FINAL ENGINEERING REPORT

FORMER TAYLOR INSTRUMENTS SITE ROCHESTER, NEW YORK

VOLUME 3

Appendix Q Off-site Groundwater Investigation

PREPARED FOR:

APOGENT TECHNOLOGIES PORTSMOUTH, NEW HAMPSHIRE

PREPARED BY:

HALEY & ALRICH OF NEW YORK ROCHESTER, NEW YORK

SEPTEMBER 2003



REPORT ON OFFSITE GROUNDWATER INVESTIGATION FORMER TAYLOR INSTRUMENTS SITE ROCHESTER, NEW YORK

by

Haley & Aldrich of New York Rochester, New York

for

New York State Department of Environmental Conservation

File No. 70600-001 September 2001



UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

Haley & Aldrich of New York 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264 Tel: 716.359.9000 Fax: 716.359.4650 www.HaleyAldrich.com



6 September 2001 File No. 70600-001

New York State Department of Environmental Conservation Division of Hazardous Waste Remediation – Region 8 6274 East Avon-Lima Road Avon, New York 14485

Attention:

David Pratt, P.E.

Subject:

Report on Offsite Groundwater Investigation Former Taylor Instruments Site 95 Ames Street Rochester, New York VCA Index No. B8-0508-97-02

Dear Mr. Pratt:

On behalf of Apogent Technologies Corporation (formerly Sybron Laboratory Products) Haley & Aldrich is pleased to submit this report documenting the offsite groundwater investigation for the above-referenced site. The work was performed in accordance with our Work Plan dated 22 December 1999. This report documents our field activities and provides a summary of our findings.

Please contact us at any time with any questions you may have. Thank you for the opportunity to continue assisting with this project.

Sincerely yours, HALEY & ALDRICH OF NEW YORK

Robert J. Mahoney, P.G. Senior Environmental Geologist

(see distribution list next page)

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I. INTRODUCTION

Haley & Aldrich of New York (Haley & Aldrich), on behalf of Apogent Technologies Corp. (Apogent) has performed an investigation of offsite soil, bedrock and groundwater conditions for the former Taylor Instrument Site, located at 95 Ames Street in Rochester, New York. The work described herein was performed in accordance with the December 1999 "Work Plan for Assessment of Offsite Groundwater Conditions," as approved by the New York State Department of Environmental Conservation (NYSDEC).

1.1 Project Background

The Site has been investigated under the NYSDEC's Voluntary Cleanup Program (VCP). The respondent for the Voluntary Cleanup Agreement (VCA # B8-0508-97-02) is Combustion Engineering (C-E), the current owner of the Site. Apogent Technologies Corp. (formerly Sybron Laboratory Products, Inc.) is involved in the project by virtue of an agreement with Combustion Engineering. An agreement was reached between C-E and Apogent whereby retained overall responsibility as the VCA-respondent, C-E would be responsible for onsite investigation and remediation, and Apogent would be responsible for investigation of the potential presence of contaminants offsite, and remediation if required.

Previous investigations by C-E revealed volatile organic compounds (VOCs) and other contamination was present on the Taylor Instruments site, including two source areas of VOC contamination. In addition, VOC presence was identified in overburden and bedrock monitoring wells located on the north and east property lines. NYSDEC has required that a limited offsite investigation of groundwater conditions in overburden and bedrock be conducted focusing on contaminants related to the Site. Accordingly, this offsite investigation has been undertaken by Haley & Aldrich for Apogent pursuant to the settlement agreement with C-E. This report documents the results of these offsite investigations.

1.2 Project Objectives

The specific objectives of the Work Plan for the offsite groundwater investigation are as follows:

- 1 Quantify the levels of any site-related VOCs that are present in overburden and bedrock groundwater downgradient from the Taylor Instruments Site.
- 2 Evaluate the potential for complete residential exposure pathways based upon VOC analytical results, depth to groundwater and proximity of residential areas to areas of offsite VOC groundwater contamination from the Taylor Instruments Site.

The offsite groundwater investigation required the installation of clusters of monitoring wells to assess conditions in the overburden and bedrock groundwater. The wells were sampled and analyzed for the VOCs that have been identified as the compounds of concern in groundwater on the Taylor Instruments Site.



II. FIELD INVESTIGATION AND LABORATORY ANALYTICAL PROGRAM

2.1 Drilling Locations and Access Agreements

A total of four well cluster locations (OS-1, OS-2, OS-3 and OS-4) were completed as part of the investigation, at locations shown on Figure 1. The well locations were reviewed in the field and approved by David Pratt of NYSDEC. The monitoring well clusters at locations OS-1, OS-2 and OS-3 were drilled within the street rights-of-way on Zena, Ames and Syke Streets, respectively. Permits to drill were obtained for each of these locations from the City of Rochester.

Well cluster location OS-4 was drilled on property currently owned by the City of Rochester (address 160 Hague Street). A license agreement, dated 28 December 2000, was obtained through The City's Bureau of Housing Development for permission to access the property to install the wells and perform subsequent groundwater sampling. The license agreement is valid for three years to allow for additional quarterly sampling events. A copy of the agreement is included in Appendix A.

The City parcel is "landlocked" (no access by road), being bounded immediately on the north by a building occupied by Davenport Machine, immediately on the south and west by railroad tracks owned by CSX Transportation, Inc. (CSX), and on the east by the Ames Street underpass. Accordingly, Apogent also obtained a Right-of-Entry Agreement with CSX to allow use of the access road along the railroad tracks to gain access to the City parcel. The Right-of-Entry Agreement (No. CSXT-PI-1019) is valid through 31 March 2002, and is renewable. A copy of the agreement is included in Appendix A.

2.2 Test Borings and Monitoring Well Installation

A total of eight test borings (four pairs) were completed at the locations shown on Figure 1 by Nothnagle Drilling Incorporated of Scottsville, New York, during the period 23 through 30 May 2001 under the direction of Haley & Aldrich. Groundwater monitoring wells were installed in the completed test borings as four well clusters. Each well cluster location consists of one overburden and one bedrock monitoring well. Copies of test boring logs and monitoring well installation reports are included in Appendix B.

Test borings were advanced at the well locations to total depths ranging from approximately 6.5 to 16.4 feet below ground surface for the overburden wells and approximately 18.5 to 36.9 feet below ground surface for bedrock wells. The variation in depths is a result of variation in ground surface elevation and top of bedrock elevation.

Soil samples from the test borings were visually classified and screened in the field using headspace methodology for VOCs with a hand-held photoionization detector (PID). Information regarding soil stratigraphy and VOC screening data for each well cluster is included on the test boring logs. The overburden well test borings were subsequently advanced to terminal depth without soil sampling. At each well cluster location bedrock was cored using an NX-core bit to collect rock samples for visual classification. The upper two feet of bedrock was overdrilled with a 5-7/8 inch tri-cone roller bit to allow installation of a permanent steel monitoring well casing.



Monitoring wells were installed in the completed test borings as an overburden and bedrock pair at each cluster location. Overburden monitoring wells (OS-1 OB, OS-2 OB, OS-3 OB and OS-4 OB) are constructed of two-inch diameter PVC slotted (0.010 inch slot) well screen and riser. Bedrock monitoring well construction (OS-1 BR, OS-2 BR, OS-3 BR and OS-4 BR) includes four-inch steel casing, installed with cement grout a minimum two feet into the top of rock. The open NX-core hole below the casing serves as the monitoring interval. The well clusters include three locations completed with flush-mount steel road boxes (OS-1 OB, OS-1 BR, OS-2 OB, OS-2 BR OS-3 OB and OS-3 BR) and one with stick-up protective steel casings (OS-4 OB and OS-4 BR).

Following installation, each of the wells was developed to recover water lost during drilling and coring (bedrock wells), and to establish hydraulic communication with the geologic formation (all wells). For bedrock wells, the following summarizes the amount of water lost during drilling and the amount recovered during development:

Water Lost (gal.)	Water <u>Recovered(gal.)</u>
15	25
250	255
30	30
30	40
	15 250 30

All investigation-derived waste (drill cuttings and development/purge water) was contained in drums and removed from the drill locations on a daily basis. The waste was disposed offsite at a licensed waste management facility in accordance with applicable regulations.

2.3 Surveying of Well Casings

Following installation and development of the monitoring wells, DJ Parrone & Associates of Penfield, New York surveyed reference elevations of the well casings. Elevations for each well are summarized on Table 2. The well clusters were located in the field by Haley & Aldrich by tape measurements from fixed features as shown on Figure 1.

2.4 Groundwater Sampling

After a period of approximately two weeks following installation and development, groundwater samples from the monitoring wells were obtained. Prior to groundwater sampling, static water level measurements were measured concurrently with onsite water level measurements being obtained by Harding ESE (consultant for C-E). Harding ESE is performing sitewide groundwater flow interpretation as part of their ongoing investigation and remediation activity.

Groundwater sampling was performed on 18 June 2001 by Haley & Aldrich personnel in accordance with the sampling procedures included in the Work Plan. Sampling was accomplished using dedicated disposable bailers. Three well volumes were purged before obtaining each sample, and field parameters were measured during well purging. Copies of groundwater sampling records are in Appendix C.



Quality assurance/quality control (QA/QC) samples obtained included a matrix spike, matrix spike duplicate and trip blank. Samples were collected in laboratory-provided containers and handled under standard chain-of-custody procedures.

2.5 Laboratory Analyses

Groundwater samples were analyzed for VOCs by Columbia Analytical Services (CAS) laboratory in Rochester, New York. Groundwater samples were analyzed by NYSDEC CLP-ASP Method 95-1 (certified laboratory program Analytical Services Protocol) with category B deliverables. The groundwater samples were submitted to CAS on 18 June 2001.



3.1 Geologic and Hydrogeologic Conditions

3.1.1 Onsite Conditions Described Previously by Others

Hydrogeologic conditions at the former Taylor Instruments Site have been previously described based on the results of the subsurface investigation programs as documented in the Final Investigation Report (FIR) for the Taylor Instruments Site (Harding Lawson Associates, March 1999). Similar geologic and hydrogeologic conditions were identified at the offsite locations areas near the Taylor Instruments Site.

The geologic conditions encountered at the Site during previous investigations include unconsolidated overburden deposits overlying bedrock ranging from approximately 14 to 30 feet in thickness. The bedrock underlying the Site was mapped as the Lockport dolomite. Regionally, this formation consists of flat to gently-dipping medium to thick bedded fine-grained dolomite with interbedded shales.

Groundwater is present within the overburden and in the underlying fractured bedrock beneath the Site. Based on measurements collected during previous Taylor Instruments Site investigations, groundwater flow beneath the Site is generally towards the north and northeast, generally consistent with regional groundwater flow.

3.1.2 Offsite Geologic and Hydrogeologic Conditions Encountered

Overburden

The geological conditions encountered during the offsite drilling investigation are generally similar to conditions identified during previous onsite investigations at the Site. The overburden identified at the offsite drilling locations included soil fill overlying glacially-deposited lacustrine and/or till deposits. The overburden thickness at the offsite locations (OS-1, OS-2, OS-3 and OS-4) ranged from approximately 6.5 to 24.5 feet. The fill, lacustrine and till deposits are generally comprised of silty sand or sandy silt. Copies of the test boring logs with details regarding the overburden soils and bedrock are included in Appendix B.

Bedrock

Bedrock encountered at the offsite well locations is identified as hard, light gray fine grained, thin to very thin-bedded Dolostone. This rock unit is currently mapped as the Eramosa Dolostone, a formation within the Lockport Group. This is a variation from the formation name useage in previous investigations, due to recent revisions in the regional stratigraphic nomenclature for the Niagaran Series in Central and Western New York.

A thin severely weathered zone approximately 0.5 feet and 2 feet thick was observed at the top of rock at locations OS-1 BR and OS-2 BR, respectively. Bedrock core samples were observed to contain occasional pits, vugs and low to high angle partings



at various locations. The depth to the top of rock ranged from approximately 6.5 (or El. 518 at OS-3) to 24.5 (or El. 505 at OS-4) feet below ground surface. A summary of the overburden thickness, top of bedrock elevations, and well completion details is presented on Table 1.

Hydrogeologic Conditions

Subsequent to well development and prior to groundwater sampling, groundwater levels at the offsite well cluster locations were measured on 14 June 2001, concurrent with the collection of onsite groundwater level measurements by Harding ESE. Groundwater elevations for offsite wells are shown on Table 1. Groundwater elevations in the offsite overburden wells ranged from approximate El. 517 (at OS-1 OB and OS-2 OB) to El. 523 (at OS-4 OB). The overburden well at cluster OS-3 was dry (< El. 518); it appears the static groundwater piezometric surface is below the top of rock (El. 518) at this location. Groundwater elevations in the offsite bedrock wells ranged from approximate El. 511.5 (at OS-1 BR and OS-2 BR) to El. 519 (at OS-4BR).

The groundwater level data from the offsite wells was provided to Harding ESE (consultant for Combustion Engineering), who will integrate the data into the overall sitewide groundwater flow evaluation, including representation of groundwater potentiometric surface for both onsite and offsite wells.

The groundwater conditions encountered indicate the overburden is relatively finegrained and of low permeability. Flow zones were encountered in the bedrock, which is typical of the Eramosa Formation near the top of rock.

3.2 Analytical Results and Discussion

The analytical results from the offsite investigation are summarized on Table 2 and discussed in the following section.

Soil:

As part of the investigation soil samples were visually classified and screened for VOCs in the field. There were no VOCs detected in the soil samples during the field screening, as indicated on the test boring reports in Appendix B. Laboratory analysis of soil samples was not required by the work plan.

Overburden Groundwater:

Groundwater samples were collected and submitted for analysis from the overburden monitoring wells OS-1 OB, OS-2 OB, OS-3 OB and OS-4 OB. As shown on Table 2, no VOCs were detected in any of the overburden groundwater samples, with the exception of acetone at 6 and 7 parts per billion (ppb) in OS-1 OB and OS-3 OB, respectively. Given the presence of acetone in a laboratory blank sample, the detection of this substance in these samples is attributed to laboratory contamination and is not considered to reflect groundwater conditions.



Bedrock Groundwater:

Groundwater samples were collected and submitted for analysis from the bedrock monitoring wells OS-1 BR, OS-2 BR, OS-3 BR and OS-4 BR. As shown on Table 2, no VOCs were detected in any of the bedrock groundwater samples, with the exception of acetone at concentrations ranging from 2 to 5 ppb in three of the wells. As with the overburden results, this is also attributed to laboratory contamination and is not considered to reflect groundwater conditions based on the presence of this substance in a laboratory blank sample analysis.

3.3 Data Usability Summary Report

Analytical results for CAS Submission #R2107196 were reviewed to evaluate the data usability. The review was completed by Denis M. Conley of Haley & Aldrich, a Certified Data Validator.

The data package included seven groundwater samples, one trip blank sample and one cooler blank with site specific matrix spike and matrix spike duplicate samples (MS/MSD). Data were assessed in accordance with the NYSDEC's "Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports (DUSR)" (September 1997) and the "NYSDEC ASP 2000 Review Guidelines," where applicable. This DUSR pertains to the groundwater samples collected by Haley & Aldrich personnel on 18 June 2001.

The following items/criteria applicable to the QA/QC data and samples listed above were reviewed:

- Blanks
- □ Instrument Tunings
- **Calibration Standards**
- **Calibration** Verification
- □ Surrogate Recoveries
- □ Spike Recoveries
- □ Replicate Analyses
- □ Laboratory Controls
- □ Sample Data
- □ Holding Times
- Data Qualifiers

The above items were in compliance with NYSDEC DUSR guidance criteria with the exception of the items discussed in the following text. The data have been reviewed according to the above procedures.

Blanks

Method blank VBLK #1 indicated the presence of acetone at an estimated (J) concentration of 1.7 ug/L. Since acetone is commonly used in laboratory procedures and a suspected laboratory contaminant, EPA guidance recommends that all sample data at a concentration of less than 10 times the detected value in the blank be flagged "B". Thus, detections of acetone in the field samples at a concentration of less than 17 ppb were flagged "B" and not



considered representative of site conditions. No other target compounds were detected in the method blank sample. No further action is required.

Instrument Tunings

GC/MS instruments were tuned using bromofluorobenzene (BFB) within twelve hours of the analysis of the project samples without exception in accordance with the prescribed analytical protocol. All tuning criteria were met prior to the initiation of each analytical batch which included the project samples or selected re-analyses of project samples performed.

Calibration Verification

The percent difference (%D) between the relative response factor (RRF) from the initial calibration and the RRF from the continuing calibration standard analyzed concurrent with the project samples met the USEPA technical criteria of 25.0% D without exception. No corrective action is required.

The percent difference (%D) between the RRF from the initial calibration and the RRF from the continuing calibration standard analyzed concurrent with the project samples met the USEPA technical criteria of 25.0% D without exception. No corrective action is required.

Replicate Analysis

Field duplicate samples were not collected and/or analyzed as part of these submissions. Analytical precision was evaluate based on the Matrix Spike and Matrix Spike duplicate analyses performed on the project samples within each submission.

The reported results for OS-4S MS/MSD analyses fell within acceptance criteria without exception. No further corrective action is recommended.

Summary

The results presented in Submission #R2107196 are compliant and usable, without further qualification. Based on our review, the usability of these submissions is 100% with the qualification of Acetone results as noted above.



IV. FINDINGS AND CONCLUSIONS

Haley & Aldrich has performed an investigation of offsite groundwater conditions associated with the former Taylor Instruments Site at 95 Ames Street in Rochester, New York. The work was performed in accordance with a work plan submitted to, and approved by, the New York State Department of Environmental Conservation (NYSDEC). This investigation was conducted in response to requests made by the NYSDEC and the New York State Department of Health (NYSDOH) for additional assessment of offsite groundwater conditions at the Taylor Instruments Site to confirm that there continues to be no threat to human health. This investigation involved the installation and sampling of groundwater from wells installed beyond the property limits and downgradient from the Taylor Instruments Site, generally between the Site and the nearest offsite residential/industrial areas (excluding the railroad right of way) as well as at other locations requested by NYSDEC. The specific intent of this investigation was to determine whether groundwater is impacted by Site-related contaminants at these locations and, if so, whether contaminants in groundwater could create a risk of residential exposure pathways.

Findings

A total of eight groundwater monitoring wells were installed as pairs at four offsite locations. Each pair consisted of one overburden and one bedrock monitoring well. Field screening of soil samples from test borings at the well locations did not indicate the presence of VOC contaminants.

Groundwater samples were obtained from each completed offsite well (except for one overburden well that did not produce water) and submitted for laboratory analysis for VOC presence. None of the samples contained VOCs at detectable levels, with the exception of low level detections of acetone in five of the samples as well as in a laboratory quality control sample. The presence of acetone in the laboratory blank suggests its presence is attributable to laboratory contamination and that it is not present in groundwater.

Conclusions

Results of this investigation indicate that VOCs related to the Taylor Instruments Site are not present above analytical detection limits either in the overburden or bedrock groundwater at any of the offsite well locations. It is our opinion that the results of these investigations fulfill the work plan objectives in that these data further confirm that there are no complete residential exposure pathways. Based on this, and the lack of detection of site-related VOCs in the groundwater, there continues to be no threat to human health or the environment posed by VOCs from the Taylor Instruments Site.

In accordance with requirements of the work plan, groundwater levels will continue to be monitored quarterly in offsite wells for two years. The water level measurements will be obtained concurrently with readings for the onsite wells by Harding ESE, and the data provided to Harding ESE for integration into ongoing sitewide evaluation of conditions.

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Former Taylor Instruments Site Offsite Groundwater Investigation

Table 1Well Construction Summary

Test Boring/	Ground Surface	Riser Reference	Overburden	Top of Bedrock	Installed Well
Well ID	Elevation	Elevation*	Thickness	Elevation	Monitoring Interval
Bedrock				·	
OS-1BR	519.9	519.55	8.7	511.2	498.4 - 508.4
OS-2BR	525.8	525.22	12	513.8	500.5 - 510.3
OS-3BR	524.5	524.30	6.5	518	506.0 - 516.0
OS-4BR	530.1	531.09	24.5	505.6	493.0 - 503.4
Overburden					
OS-10B	520.0	519.76	8.7		511.2 - 515.2
OS-2OB	525.8	525.44	12		513.8 - 520.8
OS-3OB	524.6	524.31	6.5		518.4 - 521.4
OS-4OB	530.1	530.99	24.5		513.9 - 523.9

Notes:

1. * Riser elevations surveyed using onsite reference monument, identified to be Rochester City Survey(RCS) datum by surveyor (DJ Parrone & Associates)

2. Groundwater Elevations determined from groundwater level measurements collected by H&A on 14 June 2001

3. Installed well interval for bedrock wells is open NX core hole and for overburden wells is screened interval.

G:\Projects\70600\001\Offsite Drilling\[Report Tables.xls]Tab 1 - Wells & Geol

Former Taylor Instruments Site Offsite Groundwater Investigation

Table 2Summary of Water Levels

	Riser Reference	Depth to Water	Groundwater
Well ID	Elevation (ft)*	from top of riser (ft)	Elevation
Bedrock			
OS-1BR	519.55	8.08	511.47
OS-2BR	525.22	13.5	511.72
OS-3BR	524.30	9.15	515.15
OS-4BR	531.09	12.14	518.95
Overburden			
OS-10B	519.76	3.08	516.68
OS-2OB	525.44	7.62	517.82
OS-3OB	524.31	dry	<518.1
OS-4OB	530.99	7.41	523.58

Notes:

1. * Riser elevations surveyed using onsite ref. monument, identified as Rochester City Survey(RCS) datum by surveyor

2. Groundwater level measurements collected by H&A on 14 June 2001

G:\Projects\70600\001\Offsite Drilling\[Report Tables.xls]Tab 1 - Wells & Geol

Former Taylor Site Offsite Groundwater Investigation

Table 3 **Groundwater Analytical Results**

			[OVERB			·····		<u></u>		BEDI	ROCK			
				OS-	-1S	OS	-2S	OS	-4S	OS	-1D	OS	-2D	OS	-3D	OS-	-4D
COMPOUND	MDL	PQL	UNIT	RESULT	FLAG	RESULT	FLAG	RESULT	FLAG	RESULT	FLAG	RESULT	FLAG	RESULT	FLAG	RESULT	FLAG
(M+P)XYLENE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
ACETONE	10	10	UG/L	6.00	J	10.00	U	7.00	J	5.00	J	2.00	J	10.00	U	4.00	j J
BENZENE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
BROMODICHLOROMETHANE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
BROMOFORM	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
BROMOMETHANE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
2-BUTANONE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U,	10.00	U
CARBON DISULFIDE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	υ
CARBON TETRACHLORIDE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
CHLOROBENZENE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
CHLOROETHANE	10	10	UG/L	10.00	U	10.00	U	10.00	Ŭ	10.00	U	10.00	U	10.00	U	10.00	U
CHLOROFORM	+ 10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	. U
CHLOROMETHANE	10	10	UG/L	. 10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
DIBROMOCHLOROMETHANE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	υ	10.00	U -	10.00	U	10.00	U
1,1-DICHLOROETHANE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	υ
1,2-DICHLOROETHANE	10	10	UG/L	10.00	υ	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
1-DICHLOROETHENE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	Ŭ -	10.00	U	10.00	U
TRANS-1,2-DICHLOROETHENE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
CIS-1,2-DICHLOROETHENE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
1,2-DICHLOROPROPANE	10	10	UG/L	10.00	U	10.00	U	10,00	U	10.00	U	10.00	U	10.00	U	10.00	U
TRANS-1,3-DICHLOROPROPENE	10	10	UG/L	10.00	U	10.00	υ	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
CIS-1,3-DICHLOROPROPENE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
ETHYLBENZENE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
2-HEXANONE	10	10	UG/L	10.00	U	10.00	U	10.00	υ	10.00	U	10.00	U	10.00	U	10.00	U
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4-METHYL-2-PENTANONE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	Ŭ	10.00	U
STYRENE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
1,1,2,2-TETRACHLOROETHANE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	υ	10.00	U	10.00	U
TETRACHLOROETHENE	10	10	UG/L	10.00	U	10.00	U	10.00	υ	10.00	U	10.00	U	10.00	U	10.00	U
TOLUENE	10	10	UG/L	10.00	υ	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
1,1,1-TRICHLOROETHANE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
1,1,2-TRICHLOROETHANE	10	10	UG/L	10.00	U	10.00	U	10.00	ט	10.00	U	10.00	U	10.00	U	10.00	U
TRICHLOROETHENE	10	10	UG/L	10.00	U U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
VINYL CHLORIDE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U
O-XYLENE	10	10	UG/L	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	U	10.00	UU

Notes:

Results expressed in ug/l (ppb).
Well OS-3S not sampled due to lack of water.
Samples obtained 18 June 2001.
Qualifiers: "J" - Estimated value below PQL; "U" - analyted not detected.

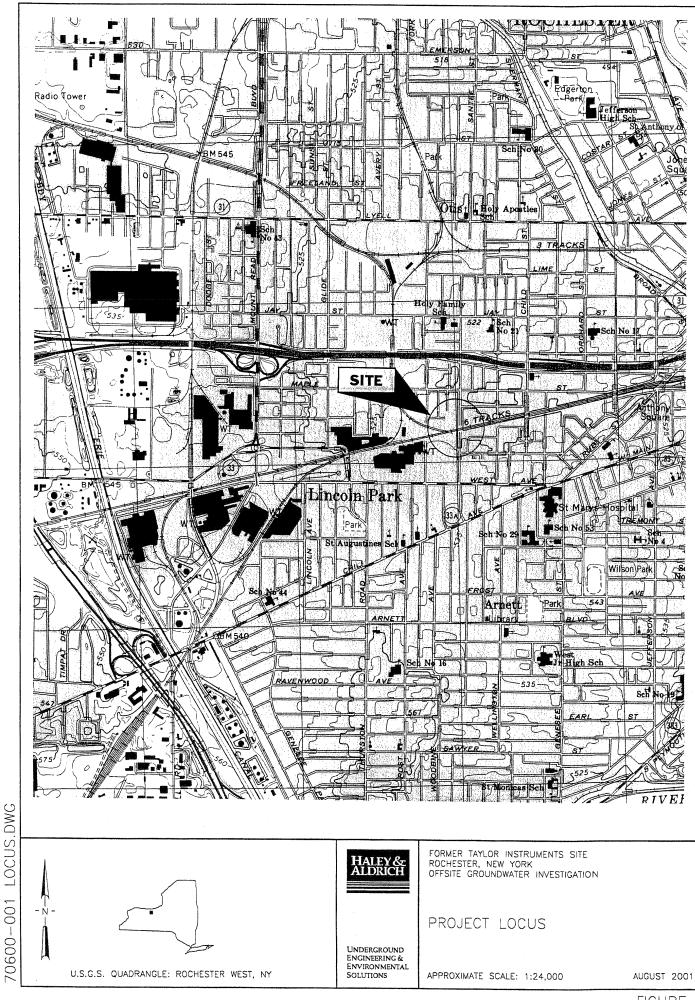
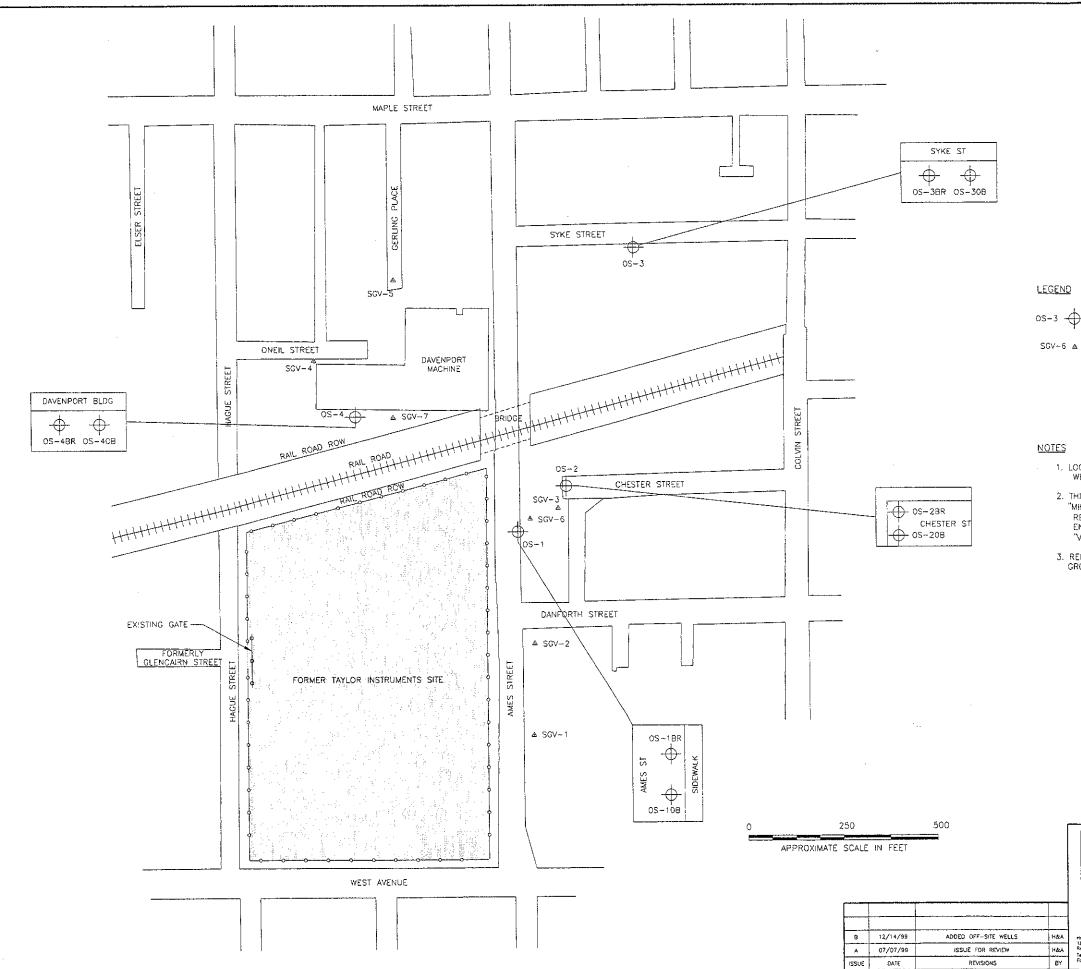
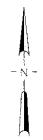


FIGURE 1



70600-001 FIGURE2.DWG



05-3 - WELL CLUSTER LOCATION

SGV-6 & VOC SOIL GAS SAMPLE LOCATION (1997)

LOCATIONS OF STREETS, BUILDINGS AND WELLS ARE APPROXIMATE.

2. THIS PLAN DEVELOPED FROM MCPW "MILE SQUARE" MAP NO. 103, AS REVISED 7/1/94 AND FROM ABB ENVIRONMENTAL SERVICES MAP ENTITLED "VOC SOIL GAS SAMPLING RESULTS" 10/16/97.

3. REFER TO TEXT OF REPORT ON OFFSITE GROUNDWATER INVESTIGATION FOR FURTHER INFORMATION.

HALEY &	FORMER TA	OUNDWATER IN	IENTS SITE	Project Engineer WCH/EL					
ALDRICH	KUCH	HESTER, NEW Y	IUKK	Designed By: H&A					
Lamenceoutero		PLAN AND V		Drown By: RLWi					
ENGINEERING & ENVIRONMENTAL									
UNDERGROUND ENGINEERING &	L	Date: File No.							
89 North Woter Street		AUG. 2001	70600-001	1 of Drawing No.	Issue				
el: 716.232.7386		AS SHOWN	Filenome: FIGURE2.DWG						

APPENDIX A

Access Agreements



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Alternative Alternative Action

H&A OF NY APR A 1 2061 RECEIVED



April 25, 2001

Mr. Robert Mahoney Haley & Aldrich of New York 200 Town Centre Drive, Suite 2 Rochester, NY 14623

RE: Right-of-Entry/ Apogent Technologies Corp Agreement No.: CSXT-PI-1019

Dear Mr. Mahoney:

Attached is a fully executed original Agreement dated February 26, 2001.

CSX Transportation, Inc.'s Risk Management Department has reviewed and approved your insurance coverage.

It is your responsibility to schedule any work on CSXT property with CSXT's Representative, Mr. Tom W. Bodkin at (518) 767-6358, at least 10 days in advance of the date you desire to commence the project. No work is to be performed on Railroad property without Mr. Bodkin's authorization.

The attached Agreement covers <u>only</u> the Work specified within it. Any requests for changes or additions to the Work must be submitted to AMEC Earth and Environmental, Inc. Approval of such changes or additions, as well as an Amendment of the Agreement, must be finalized before proceeding.

The Agreement, and your right to enter CSXT property, will expire on March 31, 2002. <u>Please make a</u> <u>note of this date</u>. If you require entry onto CSXT property beyond that date, it is your responsibility to request an extension, at least 45 days prior to expiration of the Agreement by writing AMEC, Attn: R/E, at the address below.

Sincerely,

AMEC Earth and Environmental, Inc.

ulilcole,

Sue M. Wilcox Environmental Scientist

Attachment

AMEC Earth & Environmental, Inc. 496 Osceola Ave. Jacksonville Beach, FL 32250 Tel. 904-247-4455 Fax. 904-247-4493 www.amec.com

CSX Transportation, Inc.

Temporary Right of Entry Agreement

Agreement No.: CSXT-PI-1019

This Agreement is entered into on <u>February 26, 2001</u>, by and between CSX Transportation, Inc., hereinafter called "Railroad", a Virginia corporation with its principal place of business in Jacksonville, Florida, and Apogent Technologies Corp., hereinafter called "Licensee".

WHEREAS, Licensee has submitted a written application to Railroad on November 2000 and January 4, 2001, requesting permission to enter Railroad's property located within Albany Division and Chicago Line at DOT 520 886 H/Milepost QCR O-2.10, Maple Street, Rochester, Monroe County, New York, hereinafter called "Property", for the purpose of transporting, excluding any storage of, vehicles and equipment along CSXT right-of-way to gain access to City of Rochester property to the north of track spur for installation and periodic sampling of monitoring wells hereinafter called "Work"; and

WHEREAS, Railroad is willing to grant to Licensee the limited right and permission to enter upon the Property for the limited purpose of performing said Work.

NOW THEREFORE, Railroad hereby grants to Licensee the right and permission to enter upon the Property for the purpose of performing said Work, subject to the terms and conditions set forth below:

- 1. <u>WORK:</u> The Work shall be performed at the entire cost and expense of Licensee, in accordance with good and sound engineering practices, to the satisfaction of Railroad's Chief Regional Engineer, or his duly authorized representative, and in a manner to avoid accidents and damages or unnecessary delays to or interference with train traffic of Railroad.
- 2. <u>INDEMNITY:</u> Licensee hereby assumes risk of and agrees to indemnify, defend, protect and save Railroad harmless from and against:
 - a) injury to or death of any person or persons whomsoever, including but not limited to the agents, servants or employees of the parties hereto;
 - b) the loss or damage to any property whatsoever, including property owned or in the care, custody or control of the parties hereto;
 - c) any environmental damage; and
 - d) all claims, demands, suits, judgments, settlements, fines, penalties, attorneys fees or expenses incurred in connection therewith;

resulting from or arising out of the sole or concurring acts or omissions of Licensee, or its contractors, agents, servants or employees, committed in the performance or execution of the Work performed under this Agreement or incidental thereto or related to Licensee's presence on the Property.

- 3. <u>GENERAL LIABILITY INSURANCE</u>: Licensee shall carry Public Liability or Commercial General Liability Insurance, covering Licensee's direct and assumed liability, under this Agreement. Coverage of not less than Two Million dollars (\$2,000,000.00) Combined Single Limit per occurrence for personal injury and property damage is required by Railroad. Licensee shall furnish an appropriate Certificate of Insurance, naming Railroad as Additional Insured, with the return of this executed Agreement.
- 4. <u>RAILROAD PROTECTIVE LIABILITY INSURANCE:</u> Licensee hereby agrees to also pay to Railroad a construction risk fee in the amount of ONE THOUSAND, FIVE HUNDRED DOLLARS (\$1,500.00) or, alternatively, purchase Railroad Protective Liability Insurance in accordance with Railroad's requirements (attached) for the benefit of Railroad for Licensee's operations as covered by this Agreement. Licensee shall furnish a check or an appropriate Certificate of Insurance with the return of this executed Agreement.
- 5. <u>PRIOR NOTIFICATION</u>: Licensee or Licensee's contractor shall notify the Railroad's Project Engineer, Tom Bodkin at (518) 767-6358 at least 10 days prior to proceeding with the Work on the Property and shall abide by the instructions of the Chief Regional Engineer, or his authorized representative, insofar as the Property and the safety of the Railroad is concerned.

- 6. <u>CLEARANCES</u>: No equipment of Licensee, or of its contractor, shall be placed and operated, nor Work permitted to be performed at a distance closer than twenty-five (25) feet from the center of any track, unless prior arrangements have been made with the Chief Regional Engineer's office for flagging protection. Equipment shall be moved across the Railroad's track(s) only at a public crossing unless prior arrangements have been made with said Chief Regional Engineer's office. All precautions must be taken by Licensee and its contractor to avoid interference with or damage to Railroad's signal and communication facilities during the course of said Work.
- 7. <u>**PROTECTIVE SERVICES**</u>: Railroad shall furnish such personnel, flagman or watchman, which in Railroad's opinion may be necessary to protect the facilities and traffic of Railroad during the performance of said Work. Licensee, or its contractor, shall pay for the actual cost of said services, including all applicable surcharges.
- 8. **PAYMENT**: Payment to be made by Licensee in accordance with either of the following options indicated below.

() Option 1: Licensee shall, beyond any fees rendered to Railroad under #2 and #5, provide an advance deposit of funds based on an estimate of the cost of protective or other services as determined solely by the Railroad. The actual cost for Railroad's services shall then be assessed by Railroad against this advance deposit. Upon completion of the Work, any unused funding will be returned to Licensee. If Railroad's actual costs exceed the advance deposit(s), a request will be made to Licensee for additional funding or an invoice will be issued to Licensee for final payment. Licensee shall remit payment to Railroad within thirty days of receipt of either a request for additional funds or an invoice.

(X) Option 2: Licensee shall reimburse Railroad promptly for the actual cost of protective or other services on an asincurred basis, including all applicable surcharges, upon receipt of bill or bills therefor.

- 9. ENVIRONMENTAL: This Agreement does not include and expressly excludes the performance of any site investigation activities designed to determine environmental conditions on or beneath the Property. Precluded activities include performing soil borings for purposes other than geotechnical investigation, obtaining soil, sediment, groundwater and surface water samples, and conducting field or laboratory analyses of any soil, sediment, groundwater samples obtained from Railroad properties to identify chemical composition or environmental condition. If any type of environmental investigation is desired, a separate right of entry agreement issued through Railroad's Environmental Department must be secured.
- 10. <u>CLAIMS</u>: Licensee shall, or shall require its contractor to, promptly notify said Chief Regional Engineer or his representative of any loss, damage, injury or death arising out of or in connection with said Work to be performed.
- 11. <u>**REMEDIATION**</u>: It is understood and agreed that, upon completion of said Work, the Property shall be left in a condition satisfactory to Railroad's Chief Regional Engineer or his duly authorized representative.
- 12. <u>SAFETY</u>: All personnel entering the Property must comply with the Railroad safety rules and requirements to include, without exception, the wearing of hard hats and approved safety shoes and glasses. Anyone not in compliance with these rules and regulations will be asked to leave the Property.
- 13. <u>TERM</u>: This right-of-entry and the permission conferred and the license granted by it does not constitute a grant of permanent easement and shall terminate upon completion of the Work or at midnight, March 31, 2002, whichever occurs first, unless extended in writing by Railroad. In the event Licensee fails to comply with terms and provisions of this Agreement, Licensee agrees to pay and agrees that Railroad shall be entitled to recover costs and expenses incurred by Railroad, including legal fees and expenses, to enforce the terms of the Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first above written.

ACCEPTED: Apogent Technologies Corp.

Mincheel K Print Name: ___ Title: The VP- Centonne l& Seriy 22.2001

CSX Transportation, Inc. Print Name: Carl A. Roe, Jr., P.E.

Principal Engineer – Public Improvements Date: 4/19/01, 20_____

-2-

City of Rochester

H&A OF NY

DEC 2 9 2000 RECEIVED

City Hall, Room 028-B

Rochester, New York 14614-1290

30 Church Street



FAX (716) 428-6229 TDD/Voice 232-3260

Bureau of Housing & Project Development

Department of Community Development

December 28, 2000

Mr. Robert T. Mahoney, P.G. Haley & Aldrich of New York 200 Town Centre Drive, Suite 2 Rochester, New York 14623-4264

423 6913

Re: License Agreement - 160 Hague Street

Dear Mr. Mahoney:

Attached are two copies of a License Agreement between the City of Rochester and Sybron International Corporation for property located at 160 Hague Street. The Agreement will provide access to the City owned vacant land for the installation, maintenance and sampling of two groundwater monitoring wells. The term of the License will be for three years. Sybron will have the option of extending the Agreement for two periods of one year each.

Please have both copies signed and notarized by the appropriate individual at Sybron and return them to me. Once City Council has authorized the Agreement, I will have it fully executed by the City and send you a copy for your records.

If you have any questions regarding this matter you can contact me at 428-6913.

Sincerely,

Robert J / Zimmér) Sr. Real Estate Specialist

RJZ:JS Attachments

 (\mathfrak{A})

xc: A. Fitzpatrick, Director of Real Estate D. Harradine, Municipal Attorney

EEO Employer/Handicapped

LICENSE AGREEMENT

THIS LICENSE AGREEMENT is made and entered into this _____ day of _____, 200___, by and between the CITY OF ROCHESTER, a municipal corporation with offices at City Hall, 30 Church Street, Rochester, New York 14614 (hereinafter called "City"), and SYBRON INTERNATIONAL CORPORATION, a corporation with offices c/o Sybron Laboratory Products Corp., 10 Pleasant Street, Portsmouth, New Hampshire 03801 (hereinafter the "Company").

RECITALS:

WHEREAS, the City is the owner of land at 160 Hague Street in the City of Rochester, New York (hereinafter, the "Property"); and

WHEREAS, the Company is undertaking environmental investigation and remediation at the former Taylor Instruments Site on Ames Street, in close proximity to the Property, pursuant to New York State Department of Environmental Conservation's Voluntary Cleanup Program ("VCP"); and

WHEREAS, the Company has requested permission to install a groundwater monitoring well on the Property in the location set forth on Schedule A attached hereto, to evaluate potential migration of contaminants; and

WHEREAS, the City is willing to allow the Company to install a groundwater monitoring well on the Property, on the terms and conditions of this License Agreement.

NOW, THEREFORE, the parties do hereby agree and covenant as follows:

A. COMPANY ACTIVITIES. The City hereby grants the Company the license and permission for the Company, its employees, agents and contractors to perform the following:

1. Drill, install and sample two groundwater monitoring wells (the "Wells") on the Property [one an overburden well screened across the water table, and the other a bedrock well with an open monitoring interval of 2.0 to 12.0 ft. below the top of bedrock (or potentially at a greater interval based on bedrock groundwater conditions observed during the drilling program] in the locations set forth on Schedule A attached hereto and made a part hereof. Installation of the VVells in different location(s) requires the prior written approval of the City. The Company shall maintain the Wells in safe condition.

2. Such other activities related to the Wells as approved in writing by the City.

3. The CSXT railroad right-of-way along the railroad spur which crosses Maple

Street near Orren Street shall be used for drilling equipment to access the Property, unless other access is approved in writing by the City.

B. TERM. The term of this license shall commence on February 1, 2001, and continue thereafter for a term of three years, terminating on January 31, 2004. However, upon approval by the Mayor of the City of a City Council ordinance approving this license and execution of this License by the Company, the Company may enter upon the Property in accordance with the terms of this License from the date of such approval to January 31, 2001.

C. RENEWAL. Provided that the Company is not in default of the terms and conditions of this Agreement, the Company may extend this License for two successive one-year renewal terms, upon the Company giving the City written notice of its election to renew this Agreement at least ninety (90) days prior to the expiration of the then current term, pursuant to Section J herein. The first renewal term, if applicable, shall be from February 1, 2004 to January 31, 2005. If the Company does not elect to renew this Agreement during the original three-year term, there shall be no further right of renewal.

D. LICENSE FEE. The Company shall pay the City **ONE HUNDRED DOLLARS** (\$100.) for each twelve-month period of the original term and each renewal term herein, payable to the City on or before the 5th day of each February during the original term and each applicable renewal term.

E. LICENSE CONDITIONS. This license is granted by the City conditioned upon the following terms and conditions:

1. The Company shall submit to the City a detailed outline of its planned activities and work schedule of the work on the Property for the written consent of the City;

2. The Company shall minimize to the extent possible any disruption of the portions of the Property not used by the Company;

3. The Company must obtain all governmental permits and approvals required for any activities it undertakes on the Property. The City shall assist the Company in obtaining such permits and approvals. However, such assistance is not a guarantee of obtaining any permits and approvals from the City acting in its governmental capacity.

4. The Company shall comply with all laws, rules, regulations, and orders of Federal, State, County and City authorities (hereinafter, "Legal Requirements") insofar as they are applicable to the Company's activities for the Project and on the Property, including but not limited to "Environmental Laws", as hereinafter defined.

5. The Company shall refrain from making any deposits of objectionable materials and debris, and Hazardous Substances, in, on or at the Property, except if in accordance with applicable Environmental Laws and Legal Requirements and if such materials, debris, and Hazardous Substances are removed by the Company from the Property in accordance with Environmental Laws and Legal Requirements.

6. The Company shall give the City written notice of the name of any contractor entering upon the Property pursuant to this License Agreement, at least twenty-four (24) hours prior to such entry.

7. The Company shall notify the City by personal delivery of a written notice as soon as reasonably possible, but not later than on the first business day following the discovery of any Hazardous Substance and/or any violation of Environmental Law on the Property caused by the Company's activities.

8. The Company upon expiration or termination of this License Agreement shall restore the Property to the condition existing at the commencement of this License, including repairing or replacing any monitoring wells on the Property and/or decommissioning any monitoring wells upon request of the City in a manner acceptable to the City's Division of Environmental Quality.

9. This license is non-exclusive. The City may enter upon the License Area used by the Company, provided that such entry and access does not unreasonably impede the Company's activities at the Property.

F. ENVIRONMENTAL CONDITIONS. The Company shall comply with the following:

1. The Company shall be responsible at its expense for the remediation of any soil contamination or groundwater contamination resulting from its activities, including but not limited to any leakage or spillage onto the Property. The Company shall share with the City any analytical and/or laboratory results regarding the sampling from the Wells. The Company shall undertake such measures required by the City to safeguard from such leakage or spillage. If evidence of leakage and/or spillage is apparent, the Company shall perform confirmatory analytical sampling and/or remediation in accordance with applicable laws.

2. The City shall have the right to inspect and document the Company's activities to ensure that the Company's activities are performed in accordance with this Agreement and Environmental Laws and Legal Requirements.

G. INDEMNIFICATION. The Company from and after the date of the commencement of the term of this license shall defend, indemnify, and hold the City harmless against (1) any and all claims, suits, damages or causes of action for damages arising during the

term of this lease, and against any order or decrees or judgments which may be entered therein, brought for damages or alleged damages resulting from any injury to person and/or property or loss of life sustained on the Property by any person or persons whatever, and/or (2) any expense the City may incur, which may result from (a) the environmental remediation by the City of any spills or leakage on the Property, and/or (b) the violation of any Environmental Law(s) on the Property, if any or all of the foregoing is a result of the activities of the Company, its employees, agents and contractors on the Property, except if caused by the fraud, wilful misconduct, intentional or negligent act or omission of the City.

H. DEFINITIONS. For purposes of this License Agreement, the following terms shall have the indicated meanings:

"Environmental Laws" mean all federal, state and local environmental, health, chemical use, safety and sanitation laws, statutes, ordinances and codes relating to the protection of the environment and/or governing the use, storage, treatment, generation, transportation, processing, handling, production or disposal of Hazardous Substances and the legally enforceable rules, regulations, policies, guidelines, interpretations, decisions, orders and directives of federal, state and local governmental agencies and authorities with respect thereto.

<u>"Hazardous Substance"</u> means, without limitation, any flammable explosives, radioactive materials, asbestos, urea formaldehyde foam insulation, polychlorinated biphenyls, polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans, petroleum and petroleum products, methane, hazardous materials, hazardous wastes, hazardous or toxic substances or related materials, as defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. Sections 9601, <u>et seq</u>.), the Hazardous Materials Transportation Act, as amended (49 U.S.C. Sections 1801, <u>et seq</u>.), the Resource Conservation and Recovery Act, as amended (42 U.S.C. Sections 6901, <u>et seq</u>.), the Toxic Substances Control Act, as amended (15 U.S.C. Section 2601, <u>et seq</u>.), Articles 15 and 27 of the New York State Environmental Conservation Law or any other currently applicable Environmental Law and the regulations promulgated thereunder.

I. INSURANCE. The Company at all times during the term of this License shall maintain, at its expense, (1) single limit general liability policy for the Property which shall afford protection to the limit of \$4,000,000. in the event of injury or death in one occurrence, and (2) to the limit of \$1,000,000. for property damage.

Each insurance policy shall be issued in the name of the Company and the City, as their interests may appear. Each such insurance policy shall be placed with a financially sound and reputable insurer licensed to do business in New York State, and

shall not contain any exclusions on the insurance coverage regarding property owned or leased by municipalities or corporate governmental agencies, or the personnel, employees, invitees, licensees or agents of municipalities or corporate governmental agencies. The coverage may be part of blanket policies insuring other interests of Company. Each said policy shall contain a ten day cancellation or expiration, to notify the City of such cancellation or expiration. A copy of all such policies or a bona fide certificate of insurance, evidencing the coverage provided in the polices, shall be delivered to the City upon execution of this License Agreement by the Company.

J. NOTICES. Any notice, demand or request required or agreed to be given under this License by either party shall be sufficiently given or served if in writing and signed by the party giving it and mailed by certified mail, return receipt requested, addressed to the party to be notified as follows:

TO LANDLORD: Director of Real Estate City Hall 30 Church Street Rochester, New York 14614 <u>With copy to</u>: Corporation Counsel (same address as Landlord)

TO COMPANY: (Title:) _

SYBRON INTERNATIONAL CORPORATION c/o Sybron Laboratory Products Corp., 10 Pleasant Street Portsmouth, New Hampshire 03801

or to such other address as the City and the Company may from time to time designate by giving notice thereof in writing. Service shall be complete upon such mailing except in case of a notice to change an address in which case service shall be complete when the notice is received by the addressee.

K. GENERAL PROVISIONS.

1. The captions of this License are for convenience of reference only and in no way define, limit or describe the scope or intent of this License or in any way affect this lease.

2. This License cannot be changed or terminated orally, but only by an instrument in writing executed by the party against whom enforcement of any waiver, change, modification or discharge is sought

3. This agreement shall be governed by and construed in accordance with the laws of the State of New York.

4. The agreements, terms, covenants and conditions herein shall bind and inure to the benefit of the City and the Company and their respective successors and (except as otherwise provided herein) assigns.

5. If any provision of this Agreement is held invalid by a court of law, the remainder of this Agreement shall not be affected thereby, if such remainder would then continue to confirm to the laws of the State of New York.

6. This License contains the entire agreement between the parties and it may not be changed orally or by any agreement between the parties unless in writing, signed and acknowledged by the parties or their successors.

7. The Company shall not assign or transfer its rights under this License without the prior written consent of the City, in the City's sole discretion.

8. Any lawsuit, legal action or proceeding regarding this License shall be brought in the Supreme Court of the State of New York, located in Monroe County, New York.

9. This Agreement may be executed in several counterparts, each of which shall be deemed an original and all of which be deemed to constitute but one and the same agreement.

IN WITNESS WHEREOF, the Company and the City have executed this License Agreement as of the date first above written.

CITY OF ROCHESTER

By:

Linda S. Kingsley, Corporation Counsel

SYBRON INTERNATIONAL CORPORATION

Bv:

Name: Title:

STATE OF _____ ss:

On the _____ day of _____ in the year ____ before me, the undersigned, a Notary Public in and for said State, personally appeared , personally known to me or proved to

me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public

STATE OF NEW YORK) COUNTY OF MONROE) ss: CITY OF ROCHESTER)

On the ______ day of ______ in the year _____ before me, the undersigned, a Notary Public in and for said State, personally appeared LINDA S. KINGSLEY, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her capacity, and that by her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

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APPENDIX B

Test Boring and Monitoring Well Installation Reports



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Con	tracto	r Notl	hnagl	e Drill	ing Co	•		Start May 23 Finish May 23	
				Casing	San	npler	Barrel	Drilling Equipment and Procedures Driller S. Lo	-
уре				Steel				Rig Make & Model:CME-75 Truck MountH&A Rep.D. NoBit Type:Roller Bit & Cutting HeadElevation525.8	ostrant
		meter (i						Drill Mud: None Datum R.C.S	S
		Veight (⁵ all (in.)	10.)				, -	Casing: Location See Plar Hoist/Hammer: Automatic Hammer	1
							-	Gravel Sand	Field To
(Ħ		le No . (in.	€ €	agrar	Dept	Symbol	۱. N	/isual-Manual Identification and Description	cy less
nebru (ir)	SPT*	Sample No. & Rec. (in.)	Sample Denth (ft.)	Well Diagram	Elev./Depth (ft.)	uscs (/isual-Manual Identification and Description	Dilatancy Toughness
0 -							Advanced monitoring Installation	augers without sampling to refusal at 12.0 ft. Installed well in completed borehole. See Observation Well	
5 -				N REPORT					
				WELL INSTALLATION REPORT					
0 -									
				SEE OBSERVATION	513.8				
				BSER	12.0			Bottom of Boring at 12.0 ft.	
				SEE OI					
	۰.,								
		10/0	ter I c	vel Da				Sample Identification Well Diagram Summary	
D	ate	Time	Elap Time			th (ft.) Botto of Ho		O Open End Rod Riser Pipe Overburden (lin. ft.) 12 T Thin Wall Tube Filter Sand Rock Cored (lin. ft.) -	±.0
					'Y			U Undisturbed Sample Grout Concrete Boring No OS	10P
Fi	eld Tes	te		Dilat	ancy:	R-F	apid S-SI	G Geoprobe Bentonite Seal Bentonite Seal Device Bentonite Bentonite Seal Device Bentonite Bentonite Bentonite Seal Device Bentonite Benton	-2OB
	SPT = S			Toug	hness:	Լ-Լ	ow, M-Med	tium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V- bisze (mm) is determined by direct observation within the limitations of sampler_size (in millim	√ery High

Them DECISY0600001/TESTBORE

		LEY a DRIC	ŠŦ					TEST	BORING REPOR	RT		E	Bori	ing	No.	0	S-3
	Proj Clier Con	nt /	Asses Apogen r Not	t Techi	nologi	es Co	rpora		ditions Former Taylor Ins	strument Site		Sh Sta	art	No.		1 24, 2	
				Ca	asing	San	npler	Barrel	Drilling Equipmen	t and Procedures			ish Iler			24, 20 Loran	
	Туре)		s	steel				Rig Make & Model: CM	E-75 Truck Mount			AR	ep.		Nosti	
	Insid Ham	le Diai Imer V	meter (i Veight (⁻ all (in.)	n.) lb.)		-		 -	Bit Type: Roller Bit & Drill Mud: None Casing: Hoist/Hammer: Autom	Cutting Head		Da	evatio tum catio			0.6 C.S Ian	
	Depth (ft.)	SPT*	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	(Density	/isual-Manual Identificatior /consistency, color, GROUP I	NAME, max. particle size**		% Coarse B	Fine	% Medium			Toughness a
	- 0 De	SF	& Sa	ٽ رو ا	We	Ele (ft.	IN	Advanced	dor, moisture, optional descri augers without sampling to ref well in completed borehole. Report.	fusal at 6.5 ft. Installed	ion)	%	1 %	%	%	70 Dil	To
	- 5 -				PORT												
	-				N RE	514.1											
					ATIO	6.5			Bottom of Boring	at 6.5 ft.							
					TALI												
					N WELL IN					•							
					OBSERVATION WELL INSTALLATION REPORT				•								
Jul 11, 01					SEE C												
				-													
G: PROJECTS/70600/001/TESTBORE.GPJ																	
ROJECTS																	
			Wa	ter Lev					Sample Identification	Well Diagram			Su	mm	ary		
USCSTBC3.GDT	Da	ate	Time	Elaps Time (hr B	Dep ottom Casing	th (ft. Botto of Ho	m	O Open End Rod T Thin Wall Tube U Undisturbed Sample	ि Riser Pipe Screen ि Filter Sand ि 0 Cuttings Grout	Ove Roc Sam	k C	orec			6.5 	
LibFile									S Split Spoon G Geoprobe	Concrete Bentonite Seal	Bor	-				S-30	B
USCS_TB3		eld Tes	sts: Sampler l	blowe ne		hness:	: L-L	ow, M-Me	ow, N-None Plas dium, H-High Dry size (mm) is determined by dire	ticity: N-Nonplastic, L-L Strength: N-None, L-Lov ct observation within the limit	м. M-N	/ledi	um,	H-H	ligh,	V-Ver	<u>y Hi</u>

Clie	ect nt tracto	Assess Apogen r Not	t Techi	nolog	ies Co	round	water Con	Sheet No. 1 of Start May	0-001 2 7 30, 2001 7 30, 2001
			C	asing	San	npler	Barrel		Loranty
ype	 P			steel		-			. Nostrant
• •		neter (i							30.1
		Veight (.C.S
		all (in.)	10.)		-	-	_	Casing: Location See Hoist/Hammer: Automatic Hammer	r Iaii
			<u> </u>		-			Gravel Sand	Field Te
(11)		Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	Symbol	· . V	sual-Manual Identification and Description	s ss :
uepin (n.)	*L	Rec.	pth	II Dia	۵۲./D	S S S	(Density	sual-Manual Identification and Description	% Fines Dilatancy Toughness Dlacticity
	SPT	s S a	DeSa	Ne	(ff.)	uscs	structure, o	lor, moisture, optional descriptions, geologic interpretation)	Pile North
0 -							Advanced monitoring Installation	ugers without sampling to refusal at 16.4 ft. Installed well in completed borehole. See Observation Well Report.	
_									
5 -				POR'					
				RE					-
				TAT					
				TAI					
				NA N					
0 -				ON WELL INSTALLATION REPORT					
				A NC					
				SEE OBSERVATIC					
				ERV					
				OBS					
				SEE					
5 -									
			· .		513.7 16.4		h <i>ill</i>	Bottom of Boring at 16.4 ft.	
					1				
		Wa	ter Lev	/el Da	ta	<u> </u>		Sample Identification Well Diagram Summary	
n	ate	Time	Elaps	ed	Dep	th (ft.)		O Open End Rod Riser Pipe Overburden (lin ft.)	16.4
			Time (Bottom Casing	Botto of Ho		T Thin Wall Tube Filter Sand Rock Cored (lin. ft.)	
								U Undisturbed Sample Grout Samples OS	
								S Shit Shoon	OS-4OB
Fi	eld Tes	ts:			ancy:			w, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High	
	0.07	Sampler I			hness:	<u> </u>	ow, M-Me	ium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, size (mm) is determined by direct observation within the limitations of sampler size (in m	v-very Higr

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HA AL	LEY & DRIC	Š I					TEST	BORING REPO	रा			Во	rir	ıg	No).	0	S-1	BR	2
Proje Clier Con		pogent	Tech	nolog		rpora		nditions Former Taylor In	strument Site		Sł St	art	t N	o .	l o Ma		4, 2			
			С	asing	Sam	pler	Barrel	Drilling Equipmen	t and Procedures			nisł illei		J			4, 2 oran			
Гуре	•			Steel		 S	NX	Rig Make & Model: CM	E-75 Truck Mount			3A		p.				rant		
		neter (ii		4.0		3/8	1-7/8		Cutting Head	1		eva		n		19.				
		/eight (i	<i>'</i>	0		40	-	Drill Mud: None		-		atur ocat				<u>Pla</u>				
		all (in.)				0	-	Casing: Hoist/Hammer: Auton	natic Hammer											
T				E	£	ō	l		******		Gra	avel		San	d		F		Tes	t
Depth (ft.)	SPT*	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	(Density	Visual-Manual Identification y/consistency, color, GROUP odor, moisture, optional descr	NAME, max. particle size**	, ion)	% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	
0 -		0 98 0		5	Ш£	n		augers through Asphalt and c				<u>°`</u>						<u>+</u>	<u> </u>	
							Advanced	augers through Asphalt and C	merete base to 2.0 ft.											
	8	S1	2.0	-	517.9 2.0		∖Begin sam	pling at 2.0 ft.		.				10	10	80				
	16	22/24	4.0		517.4		Dense bro	own SILT with sand, damp, mp -FILL-	os-3 mm., no odor.	t										
	16 31				2.5			own-green mottled sandy SILT	with gravel, damp, mps-20	' '	10	10	5	5	20	50				
	15	S2	4.0	-			mm., no o	-GLACIAL	TILL- PID = ND	ppm										
5 -	20 28	18/24	6.0	DRT	-		Same.		PID = ND											
	30			INSTALLATION REPORT																
	13 24	S3 18/24	6.0 8.0	[NO]	512.9				PID = ND										· ·	L
	33 100/.5			LATI	7.0		Very dens	se olive gray, poorly sorted SA -GLACIAL	ND with silt and gravel, da $PID = ND$	mp. ppm	5	10	10	10	50	15				
	21	S4	8.0	TAL	511.2			-OLACIAL	PID = ND	ppm										
	100/.1	9/13	9.1	INS	8.7		Very dens	se light gray weathered ROCK												-
10 -				MELL	510.7 9.2			-WEATHERED B auger refusal at 9.2 ft.												
				A NC			Begin cori	ing at 9.2 ft. See Core Boring	Report.											ŀ
				SEE OBSERVATION																
				SERV																
				OBS																
				SEE																
15 -																				
																	·			
					r.		Vi veren and a second a													
20 -		<u> </u>	 	 																_
			ter Lev Elaps	sed	Dep	th (ft	.) to:	Sample Identification O Open End Rod	Well Diagram	Ove	rhi			nm: (lin)	9.2			
D	ate	Time	Time	(hr)	Bottom Casing	Botte			Screen Filter Sand	Roci										
					2		¥1.¥	U Undisturbed Sample	Cuttings Grout	Sam						2R				
								S Split Spoon G Geoprobe	Concrete	Bor	in	g١	١c).		05	5-1]	BR		
Fie	eld Tes	ts:	<u>]</u>	Dilat	tancy:	R-I	Rapid, S-S	Slow, N-None Pla	Bentonite Seal sticity: N-Nonplastic, L-L	ow, M-	Me	diu	m,	H-	Hig	h				
		Compler	nows p	Toug er 6 in.	-	**Max	imum particle	e size (mm) is determined by dire	Strength: N-None, L-Lo ect observation within the limit he USCS as practiced by	ations o	fsa	amp	ler	size	(in	millir	nete	ry H rs).	ign	

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ALD	EY & RICH				co	RE B	ORI	NG R	Boring No. OS-1B File No. 70600-001 Sheet No. 2 of 2
Depth (ft)	Drilling Rate Min./ft	Run No.	Depth (ft)	Recover	ery/RQD %	Weath- ering	Well Dia- gram	Elev./ Depth (ft)	Visual Description and Remarks
- 5									SEE TEST BORING REPORT FOR OVERBURDEN DETAIL
- 10 -		R1	9.2 11.5	14 13	50 46	Slight		9.2	Began coring at 9.2 ft. Hard, slightly weathered light gray fine grained thin to very thin bedc DOLOSTONE with moderate to very close horizontal to low angle argillaceous partings.
									-ERAMOSA DOLOSTONE-
		R2	11.5 21.5	120 117	100 98	Slight			Same.
- 15 -							SEE OBSERVATION WELL INSTALLATION REPORT		
- 20									
	-							21.5	Bottom of Boring at 21.5 ft.
									Notes: 1. Driller noted slow coring rate through fractured zone from 10.4 to 11.5 ft.

