ³	<100 ppbv <0.93 mg/m ³
Flag:	M*	M*	M*	M*	M*	M*
TBP	<100 ppbv <1.2 mg/m ³	<100 ppbv <1.2 mg/m ³	<100 ppbv <1.2 mg/m ³	<150 ppbv <1.8 mg/m ³	<150 ppbv <1.8 mg/m ³	<100 ppbv <1.2 mg/m ³
Flag:	M*	M*	M*	M*	M*	M*

Note: Extrapolation below these values is not advisable because MDLs have not been established.

Flags: * = Data did not meet quality control requirements; refer to data package case narrative.

M = Target analyte was absent (not detected) in sample.

2.8.3 Supporting Data

This section contains relevant supporting data used for the tuning and calibration of the instrument, and the analysis and quantitation of the organic compounds. The following are included:

- Response Factor Reports
- Signal to noise chromatogram
- Continuing calibration reports
- Mass spectrometer tune reports
- Quantitation Reports and chromatograms.

Response Factor Report 5971 - VO

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Initial Calibration

Calibration Files

200 =V9012507.D 400 =V9012508.D 100 =V9012506.D
 50 =V9012505.D 25 =V9012504.D 10 =V9012503.D

Compound	200	400	100	50	25	10	Avg	%RSD
1) p,p'-DDE								
2) Dibutyl phosphate-T	3.423	2.745	3.484	2.970	2.401		3.004	15.23
3) Tributyl Phosphate	4.425	3.329	5.236	4.776	4.137	3.057	4.160	20.15
4) Octachloronaphthlen	0.773		0.819	0.759	0.729	0.381	0.692	25.56

(#) = Out of Range

TPBDBP2.M

Mon Feb 08 08:41:17 1999

Response Factor Report 5971 - VO

Method : C:\HPCHEM\1\METHODS\DDP2.M
Title :
Last Update : Fri Feb 05 12:09:05 1999
Response via : Initial Calibration

Calibration Files
100 =V9012526.D 200 =V9012527.D 50 =V9012525.D
10 =V9012524.D =

Compound	100	200	50	10	Avg	%RSD
1) p,p'-DDE						
2) Dipenyl phosphate-TMS	0.784	0.843	0.492		0.706	26.55

(#) = Out of Range

DDP2.M

Fri Feb 05 12:10:32 1999

File : C:\HPCHEM\1\DATA\V90125\V9012502.D
Operator : Bonfoey
Acquired : 25 Jan 99 6:58 pm using AcqMethod DIRTBP
Instrument : 5971 - VO
Sample Name: 5 ug/ml std 1411-1-132.02
Misc Info : Signal to Noise Chromatogram
Vial Number: 1

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012509.D Vial: 1
Acq On : 26 Jan 99 6:20 pm Operator: Bonfoey
Sample : 100 ug /ml std 1411-1-132.09 Inst : 5971 - VO
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
Title :
Last Update : Fri Feb 05 11:48:56 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	p,p'-DDE	1.000	1.000	0.0	101	0.00
2	Dibutyl phosphate-TMSE	3.004	3.290	-9.5	95	0.00
3	Tributyl Phosphate	4.160	5.115	-23.0	99	0.00
4	Octachloronaphthlene	0.692	0.806	-16.4	99	0.00

(#) = Out of Range
V9012506.D TPBDBP2.M

SPCC's out = 0 CCC's out = 0
Mon Feb 08 08:45:54 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012523.D

Vial: 1

Acq On : 28 Jan 99 6:21 pm

Operator: Bonfoey

Sample : 100 ug /ml std 1411-1-133.08

Inst : 5971 - VO

Misc :

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M

Title :

Last Update : Fri Feb 05 11:48:56 1999

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	p,p'-DDE	1.000	1.000	0.0	126	-0.01
2	Dibutyl phosphate-TMSE	3.004	3.537	-17.7	128	-0.02
3	Tributyl Phosphate	4.160	5.121	-23.1	123	-0.01
4	Octachloronaphthlene	0.692	0.833	-20.4	128	-0.04

(#) = Out of Range
V9012506.D TPBDBP2.M

SPCC's out = 0 CCC's out = 0
Mon Feb 08 08:46:51 1999

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012529.D Vial: 1
 Acq On : 29 Jan 99 3:24 pm Operator: Bonfoey
 Sample : 100 ug /ml std 1411-1-134.02 Inst : 5971 - VO
 Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	p,p'-DDE	1.000	1.000	0.0	119	0.05
2	Dibutyl phosphate-TMSE	3.004	3.498	-16.4	120	0.04
3	Tributyl Phosphate	4.160	5.183	-24.6	118	0.04
4	Octachloronaphthlene	0.692	0.810	-17.1	118	0.16