Clie		Assess Apogen r Noti	t Tech	iolog	ies Co	rpora		nditions Former Taylor Instrument Site Sheet No. 1 of 2 Start May 22, 2 Finish May 23, 2					
			C	asing	San	npler	Barrel	Drilling Equipment and Procedures Driller S. Loran					
Har	de Dia nmer V	neter (i Veight (all (in.)	n.) Ib.)	teel 4.0	1	S 3/8 40 30	NX 1-7/8	Rig Make & Model:CME-75 Truck MountH&A Rep.D. NostBit Type:Roller Bit & Cutting HeadElevation525.8Drill Mud:NoneDatumR.C.SCasing:LocationSee PlanHoist/Hammer:Automatic HammerLocationSee Plan					
Depth (ft.)	SPT*	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	(Density	1	Toughness				
- 0 -				>			Advanced ft.	augers through ASPHALT and concrete, gravel layer to 2.0					
- -	2 5 6 6	S1 14/24	2.0 4.0		523.8 2.0		Medium de	pling at 2.0 ft. ense light brown-red mottled, poorly graded SAMD_withbilt damp, mps <1 mm., no odor. -FILL-	L				
- 5 ·	2 3 4 4	S2 13/24	4.0 6.0	PORT			Same.	$PID = ND ppm 5 10 50 35 N$ $-FILL- \qquad PID = ND ppm \qquad 5 10 50 35 N$	L				
* *	2 2 3 4	\$3 12/24	6.0 8.0	ATION RE	518.2 7.6		Same, exce	PID = ND ppm					
-	1 2 5 7	S4 17/24	8.0 10.0	WELL INSTALLATION REPORT	7.6		Loose brov Same.	wn silty SAND, moist to wet, mps 25 mm., no odor. -LACUSTRINE- PID = ND ppm PID = ND ppm PID = ND ppm	L				
- 10 ·	2 5 7 7	S5 13/24	10.0 12.0	OBSERVATION WE			Same, exce	ept wet. PID = ND ppm $\begin{vmatrix} 10 & 5 & 10 & 10 & 40 & 25 \\ -LACUSTRINE- \end{vmatrix}$ R	L				
-	50	S 6	12.0	SERV	513.8 12.0			weathered cobble from 11.8 to 12.0 ft. e weathered ROCK FRAGMENTS, wet, mps 50 mm., no 40 20 20 10 5 5					
- 15 -	1007.1	7/7	12.6	SEE OF	510.3 15.5		odor. Observed a strata. Ad block in fra through fra 15.5 ft.	-WEATHERED BEDROCK- auger refusal at 12.0 ft. Set up to core 2.5 ft. to confirm ivanced NX core barrel from 12.0 to 14.0 ft. Observed core actured bedrock zone. Advanced 5-7/8 in. tricone roller bit actured zone to 15.5 ft. Installed 4.0 in. permanent casing at ng at 15.5 ft. See Core Boring Report.					
- 20		Wa	ter Lev			th (ft.) to:	Sample Identification Well Diagram Summary					
E	Date Time In Bottom Bo						In (ft.) to: O Open End Rod Nisel Pipe Overburden (lin. ft.) 25.3 Bottom of Hole T Thin Wall Tube Screen Screen Rock Cored (lin. ft.) 10.0 U Undisturbed Sample G Geoprobe Grout Grout Boring No. OS-2BR						

	EY & RICH				со	RE B	ORII	NG R	EPORT	Boring No. OS-2BR File No. 70600-001 Sheet No. 2 of 2
Depth (ft)	Drilling Rate Min./ft	Run No.	Depth (ft)	Recove in.	ery/RQD %	Weath- ering	Well Dia- gram	Elev./ Depth (ft)	Visual De and Re	scription
15 -			r						SEE TEST BORING REPORT	FOR OVERBURDEN DETAILS
		R1	15.5 25.3	118 114	100 97	Slight			Begin coring at 15.5 ft. Hard slightly weathered, light-gray fi DOLOSTONE, with frequent second close to very close spaced horizontal	ne grained thin to very thin beddee ary filled pits, occasional vugs and to low angle agrillaceous partings.
									-ERAMOSA	DOLOSTONE-
20 —										
							۲ ا			
							ON REPOR	ĸ		
25 —				-			SEE OBSERVATION WELL INSTALLATION REPORT			
							ELL INS	25.3	Bottom of Bo	ring at 25.3 ft.
							ATION W.			
							OBSERV/			
-							SEE			
	το., ,		-							
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Inside I Hamme Hamme (tt) D C C C C C C	er Wo er Fa	eight (n.) b.)	asing Steel 4.0	Sam Sam	npler S	Barrel	Drilling Equipment and Procedures Finish May 24, 200 Driller S. Loranty	
Hamme Hamme Debth (tr.)	er We er Fa	eight (III (in.)	n.) b.)	4.0		5			
Hamme Hamme Debth (tr.)	er We er Fa	eight (III (in.)	b.)		1 3			Rig Make & Model: CME-75 Truck Mount H&A Rep. D. Nostrat	ıt
Hamme Hamme Debth (tr.)	er We er Fa	eight (III (in.)	b.)		1 1	3/8		Bit Type: Roller Bit & Cutting Head Elevation 524.5	
Hamme Depth (ft)	er Fa	ull (in.)			1	40	-	Drill Mud: None Datum R.C.S Casing: Location See Plan	
o Depth (ft.)	SPT*					0	_	Casing: Location See Plan Hoist/Hammer: Automatic Hammer	
- 0 -		mple N Rec. (ir		E	Ę		L	Gravel Sand Fiel	
- 0		ц э́	ole (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	1	/isual-Manual Identification and Description	:
	2	& F B	Sample Depth (ft.)	/isual-Manual Identification and Description //consistency, color, GROUP NAME, max. particle size**, odor, moisture, optional descriptions, geologic interpretation)					
		S1 21/24	0.0 2.0				Loose, bro	wn-black mottled sandy SILT, damp, mps - 8 mm., no odor. 5 10 10 20 45 -FILL-	
	5				523.0 1.5				+
	~	S2 20/24	2.0 4.0				Loose, bro	own silty SAND, moist, mps - 1 mm., no odor. -FILL- PID = ND ppm	
	3 4				521.1 3.4		Loose. liol	ht gray-brown, clayey SILT, damp to moist, mps - < 1 mm., 15 85 L M	N
	9	S3 17/24	4.0 6.0				no odor.	-LACUSTRINE-	
- 5 - 1	11 20			EPORJ	519.3 5.2			ense, olive-gray, poorly sorted SAND, with gravel, damp to 10 10 15 10 55 10 N N s-30 mm., no odorGLACIAL TILL-	1
100	0/.5	S4 4/16	6.0 6.5	ON R				auger refusal at 6.5 ft. PID = ND ppm	-
- 10 - -				OBSERVATION WELL INSTALLATION REPORT					
- - 15 - - -				SEE C					
						-			
<u>I</u>		Wat	er Lev	el Def	ta			Sample Identification Well Diagram Summary	
Date		Time	Elaps Time (i	ed br B	Dept ottom	th (ft. Botto	Mator	O Open End Rod Riser Pipe Overburden (lin. ft.) 6.5	
				() t (Casing	of Ho	ne	U Undisturbed Sample U U U U U U U U U U U U U U U U U U U	
								S Split Spoon G Geoprobe Government Concrete Bentonite Seal ow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High	

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Depth R (ft) Mi	rilling Rate lin./ft	Run No.	Depth	Recove	(D 0 D				Sheet No. 2 of 2
(ft) Mi	lin./ft	No.		1		vveath-	Well Dia-	Depth	Visual Description and Remarks
		1	(ft)	in.	%	ering	gram	(ft)	
		R1	6.5 8.5	19 18	79 75	Slight		518.0 6.5	SEE TEST BORING REPORT FOR OVERBURDEN DETAILS Begin Coring at 6.5 ft. R1: Hard, slightly weathered light gray fine grained thing to very thin bedded DOLOSTONE with close to very close, open to tight horizontal to low angle partings, trace stylolites. High angle fracture from 8.5 ft. to 8.9 ft.
		R2	8.5 18.4	107 102	90 86	Slight			Same.
- 10 -									
1.5							REPORT		
- 15 -							LLATION		
							SEE OBSERVATION WELL INSTALLATION REPORT		
						_	IM NOLL	506.1 18.4	Bottom of Exploration at 18.5 ft.
							BSERVA		
							SEE (
								·	
							-		

	ALEY &		ment	of Off	site G			BORING REPO			Fi	ile I	No.		Nc	00-0		S
Clie	ent A	Apogent Noth	Tech	nologi	es Co	rporat		• •				hee tart			1 o Ma		3 .9,2	20
				asing	1	npler	Barrel	Drilling Equipmen	and Procedures		Fi	nis	h		Ma	iy 3	0, 2	ļ
Тур				teel		S	Daner	Rig Make & Model: CM			-	rille &A	r Re	p.			orai Nost	
		neter (ir		4.0		3/8		Bit Type: Roller Bit			EI	leva	atio					
		veight (I		4.0		40		Drill Mud: None				atu	m tion		F See	R.C		
	nmer F		2.)			0	-	Casing: Hoist/Hammer: Auton	natic Hammer					•	500			
		9 (;		E	노 달	b		(avel		Sar			F	
Depth (ft.)	SPT*	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	(Density	/isual-Manual Identification /consistency, color, GROUP idor, moisture, optional descr	NAME, max. particle size		% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	
- 0 -	3	S1	0.0				Medium de	ense dark brown-black SILT a	and CINDERS, damp.			-						
-	6 8	17/24	2.0		1.0			-FILL-										
-	9			-	110		Medium de	ense tan SILT, damp, mps. <		D					10	90		
	7 11	S2 18/14	2.0 4.0		2.7			-FILL-		D ppm		10	5	E	20	60	N	
	15 16				<i>w</i> .1		meanum de	ense tan sandy SILT, damp, n	PID - N	D pnm		10	0	5	20			
-	9	\$3 23/24	4.0				Same, exce	-LACUSTR ept light brown, moist from 4	INC-			10	5	5	30	50		
- 5 -	13 14	25/24	6.0	ORT				-LACUSTR	INE- $PID = N$	D ppm								
-	16 10	S4	6.0	REP			Same, moi	st	PID = N $PID = N$									
-	13	17/24	8.0	VELL INSTALLATION REPORT			Same, mor	-LACUSTR	IN IT									
	14 20			LLA'				Liteoutic	INE- $PID = N$	D ppm								
	13 18	\$5 20/24	8.0 10.0	ATA					PID = N	D ppm								
-	20 34			LL II	9.2													
- 10 -	9 30 38	S6 17/24	10.0 12.0	OBSERVATION WE	11.0		mm., no o				5	10	10	5	50	20		
_	46			RVA	11.0		Very dense	e, brown SILT with sand, moi -LACUSTR	INE- $PID = NI$	D ppm								
	15 25	S7 24/24	12.0 14.0	BSE					PID = NI	D ppm								
-	37 47			SEE C	13.4			et from very dense red-gray s m. no odor.	ilty SAND with gravel, da	mp,	5	10	10	10	50	20		
-	13	S8	14.0					-GLACIAL 1	PIL- PID = NI	D ppm								
- 15 -	40 66 100/.2	21/21	15.7						PID = NI									A REAL PROPERTY OF A REAL PROPER
	15 27	\$9 22/24	16.0 18.0				Same.		PID = NI	O ppm								
-	38 52							-GLACIAL T	PID = NI	> ppm								
-	6	S10	18.0		•		Same, exce	ept moist from 18.0 to 19.0 ft.	. $PID = NI$) ppm								
-	25 100/.5	18/18	19.5					-GLACIAL 1	TILL- PID = NI	O ppm								
- 20 -		Waţ	er Lev					Sample Identification	Well Diagram	 		ę	Sur	nm	ary			
D	ate	Time	Elaps Time (hr \ B	ottom	th (ft.) Bottor	n Wator	O Open End Rod	Riser Pipe	Ove								
				of	Casing	of Ho	e	T Thin Wall Tube U Undisturbed Sample	Filter Sand Cuttings	Roo Sar			ed		. ft. .3S,			
								S Split Spoon	Grout Concrete	Во	rin	g l	No				5-41	
Fi	eld Tes	ts:		Dilata					Bentonite Seal sticity: N-Nonplastic, L-	Low, M	Me	diu	m,	H-	Hig	h		
,	*SPT = 5	Sampler b	lows pe e: Sc					dium, H-High Dry size (mm) is determined by dire	Strength: N-None, L-Lo						(in 1	milliı		

H/ Al	ALEY &	Å H					TEST BORING REPORT		File	No			0S-4 00-00 of	1		
$\widehat{}$		о V С	· ·	Ë	pth	Symbol	Visual-Manual Identification and Description		avel		San			Field o		2
Depth (ft.)	Ľ.	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	S Syn		% Coarse	Fine	% Coarse	% Medium	ine	% Fines Dilatancv	Toughness	icitv	Ş
	SPT*	san & R	San Dep	Weil	(ff.)	nscs	(Density/consistency, color, GROUP NAME, max. particle size**, structure, odor, moisture, optional descriptions, geologic interpretation)	Ŭ %	% Fi	% C	% M	% Fine	% Fines Dilatancv	Toug	Plasticity) 5
20 -	25 67	S11 14/14	20.0 21.2		20 (PID = ND ppm								<u> </u>	
	100/.2		21.2	-	20.6		Very dense gray-brown sandy SILT with gravel. -GLACIAL TILL-	5	10	10	10	25 4	0 R	L	N	
	18	S12	22.0	-			Same, except wet from 23.0 to 23.8 ft. $PID = ND ppm$							-		
	31 30	22/22	23.8				-GLACIAL TILL- PID = ND ppm									
	100/.3		24.0	-			Same. PID = ND ppm									
25 -		4/4	24.3				Observed auger refusal at 24.5 ft. Begin Coring at 24.5 ft.	\square								
			-													
30 -																
35 -																
40 -																
*SPT	r = Samr	ler blows	per 6 in	. **Ma	iximum p	article	e size (mm) is determined by direct observation within the limitations of sampler	E	Bori	Inc	~ NI		05	-4BF	2	•

A STATE OF A STATE OF

рания (1997) 1990 — Полона (1997) 1990 — Полона (1997)

	HAL ALD	EY & RICH	-			СО	RE B	ORII	NG R	Boring No. 0S-4BR File No. 70600-001 Sheet No. 1 of 3
	Depth (ft)	Drilling Rate Min./ft	Run No.	Depth (ft)	Recove in.	ry/RQD %	Weath- ering	Well Dia- gram	Depth	Visual Description and Remarks
	- 25 -		R1	24.9 26.9	22 18		Slight		24.5	SEE TEST BORING REPORT FOR OVERBURDEN DETAILS Begin Coring at 24.5 ft. Hard, slightly weathered, medium gray fine grained thin to very thin bedded DOLOSTONE with close to very close weathered horizontal partings. -ERAMOSA DOLOSTONE-
			R2	26.9 36.9	120 107		Slight			Same, except light gray with numerous pits and occasional secondary filled vugs. -ERAMOSA DOLOSTONE-
	- 30 -							N REPORTS		
	- 35 -							SEE OBSERVATION WELL INSTALLATION REPORTS	36.9	
	5 - 40 -							SEE OBSERVA		Bottom of Boring at 36.9 ft.
)	H+A_CORE+WELL3 LINFIle USCSTBC2.GDT									

HALEY & ALDRICH			TION WELL Observation Well Observation Well	OS-1OB
				 4-May-01
		ent of Offsite Groundwate		ee Site Plan
		r, New York		
		Technologies le Drilling		0600-001
	S. Loran). Nostrant
Driller	5. L01ali	ty		
Ground El	520.0 R.C.S	-	Type of protective cover/lock:	Bolted Steel
-	OK		▼ Depth of top of roadway box below ground surface	0.0 ft
SOIL/RO		BOREHOLE BACKFILL	Depth of top of roadway box below ground surface	0.0 ht
		from ground surface in feet)		
	(not to s		Depth of top of riser pipe below ground surface	<u>0.3</u> ft
NO		0.0 FT.	Type of protective casing:	hmount Roadbox
SAMPLI PERFORM		CONCRETE	Length	<u> 1.0</u> ft
			Inside diameter	8.0 in
		1.0 FT.	Depth of bottom of roadway box	<u> </u>
		1.0 FT.	Seals: Dépth to Thickness	
		l	Seals: Depth to Thickness Type top (ft) (ft)	
			Concrete 0.0 1.0	
			Bentonite Seal 1.0 2.0	
		HYDRATED BENTONITE		
		CHIPS		
OVERBUR	RDEN		Type of riser pipe:	PVC
			Inside diameter of riser pipe	<u>2.0</u> in
			Type of backfill around riser:	See Diagram
		3.0 FT.	Diameter of borehole	8.0 in
		5.0 F1.	Depth of top of well screen	4.8 ft
			Type of screen or manufacturer:	Slotted PVC
		MORIE NO. 00N QUARTZ SAND	Screen gauge or size of openings	0.010 in
		SAND	Diameter of well screen	in
			Type of backfill around screen Morie 00N	Quartz Sand
			Depth of bottom of well screen	<u>8.8</u> ft
			Depth of bottom of silt trap	<u> </u>
	9.0 FT.	9.0 FT.	Depth of bottom of borehole	<u>9.0</u> ft
Minimum descent of an international data and a second of the second of t			-	

	HALEY & ALDRICH		OBSERV INSTALLA			Observation Well Test Boring	<u>OS-2OB</u>
	Project City/State	Rocheste	e <mark>nt of Offsite Groundwa</mark> r, New York	ater Cond	itions	Installation Date	23-May-01 See Site Plan
er me	Client Contractor Driller	Nothnag	Technologies e Drilling			H&A File No.	70600-001 D. Nostrant
 e e	Driller Ground El. El. Datum SOIL/R CONDIT (Numbers refer to NC SAMPI PERFOR	IONS elevation/depth (not to so) LING RMED	Top of Riser El. BOREHOLE BACKFILL from ground surface in feet) nale) 0.0 FT. CONCRETE 2.0 FT.	525.44	Type of protective cover/l Depth of top of roadway b Depth of top of riser pipe Type of protective casing Length Inside diameter	below ground surface	Bolted Steel
			2.0 FT. HYDRATED BENTONITE CHIPS		Seals: <u>Type</u> <u>Concrete</u> <u>Bentonite Seal</u> <u>Type of riser pipe</u> : Inside diameter of rise	Depth to Thickness top (ft) (ft) 0.0 2.0 2.0 2.0 	s
	OVERBU		4.0 FT.		Type of backfill aroun Diameter of borehole		See Diagram8.0 in5.0 ft
			MORIE NO. 00N QUARTZ SAND		Type of screen or manufa Screen gauge or size Diameter of well scree	of openings	<u>Slotted PVC</u> <u>0.010 in</u> <u>2.0 in</u>
					Type of backfill aroun Depth of bottom of well sc Depth of bottom of silt trap	reen	rie 00N Quartz Sand <u>12.0</u> ft <u>12.2</u> ft
K:\template\torms\towxxis	12.2 FT. Remarks:	Bottom of	12.2 FT.		Depth of bottom of boreho	ple refer to ground surface	12.2 ft

HALEY &		OBSERVATIO		Observation Well	OS-30B
		INSTALLATIO		Test Boring	
Project	Assessme	ent of Offsite Groundwater C	onditions	Installation Date	24-May-(
City/State		r, New York		Location	See Site I
Client	*	Technologies			70(00.00
Contractor	Nothnagl	e Drilling		H&A File No.	70600-00
Driller	S. Lorant	<u>y</u>		H&A Rep.	D. Nostr
Ground El.	524.6	Top of Riser El. 524.3	31		
El. Datum	R.C.S.		Type of protective cover/lo	ock:	Bolt
SOIL/R	оск	BOREHOLE	Depth of top of roadway b	ox below ground surfa	ce
CONDIT		BACKFILL			
(Numbers refer to e	elevation/depth (not to sc	from ground surface in feet) ale)	Depth of top of riser pipe I	below ground surface	
.		0.0 FT.		- -	
NC SAMPI			Type of protective casing:		Flushmount I
PERFOR		CONCRETE	Length		
			Incide disperter		
			Inside diameter		
		1.0 FT.	Depth of bottom of roadwa	ay box	
		1.0 FT.	Seals:	Depth to Thicknes	SS
			Type	top (ft) (ft)	
			Concrete Bentonite Seal	$\begin{array}{c} 0.0 \\ 1.0 \end{array} \begin{array}{c} 1.0 \\ 1.5 \end{array}$	
		HYDRATED		1.0 1.5	
		BENTONITE			
		CHIPS	Type of riser pipe:		
					<u></u>
			Inside diameter of rise	er bibe	
			Type of backfill aroun	d riser:	See
		2.5 FT.	▲ Diameter of borehole		
	1	2.5 FT.			Balling and a second
OVERBU	JRDEN		Depth of top of well screen		
			Type of screen or manufa	cturer:	Slot
		MORIE NO. 00N QUARTZ	Screen gauge or size	of openings	
		SAND		· · ·	
			Diameter of well scree	en	
			Type of backfill aroun	d screen Mo	orie 00N Qua
				Manager and an and a second	
			Depth of bottom of well sc	reen	
			Depth of bottom of silt trap)	
			Doubh of hottom of house		
6.5 FT.		6.5 FT.	- Depth of bottom of boreho		
Remarks:	Bottom of	Exploration	(Depths	refer to ground surface	=)
i ioniai no.					

HALEY &	BEDR	ROC	KOBS	ERVATION W	ELL	Well No. OS-1BR
ALDRICH	T	VST	ALLA	FION REPORT	I	Boring No.
	ssessment of Offsite G			H&A FI		_001
	ormer Taylor Instrumen	**********************			$\begin{array}{c} \text{CT MGR.} & \underline{70000} \\ \text{E. Hy} \end{array}$	
	oogent Technologies	13, 100me	ster, riew rein	FIELD I		
	othnagle Drilling			and and a first and a start of the	NSTALLED 5/25/2	
	Loranty			WATER	LEVEL	
Ground El.	519.9 ft I	Riser El.	519.55		Guard Pi	
El. Datum	R.C.S.	ocation	See Plan		🗸 Roadway	Box
SOIL/ROCK	BOREHOLE			-Type of protective cover/lock		Bolted Steel
CONDITIONS	BACKFILL					
ASPHALT	CONCRETE		\	- Height/Depth of top of guard pipe/r	oadway box	<u> </u>
0.5 FT	. 1.0 F	<u>r.</u>		above/below ground surface		
CONCRETE			┌──── ┥			
2.0 FT		ŢŢ		-Height/Depth of top of riser pipe		<u> </u>
FILL				above/below ground surface		
2.5 FT						
				— Type of protective casing:]	Flushmout Road Box
				Length		<u> </u>
				Inside Diameter		<u> </u>
GLACIAL TILL				- Depth of bottom of guard pipe/road	way box	<u> </u>
				Type of Seals	Top of Seal (ft)	Thickness (ft)
	CEMENT			Concrete	0.0	1.0
	GROUT			Cement Grout	1.0	20.5
		LI				
9.2 FT						
				- Depth to the top of bedrock		9.2 ft
			4	- Type of casing pipe:	S	Steel
				Inside diameter of casing pipe		<u>4.0</u> in
				Type of backfill around riser		Cement Grout
				- Diameter of borehole		10.0 + - in
	11.5 F		└┰╼┯┶┫╾╬╼┑			
				- Depth to top of open core interval		<u> 11.5 ft</u>
ERAMOSA						
DOLOSTONE				-		
			•	- Type of open core interval		NX Core
	C D D U			Diameter of open core interval		<u> </u>
	OPEN	L2			1.	
	MONITORING					
	INTERVAL					
				-Depth of bottom of open core interva	11	ft
		_	└─┘╉┼┯┙			
						21
21.5 FT	21.5 FT			- Depth of bottom of test borehole		ft
	f Exploration) from ground surface in feet			(Not to Scale)		
	ft +			ft	-	ft
Casing	Length (L1)	Cor	ed Interval (L2)		Pay len	
COMMENTS:						
					nin da milia din hadalah mananan mananan di sanja da papan dan pana da da ada da da da	

HALEY & ALDRICH			K OBSERVATI		OS-2BR Boring No.
	11	NSTA	ALLATION RE	PORT	
	Assessment of Offsite G			H&A FILE NO.	70600-001
•	Former Taylor Instrumen	ts, Rochest	er, New York	PROJECT MGR.	E. Hynes
	Apogent Technologies			FIELD REP.	D. Nostrant
	Nothnagle Drilling			DATE INSTALLED WATER LEVEL	5/23/2001
	S. Loranty				
Ground El.		Riser El. Location	525.45 ft See Plan		Guard Pipe Roadway Box
SOIL/ROCK	BOREHOLE		Type of protective of	cover/lock	Bolted Steel
CONDITIONS	BACKFILL				
ASPHALT	CONCRETE		Height of top of roa	dway box	0.0
CONCRETE	1.0 F	т. Г	above ground surfa	ce	
2.0	т.				
FILL			Depth of top of rise	r pipe	0.3
7.6	T		below ground surfa	ce	
7.0					
			Type of protective of	asing:	Flushmout Road Box
			Length		1.0
			Inside Diameter		8.0
LACUSTRINE			Inside Diameter		
			Don'th of bottom of	guard pipe/roadway box	1.0
			Depth of bottom of	guaru pipe/roadway box	
				m (C) 1 m	$C_{i+1}(t)$ (This image (t)
					Seal (ft) Thickness (ft)
	CEMENT				0.0 1.0
	GROUT			Cement Grout 1	.0 14.5
		LI			
12.0	FT.				
			Depth to the top of		12.0
			Type of casing pipe		Steel
			Inside diameter	of casing pipe	4.0
			Type of backfill	around riser	Cement Grout
			Diameter of boreho	le	10.0 +/-
	15.5 F	Т.			
		Î Î I	Depth to top of oper	n core interval	15.5
ERAMOSA					
DOLOSTONE					
			Type of open core in	nterval	NX Core
			Diameter of ope	n core interval	3.0
	OPEN	L2			
	MONITORING				
	INTERVAL				
			Depth of bottom of	open core interval	25.3
				open core inter var	25.3
		· · · · ·			с.
				4 4 h h - 1	
25.3 FT	25.3 FT		Depth of bottom of	test borehole	25.3
	m of Exploration)			(Not to Scale)	
(Botto		1		(INF W SCALE)	
	ft +		ft	<u> </u>	ft

Form # 3010

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HALEY &	BEDR	OC]	K OBS	ERVATION WI	ELL	Well No. OS-4BR
	IN	IST	ALLA'	FION REPORT		
PROJECT As	ssessment of Offsite Gro	oundwate	r Conditions	H&A FIL	E NO. 70600-0	01
	ormer Taylor Instruments	, Rochest	ter, New York	PROJECT	MGR. E. Hyne	s
CLIENT A	pogent Technologies			FIELD RH		
CONTRACTOR No.	othnagle Drilling			DATE INS		01
DRILLER <u>S.</u>	Loranty			WATER I	······································	
Ground El. El. Datum		ser El. ocation	531.05 ft See Plan		Guard Pipe	
SOIL/ROCK	BOREHOLE			Type of protective cover/lock		Hinged Steel
CONDITIONS	BACKFILL	4				
	CONCRETE			- Height of top of guard pipe		<u> </u>
FILL	1.0 FT	.		above ground surface		
2.7 FT				Height of top of riser pipe above ground surface		<u> 1.2 </u> ft
				- Turne of mustanting apping	Stielour	Zina Control Staal
LACUSTRINE				- Type of protective casing:	бискир	5.0 ft
				Length		<u> </u>
13.4 FT	<u>·</u>			Inside Diameter		<u> </u>
				— Depth of bottom of guard pipe		ft
GLACIAL TILL						
				Type of Seals	<u>Top of Seal (ft)</u>	Thickness (ft)
	CEMENT			Concrete	0.0	1.0
	GROUT			Cement Grout	1.0	1.7
		L1				
24.5 FT	· 					
			₩	- Depth to the top of bedrock	24	
			I I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	— Type of casing pipe:	Ste	eel
				Inside diameter of casing pipe		4.0in
				Type of backfill around riser		Cement Grout
			•	— Diameter of borehole		in
	26.5 FT			- Depth to top of open core interval		26.5 ft
ED LLION L				Depth to top of open core interval		n
ERAMOSA				·		
DOLOSTONE						NV O
				Type of open core interval	••••••	NX Core
				Diameter of open core interval		<u> </u>
· · · ·	OPEN	L2				
	MONITORING					
	INTERVAL					
				—Depth of bottom of open core interval		<u> </u>
				- Depth of bottom of test borehole		<u> </u>
36.9 FT	of Exploration)		· · · · · · · · · · · · · · · · · · ·			
	a from ground surface in feet			(Not to Scale)	an a	n an
	ft+			ft		ft
	g Length (L1)	Core	ed Interval (L2)		Pay lengt	th
COMMENTS:						

APPENDIX C

Groundwater Sampling Records



h-Tri

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					& ALDRIC					\mathcal{O}
			MONIT	ORING WE	ELL SAMPL	ING FIELD	FORM			
	Г	75-10B	·							
						17.0				
	<u> 1.D.: 05-</u>	-105	Date: June	,2001	Time Started	1200	Field Persor	nel: SRF	1	
leather Cond	itions: ())vercast	, uper	- 105						
omments:				·····						
						and a state of the state of the second	Cart Monthe Internet Contraction			<u></u>
a ya ka sa aya na aya ka		~	<u></u>	in	tial Readin			*****		
	Bottom (TO	2	.6		Riser Pipe Di			4.051 0.00		<u> </u>
	er Level (TOF	6			Conversion F	actor (gai/iine	aiπ)	1.25" = 0.08		3" = 0.38
	ter Column H				(Circle One)) 2.7	4" = 0.66	6" = 1.50	8" = 2.60
ne Well Volu	me (gals.)	0.	1		Three Well V	olumes (gals.	<u>a</u> 17			
lotes:	000		·	18/	ell Conditio				9	2011 Internet Charles (199
		N.	CL 201			n Steel		WC \		
	e (Circle one): OK	Stainles		Carbo	1 31661		vc)		
Casing Condit		br)	Repair Requir Repair Requir							
Cap Condition										
Paint Conditio		OK)	Repair Requir Repair Requir					1997 - 1 - 1997 - 1997 - 1997 - 1997 - 19 97 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997		
ock Conditio			Repair Requir			· · · ·	*****			
nner Casing Surface Seal		OK	Repair Requir		<u>`</u>					
Other:			Incepair nequi				49 A 2 - 49 - 50 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 -			
JUIEI.		anan kanan dan kanan k		Micro-	Purge Infor	mation	Wenderlich der Aussenzuch der Albeitet Aussenzuch der Aussenzuch der Aussenzuch der Aussenzuch der Aussenzuch d	ad hits for the second second second second	inandar tanggan yang kanan sa Padinta sa	
Puraina Meth	od (Circle one		Stainless S	*******		lic Pump	•	Grundfo	os Pump	
uigitig moti		<u>/</u>		Bailer	Contraction of the local division of the loc	ene Bailer	Other:	*****		
	Well	Gallons	Temperature	pH	Specific	Turbidity	Dissolved	ORP	NAME AND THE TAXABLE PARTY OF THE PARTY OF T	
	Volume	Purged			Conductivity		Oxygen		Comments	
		(gai)	(deg C)	(S.U.)	Conductivity	(NTU's)	(mg/L)	(mV)		
	0,9	3,5	16.8	7.64	1310			<u> </u>)		
						L C	<u> </u>	[
		L					\downarrow			
Water Level	After Purging	(TOR ft):			Calculated 95	5% Recovery	Water Level:			-
Comments:				Marten Chine Lennes Andrews	Notes and the second					
				Samp	ling Inform	nation				
Date:		Time Sample	d:	Field Personr	nel:					
Measured W	ater Level (TO	0R ft.):								
Sampling Me	hod (Circle o	ne):	Stainless S	Steel Bailer		ic Pump		Grundfo	os Pump	
	Bezeren azaran da antaran aragan aragan ar		Teflon	Bailer	Polyethyl	ene Bailer	Other:	Generalised and a second s	and the second state of the se	1
	Sample	Temperature	рН	Specific	Turbidity	Dissolved	ORP	· · · .	н. С. С. С	
	1.D. "		K K	Conductivity		Oxygen		Comr	nents	
	del inter	(deg C)	(S.U.)	(mhes)	(NTU'S)	(mg/k)	(mVQ)			
•	05-10B	16.8	7.64	1310	/	\square	ļ)	ļ	**	
							\mid	ļ		
		ŀ.	L				$ \downarrow $			
			<u></u>							
QA/QC Sam	ples Taken:									
Comments:										
					Signature					
50	A NO	maro	1117		Loto	(λ^{-})	1		(n)	118/01
Sampler (Pri		هيها المينا الميا والمالية المراجع		Sampler (sig	n sturs)	Versen 1	~		Date:	were freed to

								≥00 - 0 <u>es St.</u>		
	and a second	nander and the analysis of the						co or.	Jum	Build
			MONIT	HALEY ORING WE	& ALDRIC		FORM			
			-							
					and the second					
Ionitoring Well I.			Date: June		Time Started:	1300	Field Person	nel: SRP	l	
Veather Condition	ns:)	ver cas-	t, upper	<u>c 70</u>						
omments:			F ,							
		, 								
·				Ini	tial Readin		// #			
leasured Well B		ش	1,5		Riser Pipe Dia		<u> </u>			3" = 0.38
leasured Water			,20		Conversion F	actor (gai/line	0.5	1.25" = 0.08	2" = 0.17 6" = 1.50	8" = 2.60
Calculated Water		615 gal			(Circle One) Three Well Vo		IA C	(4 - 0.00,7	0 - 1.50	0 - 2.00
Dne Well Volume			anated		THEE WEIL VI	Julites (gais.)				
lotes: ()	5.90	<u>N CAL</u>	ALLANCE /		ell Condițio	กร				
Vell Riser Type (Circle one)	: ~	Stainles	1	and a second	n Steel	P	VC		
Casing Condition			Repair Requir	an impact of the later of the l		\sum				
Cap Condition:		YOK	Repair Requir							
Paint Condition:			Repair Requir							
ock Condition:		-OK	Repair Requir	ed: Canr	not re	-lock	<u>on u</u>	RII KE	y war	it come
nner Casing Cor	ndition:	Print the	Repair Requir						».	
Surface Seal Cor	ndition:	(OR)	Repair Requir	ed:						
Other:			An and a state of the	-		a a succession of the state of th	ungerneteksgeneratigatere	****	Website Logic Logic Logic Control (1994)	anta and a sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-
	, 			Micro-	Purge Infor	mation				· · · · · · · · · · · · · · · · · · ·
Purging Method	(Circle one)):	Stainless S	iteel Bailer		ic Pump		Grundfo	os Pump	
			Teflon		Polyethyl		Other:			
	Well	Gallons	Temperature	pН	Specific	Turbidity	Dissolved	ORP		
	Volume	Purged	(1	(0.11)	Conductivity	(NTU's)	Oxygen		Comments	5
	e, 5	(gal)	(deg C)	(s.u.) 11,8	(mhos) 1626		(mg/L)	(mV)		
	21 1		14.1	11.0	1000					
								1		
-										
							<u> </u>			
Water Level Afte	er Purging (TOR ft):			Calculated 95	% Recovery \	Nater Level:			
Comments:		an a								
<u> </u>	an han shirt a shirt of the second			Samp	ling Inform	ation				
Date:		Time Sample	d:	Field Personr	nel:				وروب وروب وروب وروب وروب وروب وروب وروب	
Measured Wate	Level (TO	R ft.):	·							
Sampling Metho	d (Circle or	ne):	Stainless 8	Steel Bailer	Peristall	ic Pump	×	Grundfo	s Pump	
		The subscription of the su	Teflon	Bailer		ene Bailer	Other:			1
	Sample	Temperature	pН	Specific	Turbidity	Dissolved	ORP	· · ·		
	I.D. "			Conductivity		Oxygen		Comr	nents	
		(deg C)	(S.U.)	(mhos)	(NTU'S)	(mg/b)	(mV)		····	
		17.0	7.60	1365	/		├ ───)──			_
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Montoring Weil 10: OS - 40% Data Data OR ORD Time Started. Field Personnel: SRA Weiller Conditions: DHU Cloud 1.910 7(3*) (2*) Comments: Initial Readings Measured Weil Bottom (TOR - ft) 1 1 129* = 0.08 2* = 0.17 Calculated Water Level (TOR - ft) 1 0 1 129* = 0.08 2* = 0.17 Calculated Water Level (TOR - ft) 1 0 1 129* = 0.08 2* = 0.17 Calculated Water Count respit (ft) 3 (Circle One) 4* = 0.86 6* = 1.50 One Weil Volume (gals) 1 2* = 0.06 2* = 0.06 6* = 1.50 Notes: (g. ft) 1 28 0.08 6* = 1.50 Notes: (g. ft) 1 28 0.08 6* = 1.50 Notes: (g. ft) 1 28 0.08 6* = 1.50 Notes: (g. ft) Notes: Weil Conditions Weil Conditions Weil Conditions Mail: Rear Trape (Cricle one): Staintess Steel Carton Steel PVC Proceeding Calific Critition: (ft) Repair Required: Proceeding Proceeding Proceeding Calific Crititition: (ft) Repair Required: <th>,</th> <th></th> <th></th> <th>MONIT</th> <th>HALEY ORING WE</th> <th>' & ALDRIC</th> <th>H, INC. ING FIELD</th> <th>FORM</th> <th></th> <th></th> <th></th>	,			MONIT	HALEY ORING WE	' & ALDRIC	H, INC. ING FIELD	FORM			
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Vein Dation Dation Dation Dation Dation Volume Purged (gal) (deg C) (S.U.) (mfks) (NTUs) (mg/L) (mV) Water (gal) (deg C) (S.U.) (ms/L) (mg/L) (mV) (mg/L) (mV) Water Level After Purging (TOR ft): (D. 75) Calculated 95% Recovery Water Level: Comments Comments: 15 mm Gale Gale Sampling Information Date: (G118/D) Time Sampled: D: 46 Field Personnel: Measured Water Level (TOR ft.): Stainless Steel Bailer Peristatic Pump Grundfos Pump Terlon Bailer Polyethylene Bailer Other: Comments I.D. (deg C) (S.U.) (mths) (NTU's) (mtV)	¥¥		<u></u>	Teflon	Bailer	Polyethyl	ene Bailer	Other:			
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I.D. (deg C) (S.U.) (S.U.) (NTU's) (mg/s) (mV)				Teflon	Bailer	Polyethyl	ene Bailer	Other:			
$(\text{deg C}) \qquad (S.U.) \qquad (\text{mbos}) \qquad (\text{NTU}_{\textbf{s}}) \qquad (\text{mg/s}) \qquad (\text{mv}_{\textbf{s}})$		Sample	Temperature	pН	Specific	Turbidity	Dissolved	ORP			
(deg C) (S.U.) (mhos) (NTU's) (mg/s) (mV)		I.D. "		а. — н.	Conductivity	$\left\{ \sum_{i=1}^{n} \sum_{j=1}^{n} i \right\}$	Oxygen	1	Com	ments	
12.3 8.20 1440			(deg C)		(mhos)	(NTU'S)	(mg/k)	(mV)			_
			12.3	18.20	1440			<u> </u>		·	_
										·	
QA/QC Samples Taken: MS/MSD	QA/QC Same	les Taken:	mest	MAD						. ł	
Comments: MIL HIGHAMPAER not Functioning , Heplan battler				and the supervision of the super	x m	A fu	oction	nina .	Peplan	battler	w . l
Signature		<u>, , ,, , , , , , , , , , , , , , , , ,</u>	and and the second s	nte liggi en star star star finsk der				5		and the second secon	7