(#) = Out of Range
 V9012506.D TPBDBP2.M

SPCC's out = 0 CCC's out = 0
 Mon Feb 08 08:47:17 1999

HP5971 Maximum Sensitivity Autotune

Instrument: 5971 - VOA
 Mon Jan 25 16:35:59 1999

C:\HPCHEM\1\5971\ATUNE.U

Scan: 10.00 - 650.00 Samples: 16 Thresh: 150 Step: 0.10
 150 peaks Base: 69.00 Abundance: 1551872

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	1551872	100.00	70.00	15817	1.02
218.95	650560	41.92	219.95	26352	4.05
502.05	24344	1.57	502.95	2548	10.47

1/26/99 tune check on V90125AT.U

Tue Jan 26 18:11:45 1999

Scan: 10.00 - 650.00 Samples: 16 Thresh: 150 Step: 0.10
169 peaks Base: 69.00 Abundance: 2291712

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	2291712	100.00	70.00	23496	1.03
218.95	1028224	44.87	219.95	40176	3.91
501.95	37744	1.65	502.95	4145	10.98

1/28/99 tune check on V90125AT.U

Thu Jan 28 16:30:42 1999

Scan: 10.00 - 650.00 Samples: 16 Thresh: 150 Step: 0.10
224 peaks Base: 69.00 Abundance: 4413440

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	4413440	100.00	70.00	50072	1.13
218.95	2291712	51.93	219.95	88544	3.86
501.95	93984	2.13	502.95	9441	10.05

1/29/99 tune check on V90125AT.U

Fri Jan 29 14:32:52 1999

Scan: 10.00 - 650.00 Samples: 16 Thresh: 150 Step: 0.10
222 peaks Base: 69.00 Abundance: 4180480

Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	4180480	100.00	70.00	45904	1.10
218.95	2153472	51.51	219.95	85936	3.99
501.95	88064	2.11	502.95	8180	9.29

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012514.D
Acq On : 26 Jan 99 9:25 pm
Sample : VS006-015-P001
Misc :
Quant Time: Feb 8 8:53 1999

Vial: 6
Operator: Bonfoey
Inst : 5971 - VO
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
Title :
Last Update : Fri Feb 05 11:48:56 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	1324099	50.00		0.02

System Monitoring Compounds

%Recovery

Target Compounds

					Qvalue
2) Dibutyl phosphate-TMSE	11.95	155	1986	0.02	# 80
3) Tributyl Phosphate	13.71	99	1066	0.01	# 89
4) Octachloronaphthlene	27.51	404	3060958	167.01	m 23

(#) = qualifier out of range (m) = manual integration
V9012514.D TPBDBP2.M Mon Feb 08 08:53:54 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012514.D
Acq On : 26 Jan 99 9:25 pm
Sample : VS006-015-P001
Misc :
Quant Time: Feb 5 13:54 1999

Vial: 6
Operator: Bonfoey
Inst : 5971 - VO
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\DDP2.M
Title :
Last Update : Fri Feb 05 12:09:05 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	1324099	50.00		0.03

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) Dipenyl phosphate-TMSE	17.57	213	930544	58.44		96
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(#) = qualifier out of range (m) = manual integration
V9012514.D DDP2.M Fri Feb 05 13:54:30 1999

File : C:\HPCHEM\1\DATA\V90125\V9012514.D
Operator : Bonfoey
Acquired : 26 Jan 99 9:25 pm using AcqMethod DIRTEP
Instrument : 5971 - VO
Sample Name: VS006-015-P001
Misc Info :
Vial Number: 6

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012515.D

Vial: 7

Acq On : 26 Jan 99 10:02 pm

Operator: Bonfoey

Sample : VS006-023-P002

Inst : 5971 - VO

Misc :

Multiplr: 1.00

Quant Time: Feb 8 8:56 1999

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M

Title :

Last Update : Fri Feb 05 11:48:56 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	1531795	50.00		0.02

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) Dibutyl phosphate-TMSE	11.97	155	6895	0.07	m	52
3) Tributyl Phosphate	13.73	99	20850	0.16	m	91
4) Octachloronaphthlene	27.51	404	3473673	163.83		98

(#) = qualifier out of range (m) = manual integration

V9012515.D TPBDBP2.M

Mon Feb 08 08:56:43 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012515.D
Acq On : 26 Jan 99 10:02 pm
Sample : VS006-023-P002
Misc :
Quant Time: Feb 5 13:54 1999

Vial: 7
Operator: Bonfoey
Inst : 5971 - VO
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\DDP2.M
Title :
Last Update : Fri Feb 05 12:09:05 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	1531795	50.00		0.03

System Monitoring Compounds						%Recovery
Target Compounds						Qvalue
2) Dipenyl phosphate-TMSE	17.57	213	1767909	82.17		96

(#) = qualifier out of range (m) = manual integration
V9012515.D DDP2.M Fri Feb 05 13:55:10 1999

File : C:\HPCHEM\1\DATA\V90125\V9012515.D
Operator : Bonfoey
Acquired : 26 Jan 99 10:02 pm using AcqMethod DIRTEP
Instrument : 5971 - VO
Sample Name: VS006-023-P002
Misc Info :
Vial Number: 7

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012516.D
 Acq On : 26 Jan 99 10:39 pm
 Sample : VS006-030-P003
 Misc :
 Quant Time: Feb 8 8:57 1999

Vial: 8
 Operator: Bonfoey
 Inst : 5971 ~ VO
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.77	246	1741106	50.00		0.01

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) Dibutyl phosphate-TMSE	11.96	155	5026	0.05	#	59
3) Tributyl Phosphate	13.72	99	2670	0.02	#	77
4) Octachloronaphthlene	27.51	404	4079894	169.29		98

(#) = qualifier out of range (m) = manual integration
 V9012516.D TPBDBP2.M Mon Feb 08 08:57:38 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012516.D
 Acq On : 26 Jan 99 10:39 pm
 Sample : VS006-030-P003
 Misc :
 Quant Time: Feb 5 13:55 1999

Vial: 8
 Operator: Bonfoey
 Inst : 5971 - VO
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\DDP2.M
 Title :
 Last Update : Fri Feb 05 12:09:05 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.77	246	1741106	50.00		0.02

System Monitoring Compounds	%Recovery
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Target Compounds	Qvalue
2) Dipenyl phosphate-TMSE	95

(#) = qualifier out of range (m) = manual integration
 V9012516.D DDP2.M Fri Feb 05 13:56:07 1999

File : C:\HPCHEM\1\DATA\V90125\V9012516.D
Operator : Bonfoey
Acquired : 26 Jan 99 10:39 pm using AcqMethod DIRTBP
Instrument : 5971 - V0
Sample Name: VS006-030-P003
Misc Info :
Vial Number: 8

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012517.D
 Acq On : 26 Jan 99 11:16 pm
 Sample : VS006-047-P004
 Misc :
 Quant Time: Feb 8 9:01 1999

Vial: 9
 Operator: Bonfoey
 Inst : 5971 - VO
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	6200351	50.00		0.02

System Monitoring Compounds					%Recovery
Target Compounds					Qvalue
2) Dibutyl phosphate-TMSE	11.96	155	954	0.00	# 51
3) Tributyl Phosphate	13.71	99	3917	0.01	# 94
4) Octachloronaphthlene	27.51	404	3765693	43.88	m 98

(#) = qualifier out of range (m) = manual integration
 V9012517.D TPBDBP2.M Mon Feb 08 09:01:45 1999

4X 43.88 = 175mg

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012517.D
 Acq On : 26 Jan 99 11:16 pm
 Sample : VS006-047-P004
 Misc :
 Quant Time: Feb 8 8:58 1999

Vial: 9
 Operator: Bonfoey
 Inst : 5971 - VO
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	6200351	50.00		0.03

System Monitoring Compounds %Recovery

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dipenyl phosphate-TMSE	0.00	213		Not Detected		

(#) = qualifier out of range (m) = manual integration
 V9012517.D TPBDBP2.M Mon Feb 08 08:58:51 1999

File : C:\HPCHEM\1\DATA\V90125\V9012517.D
Operator : Bonfoey
Acquired : 26 Jan 99 11:16 pm using AcqMethod DIRTBP
Instrument : 5971 - VO
Sample Name: VS006-047-P004
Misc Info :
Vial Number: 9

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012518.D
 Acq On : 26 Jan 99 11:53 pm
 Sample : VS006-064-P005
 Misc :
 Quant Time: Feb 8 9:05 1999