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		1 19 b		0				nel: SRA		
onitoring We	<u>II I.D.: 05-</u>		Date: June	1	Time Started:	<(0F)	Field Person	nel: JKH		
leather Cond	itions: M	CHY (Jong	<u>1 1011</u>	5 +0	SCE)		1 m 1871 - Aliy 1984 - Ang mga ang gang matalaki pang ang ang sa		
omments:							and the second secon			
				Name and a contract of the						
			~~~	lni	tial Reading		1111 / -11	ł .		
leasured Wel	I Bottom (TOF	Succession Succession	,99		Riser Pipe Dia		4" (3'		<u>xK)</u>	
leasured Wat	ter Level (TOF	the second s	.25		Conversion Fa	actor (gal/line	al ft)	1.25* = 0.08		3" = 0.38
Calculated Wa	iter Column H	eight (ft) \	6.74		(Circle One)		<u> </u>	4" = 0.66	6" = 1.50	8" = 2.60
one Well Volu	ime (gals.)	$\sim 7.0$			Three Well Vo	lumes (gals.)	$) \sim 21.$	0		
lotes: D	CY OF	ter er	NOCUOTIC		<u>3 gal</u>			ta 17 di Lina, Sala Marana		
			مستعنق المستعملين	Street Stre	ell Condition	· · · · · · · · · · · · · · · · · · ·	· · · · · ·			
Vell Riser Typ	pe (Circle one)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Stainles		Carbon	Stee	P	VC		
Casing Condit			Repair Requir						(	
Cap Condition	:		Repair Requir							
Paint Conditio	n:	<u>(ок)</u>	Repair Requir							
Lock Condition	1	OK	Repair Requir						· · · ·	
Inner Casing	Condition:		Repair Requir			<u></u>				
Surface Seal	Condition:	(OK)	Repair Requir	ed:						·
Other:									A DATE AND	
		-			Purge Infor			~ "		
Purging Meth	od (Circle one	):	Stainless S		Peristalti	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u></u>	Grundto	os Pump	
	Commences of the second se		rise want wat wat wat wat had been stated at 125.34	Bailer	Polyethyle	Concert No. of Concerts of Concerts	Other:			
	Well	Gallons	Temperature	рН	Specific	Turbidity	Dissolved	ORP		
	Volume	Purged			Conductivity		Oxygen		Comments	
. /		(gal)	(deg C)	(S.U.)	(mhos)	(NTÙ's)	(mg/L)			-
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				vilký.		<u> </u>	+	+		-
		L		Leven and the second second		<u> </u>	1 3		L	
Water Level	After Purging (	TOR ft): 30	0.45		Calculated 95	% Recovery	Water Level:			
Comments:	22.777.1777.1777.1777.1777.1777.1777.17						intelligidaan araas aa daa siiyaa		<b></b>	
	01	r	0.10	1	oling Inform	ation				
1	18/01	Time Sample		Field Personr	nel:					
Measured W	ater Level (TO	<u>r ft.): 35</u>								
Committee	ethod (Circle or	ne):		Steel Bailer	Peristalti			Grundfo	is Pump	
Sampling Me			Teflon	Bailer	Polyethyle		Other:			-11
Sampling Me	Contraction of the second s	I The second second second	pH .	Specific	Turbidity	Dissolved	ORP	1		
oampiing Me	Sample	Temperature				Ordenan	1 1-	I Comr	nents	
oampiing Me	Sample I.D.	Temperature		Conductivity		Oxygen				
Samping Me	I.D.	(deg C)	(S.U.)	Conductivity MS (mhos)	(NTU'S)	(mg/L)	(mVQ			_
oarnpilng Me			(s.u.)	Conductivity MS (mhos)	(NTU'S)	1	(mV0)			
oampilng Me	I.D.	(deg C)	Ph Ph	Conductivity (mhos)	(NTU's)	1	(mV)			16
oampilng Me	I.D.	(deg C)	Ph Ph	Conductivity (mhos)	(NTU'S)	1	(mVp)			
ວampiing Me	I.D.	(deg C)	Ph Ph	Conductivity AS (mhos)	(NTUE)	1	(mVg			
QA/QC Sam	1.D.	(deg C)	Ph Ph	Conductivity AS (mhos)		(mg/k)				
	1.D. DS-4d	(deg C)	11.92	Conductivity (mhos) 1685	(NTUR)	(mg/k)	Replace	Batter	y, A)	
QA/QC Sam	1.D. DS-4d	(deg C) 16.8	11.92	1685		(mg/k)			y , A)	- - - - -
QA/QC Sam	1.D. DS-4d	(deg C) 16.8	11.92	1685	Linctin Signature	(mg/k)			<u>y</u> ( <u>A</u> ) Date: (J	121

## APPENDIX D

# Groundwater Analytical Results



H&A OF NY

JUL 1 8 2001 RECEIVED



A FULL SERVICE ENVIRONMENTAL LABORATORY

July 16, 2001

Mr. Robert Mahoney Haley & Aldrich of New York 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264

PROJECT:#70600-001 Submission #:R2107196

Dear Mr. Mahoney:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 07/16/01 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Karen Bunker Project Manager

Enc.



1 Mustard ST. Suite 250 Rochester, NY 14609

#### THIS IS AN ANALYTICAL TEST REPORT FOR:

Client :	Haley & Aldrich of New Y	/ork
Project Reference:	#70600-001	
Lab Submission # :	R2107196	
Reported :	07/16/01	

Report Contains a total of  $\underline{35}$  pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services ' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

### CASE NARRATIVE COMPANY: Haley & Aldrich Project: #70600-001 CAS SUBMISSION#: R2107196

Samples were collected by the client on 6/18/01 and received at CAS on the same day as sampled within hours of collection at a cooler temperature of 14°C. All samples were received unbroken and with no bubbles in the vials.

#### **VOLATILE ORGANICS**

Seven⁽⁷⁾ water samples and one (1) Trip Blank were analyzed for ASP Method 95-1 Volatiles and Library Searches. One Cooler Blank was also analyzed as required by the protocol.

All Tuning criteria for BFB were within QC limits.

All the Initial and Continuing Calibration Criteria were met for all analytes.

All Internal Standard Areas were within QC limits.

All Surrogate standard recoveries were within acceptance limits.

The holding time of 10 days from VTSR was met for all samples.

Site Specific QC was performed on locations OS-4s. The Matrix Spike/Matrix Spike Duplicate recoveries and % RPD were acceptable. All Reference Check sample recoveries were within QC limits.

The Laboratory Method Blanks, Trip Blank, and Cooler Blank were free from contamination of target compounds.

Hits between the CRDL and MDL of the compound are reported and flagged as "J". All Library Search hits are flagged as estimated, "J".

All sample aliquots were tested for proper preservation after analysis. All were found to be properly preserved to a pH of <2.

No other analytical or QC problems were encountered during the analysis of these samples.

SDG #: OS4S	CASE No.:	BATCH C	DMPLETE:yes		DATE REVI	SED:		
SUBMISSION			E REQUESTED: Y_X N		DATE DUE:	7/9/01		
CLIENT:	Haley & Aldrich of New York	DATE: 0	5/19/01		PROTOCOL:	ASP-B		
CLIENT REP:	Karen Bunker	CUSTODY	SEAL: PRESENT/ABSENT:		SHIPPING	No.:		
PROJECT :	#70600-001	CHAIN O	F CUSTODY: PRESENT/ABSENT:					
CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE	DATE	pН	°₀	REMARKS
				SAMPLED	RECEIVED	(SOLIDS	SOLIDS	SAMPLE CONDITION
468456	OS-4S	WATER	95-1 QC	6/18/01	6/18/01			
468457	OS-4d	WATER	95-1	6/18/01	6/18/01			
468458	OS-3d	WATER	95-1	6/18/01	6/18/01			
468459	OS-2d	WATER	95-1	6/18/01	6/18/01			
468460	0S-2S	WATER	95-1	6/18/01	6/18/01			
468461	OS-1d	WATER	95-1	6/18/01	6/18/01			-
468462	OS-1S	WATER	95-1	6/18/01	6/18/01			
468464	TRIP BLANK	WATER	95-1	6/18/01	6/18/01			· ·
471983	COOLER BLANK	WATER	95-1	6/19/01				
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Effective 04/01/96

### **CAS LIST OF QUALIFIERS**

(The basis of this proposal are the EPA-CLP Qualifiers)

- U Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- Indicates an estimated value. For further explanation see case narrative / cover letter. J -
- This flag is used when the analyte is found in the associated blank as well as in the sample. B -
- This flag identifies compounds whose concentrations exceed the calibration range. E -

This flag indicates that a TIC is a suspected aldol-condensation product. A -

- Spiked sample recovery not within control limits. N -(Flag the entire batch - Inorganic analysis only)
- Duplicate analysis not within control limits. (Flag the entire batch - Inorganic analysis only)
  - Also used to qualify Organics QC data outside limits.
- D Spike diluted out.
- Reported value determined by Method of Standard Additions. (MSA) S -
- X As specified in the case narrative.

## CAS Lab ID # for State Certifications

NY ID # in Rochester:	1
CT ID # in Rochester:	Р
MA ID # in Rochester:	N
AIHA # in Rochester:	7

0145 PH0556 1-NY032 889

NJ ID # in Rochester: 73004 RI ID # in Rochester; 158 NH ID # in Rochester:

294198-A

## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Customer	Laboratory		Analvti	cal Require	ements*	grinter na de la nacional de la	un de la companya de porte el den secondo de la companya de porte el den secondo de la companya de la companya
Sample	Sample			SP PROTO			
Code	Code					T	
		*VOA	*BNA	*VOA	*PEST	*METALS	*OTHER
		GC/MS	GC/MS	GC	PCB		
OS-4S	468456	Х					
OS-4d	468457	Х			-		
OS-3d	468458	Х					
OS-2d	468459	Х					
OS-2S	468460	Х					
OS-1d	468461	Х					
OS-1S	468462	Х					
TRIP BLANK	468464	Х					
						х 	
<b>1</b>							
}							
F ¹							

Check Appropriate Boxes

*CLP, Non-CLP

HSL, Priority Pollutant

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### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SAMPLE PREPARATION AND ANALYSIS SUMMARY VOA ANALYSES

LABORATORY         MATRIX         DATE         DATE RECD         LOW Level         ANALYZED           468456         WATER         06/18/01         66/18/01         LOW         06/27/01           468457         WATER         06/18/01         06/18/01         LOW         06/27/01           468458         WATER         06/18/01         06/18/01         LOW         06/27/01           468459         WATER         06/18/01         06/18/01         LOW         06/27/01           468460         WATER         06/18/01         06/18/01         LOW         06/28/01           468461         WATER         06/18/01         06/18/01         LOW         06/28/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01         LOW         06/28/01         LOW         06/28/01           468464         WATER         06/18/01         LOW         06/28/01         LOW         06/28/01			<b>D A -2C</b>	DATE DEOID		DATE
468456         WATER         06/18/01         06/18/01         LOW         06/27/01           468457         WATER         06/18/01         06/18/01         LOW         06/27/01           468458         WATER         06/18/01         06/18/01         LOW         06/27/01           468459         WATER         06/18/01         06/18/01         LOW         06/27/01           468460         WATER         06/18/01         06/18/01         LOW         06/27/01           468461         WATER         06/18/01         06/18/01         LOW         06/28/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01         06/18/01         LOW         06/28/01           9         9         9         9         9         9         9           9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9	LABORATORY	MATRIX	DATE	DATE REC'D		DATE
468457         WATER         06/18/01         LOW         06/27/01           468458         WATER         06/18/01         06/18/01         LOW         06/27/01           468459         WATER         06/18/01         06/18/01         LOW         06/27/01           468460         WATER         06/18/01         06/18/01         LOW         06/27/01           468461         WATER         06/18/01         06/18/01         LOW         06/28/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01						
468458         WATER         06/18/01         LOW         06/27/01           468459         WATER         06/18/01         06/18/01         LOW         06/27/01           468460         WATER         06/18/01         06/18/01         LOW         06/27/01           468461         WATER         06/18/01         06/18/01         LOW         06/28/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01						
468459         WATER         06/18/01         06/18/01         LOW         06/27/01           468460         WATER         06/18/01         06/18/01         LOW         06/28/01           468461         WATER         06/18/01         06/18/01         LOW         06/28/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER						
468460         WATER         06/18/01         06/18/01         LOW         06/28/01           468461         WATER         06/18/01         06/18/01         LOW         06/28/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER	468458	WATER	06/18/01			
468461         WATER         06/18/01         06/18/01         LOW         06/28/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01         06/18/01         LOW         06/28/01           1         1         1         1         1         1         1           1         1         1         1         1         1         1           1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	468459	WATER	06/18/01	06/18/01	LOW	06/27/01
468462         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01         06/18/01         LOW         06/28/01           1         1         1         1         1         1         1           1         1         1         1         1         1         1           1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1<	468460	WATER	06/18/01	06/18/01	LOW	06/27/01
468464         WATER         06/18/01         06/18/01         LOW         06/28/01           Image: Strain Str	468461	WATER	06/18/01	06/18/01	LOW	06/28/01
Image: series of the series	468462	WATER	06/18/01	06/18/01	LOW	06/28/01
	468464	WATER	06/18/01	06/18/01	LOW	06/28/01
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Image: state in the state						
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#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE PREPARATION AND ANALYSIS SUMMARY

#### ORGANIC ANALYSES

SAMPLE ID	MATRIX	ANALYTICAL	EXTRACTION		DIL/CONC FACTOR
angestategasenen generation for the second second		PROTOCOL	METHOD	CLEAN UP	n an fan fernen an fan de ferste fer fer ferste ferste ferste ferste ferste ferste ferste ferste ferste ferste Ferste ferste
468456	WATER	95-1			1.0
468457	WATER	95-1			1.0
468458	WATER	95-1			1.0
468459	WATER	95-1			1.0
468460	WATER	95-1			1.0
468461	WATER	95-1			1.0
468462	WATER	95-1			1.0
468464	WATER	95-1			1.0
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					1A				EPA S	AMPLE	NO.
		ATILE ORGANICS ANALYSIS DATA SHEET						OS-2d			
Lab Name:					واستشمار والمتجارين والتركي والمركبين	Contract:					
Lab Code:	10145		Case	No.:	R21-7196	SAS N	o.:	S[	DG No.:	OS4S	
Matrix: (soil/w									468459		
Sample wt/vol				(a/ml)	MI	١	ab File II	D:	H8337.D	)	
				(g/iiii)							
Level: (low/m	ied)	LOI	N			Da	ate Rec	eived:			
% Moisture: n	ot dec.					D	ate Anal	lyzed:	06/27/01		
GC Column:	RTX50	)2.	D: 0.53	(n	nm)	D	ilution F	actor:	1.0		
					•	S		ot Volu	me.		(uL)
Soil Extract V	olume -	0000 TE 115 VI		(uL)							(42)
					CON			INITS:			
CAS NO.					(ug/L					Q	
CAS NO.	•				(ug/r	_ or uging					
74-87-	3		Chloron	netha	ne				10	U	
75-01-			Vinyl ch						10	U	
74-83-			Bromor	and the second s					10	U	-
75-00-			Chloroe						10	U	
67-64-			Aceton						2	J	
75-35-			1,1-Dic	hloroe	ethene				10	<u> </u>	
75-09-	2		Methyle	ene ct	nloride				10	U	
75-15-	0		Carbon						10	U	_
156-60	)-5		trans-1,	2-Dic	hloroethen	e			10	U	
75-34-	3				ethane				10	<u>U</u>	
78-93-	.3		2-Butar						10	<u>U</u>	
156-59					oroethene				10	<u>U</u>	
67-66-			Chlorof				·		10	<u> </u>	
107-06			1,2-Dic						10		
71-55-					roethane				10	<u> </u>	
56-23-					chloride				10	<u> </u>	
71-43-			Benzen				·		10	<u>U</u>	_
79-01-					ene				10	U U	_
78-87-					propane		. <u></u>		10		
75-27-				the second se	romethane	<u></u>			<u>    10   </u> 10		
10061			the second se	CONTRACTOR OF THE OWNER	oropropene				10		
10061					hloroprope roethane	lie			10	<u>U</u>	
79-00-	and the second se		and the second s		romethane				10	U U	
75-25-	and the second se		Bromof		TUTTettalle				10	U	
108-10					entanone				10	U	
108-88	and the second		Toluen		entanone				10	U	
591-78			2-Hexa						10		
127-18	Marcal Contractor Contractor		Tetrach		thene	unter 200 (100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100			10	T U	
108-90	and the second		Chlorot			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			10	U	
100-4	the second		Ethylbe						10	Ū	
1330-2			(m+p)X						10	U	
1330-2			o-Xyler						10	U	
100-42			Styrene			<u></u>			10	U	
79-34-					chloroetha	ne			10	Ū	
1 1 4 4 1	-										

FORMIVOA

CAS NO.		COMP	OUND			RT	EST	Г. CONC.	Q
Number TICs	found:	0	-		L or ug/K	· · · ·			]
				CON		ATION UN	ITS:		
Soil Extract V	olume		(uL)		S	Soil Aliquot	Volun	ne:	(uL)
GC Column:	RTX50	2. ID:	<u>0.53</u> (r	nm)	C	Dilution Fac	tor: 1	1.0	
% Moisture: n	ot dec.				Ē	Date Analyz	zed: <u>(</u>	06/27/01	
Level: (low/m	ed)	LOW				Date Receiv			
Sample wt/vol	l:	5.0	(g/ml)	ML		ab File ID:	-	18337.D	
Matrix: (soil/wa	ater)	WATEF	2	ê.,				68459 1.0	-
Lab Code:	10145	(	Case No.:	R21-7196		lo.:		G No.: <u>OS4</u>	S
Lab Name: <u>(</u>	CAS/RO	СН			Contract	: <u>HA</u>			
		TENTA	TIVELY I	DENTIFIED	COMPO	OUNDS		OS-2	d
	V			ICS ANAL				EPA SAMP	LE NO.
				16					

VOLATILE ORGANICS ANALYSIS DATA SHEET         Os-48           Lab Name:         CAS/ROCH         Contract: HA         Os-48           Lab Code:         10145         Case No.: R21-7196         SAS No.:         SDG No.: OS45           Matrix:         (soil/water)         WATER         Lab Sample ID: 468456 1.0           Sample wi/vol:         5.0         (g/ml)         ML           Sample wi/vol:         5.0         (g/ml)         ML           Sample wi/vol:         5.0         (g/ml)         ML           Lave:         (low/med)         Low           Date Analyzed:         06/27/01           GC column:         RTX502. ID: 0.53         (ml)         Dilution Factor: 1.0           CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L         Q           74-87-3         Chioroethane         10         U           75-00-4         Chioroet		1A		EPA SA	MPLE NO.
Conversion         Case No.:         R21-7196         SAS No.:         SDG No.:         OS4S           Matrix:         (soli/water)         WATER         Lab Sample W/vol:         5.0         (g/ml) ML         Lab Sample ID:         468456 1.0           Sample w/vol:         5.0         (g/ml) ML         Lab Sample ID:         468456 1.0           Level:         (low/med)         LOW         Date Received:				05	s-4s
Matrix:         WATER         Lab Sample ID: <u>468456 1.0</u> Sample w/vol: <u>5.0</u> (g/ml) <u>ML</u> Lab File ID: <u>H8332.D</u> Level:         (low/med)         LOW         Date Received:		0011			
Matrix:         WATER         Lab Sample ID: <u>468456 1.0</u> Sample w/vol: <u>5.0</u> (g/ml) <u>ML</u> Lab File ID: <u>H8332.D</u> Level:         (low/med)         LOW         Date Received:	Lab Code: 10145	Case No.: R21-7196	SAS No.:	SDG No.: C	DS4S
Sample wi/vol:         5.0         (g/m)         ML         Lab File ID:         H8332.D           Level:         (low/med)         LOW         Date Received:					
Level:         (low/med)         LOW         Date Received:	•		-	Contraction of the local distance of the loc	
Barbon Control         Date Analyzed:         06/27/01           % Moisture: not dec.	Sample wt/vol:	5.0 (g/ml) <u>ML</u>			
GC Column:         RTX502.         ID:         0.53         (mm)         Dilution Factor:         1.0           Soil Extract Volume	Level: (low/med)	LOW	Date Received	1: :t	
Soil Extract Volume         (uL)         Soil Aliquot Volume:         (uL)           CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         ,           75-01-4         Vinyl chloride         10         U         ,           75-03         Chloromethane         10         U         ,           75-06-3         Chloroethane         10         U         ,           75-35-4         1,1-Dichloroethene         10         U         ,           75-35-4         1,1-Dichloroethene         10         U         ,           75-36-5         trans-1,2-Dichloroethene         10         U         ,           75-34-3         1,1-Dichloroethane         10         U         ,           75-35-4         1,1-Trichloroethane         10         U         ,           75-34-3         1,1-Dichloroethane         10         U         ,           71-65-6         1,1,1-Trichloroethane         10         U         ,           71-65-6         1,1,1-Trichloroethane         10         U         ,           71-63-2	% Moisture: not dec.		Date Analyzed	1: 06/27/01	
Soil Extract Volume         (uL)         Soil Aliquot Volume:         (uL)           CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         ,           75-01-4         Vinyl chloride         10         U         ,           75-03         Chloromethane         10         U         ,           75-06-3         Chloroethane         10         U         ,           75-35-4         1,1-Dichloroethene         10         U         ,           75-35-4         1,1-Dichloroethene         10         U         ,           75-36-5         trans-1,2-Dichloroethene         10         U         ,           75-34-3         1,1-Dichloroethane         10         U         ,           75-35-4         1,1-Trichloroethane         10         U         ,           75-34-3         1,1-Dichloroethane         10         U         ,           71-65-6         1,1,1-Trichloroethane         10         U         ,           71-65-6         1,1,1-Trichloroethane         10         U         ,           71-63-2	GC Column: RTX	502. ID: 0.53 (mm)	Dilution Factor	r: <u>1.0</u>	
CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         .           75-01-4         Vinyl chloride         10         U         .           74-87-3         Chloromethane         10         U         .           75-01-4         Vinyl chloride         10         U         .           75-05-4         1.1-Dichloroethane         10         U         .           75-35-4         1.1-Dichloroethene         10         U         .           75-34-3         1.1-Dichloroethene         10         U         .           75-34-3         1.1-Dichloroethene         10         U         .           76-83-3         Chloroform         10         U         .           71-43-2         Betracene         10         U         .           71-43-2         Betracene         10				olume:	(uL)
CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         75-01-4         Vinyl chloride         10         U         75-01-4         Vinyl chloride         10         U         75-01-4         Vinyl chloride         10         U         75-03-3         Chloromethane         10         U         75-03-3         Chloroethane         6         J         75-35-4         1,1-Dichloroethene         10         U         10         U         75-35-4         1,1-Dichloroethene         10         U         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10	Soil Extract volume	(uL)			()
CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         75-01-4         Vinyl chloride         10         U         75-01-4         Vinyl chloride         10         U         75-01-4         Vinyl chloride         10         U         75-03-3         Chloromethane         10         U         75-03-3         Chloroethane         6         J         75-35-4         1,1-Dichloroethene         10         U         10         U         75-35-4         1,1-Dichloroethene         10         U         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10		CONC	FINTRATION UNITS	S:	
CAS NO.       Count Gord       (dg) E or dg (dg)					Q
$14-07-3$ Unbolicitation $75-01-4$ Vinyl chloride       10       U $74-83-9$ Bromomethane       10       U $75-00-3$ Chloroethane       10       U $75-00-3$ Chloroethane       6       J $75-50-3$ Chloroethane       10       U $75-52-4$ $1,1-0ichloroethene$ 10       U $75-35-4$ $1,1-0ichloroethene$ 10       U $75-36-3$ Carbon disulfide       10       U $75-34-3$ $1,1-0ichloroethane$ 10       U $76-53-4$ $1,2-Dichloroethane$ 10       U $76-63-3$ Chloroform       10       U $10^{-}06-2$ $1,2-Dichloroethane$ 10       U $10^{-}06-3$ Chloroform       10       U $71-55-6$ $1,1,1-Trichloroethane$ 10       U $71+43-2$ Benzene       10       U $75-27-4$ Bromodichloromethane       10       U $706-10+5$ $1,1,2-Trichloroethane$ 10       U $700-5$ $1,1,2-Trichloroethane$ </td <td>CAS NO.</td> <td></td> <td></td> <td></td> <td>-</td>	CAS NO.				-
75-01-4         Vinyl chloride         10         U         . $74-83-9$ Bromomethane         10         U         . $75-00-3$ Chloroethane         10         U $67-64-1$ Acetone         6         J $75-35-4$ 1,1-Dichloroethene         10         U $75-09-2$ Methylene chloride         10         U $75-15-0$ Carbon disulfide         10         U $75-34-3$ 1,1-Dichloroethane         10         U $75-34-3$ 1,1-Dichloroethane         10         U $76-60-5$ trans-1,2-Dichloroethane         10         U $76-63-3$ Chloroform         10         U $107-06-2$ 1,2-Dichloroethane         10         U $107-06-2$ 1,2-Dichloropthane         10         U $71-43-2$ Benzene         10         U $74-87-5$ Carbon tetrachloride         10         U $74-87-5$ 1,2-Dichloropropane         10         U $74-87-5$ 1,2-Dichloropropene         10         U<	74-87-3	Chloromethane		10	U
74-83-9         Bromomethane         10         U           75-00-3         Chloroethane         10         U           67-64-1         Acetone         6         J           75-35-4         1,1-Dichloroethene         10         U           75-35-4         1,1-Dichloroethene         10         U           75-35-4         1,1-Dichloroethene         10         U           75-35-4         1,1-Dichloroethene         10         U           75-35-0         Carbon disulfide         10         U           75-35-0         Carbon disulfide         10         U           75-35-3         1,1-Dichloroethane         10         U           75-34-3         1,1-Dichloroethane         10         U           76-65-3         Chloroform         10         U           156-59-4         cis-1,2-Dichloroethane         10         U           17-55-6         1,2-Dichloroethane         10         U           71-65-6         1,1,1-Trichloroethane         10         U           71-43-2         Benzene         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-				10	and the second se
10         U $67.64.1$ Acetone $6$ J $75.35.4$ $1,1$ -Dichloroethene $10$ U $75.09.2$ Methylene chloride $10$ U $75.35.4$ $1,1$ -Dichloroethene $10$ U $156.60.5$ trans- $1,2$ -Dichloroethene $10$ U $75.34.3$ $1,1$ -Dichloroethene $10$ U $156.59.4$ cis- $1,2$ -Dichloroethene $10$ U $156.69.4$ cis- $1,2$ -Dichloroethane $10$ U $107-06.2$ $1,2$ -Dichloroethane $10$ U $71.43.2$ Benzene $10$ U $71.43.2$ Benzene $10$ U $79.01.6$ Trichloroethane $10$ U <td< td=""><td></td><td></td><td></td><td>10</td><td>and the second se</td></td<>				10	and the second se
67.64.1         Acetone $6$ J $75.35.4$ $1,1$ -Dichloroethene $10$ U $75.09.2$ Methylene chloride $10$ U $75.15.0$ Carbon disulfide $10$ U $15.60.5$ trans- $1,2$ -Dichloroethene $10$ U $156.60.5$ trans- $1,2$ -Dichloroethane $10$ U $75.34.3$ $1,1$ -Dichloroethane $10$ U $76.93.3$ $2$ -Butanone $10$ U $156.69.4$ cis- $1,2$ -Dichloroethene $10$ U $107.06.2$ $1,2$ -Dichloroethane $10$ U $107.06.2$ $1,2$ -Dichloroethane $10$ U $71.43.2$ Benzene $10$ U $74.43.2$ Benzene $10$ U $78.87.5$ $1,2$ -Dichloropropane $10$ U $75.27.4$ Bromodichloromethane $10$ U $10061-01.5$ cis- $1,3$ -Dichloropropene $10$ U $1064.02.6$ trans- $1,3$ -Dichlo					
75-35-4         1,1-Dichloroethene         10         U           75-09-2         Methylene chloride         10         U           75-15-0         Carbon disulfide         10         U           156-60-5         trans-1,2-Dichloroethene         10         U           75-34-3         1,1-Dichloroethane         10         U           78-93-3         2-Butanone         10         U           156-59-4         cis-1,2-Dichloroethene         10         U           67-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           71-43-2         Benzene         10         U           75-27-4         Bromodichloromethane         10         U           75-27-4         Bromodichloropropane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           104-48-1         Dibromochloromethane         10         U <td></td> <td></td> <td></td> <td>and the second se</td> <td>and the second se</td>				and the second se	and the second se
75-09-2         Methylene chloride         10         U $75-15-0$ Carbon disulfide         10         U $156-60-5$ trans-1,2-Dichloroethene         10         U $75-34-3$ 1,1-Dichloroethane         10         U $75-34-3$ 2-Butanone         10         U $156-59-4$ cis-1,2-Dichloroethene         10         U $156-59-4$ cis-1,2-Dichloroethane         10         U $107-06-2$ 1,2-Dichloroethane         10         U $107-06-2$ 1,2-Dichloroethane         10         U $71-55-6$ 1,1-Trichloroethane         10         U $76-23-5$ Carbon tetrachloride         10         U $76-23-5$ Carbon tetrachloride         10         U $78-87-5$ 1,2-Dichloropropane         10         U $78-87-5$ 1,2-Dichloropropane         10         U $10061-01-5$ cis-1,3-Dichloropropene         10         U $10061-02-6$ trans-1,3-Dichloropropene         10         U $10061-01-5$ cis-1,3-Dichloropropen		1,1-Dichloroethene		and the second	
75-15-0         Carbon disulfide         10         U $156-60-5$ trans-1,2-Dichloroethene         10         U $75-34-3$ 1,1-Dichloroethane         10         U $75-34-3$ 2-Butanone         10         U $156-59-4$ cis-1,2-Dichloroethene         10         U $67-68-3$ Chloroform         10         U $107-06-2$ 1,2-Dichloroethane         10         U $71-55-6$ 1,1,1-Trichloroethane         10         U $76-25-5$ Carbon tetrachloride         10         U $76-25-5$ Carbon tetrachloride         10         U $71-43-2$ Benzene         10         U $78-87-5$ 1,2-Dichloropropane         10         U $78-87-5$ 1,2-Dichloropropane         10         U $75-27-4$ Bromodichloromethane         10         U $10061-01-5$ cis-1,3-Dichloropropene         10         U $124-48-1$ Dibromochloromethane         10         U $75-27-2$ Bromoform         10         U		Methylene chloride			And the second se
130-00-3       Italia 1,2 Dichloroethane       10       U         75-34-3       1,1-Dichloroethane       10       U         156-59-4       cis-1,2-Dichloroethene       10       U         167-66-3       Chloroform       10       U         107-06-2       1,2-Dichloroethane       10       U         107-06-2       1,2-Dichloroethane       10       U         71-55-6       1,1,1-Trichloroethane       10       U         71-52-6       1,1,1-Trichloroethane       10       U         71-43-2       Benzene       10       U         79-01-6       Trichloroethene       10       U         75-27-4       Bromodichloromethane       10       U         79-01-5       cis-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         124-48-1       Dibromochloromethane       10       U         124-48-1       Dibromochloromethane       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U      1		Carbon disulfide			
73:34:3 $1,1:Diction or entitie       10       U         156:59:4       cis-1,2:Dichloroethene       10       U         67:66:3       Chloroform       10       U         107:06:2       1,2:Dichloroethane       10       U         107:06:2       1,2:Dichloroethane       10       U         71:55:6       1,1,1:Trichloroethane       10       U         71:43:2       Benzene       10       U         79:01:6       Trichloroethene       10       U         78:87:5       1,2:Dichloropropane       10       U         78:87:5       1,2:Dichloropropane       10       U         79:01:6       Trichloroethane       10       U         78:87:5       1,2:Dichloropropane       10       U         79:01:6       trans-1,3:Dichloropropene       10       U         100:61:02:6       trans-1,3:Dichloropropene       10       U         100:61:02:6       trans-1,3:Dichloropropene       10       U         100:61:02:6       trans-1,3:Dichloropropene       10       U         108:80:3       Toluene       10       U       U         108:80:3       Toluene       10156-60-5trans-1,2-Dichloroethenethe second s$	156-60-5	trans-1,2-Dichloroethene		the second s	
156-59-4         Cis-1,2-Dichloroethene         10         U $67-66-3$ Chloroform         10         U $107-06-2$ 1,2-Dichloroethane         10         U $71-55-6$ 1,1,1-Trichloroethane         10         U $71-55-6$ 1,1,1-Trichloroethane         10         U $56-23-5$ Carbon tetrachloride         10         U $71-43-2$ Benzene         10         U $79-01-6$ Trichloroethene         10         U $78-87-5$ 1,2-Dichloropropane         10         U $75-27-4$ Bromodichloromethane         10         U $10061-01-5$ cis-1,3-Dichloropropene         10         U $10061-02-6$ trans-1,3-Dichloropropene         10         U $79-00-5$ 1,1,2-Trichloroethane         10         U $79-00-5$ 1,1,2-Trichloroethane         10         U $108-10-1$ 4-Methyl-2-pentanone         10         U $108-80-3$ Toluene         10         U $108-80-7$ Chlorobenzene         10	75-34-3				
130-39-4         Chiloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           56-23-5         Carbon tetrachloride         10         U           71-43-2         Benzene         10         U           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           124-48-1         Dibromochloromethane         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U <td>78-93-3</td> <td></td> <td></td> <td></td> <td></td>	78-93-3				
07-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           56-23-5         Carbon tetrachloride         10         U           71-43-2         Benzene         10         U           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           1061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           102-4-48-1         Dibromochloromethane         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-90-7         Chlorobenzene         10         U					
107-00-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           76-23-5         Carbon tetrachloride         10         U           71-43-2         Benzene         10         U           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5				and a second	and the second se
71-03-0         1,1,1         Trichlorostante         10         U           56-23-5         Carbon tetrachloride         10         U           71-43-2         Benzene         10         U           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U				and the second se	and the second se
30-23-3         Outpoint circulation           71-43-2         Benzene         10         U           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           1330-20-7         O-Xylene				and the second	
71-43-2         Derizence           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					and the second se
78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					
76-67-3         1,2-Dichloropropene         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-90-7         Chlorobenzene         10         U           108-90-7         Chlorobenzene         10         U           108-90-7         Chlorobenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					
75-27-4         Distribution           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					
10001-01-3         Cls ⁴ 1, 5 Didnotopropone         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					
10001-02-0         Italis 1,0-Distributioproporte         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U			0	and the second se	and the second se
19-00-3       1,1,2-minimolectuation       10       U         124-48-1       Dibromochloromethane       10       U         75-25-2       Bromoform       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U         591-78-6       2-Hexanone       10       U         127-18-4       Tetrachloroethene       10       U         108-90-7       Chlorobenzene       10       U         100-41-4       Ethylbenzene       10       U         1330-20-7       (m+p)Xylene       10       U         1030-20-7       o-Xylene       10       U         100-42-5       Styrene       10       U			6		and the second se
124-43-1         Distribution of methanis         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U				the second s	
108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U         591-78-6       2-Hexanone       10       U         127-18-4       Tetrachloroethene       10       U         108-90-7       Chlorobenzene       10       U         100-41-4       Ethylbenzene       10       U         1330-20-7       (m+p)Xylene       10       U         10330-20-7       o-Xylene       10       U         100-42-5       Styrene       10       U					
108-10-1         4-Motry 2 pendulone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U				and the second	and the second se
100-00-0         101000           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U				and the second	U
127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U				10	U
127-10-4         Fondemolection           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					U
100 001         0 Interformation           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U			· ·		U
1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U			·····		U
1330-20-7         0-Xylene         10         U           100-42-5         Styrene         10         U					U
100-42-5 Styrene 10 U				10	U
				10	and the second sec
	79-34-5		le	10	U

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COMPOUND

CAS NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EST. CONC.

RT

Q

TENTATIVELY IDENTIFIED COMPOUNDS OS-4S Contract: HA Lab Name: CAS/ROCH SAS No.: _____ SDG No.: OS4S Case No.: R21-7196 Lab Code: 10145 Lab Sample ID: 468456 1.0 Matrix: (soil/water) WATER H8332.D Lab File ID: Sample wt/vol: 5.0 (g/ml) <u>ML</u> Date Received: Level: (low/med) LOW Date Analyzed: 06/27/01 % Moisture: not dec. Dilution Factor: 1.0 GC Column: RTX502. ID: 0.53 (mm) Soil Aliquot Volume: (uL) Soil Extract Volume (uL) CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Number TICs found: 0

VOLATILE ORGANICS ANALYSIS DATA SHEET           Lab Name:         CAS/ROCH         Contract: HA           Lab Code:         10145         Case No.: R21-7196         SAS No.: SOG No.: OS4S           Matrix:         Sol No.: MATER         Lab Sample ID: 468457 1.0           Sample w//vol:         5.0         (g/m)         Date Analyzed: 06/27/01           GC Column:         RTX502. ID: 0.53 (mm)         Dilution Factor: 1.0           Soil Extract Volume         (uL)         Soil Aliquot Volume: (uL)           CONCENTRATION UNITS:         CAS NO.         COMPOUND         (ug/		1A		MPLE NO.
Lab Code:         10145         Case No.:         R21-7196         SAS No.:         SDG No.:         OS4S           Matrix:         (sollwater)         WATER         Lab Sample ID:         468457 1.0           Sample wi/vol:         5.0         (g/m)) ML         Lab Sample ID:         468457 1.0           Level:         (low/med)         LOW         Date Received:			0	S-4d
Matrix: (soil/water)       WATER				
Matrix: (soil/water)       WATER	Lab Code: 10145	Case No.: <u>R21-7196</u> SAS No.:	SDG No.:	<u></u>
Sample wt/vol:         5.0         (g/ml)         Lab         File ID:         H8335.D           Level:         (low/med)         LOW         Date Received:			ole ID: 468457 1	.0
Level:         (low/med)         LOW         Date Received:           Level:         (low/med)         LOW         Date Analyzed:         06/27/01           GC Column:         RTX502.         ID:         0.53         (mm)         Dilution Factor:         1.0           Soil Extract Volume				
Construction         Constructis and	Sample wt/vol:	(9,)	the second s	
A modulo in RTX502.         D: $0.53$ (mm)         Dilution Factor: $1.0$ GC Column:         RTX502.         D: $0.53$ (mm)         Soil Aliquot Volume:         (uL)           Soil Extract Volume	Level: (low/med)	LOW Date Rece	eived:	
Soil Extract Volume         (uL)         Soil Aliquot Volume:         (uL)           Soil Extract Volume         (uL)         CONCENTRATION UNITS:         Q           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         .           75-01-4         Vinyl chloride         10         U         .           75-03         Chloromethane         10         U         .           75-80-3         Chloromethane         10         U         .           75-35-4         1,1-Dichloroethene         10         U         .           75-36-2         Methylene chloride         10         U         .           75-35-4         1,1-Dichloroethene         10         U         .           75-36-2         Methylene chloride         10         U         .           75-34-3         1,1-Dichloroethene         10         U         .           75-82         Butanone         10         U         .           75-85-1         1,1.1-Tichloroethane         10         U         .           71-15-5         Carbon tetrachloride         10         U         .	% Moisture: not dec.	Date Anal	yzed: 06/27/01	
Soil Extract Volume         (uL)         Soil Aliquot Volume:         (uL)           CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         .           75-01-4         Vinyl chloride         10         U         .           75-01-4         Vinyl chloride         10         U         .           75-00-3         Chloromethane         10         U         .           75-00-3         Chloroethane         10         U         .           75-00-3         Chloroethane         10         U         .           75-00-3         Chloroethene         10         U         .           75-01-4         Acetone         4         J         .           75-30-5         Carbon disulfide         10         U         .           75-31-6         Carbon disulfide         10         U         .           75-32-7         Butanone         10         U         .           75-6-3         Chloroethane         10         U         .           71-55-6         1,1,1-Trichloroethane         10         U	GC Column: RTX5	02. ID: 0.53 (mm) Dilution F	actor: <u>1.0</u>	
CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         .           75-01-4         Vinyl chloride         10         U         .           74-83-9         Bromomethane         10         U         .           74-83-9         Bromomethane         10         U         .           74-83-9         Bromomethane         10         U         .           75-00-3         Chloroethane         10         U         .           75-354         1,1-Dichloroethene         10         U         .           75-35-4         1,1-Dichloroethene         10         U         .           75-36-5         trans-1,2-Dichloroethene         10         U         .           75-36-3         1,1-Dichloroethane         10         U         .           76-66-3         Chloroform         10         U         .         .           78-93-3         2-Butanone         10         U         .         .           78-93-3         2-Butanone         10         U         .         .           70-06-2 <td></td> <td></td> <td>ot Volume:</td> <td>(uL)</td>			ot Volume:	(uL)
CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U           75-01-4         Vinyl chloride         10         U           76-03         Chloromethane         10         U           76-03         Chloroethane         10         U           67-64-1         Acetone         4         J           75-03         Chloroethene         10         U           75-04-3         1,1-Dichloroethene         10         U           75-50-2         Methylene chloride         10         U           75-51-0         Carbon disulfide         10         U           75-34-3         1,1-Dichloroethene         10         U           76-63-3         Chloroform         10         U           156-59-4         cis-1,2-Dichloroethane         10         U           17-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-43-2         Benzene         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloroprop	Soli Extract volume	(uz)		
CAS NO.       Colum Outpoint (signe or signe)		CONCENTRATION U	NITS:	
T4-87-3         Chloromethane         10         U           75-01-4         Vinyl chloride         10         U         .           75-01-4         Vinyl chloride         10         U         .           75-02-3         Chloroethane         10         U         .           75-03-3         Chloroethane         4         J         .           75-35-4         1,1-Dichloroethene         10         U         .           75-35-4         1,1-Dichloroethene         10         U         .           75-35-0         Carbon disulfide         10         U         .         .           75-34-3         1,1-Dichloroethane         10         U         .         .           78-83-3         2-Butanone         10         U         .         .         .           166-60-5         trans-1,2-Dichloroethane         10         U         .         .         .         .         .           78-83-3         2-Butanone         10         U         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         . <td>CAS NO</td> <td>COMPOUND (ug/L or ug/Kg) U</td> <td>G/L</td> <td>Q</td>	CAS NO	COMPOUND (ug/L or ug/Kg) U	G/L	Q
$14-67-3$ Ontofination $75-01-4$ Vinyl chloride       10       U $74-83-9$ Bromomethane       10       U $75-00-3$ Chloroethane       10       U $67-64-1$ Acetone       4       J $75-35-4$ $1,1$ -Dichloroethene       10       U $75-35-4$ $1,1$ -Dichloroethene       10       U $75-36-2$ Methylene chloride       10       U $75-36-3$ $1,1$ -Dichloroethene       10       U $156-60-5$ trans- $1,2$ -Dichloroethene       10       U $78-93-3$ $2$ -Butanone       10       U $76-63-3$ Chloroform       10       U $10^-06-2$ $1,2$ -Dichloroethane       10       U $71-65-6$ $1,1,1$ -Trichloroethane       10       U $71-45-6$ $1,1,1$ -Trichloroethane       10       U $71-43-2$ Benzene       10       U $74-32-5$ $1,2$ -Dichloropropene       10       U $74-32-5$ $1,2$ -Dichloropropene       10       U $74-32-5$ $1,2$ -Dichlorop	CAS NO.			
75-01-4         Vinyl chloride         10         U           74-83-9         Bromomethane         10         U           75-00-3         Chloroethane         10         U           67-64-1         Acetone         4         J           75-35-4         1,1-Dichloroethene         10         U           75-36-2         Methylene chloride         10         U           75-10         Carbon disulfide         10         U           75-36-3         1,1-Dichloroethene         10         U           75-37-3         2.Butanone         10         U           75-60-5         trans-1,2-Dichloroethene         10         U           75-34-3         1,1-Dichloroethane         10         U           76-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           74-32         Benzene         10         U           74-32         Benzene         10         U           74-43-2         Benzene         10         U           74-43-2         Benzene         10         U <td>74-87-3</td> <td>Chloromethane</td> <td></td> <td>and the second se</td>	74-87-3	Chloromethane		and the second se
74-83-9       Bromomethane       10       U         75-00-3       Chloroethane       10       U         67-64-1       Acetone       4       J         75-35-4       1,1-Dichloroethene       10       U         75-09-2       Methylene chloride       10       U         75-35-4       1,1-Dichloroethene       10       U         75-36-5       trans-1,2-Dichloroethene       10       U         75-34-3       1,1-Dichloroethane       10       U         75-34-3       1,1-Dichloroethane       10       U         75-38-3       2-Butanone       10       U         156-59-4       cis-1,2-Dichloroethene       10       U         167-66-3       Chloroform       10       U         107-06-2       1,2-Dichloroethane       10       U         71-43-2       Benzene       10       U         78-87-5       1,2-Dichloropropane       10       U         78-87-5       1,2-Dichloropropane       10       U         78-87-5       1,2-Dichloropropane       10       U         78-87-5       1,2-Dichloropropane       10       U         10061-01-5       cis-1,3-Dichloropropane<			and the second	and the second se
75-00-3         Chloroethane         10         U           67-64-1         Acetone         4         J           75-35-4         1,1-Dichloroethene         10         U           75-09-2         Methylene chloride         10         U           75-09-2         Methylene chloride         10         U           75-00-3         Carbon disulfide         10         U           75-05-2         Methylene chloride         10         U           75-05-3         trans-1,2-Dichloroethene         10         U           75-34-3         1,1-Dichloroethane         10         U           76-60-5         trans-1,2-Dichloroethene         10         U           166-59-4         cis-1,2-Dichloroethane         10         U           166-59-4         cis-1,2-Dichloroethane         10         U           176-63         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-43-2         Benzene         10         U           78-87-5         1,2-Dichloropropane         10         U           76-27-4         Bromodichloromethane         10         U           10061-01-5 <td></td> <td></td> <td>10</td> <td></td>			10	
67.84-1         Acetone         4         J $75.35-4$ 1,1-Dichloroethene         10         U $75.35-4$ 1,1-Dichloroethene         10         U $75.15-0$ Carbon disulfide         10         U $156-60-5$ trans-1,2-Dichloroethene         10         U $75.34-3$ 1,1-Dichloroethane         10         U $75.34-3$ 1,1-Dichloroethane         10         U $76.33-3$ 2-Butanone         10         U $76.6-3$ Chloroform         10         U $67.66-3$ Chloroform         10         U $107.06-2$ 1,2-Dichloroethane         10         U $71.55-6$ 1,1,1-Trichloroethane         10         U $71.43-2$ Benzene         10         U $78.67-5$ 1,2-Dichloropropane         10         U $78.87-5$ 1,2-Dichloropropane         10         U $78.87-5$ 1,2-Dichloropropene         10         U $10061-02-6$ trans-1,3-Dichloropropene         10         U	and the second sec		10	and a second
75-35-4         1,1-Dichloroethene         10         U           75-09-2         Methylene chloride         10         U           75-15-0         Carbon disulfide         10         U           156-60-5         trans-1,2-Dichloroethene         10         U           75-34-3         1,1-Dichloroethane         10         U           78-93-3         2-Butanone         10         U           166-59-4         cis-1,2-Dichloroethane         10         U           17-53-6         1,1,1-Trichloroethane         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           71-43-2         Benzene         10         U           78-01-6         Trichloroethene         10         U           78-01-6         Trichloroethene         10         U           78-27-4         Bromodichloromethane         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-05         1,1,2-Trichloroethane         10         U			4	J
75-09-2         Methylene chloride         10         U           75-15-0         Carbon disulfide         10         U           156-60-5         trans-1,2-Dichloroethene         10         U           75-34-3         1,1-Dichloroethane         10         U           75-34-3         2-Butanone         10         U           166-59-4         cis-1,2-Dichloroethene         10         U           167-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           76-63-5         Carbon tetrachloride         10         U           71-55-6         1,1,1-Trichloroethane         10         U           71-65-6         1,1,1-Trichloroethane         10         U           78-75-5         Carbon tetrachloride         10         U           78-87-5         1,2-Dichloropropane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10 <td< td=""><td></td><td></td><td>10</td><td>U</td></td<>			10	U
75-15-0       Carbon disulfide       10       U $156-60-5$ trans-1,2-Dichloroethene       10       U $75-34-3$ 1,1-Dichloroethane       10       U $75-34-3$ 1,1-Dichloroethane       10       U $75-34-3$ 2-Butanone       10       U $156-59-4$ cis-1,2-Dichloroethene       10       U $67-66-3$ Chloroform       10       U $107-06-2$ 1,2-Dichloroethane       10       U $71-55-6$ 1,1,1-Trichloroethane       10       U $71-43-2$ Benzene       10       U $78-27-5$ Carbon tetrachloride       10       U $78-27-4$ Bromodichloromethane       10       U $75-27-4$ Bromodichloropropane       10       U $10061-01-5$ cis-1,3-Dichloropropene       10       U $10061-02-6$ trans-1,3-Dichloropropene       10       U $124-48-1$ Dibromochloromethane       10       U $124-48-1$ Dibromochloromethane       10       U $124-48-1$ Dibromochloromethane       10			10	U
156-60-5         trans-1,2-Dichloroethene         10         U           75-34-3         1,1-Dichloroethane         10         U           78-93-3         2-Butanone         10         U           156-59-4         cis-1,2-Dichloroethene         10         U           67-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           71-65-8         1,1,1-Trichloroethane         10         U           71-43-2         Benzene         10         U           78-87-5         1,2-Dichloropthane         10         U           78-87-5         1,2-Dichloroptopane         10         U           78-87-5         1,2-Dichloroptopane         10         U           1061-01-5         cis-1,3-Dichloroptopene         10         U           10061-02-6         trans-1,3-Dichloroptopene         10         U           124-48-1         Dibromochloromethane         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-10-1         4-Methyl-2-pentanone         10         U			10	U
$75\cdot34\cdot3$ 1,1-Dichloroethane10U $78\cdot93\cdot3$ 2-Butanone10U $156\cdot59\cdot4$ cis-1,2-Dichloroethene10U $156\cdot59\cdot4$ cis-1,2-Dichloroethene10U $67\cdot66\cdot3$ Chloroform10U $107\cdot06\cdot2$ 1,2-Dichloroethane10U $71\cdot55\cdot6$ 1,1,1-Trichloroethane10U $56\cdot23\cdot5$ Carbon tetrachloride10U $71\cdot43\cdot2$ Benzene10U $79\cdot01\cdot6$ Trichloroethene10U $78\cdot87\cdot5$ 1,2-Dichloropropane10U $76\cdot27\cdot4$ Bromodichloromethane10U $10061\cdot01\cdot5$ cis-1,3-Dichloropropene10U $10061\cdot02\cdot6$ trans-1,3-Dichloropropene10U $10061\cdot02\cdot6$ trans-1,3-Dichloropropene10U $108\cdot10\cdot1$ 4-Methyl-2-pentanone10U $108\cdot88\cdot3$ Toluene10U $108\cdot88\cdot3$ Toluene10U $108\cdot90\cdot7$ Chlorobenzene10U $108\cdot90\cdot7$ Chlorobenzene10U $108\cdot90\cdot7$ Chlorobenzene10U $1030\cdot20\cdot7$ o-Xylene10U $1330\cdot20\cdot7$ o-Xylene10U $100\cdot42\cdot5$ Styrene10U			10	U
78-93-3       2-Butanone       10       U $156-59-4$ cis-1,2-Dichloroethene       10       U $67-66-3$ Chloroform       10       U $107-06-2$ 1,2-Dichloroethane       10       U $107-06-2$ 1,2-Dichloroethane       10       U $115-5-6$ 1,1,1-Trichloroethane       10       U $75-25-6$ Carbon tetrachloride       10       U $78-93-3$ Benzene       10       U $74-32-2$ Benzene       10       U $79-01-6$ Trichloroethene       10       U $78-87-5$ 1,2-Dichloropropane       10       U $75-27-4$ Bromodichloromethane       10       U $10061-01-5$ cis-1,3-Dichloropropene       10       U $10061-02-6$ trans-1,3-Dichloropropene       10       U $124-48-1$ Dibromochloromethane       10       U $124-48-1$ Dibromochloromethane       10       U $108-10-1$ 4-Methyl-2-pentanone       10       U $108-88-3$ Toluene       10       U			10	U
156-59-4         cls-1,2-Dichloroethene         10         U $67-66-3$ Chloroform         10         U $107-06-2$ 1,2-Dichloroethane         10         U $71-55-6$ 1,1,1-Trichloroethane         10         U $71-55-6$ 1,1,1-Trichloroethane         10         U $56-23-5$ Carbon tetrachloride         10         U $71-43-2$ Benzene         10         U $79-01-6$ Trichloroethene         10         U $78-87-5$ 1,2-Dichloropropane         10         U $78-87-5$ 1,2-Dichloropropane         10         U $10061-01-5$ cis-1,3-Dichloropropene         10         U $10061-02-6$ trans-1,3-Dichloropropene         10         U $79-00-5$ 1,1,2-Trichloroethane         10         U $79-00-5$ 1,1,2-Trichloroethane         10         U $108-10-1$ 4-Methyl-2-pentanone         10         U $108-88-3$ Toluene         10         U $108-90-7$ Chlorobenzene         10			10	U
130-39-4         Construction         10         U           67-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           56-23-5         Carbon tetrachloride         10         U           71-43-2         Benzene         10         U           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           75-25-2         Bromoform         10         U           75-25-2         Bromoform         10         U           108-80-3         Toluene         10         U           108-80-3         Toluene         10         U           108-80-7         Chlorobenzene         10         U           108-80-7         Chlorobenzen			and the second	U
07-06-3         Childron of the second stress of the secon				U
107-06-2 $1,2-Dichloroethane$ $10$ $U$ $71-55-6$ $1,1,1$ -Trichloroethane $10$ $U$ $71-53-6$ Carbon tetrachloride $10$ $U$ $71-43-2$ Benzene $10$ $U$ $79-01-6$ Trichloroethene $10$ $U$ $79-01-6$ Trichloropropane $10$ $U$ $78-87-5$ $1,2-Dichloropropane$ $10$ $U$ $75-27-4$ Bromodichloromethane $10$ $U$ $10061-01-5$ cis- $1,3$ -Dichloropropene $10$ $U$ $10061-02-6$ trans- $1,3$ -Dichloropropene $10$ $U$ $10061-02-6$ trans- $1,3$ -Dichloropropene $10$ $U$ $124-48-1$ Dibromochloromethane $10$ $U$ $122-48-1$ Dibromochloromethane $10$ $U$ $108-10-1$ $4$ -Methyl- $2$ -pentanone $10$ $U$ $108-88-3$ Toluene $10$ $U$ $108-88-3$ Toluene $10$ $U$ $108-90-7$ Chlorobenzene $10$ $U$ $10$				
71-33-5       1,1,1-11-11-11-11-11-11-11-11-11-11-11-1				and the second se
36-23-3         Combon retractioned         10         U           71-43-2         Benzene         10         U           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           75-25-2         Bromoform         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene				
71-43-2       Denzene         79-01-6       Trichloroethene       10       U         78-87-5       1,2-Dichloropropane       10       U         75-27-4       Bromodichloromethane       10       U         10061-01-5       cis-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         79-00-5       1,1,2-Trichloroethane       10       U         75-25-2       Bromoform       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U         108-80-7       Chlorobenzene       10       U         108-90-7       Chlorobenzene       10       U         1030-20-7       (m+p)Xylene       10       U         1330-20-7       o-Xylene       10       U         100-42-5       Styrene       10       U				and the second
79-01-6       Incluoidentene       10       U         78-87-5       1,2-Dichloropropane       10       U         75-27-4       Bromodichloromethane       10       U         10061-01-5       cis-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         79-00-5       1,1,2-Trichloroethane       10       U         124-48-1       Dibromochloromethane       10       U         75-25-2       Bromoform       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U         108-88-3       Toluene       10       U         127-18-4       Tetrachloroethene       10       U         108-90-7       Chlorobenzene       10       U         1030-20-7       (m+p)Xylene       10       U         1330-20-7       o-Xylene       10       U         1330-20-7       o-Xylene       10       U         100-42-5       Styrene       10       U				the second s
78-87-3         1,2-Dichloropropute         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           75-25-2         Bromoform         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U				
10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-90-7         Chlorobenzene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U				
10001-01-3         0.13-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U				
10001-02-0         trans-1,5-Diamotoproport           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           100-42-5         Styrene         10         U		cis-1,3-Dicnioropropene	and the second	
79-00-3       1,1,2- memore thane       10       U         124-48-1       Dibromochloromethane       10       U         75-25-2       Bromoform       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U         591-78-6       2-Hexanone       10       U         127-18-4       Tetrachloroethene       10       U         108-90-7       Chlorobenzene       10       U         100-41-4       Ethylbenzene       10       U         1330-20-7       (m+p)Xylene       10       U         100-42-5       Styrene       10       U				and the second sec
124-43-1         Distribution           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           100-42-5         Styrene         10         U			and the second	
75-25-2       Diomotorm       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U         591-78-6       2-Hexanone       10       U         127-18-4       Tetrachloroethene       10       U         108-90-7       Chlorobenzene       10       U         100-41-4       Ethylbenzene       10       U         1330-20-7       (m+p)Xylene       10       U         1330-20-7       o-Xylene       10       U         100-42-5       Styrene       10       U			where the second s	and the second se
108-10-1         Hittiny 2-pentation           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-890-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           10330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U				
108-88-3       1040hc         591-78-6       2-Hexanone       10       U         127-18-4       Tetrachloroethene       10       U         108-90-7       Chlorobenzene       10       U         100-41-4       Ethylbenzene       10       U         1330-20-7       (m+p)Xylene       10       U         100-42-5       Styrene       10       U	108-10-1			the second se
127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U	108-88-3	Toluene		
108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U	591-78-6	2-Hexanone		and the second
108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U	127-18-4	Tetrachloroethene	and the second	
100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U		Chlorobenzene		
1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U		Ethylbenzene		the second se
1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U				
100-42-5 Styrene 10 U			10	and and a second s
			10	
/9-34-5 1,1,2,2-1 Cit domotocitante	79-34-5	1,1,2,2-Tetrachloroethane	10	U

### FORMIVOA

		RGANICS ANALY		EPA SAMPLE	NO.
			COMPOUNDS Contract: HA	OS-4d	
Lab Name: CAS/R	UCH				
Lab Code: 10145	Cas	e No.: <u>R21-7196</u>	SAS No.:	SDG No.:	
Matrix: (soil/water)	WATER	•	Lab Sample	e ID: 468457 1.0	
Sample wt/vol:	5.0	(g/ml) <u>ML</u>	Lab File ID:	H8335.D	
Level: (low/med)	LOW		Date Recei	ved:	
% Moisture: not dec.			Date Analyz	zed: 06/27/01	
GC Column: RTX5	02. ID: 0.5	53 (mm)	Dilution Fac	xtor: <u>1.0</u>	
Soil Extract Volume	<b></b>	_ (uL)	Soil Aliquot	Volume:	(uL)
		CON	CENTRATION UN	ITS:	
		(ug/L	or ug/Kg) UG	/L	
Number TICs found:	0	_			
CAS NO.	COMPOU	IND	RT	EST. CONC.	Q

### FORM I VOA-TIC

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	1A		EPA SA		10.	
	VOLATILE ORGANICS ANAL		0	OS-3d		
Lab Name: CAS/RO		Contract: HA			<b>I</b>	
Lab Code: 10145	Case No.: R21-7196	SAS No.: \$	SDG No.:	JS4S		
Matrix: (soil/water)	WATER	Lab Sample ID	: <u>468458 1</u>	.0		
Sample wt/vol	5.0 (g/ml) ML	Lab File ID:	H8336.D			
•		Date Received	•			
Level: (low/med)						
% Moisture: not dec.		Date Analyzed	06/27/01			
GC Column: RTX5	02. ID: 0.53 (mm)	Dilution Factor	1.0			
Soil Extract Volume		Soil Aliquot Vo	lume.		(ul.)	
Soli Extract volume	(uc)	Obil Aliquot Vo	unio.		(46)	
	CON	ICENTRATION UNITS	•			
		_ or ug/Kg) UG/L		Q		
CAS NO.				~		
74-87-3	Chloromethane		10	U		
75-01-4	Vinyl chloride		10	U	]	
74-83-9	Bromomethane		10	U _		
75-00-3	Chloroethane		10	U	_	
67-64-1	Acetone		10	<u> </u>	4	
75-35-4	1,1-Dichloroethene	·····	10	<u> </u>	4	
75-09-2	Methylene chloride		10	<u>U</u>	4	
75-15-0	Carbon disulfide	-	10	U U	-	
156-60-5	trans-1,2-Dichloroethene	<u>e</u>	10 10	U U	-	
75-34-3	1,1-Dichloroethane 2-Butanone		10	U U	-	
<u>78-93-3</u> 156-59-4	cis-1,2-Dichloroethene		10	U	-	
67-66-3	Chloroform		10	Ŭ	1	
107-06-2	1,2-Dichloroethane		10	Ū	1	
71-55-6	1,1,1-Trichloroethane		10	U	1	
56-23-5	Carbon tetrachloride		10	U	]	
71-43-2	Benzene		10	U	]	
79-01-6	Trichloroethene		10	<u> </u>	_	
78-87-5	1,2-Dichloropropane		10	U	_	
75-27-4	Bromodichloromethane		10	<u> </u>	-	
10061-01-5	cis-1,3-Dichloropropene		10	U	4	
10061-02-6	trans-1,3-Dichloroprope	ne	10	<u> </u>	-	
79-00-5	1,1,2-Trichloroethane		10	U U	-	
124-48-1	Dibromochloromethane		<u>10</u> 10	<u> </u>	-	
75-25-2	Bromoform 4-Methyl-2-pentanone		10	U U	-	
108-88-3	Toluene		10	<u> </u>	-	
591-78-6	2-Hexanone		10	<u> </u>	-	
127-18-4	Tetrachloroethene		10	U	1	
108-90-7	Chlorobenzene		10	U	1	
100-41-4	Ethylbenzene		10	U	]	
1330-20-7	(m+p)Xylene		10	U		
1330-20-7	o-Xylene		10	U		
100-42-5	Styrene		10	U		
79-34-5	1,1,2,2-Tetrachloroetha	ne	10	U U		

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	,	VOLATILE (		1E CS ANAL)	YSIS DA	TA SHEET	•	EPA SAM	PLE NO.
Lab Name:	CAS/RO		VELY ID	ENTIFIED	COMP Contrac			OS-	3d
	-						~		
Lab Code:	10145		se No.: I	R21-7196	343	No.:	_ >	DG No.: <u>OS</u>	45
Matrix: (soil/w	water)	WATER	-		1	ab Sample	D:	468458 1.0	
Sample wt/vo	ol:	5.0	(g/ml)	ML	L	ab File ID:		H8336.D	
Level: (low/n	ned)	LOW			[	Date Receiv	ved:		
% Moisture:	not dec.	•••••••••••••••••••••••••••••••••••••••			[	Date Analyz	ed:	06/27/01	Source Service of State
GC Column:	RTX5	02. ID: 0.5	53 (m	m)	[	Dilution Fac	tor:	1.0	
Soil Extract \	/olume		_ (uL)		e e	Soil Aliquot	Volu	me:	(uL)
				CON		ATION UN	ITS:		
Number TICs	s found:	0		(ug/L	. or ug/K	g) <u>UG</u> /	/L		
CAS NO.		COMPOU	ND			RT	ES	T. CONC.	Q

			1/					EPA S	AMPLE	NO.
	١	VOLA	TILE ORGANICS	S ANALY	'SIS DAT	ra she	ET		20.00	
Lab Name:	CAS/RO	осн		(	Contract	: <u>HA</u>			DS-2S	
Lab Code:	10145		Case No.: <u>R2</u>	21-7196	SAS N	lo.:	SD	G No.:	OS4S	
Matrix: (soil/							ple ID: 4			
•	-						ID: +			
Sample wt/v	ol:	5.0	(g/ml) <u>M</u>	1L						
Level: (low/	med)	LO\	<u>N</u>		D	ate Re	ceived:			
% Moisture:	not dec.				D	ate Ana	alyzed: 0	6/27/01		
GC Column	: RTX5	02.	ID: <u>0.53</u> (mm)	)	D	ilution l	Factor: <u>1</u>	.0		
			(uL)		s	oil Alia	uot Volum	ne:		(uL)
	Volume		(ut)		-					. ,
				CON	CENTRA		UNITS:			
CACN	0		COMPOUND						Q	
CH2 M	J.			(uy/L	or uging	a/ _			~	
74-8	7-3		Chloromethane					10	U	
75-0			Vinyl chloride					10	·U	
74-8:			Bromomethane					10		-
75-00			Chloroethane					10	U	
67-6			Acetone					10	U	
75-3			1,1-Dichloroethe	ene				10	U	
75-0			Methylene chlor					10	U	
75-1			Carbon disulfide					10	U	
	60-5		trans-1,2-Dichlo		<u>,</u>			10	U	
75-3			1,1-Dichloroetha					10	U	
78-9			2-Butanone					10	U	
156-5			cis-1,2-Dichloro	othone				10	U	
67-6			Chloroform	ettiene				10	U	
	06-2		1,2-Dichloroetha	<u></u>				10	U	
			1,1,1-Trichloroe					10	U	
	5-6		Carbon tetrachl					10	U	
and the second	3-5	· · · · · · · · · · · · · · · · · · ·		Unue				10	U U	
71-4			Benzene Trichloroethene					10	U	
79-0								10		
78-8			1,2-Dichloropro					10		
75-2			Bromodichloron					10	U U	
and the second	<u>31-01-5</u>		cis-1,3-Dichloro					10	U U	
the second se	<u>31-02-6</u>		trans-1,3-Dichlo		Ie			10	U U	
79-0			1,1,2-Trichloroe							
	48-1		Dibromochloron	netnane				<u>    10    </u> 10		
75-2			Bromoform						U U	
	<u>10-1</u>		4-Methyl-2-pent	lanone	<u></u>		<u> </u>	10		
	88-3		Toluene					<u>10</u> 10		
	78-6		2-Hexanone							
	18-4		Tetrachloroethe				<u> </u>	10		
	-90-7		Chlorobenzene					10		
	41-4		Ethylbenzene	<u>,</u>				10		
	0-20-7		(m+p)Xylene				l	10		
	-20-7		o-Xylene					10		
	-42-5		Styrene				ļ	10	<u>U</u>	
79-3	4-5		1,1,2,2-Tetrach	loroethar	ne		1	10	<u> </u>	

### FORMIVOA

· · ·	1E VOLATILE ORGANICS A	NALYSIS DA	TA SHEET	-	EPA SAMPL	E NO.
	TENTATIVELY IDENTIFIED COMPOUNDS					
Lab Name: CAS/R	OCH	Contrac	t: <u>HA</u>			
Lab Code: 10145	Case No.: <u>R21-</u>	7196 SAS I	No.:	SD	G No.: OS4	<u> </u>
Matrix: (soil/water)	WATER	- <b>L</b>	ab Sample	e ID: 4	68460 1.0	
Sample wt/vol:	5.0 (g/ml) <u>ML</u>	L	ab File ID:	· -	18338.D	
Level: (low/med)	LOW	ſ	Date Receiv	ved: _		11201F
% Moisture: not dec.		ſ	Date Analyz	zed: C	06/27/01	
GC Column: RTX5	02. ID: <u>0.53</u> (mm)	ſ	Dilution Fac	tor: <u>1</u>	.0	
Soil Extract Volume	(uL)	S	Soil Aliquot	Volun	ne:	(uL)
		CONCENTR				
Number TICs found:	0	(ug/L or ug/K	g) <u>UG</u>	/L		
CAS NO.	COMPOUND		RT	EST	CONC.	Q

				EPA SA	MPLE N	0.
			VOLATILE ORGANICS ANALYSIS DATA SHEET	OS-1d		
		CAS/R		a de la companya de l		
Lab (	Code:	10145	Case No.: <u>R21-7196</u> SAS No.: SDC	3 No.: _	OS4S	
Matri	ix: (soil/	water)	WATER Lab Sample ID: 40	38461 1	.0	
			5.0 (g/ml) <u>ML</u> Lab File ID: <u>H</u>	8340 D		
Leve	l: (low/	med)	LOW Date Received:			
% M	oisture:	not dec.	Date Analyzed: 06	3/28/01		
GC C	Column	: RTX5	02. ID: 0.53 (mm) Dilution Factor: 1.	0		
				e'	(	ωL)
5011	Extract	volume	(uL) Soil Aliquot Volum	·	······ \	,uc)
			CONCENTRATION UNITS:			
		~			Q	
	CASN	0.	COMPOUND (ug/L or ug/Kg) UG/L		<u>v</u> e	
	74-8	7-3	Chloromethane	10	U	7
	75-0		Vinyl chloride	10	U.	1
	74-8		Bromomethane	10	U	]
	75-00	And the second se	Chloroethane	10	U	]
	67-64		Acetone	5	J	
	75-3	5-4	1,1-Dichloroethene	10	U	_
	75-0	9-2	Methylene chloride	10	U	
	75-1	5-0	Carbon disulfide	10	U	4
	156-	60-5	trans-1,2-Dichloroethene	10	U	_
	75-3-	4-3	1,1-Dichloroethane	10	U	4
	78-9	3-3	2-Butanone	10	U	4
	156-5		cis-1,2-Dichloroethene	10	U	4
	67-6		Chloroform	10	U	4
	summer and the second s	06-2	1,2-Dichloroethane	10	U	4
	71-5		1,1,1-Trichloroethane	10	U	4
	56-2		Carbon tetrachloride	10	<u> </u>	4
	71-4		Benzene	10	U U	-
	79-0		Trichloroethene	10	U U	-
	78-8		1,2-Dichloropropane	<u>   10     </u> 10	U U	-
	75-2		Bromodichloromethane cis-1,3-Dichloropropene	10	U U	-
		6 <u>1-01-5</u> 61-02-6	trans-1,3-Dichloropropene	10	U U	1
	79-0		1,1,2-Trichloroethane	10	U U	1
	124-		Dibromochloromethane	10	U U	1
	75-2		Bromoform	10	- U	1
	108-		4-Methyl-2-pentanone	10	U	1
	And the second s	88-3	Toluene	10	Ū	1
		78-6	2-Hexanone	10	U	1
	127-		Tetrachloroethene	10	U	]
	108-		Chlorobenzene	10	U	]
		41-4	Ethylbenzene	10	U	]
	- Junger and the state of the state	)-20-7	(m+p)Xylene	10	U	
		-20-7	o-Xylene	10	U	
	100-	42-5	Styrene	10	U	
	79-3	4-5	1,1,2,2-Tetrachloroethane	10	U	

### FORM I VOA

	١	OLATILE (	1E DRGANICS	ANALY	SIS DA	TA	SHEET		EPA SA	AMPLI	E NO.
	TENTATIVELY IDENTIFIED COMPOUNDS						C	OS-1d			
Lab Name:	CAS/RC	CH			Contrac	t:	HA				
Lab Code:	10145	Ca	se No.: <u>R21</u>	-7196	SAS	No.		_ SC	G No.:	OS4S	
Matrix: (soil/w	vater)	WATER	_		l	_ab	Sample	ID:	468461 1	.0	<b></b> ·
Sample wt/vo	ol:	5.0	(g/ml) ML			_ab	File ID:	-	H8340.D		
Level: (low/n	ned)	LOW	_		[	Dat	e Receiv	ed:			
% Moisture: r	not dec.				[	Dat	e Analyz	ed:	06/28/01		
GC Column:	RTX5	02. ID: 0.	53 (mm)		Ĩ	Dilu	ition Fac	tor:	1.0		
Soil Extract V	/olume		_ (uL)			Soi	I Aliquot	Volur	ne:		_ (uL)
					ICENTR _ or ug/K		ION UNI UG/				
Number TICs	s found:	0			/		<b>B</b> ¢11111111111111				·······
CAS NO.		COMPOL	JND				RT	ES	T. CONC	•	Q

	1A		EPA SAMPLE NO.		
	VOLATILE ORGANICS ANAL	YSIS DATA SHE	ET	OS-1S	
Lab Name: CAS/R		Contract: HA	the condemness of		
Lab Code: 10145	Case No.: R21-7196	SAS No.:	SDG No.:	OS4S	
Matrix: (soil/water)	WATER	Lab Sam	ple ID: 468462	1.0	
•		l ah File l	D: H8339.	<u></u> п	
	5.0 (g/ml) <u>ML</u>	-	Contrast of the second s		
Level: (low/med)	LOW	Date Rec	eived:		
% Moisture: not dec.		Date Ana	lyzed: 06/28/0	1	
GC Column: RTX5	502. ID: 0.53 (mm)	Dilution F	actor: 1.0		
Soil Extract Volume		Soil Alia	iot Volume:		(uL)
	(uL)	Convinge			()
	100	ICENTRATION L	JNITS:		
CAS NO.	COMPOUND (ug/l			Q	
CAS NU.			· · · / L	~	
74-87-3	Chloromethane		10	U	
75-01-4	Vinyl chloride		10	U	
74-83-9	Bromomethane		10	U	
75-00-3	Chloroethane		10	U	
67-64-1	Acetone		7	J	
75-35-4	1,1-Dichloroethene		10	U	
75-09-2	Methylene chloride		10	<u> </u>	
75-15-0	Carbon disulfide		10	U	
156-60-5	trans-1,2-Dichloroethen		10	<u> </u>	
75-34-3	1,1-Dichloroethane		10	<u> </u>	
78-93-3	2-Butanone		10	<u> </u>	
156-59-4	cis-1,2-Dichloroethene		10	<u> </u>	
67-66-3	Chloroform	·	10	<u> </u>	
107-06-2	1,2-Dichloroethane		10	<u> </u>	
71-55-6	1,1,1-Trichloroethane		10	U	
56-23-5	Carbon tetrachloride		10		
71-43-2	Benzene		10		
79-01-6	Trichloroethene		10	<u>U</u>	
78-87-5	1,2-Dichloropropane		<u> </u>		
75-27-4	Bromodichloromethane		10		
10061-01-5	cis-1,3-Dichloropropene		10		
10061-02-6	trans-1,3-Dichloroprope	ine ,	10		
79-00-5	1,1,2-Trichloroethane Dibromochloromethane		10	U	
124-48-1	Bromoform		10	<u> </u>	
75-25-2	4-Methyl-2-pentanone		10		
108-10-1	Toluene		10		
<u>108-88-3</u> 591-78-6	2-Hexanone		10	U	
127-18-4	Tetrachloroethene		10	U	
108-90-7	Chlorobenzene		10	U	
100-41-4	Ethylbenzene		10		
1330-20-7	(m+p)Xylene		10		
1330-20-7	o-Xylene		10	<u> </u>	
100-42-5	Styrene		10	U	-
79-34-5	1,1,2,2-Tetrachloroetha	ne	10	U	
10-04-0		1		<b></b>	

### FORM I VOA

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	in the second

#### VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

OS-1S Contract: HA Lab Name: CAS/ROCH SAS No.: SDG No.: OS4S Case No.: R21-7196 Lab Code: 10145 Lab Sample ID: 468462 1.0 WATER Matrix: (soil/water) Lab File ID: H8339.D Sample wt/vol: 5.0 (g/ml) ML Date Received: Level: (low/med) LOW Date Analyzed: 06/28/01 % Moisture: not dec. GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0 (uL) Soil Aliquot Volume: Soil Extract Volume _____ (uL)

#### CONCENTRATION UNITS:

Number TICs found: 1

(ug/L or ug/Kg) UG/L

EPA SAMPLE NO.

	S NO.	COMPOUND	RT	EST. CONC.	0
CA	5 NO.	COMPOUND	1.11	Lot: cono:	~
1.	001634-04-4	Propane, 2-methoxy-2-methyl-	9.29	260	JN

	1A	EPA SAM	PLE NO.
	VOLATILE ORGANICS ANALYSIS DATA SHEE	TRIP B	LANK
Lab Name: CAS/R			J
Lab Code: 10145	Case No.: <u>R21-7196</u> SAS No.:	SDG No.: OS	;4S
Matrix: (soil/water)	WATER Lab Samp	le ID: 468464 1.0	
Sample wt/vol	5.0 (g/ml) <u>ML</u> Lab File ID	D: H8341.D	
		Construction and the second	POT TO A DECEMBER OF
Level: (low/med)		eived:	
% Moisture: not dec.	Date Analy	yzed: 06/28/01	
GC Column: RTX5	02. ID: 0.53 (mm) Dilution Fa	actor: <u>1.0</u>	
Soil Extract Volume	(ul.) Soil Alique	ot Volume:	(uL)
	(u_)		(==)
	CONCENTRATION U	NITS:	
CAS NO.	COMPOUND (ug/L or ug/Kg) U(	G/L	Q
	(-3, 3, - 3)		-
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U.
74-83-9	Bromomethane	10	<u> </u>
75-00-3	Chloroethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	UUU
75-15-0	Carbon disulfide	<u> </u>	U
156-60-5	trans-1,2-Dichloroethene	10	U
75-34-3 78-93-3	1,1-Dichloroethane 2-Butanone	10	U
156-59-4	cis-1,2-Dichloroethene	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	Ū
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	(m+p)Xylene	10	U .
1330-20-7	o-Xylene	10	U
100-42-5	Styrene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U

### FORM I VOA

#### 1E

#### VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

TRIP BLANK Contract: HA Lab Name: CAS/ROCH SAS No.: SDG No.: OS4S 10145 Case No.: R21-7196 Lab Code: Lab Sample ID: 468464 1.0 Matrix: (soil/water) WATER H8341.D Lab File ID: 5.0 (g/ml) ML Sample wt/vol: Date Received: Level: (low/med) LOW Date Analyzed: 06/28/01 % Moisture: not dec. Dilution Factor: 1.0 GC Column: RTX502. ID: 0.53 (mm) Soil Aliquot Volume: (uL) Soil Extract Volume (uL) CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Number TICs found: 0 Q RT EST. CONC. CAS NO. COMPOUND

EPA SAMPLE NO.

				1E					
	V	OLATILE C	RGAN	CS ANAL	YSIS DAT	A SHEET		EPA SAMP	LE NO.
	010/06		VELY IC	DENTIFIED				COOLER E	BLANK
Lab Name:	CAS/RC	ОСН			Contract:				
Lab Code:	10145	Cas	e No.:	R21-7196	SAS N	o.:	_ SD	G No.: <u>OS4</u>	<u>S</u>
Matrix: (soil/w	vater)	WATER			La	ab Sample	ID: _	71983 1.0	
Sample wt/vo	ol:	5.0	(g/ml)	ML	La	ab File ID:	<u> </u>	-18342.D	
Level: (low/m	ned)	LOW			D	ate Receiv	ed: _		-
% Moisture: r	not dec.				D	ate Analyz	ed: (	06/28/01	
GC Column:	RTX50	02. ID: 0.5	<u>3</u> (n	nm)	D	ilution Fac	tor:	1.0	
Soil Extract V	/olume		_ (uL)		S	oil Aliquot	Volur	ne:	(uL)
				CON			TS:		
Number TICs	s found:	0		(ug/l	_ or ug/Ko	)) <u>UG/</u>	L		
CAS NO.		COMPOU	ND			RT	ES	r. conc.	Q

2A

### WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:	CAS/ROCH		Contract: HA	
Lab Code:	10145	Case No.: R21-719	6 SAS No.:	SDG No.: OS4S

_					
	EPA	SMC1	SMC2	SMC3	тот
	SAMPLE NO.	#	#	#	OUT
01	VBLK01	102	100	98	0
02	VBLK01MS	104	101	98	0
03	OS-4S	104	102	98	0
04	OS-4SMS	103	102	98	0
05	OS-4SMSD	104	102	98	0
06	OS-4D	104	102	98	0
07	OS-3D	102	101	97	0
08	OS-2D	101	102	96	0
09	OS-2S	101	102	97	0
10	OS-1S	101	103	97	0
11	OS-1D	101	105	95	0
12	TRIP BLANK	101	101	96	0
13	COOLER BLA	104	102	98	0

			QC LIMITS
SMC1	=	1,2-Dichloroethane-d4	(76-114)
SMC2	=	Toluene-d8	(88-110)
SMC3	=	Bromofluorobenzene	(86-115)

# Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

'95-1

#### 3A

### WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0.0	54	108	61 - 145
Benzene	50	0.0	52	104	76 - 127
Trichloroethene	50	0.0	50	100	71 - 120
Toluene	50	0.0	50	100	76 - 125
Chlorobenzene	50	0.0	52	104	75 - 130

	SPIKE	MSD	MSD			
	ADDED	CONCENTRATION	%	%	QC L	IMITS
COMPOUND	(ug/L)	(ug/L)	REC #	RPD #	RPD	REC.
1,1-Dichloroethene	50	52	104	4	14	61 - 145
Benzene	50	52	104	0	11	76 - 127
Trichloroethene	50	50	100	0	14	71 - 120
Toluene	50	51	102	2	13	76 - 125
Chlorobenzene	50	52	104	0	13	75 - 130

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

'95-1

CONCENTRATION UNITS:           CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .         .		1A		MPLE NO.
Lab Name:         CAS/ROCH         Contract:         HA           Lab Code:         10145         Case No.:         R21-7196         SAS No.:         SDG No.:         OSAS           Matrix:         (soliwater)         WATER         Lab Sample ID:         468456 1.0           Sample wt/vol:         5.0         (g/ml) ML         Lab Sample ID:         468456 1.0           Sample wt/vol:         5.0         (g/ml) ML         Lab File ID:         H8333.D           Level:         (low/med)         LOW         Date Received:		VOLATILE ORGANICS ANALYSIS DATA SHE		
Matrix: (soil/water)         WATER         Lab Sample ID:         468456 1.0           Sample wt/vol:         5.0         (g/ml) ML         Lab File ID:         H8333.D           Level: (low/med)         LOW         Date Received:	Lab Name: CAS/	ROCH Contract: HA		ISMS
Matrix: (soli/water)         WATER         Lab Sample ID: <u>468456 1.0</u> Sample wt/vol:         5.0         (g/ml) ML         Lab File ID:         H8333.D           Level: (low/med)         LOW         Date Received:	Lab Code: 1014	5 Case No.: R21-7196 SAS No.:	SDG No.: O	S4S
			ple ID: 468456 1.0	)
Sumport in Stating         Image: Control of the state in the s	•		ID: H8333.D	
% Moisture: not dec.         Date Analyzed:         06/27/01           GC Column:         RTX502.         D:         0.53         (mm)         Dilution Factor:         1.0           Soil Extract Volume         (uL)         Soil Aliquot Volume:         (uL)           Soil Extract Volume         (uL)         Soil Aliquot Volume:         (uL)           CONCENTRATION UNITS:         CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U			Contraction of the second s	
GC Column:         RTX502_         ID:         0.53         (mm)         Dilution Factor:         1.0           Soil Extract Volume	Level: (low/med)			
Soil Extract Volume         (uL)         Soil Aliquot Volume:         (uL)           Soil Aliquot Volume:         (uL)           CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         74-87-3         Q           74-83-9         Bromomethane         10         U         Q           74-83-9         Bromomethane         10         U         Q           75-01-4         Vinyl chloride         10         U         Q           75-35-4         1,1-Dichloroethane         10         U         Q           75-35-4         1,1-Dichloroethene         54         T         Q           75-02         Methylene chloride         10         U         Q         T           75-15-0         Carbon disulfide         10         U         Q         T         T         T         Soil Aliquot Volume:         Q         T           76-80-3         Chloroethane         10         U         T         T         T         Soil Aliquot U         T         T         T         Soil Aliquot U         T         T         Soil Aliquot U<	% Moisture: not de	c Date Ana	alyzed: <u>06/27/01</u>	
Soil Extract Volume         (uL)         Soil Aliquot Volume:         (uL)           CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         Q           74-87-3         Chloromethane         10         U         Q           74-87-3         Chloromethane         10         U         Q           74-87-3         Chloroethane         10         U         Q           74-83-9         Bromomethane         10         U         Q           75-00-3         Chloroethane         10         U         Q           75-08-2         Methylene chloride         10         U         Q           75-15-0         Carbon disulfide         10         U         Q           75-34-3         1,1-Dichloroethene         10         U         Q           76-66-3         Chloroform         10         U         Q         Q           71-55-6         1,1,1-Trichloroethane         10         U         Q         Q           71-62-2         Carbon disulfide         10         U         Q         Q         Q         Q	GC Column: RTX	(502. ID: 0.53 (mm) Dilution F	Factor: 1.0	
CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         7           74-87-3         Chloromethane         10         U         7           74-87-3         Chloromethane         10         U         7           74-83-9         Bromomethane         10         U         7           75-35-4         1.1-Dichloroethene         54         7         7           75-35-4         1.1-Dichloroethene         10         U         1           75-35-4         1.1-Dichloroethene         10         U         1         1           75-15-0         Carbon disulfide         10         U         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1<			uot Volume:	(uL)
CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U           75-01-4         Vinyl chloride         10         U           74-83-9         Bromomethane         10         U           75-00-3         Chloroethane         10         U           67-64-1         Acetone         6         J           75-35-4         1.1-Dichloroethene         54         J           75-36-2         Methylene chloride         10         U           175-35-4         1.1-Dichloroethene         10         U           175-34-3         1.1-Dichloroethane         10         U           156-60-5         trans-1,2-Dichloroethane         10         U           166-89-4         cis-1,2-Dichloroethane         10         U           175-56         1,1,1-Trichloroethane         10         U           171-43-2         Benzene         52         J           79-01-6         Trichloroethane         10         U           174-43-2         Benzene         10         U           174-43-2         Benzene         10         U           174-43-2 <td< td=""><td></td><td></td><td></td><td>-</td></td<>				-
74-87-3         Chloromethane         10         U           74-87-3         Chloromethane         10         U           74-83-9         Bromomethane         10         U           75-00-3         Chloroethane         6         J           75-00-3         Chloroethane         6         J           75-35-4         1,1-Dichloroethene         54         T           75-09-2         Methylene chloride         10         U           75-15-0         Carbon disulfide         10         U           75-35-4         1,1-Dichloroethene         10         U           75-36-5         trans-1,2-Dichloroethene         10         U           75-36-6         trans-1,2-Dichloroethene         10         U           75-36-3         Chloroform         10         U           76-66-5         trans-1,2-Dichloroethane         10         U           106-69-2         1,2-Dichloroethane         10         U           1156-59-4         cis-1,2-Dichloroethane         10         U           1166-59-4         cis-1,2-Dichloroethane         10         U           117-55-6         1,1,1-Trichloroethane         10         U           107-		CONCENTRATION	JNITS:	
74-87-3       Chloromethane       10       U         75-01-4       Vinyl chloride       10       U         75-01-4       Vinyl chloride       10       U         75-01-3       Chloroethane       10       U         75-00-3       Chloroethane       6       J         75-03-4       1,1-Dichloroethene       54       54         75-05-2       Methylene chloride       10       U         75-15-0       Carbon disulfide       10       U         75-34-3       1,1-Dichloroethene       10       U         75-34-3       1,1-Dichloroethane       10       U         75-35-4       1.1-Dichloroethane       10       U         75-35-5       Carbon disulfide       10       U         75-35-4       1.2-Dichloroethane       10       U         75-35-5       1.2-Dichloroethane       10       U         107-06-2       1.2-Dichloroethane       10       U         107-06-2       1.2-Dichloroethane       10       U         71-43-2       Benzene       52       79-01-6         78-87-5       1.2-Dichloropropene       10       U         10061-01-5       cis-1.3-Dichloroprope	CAS NO.	COMPOUND (ug/L or ug/Kg) (	JG/L	Q
74-01-3       Univ) chloride       10       U $74-83-9$ Bromomethane       10       U $75-00-3$ Chloroethane       10       U $67-64-1$ Acetone       6       J $75-35-4$ 1,1-Dichloroethene       54       J $75-35-4$ 1,1-Dichloroethene       10       U $75-35-4$ 1,1-Dichloroethene       10       U $75-35-4$ 1,1-Dichloroethene       10       U $75-35-4$ 1,1-Dichloroethene       10       U $75-34-3$ 1,1-Dichloroethene       10       U $75-34-3$ 1,1-Dichloroethane       10       U $75-34-3$ 1,1-Dichloroethane       10       U $76-33-3$ 2-Butanone       10       U $156-59-4$ cis-1,2-Dichloroethane       10       U $107-06-2$ 1,2-Dichloroethane       10       U $71-45-6$ 1,1,1-Trichloroethane       10       U $71-45-6$ 1,2-Dichloropropane       10       U $78-87-5$ 1,2-Dichloropropane       10       U $75-2$	0,10,110.			
73-01-4       Unry onionize       10       U         74-83-9       Bromomethane       10       U         75-00-3       Chloroethane       10       U         67-64-1       Acetone       6       J         75-35-4       1,1-Dichloroethene       54         75-09-2       Methylene chloride       10       U         75-15-0       Carbon disulfide       10       U         75-34-3       1,1-Dichloroethene       10       U         75-34-3       1,1-Dichloroethene       10       U         75-34-3       1,1-Dichloroethane       10       U         76-60-5       trans-1,2-Dichloroethene       10       U         76-66-3       Chloroform       10       U         107-06-2       1,2-Dichloroethane       10       U         71-55-6       1,1.1-Trichloroethane       10       U         75-23-5       Carbon tetrachloride       10       U         71-43-2       Benzene       52       7         78-01-6       Trichloroethene       50       10         78-87-5       1,2-Dichloropropane       10       U         1061-01-5       cis-1,3-Dichloropropene       10	74-87-3			
7403-9       Domination       10       U $75-03-3$ Chloroethane       6       J $75-35-4$ $1,1$ -Dichloroethene       54       J $75-09-2$ Methylene chloride       10       U $75-10-C$ Carbon disulfide       10       U $75-15-0$ Carbon disulfide       10       U $156-60-5$ trans-1,2-Dichloroethane       10       U $75-34-3$ $1,1$ -Dichloroethane       10       U $75-34-3$ $1,1$ -Dichloroethane       10       U $75-34-3$ $1,2$ -Dichloroethane       10       U $76-63-3$ Chloroform       10       U $107-06-2$ $1,2$ -Dichloroethane       10       U $107-06-2$ $1,2$ -Dichloroethane       10       U $76-6-3$ Chloroform       10       U $76-76-3$ Chloropethane       10       U $76-76-3$ Chloropethane       10       U $76-76-3$ Chloropethane       10       U $76-75-1,2-10chloroethane       10       U       U         78-75-475-01-4$	75-01-4			
13-00-3       Ontoletratic $12$ $12$ $67-64-1$ Acctone $6$ $J$ $75-35-4$ $1,1-Dichloroethene$ $54$ $75-09-2$ Methylene chloride $10$ $U$ $75-35-4$ $1,1-Dichloroethene$ $10$ $U$ $75-35-4$ $1,1-Dichloroethene$ $10$ $U$ $156-60-5$ trans- $1,2-Dichloroethene$ $10$ $U$ $75-34-3$ $1,1-Dichloroethane$ $10$ $U$ $75-35-4$ $cis-1,2-Dichloroethene$ $10$ $U$ $78-93-3$ $2-Butanone$ $10$ $U$ $105-59-4$ $cis-1,2-Dichloroethene$ $10$ $U$ $107-06-2$ $1,2-Dichloroethane$ $10$ $U$ $107-06-2$ $1,2-Dichloroethane$ $10$ $U$ $71-43-2$ Benzene $52$ $79-01-6$ $7richloroethene$ $50$ $78-87-5$ $1,2-Dichloropropane$ $10$ $U$ $10061-01-5$ $cis-1,3-Dichloropropene$ $10$ $U$ $79-01-6$ $rans-1,3-Dichloropropene$ $10$ $U$	74-83-9			
07-04-1         Action           75-35-4         1,1-Dichloroethene         54           75-09-2         Methylene chloride         10         U           75-15-0         Carbon disulfide         10         U           156-60-5         trans-1,2-Dichloroethene         10         U           75-34-3         1,1-Dichloroethane         10         U           76-34-3         1,1-Dichloroethane         10         U           78-93-3         2-Butanone         10         U           156-59-4         cis-1,2-Dichloroethene         10         U           107-06-2         1,2-Dichloroethane         10         U           107-06-2         1,2-Dichloroethane         10         U           107-56-6         1,1,1-Trichloroethane         10         U           78-87-5         Carbon tetrachloride         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane         10         U           10661-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10661-02-6         trans-1,3-Di				
10         10         U           75-09-2         Methylene chloride         10         U           75-15-0         Carbon disulfide         10         U           156-60-5         trans-1,2-Dichloroethene         10         U           75-34-3         1,1-Dichloroethane         10         U           78-93-3         2-Butanone         10         U           156-59-4         cis-1,2-Dichloroethene         10         U           67-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           71-43-2         Benzene         52         79-01-6         Trichloroethene           79-01-6         Trichloroethene         50         78-87-5         1,2-Dichloropropane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U         10061-02-6         trans-1,3-Dichloropropene         10         U           108-88-3         Toluene         50         50         50         50         50           591-78-6         2-Hexanone         10         U         108-88-3         Tolue				J
73.03-2       Interface       10       U $75.15-0$ Carbon disulfide       10       U $156-60-5$ trans-1,2-Dichloroethane       10       U $75.34-3$ 1,1-Dichloroethane       10       U $76.34-3$ 2-Butanone       10       U $76.34-3$ 2-Butanone       10       U $76.34-3$ 2-Butanone       10       U $76.34-3$ 2-Butanone       10       U $156-59-4$ cis-1,2-Dichloroethane       10       U $107-06-2$ 1,2-Dichloroethane       10       U $107-06-2$ 1,2-Dichloroethane       10       U $71-55-6$ 1,1.1-Trichloroethane       10       U $71-43-2$ Benzene       52       79-01-6 $78-87-5$ 1,2-Dichloropropane       10       U $75-27-4$ Bromodichloromethane       10       U $10061-01-5$ cis-1,3-Dichloropropene       10       U $10061-02-6$ trans-1,3-Dichloropropene       10       U $108-10-1$ 4-Methyl-2-pentanone       10       U <t< td=""><td></td><td></td><td></td><td></td></t<>				
15:13:0         Darbor disabo           156-60-5         trans-1,2-Dichloroethene         10         U           75:34-3         1,1-Dichloroethane         10         U           78:93-3         2-Butanone         10         U           156-60-5         trans-1,2-Dichloroethene         10         U           156-59-4         cis-1,2-Dichloroethene         10         U           67:66-3         Chloroform         10         U           107:06-2         1,2-Dichloroethane         10         U           71:45-5         1,1,1-Trichloroethane         10         U           76:623-5         Carbon tetrachloride         10         U           71:43-2         Benzene         52         10           79:01-6         Trichloroethene         50         10           78:87:5         1,2-Dichloropropane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-10-1				
130-00-0         Items free brokenere         10         U           75-34-3         1,1-Dichloroethane         10         U           18-93-3         2-Butanone         10         U           156-59-4         cis-1,2-Dichloroethene         10         U           67-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           71-43-2         Benzene         52         2           79-01-6         Trichloroethene         50         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U				
78-93-3       2-Butanone       10       U $156-59-4$ cis-1,2-Dichloroethene       10       U $67-66-3$ Chloroform       10       U $107-06-2$ 1,2-Dichloroethane       10       U $107-06-2$ 1,2-Dichloroethane       10       U $71-55-6$ 1,1,1-Trichloroethane       10       U $71-55-6$ 1,1,1-Trichloroethane       10       U $71-43-2$ Benzene       52       50 $79-01-6$ Trichloroethene       50       50 $78-87-5$ 1,2-Dichloropropane       10       U $75-27-4$ Bromodichloromethane       10       U $10061-01-5$ cis-1,3-Dichloropropene       10       U $10061-02-6$ trans-1,3-Dichloropropene       10       U $10061-02-6$ trans-1,3-Dichloropropene       10       U $108-10-1$ 4-Methyl-2-pentanone       10       U $108-88-3$ Toluene       50       50 $591-78-6$ 2-Hexanone       10       U $108-90-7$ Chlorobenzene       52       10 <td< td=""><td></td><td></td><td></td><td></td></td<>				
108905         Libration           156-59-4         cis-1,2-Dichloroethene         10         U           67-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           56-23-5         Carbon tetrachloride         10         U           71-43-2         Benzene         52			And the second	
130-39-4         10         U           67-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           56-23-5         Carbon tetrachloride         10         U           71-43-2         Benzene         52         10         U           71-43-2         Benzene         50         10         U           71-43-2         Benzene         52         10         U           79-01-6         Trichloroethene         50         10         U           75-27-4         Bromodichloromethane         10         U         100           10061-01-5         cis-1,3-Dichloropropene         10         U         10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U         10         10           124-48-1         Dibromochloromethane         10         U         10         10         10           108-10-1         4-Methyl-2-pentanone         10         U         10         10         10           108-10-1         4-Methy				the second s
07-00-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           56-23-5         Carbon tetrachloride         10         U           71-43-2         Benzene         52         10         U           71-43-2         Benzene         52         10         U           71-43-2         Benzene         52         10         10         U           71-43-2         Benzene         50         10         U         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10			manufactory of the second s	
107-00-2         1,2 Distriction of the second				
56-23-5       Carbon tetrachloride       10       U         71-43-2       Benzene       52         79-01-6       Trichloroethene       50         78-87-5       1,2-Dichloropropane       10       U         10061-01-5       cis-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         124-48-1       Dibromochloromethane       10       U         124-48-1       Dibromochloromethane       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       50       50         591-78-6       2-Hexanone       10       U         108-90-7       Chlorobenzene       52       10         100-41-4       Ethylbenzene       10       U         1330-20-7       (m+p)Xylene       10       U         1330-20-7       o-Xylene       10       U         100-42-5       Styrene			Construction of the Association	and the second se
36-23-3         Carbon retraction         10         10           71-43-2         Benzene         50         10         10         10           79-01-6         Trichloroethene         50         10         10         10           78-87-5         1,2-Dichloropropane         10         10         10         10         10           75-27-4         Bromodichloromethane         10         10         10         10         10           10061-01-5         cis-1,3-Dichloropropene         10         10         10         10         10           10061-02-6         trans-1,3-Dichloropropene         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10				
1140 L         Dono           79-01-6         Trichloroethene         50           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         50         50           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         52         10           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10				
78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         50         50           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         52         10         U           1330-20-7         (m+p)Xylene         10         U         1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U         U         U				
75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         50         591-78-6         2-Hexanone           108-90-7         Chlorobenzene         52         10         U           108-90-7         Chlorobenzene         52         10         U           1330-20-7         (m+p)Xylene         10         U         10           1330-20-7         o-Xylene         10         U         10				
10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         50         50           591-78-6         2-Hexanone         10         U           108-90-7         Chlorobenzene         52         10           108-90-7         Chlorobenzene         52         10           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-41-4         Ethylbenzene         10         U           100-42-5         Styrene         10         U	and the second		the second se	and the second se
10001101-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         50         50           591-78-6         2-Hexanone         10         U           108-90-7         Chlorobenzene         52         10           108-90-7         Chlorobenzene         52         10           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U			and the second	
10001102-0         Italis 1,0-Districtoproportion         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         50         50           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         52         10           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           100-42-5         Styrene         10         U				and the second
13-00-3         1/1/2         Homerocatano           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         50         50           591-78-6         2-Hexanone         10         U           108-90-7         Chlorobenzene         52         10           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           100-42-5         Styrene         10         U			and the second	
12+401         Distribution of motion and the second state         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         50         50           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         52         10           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           100-42-5         Styrene         10         U				and the second data waited as a second
108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         50         50           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         52         10           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           100-42-5         Styrene         10         U				
108-88-3         Toluene         50           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         52         10           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           100-42-5         Styrene         10         U				
100 00         100 00         100 U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         52         10           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U	·			
127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         52         100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U         10         U           1330-20-7         o-Xylene         10         U         10         U           100-42-5         Styrene         10         U         10         U				U
108-90-7         Chlorobenzene         52           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U			Construction of the Constr	
100-01         Ethylbenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U				
1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U			and the second	U
1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U			the second s	U
100-42-5 Styrene 10 U				U
			10	U
			10	U

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		1A			EPA SA		10.
		RGANICS ANALY			os-4	ISMSD	
	AS/ROCH		Contract: <u>HA</u>	Contestantencerconstantistical Contestantistical Contestantistical Contestantistical Contestantistical Contesta			
Lab Code: 10	145 Case	No.: R21-7196	SAS No.:	SDC	∃ No.: _	DS4S	
	er) <u>WATER</u>			ple ID: 4			
				ID: H			
Sample wt/vol:	5.0	(g/ml) <u>ML</u>					
Lèvel: (low/me	d) LOW		Date Rec	eived:			
% Moisture: not	dec.	*•r	Date Ana	alyzed: 0	6/27/01		
GC Column:	RTX502. ID: 0.53	(mm)	Dilution F	Factor: 1	.0		
				uot Volum			(uL)
Soil Extract Vol	ume	(uL)			c		(uL)
		CON	CENTRATION	INITS			
						Q	
CAS NO.	COMPO	UND (ug/L	or ug/kg)	JG/L		Q	
74 07 0	Chloro	methane			10	U	
74-87-3 75-01-4	And and a sub-state of the	hloride			10	Ū	-
75-01-4		methane			10	Ū.	
75-00-3		ethane			10	U	
67-64-1					6	J	
75-35-4		hloroethene			52		
75-09-2		ene chloride			10	U	
75-15-0		n disulfide			10	U	
156-60-		,2-Dichloroethene	)		10	<u> </u>	
75-34-3		chloroethane			10	U	
78-93-3					10	<u> </u>	
156-59-4		-Dichloroethene			10	<u> </u>	
67-66-3		form	-		10	U	_
107-06-		chloroethane			10	U	
71-55-6		richloroethane			10	U	
56-23-5	Carbo	n tetrachloride			10	U	
71-43-2	Benze	ne			52		
79-01-6		proethene			50		
78-87-5		chloropropane			10	U U	
75-27-4		dichloromethane			10		
10061-0		-Dichloropropene			10		
10061-0		1,3-Dichloroproper	10		<u>10</u> 10	U	
79-00-5		Frichloroethane		<u> </u>	Contraction of the Association o		$\neg$
124-48-		nochloromethane		· · · · · · · · · · · · · · · · · · ·	<u>10</u> 10	U U	
75-25-2				<u> </u>	10	U	
108-10-	the second se	nyl-2-pentanone			51		
108-88-					10	U	
591-78		anone hloroethene			10	U U	
127-18		benzene			52	†	
108-90		enzene			10	U	-
100-41		Xylene		<u> </u>	10	U	$\neg$
1330-2					10	Ŭ	
1330-20					10	Ŭ	
100-42		2-Tetrachloroethai	ne	1	10	Ū	_
79-34-	<u>, کرارا ا</u>	L- I GUAUNOUOUNA				J	

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		1A			MPLE NO.
		OLATILE ORGANICS A	ANALYSIS DATA SHE Contract: HA	VBL	K01MS
Lab Name:				+ caracterization and the statement of the	
Lab Code:	10145	Case No.: R21-	-7196 SAS No.:	SDG No.:	0545
Matrix: (soil/w	ater)	WATER	Lab San	nple ID: VBLKMS	un est annu fait fait annu ann dt
-		5.0 (g/ml) <u>ML</u>	Lab File	ID: H8331.D	
			And an effective strategy and a second strategy an		
Level: (low/m	ied)	LOW	Date Re	ceived:	
% Moisture: n	ot dec.		Date An	alyzed: 06/27/01	
GC Column	RTX50	02. ID: 0.53 (mm)	Dilution	Factor: 1.0	
				uot Volume:	(ul.)
Soil Extract V	olume .	(uL)			(uc)
			CONCENTRATION	UNITS	
			(ug/L or ug/Kg)		Q
CAS NO.	•	COMPOUND	(ug/L of ug/ry)	00/2	<b>u</b>
74-87-	3	Chloromethane	An	10	U
75-01-		Vinyl chloride		10	U.
74-83-		Bromomethane		10	U _
75-00-		Chloroethane		10	U
67-64-		Acetone		10	U
75-35-	.4	1,1-Dichloroethen		53	
75-09-		Methylene chlorid	e	10	<u>U</u>
75-15-		Carbon disulfide	- 1	10	U U
156-60		trans-1,2-Dichloro		<u>10</u> 10	U
75-34-		1,1-Dichloroethan	<u>e</u>	10	U
78-93-		2-Butanone cis-1,2-Dichloroet	hono	10	<u> </u>
<u>156-59</u> 67-66-		Chloroform	liene	10	U
107-06	the second s	1,2-Dichloroethan	A	10	U
71-55-		1,1,1-Trichloroeth		10	U
56-23-		Carbon tetrachlor		10	U
71-43-		Benzene		51	
79-01-		Trichloroethene		50	
78-87-		1,2-Dichloropropa	ine	10	<u> </u>
75-27-	-4	Bromodichlorome		10	<u> </u>
10061		cis-1,3-Dichloropr		10	<u> </u>
10061		trans-1,3-Dichloro		10	<u> </u>
79-00-		1,1,2-Trichloroeth		10	<u>     U                               </u>
124-4		Dibromochlorome	sthane	10	U
75-25-		Bromoform 4-Methyl-2-pentar		10	<u> </u>
108-1		Toluene		50	
591-7		2-Hexanone		10	U
127-1		Tetrachloroethene	8	10	U
108-9	Contraction of the second second	Chlorobenzene	<u></u>	51	
100-4		Ethylbenzene		10	U
1330-	And the second se	(m+p)Xylene	· · · · · · · · · · · · · · · · · · ·	10	U
1330-2		o-Xylene		10	U
100-4		Styrene		10	U
79-34	5	1,1,2,2-Tetrachlo	roethane	10	U

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### WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:	CAS/ROCH			Contract:	HA			
Lab Code:	10145	Case No.:	R21-7196	SAS No	).:	SDG No.:	OS4S	
Matrix Spike	- EPA Sample I	No.: VBLK	01	_				

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0.0	53	106	61 - 145
Benzene	50	0.0	51	102	76 - 127
Trichloroethene	50	0.0	50	100	71 - 120
Toluene	50	0.0	50	100	76 - 125
Chlorobenzene	50	0.0	51	102	75- 130

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits  $O \longrightarrow 7 - 10 - 01$ RPD: \$ out of 5 outside limits Spike Recovery: \$ out of 10 outside limits COMMENTS:

#### FORM III VOA-1

		<b>4</b> A	EPA SAMPLE NO.	
	VC	LATILE METHOD BLA	NK SUMMARY	VBLK01
Lab Name:	CAS/ROCH		Contract: HA	
Lab Code:	10145	Case No.: R21-7196	SAS No.:	SDG No.: OS4S
Lab File ID:	H8330.D		Lab Samp	le ID: MET BLK
Date Analyz	ed: <u>06/27/01</u>	an a distance in the second	Time Anal	yzed: 18:06
GC Column:	RTX502. ID	: <u>0.53</u> (mm)	Heated P	urge: (Y/N) N
Instrument II	D: GCMS#1			

### THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

ſ	EPA	LAB	LAB	TIME
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
01	VBLK01MS	VBLKMS	H8331.D	18:45
02	OS-4S	468456 1.0	H8332.D	19:28
03	OS-4SMS	468456 1.0	H8333.D	20:11
04	OS-4SMSD	468456 1.0	H8334.D	20:54
05	OS-4D	468457 1.0	H8335.D	21:37
06	OS-3D	468458 1.0	H8336.D	22:20
07	OS-2D	468459 1.0	H8337.D	23:03
08	OS-2S	468460 1.0	H8338.D	23:45
09	OS-1S	468462 1.0	H8339.D	00:28
10	OS-1D	468461 1.0	H8340.D	01:11
11	TRIP BLANK	468464 1.0	H8341.D	01:53
12		471983 1.0	H8342.D	02:36

### COMMENTS

				1A			EPA SA		10.
				SIS DATA SH		VBLK01			
Lab Name:					Contract: <u>HA</u>	المرجعين فالمسترجين والمشار والمحجب أحاكم المراجع		and the second second second	
Lab Code:	10145		Case No.:	R21-7196	SAS No.:	S	DG No.:	DS4S	
Matrix: (soil/	water)	WATEF	ł		Lab Sa	mple ID:	MET BLK		
			*********	 КАТ		-	H8330.D		
Sample wt/v			(g/m)	IVIL			firmental provide dealers a subscripts		
Level: (low/	med)	LOW	********		Date R	eceived:			
% Moisture:	not dec.			1	Date A	nalyzed:	06/27/01		
GC Column				nm)	Dilution	n Factor:	1.0		
				,, <b>,</b>					(uL)
Soil Extract	Volume		(uL)		5011 Ali	iquot voiu	ime:		(uL)
				CON					
	•							0	
CAS N	0.	CON	IPOUND	(ug/L	. or ug/Kg)			Q	
74-87	7-3	Ch	lorometha	ne			10	U	٦
75-0			yl chloride				10	U	
74-83			omometha				10	U	
75-00			loroethane		· · · · · · · · · · · · · · · · · · ·		10	U	
67-64			etone				10	U	
75-3			-Dichloroe	ethene			10	U	
75-0				nloride			10	U	
75-1			rbon disul				10	U	
156-0		tra	ns-1,2-Dic	hloroethene	Э		10	U	
75-34		1,1	-Dichloroe	ethane			10	U	
78-9	3-3	2-1	Butanone		· ·		10	U	
156-5	9-4	cis	-1,2-Dichle	proethene			10	U	
67-6	6-3	Ch	loroform				10	U	_
107-	06-2	1,2	2-Dichloroe	ethane	-		10	U	_
71-5	5-6	1,1	,1-Trichlo	roethane			10	U	
56-2	3-5	Ca	rbon tetra	chloride			10	<u> </u>	_
71-4			nzene				10	U	_
79-0	1-6	Tri	chloroethe	ene			10	U	_
78-8	7-5	and the second se	2-Dichlorop				10	U	_
75-2	7-4			romethane			10	U	_
	1-01-5			oropropene			10	U	_
	1-02-6			hloroprope	ne		10	U	4
79-0			,2-Trichlo				10	U	_
124-				romethane			10	U	_
75-2			omoform				10	U	_
108-	and the second se		Methyl-2-p	entanone			10	U	_
108-			luene				10	U	4
591-			lexanone				10	<u> </u>	4
	18-4		trachloroe				10	U	4
the second se	90-7	and the second	lorobenze		· .		10	U	4
100-		and the second s	nylbenzen				10	<u>U</u>	4
	)-20-7		+p)Xylene			<u> </u>	10	<u> </u>	-
	-20-7		Kylene				10	U	4
and the second se	42-5	Contraction of the local data and the local data an	vrene				10	<u> </u>	4
79-3	4-5	1,	1,2,2-Tetra	chloroethar	ne		10	U	

### FORMIVOA

	١	OLATILE		E S ANAL`	YSIS DA	TA SHEET	•	EPA SAMP	LE NO.
		TENTAT	IVELY IDE	NTIFIE	COMP	OUNDS		VBLK	01
Lab Name:	CAS/RO	CH			Contrac	t: <u>HA</u>			
Lab Code:	10145	Ca	se No.: R	21-7196	SASI	No.:	si	DG No.: <u>OS4</u>	S
Matrix: (soil/	water)	WATER	_		L	ab Sample	D:	MET BLK	
Sample wt/v	ol:	5.0	(g/ml) <u>N</u>	/L	L	ab File ID:		H8330.D	
Level: (low/	med)	LOW	_		[	Date Receiv	ved:		
% Moisture:	not dec.	-			C	Date Analyz	zed:	06/27/01	
GC Column:	RTX5	02. ID: <u>0.</u>	53(mm	1)	[	Dilution Fac	tor:	1.0	
Soil Extract	Volume		(uL)		5	Soil Aliquot	Volu	me:	(uL)
				CON	ICENTR	ATION UN	ITS:		
Number TIC	s found:	0		(ug/l	_ or ug/K	g) <u>UG</u> /	/L		
CAS NO.		COMPOL	JND			RT	ES	T. CONC.	Q

8A

### VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab N	ame: <u>CAS/RO</u>	СН		Contract: H/	٩		
Lab C	ode: 10145	Case No	.: R21-7196	SAS No.:	SDC	3 No.: <u>OS4S</u>	
Lab F	ile ID (Standard):	H8329.D	<b></b>		Date Analyze	ed: <u>06/27/01</u>	un esta a su esta da su
	ment ID: GCMS			-	Fime Analyz	ed: 17:02	
	olumn: RTX502		(mm)			e: (Y/N)N	1
		<u>.</u>					
		IS1		IS2		IS3	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR ST	277224	12.75	1320417	14.86	1050155	22.03
:	LOWER LIMIT	138612	12.25	660209	14.36	525078	21.53
	UPPER LIMIT	554448	13.25	2640834	15.36	2100310	22.53
	EPA SAMPLE						
	NO.						
01	VBLK01	277532	12.74	1315365	14.84	1042139	· 22.01
02	VBLK01MS	266402	12.73	1288452	14.85	1016657	22.02
03	OS-4S	264671	12.72	1279624	14.84	999201	22.01
04	OS-4SMS	259944	12.74	1264820	14.84	990513	21.99
05	OS-4SMSD	262727	12.72	1277557	14.84	996295	22.00
06	OS-4D	260445	12.74	1247765	14.84	978671	21.99
07	OS-3D	259918	12.72	1229931	14.83	975580	22.00
08	OS-2D	261302	12.72	1216145	14.84	967625	21.99
09	OS-2S	261066	12.73	1226796	14.84	956182	22.01
10	OS-1S	259441	12.72	1210412	14.84	945355	22.00
11	OS-1D	189159	12.72	977021	14.82	743160	21.99
12	TRIP BLANK	256691	12.72	1188300	14.82	944603	21.99
13	COOLER BLA	247060	12.72	1177612	14.84	928446	21.98

IS1

- Bromochloromethane
- IS2 IS3
- = 1,4-Difluorobenzene= Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area AREA LOWER LIMIT = - 50% of internal standard area RT UPPER LIMIT = +0.50 minutes of internal standard RT RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

FORM VIII VOA



A FULL SERVICE ENVIRONMENTAL LABORATORY

July 16, 2001

Mr. Robert Mahoney Haley & Aldrich of New York 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264

PROJECT: #70600-001 Submission #:R2107196

Dear Mr. Mahoney:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 07/16/01 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Bron ker

Karen Bunker Project Manager

Enc.



1 Mustard ST. Suite 250 Rochester, NY 14609

#### THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : Haley & Aldrich of New York Project Reference: #70600-001 Lab Submission # : R2107196 Reported : 07/16/01

## Report Contains a total of 133 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

# **SDG NARRATIVE**

#### CASE NARRATIVE COMPANY: Haley & Aldrich Project: #70600-001 CAS SUBMISSION#: R2107196

Samples were collected by the client on 6/18/01 and received at CAS on the same day as sampled within hours of collection at a cooler temperature of 14°C. All samples were received unbroken and with no bubbles in the vials.

#### **VOLATILE ORGANICS**

Seven (7) water samples and one (1) Trip Blank were analyzed for ASP Method 95-1 Volatiles and Library Searches. One Cooler Blank was also analyzed as required by the protocol.

All Tuning criteria for BFB were within QC limits.

All the Initial and Continuing Calibration Criteria were met for all analytes.

All Internal Standard Areas were within QC limits.

All Surrogate standard recoveries were within acceptance limits.

The holding time of 10 days from VTSR was met for all samples.

Site Specific QC was performed on locations OS-4s. The Matrix Spike/Matrix Spike Duplicate recoveries and % RPD were acceptable. All Reference Check sample recoveries were within QC limits.

The Laboratory Method Blanks, Trip Blank, and Cooler Blank were free from contamination of target compounds.

Hits between the CRDL and MDL of the compound are reported and flagged as "J". All Library Search hits are flagged as estimated, "J".

All sample aliquots were tested for proper preservation after analysis. All were found to be properly preserved to a pH of <2.

No other analytical or QC problems were encountered during the analysis of these samples.

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SDG #: OS4S	CASE No.:	BATCH CC	MPLETE: yes		DATE REVI	SED:		·
SUBMISSION			REQUESTED: Y_X N		DATE DUE:	7/9/01		
	Haley & Aldrich of New York				PROTOCOL:	ASP-B		
8	Karen Bunker		SEAL: PRESENT/ABSENT:		SHIPPING	No.:		
PROJECT :	#70600-001		CUSTODY: PRESENT/ABSENT:					
1 · · · · · · · · · · · · · · · · · · ·	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE	DATE	pН	00	REMARKS
						(SOLIDS	SOLIDS	SAMPLE CONDITION
468456	0S-4S	WATER	95-1 QC	6/18/01	6/18/01			
468457	OS-4d	WATER	95-1	6/18/01	6/18/01			
468458	0S-3d	WATER	95-1	6/18/01	6/18/01			
468459	OS-2d	WATER	95-1	6/18/01	6/18/01			
468460	0S-2S	WATER	95-1	6/18/01	6/18/01			
468461	OS-1d	WATER	95-1	6/18/01	6/18/01			
468462	0S-1S	WATER	95-1	6/18/01	6/18/01			
468464	TRIP BLANK	WATER	95-1	6/18/01	6/18/01			
471983	COOLER BLANK	WATER	95-1	6/19/01				
			······································					
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Effective 04/01/96

#### **CAS LIST OF QUALIFIERS**

#### (The basis of this proposal are the EPA-CLP Qualifiers)

- U Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J Indicates an estimated value. For further explanation see case narrative / cover letter.
- B This flag is used when the analyte is found in the associated blank as well as in the sample.
- E This flag identifies compounds whose concentrations exceed the calibration range.
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- N Spiked sample recovery not within control limits. (Flag the entire batch - Inorganic analysis only)
- * Duplicate analysis not within control limits.
   (Flag the entire batch Inorganic analysis only)
  - Also used to qualify Organics QC data outside limits.
- D Spike diluted out.
- S Reported value determined by Method of Standard Additions. (MSA)
- X As specified in the case narrative.

#### CAS Lab ID # for State Certifications

NY ID # in Rochester:
CT ID # in Rochester:
MA ID # in Rochester:
AIHA # in Rochester:

10145 PH0556 M-NY032 7889

 NJ ID # in Rochester:
 73004

 RI ID # in Rochester:
 158

 NH ID # in Rochester:
 294198-A

# CHAINS OF CUSTODY

# **INTERNAL CHAINS**

An ical Services Inc. An Employee-Owned Company One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (716) 288-5380 •				EST FOR	1	Contact
Project Name Project Number		ANALYS	IS REQUESTED (I	nclude Method Nu	mber and Containe	r Preservative)
Project Manager Bob Mahoney Report CC	PRESE	ERVATIVE				
Company/Address H 8	St		14 ⁸ 8082	A R R R R R R R R R R R R R R R R R R R	2 210	Preservative Key 0. NONE 1. HCL
200 Town (entre Dr. Suite 2 Rochester, NY 14623-4264 Phone # (716) 359-9000 Sampler's Signature CLIENT SAMPLE ID MSD (0S-45) MSD (0S-36) MGS (0S-65) MGS (	IX	GCM/S V04/S GCM/S V04/S GCM/S V04/S GCM/S SV04/S GC/V04/S GCV/G D 8270 D 8270	57495 10 608 57495 10 608 57495 15 908 108 57495 15 802 57495 15 82 1010 1010 1048 1010 51004	MASTE CHARACTERIZ	XXXXXXX CLP-ASP 95	2. HNO3         3. H2SO4         4. NãOH         5. Zn. Acetate         6. MeOH         7. NaHSO4         8. Other
05-15 468462 14:10 Trip Blank 468464 V - V	3				X	
SPECIAL INSTRUCTIONS/COMMENTS Metals (in sample IP D=BR & S=R in cases of alt. labeling	0B)	RUSH (SURC	REQUIREMENTS HARGES APPLY) 8 hr5 day E	I. Results Only	EQUIREMENTS	INVOICE INFORMATION
Fax preliminary results to Bob M. See QAPP -		REQUESTED REPORT	 DATE	V. Speicalized F	ion Report with Raw Data Forms / Custom Report	SPME R2107196 SUBMISSION #:
SAMPLE RECEIPT: CONDITION/COOLER TEMP: CUSTODY SU RELINDOUSHED BY RECEIVED BY RECEIV			VED BY		UISHED BY	RECEIVED BY
Printed Name Printed Name Printed Name		Printed Name		Printed Name		Printed Name Firm
$\frac{\operatorname{Firm}}{\operatorname{Date/Time}} 0 15:15 \operatorname{Firm} 18/01 15:15 \operatorname{Firm} 6/15/01 15$	515	Date/Time		Date/Time		Date/Time SCOC-0101-08

Haaln

					Analytical Serv ipt And Preserva		m	
Project	t/Client	HOA			-	lbmission Numbe	DOLOTION	)
Cooler	received on_	6/141 by:2	<i>M</i> A	5	COURIER: CA	S UPS FED	EX CD&L	ENT
1. 2. 3. 4. 5. 6. 7.	Were custod Did all bottl Did any VO Were Ice or Where did th	dy seals on outside dy papers properly es arrive in good c A vials have signif Ice packs present he bottles originate e of cooler(s) upor	filled o onditio icant ai ? ?	out (ink n (unbi r bubbl	roken)?	YE YE YE	S (NO S)NO S)NO S NO N/A S-NO S/ROC, CLIENT	
	Is the temperat	ture within 0° - 6° C?	:		Yes Yes	Yes 🗆	Yes 🛛 Yes 🗆	
	If No, Explai	n Below				No 🗆	No 🛛 No 🗖	
	Date/Time T	Temperatures Take	en:		6/18/10	1	515	
	Thermomete	er ID:	1	Cemp E	llank Sample B	ottle Cooler To	emp. IR. Gun	
If out of	Tennerature	e, Client Approval t	o Run S	omnlos				a a state for the state of the
٦. 4.	Were correc	e labels and tags ag t containers used f : Cassettes / Tub ncies:	or the t	ests inc	licated?	(Y	ES NO Bags Inflated N	
	na ya mata ana kata kata kata kata kata kata ka		YES	NO	Sample I.D.	Reagent	Vol. Added	] "
	pH	Reagent						_
	• 12	NaOH	ļ					_
	2	HNO3	-					
	2	H ₂ SO ₄	<u></u>	<u> </u>			97004 - 22 Santa Derhaderin geschstenningen Mitelitätististististe Aurosite	
Residua	l Chlorine (+/-)	for TCN & Phenol	<u> </u>	ļ				
	5-9*	P/PCBs (608 only)						
	ll samples OK justment is requi	NO = Sarr red, use NaOH and/or H		e preserv	ed at lab as listed	PC OK to adjust	pH	•
	(	C Vial pH Verification Tested after Analysis) Following Samples Exhibited pH > 2		*****				الله م الله م
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<u> </u>								
		And the second						I

Other Comments:

	INTERNAL	AF.	INS
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CLIENT NAME: Haley & Aldrich of New York

SDG#:	SU	JBMISSION: R2	2107196 I	DATE REC'D: 06/	18/01 15:15	i	
	order #	# OF CONTAINERS	RELINQUISHED BY	D RECEIVED BY	DATE TIME	STORA PH LOCAT	
95-1	468456	QC 9	MAC	(P	6/19/07 1215	<20	07/18/01
95-1	468457	3			1		07/18/01
95-1	468458	3					07/18/01
95-1	468459	2					07/18/01
95-1	468460	3					07/18/01
95-1	468461	3					07/18/01
95-1	468462	3					07/18/01
95-1	468464	3					07/18/01
95-1 (cooler Blank	<u>() 47198:</u>	3 3				1	

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Customer Sample	Laboratory Sample	Analytical Requirements* 95ASP PROTOCOL						
Code	Code							
		*VOA	*BNA	*VOA	*PEST	*METALS	*OTHER	
		GC/MS	GC/MS	GC	РСВ			
OS-4S	468456	Х						
OS-4d	468457	X						
OS-3d	468458	Х						
OS-2d	468459	X						
OS-2S	468460	Х						
OS-1d	468461	Х						
OS-1S	468462	Х	:					
TRIP BLANK	468464	Х						
<b>r</b>								
· .								
I								
							-	
			· · · · · · · · · · · · · · · · · · ·					

Check Appropriate Boxes

CLP, Non-CLP

*HSL, Priority Pollutant

NCF1

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SAMPLE PREPARATION AND ANALYSIS SUMMARY VOA ANALYSES

LABORATORY         MATRIX         DATE         DATE REC'D         LOW LEVEL         DATE ANALYZED           SAMPLE ID         WATER         06/18/01         06/18/01         LOW         06/27/01           468456         WATER         06/18/01         06/18/01         LOW         06/27/01           468458         WATER         06/18/01         06/18/01         LOW         06/27/01           468458         WATER         06/18/01         06/18/01         LOW         06/27/01           468460         WATER         06/18/01         06/18/01         LOW         06/27/01           468461         WATER         06/18/01         06/18/01         LOW         06/27/01           468461         WATER         06/18/01         06/18/01         LOW         06/28/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01         06/18/01         LOW         06/28/01           468464         WATER         06/18/01         LOW         06/28/01         LOW         06/28/01           46846	[		D 4			DATE
468456WATER06/18/0106/18/01LOW06/27/01468457WATER06/18/0106/18/01LOW06/27/01468458WATER06/18/0106/18/01LOW06/27/01468459WATER06/18/0106/18/01LOW06/27/01468460WATER06/18/0106/18/01LOW06/27/01468461WATER06/18/0106/18/01LOW06/27/01468462WATER06/18/0106/18/01LOW06/28/01		MATRIX				
468457WATER06/18/0106/18/01LOW06/27/01468458WATER06/18/0106/18/01LOW06/27/01468459WATER06/18/0106/18/01LOW06/27/01468460WATER06/18/0106/18/01LOW06/27/01468461WATER06/18/0106/18/01LOW06/28/01468462WATER06/18/0106/18/01LOW06/28/01						
468458         WATER         06/18/01         06/18/01         LOW         06/27/01           468459         WATER         06/18/01         06/18/01         LOW         06/27/01           468460         WATER         06/18/01         06/18/01         LOW         06/27/01           468461         WATER         06/18/01         06/18/01         LOW         06/27/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01	1					
468459         WATER         06/18/01         06/18/01         LOW         06/27/01           468460         WATER         06/18/01         06/18/01         LOW         06/27/01           468461         WATER         06/18/01         06/18/01         LOW         06/27/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01						
468460         WATER         06/18/01         06/18/01         LOW         06/27/01           468461         WATER         06/18/01         06/18/01         LOW         06/28/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01						
468461         WATER         06/18/01         06/18/01         LOW         06/28/01           468462         WATER         06/18/01         06/18/01         LOW         06/28/01						
468462 WATER 06/18/01 06/18/01 LOW 06/28/01	468460	WATER	06/18/01			
	468461	WATER	06/18/01	06/18/01	LOW	
468464         WATER         06/18/01         06/18/01         LOW         06/28/01           Image: Solution of the solution of	468462	WATER	06/18/01	06/18/01	LOW	06/28/01
Image: series of the series	468464	WATER	06/18/01	06/18/01	LOW	06/28/01
Image: series of the series						
Image: series of the series				-		
Image: series of the series						
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NCF5

5/91

#### SAMPLE PREPARATION AND ANALYSIS SUMMARY

#### ORGANIC ANALYSES

SAMPLE ID	MATRIX	ANALYTICAL	EXTRACTION	AUXILARY CLEAN UP	DIL/CONC FACTOR
		PROTOCOL	METHOD	CLEAN UP	
468456	WATER	95-1			1.0
468457	WATER	95-1			1.0
468458	WATER	95-1			1.0
468459	WATER	95-1		· · · · · · · · · · · · · · · · · · ·	1.0
468460	WATER	95-1			1.0
468461	WATER	95-1			1.0
468462	WATER	95-1	,		1.0
468464	WATER	95-1			1.0
			-		
1					
			·		
		· · · · · · · · · · · · · · · · · · ·			
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NCF2

9/89

# **VOLATILE ORGANICS**

# QC SUMMARY

### WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:	CAS/ROCH		Contract:	HA
Lab Code:	10145	Case No.: R21-7196	SAS No	SDG No.: OS4S

ſ	EPA	SMC1	SMC2	SMC3	тот
	SAMPLE NO.	#	#	#	OUT
01	VBLK01	102	100	98	0
02	VBLK01MS	104	101	98	0
03	OS-4S	104	102	98	0
04	OS-4SMS	103	102	98	0
05	OS-4SMSD	104	102	98	0
06	OS-4D	104	102	98	0
07	OS-3D	102	101	97	0
08	OS-2D	101	102	96	0
09	OS-2S	101	102	97	0
10	OS-1S	101	103	97	0
11	OS-1D	101	105	95	0
12	TRIP BLANK	101	101	96	0
13	COOLER BLA	104	102	98	0

			QC LIMITS
SMC1	n	1,2-Dichloroethane-d4	(76-114)
SMC2	=	Toluene-d8	(88-110)
SMC3	=	Bromofluorobenzene	(86-115)

# Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

page 1 of 1

FORM II VOA-1

#### 3A

#### WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CAS/ROCH

Contract: HA

Case No.: <u>R21-7196</u> SAS No.: _____ SDG No.: <u>OS4S</u> 10145 Lab Code:

Matrix Spike - EPA Sample No.: OS-4S

	SPIKE	SAMPLE	MS	MS	QC
	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
COMPOUND	(ug/L)	(ug/L)	(ug/L)	REC #	REC.
1,1-Dichloroethene	50	0.0	54	108	61- 145
Benzene	50	0.0	52	104	76 - 127
Trichloroethene	50	0.0	50	100	71 - 120
Toluene	50	0.0	50	100	76 - 125
Chlorobenzene	50	0.0	52	104	75- 130

	SPIKE	MSD	MSD			
	ADDED	CONCENTRATION	%	%	QC L	IMITS
COMPOUND	(ug/L)	(ug/L)	REC #	RPD #	RPD	REC.
1,1-Dichloroethene	50	52	104	4	14	61 - 145
Benzene	50	52	104	0	11	76 - 127
Trichloroethene	50	50	100	0	14	71 - 120
Toluene	50	51	102	2	13	76 - 125
Chlorobenzene	50	52	104	0	13	75 - 130

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

#### **4**A

EPA SAMPLE NO.

	VO	ATILE METHOD BLAI	NK SUMMARY	
Lab Name:	CAS/ROCH		Contract: <u>HA</u>	VBLK01
Lab Code:	10145	Case No.: R21-7196	SAS No.: SD	G No.: <u>OS4S</u>
Lab File ID:	H8330.D		Lab Sample ID: <u>I</u>	MET BLK
Date Analyze	ed: <u>06/27/01</u>		Time Analyzed:	18:06
GC Column:	RTX502. ID:	0.53 (mm)	Heated Purge: ()	(/N) <u>N</u>
Instrument II	D: GCMS#1			

## THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

ſ	EPA	LAB	LAB	TIME
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
01	VBLK01MS	VBLKMS	H8331.D	18:45
02	OS-4S	468456 1.0	H8332.D	19:28
03	OS-4SMS	468456 1.0	H8333.D	20:11
04	OS-4SMSD	468456 1.0	H8334.D	20:54
05	OS-4D	468457 1.0	H8335.D	21:37
06	OS-3D	468458 1.0	H8336.D	22:20
07	OS-2D	468459 1.0	H8337.D	23:03
08	OS-2S	468460 1.0	H8338.D	23:45
09	OS-1S	468462 1.0	H8339.D	00:28
10	OS-1D	468461 1.0	H8340.D	01:11
11	TRIP BLANK	468464 1.0	H8341.D	01:53
12	COOLER BLANK	471983 1.0	H8342.D	02:36

#### COMMENTS

#### 5A VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab Name:	CAS/ROCH			Contract: HA	
Lab Code:	10145	Case No.:	R21-7196	SAS No.: SDC	S No.: <u>OS4S</u>
Lab File ID:	H8319.D			BFB Injection Date	: 06/27/01
Instrument II	D: GCMS#1			BFB Injection Time	e: <u>09:55</u>
GC Column:	RTX502.2	D: 0.53	(mm)	Heated Purge: (Y/I	N) <u>N</u>

		% RELATIVE
m/e	ION ABUNDANCE CRITERIA	ABUNDANCE
50	15.0 - 40.0% of mass 95	18.9
75	30.0 - 60.0% of mass 95	47.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.2 ( 0.3)1
174	50.0 - 120.0% of mass 95	73.2
175	5.0 - 9.0% of mass 174	5.4 ( 7.4)1
176	95.0 - 101.0% of mass 174	73.5 (100.4)1
177	5.0 - 9.0% of mass 176	5.0 ( 6.9)2
L		2 Value is % mass 176

1-Value is % mass 174

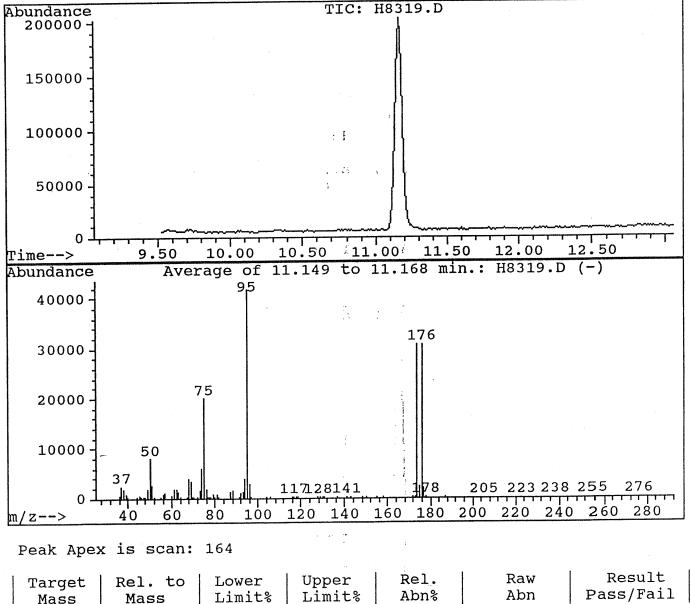
2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

Γ	EPA	LAB	LAB	DATE	TIME
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED	ANALYZED
01	VSTD010	VSTD010	H8321.D	06/27/01	11:12
02	VSTD020	VSTD020	H8322.D	06/27/01	11:54
03	VSTD050	VSTD050	H8323.D	06/27/01	12:37
04	VSTD100	VSTD100	H8324.D	06/27/01	13:20
05	VSTD200	VSTD200	H8325.D	06/27/01	14:02

FORM V VOA

Data File : J:\ACQUDATA\MSVOA1\DATA\062701\H8319.D Vial: 8 Operator: DLIPANI 9:55 am Acq On : 27 Jun 101 Inst : 5970 - In : TUNE CHECK Sample Multiplr: 1.00 Misc : '95-1



	Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
-	50 75 95 96 173 174 175 176 177	95 95 95 174 95 174 174 174	15 30 100 5 0 50 5 95 5	40 60 100 9 2 120 9 101 9	$ \begin{array}{c} 18.9\\ 47.7\\ 100.0\\ 6.7\\ 0.3\\ 73.2\\ 7.4\\ 100.4\\ 6.9 \end{array} $	$\begin{array}{c c} 7895\\ 19909\\ 41723\\ 2780\\ 83\\ 30544\\ 2246\\ 30651\\ 2101\end{array}$	PASS PASS PASS PASS PASS PASS PASS PASS
		ante allar como allas allas dallo allas éstes allas dade a					

H8319.D ASP0627.M Wed Jun 27 10:18:16 2001 TEST2

#### 5A VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab Name:	CAS/ROCH		Contract: HA	
Lab Code:	10145	Case No.: <u>R21-719</u>	6_ SAS No.: SDG	No.: <u>OS4S</u>
Lab File ID:	H8328.D		BFB Injection Date:	06/27/01
Instrument II	D: GCMS#1		BFB Injection Time:	16:28
GC Column:	RTX502.2 I	D: <u>0.53</u> (mm)	Heated Purge: (Y/N	) <u>N</u>

		% RELATIVE
m/e	ION ABUNDANCE CRITERIA	ABUNDANCE
50	15.0 - 40.0% of mass 95	17.6
75	30.0 - 60.0% of mass 95	47.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.1 ( 0.1)1
174	50.0 - 120.0% of mass 95	75.4
175	5.0 - 9.0% of mass 174	5.0 ( 6.7)1
176	95.0 - 101.0% of mass 174	73.3 ( 97.3)1
177	5.0 - 9.0% of mass 176	5.2 ( 7.1)2
L		% mass 176

1-Value is % mass 174

2-Value is % mass 176

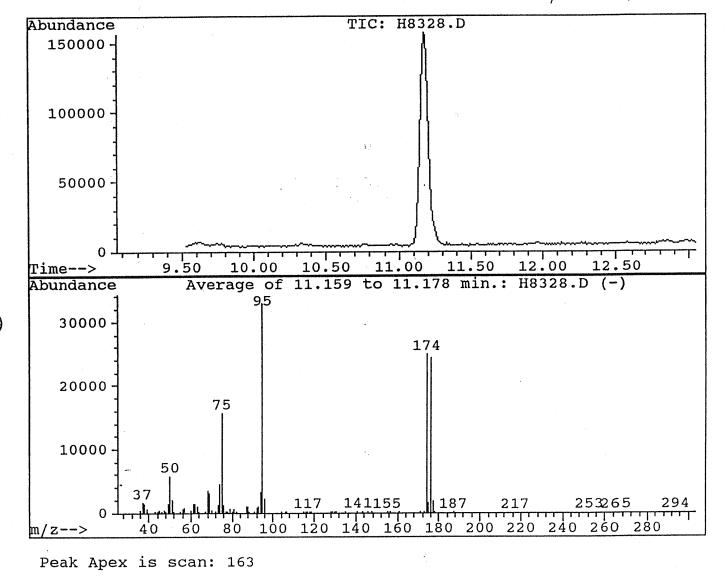
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

Γ	EPA	LAB	LAB	DATE	TIME
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED	ANALYZED
01	VSTD050	VSTD050	H8329.D	06/27/01	17:02
02	VBLK01	MET BLK	H8330.D	06/27/01	18:06
03	VBLK01MS	VBLKMS	H8331.D	06/27/01	18:45
04	OS-4S	468456 1.0	H8332.D	06/27/01	19:28
05	OS-4SMS	468456 1.0	H8333.D	06/27/01	20:11
06	OS-4SMSD	468456 1.0	H8334.D	06/27/01	20:54
07	OS-4D	468457 1.0	H8335.D	06/27/01	21:37
08	OS-3D	468458 1.0	H8336.D	06/27/01	22:20
09	OS-2D	468459 1.0	H8337.D	06/27/01	23:03
10	OS-2S	468460 1.0	H8338.D	06/27/01	23:45
11	OS-1S	468462 1.0	H8339.D	06/28/01	00:28
12	OS-1D	468461 1.0	H8340.D	06/28/01	01:11
13	TRIP BLANK	468464 1.0	H8341.D	06/28/01	01:53
14	COOLER BLANK	471983 1.0	H8342.D	06/28/01	02:36

Acq On	: J:\ACQUDATA\MSVOA1\DATA\062701\H8328.D : 27 Jun 101 4:28 pm : TUNE CHECK : '95-1	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
Method			

Method		J:\ACQUDATA\MSVOA1\METHODS\ASP0627.1
Title	:	CLPVOAS ON MS#1

Davidhipam



Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	5789	PASS
75	95	30	60	47.4	15609	PASS
95	95	100	100	100.0	32940	PASS
96	95	5	9	6.8	2240	PASS
173	174	0	2	0.1	33	PASS
174	95	50	120	75.4	24840	PASS
175	174	5	9	6.7	1659	PASS
176	174	95	101	97.3	24160	PASS
177	176	5	9	7.1	1725	PASS
	20 600 000 000 000 000 000 000 000 000 0	227 4210 4210 4210 4210 4220 4220 4220 4220				

24.

Wed Jun 27 16:49:28 2001 TEST2

VOLATILE ORGANICS INITIAL CALIBRATION DATA								
Lab Name: CAS/ROCH		Co	ntract: H	IA				
Lab Code: 10145 Case	(	SDG No.:	OS4S					
Instrument ID: GCMS#1	Cali	bration Da	ate(s):	06/	27/01	06/27/01		
	-	bration Ti	_		 11:12	1	4:02	
Heated Purge (Y/N): N	Can			an a			<del></del>	
GC Column: <u>RTX502.2</u> ID: <u>0.5</u>	<u>3</u> (mm	)						
LAB FILE ID RRF1	0 = H8	321.D	RRI	=20 = 1	-18322.D			
RRF50 = H8323.D RRF1	00 = H8	324.D	RRI	=200 = 1	H8325.D			
							%	
	00540	00000			RRF200	RRF	RSD	
COMPOUND	RRF10	RRF20	RRF50					
Chloromethane *	1.024	1.434	1.269	1.380	1.308	1.403	9.9 *	
vinyi chionde	1.100	1.143	1.075	1.270	1.166 1.366	1.164 1.269	11.7 *	
Bromomethane	1.000	1.234 1.067	1.225	1.454	0.996	1.039	4.3 *	
Chloroethane * Acetone *	1.071	0.736	0.667	0.517	0.424	0.618	23.1 *	
1,1-Dichloroethene *	0.740	1.332	1.254	1.392	1.320	1.323	3.7 *	
Methylene chloride *		1.585	1.471	1.524	1.404	1.530	6.6 *	
Carbon disulfide *		2.771	3.166	3.989	3.943	3.254	21.6 *	
trans-1,2-Dichloroethene *		1.524	1.443	1.551	1.455	1.505	3.5 *	
1,1-Dichloroethane *	2.649	2.595	2.491	2.669	2.511	2.583	3.1 *	
2-Butanone *	0.747	0.731	0.716	0.686	0.599	0.696	8.4 *	
cis-1,2-Dichloroethene *	1.639	1.626	1.540	1.626	1.508	1.588	3.7 *	
Chloroform *	3.054	2.984	2.836	3.010	2.824	2.942	3.6 *	
1,2-Dichloroethane *	2.564	2.453	2.325	2.451	2.263	2.411	4.9 *	
1,1,1-Trichloroethane *	0.474	0.488	0.482	0.526	0.509	0.496	4.3 *	
Carbon tetrachloride *	0.004	0.411	0.419	0.473	0.464	0.430	8.8 *	
Benzene *	1.002	1.037	0.979	1.039	1.002	1.028	3.8 *	
Trichloroethene *	0.405	0.402	0.378	0.399	0.378	0.392	<u> </u>	
1,2-Dichloropropane	0.525	0.314	0.299	0.325	0.318	0.316	12.1 *	
Biomoulcinoromemane	0.301	0.420	0.444	0.508	0.504	0.451	12.1	
cis-1,3-Dichloropropene *	0.356	0.394	0.422	0.435	0.477	0.420	18.9 *	
trans-1,3-Dichloropropene * 1,1,2-Trichloroethane *		0.321	0.284	0.306	0.288	0.296	3.4 *	
Dibromochloromethane *		0.330	0.376	0.439	0.431	0.375	16.5 *	
Bromoform *		0.198	0.249	0.311	0.304	0.245	26.1 *	
4-Methyl-2-pentanone *		0.364	0.364	0.389	0.372	0.369	3.5 *	
Toluene *		0.849	0.795	0.834	0.804	0.835	4.7 *	
2-Hexanone *		0.294	0.324	0.282	0.256	0.294	9.2 *	
Tetrachloroethene		0.453	0.420	0.434	0.413	0.436	4.7 *	
Chlorobenzene		1.033	0.969	1.011	0.959	1.007	4.3 *	
Ethylbenzene *		1.712	1.628	1.721	1.630	1.686	3.1 *	
(m+p)Xylene *	1.475	1.451	1.342	1.389	1.298	1.391	5.3 *	
o-Xylene *	1.432	1.451	1.372	1.424	1.349	1.418	4.1 *	
Styrene	1.000	1.020	0.970	1.025	0.972	1.004	3.0 *	
1,1,2,2-Tetrachloroethane	0.4/4	0.472	0.468	0.512	0.498	0.485	3.9 *	
1,2-Dichloroethane-d4	2.120	2.023	1.941	2.034	1.915	2.008	4.1 *	
Toluene-d8 *	1.000	1.311	1.276	1.322	1.284	1.310	<u>2.5</u> * 2.2 *	
Bromofluorobenzene	0.792	0.764	0.755	0.791	0.766	0.774	L.L	

6A

* Compounds with required minimum RRF and maximum %RSD values. All other compounds must meet a minimum RRF of 0.010. -EXCEPTION (%RSD)

#### 7A VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CAS/ROCH			Contract: HA		_	
Lab Code:	10145	Case No.:	R21-7196	SAS No.:	SDG N	o.: <u>OS4S</u>	
Instrument II	D: GCMS#1		Ca	libration Date:	06/27/01	Time:	17:02
Lab File ID:	H8329.D		Ini	t. Calib. Date(s):	06/	/27/01	06/27/01
Heated Purg	e: (Y/N)	<u>N</u>	Ini	t. Calib. Times:		11:12	14:02
GC Column:	RTX502.2	ID: 0.53	(mm)				

MAX MIN % D RRF RRF **RRF50** % D COMPOUND 1.305 7.0 1.403 Chloromethane 25.0 1.164 1.130 0.100 2.9 Vinyl chloride 1.1 1.269 1.255 0.100 25.0 Bromomethane -4.7 1.039 1.088 Chloroethane -39.3 0.618 0.861 Acetone 0.100 -1.3 25.0 1.323 1.339 1.1-Dichloroethene 1.524 0.4 1.530 Methylene chloride -7.3 3.254 3.491 Carbon disulfide -0.6 trans-1,2-Dichloroethene 1.505 1.515 25.0 1,1-Dichloroethane 2.583 2.608 0.200 -1.0 0.858 -23.3 0.696 2-Butanone -0.2 cis-1,2-Dichloroethene 1.591 1.588 0.5 25.0 0.200 2.926 Chloroform 2.942 25.0 2.411 2.376 0.100 1.4 1,2-Dichloroethane 0.491 0.100 0.9 25.0 0.496 1.1.1-Trichloroethane 3.2 25.0 0.416 0.100 0.430 Carbon tetrachloride 3.2 25.0 0.995 0.500 1.028 Benzene 25.0 0.376 0.300 4.1 Trichloroethene 0.392 0.306 3.3 0.316 1,2-Dichloropropane 0.0 25.0 0.200 0.451 0.451 Bromodichloromethane 0.200 -3.3 25.0 0.426 0.440 cis-1,3-Dichloropropene -5.3 25.0 0.387 0.100 0.367 trans-1,3-Dichloropropene 25.0 0.293 0.100 1.1 1,1,2-Trichloroethane 0.296 -3.0 25.0 0.375 0.386 0.100 Dibromochloromethane -8.9 25.0 0.245 0.267 0.100 Bromoform -5.7 0.390 4-Methyl-2-pentanone 0.369 0.400 25.0 0.835 0.798 4.4 Toluene -17.6 0.294 0.346 2-Hexanone 25.0 0.200 4.1 0.436 0.418 Tetrachloroethene 0.952 0.500 5.4 25.0 1.007 Chlorobenzene 2.4 25.0 0.100 1.686 1.644 Ethylbenzene 1.337 0.300 3.9 25.0 (m+p)Xylene 1.391 1.418 1.358 0.300 4.2 25.0 o-Xylene 2.5 0.300 25.0 1.004 0.979 Styrene 25.0 0.493 0.300 -1.6 1,1,2,2-Tetrachloroethane 0.485 1,2-Dichloroethane-d4 2.008 1.960 2.4 4.6 1.250 1.310 Toluene-d8 25.0 0.200 1.6 0.761 Bromofluorobenzene 0.774

All other compounds must meet a minimum RRF of 0.010.

'95-1 23

#### 8A VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab N	ame: <u>CAS/RO</u>	CH		Contract: H/	۹		
Lab C	ode: 10145	Case No	.: <u>R21-7196</u>	SAS No.:	SDC	S No.: OS4S	
Lab File ID (Standard): H8329.D Date Analyzed: 06/27/01							
Instru	ment ID: GCMS	#1		-	Fime Analyze	ed: 17:02	
	olumn: RTX502	and the set of the second s	(mm)	ł	Heated Purge	e: (Y/N)N	
ſ		IS1		IS2		IS3	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR ST	277224	12.75	1320417	14.86	1050155	22.03
	LOWER LIMIT	138612	12.25	660209	14.36	525078	21.53
	UPPER LIMIT	554448	13.25	2640834	15.36	2100310	22.53
	EPA SAMPLE						
	NO.						
01	VBLK01	277532	12.74	1315365	14.84	1042139	22.01
02	VBLK01MS	266402	12.73	1288452	14.85	1016657	22.02
03	OS-4S	264671	12.72	1279624	14.84	999201	22.01
04	OS-4SMS	259944	12.74	1264820	14.84	990513	21.99
05	OS-4SMSD	262727	12.72	1277557	14.84	996295	22.00
06	OS-4D	260445	12.74	1247765	14.84	978671	21.99
07	OS-3D	259918	12.72	1229931	14.83	975580	22.00
08	OS-2D	261302	12.72	1216145	14.84	967625	21.99
09	OS-2S	261066	12.73	1226796	14.84	956182	22.01
10	OS-1S	259441	12.72	1210412	14.84	945355	22.00
11	OS-1D	189159	12.72	977021	14.82	743160	21.99
12	TRIP BLANK	256691	12.72	1188300	14.82	944603	21.99
13	COOLER BLA	247060	12.72	1177612	14.84	928446	21.98

**IS1** 

- Bromochloromethane =
- IS2 **IS3**
- = 1,4-Difluorobenzene = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area AREA LOWER LIMIT = - 50% of internal standard area RT UPPER LIMIT = +0.50 minutes of internal standard RT RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

FORM VIII VOA

alyst: Dave Lipani				Water							<u>arran and blainedd</u>
· ·	Conc. ppb	IDI Sta #1	IDI 514 #2	IDL Std #3	IDI Std #4			IDI Std #	stdv	IDL	MEDIA
_ 4-11-2001 surr1 1,2-Dichloroethane	10.0	11.32	10.69	9.95	10.60	10.17	10.94	10.2	0.48	1,51	10.6
sun3 Toluene-d8	10.0	10.83	11.04	11.09	11.21	10.62	10.89	10.79	0.20	0.63	10.9
surr2-Bromofluorobenzene	10.0	10.63	10.65	10.71	10.34	10.17	10.38	10.22	0.22	0.69	10.4
Dichlorofluoromethane	10.0	10.03	11.03	10.00	9.83	8.94	9.16	8.96	0.88	2.76	9.8
Chloromethane	10.0	11.33	10.95	10.35	10.30	9.93	9.06	10.06	0.73	2.30	10.3
Vinyi Chloride	10.0	11.59	11.33	10.22	10.47	9.68	9.29	9.51	0.89	2.81	10.2
Bromomethane	10.0	9.38	10.85	9,75	9.51	9.00	9.08	8.96	0.66	2.08	9,4
Chloroethane	10.0	9.65	10.59	9,51	9,44	9.01	8.85	8.40	0.70	2.20	9.4
Trichlorofluoromethane	10.0	8.85	9.47	8,94	9.32	8.53	8.27	8.02	0.53	1.67	8.9
Freon 113	10.0	9.06	9.24	9.26	9.58	8,88	8.63	8.50	0.38	1.19	9.1
Acetone	10.0	4.78	5.87	6.75	5.28	5.95	5.92	5.06	0.67	2.09	5.9
1,1-Dichloroethene	10.0	9.33	9.37	9.65	9.71	9.13	8.71	8.83	0.38	1.20	9.3
Methyl Acetate	10.0	10.12	9.96	9.85	9,70	9.66	10.38	9.83	0.25	0.79	9.9
Methylene Chloride	10.0	10.08	9.81	10.12	10.26	9.64	9.49	9.59	0.30	0.94	9.8
Carbon Disulfide	10.0	8.62	8.54	8.40	8.78	7.8	7.67	7.62	0.49	1.54	8.4
Methyl tert-Butyl Ether	10.0	9.96	9.82	10.15	10.16	9.81	9.95	9.54	0.22	0.68	10.
trans-1,2-Dichloroethene	10.0	9.69	9.79	10.00	10.13	9.64	9.34	9.51	0.27	0.86	9.7
1,1-Dichloroethane	10.0	10.22	10.18	10.43	10.62	9.98	9.8	9.55	0.37	1.15	10.
2-Butanone	10.0	8.24	8.25	8.64	7.82	9.1	8.31	7.93	0.43	1.36	8.3
cis-1,2-Dichloroethene	10.0	10.93	10.92	10.97	11.11	10.39	10.16	10.1	0.42	1.33	10.
Chloroform	10.0	10.68	10.75	10.53	10.61	9.77	10.16	9.95	0.39	1.22	10.
Cyclohexane	10.0	11.14	10.83	10.36	10.71	10.59	10.42	9.97	0.37	1.18	10.
1,2-Dichloroethane	10.0	10.81	10.78	9.90	10.64	10.34	10.25	9.99	0.37	1.16	10.
1,1,1-Trichloroethane	10.0	10.01	9.89	9,96	10.73	9.8	9.81	10.1	0.32	1.01	10.
Carbontetrachioride	10.0	9.02	9.37	9.09	9.65	9.03	8.89	9.01	0.26	0,83	9.0
Benzene	10.0	10.86	10.98	10.51	11.45	11.08	10.66	10.93	0.30	0.95	10.
Trichloroethene	10.0	10.23	10.45	10.50	10.97	10.49	10.73	10.53	0.23	0.73	10.
Methylcyclohexane	10.0	10.49	10.79	10.18	10.88	10.53	10.92	10.68	0.26	0.82	10.
1,2-Dichloropropane	10.0	10.21	10.88	9.89	10.93	10.48	10.41	11.12	0.44	1.38	10.
Bromodichloromethane	10.0	9.33	9.21	9.02	9.11	9.16	9.02	9.5	0.17	0.55	9.3
cis-1,3-Dichloropropene	10.0	10.40	10.28	9.69	10.06	9.48	9.6	9.7	0.36	1.13	9.1
trans-1,3-Dichloropropene	10.0	9.74	9.51	9.29	9.63	9.44	9.31	9.61	0.17	0.53	9.
1,1,2-Trichloroethane	10.0	10.48	10.71	10.24	10.32	10.82	10.66	10.93	0.26	0.81	10.
Dibromochloromethane	10.0	8.47	8.99	8.63	8.50	8.71	8.77	8.84	0.19	0.58	8.
Bromoform	10.0	7.82	8.13	7.38	7.26	7.43	7.58	7.69	0.30	0.93	7.0
4-Methyl-2-Pentanone	10.0	10.17	10.13	10.38	10.46	10.58	10.92	10.6	0.27	0.86	10
Toluene	10.0	10.76	10.76	10.80	11.46	10.68	10.62	10.92	0.28	0.89	10
2-Hexanone	10.0	8.04	8.42	8.81	8.26	9.59	9.01	8.9	0.52	1.65	8.6
Tetrachloroethene	10.0	10.16	9.94	10.64	10.92	10.17	10.35	10.31	0.33	1.03	10.
1.2-Dibromoethane	10.0	10.01	9.98	10.40	10.58	10.19	10.51	10.43	0.24	0.76	10.