Vial: 10
 Operator: Bonfoey
 Inst : 5971 - VO
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.77	246	1581898	50.00		0.00

System Monitoring Compounds					%Recovery
Target Compounds					Qvalue
2) Dibutyl phosphate-TMSE	11.95	155	1051	0.01	# 79
3) Tributyl Phosphate	13.72	99	2097	0.02	# 70
4) Octachloronaphthlene	27.49	404	3873013	176.88	98

(#) = qualifier out of range (m) = manual integration
 V9012518.D TPBDBP2.M Mon Feb 08 09:05:07 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012518.D
 Acq On : 26 Jan 99 11:53 pm
 Sample : VS006-064-P005
 Misc :
 Quant Time: Feb 5 13:57 1999

Vial: 10
 Operator: Bonfoey
 Inst : 5971 - VO
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.77	246	1581898	50.00		0.02

System Monitoring Compounds	%Recovery
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Target Compounds					Qvalue
2) Dipenyl phosphate-TMSE	17.57	213	737330	46.00	m 95

(#) = qualifier out of range (m) = manual integration
 V9012518.D TPBDBP2.M Mon Feb 08 09:03:35 1999

File : C:\HPCHEM\1\DATA\V90125\V9012518.D
Operator : Bonfoey
Acquired : 26 Jan 99 11:53 pm using AcqMethod DIRTEP
Instrument : 5971 - VO
Sample Name: VS006-064-P005
Misc Info :
Vial Number: 10

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012519.D
 Acq On : 27 Jan 99 12:30 am
 Sample : VS006-080-P006
 Misc :
 Quant Time: Feb 8 9:08 1999

Vial: 11
 Operator: Bonfoey
 Inst : 5971 - VO
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QI	on	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	1621512	50.00		0.02	

System Monitoring Compounds						%Recovery
Target Compounds						Qvalue
2) Dibutyl phosphate-TMSE	11.96	155	628	0.01	#	1
3) Tributyl Phosphate	13.73	99	25714	0.19	#	75
4) Octachloronaphthlene	27.53	404	4344871	193.58	m	34

(#) = qualifier out of range (m) = manual integration
 V9012519.D TPBDBP2.M Mon Feb 08 09:08:30 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012519.D
 Acq On : 27 Jan 99 12:30 am
 Sample : VS006-080-P006
 Misc :
 Quant Time: Feb 5 13:58 1999

Vial: 11
 Operator: Bonfoey
 Inst : 5971 - VO
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	1621512	50.00		0.03

System Monitoring Compounds	%Recovery
Target Compounds	Qvalue
2) Dipenyl phosphate-TMSE	m 94

(#) = qualifier out of range (m) = manual integration
 V9012519.D TPBDBP2.M Mon Feb 08 09:06:42 1999

File : C:\HPCHEM\1\DATA\V90125\V9012519.D
Operator : Bonfoey
Acquired : 27 Jan 99 12:30 am using AcqMethod DIRTBP
Instrument : 5971 - VO
Sample Name: VS006-080-P006
Misc Info :
Vial Number: 11

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012520.D

Acq On : 27 Jan 99 1:07 am

Sample : VS006-095-P007

Misc :

Quant Time: Feb 8 9:11 1999

Vial: 12

Operator: Bonfoey

Inst : 5971 - VO

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M

Title :

Last Update : Fri Feb 05 11:48:56 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	6624239	50.00		0.02

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) Dibutyl phosphate-TMSE	11.95	155	262	0.00	#	74
3) Tributyl Phosphate	13.72	99	8783	0.02	#	68
4) Octachloronaphthlene	27.53	404	3726004	40.64		98

(#) = qualifier out of range (m) = manual integration

V9012520.D TPBDBP2.M Mon Feb 08 09:11:14 1999

4X 40.64 = 162ng

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012520.D
Acq On : 27 Jan 99 1:07 am
Sample : VS006-095-P007
Misc :
Quant Time: Feb 5 13:59 1999

Vial: 12
Operator: Bonfoey
Inst : 5971 - VO
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\DDP2.M
Title :
Last Update : Fri Feb 05 12:09:05 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	6624239	50.00		0.03

System Monitoring Compounds

%Recovery

Target Compounds

2) Dipenyl phosphate-TMSE	17.59	213	6881	21.34	Qvalue	# 76
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(#) = qualifier out of range (m) = manual integration
V9012520.D DDP2.M Fri Feb 05 14:00:06 1999