Chlorobenzene	10.0	10.56	10.57	10.98	11.07	10.75	10.65	10.63	0.20	0.64	10.
Ethylbenzene	10.0	10.85	10.99	10.54	11.19	10.88	10.8	10.48	0.25	0.77	10.
(m+p) Xylene	20.0	21.22	20.80	21.21	21.40	20.99	20.65	20.68	0.29	0.92	21.
o-Xyiene	10.0	10.46	10.61	10.38	10.38	10.43	10.22	10.29	0.13	0.39	10.
Styrene	10.0	10.53	10.62	10.55	10.69	10.43	9.88	10.24	0.28	0.88	10.
isopropylbenzene	10.0	10.56	10.66	10.39	10.69	10.54	10.33	10.31	0.15	0.49	10.
1,1,2,2-Tetrachloroethane	10.0	9.96	9.98	10.10	10.12	10.45	10.79	10.64	0.33	1.05	10.
1,3-Dichlorobenzene	10.00	10.44	10.67	10.34	10.60	10.39	10.14	9.92	0.26	0.81	10.
1,4-Dichlorobenzene	10.0	10.75	10.63	10.41	10.55	9.95	10.08	9.93	0.34	1.06	10.
1,2-Dichlorobenzene	10.0	10.25	10.68	10.35	10.61	10.36	10.28	9.88	0.26	0.82	10.
,2-Dibromo-3-Chloropropane		9.02	8.92	9.08	8.61	9.10	9.71	9.42	0.35	1.11	9.1
1,2,4-Trichlorobenzene	10.0	10.36	10.47	10.27	9.83	10.21	9.84	9.62	0.32	1.01	10.

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# **VOLATILE ORGANICS**

## SAMPLE DATA

1A			MPLE NO
		0	S-4S
Lab Name: CAS/ROCH			
Lab Code: 10145 Case No.: R21-71	96 SAS No.:	SDG No.:	OS4S
Matrix: (soil/water) WATER	Lab Sam	ole ID: 468456 1	.0
Sample wt/vol: 5.0 (g/ml) ML	Lah File I	D: H8332.D	
			****
Level: (low/med) LOW	Date Rec	eived:	
% Moisture: not dec.	Date Ana	lyzed: 06/27/01	
GC Column: RTX502. ID: 0.53 (mm)	Dilution F	actor: <u>1.0</u>	
Soil Extract Volume (uL)	Soli Aliqu		(ui
-			0
CAS NO. COMPOUND (I		G/L	Q
74-87-3 Chloromethane		10	U
75-01-4 Vinyl chloride		10	U
74-83-9 Bromomethane		. 10	U
75-00-3 Chloroethane		10	U
67-64-1 Acetone		6	J
75-35-4 1,1-Dichloroethene		10	U
75-09-2 Methylene chloride		10	U
75-15-0 Carbon disulfide		10	U
156-60-5 trans-1,2-Dichloroeth		10	U
75-34-3 1,1-Dichloroethane		10	U
78-93-3 2-Butanone		10	UU
156-59-4 cis-1,2-Dichloroether	10	<u> </u>	U
67-66-3 Chloroform		10	U
107-06-2 1,2-Dichloroethane		10	U
71-55-6 1,1,1-Trichloroethan 56-23-5 Carbon tetrachloride		10	U
56-23-5 Carbon tetrachloride 71-43-2 Benzene		10	U
79-01-6 Trichloroethene		10	U
78-87-5 1,2-Dichloropropane		10	U
75-27-4 Bromodichlorometha		10	U
10061-01-5 cis-1,3-Dichloroprop		10	U
10061-02-6 trans-1,3-Dichloropro		10	U
79-00-5 1,1,2-Trichloroethan		10	U
124-48-1 Dibromochlorometha	ine	10	U
75-25-2 Bromoform		10	U
108-10-1 4-Methyl-2-pentanon	е	10	U
108-88-3 Toluene		10	U
591-78-6 2-Hexanone		10	U
127-18-4 Tetrachloroethene	*	10	
108-90-7 Chlorobenzene		10	
100-41-4 Ethylbenzene		10	U
1330-20-7 (m+p)Xylene		<u> </u>	U U
1330-20-7 o-Xylene		10	U
100-42-5         Styrene           79-34-5         1,1,2,2-Tetrachloroe	thana	10	U
19-54-5 I, I, Z, Z- I Eliaciiloroe	Indito	I V	

'95-1

#### 1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

		TENTATI	VELY IDENTIFIE	COMPOU	NDS		
Lab Name:	CAS/RC	сн		Contract: H	HA	OS-4	5
Lab Code:	10145	Ca	se No.: <u>R21-7196</u>	SAS No.:	S	DG No.: OS4	S
Matrix: (soil/w	vater)	WATER		Lab	Sample ID:	468456 1.0	
Sample wt/vo	ol:	5.0	(g/ml) <u>ML</u>	Lab	File ID:	H8332.D	
Level: (low/m	ned)	LOW	_	Date	Received:		
% Moisture: n	not dec.			Date	Analyzed:	06/27/01	
GC Column:	RTX50	02. ID: 0.	53 (mm)	Dilut	ion Factor:	1.0	
Soil Extract V	/olume	and a substanting of the substantial substantial substantial substantial substantial substantial substantial su	(uL)	Soil	Aliquot Vol	ume:	(uL)
			CON		ON UNITS:		
Number TICs	found:	0	(ug/l	_ or ug/Kg)	UG/L		
CAS NO.		COMPOL	JND		RT E	ST. CONC.	Q

CAS NO.

#### Quantitation Report

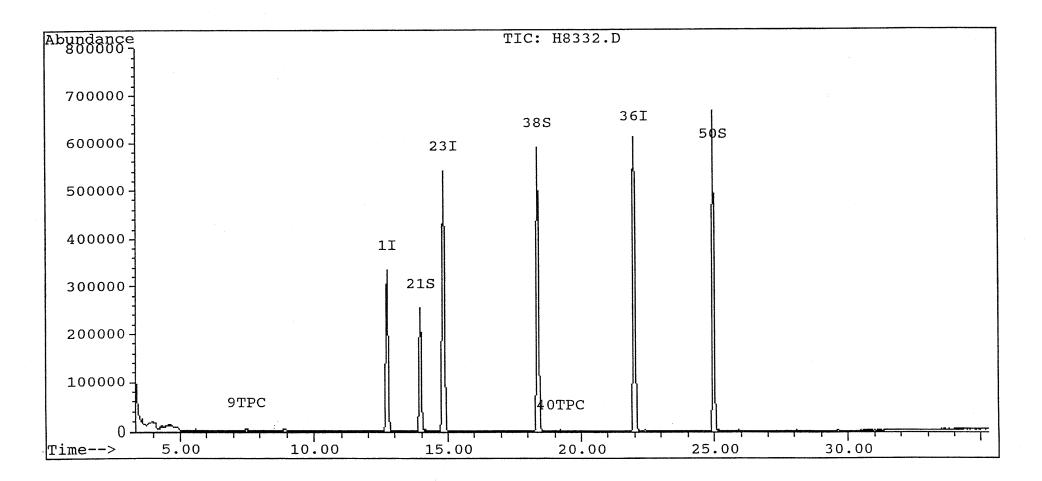
~		-			
Data File : J:\ACQUDATA\MSVOA1 Acq On : 27 Jun 101 7:28 Sample : 468456 1.0 Misc : HA '95-1 SDG:OS4S Quant Time: Jun 27 20:03 19101	pm EPA:OS·		\H8332.D	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
Method : J:\ACQUDATA\MSV Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 17:5 Response via : Single Level Ca	55:43 20	001	ASP0627.M		
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
System Monitoring Compounds	11.97 13.97 18.38	114 117 65 98	264671 1279624 999201 537370 1278684 746609	50.00 ug/l 50.00 ug/l 50.00 ug/l \$ 51.81 ug/l 51.19 ug/l 49.09 ug/l	-0.02 -0.02 Recovery 103.61% 102.38% 98.19%
Target Compounds 9) Acetone 40) 2-Hexanone	7.47 19.20 1 No	43	25956 9840		Qvalue 96 J # 35 @ 06/28/01

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Data File	:	J:\ACQUDATA\MSVOA1\DATA\062701\H8332.D	Vial:	14
Acq On	:	27 Jun 101 7:28 pm	Operator:	
Sample	:	468456 1.0		5970 - In
Misc	:	HA '95-1 SDG:OS4S EPA:OS-4S	Multiplr:	1.00
Quant Time	€:	Jun 27 20:03 19101		

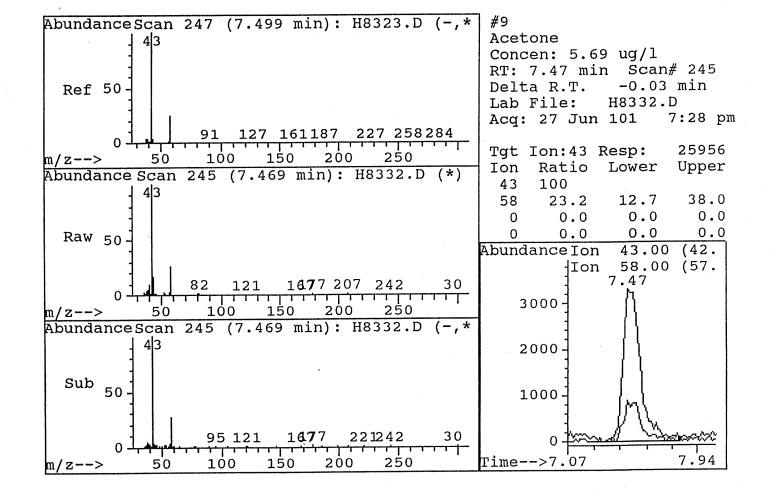
Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 17:55:43 2001 Response via : Single Level Calibration



#### 30 0

H8332.D ASP0627.M

TEST2



H8332.D ASP0627.M

Thu Jun 28 10:00:18 2001

TEST2

Page 1

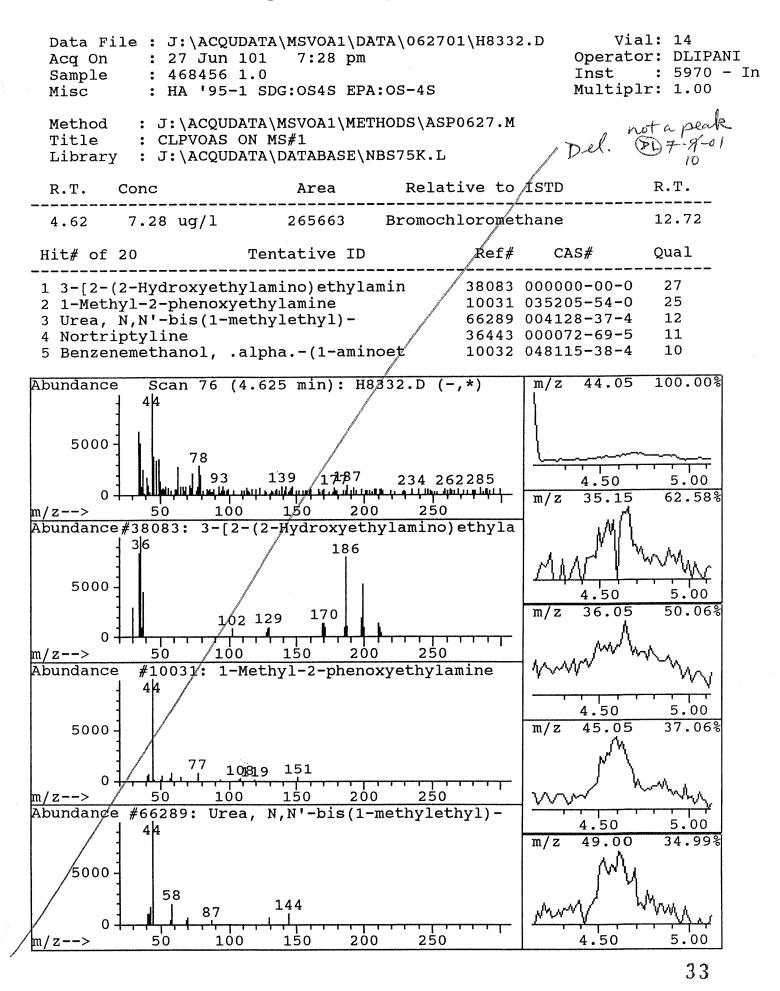
#### Library Search Compound Report

		J:\ACQUDATA\MSVOA1\DATA\062701\H8332.D 27 Jun 101 7:28 pm	Vial: Operator:	
Sample		468456 1.0	Inst :	5970 - In
Misc	:	HA '95-1 SDG:OS4S EPA:OS-4S	Multiplr:	1.00

Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Library : NBS75K.L

Internal Standard Area Summary

R.T.	Conc	Area	ISTD
12.72	50.00 ug/l	1824635	Bromochloromethane
14.84	50.00 ug/l	3206906	1,4-Difluorobenzene
22.01	50.00 ug/l	3211144	Chlorobenzene-d5



H8332.D ASP0627.M

		1A			EPA SA		0.
		VOLATILE ORGANICS ANA			0	S-4d	
Lab Name:	CAS/RO	ОСН	_ Contract: <u>HA</u>				
Lab Code:	10145	Case No.: R21-719	6 SAS No.:	SD0	G No.: 🤇	DS4S	-
		WATER		nple ID: 4			
-							
Sample wt/v	/ol:	5.0 (g/ml) <u>ML</u>		ID: <u>+</u>			
Level: (low/	'med)	LOW	Date Re	ceived:			
			Date An	alyzed: 0	6/27/01		
		502. ID: 0.53 (mm)	Dilution	Factor: 1	.0		
							x
Soil Extract	Volume	(uL)	Soil Aliq	uot Volum	1e:	(	(uL)
				UNITO			
						•	
CAS N	0.	COMPOUND (u	J/L or ug/Kg) _	UG/L		Q	
		Chloromothana		T	10	U	٦
74-8		Chloromethane			10	U	-
75-0		Vinyl chloride			10	U	1
74-8		Bromomethane			10	U	1
75-0		Chloroethane			4	J	-
67-6		Acetone			10	Ū	1
75-3		1,1-Dichloroethene			10	U	1
75-0		Methylene chloride		+	10	U	1
75-1		Carbon disulfide			10	U	-
and the second sec	60-5	trans-1,2-Dichloroethe			10	U	1
	4-3	1,1-Dichloroethane			10	U U	-
78-9		2-Butanone	~	+	10	U U	-
the second s	59-4	cis-1,2-Dichloroethen	8	+	10	U	-
	6-3				10	U U	-
the second s	-06-2	1,2-Dichloroethane			10	U U	-
Construction in the second	5-6			+	10	U U	-
	23-5	Carbon tetrachloride		-	10	U U	-
71-4		Benzene			10	U	-
79-0		Trichloroethene			10	U U	-
78-8		1,2-Dichloropropane			10	U	-
75-2		Bromodichloromethar				U U	-
	61-01-5	cis-1,3-Dichloroprope			<u>    10    </u> 10	U U	-
	61-02-6	trans-1,3-Dichloropro		-		U U	-
79-0		1,1,2-Trichloroethane			<u>    10    </u> 10	U U	-
and the second s	-48-1	Dibromochlorometha	IE	+	10	U U	-
75-2		Bromoform			10	U U	-
	-10-1	4-Methyl-2-pentanone	3				-
	-88-3	Toluene			10	U U	-
and the second sec	-78-6	2-Hexanone			10	U U	-
	-18-4	Tetrachloroethene			10		-
and the second	-90-7	Chlorobenzene		-	10	U	-
and an other statements	-41-4	Ethylbenzene			10	U	-
	0-20-7	(m+p)Xylene			10	U	-
and a state of the	)-20-7	o-Xylene			10	U	-
the second s	-42-5	Styrene			10	U	-
79-3	34-5	1,1,2,2-Tetrachloroet	hane		10	<u> </u>	

'95-1

1E	
VOLATILE ORGANICS ANALYSIS DATA SHEET	
TENTATIVELY IDENTIFIED COMPOUNDS	

EPA SAMPLE NO.

		TENTAI	IVELY IDENTIF	IED COMP	^v Ol	JNDS			
Lab Name:	CAS/RO	ОСН		Contrac	xt:	HA		OS-4	a
Lab Code:	10145	Ca	se No.: <u>R21-71</u>	96 SAS	No	.:	_ SD	G No.: <u>OS4</u>	IS
Matrix: (soil/	water)	WATER	_		Lat	o Sample	ID: 4	68457 1.0	
Sample wt/ve	ol:	5.0	(g/ml) <u>ML</u>	-	Lat	o File ID:	<u>+</u>	18335.D	
Level: (low/r	med)	LOW	-	ĺ	Dat	te Receiv	/ed:		
% Moisture:	not dec.			I	Dat	te Analyz	ed: 0	6/27/01	
GC Column:	RTX5	02. ID: <u>0.</u>	53 (mm)	I	Dilı	ution Fac	tor: <u>1</u>	.0	
Soil Extract	Volume		(uL)	:	Soi	il Aliquot	Volum	ie:	(uL)
			_	ONCENTR					
Number TIC:	s found:	0	<u> </u>	<u> </u>					
CAS NO.		COMPOL	JND	-		RT	EST	. CONC.	Q

#### Quantitation Report

Data File : J:\ACQUDATA\MSVOA Acq On : 27 Jun 101 9:37 Sample : 468457 1.0 Misc : HA '95-1 SDG:OS4S Quant Time: Jun 27 22:12 1910	pm EPA:OS-		\H8335.D	Vial: 1 Operator: D Inst : 5 Multiplr: 1	DLIPANI 5970 - In
Method: J:\ACQUDATA\MSYTitle: CLPVOAS ON MS#Last Update: Wed Jun 27 17:Response via: Single Level Ca	1 55 <b>:</b> 43 20	001	ASP0627.M		
Internal Standards	R.T.	QION	Response	Conc Units	Dev(Min)
<ol> <li>Bromochloromethane</li> <li>1,4-Difluorobenzene</li> <li>Chlorobenzene-d5</li> </ol>	12.74 14.84 21.99	114			
System Monitoring Compounds 21) 1,2-Dichloroethane-d4 38) Toluene-d8 50) Bromofluorobenzene	13.97 18.37 24.99	65 98	529534 1250053 729911	%F 51.88 ug/l 51.10 ug/l 49.00 ug/l	102.19%
Target Compounds 9) Acetone 40) 2-Hexanone	7.49 19.20	43 43	19160 7613	4.27 ug/l <u>1.13 ug/l</u>	Qvalue 91 J #

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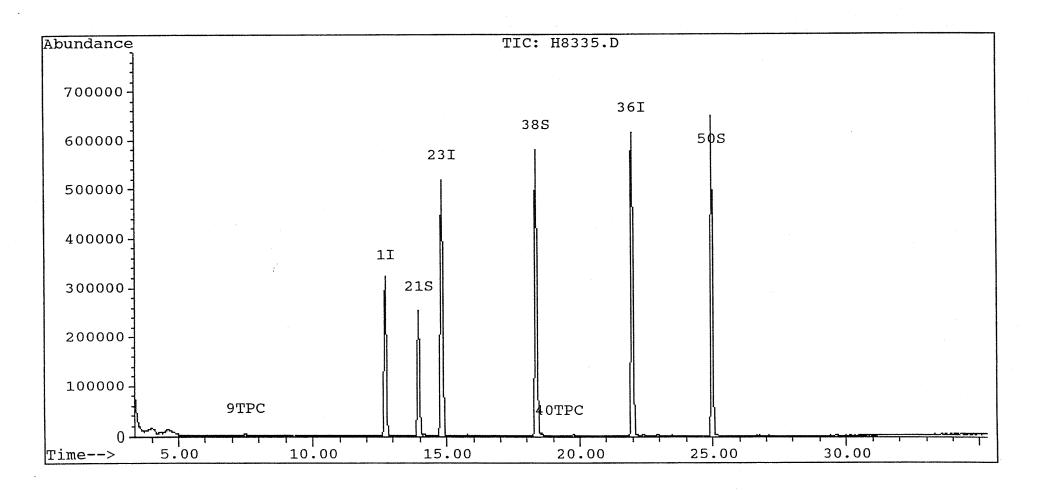
TEST2

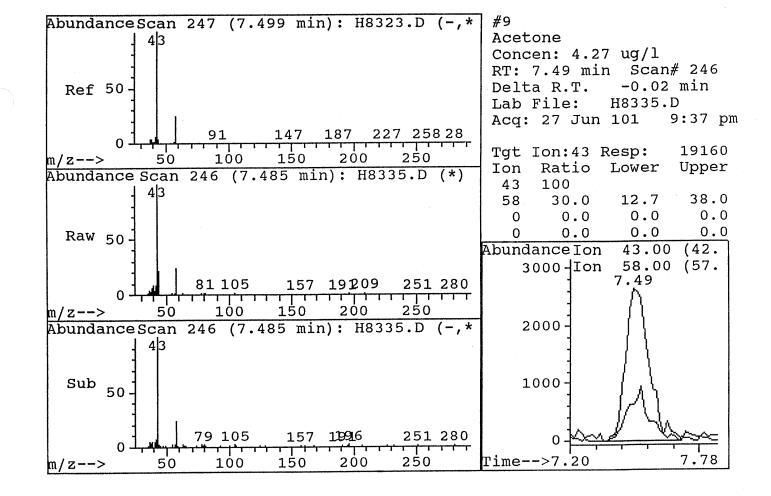
Page 1 36

Quantita n Report

Data File	:	J:\ACQUDATA\MSVOA1\DATA\062701\H8335.D	Vial:	17
Acq On	:	27 Jun 101 9:37 pm	Operator:	DLIPANI
-		468457 1.0	Inst :	5970 <b>-</b> In
	:	HA '95-1 SDG:0S4S EPA:0S-4d	Multiplr:	1.00
Quant Time	:	Jun 27 22:12 19101		

Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 17:55:43 2001 Response via : Single Level Calibration





H8335.D ASP0627.M

Thu Jun 28 10:14:31 2001

TEST2

#### Page 1 38

#### Library Search Compound Report

		J:\ACQUDATA\MSVOA1\DATA\062701\H8335.D	Vial: Operator:	
Acq On Sample		27 Jun 101 9:37 pm 468457 1.0	÷	5970 - In
Misc	-	HA '95-1 SDG:OS4S EPA:OS-4d	Multiplr:	1.00

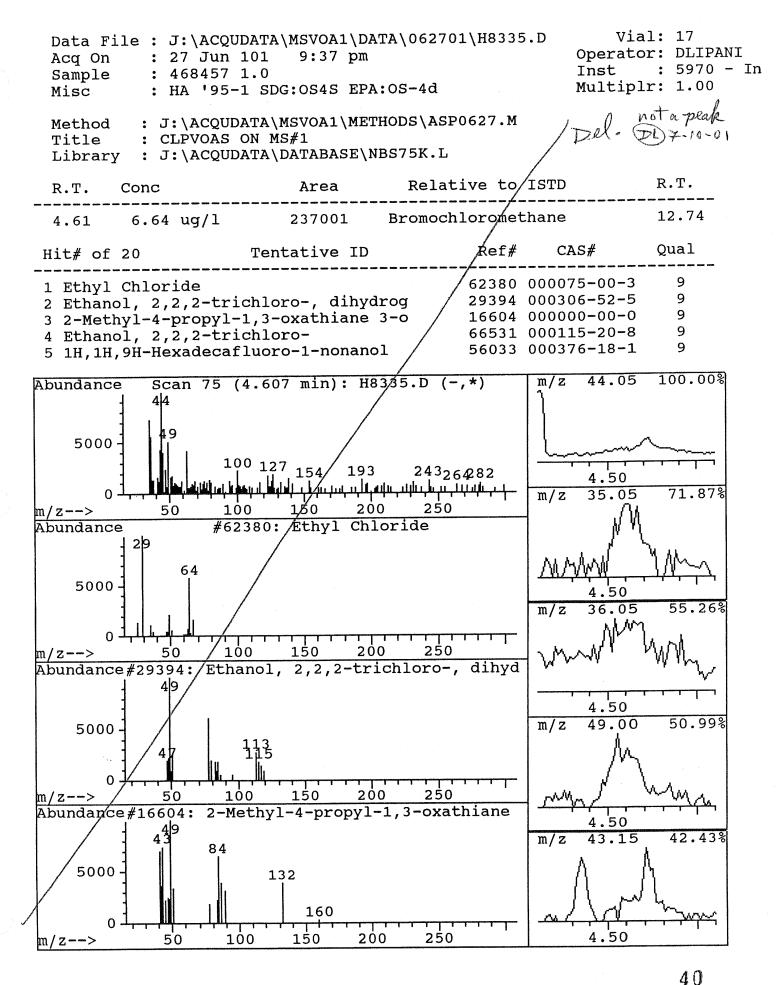
Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Library : NBS75K.L

Internal Standard Area Summary

R.T.	Conc	Area	ISTD
12.74	50.00 ug/l	1783853	Bromochloromethane
14.84	50.00 ug/l	3129006	1,4-Difluorobenzene
21.99	50.00 ug/l	3164928	Chlorobenzene-d5

07/10/01

H8335.D ASP0627.M



H8335.D ASP0627.M

TEST2

Page 2

			1A		EPA SA	MPLE	NO.
			VOLATILE ORGANICS ANALYSIS DATA SHE		0	S-3d	
			OCH Contract: HA		L		]
Lab C	code:	10145	Case No.: <u>R21-7196</u> SAS No.:	SE	)G No.: _	DS4S	
Matrix	x: (soil/	water)	WATER Lab San	nple ID:	468458 1	.0	
	•			יחו.	H8336.D		
Samp	ble wt/v	01:	(9,)	-			
Level	: (low/ı	med)	LOW Date Re	ceived:			
% Mc	oisture:	not dec.	Date An	alyzed:	06/27/01		
	olumn.	DTY5	02. ID: 0.53 (mm) Dilution	Factor:	1.0		
				•			(11)
Soil E	Extract	Volume	(uL) Soil Aliq	uot voiu	me:		(uL)
			CONCENTRATION	LINITO			
		_				0	
(	CAS NO	Э.	COMPOUND (ug/L or ug/Kg)	UG/L		Q	
Г	74 97	7.2	Chloromethane		10	U	
·	74-87 75-01		Vinyl chloride		10	Ū	-
	74-83		Bromomethane		10	Ū	
ŀ	75-00		Chloroethane		10	U	
ŀ	67-64		Acetone		10	U	
ł	75-35		1,1-Dichloroethene		10	U	_
ŀ	75-09		Methylene chloride		10	U	
ł	75-1		Carbon disulfide		10	U	_
	156-6		trans-1,2-Dichloroethene		10	U	_
	75-34		1,1-Dichloroethane		10	U	
	78-93		2-Butanone		10	υ	
	156-5		cis-1,2-Dichloroethene		10	U	
	67-66		Chloroform		10	U	
	107-0		1,2-Dichloroethane		10	U	
	71-5		1,1,1-Trichloroethane		10	U	
	56-2		Carbon tetrachloride		10	U	
	71-4		Benzene	1	10	U	
	79-0		Trichloroethene		10	U	
	78-8		1,2-Dichloropropane		10	U	
	75-2		Bromodichloromethane		10	U	
		61-01-5	cis-1,3-Dichloropropene		10	U	
		01-02-6	trans-1,3-Dichloropropene		10	U	
	79-0		1,1,2-Trichloroethane		10	U	
	124-		Dibromochloromethane		10	U	
	75-2		Bromoform		10	U	
	108-		4-Methyl-2-pentanone		10	U	
		88-3	Toluene		10	U	
	591-		2-Hexanone		10	Ŭ	
		18-4	Tetrachloroethene		10	U	
		90-7	Chlorobenzene		10	U	
		41-4	Ethylbenzene		10	U	
		)-20-7	(m+p)Xylene		10	U	
		-20-7	o-Xylene		10	U	
		42-5	Styrene		10	U	
	79-3		1,1,2,2-Tetrachloroethane		10	U	

#### 1E

#### VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

OS-3d Lab Name: CAS/ROCH Contract: HA Lab Code: 10145 Case No.: R21-7196 SAS No.: SDG No.: OS4S Lab Sample ID: 468458 1.0 Matrix: (soil/water) WATER 5.0 (g/ml) ML Sample wt/vol: Lab File ID: H8336.D Level: (low/med) LOW Date Received: % Moisture: not dec. Date Analyzed: 06/27/01 GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume (uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Number TICs found: 0 RT Q CAS NO. COMPOUND EST. CONC.

#### Quantitation Report

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Data File : J:\ACQUDATA\MSVOA Acq On : 27 Jun 101 10:20 Sample : 468458 1.0 Misc : HA '95-1 SDG:0S4S Quant Time: Jun 27 22:55 1910) pm 5 EPA:0S-		\H8336.D	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
Method : J:\ACQUDATA\MS Title : CLPVOAS ON MS# Last Update : Wed Jun 27 17: Response via : Single Level C	⁴ 1 55:43 20	01			
Internal Standards	R.T.	QIon	Response	Conc Units	Bev(Min)
1) Bromochloromethane 23) 1,4-Difluorobenzene 36) Chlorobenzene-d5	12.72 14.83 22.00	114	259918 1229931 975580	50.00 ug/] 50.00 ug/] 50.00 ug/]	-0.03
System Monitoring Compounds 21) 1,2-Dichloroethane-d4 38) Toluene-d8 50) Bromofluorobenzene	13.95 18.36 24.99	98	520492 1234505 720037	9 51.10 ug/1 50.62 ug/1 48.49 ug/1	101.24%
Target Compounds 9) Acetone	7.50	43	9247	2.07 ug/3	Qvalue 99 < 06/27/01

μ. 12 c - - - 1

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Library Search Compound Report

Acq On : Sample :	J:\ACQUDATA\MSVOA1\DATA\062701\H8336.D 27 Jun 101 10:20 pm 468458 1.0 HA '95-1 SDG:OS4S EPA:OS-3d	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
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Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Library : NBS75K.L

No Library Search Compounds Detected

Lab Name: CAS/ROCH Contract: HA OS-2d ab Code: 10145 Case No.: R21-7196 SAS No.: SDG No.: OS45 datrix: (soli/water) WATER Lab Sample U: 468459 1.0 Sample wi/vol: 5.0 (g/ml) ML Lab File ID: H8337.D sample wi/vol: 5.0 (g/ml) ML Lab File ID: H8337.D sample wi/vol: 5.0 (g/ml) ML Lab File ID: H8337.D sample wi/vol: 5.0 (g/ml) ML Lab File ID: H837.D Scoli Extract Volume		1A		EPA SA	MPLE	NO.
Ab Code: 10145 Case No.: R21-7196 SAS No.: SDG No.: OS4S Matrix: (soil/water) WATER Lab Sample ID: 468459 1.0 Sample wi/vol: 5.0 (g/ml) ML Lab File ID: H8337.D .evel: (low/med) LOW Date Received:	VOLATILE ORGANICS ANALYSIS DATA SHEET				S-2d	
Matrix: (soil/water) WATER Lab Sample ID: 468459 1.0 Sample wi/vol: 5.0 (g/ml) ML Lab File ID: H8337.D .evel: (low/med) LOW Date Received:	Lab Name: CAS/RO	ОСН ()	Contract: <u>HA</u>]
Matrix: (soil/water) WATER Lab Sample ID: 468459 1.0 Sample wi/vol: 5.0 (g/ml) ML Lab File ID: H8337.D .evel: (low/med) LOW Date Received:	Lab Code: 10145	Case No.: R21-7196	SAS No.:	SDG No.:	OS4S	
.evel: LOW Date Received: .evel: (ow/med) LOW Date Received: .evel: (ow/med) Date Analyzed: 06/27/01 .ac Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume			· · · ·	Constant and a state of the second		
Moisture: not dec. Date Analyzed: 06/27/01 GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume	Sample wt/vol:	5.0 (g/ml) <u>ML</u>	Lab File ID:	H8337.D		
Moisture: not dec. Date Analyzed: 06/27/01 GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume	Level: (low/med)	LOW	Date Received	J:		
3C Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume			Date Analyzed	1: 06/27/01		
Soil Extract Volume (uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q 74-87-3 Chloromethane 10 U 75-01-4 Vinyl chloride 10 U 75-01-4 Vinyl chloride 10 U 75-01-4 Vinyl chloride 10 U 75-00-3 Chloroethane 10 U 75-35-4 1,1-Dichloroethene 10 U 75-35-5 Carbon disulfide 10 U 75-35-6 1,1-Dichloroethane 10 U 75-35-7 Chloroethane 10 U 76-63-3 Chloroethane 10 U 71-55-6 1,1-Dichloroethane 10 U 71-5						
CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q 74-87-3 Chloromethane 10 U 75-01-4 Vinyl chloride 10 U 74-87-3 Chloromethane 10 U 75-01-4 Vinyl chloride 10 U 75-03 Chloroethane 10 U 67-64-1 Acetone 2 J 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-34-3 1,1-Dichloroethene 10 U 75-34-3 1,1-Dichloroethane 10 U 76-33-3 2-Butanone 10 U 76-63-5 trans-1,2-Dichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 71-55-6 1,2-Dichloropropane 10 U 78-01-6 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q 74-87-3 Chloromethane 10 U 75-01-4 Vinyl chloride 10 U 75-01-4 Vinyl chloride 10 U 75-01-3 Chloroethane 10 U 67-64-1 Acetone 2 J 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-34-3 1,1-Dichloroethene 10 U 75-34-3 1,1-Dichloroethane 10 U 75-89-2 Methylene chloride 10 U 75-34-3 1,1-Dichloroethane 10 U 76-86-3 Chloroform 10 U 166-58 1,1,1-Trichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 71-43-2 Benzene 10 U 78-87-5	Soil Extract Volume	(uL)	Soil Aliquot Vo	olume:		(uL)
CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q 74-87-3 Chloromethane 10 U 75-01-4 Vinyl chloride 10 U 75-01-4 Vinyl chloride 10 U 75-01-3 Chloroethane 10 U 67-64-1 Acetone 2 J 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-34-3 1,1-Dichloroethene 10 U 75-34-3 1,1-Dichloroethane 10 U 75-89-2 Methylene chloride 10 U 75-34-3 1,1-Dichloroethane 10 U 76-86-3 Chloroform 10 U 166-58 1,1,1-Trichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 71-43-2 Benzene 10 U 78-87-5						
74-87-3 Chloromethane 10 U 75-01-4 Vinyl chloride 10 U 75-01-4 Vinyl chloride 10 U 75-30-3 Chloroethane 10 U 75-00-3 Chloroethane 2 J 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-35-0 Carbon disulfide 10 U 156-60-5 trans-1,2-Dichloroethene 10 U 78-93-3 2-Butanone 10 U 76-66-3 Chloroform 10 U 106-66-3 Chloroform 10 U 107-06-2 1,2-Dichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 71-43-2 Benzene 10 U 71-43-2 Benzene 10 U 75-27-4 Bromodichloromethane <t< td=""><td></td><td>CON</td><td>CENTRATION UNITS</td><td>S:</td><td></td><td></td></t<>		CON	CENTRATION UNITS	S:		
14 01 Univ Chloride 10 U 75-01-4 Vinyi Chloride 10 U 75-01-3 Chloroethane 10 U 75-00-3 Chloroethane 10 U 67-64-1 Acetone 2 J 75-35-4 1.1-Dichloroethene 10 U 75-09-2 Methylene chloride 10 U 75-10 Carbon disulfide 10 U 75-34-3 1.1-Dichloroethane 10 U 76-63-5 trans-1,2-Dichloroethane 10 U 76-63 Chloroform 10 U 107-66-2 1,2-Dichloroethane 10 U 71-65-6 1,1,1-Trichloroethane 10 U 76-63-7 Chloropropane 10 U 71-43-2 Benzene 10 U 74-83-3 1,2-Dichloropropane 10 U 71-43-2 Benzene 10 U 71-43-2 Benzene 10	CAS NO.	COMPOUND (ug/L	or ug/Kg) UG/L		Q	
14 01 Univ Chloride 10 U 75-01-4 Vinyi Chloride 10 U 75-01-3 Chloroethane 10 U 75-00-3 Chloroethane 10 U 67-64-1 Acetone 2 J 75-35-4 1.1-Dichloroethene 10 U 75-09-2 Methylene chloride 10 U 75-10 Carbon disulfide 10 U 75-34-3 1.1-Dichloroethane 10 U 76-63-5 trans-1,2-Dichloroethane 10 U 76-63 Chloroform 10 U 107-66-2 1,2-Dichloroethane 10 U 71-65-6 1,1,1-Trichloroethane 10 U 76-63-7 Chloropropane 10 U 71-43-2 Benzene 10 U 74-83-3 1,2-Dichloropropane 10 U 71-43-2 Benzene 10 U 71-43-2 Benzene 10	p					
T4-83-9 Bromomethane 10 U 75-00-3 Chloroethane 10 U 67-64-1 Acetone 2 J 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-35-4 1,1-Dichloroethene 10 U 75-35-3 Carbon disulfide 10 U 75-34-3 1,1-Dichloroethene 10 U 76-65-3 Chloroform 10 U 156-59-4 cis-1,2-Dichloroethane 10 U 167-66-3 Chloroform 10 U 107-06-2 1,2-Dichloroethane 10 U 71-55-6 1,1.1-Trichloroethane 10 U 78-87-5 1,2-Dichloropropane 10 U 78-87-5 1,2-Dichloropropane 10 U 78-87-5 1,2-Dichloropropene 10 U 78-87-5 1,2-						
17:00 Dimension 10 U 67:64-1 Acetone 2 J 75:35-4 1,1-Dichloroethene 10 U 75:09-2 Methylene chloride 10 U 75:09-2 Methylene chloride 10 U 75:09-2 Methylene chloride 10 U 75:00-3 Carbon disulfide 10 U 75:00-2 Methylene chloride 10 U 75:00-3 Carbon disulfide 10 U 75:00-3 Chloroethene 10 U 75:00-3 Tristono 10 U 75:00-3 Chloroethane 10 U 75:34:3 1,1-Dichloroethane 10 U 16:6:59:-4 cis-1,2-Dichloroethane 10 U 17:55:6 1,1,1-Trichloroethane 10 U 71:43:2 Benzene 10 U 74:43:2 Benzene 10 U 10:061:01:5 cis-1,3-Dichloropropene						
10 Observe 2 J 67-64-1 Acetone 2 J 75-35-4 1,1-Dichloroethene 10 U 75-09-2 Methylene chloride 10 U 75-15-0 Carbon disulfide 10 U 156-60-5 trans-1,2-Dichloroethene 10 U 75-34-3 1,1-Dichloroethane 10 U 75-34-3 1,1-Dichloroethane 10 U 76-63 Chloroform 10 U 156-59-4 cis-1,2-Dichloroethane 10 U 107-06-2 1,2-Dichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 71-43-2 Benzene 10 U 75-27-4 Bromodichloromethane 10 U 75-27-4 Bromodichloropropene 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 75-25-2 Bromoform 10 U 108-88-3 Toluene	74-83-9					
No. 1 No. 1 No. 1 75-35-4 1,1-Dichloroethene 10 U 75-36-2 Methylene chloride 10 U 75-15-0 Carbon disulfide 10 U 156-60-5 trans-1,2-Dichloroethene 10 U 75-34-3 1,1-Dichloroethane 10 U 75-35-4 cis-1,2-Dichloroethane 10 U 75-36-3 Chloroform 10 U 107-06-2 1,2-Dichloroethane 10 U 107-06-2 1,2-Dichloroethane 10 U 71-55-6 1,1.1-Trichloroethane 10 U 71-43-2 Benzene 10 U 75-27-4 Bromodichloromethane 10 U 78-87-5 1,2-Dichloropropane 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-10-1 </td <td>75-00-3</td> <td>Chloroethane</td> <td></td> <td></td> <td></td> <td></td>	75-00-3	Chloroethane				
75-09-2 Methylene chloride 10 U 75-15-0 Carbon disulfide 10 U 156-60-5 trans-1,2-Dichloroethene 10 U 75-34-3 1,1-Dichloroethane 10 U 78-93-3 2-Butanone 10 U 156-59-4 cis-1,2-Dichloroethane 10 U 67-66-3 Chloroform 10 U 107-06-2 1,2-Dichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 71-43-2 Benzene 10 U 75-27-4 Beromodichloropropane 10 U 75-27-4 Bromodichloropropene 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 1044-48-1 Dibromochloromethane 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U U	67-64-1	Acetone				
75-15-0 Carbon disulfide 10 U 156-60-5 trans-1,2-Dichloroethene 10 U 75-34-3 1,1-Dichloroethane 10 U 78-93-3 2-Butanone 10 U 156-59-4 cis-1,2-Dichloroethene 10 U 67-66-3 Chloroform 10 U 107-06-2 1,2-Dichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 71-43-2 Benzene 10 U 78-87-5 1,2-Dichloropropane 10 U 78-87-5 1,2-Dichloropropane 10 U 78-87-5 1,2-Dichloropropane 10 U 78-87-5 1,2-Dichloropropane 10 U 78-87-5 1,2-Dichloropropene 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 75-25-2 Bromodir 10 U	75-35-4	1,1-Dichloroethene				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	75-09-2	Methylene chloride				
75.34.3 1,1-Dichloroethane 10 U $78.93.3$ 2-Butanone 10 U $156-59.4$ cis-1,2-Dichloroethene 10 U $67.66.3$ Chloroform 10 U $107.06-2$ 1,2-Dichloroethane 10 U $71.55.6$ 1,1,1-Trichloroethane 10 U $71.43.2$ Benzene 10 U $78.87.5$ Carbon tetrachloride 10 U $78.87.5$ 1,2-Dichloropropane 10 U $78.87.5$ 1,2-Dichloropropane 10 U $78.87.5$ 1,2-Dichloropropane 10 U $78.87.5$ 1,2-Dichloropropene 10 U $10061-01.5$ cis-1,3-Dichloropropene 10 U $10061-02.6$ trans-1,3-Dichloropropene 10 U $79.00.5$ 1,1,2-Trichloroethane 10 U $124.48.1$ Dibromochloromethane 10 U $108.40.1$ 4-Methyl-2-pentanone 10 U $108.40.1$ 4-Methyl-2-pentanone 10 <t< td=""><td>75-15-0</td><td>Carbon disulfide</td><td></td><td></td><td></td><td></td></t<>	75-15-0	Carbon disulfide				
10101010156-59-4cis-1,2-Dichloroethene10U156-59-4cis-1,2-Dichloroethene10U107-06-21,2-Dichloroethane10U107-06-21,2-Dichloroethane10U107-06-21,2-Dichloroethane10U107-06-21,2-Dichloroethane10U107-06-21,2-Dichloroethane10U107-06-21,2-Dichloroethane10U107-06-21,2-Dichloroethane10U108-23-5Carbon tetrachloride10U109-01-6Trichloroethene10U108-87-51,2-Dichloropropane10U10061-01-5cis-1,3-Dichloropropene10U10061-02-6trans-1,3-Dichloropropene10U10061-02-6trans-1,3-Dichloropropene10U108-10-14-Methyl-2-pentanone10U108-88-3Toluene10U108-88-3Toluene10U108-90-7Chlorobenzene10U108-90-7Chlorobenzene10U108-90-7Chlorobenzene10U109-14-4Ethylbenzene10U130-20-7o-Xylene10U130-20-7o-Xylene10U100-42-5Styrene10U	156-60-5	trans-1,2-Dichloroethene)			
156-59-4 cis-1,2-Dichloroethene 10 U 67-66-3 Chloroform 10 U 107-06-2 1,2-Dichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 71-43-2 Benzene 10 U 79-01-6 Trichloroethene 10 U 78-87-5 1,2-Dichloropropane 10 U 75-27-4 Bromodichloromethane 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 79-00-5 1,1,2-Trichloroethane 10 U 1024-48-1 Dibromochloromethane 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 108-88-3 Toluene 10 U	75-34-3	1,1-Dichloroethane				
100 01 100 01 67-66-3 Chloroform 10 U 107-06-2 1,2-Dichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 56-23-5 Carbon tetrachloride 10 U 71-43-2 Benzene 10 U 79-01-6 Trichloroethene 10 U 78-87-5 1,2-Dichloropropane 10 U 75-27-4 Bromodichloromethane 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 104061-02-6 trans-1,3-Dichloropropene 10 U 1061-02-6 trans-1,3-Dichloropropene 10 U 124-48-1 Dibromochloromethane 10 U 124-48-1 Dibromochloromethane 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 108-88-3 To	78-93-3	2-Butanone				
01000 1,2-Dichloroethane 10 U 71-55-6 1,1,1-Trichloroethane 10 U 56-23-5 Carbon tetrachloride 10 U 71-43-2 Benzene 10 U 79-01-6 Trichloroethene 10 U 78-87-5 1,2-Dichloropropane 10 U 75-27-4 Bromodichloromethane 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 124-48-1 Dibromochloromethane 10 U 128-88-3 Toluene 10 U 108-88-3 Toluene 10 U 108-88-3 Toluene 10 U 108-90-7 Chlorobenzene 10 U 108-90-7 Chlorobenzene 10 U 1030-20-7 (m+p)Xylene 10 U 1330-20-7	156-59-4	cis-1,2-Dichloroethene				
101 00 L 1,1,1-Trichloroethane 10 U 56-23-5 Carbon tetrachloride 10 U 71-43-2 Benzene 10 U 79-01-6 Trichloroethene 10 U 78-87-5 1,2-Dichloropropane 10 U 75-27-4 Bromodichloromethane 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 124-48-1 Dibromochloromethane 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 108-88-3 Toluene 10	67-66-3	Chloroform	·			
11000 1110 U 56-23-5 Carbon tetrachloride 10 U 71-43-2 Benzene 10 U 79-01-6 Trichloroethene 10 U 78-87-5 1,2-Dichloropropane 10 U 75-27-4 Bromodichloromethane 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 79-00-5 1,1,2-Trichloroethane 10 U 79-00-5 1,1,2-Trichloroethane 10 U 75-25-2 Bromoform 10 U 75-25-2 Bromoform 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 108-88-3 Toluene 10 U 127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 1030-20-7 (m+p)Xylene 10 </td <td>107-06-2</td> <td>1,2-Dichloroethane</td> <td></td> <td></td> <td></td> <td></td>	107-06-2	1,2-Dichloroethane				
100 120 0 Dataset 10 U 71-43-2 Benzene 10 U 79-01-6 Trichloroethene 10 U 78-87-5 1,2-Dichloropropane 10 U 75-27-4 Bromodichloromethane 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 124-48-1 Dibromochloromethane 10 U 124-48-1 Dibromochloromethane 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 108-88-3 Toluene 10 U 108-90-7 Chlorobenzene 10 U <td>71-55-6</td> <td>1,1,1-Trichloroethane</td> <td></td> <td></td> <td>4</td> <td></td>	71-55-6	1,1,1-Trichloroethane			4	
11 10 U 79-01-6 Trichloroethene 10 U 78-87-5 1,2-Dichloropropane 10 U 75-27-4 Bromodichloromethane 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 79-00-5 1,1,2-Trichloroethane 10 U 79-00-5 1,1,2-Trichloroethane 10 U 124-48-1 Dibromochloromethane 10 U 75-25-2 Bromoform 10 U 708-88-3 Toluene 10 U 108-88-3 Toluene 10 U 108-88-3 Toluene 10 U 127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 1030-20-7 (m+p)Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 <td< td=""><td>56-23-5</td><td>Carbon tetrachloride</td><td></td><td>10</td><td></td><td></td></td<>	56-23-5	Carbon tetrachloride		10		
78-87-5 1,2-Dichloropropane 10 U 75-27-4 Bromodichloromethane 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 79-00-5 1,1,2-Trichloroethane 10 U 124-48-1 Dibromochloromethane 10 U 75-25-2 Bromoform 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 108-88-3 Toluene 10 U 108-90-7 Chlorobenzene 10 U 108-90-7 Chlorobenzene 10 U 1330-20-7 (m+p)Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U	71-43-2	Benzene		10	U	
78-87-5 1,2-Dichloropropane 10 U 75-27-4 Bromodichloromethane 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 79-00-5 1,1,2-Trichloroethane 10 U 75-25-2 Bromoform 10 U 75-25-2 Bromoform 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 1030-20-7 (m+p)Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U	79-01-6	Trichloroethene		10	U	
75-27-4 Bromodichloromethane 10 U 10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 79-00-5 1,1,2-Trichloroethane 10 U 124-48-1 Dibromochloromethane 10 U 75-25-2 Bromoform 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 108-88-3 Toluene 10 U 108-90-7 Chlorobenzene 10 U 108-90-7 Chlorobenzene 10 U 100-41-4 Ethylbenzene 10 U 1330-20-7 o-Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U		1,2-Dichloropropane		10	U	
10061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 79-00-5 1,1,2-Trichloroethane 10 U 124-48-1 Dibromochloromethane 10 U 75-25-2 Bromoform 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 108-88-3 Toluene 10 U 107-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 108-90-7 Chlorobenzene 10 U 1030-20-7 (m+p)Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U		Bromodichloromethane		10	U	
10061-02-6 trans-1,3-Dichloropropene 10 U 79-00-5 1,1,2-Trichloroethane 10 U 124-48-1 Dibromochloromethane 10 U 75-25-2 Bromoform 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 591-78-6 2-Hexanone 10 U 127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 100-41-4 Ethylbenzene 10 U 1330-20-7 (m+p)Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U		cis-1,3-Dichloropropene		10	U	
10000 1112 memore and the container 10 U 124-48-1 Dibromochloromethane 10 U 75-25-2 Bromoform 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 591-78-6 2-Hexanone 10 U 127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 100-41-4 Ethylbenzene 10 U 1330-20-7 (m+p)Xylene 10 U 130-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U		trans-1,3-Dichloropropen	ne	10	U	
124-48-1 Dibromochloromethane 10 U 75-25-2 Bromoform 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 591-78-6 2-Hexanone 10 U 127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 100-41-4 Ethylbenzene 10 U 1330-20-7 (m+p)Xylene 10 U 130-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U						
75-25-2 Bromoform 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 591-78-6 2-Hexanone 10 U 127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 100-41-4 Ethylbenzene 10 U 1330-20-7 (m+p)Xylene 10 U 130-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U				10		
108-10-14-Methyl-2-pentanone10U108-88-3Toluene10U591-78-62-Hexanone10U127-18-4Tetrachloroethene10U108-90-7Chlorobenzene10U100-41-4Ethylbenzene10U1330-20-7(m+p)Xylene10U130-42-5Styrene10U						
108-88-3 Toluene 10 U 591-78-6 2-Hexanone 10 U 127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 100-41-4 Ethylbenzene 10 U 1330-20-7 (m+p)Xylene 10 U 130-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U	108-10-1	4-Methyl-2-pentanone				
127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 100-41-4 Ethylbenzene 10 U 1330-20-7 (m+p)Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U	108-88-3	Toluene		10	U	
127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 100-41-4 Ethylbenzene 10 U 1330-20-7 (m+p)Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U		2-Hexanone				
108-90-7 Chlorobenzene 10 U 100-41-4 Ethylbenzene 10 U 1330-20-7 (m+p)Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U				and the second		
100-41-4 Ethylbenzene 10 U 1330-20-7 (m+p)Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U		Chlorobenzene				
1330-20-7 (m+p)Xylene 10 U 1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U		Ethylbenzene	· · · · · · · · · · · · · · · · · · ·	10		
1330-20-7 o-Xylene 10 U 100-42-5 Styrene 10 U				10	U	
100-42-5 Styrene 10 U					U	
					U	
	79-34-5	1,1,2,2-Tetrachloroethan	18		1	

1E VOLATILE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO. TENTATIVELY IDENTIFIED COMPOUNDS OS-2d Lab Name: CAS/ROCH Contract: HA

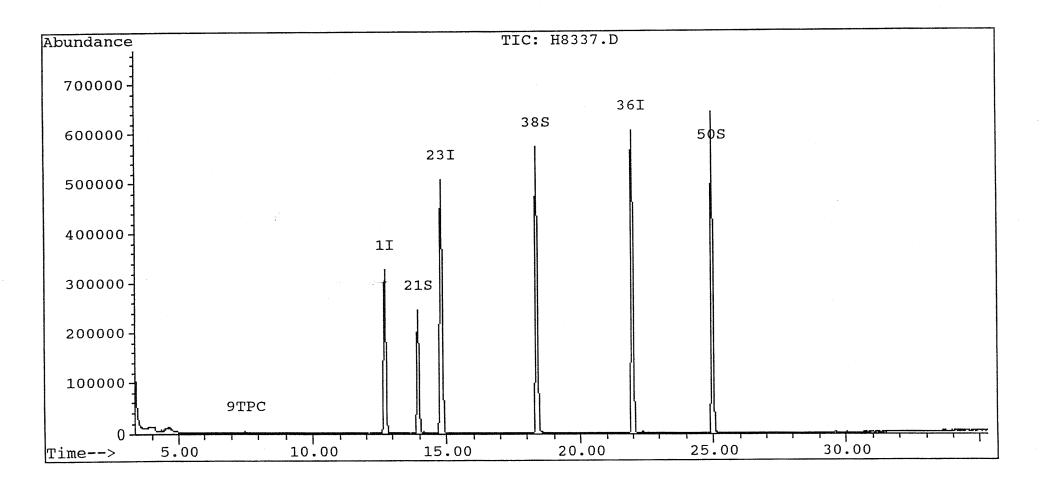
Lap Namo.				-			an and the state of the state o		
Lab Code:	10145	Cas	se No.: <u>R21-7196</u>	SAS	No.:	_ SDO	G No.: <u>OS</u>	4S	
Matrix: (soil/v	water)	WATER	_	i	Lab Sample	ID: 4	68459 1.0		
Sample wt/vo	ol:	5.0	(g/ml) ML		Lab File ID:	F	18337.D		
Level: (low/r	ned)	LOW	_	.	Date Receiv	/ed:			
% Moisture: I	not dec.		1991-1991-1991-1991-1991-1991-1991-199	I	Date Analyz	ed: 0	6/27/01		
GC Column:	RTX5	02. ID: 0.5	53 (mm)	I	Dilution Fac	tor: <u>1</u>	.0		
Soil Extract \	Volume		_ (uL)	:	Soil Aliquot	Volum	ie:	(u	L)
			CO	NCENTR	ATION UNI	TS:			
Number TICs	s found:	0	(ug, 	/L or ug/k	(g) <u>UG/</u>	<u>۲</u>			
CAS NO.		COMPOU	IND		RT	EST	. CONC.	Q	

Quantitation Report

Data File : J:\ACQUDATA\MSVOA Acq On : 27 Jun 101 11:03 Sample : 468459 1.0 Misc : HA '95-1 SDG:OS4S Quant Time: Jun 27 23:38 19101	Vial: Operator: 1 Inst : Multiplr:	DLIPANI 5970 - In					
Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 17:55:43 2001 Response via : Single Level Calibration							
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)		
 Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5 	12.72 14.84 21.99	114		50.00 ug/l 50.00 ug/l 50.00 ug/l	-0.02		
System Monitoring Compounds 21) 1,2-Dichloroethane-d4 38) Toluene-d8 50) Bromofluorobenzene	13.96 18.37 24.99	98	518255 1232639 709585	%] 50.61 ug/l 50.96 ug/l 48.18 ug/l	101.92%		
Target Compounds 9) Acetone	7.52	43	10137	2.25 ug/l	Qvalue 92 J 06/28/01		

Data File	:	J:\ACQUDATA\MSVOA1\DATA\062701\H8337.D	Vial:	
Acq On	:	27 Jun 101 11:03 pm	Operator:	
Sample	:	468459 1.0		5970 - In
Misc	:	HA '95-1 SDG:OS4S EPA:OS-2d	Multiplr:	1.00
Quant Time	9:	Jun 27 23:38 19101		

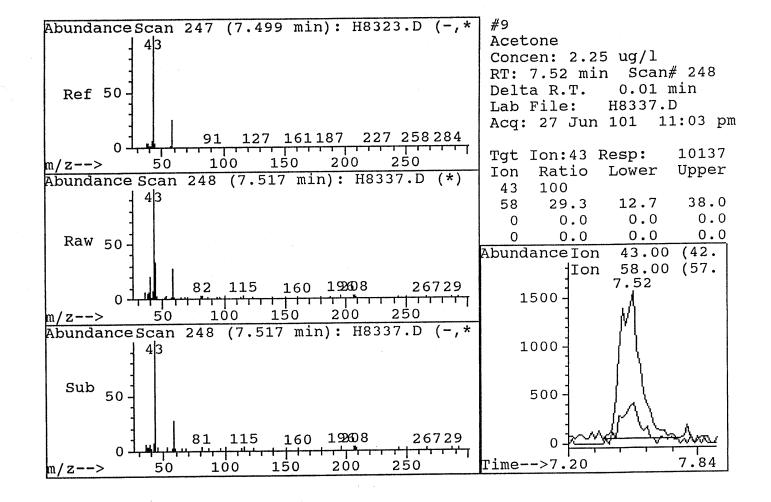
Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 17:55:43 2001 Response via : Single Level Calibration



030

H8337.D ASP0627.M

TEST2



H8337.D ASP0627.M

Thu Jun 28 10:19:01 2001

TEST2

51 Page 1

	:	J:\ACQUDATA\MSVOA1\DATA\062701\H8337.D 27 Jun 101 11:03 pm 468459 1.0 HA '95-1 SDG:OS4S EPA:OS-2d	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In	
Method		T · \ ACOUDATA \ MSVOA1 \ METHODS \ ASP0627 . M			

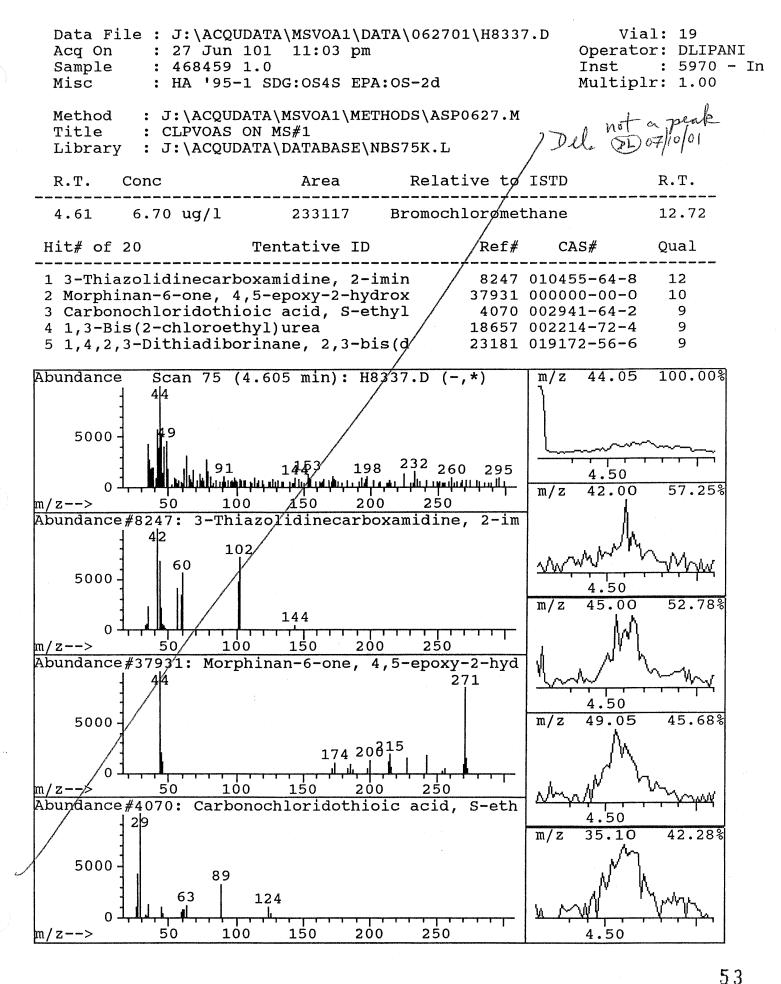
Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Library : NBS75K.L

Internal Standard Area Summary

R.T.	Conc	Area	ISTD					
12.72 14.84 21.99	50.00 ug/l 50.00 ug/l 50.00 ug/l	1739762 3076952 3116289	Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5					
07/10/01								

H8337.D ASP0627.M

52



H8337.D ASP0627.M

Tue Jul 10 12:38:29 2001

TEST2

JJ Page 2

	V	1A /OLATILE ORGANICS ANA	I YSIS DATA SHF		EPA SA		NO.
Lab Name:			Contract: HA	- toon 1	0	S-2S	
		Case No.: R21-719	nak Washington		3 No · (0545	
		······································					
Matrix: (soil/	water)	WATER	Lab Sarr	ple ID: 4	<u>68460 1.</u>	.0	
Sample wt/v	ol:	5.0 (g/ml) <u>ML</u>	Lab File	ID: <u>H</u>	18338.D	gan an a	
Level: (low/r	med)	LOW	Date Re	ceived: _			
% Moisture:	not dec.		Date An	alyzed: 0	6/27/01		
GC Column:	RTX50	D2. ID: 0.53 (mm)	Dilution	Factor: 1	.0		
		(uL)	Soil Alia	uot Volum	ie:		(uL)
	-	(uc)					
		cc	NCENTRATION	UNITS:			
CAS NO	ר	COMPOUND (ug	u/Lorua/Ka)	UG/L		Q	
CASIN	J.					-	
74-87	/-3	Chloromethane	· · · · · · · · · · · · · · · · · · ·		10	U	
75-01		Vinyl chloride	· ·		10	υ	
74-83		Bromomethane			10	U	
75-00)-3	Chloroethane			10	U	
67-64		Acetone			10	U	
75-35	5-4	1,1-Dichloroethene			10	U	
75-09)-2	Methylene chloride			10	U	_
75-15	5-0	Carbon disulfide			10	U	
156-6	30-5	trans-1,2-Dichloroethe	ne		10	U	
75-34	-3	1,1-Dichloroethane			10	U	
78-93	3-3	2-Butanone			10	U	
156-5	9-4	cis-1,2-Dichloroethene)		10	U	
67-66	6-3	Chloroform			10	U	
107-0)6-2	1,2-Dichloroethane			10	U	
71-55	5-6	1,1,1-Trichloroethane			10	U	
56-23	3-5	Carbon tetrachloride			10	U	
71-43	3-2	Benzene			10	U	
79-01	1-6	Trichloroethene			10	U	
78-87	7-5	1,2-Dichloropropane			10	U	
75-27	7-4	Bromodichloromethan	е		10	<u> </u>	
1006	1-01-5	cis-1,3-Dichloroproper			10	U	
1006	1-02-6	trans-1,3-Dichloroprop	bene		10	U	
79-00)-5	1,1,2-Trichloroethane			10	U	
124-4	48-1	Dibromochloromethan	е		10	U	
75-25	5-2	Bromoform			10	U	
108-1	10-1	4-Methyl-2-pentanone			10	U	
108-8		Toluene			10	U	
591-7		2-Hexanone			10	U	_
127-1		Tetrachloroethene			10	<u>U</u>	
108-9		Chlorobenzene			10	<u>U</u>	_
100-4		Ethylbenzene			10	<u> </u>	_
	-20-7	(m+p)Xylene			10	<u> </u>	
1330-		o-Xylene			10	<u>U</u>	
100-4		Styrene			10	<u> </u>	
79-34	4-5	1,1,2,2-Tetrachloroeth	ane		10	U	

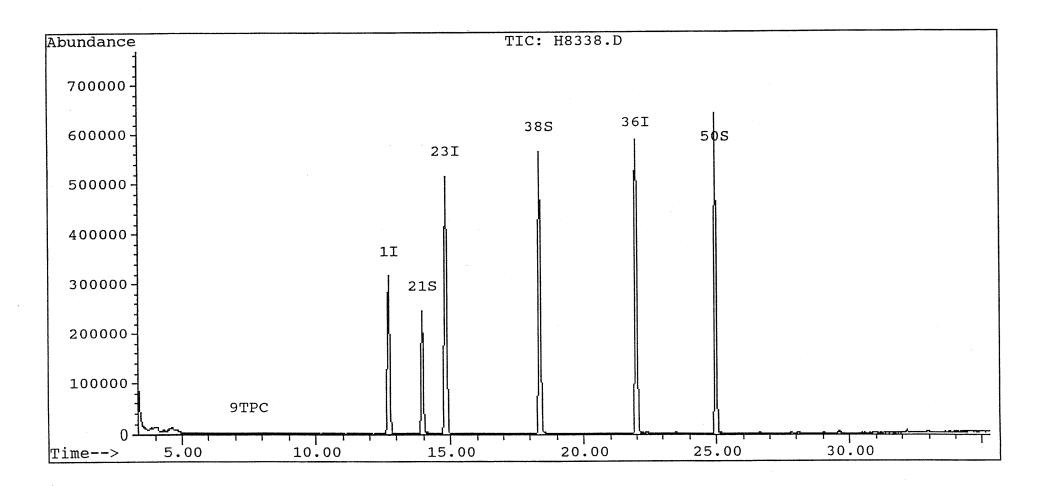
			1E		•		
	N	VOLATILE	ORGANICS /	ANALYSIS DA	TA SHEET	EPA SAMPLI	E NO.
		TENTAT	IVELY IDEN	TIFIED COMF	POUNDS	OS-2S	
Lab Name:	CAS/RC	осн		Contrac	:t: <u>HA</u>		
Lab Code:	10145	Ca	se No.: <u>R21</u>	-7196 SAS	No.:	_ SDG No.: <u>OS4S</u>	
Matrix: (soil/	water)	WATER	_	l	Lab Sample	ID: 468460 1.0	
Sample wt/ve	ol:	5.0	(g/ml) <u>ML</u>		Lab File ID:	H8338.D	
Level: (low/r	ned)	LOW		1	Date Receiv	/ed:	_
% Moisture:	not dec.				Date Analyz	ed: 06/27/01	
GC Column:	RTX5	02. ID: 0	53 (mm)		Dilution Fac	tor: <u>1.0</u>	
Soil Extract	Volume		(uL)	:	Soil Aliquot	Volume:	_ (uL)
				CONCENTR		ITS:	
Number TIC:	s found:	0		(ug/L or ug/ł	(g) <u>UG</u>	<u></u>	£
CAS NO.		сомро	JND		RT	EST. CONC.	Q

Quantitation Report

Data File : J:\ACQUDATA\MSVOA1 Acq On : 27 Jun 101 11:45 Sample : 468460 1.0 Misc : HA '95-1 SDG:OS4S Quant Time: Jun 28 0:21 19101	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In							
Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 17:55:43 2001 Response via : Single Level Calibration									
Internal Standards	R.T.	QION	Response	Conc Units	Dev(Min)				
 Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5 	12.73 14.84 22.01	114	261066 1226796 956182	50.00 ug/l 50.00 ug/l 50.00 ug/l	-0.02				
System Monitoring Compounds 21) 1,2-Dichloroethane-d4 38) Toluene-d8 50) Bromofluorobenzene	13.96 18.37 24.99	98	514342 1218539 703984	% 50.27 ug/l 50.98 ug/l 48.37 ug/l	101.96%				
Target Compounds 9) Acetone	7.48	43	6161	-1.37-ug/l	Qvalue 81 <				
	۶. – ۲.								

Data File	:	J:\ACQUDATA\MSVOA1\DATA\062701\H8338.D	Vial:	
Acq On	:	27 Jun 101 11:45 pm	Operator:	
		468460 1.0	Inst :	
Misc	:	HA '95-1 SDG:OS4S EPA:OS-2S	Multiplr:	1.00
Quant Time	9:	Jun 28 0:21 19101		

Method	:	J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M
Title	:	CLPVOAS ON MS#1
Last Update	:	Wed Jun 27 17:55:43 2001
Response via	:	Single Level Calibration



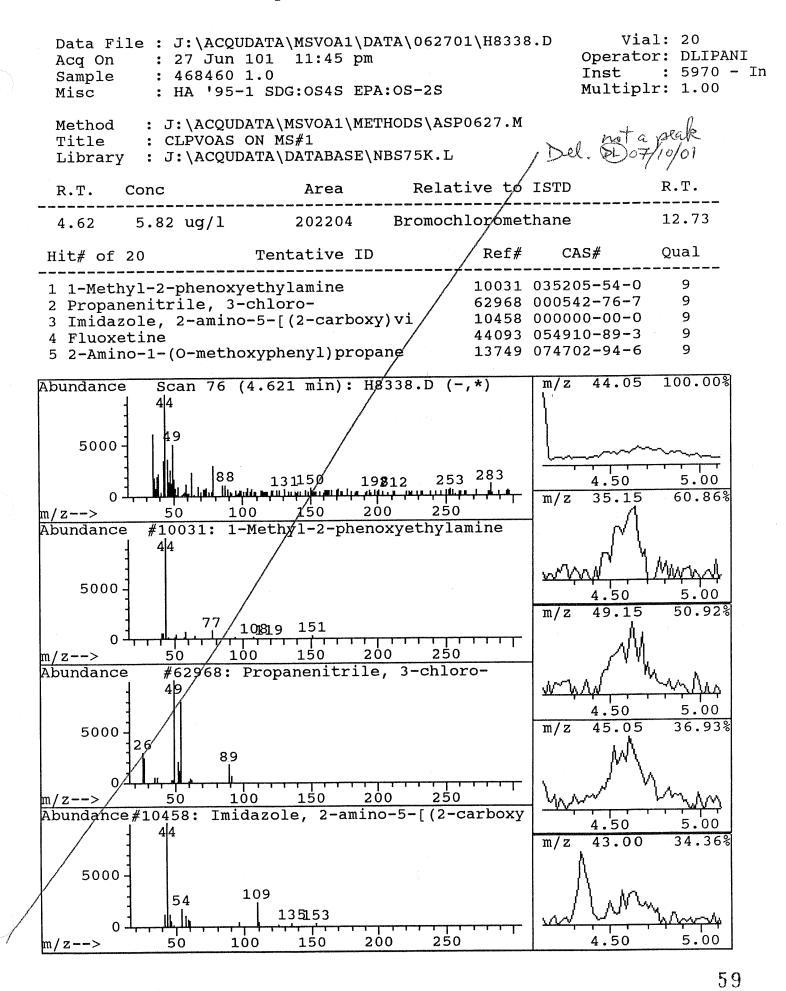
Data File	: J:\ACQUDATA\MSVOA1\DATA\062701\H8338.D	Vial:	20
Acq On	: 27 Jun 101 11:45 pm	Operator:	DLIPANI
Sample	: 468460 1.0	Inst :	5970 - In
Misc	: HA '95-1 SDG:0S4S EPA:0S-2S	Multiplr:	1.00
Mothod			

Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Library : NBS75K.L

Internal Standard Area Summary

R.T.	Conc	Area	ISTD
12.73 14.84 22.01	50.00 ug/l 50.00 ug/l 50.00 ug/l	1736228 3079644 3070615	Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5
		07/10/01	

H8338.D ASP0627.M



H8338.D ASP0627.M

Tue Jul 10 12:39:46 2001

TEST2

Pag

Page 2

	1A			EPA SA	MPLE	NO.
Ň	VOLATILE ORGANICS AN	ALYSIS DATA SH	EET	OS-1d		
Lab Name: <u>CAS/RC</u>	СН	Contract: HA				
Lab Code: <u>10145</u>	Case No.: <u>R21-71</u>	96 SAS No.:	SDG	; No.: <u>C</u>	S4S	
Matrix: (soil/water)	WATER	Lab Sar	mple ID: 46	\$8461 1.	0	
Sample wt/vol:	5.0 (g/ml) <u>ML</u>	Lab File	D: H	3340.D		
Level: (low/med)			eceived:			
% Moisture: not dec.	Construction of the second statements		nalyzed: 06			
	02. ID: 0.53 (mm)		Factor: <u>1.</u>			
Soil Extract Volume	(uL)	Soil Alic	quot Volume	9:		(uL)
	· · · · · · · · · · · · · · · · · · ·	ONCENTRATION	LINITS			
					Q	
CAS NO.	COMPOUND (u	y/L of ug/Ky)			Q	
74-87-3	Chloromethane			10	U	
75-01-4	Vinyl chloride			10	U	
74-83-9	Bromomethane			10	U	
75-00-3	Chloroethane			10	U	
67-64-1	Acetone			5	J	
75-35-4	1,1-Dichloroethene			10	<u> </u>	
75-09-2	Methylene chloride			10	<u> </u>	
75-15-0	Carbon disulfide			10	<u> </u>	
156-60-5	trans-1,2-Dichloroeth	ene		10	U	
75-34-3	1,1-Dichloroethane			10	U	
78-93-3	2-Butanone			10	U	
156-59-4	cis-1,2-Dichloroethen	e		10	U	
67-66-3	Chloroform			10	U	
107-06-2	1,2-Dichloroethane			10	U	
71-55-6	1,1,1-Trichloroethane)		10	U	
56-23-5	Carbon tetrachloride			10	U	
71-43-2	Benzene			10	U	
79-01-6	Trichloroethene			10	U	_
78-87-5	1,2-Dichloropropane			10	U	
75-27-4	Bromodichlorometha	ne		10	U	
10061-01-5	cis-1,3-Dichloroprope			10	U	
10061-02-6	trans-1,3-Dichloropro			10	U	
79-00-5	1,1,2-Trichloroethane			10	U	
124-48-1	Dibromochlorometha			10	Ū	-
75-25-2	Bromoform			10	Ū	-
108-10-1	4-Methyl-2-pentanon	A		10	U	-
108-88-3	Toluene			10	U	-
591-78-6	2-Hexanone		-	10	U	-
127-18-4	Tetrachloroethene			10	U	
108-90-7	Chlorobenzene			10	U	-1
100-41-4	Ethylbenzene			10	<u> </u>	-
1330-20-7				10	U	
	(m+p)Xylene	Magnating and a second seco		10	<u> </u>	
1330-20-7	o-Xylene				U	-
100-42-5	Styrene			10		
I / W KA"		12014	1	111 1	1.1	1

FORM I VOA

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

		TENT	ATIVELY I	DENTIFIEI	D COMPO	DUNDS			
Lab Name:	CAS/RC	осн			Contract	: <u>HA</u>		OS-1	a
Lab Code:	10145		Case No.:	R21-7196	SAS	lo.:	SD	G No.: OS	4S
Matrix: (soil/w	vater)	WATE	R		L	ab Sample	e ID:	468461 1.0	
Sample wt/vc	ol:	5.0	(g/ml)	ML	. L	ab File ID:	: 1	H8340.D	
Level: (low/n	ned)	LOW			C D	ate Recei	ved:		
% Moisture: r	not dec.				D	ate Analy	zed:	06/28/01	
GC Column:	RTX5	02. ID:	<u>0.53</u> (r	nm)	C	ilution Fac	ctor:	1.0	
Soil Extract V	/olume		(uL)		S	oil Aliquot	t Volur	ne:	(uL)
				CON		ATION UN	IITS:		
Number TICs	s found:	0		(ug/	L or ug/K	g) <u>UG</u>	S/L		
CAS NO.		сом	POUND			RT	ES	F. CONC.	Q

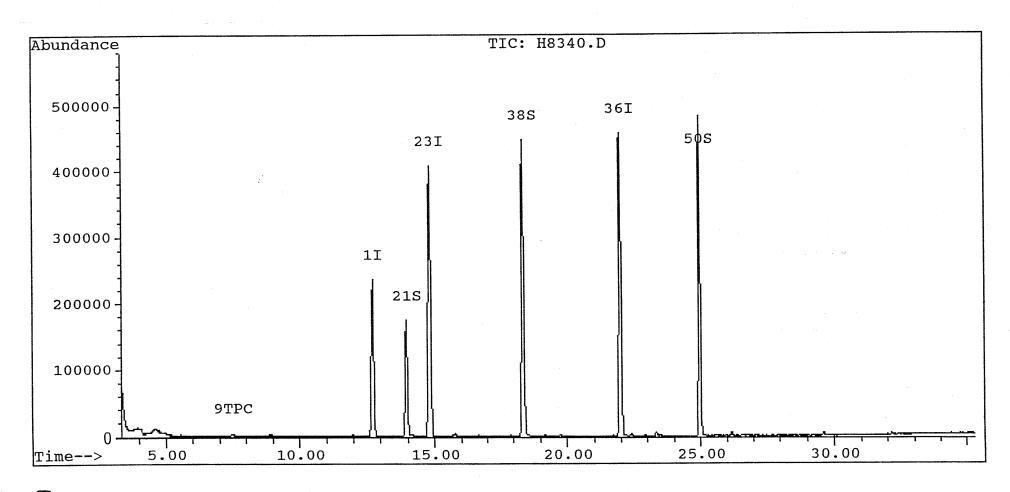
Quantitation Report

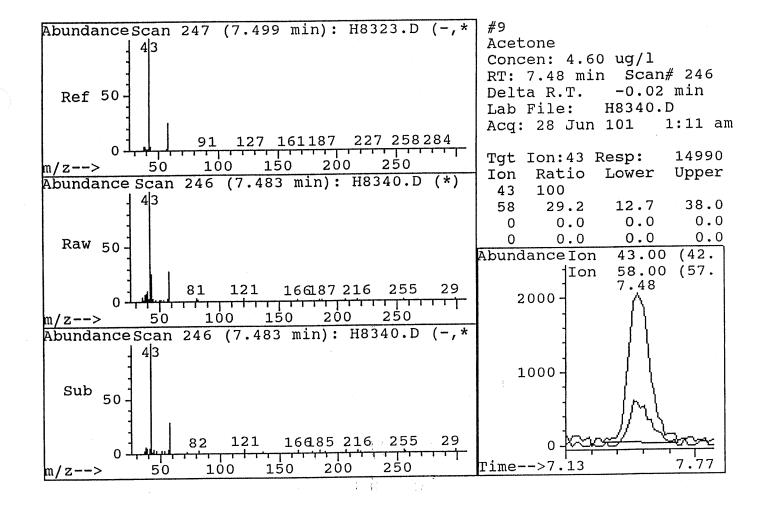
Data File : J:\ACQUDATA\MSVOA Acq On : 28 Jun 101 1:11 Sample : 468461 1.0 Misc : HA '95-1 SDG:OS4S Quant Time: Jun 28 1:46 1910 Method : J:\ACQUDATA\MS Title : CLPVOAS ON MS# Last Update : Wed Jun 27 17: Response via : Single Level C	am EPA:OS- 1 VOA1\MET 1 55:43 20	-1d THODS\ 001		Vial: 2 Operator: D Inst : 5 Multiplr: 1	DLIPANI 970 - In
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
 Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5 	12.72 14.82 21.99	114		50.00 ug/l 50.00 ug/l 50.00 ug/l	
System Monitoring Compounds 21) 1,2-Dichloroethane-d4 38) Toluene-d8 50) Bromofluorobenzene	13.96 18.36 24.97	98	971829	%F 50.29 ug/l 52.31 ug/l 47.46 ug/l	104.62%
Target Compounds 9) Acetone	7.48	43	14990	4.60 ug/l	Qvalue 92 J

Quancita on keport

Data File	:	J:\ACQUDATA\MSVOA1\DATA\062701\H8340.D	Vial:	
Acq On	:	28 Jun 101 1:11 am	Operator:	DLIPANI
Sample	:	468461 1.0	Inst :	
		HA '95-1 SDG:OS4S EPA:OS-1d	Multiplr:	1.00
Quant Time	:	Jun 28 1:46 19101		

Method: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.MTitle: CLPVOAS ON MS#1Last Update: Wed Jun 27 17:55:43 2001Response via: Single Level Calibration





H8340.D ASP0627.M

Thu Jun 28 10:23:13 2001

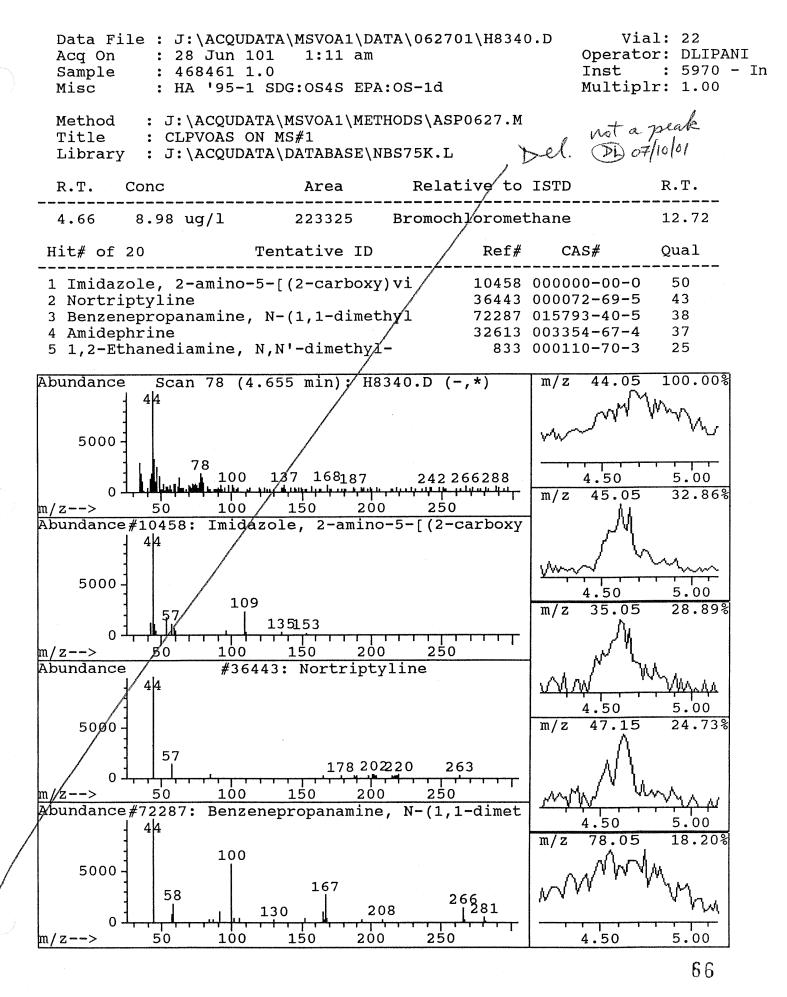
		J:\ACQUDATA\MSVOA1\DATA\062701\H8340.D 28 Jun 101 1:11 am	Vial: Operator:	
Sample		468461 1.0	Inst :	5970 - In
Misc	:	HA '95-1 SDG:OS4S EPA:OS-1d	Multiplr:	1.00

Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Library : NBS75K.L

Internal Standard Area Summary

R.T.	Conc	Area	ISTD
12.72 14.82 21.99	50.00 ug/l 50.00 ug/l 50.00 ug/l	1243022 2458265 2383592	Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5

H8340.D ASP0627.M



H8340.D ASP0627.M

Tue Jul 10 13:02:27 2001

	1A		EPA SA	MPLE NO.
	VOLATILE ORGANICS ANALY	t	0	S-1S
Lab Name: CAS/RO	ОСН	Contract: HA	L	
Lab Code: 10145	Case No.: R21-7196	SAS No.:	SDG No.:	OS4S
Matrix: (soil/water)	WATER	Lab Sample II	D: <u>468462 1</u>	.0
Sample wt/vol:	5.0 (g/ml) <u>ML</u>	Lab File ID:	H8339.D	
Level: (low/med)	LOW	Date Receive	d:	
% Moisture: not dec.		Date Analyzed	d: 06/28/01	
	02. ID: 0.53 (mm)	Dilution Facto	or: 1.0	
Soil Extract Volume		Soil Aliquot V		
Soli Extract volume	(uc)			(uc)
	CON	ICENTRATION UNIT	S:	
CAS NO.	COMPOUND (ug/L	or ug/Kg) UG/L		Q
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	Ū
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	Ū
67-64-1	Acetone		7	J
75-35-4	1,1-Dichloroethene	· · · ·	10	U
75-09-2	Methylene chloride		10	U
75-15-0	Carbon disulfide		10	U
156-60-5	trans-1,2-Dichloroethene	3	10	U
75-34-3	1,1-Dichloroethane		10	U
78-93-3	2-Butanone		10	U
156-59-4	cis-1,2-Dichloroethene		10	U
67-66-3	Chloroform		10	U
107-06-2	1,2-Dichloroethane		10	<u> </u>
71-55-6	1,1,1-Trichloroethane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		10	U
79-01-6	Trichloroethene		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
10061-02-6	trans-1,3-Dichloroproper	10	10	U
79-00-5	1,1,2-Trichloroethane		10	U
124-48-1	Dibromochloromethane		10	<u> </u>
75-25-2	Bromoform		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	<u> </u>
591-78-6	2-Hexanone		10	U
127-18-4	Tetrachloroethene		10	U U
108-90-7	Chlorobenzene		10	U
100-41-4	Ethylbenzene		10	U
1330-20-7	(m+p)Xylene		<u>10</u> 10	U U
1330-20-7	o-Xylene			<u> </u>
100-42-5	Styrene		10	<u> </u>
79-34-5	1,1,2,2-Tetrachloroethan		10	<u> </u>

FORMIVOA

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1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

OS-1S Contract: HA Lab Name: CAS/ROCH SAS No.: SDG No.: OS4S 10145 Case No.: R21-7196 Lab Code: Lab Sample ID: 468462 1.0 Matrix: (soil/water) WATER Lab File ID: H8339.D (g/ml) ML 5.0 Sample wt/vol: Date Received: Level: (low/med) LOW Date Analyzed: 06/28/01 % Moisture: not dec. GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0 (uL) Soil Aliquot Volume: Soil Extract Volume (uL)

CONCENTRATION UNITS:

Number TICs found: 1

(ug/L or ug/Kg) UG/L

EPA SAMPLE NO.

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 001634-04-4	Propane, 2-methoxy-2-methyl-	9.29	260	JN

	Quan	titatio	on Rep	ort			
	Data File : J:\ACQUDATA\MSVOA1\DATA\062701\H8339.D Vial: 21 Acq On : 28 Jun 101 12:28 am Operator: DLIPANI Sample : 468462 1.0 Inst : 5970 - In Misc : HA '95-1 SDG:OS4S EPA:OS-1S Multiplr: 1.00 Quant Time: Jun 28 1:04 19101 1:04 19101						
	Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 17:55:43 2001 Response via : Single Level Calibration						
I	nternal Standards	R.T.	QIon	Response	Conc (Jnits	Dev(Min)
			114	259441 1210412 945355	50.00	ug/l	-0.01
	ystem Monitoring Compounds 21) 1,2-Dichloroethane-d4 38) Toluene-d8 50) Bromofluorobenzene	13.97 18.38 24.99	65 98	514726 1214762 698673	51.40	ug/l ug/l	Recovery 101.25% 102.81% 97.12%
	arget Compounds 9) Acetone 14) Methyl tert Butyl Ether 17) 2-Butanone	7.49 9.31 11.58	43 73	31186 3843808 5709	182.93		99 NT

11 1

(#) = qualifier out of range (m) = manual integration H8339.D ASP0627.M Thu Jun 28 01:04:07 2001

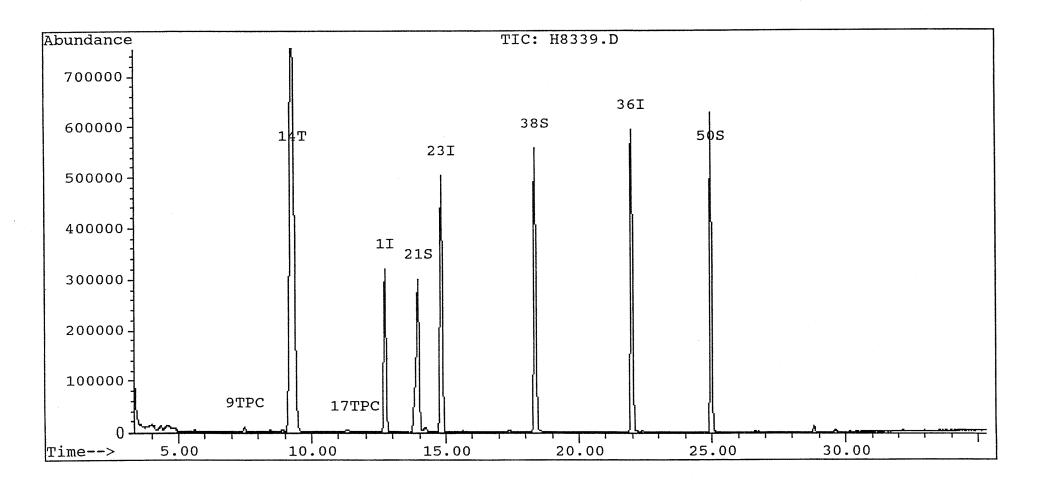
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06/28/01

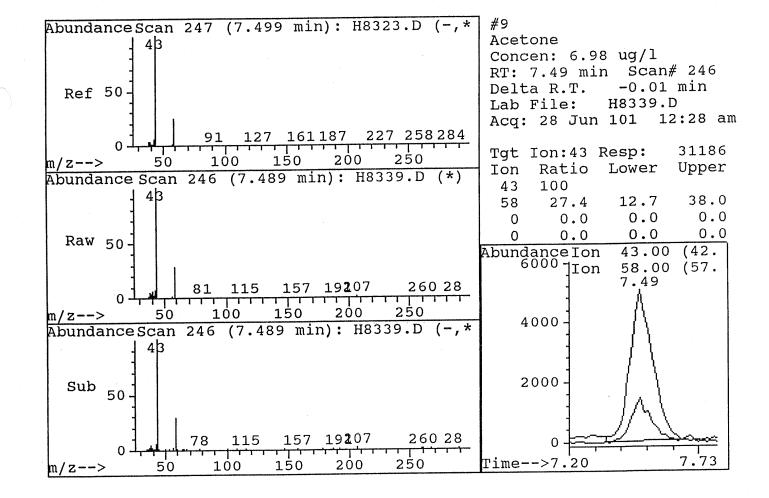
Quantita on keport

Data File	:	J:\ACQUDATA\MSVOA1\DATA\062701\H8339.D	Vial:	21
Acq On	:	28 Jun 101 12:28 am	Operator:	
Sample	:	468462 1.0		5970 - In
Misc	:	HA '95-1 SDG:OS4S EPA:OS-1S	Multiplr:	1.00
Quant Time	2:	Jun 28 1:04 19101		

Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M
Title : CLPVOAS ON MS#1
Last Update : Wed Jun 27 17:55:43 2001
Response via : Single Level Calibration



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H8339.D ASP0627.M

Thu Jun 28 10:22:18 2001

Data File	:	J:\ACQUDATA\MSVOA1\DATA\062701\H8339.D	Vial:	21
		28 Jun 101 12:28 am	Operator:	DLIPANI
· · ·	:	468462 1.0	Inst :	5970 - In
	:	HA '95-1 SDG:OS4S EPA:OS-1S	Multiplr:	1.00

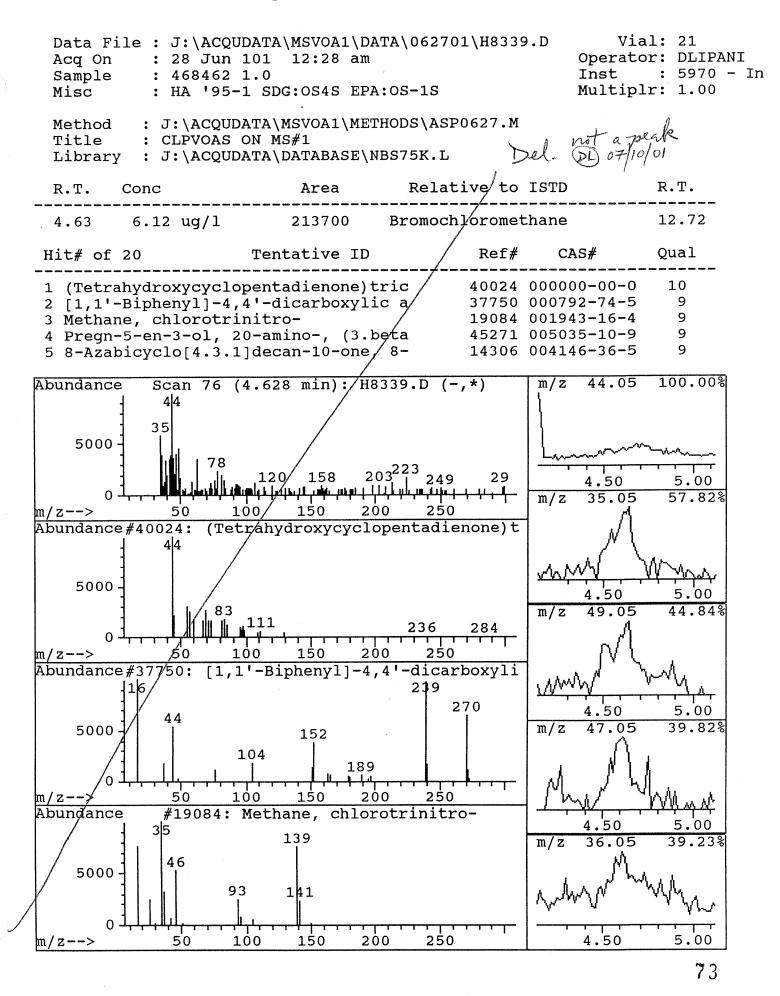
Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Library : NBS75K.L

Internal Standard Area Summary

R.T.	Conc	Area	ISTD			
12.72 14.84 22.00	50.00 ug/l 50.00 ug/l 50.00 ug/l	1746319 3048491 3062962	Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5			
	07/10/01					

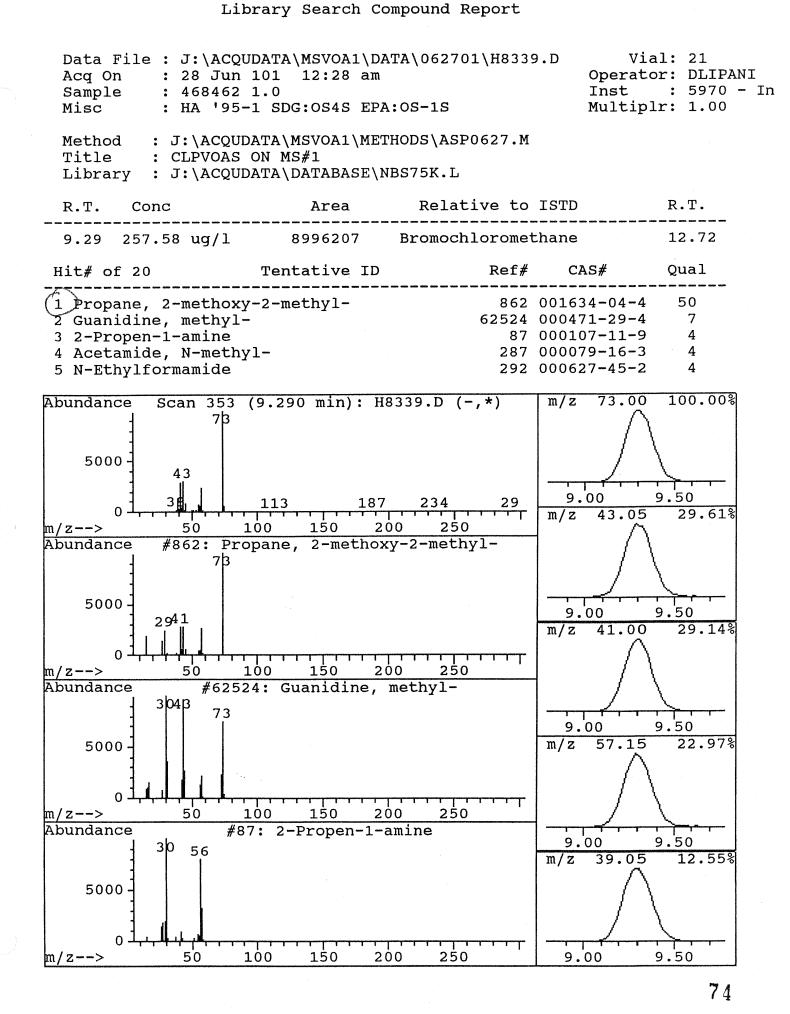
H8339.D ASP0627.M

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H8339.D ASP0627.M

Tue Jul 10 12:58:27 2001



H8339.D ASP0627.M

Tue Jul 10 12:58:28 2001



			-		
	1A VOLATILE ORGANICS ANA	LYSIS DATA SH		EPA SA	MPLE NO
Lab Name: CAS/	ROCH	Contract: HA		TRIP	BLANK
Lab Code: 10145	5 Case No.: R21-719	 06 SAS No.:	SDG	No.: C	S4S
Matrix: (soil/water)			mple ID: 46		
•					<u> </u>
Sample wt/vol:	5.0 (g/ml) <u>ML</u>	Lab File	e ID: <u>H8</u>	341.D	
Level: (low/med)	LOW	Date Re	eceived:		
% Moisture: not dec	C.	Date An	nalyzed: 06	/28/01	
			Factor: 1.0		
	(502. ID: <u>0.53</u> (mm)				
Soil Extract Volume	e (uL)	Soil Alic	quot Volume): 	(u
		DNCENTRATION			_
CAS NO.	COMPOUND (ug	J/L or ug/Kg)	UG/L		Q
74 07 0	Chloromothano			10	U
74-87-3 75-01-4	Chloromethane Vinyl chloride	******		10	U
74-83-9	Bromomethane			10	U
75-00-3	Chloroethane	***********	-	10	U
67-64-1	Acetone			10	U
75-35-4	1,1-Dichloroethene			10	U
75-09-2	Methylene chloride			10	U
75-15-0	Carbon disulfide			10	U
156-60-5	trans-1,2-Dichloroethe	ne		10	U
75-34-3	1,1-Dichloroethane			10	U
78-93-3	2-Butanone			10	U
156-59-4	cis-1,2-Dichloroethene	}		10	U U
67-66-3	Chloroform			10 10	U
<u>107-06-2</u> 71-55-6	1,2-Dichloroethane 1,1,1-Trichloroethane			10	U U
56-23-5	Carbon tetrachloride			10	U
71-43-2	Benzene			10	U
79-01-6	Trichloroethene	· · · · · · · · · · · · · · · · · · ·		10	U
78-87-5	1,2-Dichloropropane	· ·		10	U
75-27-4	Bromodichloromethan	e		10	U
10061-01-5	cis-1,3-Dichloroproper	10		10	U
10061-02-6		ene		10	U
79-00-5	1,1,2-Trichloroethane			10	<u> </u>
124-48-1	Dibromochloromethan	e		10	<u>U</u>
75-25-2	Bromoform			10	U
108-10-1	4-Methyl-2-pentanone			10	<u> </u>
108-88-3	Toluene		+	10	U U
<u>591-78-6</u> 127-18-4	2-Hexanone Tetrachloroethene			10 10	U U
108-90-7	Chlorobenzene		+	10	U
100-41-4	Ethylbenzene			10	U
1330-20-7	(m+p)Xylene			10	U
1330-20-7	o-Xylene		1	10	U
100-42-5	Styrene			10	U
79-34-5	1,1,2,2-Tetrachloroeth	ane		10	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA	SAMPL	_E	NO
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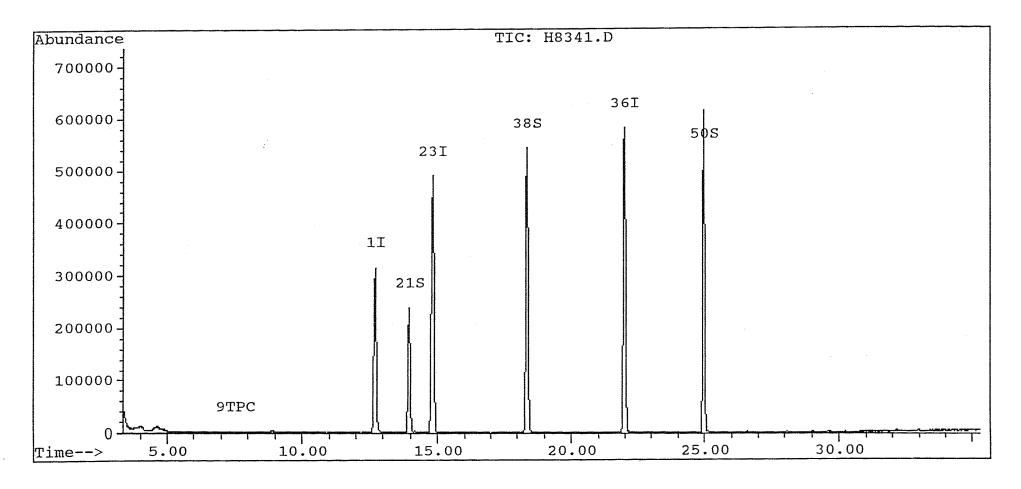
		TENTATI	VELY IDENT	IFIED COMP	OUNDS	Г	anger proj. 7 Sant. Sant. 2	A. 1.1.C
Lab Name:	CAS/RC	СН	<u></u>	Contrac	t: <u>HA</u>		TRIP BL	ANK
Lab Code:	10145	Cas	se No.: <u>R21-</u>	7 <u>196</u> SAS	No.:	_ SDG	No.: <u>OS4</u>	S
Matrix: (soil/w	ater)	WATER		i	_ab Sample	ID: 46	68464 1.0	
Sample wt/vo	l:	5.0	(g/ml) <u>ML</u>		_ab File ID:	H	8341.D	
Level: (low/m	ned)	LOW		I	Date Receiv	/ed:		
% Moisture: n	ot dec.			I	Date Analyz	ed: 06	5/28/01	
GC Column:	RTX50	02. ID: 0.5	53 (mm)	I	Dilution Fac	tor: <u>1.</u>	0	
Soil Extract V	olume .		_ (uL)	:	Soil Aliquot	Volume	ə:	(uL)
				CONCENTR				
Number TICs	found:	0		(ug/L or ug/k	(g) <u>UG</u>	<u>/L</u>		
CAS NO.		COMPOU	IND		RT	EST.	CONC.	Q

Data File : J:\ACQUDATA\MSVOA Acq On : 28 Jun 101 1:53 Sample : 468464 1.0 Misc : HA '95-1 SDG:OS4S Quant Time: Jun 28 2:29 1910 Method : J:\ACQUDATA\MS Title : CLPVOAS ON MS#	am 5 EPA:TRI 91 5VOA1\MET 41	P BLA	NK	Vial: 2 Operator: D Inst : 5 Multiplr: 1	LIPANI 970 - In
Last Update : Wed Jun 27 17: Response via : Single Level C	55:43 20	01 on			
Response via : Single Level C					
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	12.72	128	256691	50.00 ug/l	
23) 1,4-Difluorobenzene	14.82	114	1188300	50.00 ug/l	
36) Chlorobenzene-d5	21.99	117	944603	50.00 ug/l	-0.04
Gunt an Manitaning Compounds				8F	Recovery
System Monitoring Compounds	13.96	65	508936	50.59 ug/l	
21) 1,2-Dichloroethane-d4	18.36		1196568	50.67 ug/l	
38) Toluene-d8	24.99		688712	47.91 ug/l	
50) Bromofluorobenzene	24.77	55	000,10	.,	
Target Compounds					Qvalue
9) Acetone	7.52	43	5997	1.36 ug/l	89 <
<i>y n o o o o o o o o o o</i>					G.

Quantita on keport

Data File	:	J:\ACQUDATA\MSVOA1\DATA\062701\H8341.D	Vial:	
Acq On	:	28 Jun 101 1:53 am	Operator:	
Dampao	-	468464 1.0	Inst :	
Misc	:	HA '95-1 SDG:OS4S EPA:TRIP BLANK	Multiplr:	1.00
Quant Time) :	Jun 28 2:29 19101		

Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M
Title : CLPVOAS ON MS#1
Last Update : Wed Jun 27 17:55:43 2001
Response via : Single Level Calibration



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H8341.D ASP0627.M

Page 2

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Data File	:	J:\ACQUDATA\MSVOA1\DATA\062701\H8341.D	Vial:	23
Acq On	:	28 Jun 101 1:53 am	Operator:	DLIPANI
Sample	•	468464 1.0	Inst :	5970 - In
Misc	:	HA '95-1 SDG:OS4S EPA:TRIP BLANK	Multiplr:	1.00

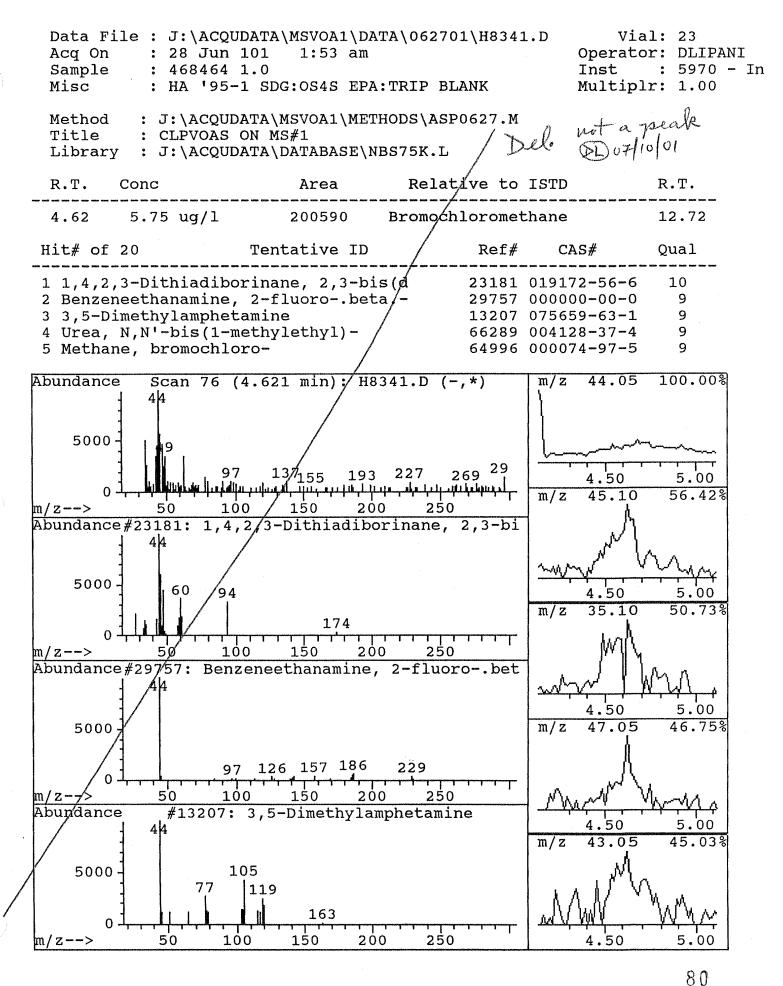
Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Library : NBS75K.L

Internal Standard Area Summary

R.T.	Conc	Area	ISTD
12.72	50.00 ug/l	1743093	Bromochloromethane
14.82	50.00 ug/l	2984214	1,4-Difluorobenzene
21.99	50.00 ug/l	3017466	Chlorobenzene-d5

07/10/01

H8341.D ASP0627.M



H8341.D ASP0627.M Tue Jul 10 13:03:57 2001

VOLATILE ORGANICS ANALYSIS DATA SHEET COOLER BLANK Lab Name: CAS/ROCH Contract: HA Lab Code: 10145 Case No.: R21-7196 SAS No.: SDG No.: OS45 Matrix: (sol/water) WATER Lab Sample ID: 471983 1.0 SDG No.: OS45 Sample wt/vol: 5.0 (g/m) ML Lab Sample ID: 471983 1.0 Sample wt/vol: 5.0 (g/m) ML Lab Sample ID: 471983 1.0 Sample wt/vol: 5.0 (g/m) ML Lab Sample ID: 471983 1.0 Cover Date Received:		1A	EPA SAMPLE NO.
Lab Code: 10145 Case No.: R21-7196 SAS No.: SDG No.: OS45 Matrix: (soil/water) WATER Lab Sample ID: 471983 1.0 Sample wl/vol: 5.0 (g/mi) ML Lab Sile ID: H8342.D Level: (low/med) LOW Date Received:			COOLER BLANK
Matrix: (soli/water) WATER Lab Sample ID: 471983 1.0 Sample wt/vol: 5.0 (g/ml) ML Lab File ID: H8342.D Level: (low/med) LOW Date Received:	Lab Name: CAS/RO	CH Contract: HA	
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: H8342.D Level: (low/med) LOW Date Received:	Lab Code: 10145	Case No.: R21-7196 SAS No.:	SDG No.: OS4S
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: H8342.D Level: (low/med) LOW Date Received:	Matrix: (soil/water)	WATER Lab Sar	mple ID: 471983 1.0
Level: LoW Date Received: % Moisture: not dec.	· · ·		S. Contraction of the second se
% Moisture: not dec. Date Analyzed: <u>66/28/01</u> GC Column: <u>RTX502</u> . ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume			
GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume	Level: (low/med)	LOW Date Re	eceived:
GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume	% Moisture: not dec.	Date An	alyzed: 06/28/01
Soil Extract Volume (uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q 74-87-3 Chloromethane 10 U Q 74-87-3 Chloromethane 10 U Q 74-87-3 Chloromethane 10 U Q 74-87-3 Chloroethane 10 U Q 74-83-9 Bromomethane 10 U Q 75-01-4 Vinyl chloroethene 10 U Q 75-05-2 Methylene chloride 10 U Q 75-50-3 Carbon disulfide 10 U Q 156-60-5 trans-1,2-Dichloroethene 10 U Q 75-34-3 1,1-Dichloroethene 10 U Q 71-55-6 Carbon disulfide 10 U Q 71-65-7 Carbon disulfide 10 U Q 71-43-2 Benomene			Factor: 1.0
CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q 74-87-3 Chloromethane 10 U 75-01-4 Vinyl chloride 10 U 74-83-9 Bromomethane 10 U 74-83-9 Bromomethane 10 U 75-01-4 Vinyl chloride 10 U 76-03 Chloroethane 10 U 75-04 Acetone 10 U 75-35-4 1,1-Dichloroethene 10 U 75-15-0 Carbon disulfide 10 U 75-34-3 1,1-Dichloroethene 10 U 75-65-5 trans-1,2-Dichloroethene 10 U 156-69-4 cis-1,2-Dichloroethene 10 U 156-63 Chloroform 10 U 156-63 Chloroform 10 U 71-65-6 1,1-Trichloroethane 10 U 71-43-2 Benzene 10 U 75-65 1,2-Dichloropropa			
CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q 74-87-3 Chloromethane 10 U 75-01-4 Vinyl chloride 10 U 74-87-3 Chloromethane 10 U 74-83-9 Bromomethane 10 U 74-81-3 Chloroethane 10 U 75-00-3 Chloroethane 10 U 67-64-1 Acetone 10 U 75-03-2 Methylene chloride 10 U 75-09-2 Methylene chloride 10 U 75-34-3 1,1-Dichloroethene 10 U 75-34-3 1,1-Dichloroethane 10 U 76-66-5 trans-1,2-Dichloroethane 10 U 107-06-2 1,2-Dichloroethane 10 U 107-06-2 1,2-Dichloroethane 10 U 71-43-2 Benzene 10 U 78-87-5 1,2-Dichloropropane 10 U 78-87-5	Soli Extract volume		
CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q 74-87-3 Chloromethane 10 U 75-01-4 Vinyl chloride 10 U 74-87-3 Chloromethane 10 U 74-83-9 Bromomethane 10 U 74-81-3 Chloroethane 10 U 75-00-3 Chloroethane 10 U 67-64-1 Acetone 10 U 75-03-2 Methylene chloride 10 U 75-09-2 Methylene chloride 10 U 75-34-3 1,1-Dichloroethene 10 U 75-34-3 1,1-Dichloroethane 10 U 76-66-5 trans-1,2-Dichloroethane 10 U 107-06-2 1,2-Dichloroethane 10 U 107-06-2 1,2-Dichloroethane 10 U 71-43-2 Benzene 10 U 78-87-5 1,2-Dichloropropane 10 U 78-87-5		CONCENTRATION	UNITS:
74-87-3 Chloromethane 10 U 75-01-4 Vinyl chloride 10 U 74-83-9 Bromomethane 10 U 74-83-9 Bromomethane 10 U 75-00-3 Chloroethane 10 U 67-64-1 Acetone 10 U 75-30-2 Methylene chloride 10 U 75-09-2 Methylene chloride 10 U 75-36-4 1,1-Dichloroethene 10 U 156-60-5 trans-1,2-Dichloroethane 10 U 75-34-3 1,1-Dichloroethane 10 U 156-59-4 cis-1,2-Dichloroethane 10 U 176-66-3 Chloroform 10 U 107-06-2 1,2-Dichloroethane 10 U 71-43-2 Benzene 10 U 78-87-5 1,2-Dichloropropane 10 U 78-87-5 1,2-Dichloropropene 10 U 78-87-5 1,2-Dichloropro	CASNO		
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56-23-5 Carbon tetrachloride 10 U 71-43-2 Benzene 10 U 79-01-6 Trichloroethene 10 U 78-87-5 1,2-Dichloropropane 10 U 75-27-4 Bromodichloromethane 10 U 1061-01-5 cis-1,3-Dichloropropene 10 U 10061-02-6 trans-1,3-Dichloropropene 10 U 79-00-5 1,1,2-Trichloroethane 10 U 124-48-1 Dibromochloromethane 10 U 75-25-2 Bromoform 10 U 108-10-1 4-Methyl-2-pentanone 10 U 108-88-3 Toluene 10 U 108-88-3 Toluene 10 U 127-18-4 Tetrachloroethene 10 U 108-90-7 Chlorobenzene 10 U 100-41-4 Ethylbenzene 10 U 1330-20-7 o-Xylene 10 U 1330-20-7 o-			
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100-42-5 Styrene 10 U			

FORM I VOA

81

	1E VOLATILE ORGANICS ANAL	VSIS DATA SHEFT	EPA SAMPL	F NO
	TENTATIVELY IDENTIFIE			
Lab Name: <u>CAS/</u> F	loch	Contract: <u>HA</u>	COOLER B	LANK
Lab Code: 10145	Case No.: R21-7196	SAS No.:	_ SDG No.: <u>OS48</u>	3
Matrix: (soil/water)	WATER	Lab Sample	ID: 471983 1.0	
Sample wt/vol:	5.0 (g/ml) <u>ML</u>	Lab File ID:	H8342.D	ق تىببىر.
Level: (low/med)	LOW	Date Receiv	/ed:	
% Moisture: not dec	•	Date Analyz	ed: 06/28/01	
GC Column: RTX	502. ID: <u>0.53</u> (mm)	Dilution Fac	tor: <u>1.0</u>	
Soil Extract Volume	(uL)	Soil Aliquot	Volume:	(uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L				
CAS NO.	COMPOUND	RT	EST. CONC.	Q

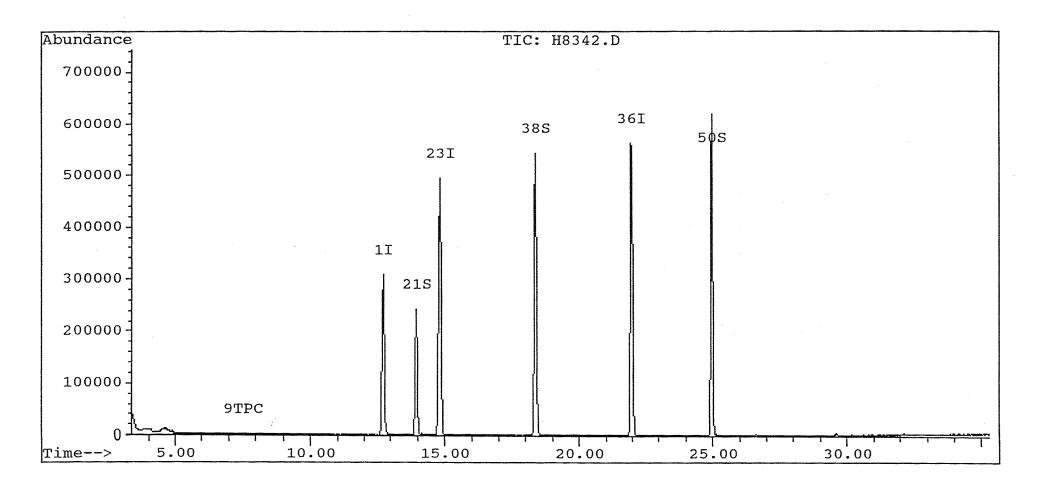
Data File : J:\ACQUDATA\MSVOA Acq On : 28 Jun 101 2:30 Sample : 471983 1.0 Misc : HA '95-1 SDG:OS48 Quant Time: Jun 28 3:11 1910 Method : J:\ACQUDATA\M8 Title : CLPVOAS ON MS Last Update : Wed Jun 27 17 Response via : Single Level 0	6 am 5 EPA:COOL 01 5VOA1\METH #1 :55:43 200	ER BLANK ODS\ASP0627.M 1	Vial: 2 Operator: D Inst : 5 Multiplr: 1	LIPANI 970 – In
Internal Standards	Ion Response	Conc Units	Dev(Min)	
 Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5 	14.84	128 247060 114 1177612 117 928446	50.00 ug/l 50.00 ug/l 50.00 ug/l	-0.02
System Monitoring Compounds 21) 1,2-Dichloroethane-d4 38) Toluene-d8 50) Bromofluorobenzene	13.96 18.37 24.97	65 505700 98 1185525 95 692171	%R 52.23 ug/l 51.08 ug/l 48.98 ug/l	102.16%
Target Compounds 9) Acetone	7.52	43 4644	1.09 ug/l	Qvalue 98 <

06/28/01

(#) = qualifier out of range (m) = manual integration H8342.D ASP0627.M Thu Jun 28 03:11:52 2001 TEST2

Data File :	J:\ACQUDATA\MSVOA1\DATA\062701\H8342.D	Vial:	24
Acq On :	28 Jun 101 2:36 am	Operator:	DLIPANI
Sample :	471983 1.0	Inst :	5970 - In
Misc :	HA '95-1 SDG:OS4S EPA:COOLER BLANK	Multiplr:	1.00
Quant Time:	Jun 28 3:11 19101		

Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M
Title : CLPVOAS ON MS#1
Last Update : Wed Jun 27 17:55:43 2001
Response via : Single Level Calibration



\$ 8

H8342.D ASP0627.M

Data File	•	J:\ACQUDATA\MSVOA1\DATA\062701\H8342.D	Vial:	24
		28 Jun 101 2:36 am	Operator:	DLIPANI
Sample	•	471983 1.0	Inst :	
Misc	:	HA '95-1 SDG:OS4S EPA:COOLER BLANK	Multiplr:	1.00

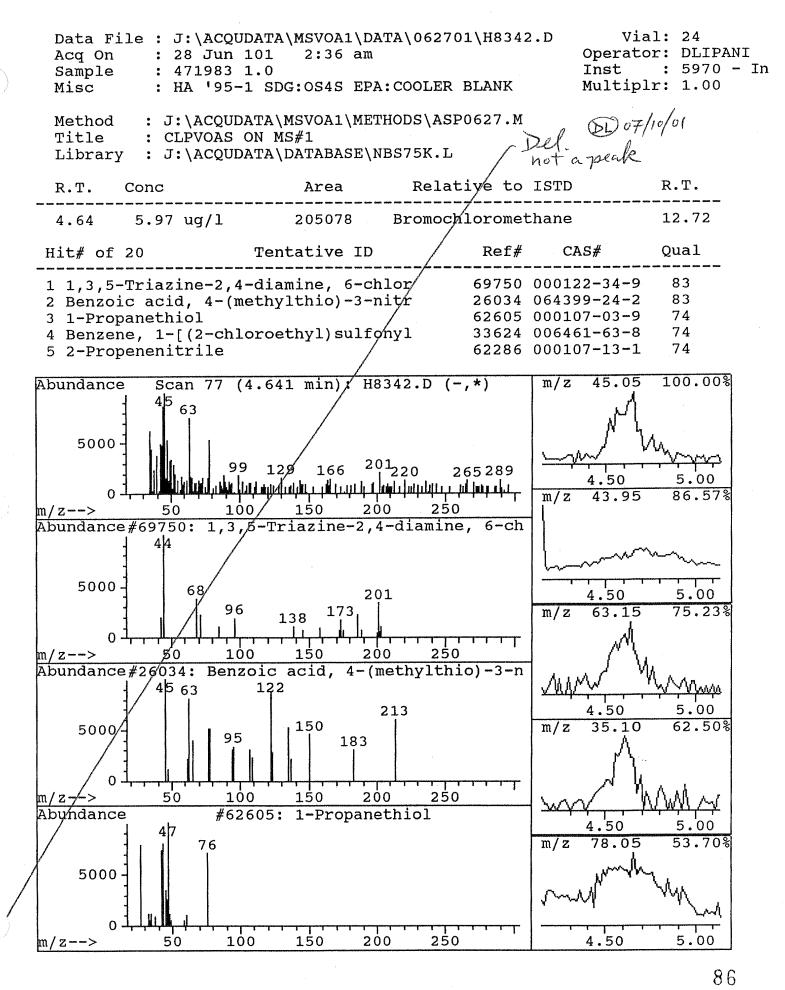
Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Library : NBS75K.L

Internal Standard Area Summary

R.T.	Conc	Area	ISTD
12.72 14.84 21.98	50.00 ug/l 50.00 ug/l 50.00 ug/l	1717122 2961207 3022277	Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5
		51) 67/10/01	

85

H8342.D ASP0627.M



H8342.D ASP0627.M Tue Jul 10 13:05:54 2001

VOLATILE ORGANICS

STANDARDS DATA

Concentration Report

Method:	ASP0627
Title	CLPVOAS ON MS#1
Last Update	Wed Jun 27 14:59:56 2001
Analyst	DLIPANI

	STD	STD	STD	STD	STD	STD
	10	20	50	100	150	200
Compound:						
Bromochloromethane	50.0	50.0	50.0	50.0	50.0	50.0
Dichlorodifluoromethane	10.0	20.0	50.0	100.0	150.0	200.0
Chloromethane	10.0	20.0	50.0	100.0	150.0	200.0
Vinyl chloride	10.0	20.0	50.0	100.0	150.0	200.0
Bromomethane	10.0	20.0	50.0	100,0	150.0	200.0
Chloroethane	10.0	20.0	50.0	100.0	150.0	200.0
Trichlorofluoromethane	10.0	20.0	50.0	100.0	150.0	200.0
FREON 113	10,0	20.0	50.0	100.0	150.0	200.0
Acetone	10.0	20.0	50.0	100.0	150.0	200.0
1,1-Dichloroethene	10.0	20.0	50.0	100.0	150.0	200.0
Methyl Acetate	10.0	20.0	50.0	100.0	150.0	200.0
Methylene chloride	10.0	20.0	50.0	100.0	150.0	200.0
Carbon disulfide	10.0	20.0	50.0	100.0	150.0	200.0
Methyl tert Butyl Ether	10.0	20.0	50.0	100.0	150.0	200.0
trans-1,2-Dichloroethene	10.0	20.0	50.0	100.0	150.0	200.0
1,1-Dichloroethane	10.0	20.0	50.0	100.0	150.0	200.0
2-Butanone	10.0	20.0	50.0	100.0	150.0	200.0
cis-1,2-Dichloroethene	10.0	20.0	50.0	100.0	150.0	200.0
Chloroform	10.0	20.0	50.0	100.0	150.0	200.0
Cyclohexane	10.0	20.0	50.0	100.0	150.0	200.0
1,2-Dichloroethane-d4	10.0	20.0	50.0	100.0	150.0	200.0
1,2-Dichloroethane	10.0	20.0	50.0	100.0	150.0	200.0
1,4-Difluorobenzene	50.0	50.0	50.0	50.0	50.0	50.0
1,1,1-Trichloroethane	10.0	20.0	50.0	100.0	150.0	200.0
Carbon tetrachloride	10.0	20.0	50.0	100.0	150.0	200.0
Benzene	10.0	20.0	50.0	100.0	150.0	200.0
Trichloroethene	10.0	20.0	50.0	100.0	150.0	200.0
Methylcyclohexane	10.0	20.0	50.0	100.0	150.0	200.0
1,2-Dichloropropane	10.0	20.0	50.0	100.0	150.0	200.0
Bromodichloromethane	10.0	20.0	50.0	100.0	150.0	200.0
cis-1,3-Dichloropropene	10.0	20.0	50.0	100.0	150.0	200.0
trans-1,3-Dichloropropene	10.0	20.0	50.0	100.0	150.0	200.0
1,1,2-Trichloroethane	10.0	20.0	50,0	100.0	150.0	200.0

Concentration Report

Method:	ASP0627
Title	CLPVOAS ON MS#1
Last Update	Wed Jun 27 14:59:56 2001
Analyst	DLIPANI

Compound:Dibromochloromethane10.020.050.0100.0150.0200.0Bromoform10.020.050.0100.0150.0200.0Chlorobenzene-d550.050.050.050.050.050.0		STD 10	STD 20	STD 50	STD 100	STD 150	STD 200
Bromoform10.020.050.0100.0150.0200.0Chlorobenzene-d550.050.050.050.050.050.050.0	Compound:						
Chlorobenzene-d5 50.0	Dibromochloromethane	10.0	20.0	50.0	100.0	150.0	200.0
	Bromoform	10.0	20.0	50.0	100.0	150.0	200.0
	Chlorobenzene-d5	50.0	50.0	50.0	50.0	50.0	50.0
4-Methyl-2-pentanone 10.0 20.0 50.0 100.0 150.0 200.0	4-Methyl-2-pentanone	10.0	20.0	50,0	100.0	150.0	200.0
Toluene-d810.020.050.0100.0150.0200.0	Toluene-d8	10.0	20.0	50.0	100.0	150.0	200.0
Toluene10.020.050.0100.0150.0200.0	Toluene	10.0	20.0	50.0	100.0	150.0	200.0
2-Hexanone 10.0 20.0 50.0 100.0 150.0 200.0	2-Hexanone	10.0	20.0	50.0	100.0	150.0	200.0
Tetrachloroethene10.020.050.0100.0150.0200.0	Tetrachloroethene	10.0	20.0	50.0	100.0	150,0	200.0
1,2-Dibromoethane 10.0 20.0 50.0 100.0 150.0 200.0	1,2-Dibromoethane	10.0	20.0	50.0	100.0	150.0	200.0
Chlorobenzene 10.0 20.0 50.0 100.0 150.0 200.0	Chlorobenzene	10.0	20.0	50.0	100.0	150.0	200.0
Ethylbenzene10.020.050.0100.0150.0200.0	Ethylbenzene	10.0	20.0	50.0	100.0	150.0	200.0
(m+p)Xylene 20.0 40.0 100.0 200.0 300.0 400.0	(m+p)Xylene	20.0	40.0	100.0	200.0	300.0	400.0
o-Xylene 10.0 20.0 50.0 100.0 150.0 200.0	o-Xylene	10.0	20.0	50.0	100.0	150.0	200.0
Styrene10.020.050.0100.0150.0200.0	Styrene	10.0	20.0	50.0	100.0	150.0	200.0
Isopropylbenzene 10.0 20.0 50.0 100.0 150.0 200.0	Isopropylbenzene	10.0	20.0	50.0	100.0	150.0	200.0
1,1,2,2-Tetrachloroethane 10.0 20.0 50.0 100.0 150.0 200.0	1,1,2,2-Tetrachloroethane	10.0	20.0	50.0	100.0	150.0	200.0
Bromofluorobenzene 10.0 20.0 50.0 100.0 150.0 200.0	Bromofluorobenzene	10.0	20.0	50.0	100.0	150.0	200.0
1,3-Dclbenzene 10.0 20.0 50.0 100.0 150.0 200.0	1,3-Dclbenzene	10.0	20.0	50.0	100,0	150.0	200.0
1,4-Dclbenzene 10.0 20.0 50.0 100.0 150.0 200.0	1,4-Dclbenzene	10.0	20.0	50.0	100.0	150.0	200.0
1,2-Dclbenzene 10.0 20.0 50.0 100.0 150.0 200.0	1,2-Dclbenzene	10.0	20.0	50.0	100.0	150.0	200.0
1,2-Dibromo-3-chloropropa 10.0 20.0 50.0 100.0 150.0 200.0	1,2-Dibromo-3-chloropropa	10.0	20.0	50.0	100.0	150.0	200.0
1,2,4-Tcbenzene 10.0 20.0 50.0 100.0 150.0 200.0	1,2,4-Tcbenzene	10.0	20.0	50.0	100.0	150.0	200.0

Data File : J:\ACQUDATA\MSVOA1 Acq On : 27 Jun 101 11:12 Sample : VSTD010 Misc : Quant Time: Jun 27 14:53 19101	Vial: 1 Operator: D Inst : 59 Multiplr: 1	LIPANI 970 - In			
Method : J:\ACQUDATA\MSV Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 14:5 Response via : Single Level Ca	9:56 20	001	ASP0627.M		
Internal Standards	R.T.	QIon	Response	Conc Units I	Dev(Min)
 Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5 	12.73 14.84 21.99	114	1254014	- · ·	0.00
System Monitoring Compounds 21) 1,2-Dichloroethane-d4 38) Toluene-d8 50) Bromofluorobenzene	13.96 18.37 24.99	65 98	113277 264019 154016		21.29%
<pre>Target Compounds 2) Dichlorodifluoromethane 3) Chloromethane 4) Vinyl chloride 5) Bromomethane 6) Chloroethane 7) Trichlorofluoromethane 8) FREON 113 9) Acetone 10) 1,1-Dichloroethene 11) Methyl Acetate 12) Methylene chloride 13) Carbon disulfide 14) Methyl tert Butyl Ether 15) trans-1,2-Dichloroethene 16) 1,1-Dichloroethane 17) 2-Butanone 18) cis-1,2-Dichloroethene 19) Chloroform 20) Cyclohexane 22) 1,2-Dichloroethane 24) 1,1,1-Trichloroethane</pre>	3.68 4.24 4.45 5.48 5.68 6.29 7.37 7.50 7.79 8.58 8.91 8.96 9.32 9.64 11.56 11.99 12.35 13.32 14.17 13.27	94 64 101 43 96 43 84 76 73 96 63 43	136939 86570 62233 56816 57102 168051 126873 39867 70060 61955 88842 127995 210594 82842 141191 39826 87322 162767 144286 136659 118829	10.64 ug/l	Qvalue 100 99 95 100 99 100 98 96 100 98 98 100 99 98 100 99 98 100 98 99
24) 1,1,1-Trichloroethane 25) Carbon tetrachloride 26) Benzene 27) Trichloroethene 28) Methylcyclohexane 29) 1,2-Dichloropropane 30) Bromodichloromethane 31) cis-1,3-Dichloropropene 32) trans-1,3-Dichloropropene 33) 1,1,2-Trichloroethane 34) Dibromochloromethane 35) Bromoform 37) 4-Methyl-2-pentanone 39) Toluene	13.27 13.86 14.23 15.63 15.80 16.02 16.56 17.78 18.95 19.32 20.59 24.42 17.28 18.56	117 78 130 83 63 83 75 75 97 129 129 173 43	96194 271271 101479 145139 81444 95597 89271 70153 76709	9.17 ug/l 11.05 ug/l 10.71 ug/l 10.95 ug/l 10.85 ug/l 8.58 ug/l 8.43 ug/l 7.71 ug/l 10.77 ug/l 7.90 ug/l 6.63 ug/l 9.74 ug/l	98 100 98 100 99 100 100 99 98 99 99 99 99 99 99
(#) = qualifier out of range (m) H8321.D ASP0627.M Wed Jun	= manu 27 15:1	al in 5:08	tegration 2001	E TEST2 06/27/01	Page 1

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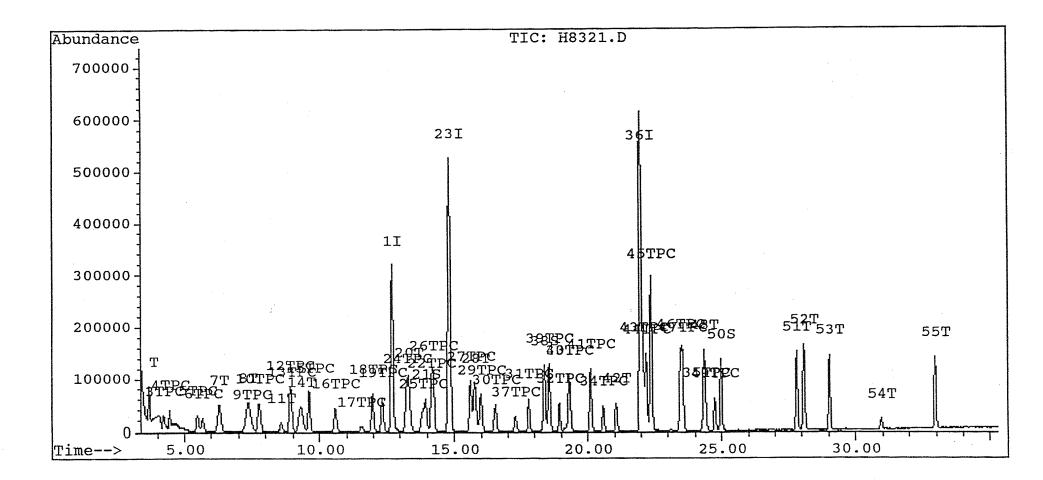
<u>in a</u>

Data File : J:\ACQUDATA\MSVOA1 Acq On : 27 Jun 101 11:12 ; Sample : VSTD010 Misc : Quant Time: Jun 27 14:53 19101	Vial: 10 Operator: DLI Inst : 597 Multiplr: 1.0	0 - In			
Method : J:\ACQUDATA\MSVG Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 14:59 Response via : Single Level Ca					
Compound	R.T.	QIon	Response	Conc Unit Q	value
40) 2-Hexanone	19.32	43	60929	9.67 ug/l	95
41) Tetrachloroethene	20.12	164	89370	10.96 ug/l	99
42) 1,2-Dibromoethane	21.08	107	103537	10.44 ug/l	97
	22.09	112	206304	10.96 ug/l	94
44) Ethylbenzene	22.21		337664	10.66 ug/l	99
45) $(m+p)$ Xylene	22.38		573260	21.99 ug/l	99
46) o-Xylene	23.47	91	289961	10.87 ug/l	99
47) Styrene	23.56	104	200734	10.65 ug/l	99
48) Isopropylbenzene	24.35	105	340105		99
49) 1,1,2,2-Tetrachloroethane	24.75	83	92091		99
51) 1,3-Dclbenzene	27.82	146	182978	10.96 ug/l	99
52) 1,4-Dclbenzene	28.08		182093	10.81 ug/l #	51
53) 1,2-Dclbenzene	29.04		171355		100
54) 1,2-Dibromo-3-chloropropan				6.89 ug/l	100
55) 1,2,4-Tcbenzene	32.98	180	110411	12.63 ug/l	99

(#) = qualifier out of range (m) = manual integration H8321.D ASP0627.M Wed Jun 27 15:15:09 2001 TEST2

	Quantiti jn F	Report		
Acq On : Sample : Misc :	J:\ACQUDATA\MSVOA1\DATA\062701\H8321.D 27 Jun 101 11:12 am VSTD010 Jun 27 14:53 19101	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In	
Method Title Last Update	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M : CLPVOAS ON MS#1 : Wed Jup 27 14:59:56 2001			

Last Update : Wed Jun 27 14:59:56 2001 Response via : Single Level Calibration



H8321.D ASP0627.M

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Page 3

)	Ace Sai Mis	ta File : J:\ACQUDATA\MSVOA q On : 27 Jun 101 11:54 mple : VSTD020 sc : ant Time: Jun 27 14:55 1910	am)62701	\H8322.D	Vial: 11 Operator: DL Inst : 59 Multiplr: 1.	IPANI 70 – In
	Ti^{\dagger} La:	thod : J:\ACQUDATA\MS tle : CLPVOAS ON MS# st Update : Wed Jun 27 14: sponse via : Single Level C	1 59:56 20	001	ASP0627.M		
1	Inte	rnal Standards	R.T.	QIon	Response	Conc Units D	ev(Min)
-	1)	Bromochloromethane	12.72	128		50.00 ug/l	-0.01
		1,4-Difluorobenzene	14.82				
	36)	Chlorobenzene-d5	21.98	117	966319	50.00 ug/l	-0.01
	~~~~	- Newitering Compounds				%Re	covery
		em Monitoring Compounds 1,2-Dichloroethane-d4	13.95	65	213572		
		Toluene-d8	18.36			<b>_</b> .	
		Bromofluorobenzene	24.97	95	295096	20.23 ug/l	
_	•		1				Qvalue
	larg	et Compounds Dichlorodifluoromethane	3.68	85	259022	21.71 ug/l	99
		Chloromethane	4.22	50	151429		97
		Vinyl chloride	4.46	62	120639		97
		Bromomethane	5.48	94	130263	20.14 ug/l	100
		Chloroethane	5.67	64	112601	21.67 ug/l	100
	7)	Trichlorofluoromethane	6.29	101	331998	21.37 ug/l	99
	8)	FREON 113	7.35	101	245756	21.72 ug/l	99
	9)	Acetone	7.50	43	77685	22.05 ug/l	98
		1,1-Dichloroethene	7.77	96	140680	21.25 ug/l	99
		Methyl Acetate	8.56	43	122467	20.78 ug/l	98 99
		Methylene chloride	8.92	84 76	167386 292563	21.55 ug/l 17.50 ug/l	99
		Carbon disulfide	8.97 9.32	73	410906	20.76 ug/1	99
		Methyl tert Butyl Ether trans-1,2-Dichloroethene	9.52	73 96	160894	21.12 ug/l	99
		1,1-Dichloroethane	10.60	63	273995	20.84 ug/l	100
		2-Butanone	11.56	43	77142	20.42 ug/l	100
		cis-1,2-Dichloroethene	12.00	96	171670	21.11 ug/l	98
		Chloroform	12.35	83	315089	21.05 ug/l	99
		Cyclohexane	13.33	56	277428	21.23 ug/l	99
		1,2-Dichloroethane	14.17	62	258997	21.10 ug/l	98
		1,1,1-Trichloroethane	13.28	97	242611	20.26 ug/l	100
	•	Carbon tetrachloride	13.86	117	204090	19.63 ug/l	99
	26)	Benzene	14.23	78	515405	21.20 ug/l	99 99
	27)	Trichloroethene	15.61 15.78	130 83	199724 278169	21.28 ug/l 21.19 ug/l	100
	28) 29)	Methylcyclohexane 1,2-Dichloropropane	16.00	63	156225	21.19 ug/1 21.01 ug/l	99
	30)	Bromodichloromethane	16.54	83	208415	18.88 ug/l	95
	31)	cis-1,3-Dichloropropene	17.77	75	195768	18.66 ug/l	99
		trans-1,3-Dichloropropene	18.93	75	159480	17.70 ug/l	99
	•	1,1,2-Trichloroethane	19.32	97	148215	21.00 ug/l	98
	34)	Dibromochloromethane	20.58	129	163880	17.54 ug/l	100
		Bromoform	24.40	173	98476	15.91 ug/l	98
		4-Methyl-2-pentanone	17.26	43			98
	39)	Toluene	18.54	92	328308	21.37 ug/l	100
]	(#) H832	= qualifier out of range (m 2.D ASP0627.M Wed Jun	) = manu 27 15:1	al in 15:22	tegration 2001	TEST2 06/27/01	 Рафез 1

Data File :	J:\ACQUDATA\MSVOA1\DATA\062701\H8322.D	Vial:	11
Acq On :	27 Jun 101 11:54 am	Operator:	DLIPANI
Sample :	VSTD020	Inst :	5970 - 3
Misc :		Multiplr:	1.00
Quant Time:	Jun 27 14:55 19101		
s. •	· · · · · ·		

Method	:	J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M
Title	:	CLPVOAS ON MS#1
Last Update	:	Wed Jun 27 14:59:56 2001
Response via	:	Single Level Calibration

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	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
40)	2-Hexanone	19.30	43	113445	18.11 ug/l	96
41)	Tetrachloroethene	20.11	164	175124	21.60 ug/l	99
42)	1,2-Dibromoethane	21.07	107	199633	20.24 ug/l	100
43)	Chlorobenzene	22.08	112	399386	21.33 ug/l	99
44)	Ethylbenzene	22.18	91	661694	21.01 ug/l	99
45)	(m+p)Xylene	22.38	91	1121495	43.26 ug/l	100
46)	o-Xylene	23.46	91	560866	21.15 ug/l	100
47)	Styrene	23.54	104	394130	21.03 ug/l	100
48)	Isopropylbenzene	24.33	105	655341	21.23 ug/l	99
49)	1,1,2,2-Tetrachloroethane	24.75	83	182444	20.17 ug/l	99
51)	1,3-Dclbenzene	27.82	146	354069	21.33 ug/l	100
52)	1,4-Dclbenzene	28.09	146	358793	21.43 ug/l	99
53)	1,2-Dclbenzene	29.05	146	329902	20.97 ug/l	99
54)	1,2-Dibromo-3-chloropropan	30.96	75	30646	16.52 ug/l	98
55)	1,2,4-Tcbenzene	32.98	180	178979	20.60 ug/l	98
•		<b>.</b> ."	• •			