File : C:\HPCHEM\1\DATA\V90125\V9012520.D
Operator : Bonfoey
Acquired : 27 Jan 99 1:07 am using AcqMethod DIRTBP
Instrument : 5971 - VO
Sample Name: VS006-095-P007
Misc Info :
Vial Number: 12

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012521.D
 Acq On : 27 Jan 99 1:44 am
 Sample : VS006-138-P010
 Misc :
 Quant Time: Feb 8 9:12 1999

Vial: 13
 Operator: Bonfoey
 Inst : 5971 - Vo
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	1650330	50.00		0.02

System Monitoring Compounds					%Recovery
Target Compounds					Qvalue
2) Dibutyl phosphate-TMSE	11.98	155	2728	0.03	# 73
3) Tributyl Phosphate	13.71	99	749	0.01	# 85
4) Octachloronaphthlene	27.54	404	4272681	187.04	# 99

(#) = qualifier out of range (m) = manual integration
 V9012521.D TPBDBP2.M Mon Feb 08 09:13:26 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012521.D
 Acq On : 27 Jan 99 1:44 am
 Sample : VS006-138-P010
 Misc :
 Quant Time: Feb 5 14:00 1999

Vial: 13
 Operator: Bonfoey
 Inst : 5971 - VO
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\DDP2.M
 Title :
 Last Update : Fri Feb 05 12:09:05 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIOn	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.78	246	1650330	50.00		0.03

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) Dipenyl phosphate-TMSE	17.57	213	1702891	75.74		95
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(#) = qualifier out of range (m) = manual integration
 V9012521.D DDP2.M Fri Feb 05 14:00:47 1999

File : C:\HPCHEM\1\DATA\V90125\V9012521.D
Operator : Bonfoey
Acquired : 27 Jan 99 1:44 am using AcqMethod DIRTBP
Instrument : 5971 - VO
Sample Name: VS006-138-P010
Misc Info :
Vial Number: 13

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012534.D
 Acq On : 29 Jan 99 6:30 pm
 Sample : VS006-110-P008
 Misc :
 Quant Time: Feb 8 9:17 1999

Vial: 6
 Operator: Bonfoey
 Inst : 5971 - VO
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPBDBP2.M
 Title :
 Last Update : Fri Feb 05 11:48:56 1999
 Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.80	246	1677762	50.00		0.04

System Monitoring Compounds					%Recovery
Target Compounds					Qvalue
2) Dibutyl phosphate-TMSE	11.99	155	9419	0.09	# 73
3) Tributyl Phosphate	13.72	99	908	0.01	# 16
4) Octachloronaphthlene	27.61	404	4068163	175.18	# 98

(#) = qualifier out of range (m) = manual integration
 V9012534.D TPBDBP2.M Mon Feb 08 09:17:39 1999

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V90125\V9012534.D

Vial: 6

Acq On : 29 Jan 99 6:30 pm

Operator: Bonfoey

Sample : VS006-110-P008

Inst : 5971 - VO

Misc :

Multiplr: 1.00

Quant Time: Feb 9 8:34 1999

Method : C:\HPCHEM\1\METHODS\DDP2.M

Title :

Last Update : Fri Feb 05 12:09:05 1999

Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) p,p'-DDE	19.80	246	1677762	50.00		0.05

System Monitoring Compounds

%Recovery

Target Compounds

Qvalue

2) Dipenyl phosphate-TMSE	17.60	213	1797149	77.81		94
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(#) = qualifier out of range (m) = manual integration

V9012534.D DDP2.M

Tue Feb 09 08:35:10 1999

File : C:\HPCHEM\1\DATA\V90125\V9012534.D
Operator : Bonfoey
Acquired : 29 Jan 99 6:30 pm using AcqMethod DIRTBP
Instrument : 5971 - VO
Sample Name: VS006-110-P008
Misc Info :
Vial Number: 6

3.0 References

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3.0 REFERENCES

- LMHC, 1998, *Waste Retrieval Sluicing System Vapor Sampling and Analysis Plan for Evaluation of Organic Emissions*, HNF-3732, Rev. 0-A, Lockheed Martin Hanford Corporation, Richland, Washington.
- NHC, 1997, *Preparation of Triple Sorbent Tubes for Field Sampling, Analysis and Calibration Standards*, LA-549-404, Rev. A-1, Numatec Hanford Corporation, Richland, Washington.
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- NHC, 1997, *Sample Chain of Custody, Acceptance, and Disposal*, LO-090-450, Rev. B-1, Numatec Hanford Corporation, Richland, Washington.

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