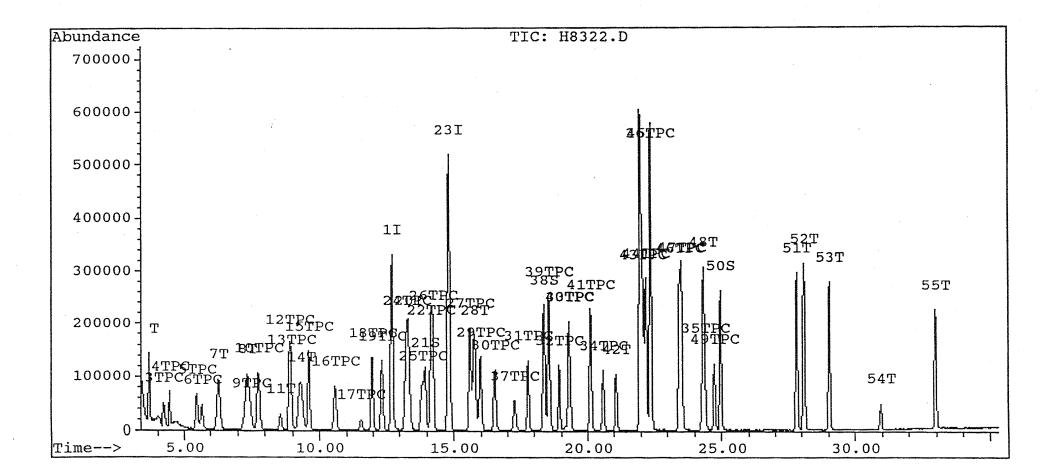
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(#) = qualifier out of range (m) = manual integration H8322.D ASP0627.M Wed Jun 27 15:15:23 2001 TEST2

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In

Ĵ.	Quantit n R	eport	
Acq On : Sample : Misc :	J:\ACQUDATA\MSVOA1\DATA\062701\H8322.D 27 Jun 101 11:54 am VSTD020 Jun 27 14:55 19101	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
<b>.</b>	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M : CLPVOAS ON MS#1 : Wed Jun 27 14:59:56 2001 a : Single Level Calibration		



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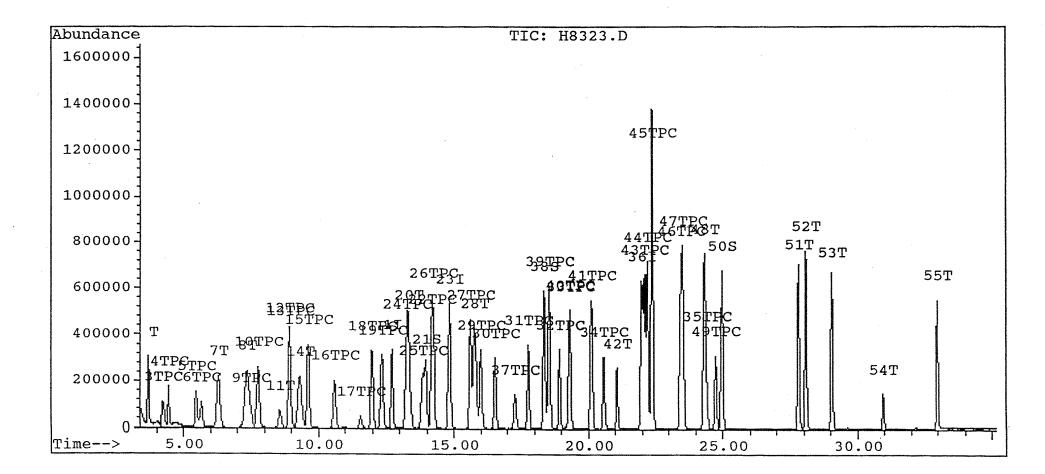
	Ac Sa Mi	ta File : J:\ACQUDATA\MSVOA q On : 27 Jun 101 12:37 mple : VSTD050 sc : ant Time: Jun 27 14:52 1910	pm		.\H8323.D	Vial: 1 Operator: D Inst : 5 Multiplr: 1	LIPANI 970 - In
	Ti La	thod : J:\ACQUDATA\MS tle : CLPVOAS ON MS# st Update : Wed Jun 27 14: sponse via : Single Level C	1 59 <b>:</b> 56 20	001	ASP0627.M		
	Inte	rnal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
	23)	Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5	12.73 14.84 21.99	128 114 117	274568 1281036 1007062	50.00 ug/l 50.00 ug/l 50.00 ug/l	0.00 0.00 0.00
	Syst	em Monitoring Compounds				%R	ecovery
		1,2-Dichloroethane-d4	13.98			50.00 ug/l	
		Toluene-d8	18.37			50.00 ug/l	
	50)	Bromofluorobenzene	24.99	95	759918	50.00 ug/l	100.00%
	Targ	et Compounds					Qvalue
		Dichlorodifluoromethane	3.70	85	620441	50.00 ug/l	~ 99
		Chloromethane	4.23	50	348456	50.00 ug/l	98
		Vinyl chloride	4.45	62	295221	50.00 ug/l	97
		Bromomethane	5.48	94	336315	50.00 ug/l	100
		Chloroethane Trichlorofluoromethane	5.66 6.30	64 101	270192 808083	50.00 ug/l 50.00 ug/l	100 99
		FREON 113	7.36	101	588534	50.00 ug/1	99
1		Acetone	7.50	43	183195	50.00 ug/l	98
		1,1-Dichloroethene	7.79	96	344264	50.00 ug/l	99
		Methyl Acetate	8.58	43	306558	50.00 ug/l	98
	12)		8.93	84		50.00 ug/l	99
		Carbon disulfide	8.96	76	869286	50.00 ug/l	100
		Methyl tert Butyl Ether	9.32	73	1029257	50.00 ug/l	99
	•	trans-1,2-Dichloroethene	9.64	96	396295	50.00 ug/l	99
		1,1-Dichloroethane	10.61 11.57	63	683881 196461	50.00 ug/l 50.00 ug/l	100 99
		2-Butanone cis-1,2-Dichloroethene	11.99	43 96	422910	50.00 ug/1	98
	•	Chloroform	12.36	83	778644	50.00 ug/l	99
		Cyclohexane	13.34	56	679584	50.00 ug/l	99
		1,2-Dichloroethane	14.18	62	638262	50.00 ug/l	98
	•	1,1,1-Trichloroethane	13.27	97	617402	50.00 ug/l	100
	•	Carbon tetrachloride	13.86	117	536088	50.00 ug/l	99
		Benzene Trichloroethene	14.23 15.63	78 130	1253717 484028	50.00  ug/l	99 99
		Methylcyclohexane	15.78	83	677071	50.00 ug/l 50.00 ug/l	100
	29)		16.02	63	383503	50.00 ug/l	100
		Bromodichloromethane	16.55	83	569185	50.00 ug/l	95
	31)	cis-1,3-Dichloropropene	17.78	75	541006	50.00 ug/l	99
	-	trans-1,3-Dichloropropene	18.94	75	464689	50.00 ug/l	99
	•		19.33	97	363957	50.00 ug/l	98
		Dibromochloromethane	20.58	129		50.00 ug/l	100
		Bromoform 4-Methyl-2-pentanone	24.41 17.28	173 43	319185 366843	50.00 ug/l 50.00 ug/l	98 97
	•	Toluene	18.56	43 92	800429	50.00 ug/l	100
	(#)	= qualifier out of range (m) 3.D ASP0627.M Wed Jun	) = manu	al in	tegration	EL TEST2 06/27/01	out allos and and and and

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Data File : J:\ACQUDATA\MSVOA1 Acq On : 27 Jun 101 12:37 Sample : VSTD050 Misc : Quant Time: Jun 27 14:52 19101	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In			
Method : J:\ACQUDATA\MSV Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 14:5 Response via : Single Level Ca					
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
40) 2-Hexanone	19.31	43	326489	50.00 ug/	1 92
41) Tetrachloroethene	20.12	164	422545	50.00 ug/	l # 100
42) 1,2-Dibromoethane	21.08	107	513866		
43) Chlorobenzene	22.09	112	975508	50.00 ug/	1 99
44) Ethylbenzene	22.19	91	1639307	49.95 ug/	1 99
45) (m+p)Xylene	22.39	91	2701974	100.00 ug/	1 100
46) o-Xylene	23.47	91	1382022	50.00 ug/	1 100
47) Styrene	23.54	104	976692	50.00 ug/	
48) Isopropylbenzene	24.35	105	1608772	50.00 ug/	
49) 1,1,2,2-Tetrachloroethane	24.75	83	471396	50.00 ug/	
51) 1,3-Dclbenzene	27.83			50.00 ug/	
52) 1,4-Dclbenzene	28.08		872567	50.00 ug/	
	29.06		819935		
54) 1,2-Dibromo-3-chloropropan	30.96		96671	50.00 ug/	
55) 1,2,4-Tcbenzene	33.00	180	452829	50.00 ug/	1 98

	Quantit n R	leport	
Acq On : 2 Sample : V Misc :	:\ACQUDATA\MSVOA1\DATA\062701\H8323.D 7 Jun 101 12:37 pm STD050 un 27 14:52 19101	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
Title Last Update	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M : CLPVOAS ON MS#1 : Wed Jun 27 14:59:56 2001 : Single Level Calibration		



H8323.D ASP0627.M

	Ac Sa Mi	ta File : J:\ACQUDATA\MSVOA q On : 27 Jun 101 1:20 mple : VSTD100 sc : '95-1 INIT CAL GC ant Time: Jun 27 14:57 1910	pm MS#1			Opera Inst		DLIPANI 5970 - In
	Ti La	thod : J:\ACQUDATA\MS tle : CLPVOAS ON MS# st Update : Wed Jun 27 14: sponse via : Single Level C	1 59:56 20	001	ASP0627.M			
	Inte	rnal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-		Bromochloromethane			281769			
		1,4-Difluorobenzene Chlorobenzene-d5	14.84 22.01		1311698 1043957		ug/l ug/l	0.00 0.02
		em Monitoring Compounds						Recovery
		1,2-Dichloroethane-d4	13.96		1145976			
		Toluene-d8 Bromofluorobenzene	18.37 25.00		2759074 1652154	103.56		207.12% 209.73%
	Тата	et Compounds						Qvalue
		Dichlorodifluoromethane	3.68	85	1412610	110.93	ug/l	99
		Chloromethane	4.22		777492	108.71		99
		Vinyl chloride	4.44		715442	118.07		98
		Bromomethane	5.48			118.73		100
		Chloroethane	5.67		606783	109.42		100
		Trichlorofluoromethane	6.29		1769486 1277920	106.69		99 99
y y		FREON 113	7.37 7.48			105.79		
		Acetone 1,1-Dichloroethene			784644	111.05		99
		Methyl Acetate			671845	106.78		98
		Methylene chloride	8.91		858635	103.56		99
		Carbon disulfide	8.95		2247798			100
		Methyl tert Butyl Ether	9.28	73		106.61		99
		trans-1,2-Dichloroethene	9.62			107.47		99
	•	1,1-Dichloroethane	10.60			107.17		100
		2-Butanone	11.56	43	386318			100
	•	cis-1,2-Dichloroethene	11.99		916050	105.54		99 99
	•	Chloroform Cyclohexane	12.35 13.32	83 56	1696278 1463680	106.14 104.94		99
		1,2-Dichloroethane	14.18	62	1381438	105.45		99
		1,1,1-Trichloroethane	13.27	97	1380206	109.16		100
		Carbon tetrachloride	13.86	117	1239978	112.95		100
	26)	Benzene	14.23	78	2725979	106.17		100
		Trichloroethene	15.63		1046256	105.55		100
	•	Methylcyclohexane	15.78		1453218	104.81		
		1,2-Dichloropropane	16.00		851687			6/27/01100
		Bromodichloromethane	16.54			114.36		97 99
		cis-1,3-Dichloropropene trans-1,3-Dichloropropene	17.78 18.95		1257938 1141051	113.54 119.91		99
		1,1,2-Trichloroethane	19.33		802007	107.60		99
		Dibromochloromethane	20.59	129	1151291	116.68		100
		Bromoform	24.42		815505	124.76		100
1. 19		4-Methyl-2-pentanone	17.28		812456	106.82		100
e and		Toluene	18.56	92	1740854	104.90	ug/l	99
		= qualifier out of range (m				-	QD_1	99
	H832	4.D ASP0627.M Wed Jun	27 15:1	6:06	2001	TEST2	06/27/0	Page 1

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Data File : J:\ACQUDATA\MSVO Acq On : 27 Jun 101 1:2 Sample : VSTD100 Misc : '95-1 INIT CAL G Quant Time: Jun 27 14:57 191	Vial: Operator: 1 Inst : Multiplr:	DLIPANI 5970 - In					
Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 14:59:56 2001							
Response via : Single Level			Degnenge	Cong Unit	Qvalue		
Compound	R.T.	QION	Response	Conc Unit	Qvarue		
40) 2-Hexanone	19.32	43	587722	86.83 ug/l	96		
41) Tetrachloroethene	20.12		905980	103.42 ug/l			
42) 1,2-Dibromoethane	21.08	107	1121558	105.27 ug/l	100		
43) Chlorobenzene	22.09	112	2110191	104.34 ug/l	100		
44) Ethylbenzene	22.21	91	3592262	105.59 ug/l			
45) (m+p)Xylene	22.40	91	5799604	207.06 ug/l	99		
46) o-Xylene	23.49	91	2974018		100		
47) Styrene	23.56	104	2140465	105.70 ug/l	100		
	~ • ~ ~ ~		0 1 0 0 0 1	100 01	100		

24.36

24.77 27.83

28.10

29.06

30.96

33.00

48) Isopropylbenzene

51) 1,3-Dclbenzene

52) 1,4-Dclbenzene

53) 1,2-Dclbenzene

55) 1,2,4-Tcbenzene

49) 1,1,2,2-Tetrachloroethane

54) 1,2-Dibromo-3-chloropropan

105

146

146

146

180

75

83

3429231

1068548

1834062

1851213

1734686

239613

720146

102.81 ug/l

109.33 ug/l

102.28 ug/l

102.33 ug/l

102.04 ug/l

119.55 ug/l

76.71 ug/l

(#) = qualifier out of range (m) = manual integration H8324.D ASP0627.M Wed Jun 27 15:16:07 2001 TEST2 100

100

100

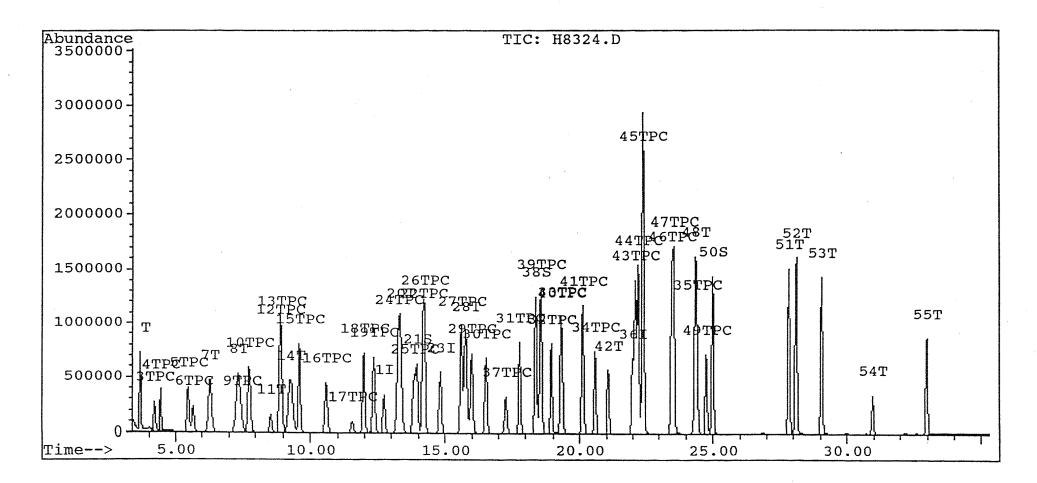
99

99

98

Quantita n Report Data File : J:\ACQUDATA\MSVOA1\DATA\062701\H8324.D Vial: 12 Acq On : 27 Jun 101 1:20 pm Operator: DLIPANI : 5970 - In Sample : VSTD100 Inst Misc Multiplr: 1.00 : '95-1 INIT CAL GCMS#1 Quant Time: Jun 27 14:57 19101 : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Method Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 14:59:56 2001

Response via : Single Level Calibration



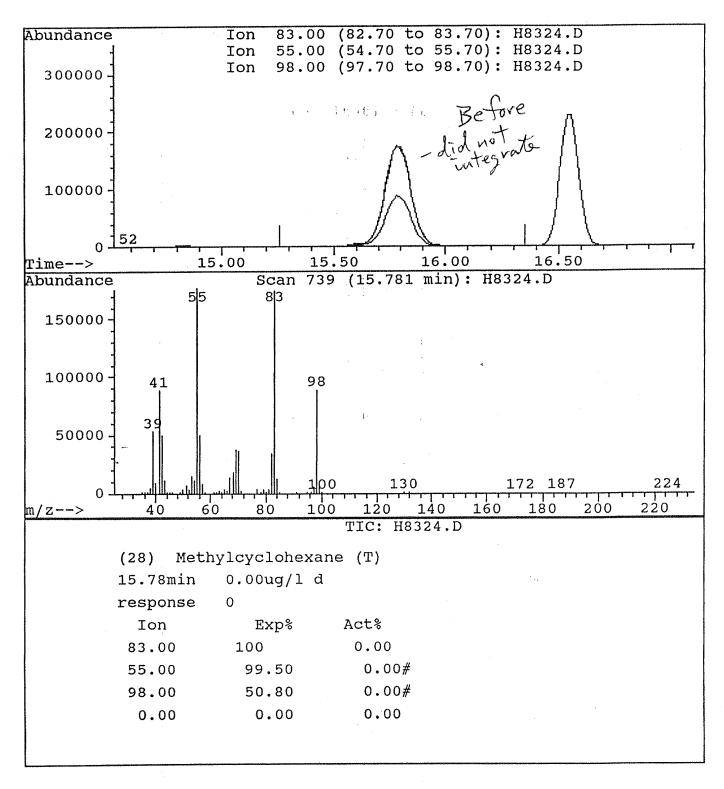
# 101

H8324.D ASP0627.M

Sague report

Acq On : Sample : Misc :	J:\ACQUDATA\MSVOA1\DATA\062701\H8324.D 27 Jun 101 1:20 pm VSTD100 '95-1 INIT CAL GCMS#1 Jun 27 14:56 19101	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
Method Title	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M : CLPVOAS ON MS#1		

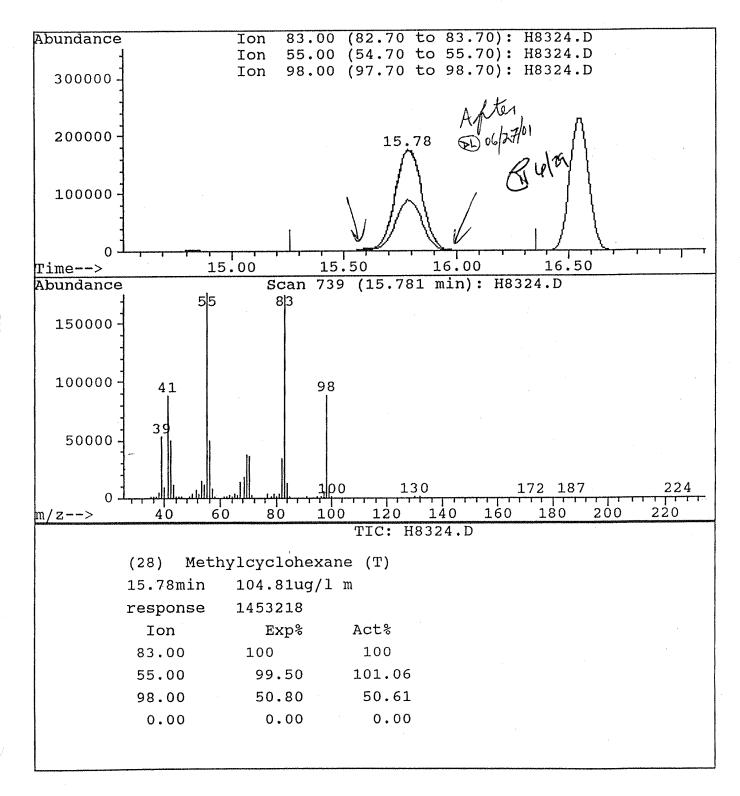
Last Update : Wed Jun 27 14:56:31 2001 Response via : Single Level Calibration



H8324.D ASP0627.M

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Data File :	J:\ACQUDATA\MSVOA1\DATA\062701\H8324.D	Vial:	
Acq On :	27 Jun 101 1:20 pm	Operator:	
Sample :	VSTD100	Inst :	5970 - In
	'95-1 INIT CAL GCMS#1	Multiplr:	1.00
	Jun 27 14:57 19101		
Method	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M		
Title	: CLPVOAS ON MS#1		
Last Update	: Wed Jun 27 14:56:31 2001		
	a : Single Level Calibration		



H8324.D ASP0627.M

	Data File : J:\ACQUDATA\MSVOA Acq On : 27 Jun 101 2:02 Sample : VSTD200 Misc : '95-1 INIT CAL GC Quant Time: Jun 27 14:58 1910	pm MS#1	062701	\H8325.D	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
	Method : J:\ACQUDATA\MS Title : CLPVOAS ON MS# Last Update : Wed Jun 27 14: Response via : Single Level C	⁴ 1 59 <b>:</b> 56 20	001	ASP0627.M		
	Internal Standards	R.T.	QION	Response	Conc Units	Dev(Min)
•	1) Bromochloromethane	12.74	128	299770	50.00 ug/l	0.00
	23) 1,4-Difluorobenzene	14.84	114		21	
	36) Chlorobenzene-d5	22.01	117	1074206	50.00 ug/l	0.02
					0,	Decenery
	System Monitoring Compounds	13.96	65	2296648	197.34 ug/l	Recovery 394.68%
	21) 1,2-Dichloroethane-d4 38) Toluene-d8	18.39			201.28 ug/l	
	50) Bromofluorobenzene	25.01		3290812	202.99 ug/l	
	SU) BIOMOTIUOIODENZENE	20.01	20	0000020	202000 - 20,-	
	Target Compounds					Qvalue
	2) Dichlorodifluoromethane	3.68	85	2772086	204.62 ug/l	
	3) Chloromethane	4.20	50		206.10 ug/l	
	4) Vinyl chloride	4.44	62	1397889	216.85 ug/l	
	5) Bromomethane	5.47	94	1638334	223.09 ug/l	
	6) Chloroethane	5.67	64	1193714	202.33 ug/l 200.35 ug/l	
<b>3</b>	7) Trichlorofluoromethane	6.29 7.37	101 101	3535248 2512364	195.50 ug/l	
Y	8) FREON 113 9) Acetone	7.49	43	507920	126.97 ug/l	
	10) 1,1-Dichloroethene	7.77	96		210.60 ug/l	
	11) Methyl Acetate	8.56	43		192.79 ug/l	
	12) Methylene chloride	8.92	84		190.79 ug/l	
	13) Carbon disulfide	8.97	76	4728411	249.11 ug/l	100
	14) Methyl tert Butyl Ether	9.30	73	4457446	198.33 ug/l	
	15) trans-1,2-Dichloroethene	9.62	96	1744053	201.55 ug/l	98
	16) 1,1-Dichloroethane	10.60	63		201.64 ug/l	,
	17) 2-Butanone	11.56		718463	167.48 ug/l	
	18) cis-1,2-Dichloroethene	12.00	96	1807966	195.78 ug/l	
	19) Chloroform	12.37	83	3386067	199.15 ug/l	
	20) Cyclohexane 22) 1,2-Dichloroethane	$13.34 \\ 14.18$	56 62	2934202 2713772	197.73 ug/l 194.72 ug/l	
	24) 1,1,1-Trichloroethane	13.27	97	2758590	211.26 ug/l	
	25) Carbon tetrachloride	13.86	117	2515910	221.90 ug/l	
	26) Benzene	14.25	78	5428676	204.74 ug/l	
	27) Trichloroethene	15.63	130	2050529	200.31 ug/l	100
	28) Methylcyclohexane	15.80	83	2914956	203.56 ug/l	99
	29) 1,2-Dichloropropane	16.02	63	1723418	212.48 ug/l	
	30) Bromodichloromethane	16.56	83	2731176	226.88 ug/l	
	31) cis-1,3-Dichloropropene	17.79		2586630	226.07 ug/l	
	32) trans-1,3-Dichloropropene		75	2368477	241.00 ug/l	
	<ul><li>33) 1,1,2-Trichloroethane</li><li>34) Dibromochloromethane</li></ul>	19.35 20.60	97 129	1562051 2335360	202.93 ug/l 229.17 ug/l	
100	34) Dibromochioromethane 35) Bromoform	20.80	173	1644626	243.63 ug/l	
setter in	37) 4-Methyl-2-pentanone	17.28	43		203.94 ug/1	
1	39) Toluene	18.58			202.27 ug/l	
	(#) = qualifier out of range (m H8325.D ASP0627.M Wed Jun	i) = manu	al in	tegration		/01 Page 1

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. 88

Data File : J:\ACQUDATA\MSVO Acq On : 27 Jun 101 2:0 Sample : VSTD200 Misc : '95-1 INIT CAL G Quant Time: Jun 27 14:58 191	12 DLIPANI 5970 - In 1.00				
Method : J:\ACQUDATA\M Title : CLPVOAS ON MS Last Update : Wed Jun 27 14 Response via : Single Level (					
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
	20.14 21.10 22.11 22.21	164 107 112 91	1099459 1774424 2214265 4119656 7005350 11155338	157.85 ug/l 196.84 ug/l 201.98 ug/l 197.96 ug/l 200.11 ug/l 387.05 ug/l	99 100 100 99

23.49

23.58

24.37

24.77

27.83

28.10

29.06

30.96

33.00

91

104

105

146

146

146

180

75

83

5794882

4175210

6611317

2138586

3564770

3632067

3374086

1886571

489301

196.55 ug/l

200.38 ug/l

192.63 ug/l

212.66 ug/l

193.20 ug/l

195.12 ug/l

192.89 ug/l

237.26 ug/l

195.29 ug/l

99

100

100

100

100

99

99

98

100

46) o-Xylene

Isopropylbenzene

51) 1,3-Dclbenzene

52) 1,4-Dclbenzene

53) 1,2-Dclbenzene

55) 1,2,4-Tcbenzene

49) 1,1,2,2-Tetrachloroethane

54) 1,2-Dibromo-3-chloropropan

47) Styrene

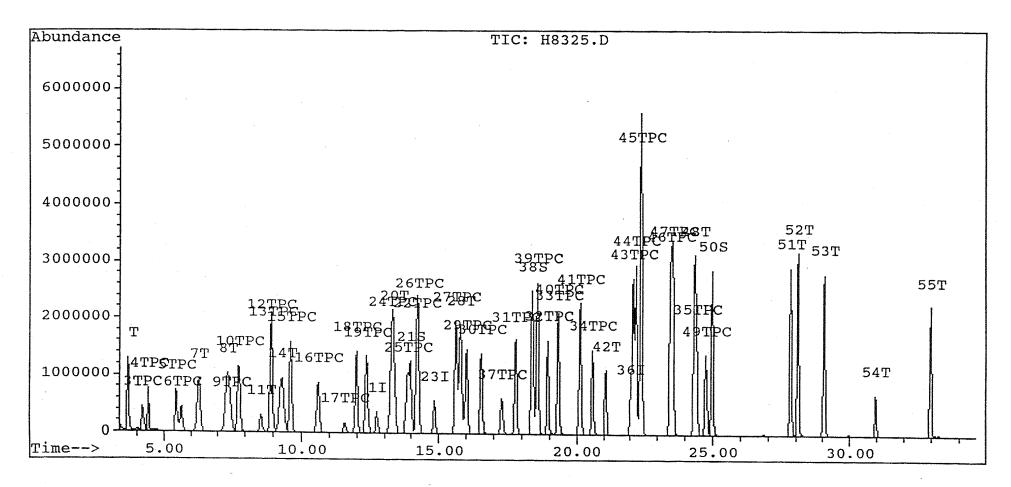
48)

(#) = qualifier out of range (m) = manual integration H8325.D Wed Jun 27 15:16:29 2001 ASP0627.M TEST2

105 Page 2

Quantita on Report Data File : J:\ACQUDATA\MSVOA1\DATA\062701\H8325.D Vial: 12 Acq On : 27 Jun 101 2:02 pm Operator: DLIPANI Sample : VSTD200 Inst : 5970 - In : '95-1 INIT CAL GCMS#1 Misc Multiplr: 1.00 Quant Time: Jun 27 14:58 19101 Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M

Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 14:59:56 2001 Response via : Single Level Calibration



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H8325.D ASP0627.M

Data File : J:\ACQUDATA\MSVOA1\DATA\062701\H8319.D Vial: 8 Operator: DLIPANI 9:55 am Acq On : 27 Jun 101 : 5970 - In Inst : TUNE CHECK Sample Multiplr: 1.00 Misc : '95-1 : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Method : CLPVOAS ON MS#1 Title TIC: H8319.D Abundance 200000 -150000 100000 : [ 12 50000 0 12.50 11.00 11.50 12.00 10.50 9.50 10.00 Time--> 11.149 to 11.168 min.: H8319.D (-) Abundance Average of 9,5 40000 -176 30000 75 20000 10000 -50 37 H<u>7</u>8

Peak Apex is scan: 164

40

60

80

0 -

m/z - ->

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50 75 95 96 173 174 175 176 177	95 95 95 174 95 174 174 174 176	15 30 100 5 0 50 5 95 5	40 60 100 9 2 120 9 101 9	$     18.9 \\     47.7 \\     100.0 \\     6.7 \\     0.3 \\     73.2 \\     7.4 \\     100.4 \\     6.9     $	7895 19909 41723 2780 83 30544 2246 30651 2101	PASS PASS PASS PASS PASS PASS PASS PASS

117128141

<del>╻┍┍╻╻╻╷╻╷╻╷╻╷╻╻</del>

100 120 140 160 180 200 220

H8319.D ASP0627.M

Wed Jun 27 10:18:16 2001 TEST2 107

205 223 238 255

276

240 260 280

BFB

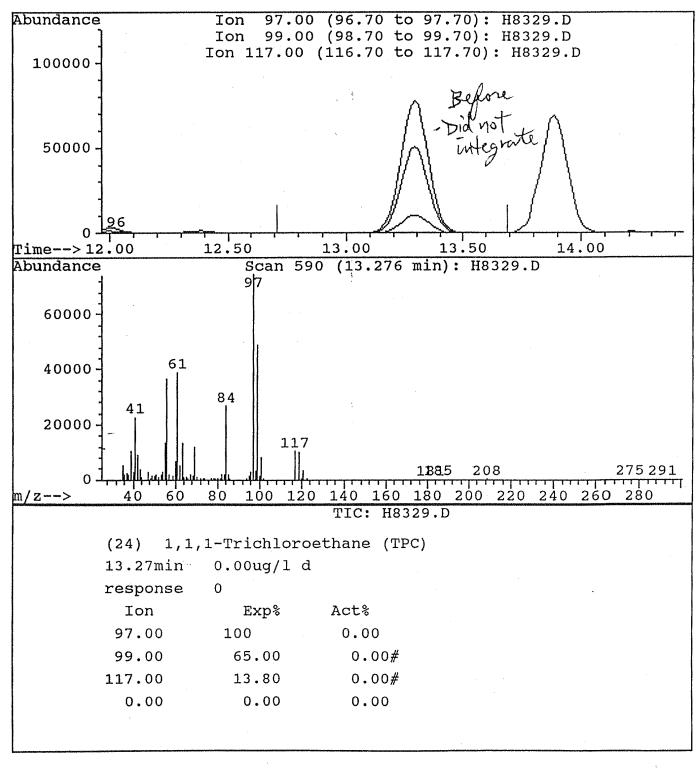
) )	Aco Sai Mis	ta File : J:\ACQUDATA\MSVOA q On : 27 Jun 101 5:02 mple : VSTD050 sc : '95-1 ant Time: Jun 27 17:38 1910	pm	.62701	\H8329.D	Vial: 3 Operator: 1 Inst : 5 Multiplr: 3	DLIPANI 5970 - In
	Ti La	thod : J:\ACQUDATA\MS tle : CLPVOAS ON MS# st Update : Wed Jun 27 14: sponse via : Single Level C	1 59:56 20	001	ASP0627.M		
	Inte	rnal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
·	23)	Bromochloromethane 1,4-Difluorobenzene Chlorobenzene-d5	12.75 14.86 22.03	114	277224 1320417 1050155	• •	0.02
	21) 38)	em Monitoring Compounds 1,2-Dichloroethane-d4 Toluene-d8 Bromofluorobenzene	13.98 18.41 25.01	98	543236 1312588 799153	50.47 ug/l	97.95%
	2) 3) 4) 5) 6) 7) 8) 9) 10) 12) 13) 14) 15) 16) 17) 18) 17) 20) 22) 24) 26) 27) 28) 20) 22) 24) 25) 20) 22) 23) 31) 32) 33) 34)	et Compounds Dichlorodifluoromethane Chloromethane Vinyl chloride Bromomethane Chloroethane Trichlorofluoromethane FREON 113 Acetone 1,1-Dichloroethene Methyl Acetate Methyl Acetate Methyl ene chloride Carbon disulfide Methyl tert Butyl Ether trans-1,2-Dichloroethene 1,1-Dichloroethane 2-Butanone cis-1,2-Dichloroethene Chloroform Cyclohexane 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon tetrachloride Benzene Trichloroethene Methylcyclohexane 1,2-Dichloropropane Bromodichloromethane cis-1,3-Dichloropropene trans-1,3-Dichloropropene 1,1,2-Trichloroethane	6.31 7.38 7.50 7.79 8.60	50 62 94 64 101 101 43 96 43 84 76 73 96 63 43 96 83 56 62 97	313306 347805 301602 847471 618932 238742 371306	52.55 ug/l 51.21 ug/l 55.28 ug/l 51.93 ug/l 52.08 ug/l 64.54 ug/l 53.41 ug/l 54.60 ug/l 51.79 ug/l 55.13 ug/l	98 99 100 99 99 98 99 100 100 99 100 100 98 99 100 100 99 00 0 00 99
	37)	Bromoform 4-Methyl-2-pentanone Toluene	17.31 18.58	43 92	409453 838193	53.52 ug/l 50.21 ug/l	99 99
	(#) H832	= qualifier out of range (m 9.D ASP0627.M Wed Jun	) = manu 27 17:3	al in 8:38	tegration 2001	E) TEST2 06/27/0	108 Page 1

Data File : J:\ACQUDATA\MSVOA Acq On : 27 Jun 101 5:02 Sample : VSTD050 Misc : '95-1 Quant Time: Jun 27 17:38 1910	2 pm	062701	\H8329.D	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
Method : J:\ACQUDATA\MS Title : CLPVOAS ON MS# Last Update : Wed Jun 27 14: Response via : Single Level C	#1 :59:56 20	001	ASP0627.M		
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
40) 2-Hexanone 41) Tetrachloroethene	19.33		362844	53.29 ug/l	

/					27	
41)	Tetrachloroethene	20.16	164	438765	49.79 ug/l	99
42)	1,2-Dibromoethane	21.10	107	536846	50.09 ug/l	99
43)	Chlorobenzene	22.11	112	999863	49.15 ug/l	98
44)	Ethylbenzene	22.23	91	1726880	50.46 ug/l	100
45)	(m+p)Xylene	22.41	91	2808504	99.68 ug/l	100
46)	o-Xylene	23.51	91	1425584	49.46 ug/l	99
47)	Styrene	23.58	104	1028327	50.48 ug/l	100
48)	Isopropylbenzene	24.37	105	1690521	50.38 ug/l	100
49)	1,1,2,2-Tetrachloroethane	24.79	83	517276	52.61 ug/l	99
51)	1,3-Dclbenzene	27.83	146	902551		el o
52)	1,4-Dclbenzene	28.10	146	915192	50.29 ug/1 04	17/01 99
53)	1,2-Dclbenzene	29.06	146	854735	49.98 ug/l	99
54)	1,2-Dibromo-3-chloropropan	30.96	75	104100	51.63 ug/l	98
55)	1,2,4-Tcbenzene	32.98	180	475423	50.34 ug/l	100
				•		

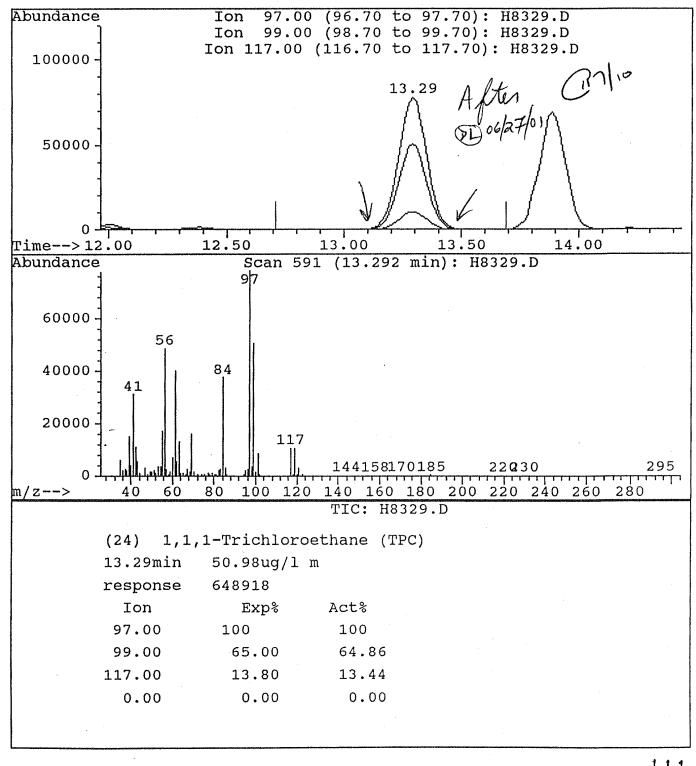
### Zunniemenen --- ---

Data File :	J:\ACQUDATA\MSVOA1\DATA\062701\H8329.D	Vial:	3
Acq On :	27 Jun 101 5:02 pm	Operator:	DLIPANI
Sample :	VSTD050	Inst :	5970 - In
Misc :	95-1	Multiplr:	1.00
Quant Time:	Jun 27 17:36 19101	E.	
Method	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M		
Title	: CLPVOAS ON MS#1	•	
Last Update	: Wed Jun 27 14:59:56 2001		
	: Single Level Calibration		



H8329.D ASP0627.M

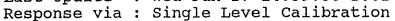
Acq On : Sample : Misc :	J:\ACQUDATA\MSVOA1\DATA\062701\H8329.D 27 Jun 101 5:02 pm VSTD050 '95-1 Jun 27 17:37 19101	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
Last Update	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M : CLPVOAS ON MS#1 : Wed Jun 27 14:59:56 2001 a : Single Level Calibration		

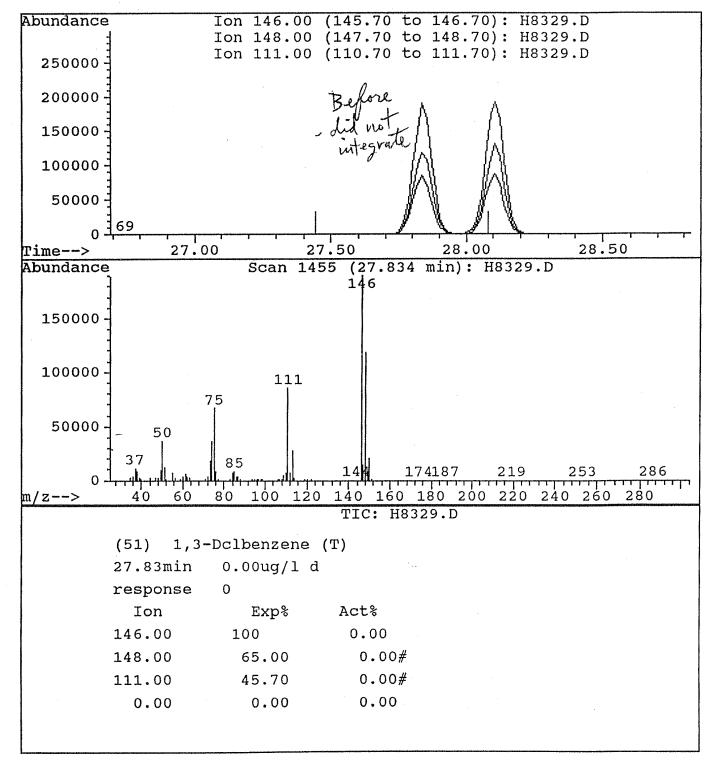


H8329.D ASP0627.M

TEST2

Acq On : Sample : Misc :	J:\ACQUDATA\MSVOA1\DATA\062701\H8329.D 27 Jun 101 5:02 pm VSTD050 '95-1 Jun 27 17:37 19101	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
Method Title Last Update	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M : CLPVOAS ON MS#1 : Wed Jun 27 14:59:56 2001		

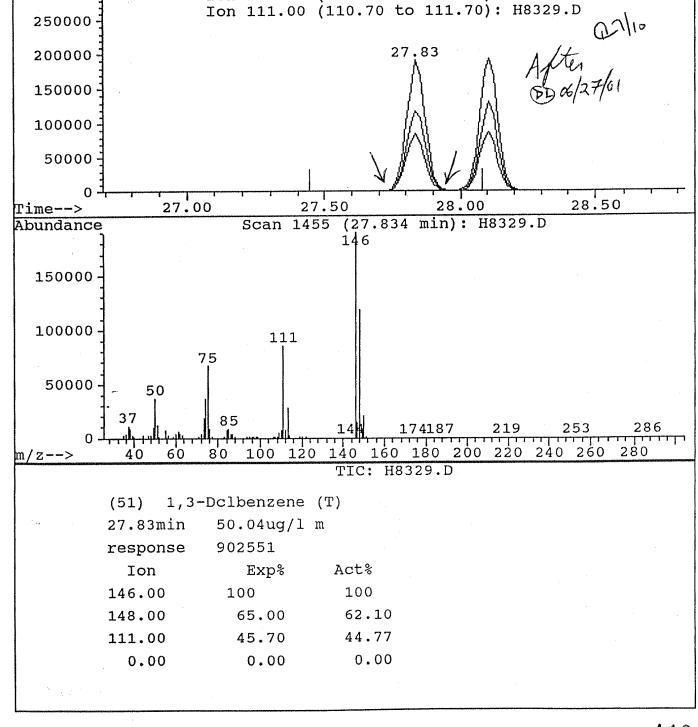




H8329.D ASP0627.M

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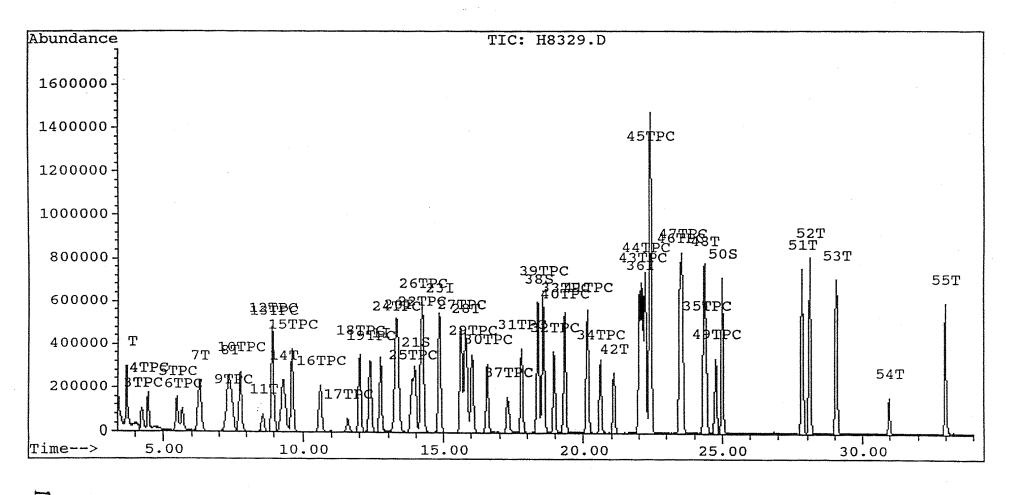
Acq On : 27 Sample : VS' Misc : '9		2 pm	701\H8329	Operato Inst	al: 3 or: DLIPANI : 5970 - In lr: 1.00
Title : Last Update :	J:\ACQUDATA\MS CLPVOAS ON MS# Wed Jun 27 14: Single Level (	#1 :59:56 2001		7.M	
Abundance	Ion 146.00 Ion 148.00				
	Ion 148.00 Ion 111.00				<b>\</b>



H8329.D ASP0627.M

-		Quantita	Report		
	Acq On Sample Misc	: J:\ACQUDATA\MSVOA1\DATA\062701\H8329.D : 27 Jun 101 5:02 pm : VSTD050 : '95-1 : Jun 27 17:38 19101	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In	
ſĿ,	Method Title Last Update	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M : CLPVOAS ON MS#1 : Wed Jun 27 14:59:56 2001			

Response via : Single Level Calibration



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H8329.D ASP0627.M

# **VOLATILE ORGANICS**

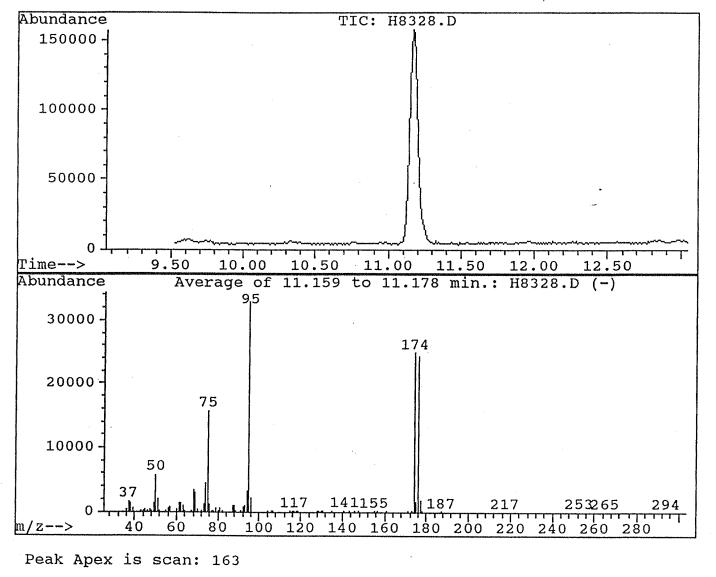
# RAW QC DATA

Data File	: :	J:\ACQUDATA\MSVO	A1\DATA\062701\H8328.I	)	Vial:	3	
Acq On	:	27 Jun 101 4:2	8 pm		Operator:	DLIPA	NI
Sample	•	TUNE CHECK	-		Inst :	5970	- In
Misc		95-1			Multiplr:	1.00	1 Star
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BFB

Method : J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Title : CLPVOAS ON MS#1

Dividhipam



Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	17.6	5789	PASS
75	95	30	60		15609	PASS
95	95	100	100	100.0	32940	PASS
96	95	5	9	6.8	2240	PASS
173	174	0	2		33	PASS
174	95	50	120	75.4	24840	PASS
175	174	5	9	6.7	1659	- PASS
176	174	95	101	97.3	24160	PASS
177	176	5	9		1725	PASS
4000 ando 6000 6000 6000 6000 6000 6000 6000 6	-					

VOLATILE ORGANICS ANALYSIS DATA SHEET           Lab Name:         CAS/ROCH         Contract:         HA         VBLK01           Lab Code:         10145         Case No.:         R21-7196         SAS No.:         SDG No.:         OS45           Matrix:         (solf/water)         WATER         Lab Sample ID:         MET BLK.         (4-7%159')           Sample wt/vol:         5.0         (g/ml)         ML         Lab Sample ID:         MB330.D           Level:         (low/med)         LOW         Date Received:			EPA SA	MPLE NO.	
Lab Name:         CAS/ROCH         Contract:         HA           Lab Code:         10145         Case No::         R21-7198         SAS No::         SDG No::         OS45           Matrix:         (soil/water)         WATER         Lab Sample ID:         MET BLK         (H=78157)           Sample wt/vol:         5.0         (g/ml) ML         Lab Sample ID:         ME330.D           Level:         (low/med)         LOW         Date Received:		VOLATILE ORGANICS ANALY	SIS DATA SHEET		
Matrix: (soil/water)       WATER       Lab Sample ID:       MET BLK $(\frac{1}{2}\% 15^{2})$ Sample wit/vol:       5.0       (g/ml) ML       Lab File ID:       H8330.D         Level: (low/med)       LOW       Date Received:	Lab Name: CAS/RO	ЭСН	Contract: HA	VB	LK01
Matrix: (soil/water)       WATER       Lab Sample ID:       MET BLK $(\frac{1}{2}\% 15^{2})$ Sample wit/vol:       5.0       (g/ml) ML       Lab File ID:       H8330.D         Level: (low/med)       LOW       Date Received:			SAS No.: S	DG No.: C	DS4S
$ \begin{array}{l c c c c c c c c c c c c c c c c c c c$					
Level:         (low/med)         LOW         Date Received:           Level:         Date Analyzed:         06/27/01           GC Column:         RTX502.         ID:         0.53           GC Column:         RTX502.         ID:         0.53           Soil Extract Volume	•				. ,
% Moisture: not dec.         Date Analyzed:         06/27/01           GC Column:         RTX502, ID:         0.53         (mm)         Dilution Factor:         1.0           Soil Extract Volume         (uL)         Soil Aliquot Volume:         (uL)           Soil Extract Volume         (uL)         Soil Aliquot Volume:         (uL)           CONCENTRATION UNITS:         CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U         75-01-4         Vinyl chloride         10         U           75-01-4         Vinyl chloride         10         U         76-03         Chloromethane         10         U           75-01-4         Acetone         10         U         75-04         10         U           75-02-3         Chloromethane         10         U         10         75-03         10         U           75-04         1,1-Dichloroethane         10         U         156-60-5         trans-1,2-Dichloroethane         10         U           75-34-3         1,1-Dichloroethane         10         U         167-66-3         Chloroform         10         U           76-76-3         Chloroform         10					
GC Column:       RTX502.       ID:       0.53       (mm)       Dilution Factor:       1.0         Soil Extract Volume	Level: (low/med)	LOW	Date Received:		
GC Column:       RTX502.       ID:       0.53       (mm)       Dilution Factor:       1.0         Soil Extract Volume	% Moisture: not dec.		Date Analyzed:	06/27/01	
Soil Extract Volume       (uL)       Soil Aliquot Volume:       (uL)         CONCENTRATION UNITS:         CAS NO.       COMPOUND       (ug/L or ug/Kg)       UG/L       Q         74-87-3       Chloromethane       10       U       Q         74-83-9       Bromomethane       10       U       Q         75-01-4       Vinyl chloride       10       U         75-03       Chloroethane       10       U         67-64-1       Acetone       10       U         75-05-2       Methylene chloride       10       U         75-35-4       1,1-Dichloroethene       10       U         75-36-2       Methylene chloride       10       U         75-37-3       2Bulanone       10       U         75-34-3       1,1-Dichloroethene       10       U         75-65-4       cis-1,2-Dichloroethane       10       U         75-65-5       Carbon tetrachloride       10       U         75-65-6       1,1.1-Trichloroethane       10       U         75-65       1,2-Dichloroethane       10       U         75-75       1,2-Dichloropropane       10       U         75-74 <td></td> <td></td> <td>Dilution Factor:</td> <td>1.0</td> <td></td>			Dilution Factor:	1.0	
CONCENTRATION UNITS:           CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chioromethane         10         U           75-01-4         Vinyl choride         10         U           75-01-4         Vinyl choride         10         U           75-01-4         Vinyl choride         10         U           75-03         Chioroethane         10         U           75-04         Acetone         10         U           75-05-2         Methylene chloride         10         U           75-05-2         Methylene chloride         10         U           75-34-3         1,1-Dichloroethene         10         U           75-34-3         1,1-Dichloroethene         10         U           76-86-3         Chioroform         10         U           156-59-4         cis-1,2-Dichloroethane         10         U           171-65-6         1,1.1-Trichloroethane         10         U           171-65-7         1,1-1-Trichloroethane         10         U           171-65-8         1,1.1-Trichloroethane         10         U           171-65-6         1,1.1-Trichloroethane         10 </td <td><b>******</b></td> <td></td> <td></td> <td></td> <td></td>	<b>******</b>				
CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U           75-01-4         Vinyl chloride         10         U           74-83-9         Bromomethane         10         U           74-83-9         Bromomethane         10         U           75-00-3         Chloroethane         10         U           75-02         Methylene chloride         10         U           75-50-         Carbon disulfide         10         U           75-51-0         Carbon disulfide         10         U           156-60-5         trans-1,2-Dichloroethene         10         U           156-59-4         cis-1,2-Dichloroethane         10         U           156-59-4         cis-1,2-Dichloroethane         10         U           17-55-6         1,1,1-Trichloroethane         10         U           71-43-2         Benzene         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane         10         U           <	Soll Extract Volume	(uc)		unite	(012)
CAS NO.         COMPOUND         (ug/L or ug/Kg)         UG/L         Q           74-87-3         Chloromethane         10         U           75-01-4         Vinyl chloride         10         U           74-83-9         Bromomethane         10         U           74-83-9         Bromomethane         10         U           75-00-3         Chloroethane         10         U           67-64-1         Acetone         10         U           75-09-2         Methylene chloride         10         U           75-15-0         Carbon disulfide         10         U           156-60-5         trans-1,2-Dichloroethane         10         U           76-83-3         2-Butanone         10         U           156-59-4         cis-1,2-Dichloroethane         10         U           17-65-6         1,1,1-Tichloroethane         10         U           17-55-6         1,2-Dichloroethane         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-		CON	CENTRATION UNITS:		
74-87-3         Chloromethane         10         U           75-01-4         Vinyl chloride         10         U           74-83-9         Bromomethane         10         U           75-00-3         Chloroethane         10         U           67-64-1         Acetone         10         U           75-09-2         Methylene chloride         10         U           75-50-1         Carbon disulfide         10         U           75-51-0         Carbon disulfide         10         U           156-60-5         trans-1,2-Dichloroethane         10         U           78-83-3         2-Butanone         10         U           156-59-4         cis-1,2-Dichloroethane         10         U           17-68-3         Chloroform         10         U           17-55-6         1,1,1-Tichloroethane         10         U           71-43-2         Benzene         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane<					0
17:00       Unity chloride       10       U         74:83-9       Bromomethane       10       U         75:00-3       Chloroethane       10       U         67:64-1       Acetone       10       U         75:35-4       1,1-Dichloroethene       10       U         75:35-2       Methylene chloride       10       U         75:36-3       1,1-Dichloroethene       10       U         75:34-3       1,1-Dichloroethene       10       U         75:34-3       1,1-Dichloroethene       10       U         75:34-3       1,1-Dichloroethane       10       U         76:6-3       Chloroform       10       U         10:7-06-2       1,2-Dichloroethane       10       U         10:7-06-2       1,2-Dichloroethane       10       U         10:7-06-2       1,2-Dichloroethane       10       U         10:7-06-2       1,2-Dichloroethane       10       U         10:7-06-3       Chloroform       10       U         71:43:2       Benzene       10       U         71:43:2       Benzene       10       U         75:27-4       Bromodichloromethane       10       <	CAS NO.				4
75-01-4         Vinyl chloride         10         U           74-83-9         Bromomethane         10         U           75-00-3         Chloroethane         10         U           67-64-1         Acetone         10         U           75-35-4         1,1-Dichloroethene         10         U           75-36-2         Methylene chloride         10         U           75-09-2         Methylene chloride         10         U           75-34-3         1,1-Dichloroethene         10         U           75-34-3         1,1-Dichloroethane         10         U           76-60-5         trans-1,2-Dichloroethane         10         U           76-63         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           74-82-5         Carbon tetrachloride         10         U           78-01-6         Trichloroethene         10         U           74-55-6         1,1,2-Trichloroethane         10         U           79-01-6 <t< td=""><td>74-87-3</td><td>Chioromethane</td><td></td><td>10</td><td>υ</td></t<>	74-87-3	Chioromethane		10	υ
74-83-9         Bromomethane         10         U           75-00-3         Chloroethane         10         U           67-64-1         Acetone         10         U           75-35-4         1,1-Dichloroethene         10         U           75-35-4         1,1-Dichloroethene         10         U           75-35-4         1,1-Dichloroethene         10         U           75-36-2         Methylene chloride         10         U           75-36-3         Carbon disulfide         10         U           156-60-5         trans-1,2-Dichloroethene         10         U           78-93-3         2-Butanone         10         U           166-59-4         cis-1,2-Dichloroethane         10         U           67-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           71-45-7         Benzene         10         U           78-97-5         1,2-Dichloropropane         10         U           78-97-4         Bromodichloromethane         10         U           10061-02-6         tran					U
75-00-3Chloroethane10U $67-64-1$ Acetone10U $75-35-4$ 1,1-Dichloroethene10U $75-35-4$ 1,1-Dichloroethene10U $75-15-0$ Carbon disulfide10U $75-15-0$ Carbon disulfide10U $75-34-3$ 1,1-Dichloroethene10U $75-34-3$ 1,1-Dichloroethene10U $76-60-5$ trans-1,2-Dichloroethene10U $76-66-3$ Chloroform10U $156-59-4$ cis-1,2-Dichloroethene10U $107-66-3$ Chloroform10U $107-66-2$ 1,2-Dichloroethane10U $71-55-6$ 1,1,1-Trichloroethane10U $71-65-6$ 1,2-Dichloropthane10U $71-43-2$ Benzene10U $79-01-6$ Trichloroethane10U $75-7-4$ Bromodichloromethane10U $1061-01-5$ cis-1,3-Dichloropropane10U $10061-01-5$ cis-1,3-Dichloropropene10U $10061-02-6$ trans-1,3-Dichloropropene10U $1024-48-1$ Dibromochloromethane10U $108-80-7$ Chlorobenzene10U $108-83-3$ Toluene10U $102-17-8-4$ Tetrachloroethene10U $102-17-18-4$ Tetrachloroethene10U $1030-20-7$ Chlorobenzene10U $100-42-5$ Styr				10	U
10 $10$ $10$ $10$ $75-35-4$ $1,1$ -Dichloroethene $10$ $10$ $75-35-4$ $1,1$ -Dichloroethene $10$ $10$ $75-9-2$ Methylene chloride $10$ $10$ $75-15-0$ Carbon disulfide $10$ $10$ $156-60-5$ trans- $1,2$ -Dichloroethene $10$ $10$ $75-34-3$ $1,1$ -Dichloroethane $10$ $10$ $75-34-3$ $1,1$ -Dichloroethane $10$ $10$ $75-34-3$ $1,1$ -Dichloroethane $10$ $10$ $75-34-3$ $2$ -Butanone $10$ $10$ $156-59-4$ $(is-1,2-Dichloroethane         10 10 107-06-2 1,2-Dichloroethane         10 10 107-06-2 1,2-Dichloroethane         10 10 71-43-2         Benzene         10 10 79-01-6         Trichloroethane         10 10 78-37-5 1,2-Dichloropropane         10 10 7000-5$	Construction of the second sec				U
75-35-41,1-Dichloroethene10U $75-09-2$ Methylene chloride10U $75-09-2$ Carbon disulfide10U $75-15-0$ Carbon disulfide10U $156-60-5$ trans-1,2-Dichloroethene10U $75-34-3$ 1,1-Dichloroethane10U $75-34-3$ 2-Butanone10U $75-36-3$ 2-Butanone10U $76-66-3$ Chloroform10U $107-06-2$ 1,2-Dichloroethane10U $107-06-2$ 1,2-Dichloroethane10U $71-55-6$ 1,1,1-Trichloroethane10U $71-43-2$ Benzene10U $79-01-6$ Trichloroethene10U $78-7-4$ Bromodichloropropane10U $79-01-6$ Trichloroethane10U $79-01-6$ Trichloropropane10U $79-00-5$ 1,1,2-Trichloroethane10U $79-00-5$ 1,1,2-Trichloroethane10U $79-00-5$ 1,1,2-Trichloroethane10U $79-00-5$ 1,1,2-Trichloroethane10U $108-80-7$ Chlorobenzene10U $108-80-7$ Chlorobenzene10U $108-80-7$ Chlorobenzene10U $1030-20-7$ O-Xylene10U $1330-20-7$ O-Xylene10U $1330-20-7$ O-Xylene10U $100-41-4$ Ethylbenzene10U					U
10       10       U         75-09-2       Methylene chloride       10       U         75-15-0       Carbon disulfide       10       U         156-60-5       trans-1,2-Dichloroethene       10       U         75-34-3       1,1-Dichloroethane       10       U         78-93-3       2-Butanone       10       U         156-59-4       cis-1,2-Dichloroethene       10       U         67-66-3       Chloroform       10       U         107-06-2       1,2-Dichloroethane       10       U         71-455-6       1,1,1-Trichloroethane       10       U         71-43-2       Benzene       10       U         78-87-5       1,2-Dichloropropane       10       U         75-27-4       Bromodichloromethane       10       U         10061-01-5       cis-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         75-25-2       Bromodichloromethane       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U         108-88-3       Toluene       10 </td <td></td> <td></td> <td>****</td> <td></td> <td></td>			****		
$10 \circ 12$ Interpret to the second structure       10       U $156 \cdot 60 \cdot 5$ trans-1,2-Dichloroethene       10       U $75 \cdot 34 \cdot 3$ 1,1-Dichloroethane       10       U $75 \cdot 34 \cdot 3$ 1,1-Dichloroethane       10       U $75 \cdot 34 \cdot 3$ 2-Butanone       10       U $156 \cdot 59 \cdot 4$ cis-1,2-Dichloroethene       10       U $67 \cdot 66 \cdot 3$ Chloroform       10       U $107 \cdot 06 \cdot 2$ 1,2-Dichloroethane       10       U $107 \cdot 06 \cdot 2$ 1,2-Dichloroethane       10       U $71 \cdot 452 \cdot 6$ 1,1,1 - Trichloroethane       10       U $71 \cdot 43 \cdot 2$ Benzene       10       U $79 \cdot 01 \cdot 6$ Trichloroethene       10       U $78 \cdot 87 \cdot 5$ 1,2 - Dichloropropane       10       U $78 \cdot 87 \cdot 5$ 1,2 - Dichloropropene       10       U $106 \cdot 10 \cdot 5$ cis-1,3 - Dichloropropene       10       U $106 \cdot 10 \cdot 5$ cis-1,3 - Dichloropropene       10       U $106 \cdot 10 \cdot 5$ fis-1,3 - Dichloropropene       10       U				and the second division of the second divisio	the state of the s
156-60-5         trans-1,2-Dichloroethene         10         U           75-34-3         1,1-Dichloroethane         10         U           78-93-3         2-Butanone         10         U           156-59-4         cis-1,2-Dichloroethene         10         U           67-66-3         Chloroform         10         U           107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1.1-Trichloroethane         10         U           71-43-2         Benzene         10         U           78-87-5         Carbon tetrachloride         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           75-25-2         Bromoform         10         U           108-80-1         4-Methyl-2-pentanone         10         U					
1000011010001000078-93-32-Butanone10U156-59-4cis-1,2-Dichloroethene10U156-59-4cis-1,2-Dichloroethene10U107-06-21,2-Dichloroethane10U107-06-21,2-Dichloroethane10U107-06-21,2-Dichloroethane10U107-06-21,2-Dichloroethane10U11-55-61,1,1-Trichloroethane10U12-32Benzene10U14-32Benzene10U17-43-2Benzene10U17-52-61,2-Dichloropropane10U1061-01-5cis-1,3-Dichloropropene10U10061-02-6trans-1,3-Dichloropropene10U10061-02-6trans-1,3-Dichloropropene10U124-48-1Dibromochloromethane10U124-48-1Dibromochloromethane10U108-10-14-Methyl-2-pentanone10U108-88-3Toluene10U108-80-7Chlorobenzene10U108-90-7Chlorobenzene10U1030-20-7(m+p)Xylene10U1330-20-7(m+p)Xylene10U100-42-5Styrene10U					
78.93-3 $2-Butanone$ $10$ $U$ $156-59-4$ cis-1,2-Dichloroethene $10$ $U$ $156-59-4$ cis-1,2-Dichloroethane $10$ $U$ $107.06-2$ 1,2-Dichloroethane $10$ $U$ $11-55-6$ 1,1,1-Trichloroethane $10$ $U$ $71-55-6$ 1,1,1-Trichloroethane $10$ $U$ $71-52-6$ 1,1,1-Trichloroethane $10$ $U$ $71-52-6$ 1,2-Dichloroethane $10$ $U$ $71-43-2$ Benzene $10$ $U$ $79-01-6$ Trichloroethene $10$ $U$ $78-87-5$ 1,2-Dichloropropane $10$ $U$ $75-27-4$ Bromodichloromethane $10$ $U$ $10061-01-5$ cis-1,3-Dichloropropene $10$ $U$ $10061-02-6$ trans-1,3-Dichloropropene $10$ $U$ $124-48-1$ Dibromochloromethane $10$ $U$ $124-48-1$ Dibromochloromethane $10$ $U$ $108-10-1$ $4-Methyl-2-pentanone$ $10$ $U$ $108-88-3$ Toluene $10$ $U$ $108-90-7$ Chlorobenzene $10$ $U$ $108-90-7$ Chlorobenzene $10$ $U$ $100-41-4$ Ethylbenzene $10$ $U$ $1330-20-7$ $(m+p)Xylene$ $10$ $U$ $100-42-5$ Styrene $10$ $U$					
10002210U156-59-4cis-1,2-Dichloroethene10U107-06-21,2-Dichloroethane10U107-06-21,2-Dichloroethane10U71-55-61,1,1-Trichloroethane10U56-23-5Carbon tetrachloride10U71-43-2Benzene10U78-87-51,2-Dichloropropane10U78-87-51,2-Dichloropropane10U75-27-4Bromodichloromethane10U10061-01-5cis-1,3-Dichloropropene10U10061-02-6trans-1,3-Dichloropropene10U79-00-51,1,2-Trichloroethane10U75-25-2Bromoform10U108-10-14-Methyl-2-pentanone10U108-88-3Toluene10U108-90-7Chlorobenzene10U108-90-7Chlorobenzene10U1030-20-7(m+p)Xylene10U1330-20-7o-Xylene10U100-42-5Styrene10U				and the second se	A CONTRACT OF A
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107-06-2         1,2-Dichloroethane         10         U           71-55-6         1,1,1-Trichloroethane         10         U           56-23-5         Carbon tetrachloride         10         U           71-43-2         Benzene         10         U           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           110061-02-6         trans-1,3-Dichloropropene         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           108-80-3         Toluene         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U					
71-55-6       1,1,1-Trichloroethane       10       U         56-23-5       Carbon tetrachloride       10       U         71-43-2       Benzene       10       U         79-01-6       Trichloroethene       10       U         78-87-5       1,2-Dichloropropane       10       U         75-27-4       Bromodichloromethane       10       U         10061-01-5       cis-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         79-00-5       1,1,2-Trichloroethane       10       U         79-00-5       1,1,2-Trichloroethane       10       U         75-25-2       Bromoform       10       U         75-25-2       Bromoform       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U         108-88-3       Toluene       10       U         127-18-4       Tetrachloroethene       10       U         108-90-7       Chlorobenzene       10       U         1030-20-7       (m+p)Xylene       10       U         1330-20-7       o-Xylene					
1000         1000         U           56-23-5         Carbon tetrachloride         10         U           71-43-2         Benzene         10         U           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10661-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           125-22         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-90-7         Chlorobenzene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10					
101-13-2         Benzene         10         U           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           124-48-1         Dibromochloromethane         10         U           124-48-1         Dibromochloromethane         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-90-7         Chlorobenzene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene					
11 rot         Dominio           79-01-6         Trichloroethene         10         U           78-87-5         1,2-Dichloropropane         10         U           75-27-4         Bromodichloromethane         10         U           10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-80-7         Chlorobenzene         10         U           108-90-7         Chlorobenzene         10         U           1030-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U   <					the second s
78-87-5       1,2-Dichloropropane       10       U         75-27-4       Bromodichloromethane       10       U         10061-01-5       cis-1,3-Dichloropropene       10       U         10061-02-6       trans-1,3-Dichloropropene       10       U         79-00-5       1,1,2-Trichloroethane       10       U         124-48-1       Dibromochloromethane       10       U         75-25-2       Bromoform       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U         108-88-3       Toluene       10       U         127-18-4       Tetrachloroethene       10       U         108-90-7       Chlorobenzene       10       U         108-90-7       Chlorobenzene       10       U         1030-20-7       (m+p)Xylene       10       U         1330-20-7       o-Xylene       10       U         130-20-7       o-Xylene       10       U         100-42-5       Styrene       10       U					
10         1,2         Distribution of the property o					
10061-01-5         cis-1,3-Dichloropropene         10         U           10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           108-88-3         Toluene         10         U           108-90-7         Chlorobenzene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         o-Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					
10061-02-6         trans-1,3-Dichloropropene         10         U           79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					the second design of the secon
79-00-5         1,1,2-Trichloroethane         10         U           124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U	Contraction of the Contraction o				
124-48-1         Dibromochloromethane         10         U           75-25-2         Bromoform         10         U           108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           10330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					
75-25-2       Bromoform       10       U         108-10-1       4-Methyl-2-pentanone       10       U         108-88-3       Toluene       10       U         591-78-6       2-Hexanone       10       U         127-18-4       Tetrachloroethene       10       U         108-90-7       Chlorobenzene       10       U         100-41-4       Ethylbenzene       10       U         1330-20-7       (m+p)Xylene       10       U         1330-20-7       o-Xylene       10       U         100-42-5       Styrene       10       U					
108-10-1         4-Methyl-2-pentanone         10         U           108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U	1				
108-88-3         Toluene         10         U           591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					Contraction of the providence
591-78-6         2-Hexanone         10         U           127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					
127-18-4         Tetrachloroethene         10         U           108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					
108-90-7         Chlorobenzene         10         U           100-41-4         Ethylbenzene         10         U           1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					
100-41-4Ethylbenzene10U1330-20-7(m+p)Xylene10U1330-20-7o-Xylene10U100-42-5Styrene10U				and the second state of th	
1330-20-7         (m+p)Xylene         10         U           1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					manialization and the second state of the seco
1330-20-7         o-Xylene         10         U           100-42-5         Styrene         10         U					
100-42-5 Styrene 10 U					man det tiet is die de traine and and an
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FORMIVOA

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### VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK01 Lab Name: CAS/ROCH Contract: HA SAS No.: SDG No.: OS4S Lab Code: 10145 Case No.: R21-7196 Lab Sample ID: MET BLK (478/59) Matrix: (soil/water) WATER H8330.D Sample wt/vol: 5.0 (g/ml) ML Lab File ID: Level: (low/med) LOW Date Received: % Moisture: not dec. Date Analyzed: 06/27/01 GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 1.0 Soil Extract Volume _____ (uL) Soil Aliquot Volume: (uL) CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Number TICs found: 0 COMPOUND RT EST. CONC. Q CAS NO.

### Quantitation Report

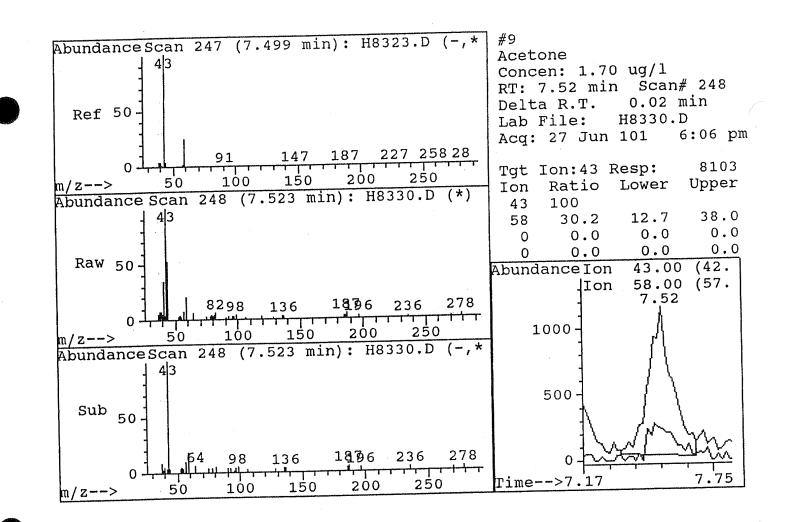
Acq On Sample Misc	: J:\ACQUDATA\MSVOA1\D : 27 Jun 101 6:06 pm : VBLK 478/59 : : Jun 27 18:36 19101	Operato: Inst Multipl:	l: 12 r: DLIPANI : 5970 - In r: 1.00
		= = = = = = = = = = = = = = = = = = =	

Method: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.MTitle: CLPVOAS ON MS#1Last Update: Wed Jun 27 17:55:43 2001Response via: Single Level Calibration

Internal Standards	R.T. QI	on Response	e Conc Units Dev(Min)
<ol> <li>Bromochloromethane</li> <li>1,4-Difluorobenzene</li> <li>Chlorobenzene-d5</li> </ol>	14.84 1	28 277532 14 1315365 17 1042139	50.00 ug/l -0.01 50.00 ug/l -0.01 50.00 ug/l -0.01
System Monitoring Compounds 21) 1,2-Dichloroethane-d4 38) Toluene-d8 50) Bromofluorobenzene	13.97 18.38 25.01	65 552803 98 1307120 95 773219	<pre>%Recovery 50.82 ug/l 101.65% 50.17 ug/l 100.35% 48.75 ug/l 97.50%</pre>
Target Compounds 9) Acetone 40) 2-Hexanone	7.52 19.20	43 8103 43 10103	Qvalue 1.70 ug/l 90 ~ <del>1.40 ug/l # 33</del> <u>OL</u> 06/28/61

(#) = qualifier out of range (m) = manual integration H8330.D ASP0627.M Wed Jun 27 18:36:56 2001 TEST2

Page 1



H8330.D ASP0627.M

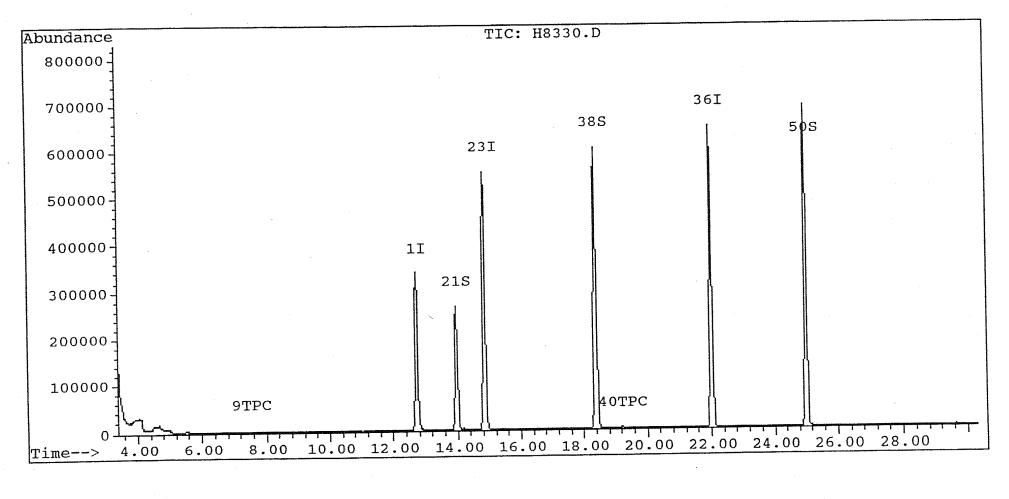
Thu Jun 28 09:56:40 2001

TEST2

Page 1

	Quantita	ti Report		in a state of the
Acq On : Sample : Misc :	J:\ACQUDATA\MSVOA1\DATA\062701\H83 27 Jun 101 6:06 pm VBLK Jun 27 18:36 19101	Operator:	DLIPANI 5970 - In	
Method Title Last Update	: J:\ACQUDATA\MSVOA1\METHODS\ASPO : CLPVOAS ON MS#1 : Wed Jun 27 17:55:43 2001	627.M		

Response via : Single Level Calibration



2

H8330 ASP0627.M

### Library Search Compound Report

Data File Acq On Sample Misc	: J:\ACQUDATA\MSVOA1\DATA\062701\H8330.D : 27 Jun 101 6:06 pm : VBLK :	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In
Method	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M		

Title : CLPVOAS ON MS#1 Library : NBS75K.L

### Internal Standard Area Summary

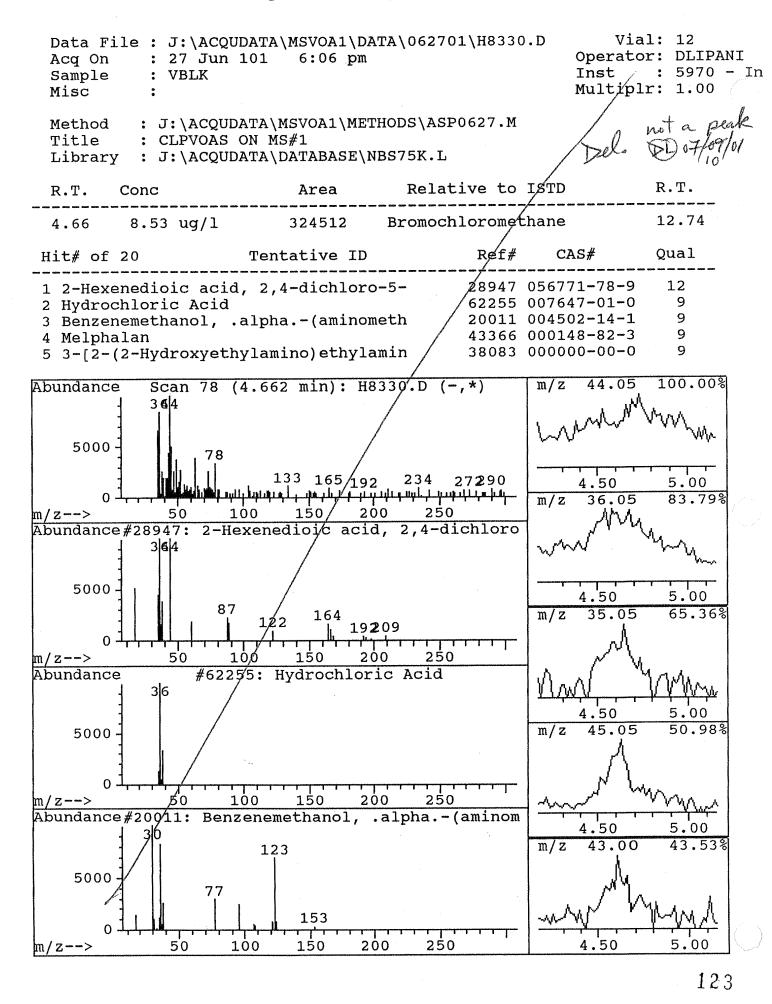
R.T.	Conc	Area	ISTD
12.74	50.00 ug/l	1901764	Bromochloromethane
14.84	50.00 ug/l	3326199	1,4-Difluorobenzene
22.01	50.00 ug/l	3344457	Chlorobenzene-d5

07/09/01

TEST2

Page 1

### Library Search Compound Report



H8330.D ASP0627.M

Tue Jul 10 12:24:07 2001

Page 2

TEST2

				1A			_	EPA S	AMPLE	NO.
VOLATILE ORGANICS ANALYS					Γ	VBI	_K01MS			
Lab Name:	Date and the second				Contract:					
Lab Code:	10145	Ca	se No.: F	21-7196	SAS No	0.:	S	DG No.:	OS4S	
Matrix: (soil/v					La	b Sampl	e ID:	VBLKMS	5 (478	160)
			-							,
Sample wt/vo	ol:	5.0	(g/ml) _	ML	La	ID File ID	:	H8331.D	) 	
Level: (low/r	ned)	LOW	_		Da	ate Recei	ved:			
% Moisture: I	not dec.		-		Da	ate Analy	zed:	06/27/01		
				<i>n</i> )		-	•	1.0		
GC Column:		Westerner		11)						
Soil Extract \	√olume		_ (uL)		Sc	oil Aliquo	t Volu	me:		(uL)
					CENTRA					
CAS NO	).	COMP	OUND	(ug/L	or ug/Kg	) <u>Uo</u>	S/L		Q	
						1		40	U	
74-87			omethane	3				<u>    10    </u> 10     10		
75-01			chloride			·		10		
74-83			omethane	3				10		
75-00			oethane					10		
67-64			************	nene				53		
75-35				oride			,	10	<u> </u>	
75-15			on disulfic					10	U	
156-6				oroethene	· · · · ·			10	U	
75-34			ichloroeth					10	U	
78-93			anone	14110				10	U	
156-59				oethene				10	U	
67-66			oform					10	U	
107-0			ichloroeth	nane				10	U	
71-55			Trichloro					10	U	·
56-23			on tetrach					10	U	
71-43		Benz						51		
79-01	-6	Trich	loroethen	е				50		
78-87		1,2-D	ichloropro	opane				10	U	
75-27		Brom	odichloro	methane				10	U	
10061	1-01-5			opropene				10	<u> </u>	
	1-02-6			oroproper	ie .			10	U	
79-00			-Trichloro					10	U	
124-4				methane				10	U	
75-25	******		oform					10		
108-1			thyl-2-per	ntanone				10	U	
108-8		Tolue						50		
591-7		~~~~	kanone					10		
127-1			chloroeth					<u> </u>	<u> </u>	
108-9	*****		obenzene	3					U	
100-4			benzene					10		
1330-			)Xylene					<u> </u>		
1330-2		o-Xyl						10		
100-4		Styre		hloroother				10	U U	
79-34	1-D	1,1,2	,z-i etraci	hloroethan	16			10	<u> </u>	l

FORM I VOA

Quantitation Report						
Data File : J:\ACQUDATA\MSVOA Acq On : 27 Jun 101 6:45 Sample : VBLKMS $478/60$ Misc : Quant Time: Jun 27 19:20 1910	Vial: 1 Operator: 1 Inst : 1 Multiplr: 1	DLIPANI 5970 - In				
Method : J:\ACQUDATA\MS Title : CLPVOAS ON MS# Last Update : Wed Jun 27 17: Response via : Single Level C						
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)	
<ol> <li>Bromochloromethane</li> <li>1,4-Difluorobenzene</li> <li>Chlorobenzene-d5</li> <li>System Monitoring Compounds</li> <li>1,2-Dichloroethane-d4</li> <li>Toluene-d8</li> <li>Bromofluorobenzene</li> </ol>	12.73 14.85 22.02 13.98 18.39 25.02	114 117 65 98	266402 1288452 1016657 541945 1287597 759576	50.00 ug/l 50.00 ug/l 50.00 ug/l %1 51.91 ug/l 50.66 ug/l 49.09 ug/l	0.00 0.00 Recovery 103.81% 101.33%	
Target Compounds 5) Bromomethane 9) Acetone 10) 1,1-Dichloroethene 22) 1,2-Dichloroethane 26) Benzene 27) Trichloroethene 39) Toluene 40) 2-Hexanone 43) Chlorobenzene	5.50 7.53 7.78 14.23 14.25 15.63 18.57 19.21 22.11	43 96 62 78 130 92 43	10044 6491 380743 16525 1315990 480769 817931 11399 985223	1.50 ug/l 1.41 ug/l 53.35 ug/l 1.31 ug/l 51.32 ug/l 49.60 ug/l 50.40 ug/l <u>1.62 ug/l</u> 50.89 ug/l	96 99 100	

. 8

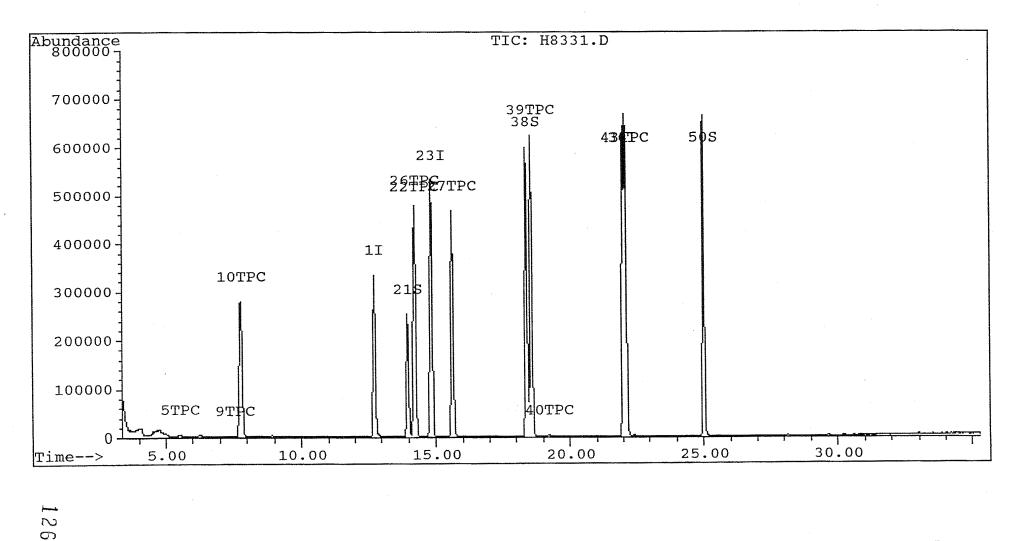
06/28/01

(#) = qualifier out of range (m) = manual integration H8331.D ASP0627.M Wed Jun 27 19:21:00 2001 TEST2

T25 Page 1

	Quancitation R	eport	, , , , , , , , , , , , , , , , , , ,	ŝ
Acq On : 2 Sample : V Misc :	J:\ACQUDATA\MSVOA1\DATA\062701\H8331.D 27 Jun 101 6:45 pm VBLKMS Jun 27 19:20 19101	Vial: Operator: Inst : Multiplr:	DLIPANI 5970 - In	
Method Title Last Update	: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M : CLPVOAS ON MS#1 : Wed Jun 27 17:55:43 2001			

Response via : Single Level Calibration



H8331 ASP0627.M

				1A				EPA SA	AMPLE I	NO.
VOLATILE ORGANICS ANALYSIS DATA SHEET				EET	os	-4SMS				
Lab Name:	CAS/RO	DCH			Contract:	HA HA		_ L		
Lab Code:	10145		Case No	.: R21-7196	SAS N	lo.:	S	DG No.:	OS4S	
Matrix: (soil/								468456 1		
Sample wt/v	ol:	5.0	(g/n	nl) <u>ML</u>	La	ab File	ID:	H8333.D		
Level: (low/i	med)	LOW			D	ate Re	ceived:			
% Moisture:					D	ate An	alyzed:	06/27/01		
				(mm)	П	ilution	Factor	1.0		
GC Column:		1-01700 X 2-14-177						<u> </u>		
Soil Extract	Volume	-	(uL	.)	S	oil Aliq	uot Volu	ume:	****	(uL)
					_					
				CON	CENTRA	TION	UNITS:			
CAS NO	Э.	C	OMPOUN	) (ug/L	or ug/K	g) _	UG/L		Q	
							1		T 11	
74-87				nane				10	U U	
75-01			Vinyl chlori					<u> </u>		
74-83				hane				10		
75-00				ne			+	6	J	
	4-1		Acetone	acthono			<u> </u>	54		
75-35				oethene				10	U	
75-09			Carbon dis	chloride		-		10	U	
75-15				)ichloroethene	<u></u>			10	Ū	
75-34	<u>30-5</u>			roethane				10	Ū	
78-93			2-Butanon					10	Ū	{
156-5				hloroethene			-	10	U	
67-66			Chloroform				+	10	U	
107-0		······	1,2-Dichlor					10	U	
71-5				loroethane				10	U	
56-23			Carbon tet					10	U	
71-43			Benzene					52		
79-0			Trichloroet	hene				50		
78-8			1,2-Dichlo	ropropane				10	U	
75-27			Bromodich	loromethane				10	U	
1006	1-01-5		cis-1,3-Dic	hloropropene				10	U	
1006	1-02-6		trans-1,3-D	Dichloroproper	ne			10	U	
79-00	0-5		1,1,2-Trich	loroethane				10	U	
124-4	48-1			loromethane				10	<u> </u>	
75-2			Bromoforn					10	<u>U</u>	
108-				-pentanone				10	U	
108-8			Toluene					50		
591-	******		2-Hexanor					10		
127-			Tetrachlor					10	<u> </u>	
108-1			Chloroben					52		
100-4			Ethylbenze					10	U U	
	-20-7		(m+p)Xyle	ne				<u>10</u> 10		
1330-			o-Xylene					10		
100-4			Styrene	trachlaradha				10		
79-34	4-5		1,1,2,2-10	trachloroethar	16			10		

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# Quantitation Report

Data File : J:\ACQUDATA\MSVOA1 Acq On : 27 Jun 101 8:11 Sample : 468456 1.0 478 Misc : HA '95-1 SDG:OS4S Quant Time: Jun 27 20:46 19101	Vial: 1 Operator: D Inst : 5 Multiplr: 1	LIPANI 970 - In			
Method : J:\ACQUDATA\MSV Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 17:5 Response via : Single Level Ca	5:43 20	001	ASP0627.M		
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
<ol> <li>Bromochloromethane</li> <li>1,4-Difluorobenzene</li> <li>Chlorobenzene-d5</li> <li>System Monitoring Compounds</li> <li>1,2-Dichloroethane-d4</li> <li>Toluene-d8</li> <li>Bromofluorobenzene</li> </ol>	12.74 14.84 21.99 	114 117 65 98	259944 1264820 990513 524276 1256799 736620	50.00 ug/l 50.00 ug/l 50.00 ug/l %F 51.46 ug/l 50.76 ug/l 48.86 ug/l	-0.02 -0.03 Recovery 102.93% 101.52%
Target Compounds 9) Acetone 10) 1,1-Dichloroethene 17) 2-Butanone 22) 1,2-Dichloroethane 26) Benzene 27) Trichloroethene 39) Toluene 40) 2-Hexanone 43) Chlorobenzene	7.52 7.77 11.61 14.23 14.23 15.61 18.56 19.18 22.09	96 43 62 78 130 92 43	26570 372911 5331 16080 1305653 478139 796097 8863 989183	5.93 ug/l 53.55 ug/l 1.20 ug/l <u>1.30 ug/l</u> 51.87 ug/l 50.25 ug/l 50.35 ug/l <u>1.29 ug/l</u> 52.44 ug/l	96 99 97

06/27/01 28

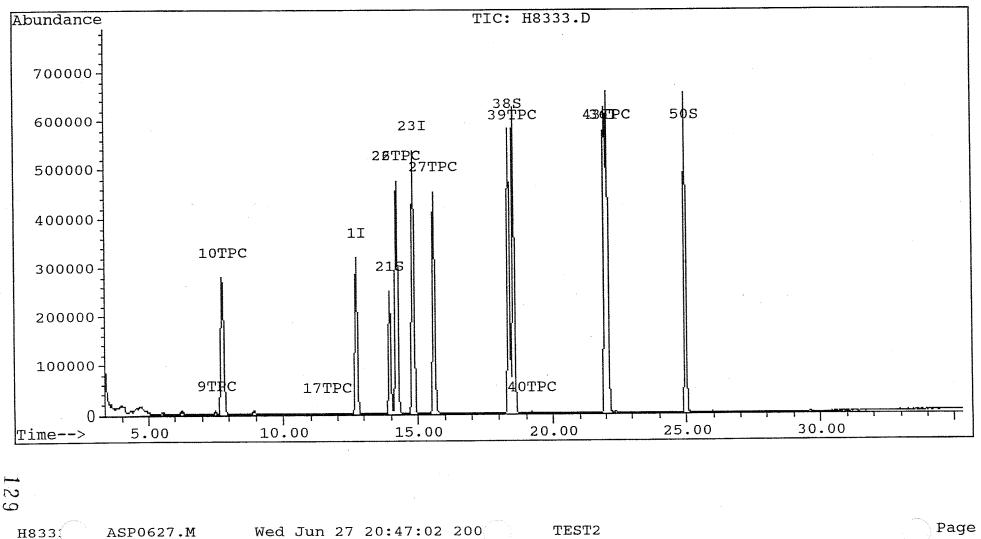
(#) = qualifier out of range (m) = manual integration H8333.D ASP0627.M Wed Jun 27 20:47:00 2001 T

TEST2

Quantitation Report

Data File : J:\ACQUDATA\MSVOA1\DATA\062701\H8333.D	Vial:	
Acq On : 27 Jun 101 8:11 pm	Operator:	
Sample : 468456 1.0		5970 - In
Misc : HA '95-1 SDG:OS4S EPA:OS-4SMS	Multiplr:	1.00
Quant Time: Jun 27 20:46 19101		

: J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M Method Title : CLPVOAS ON MS#1 Last Update : Wed Jun 27 17:55:43 2001 Response via : Single Level Calibration



Page 2

1A				MPLE NO.
	VOLATILE ORGANICS ANAL	YSIS DATA SHEET		01100
Lab Name: CAS/R	ОСН	Contract: HA	OS-4	SMSD
	Case No.: R21-7196		SDG No.: C	S4S
Matrix: (soil/water)		Lab Sample ID		
•			Construction of the second sec	
Sample wt/vol:	5.0 (g/ml) <u>ML</u>	•	Construction of the optimized of the opt	
Level: (low/med)	LOW	Date Received		
% Moisture: not dec.	www.co.co.barantery.co.barantery.co.barantery.co.barantery.co.barantery.co.barantery.co.barantery.co.barantery	Date Analyzed	: 06/27/01	
		Dilution Factor	: 1.0	
	neurona faith ann an thair ann an thair ann an thair			
Soil Extract Volume	(uL)	Soil Aliquot Vo	lume:	(uL)
	001	ICENTRATION UNITS	2.	
				0
CAS NO.	COMPOUND (ug/L	$_{\rm or}$ or ug/kg) <u>UG/L</u>	and the second state of th	Q
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
74-83-9	Bromomethane		10	Ū
75-00-3	Chloroethane		10	U
67-64-1	Acetone		6	J
75-35-4	1,1-Dichloroethene		52	
75-09-2	Methylene chloride		10	U
75-15-0	Carbon disulfide		10	<u> </u>
156-60-5	trans-1,2-Dichloroethen	e	10	<u> </u>
75-34-3	1,1-Dichloroethane		10	<u> </u>
78-93-3	2-Butanone		10	<u> </u>
156-59-4	cis-1,2-Dichloroethene		10	U
67-66-3	Chloroform		10	U
107-06-2	1,2-Dichloroethane		10	U
71-55-6	1,1,1-Trichloroethane		10	U
56-23-5	Carbon tetrachloride		10	<u> </u>
71-43-2	Benzene		52	
79-01-6	Trichloroethene		50	
78-87-5	1,2-Dichloropropane		10	<u> </u>
75-27-4	Bromodichloromethane		10	<u> </u>
10061-01-5	cis-1,3-Dichloropropene		10	U
10061-02-6	trans-1,3-Dichloroprope	ne	10	UUU
79-00-5	1,1,2-Trichloroethane		<u>10</u> 10	<u> </u>
124-48-1	Dibromochloromethane		10	<u> </u>
75-25-2	Bromoform 4-Methyl-2-pentanone		10	<u> </u>
108-10-1	Toluene		51	
108-88-3			10	U
<u>591-78-6</u> 127-18-4	2-Hexanone Tetrachloroethene		10	<u> </u>
108-90-7	Chlorobenzene		52	
100-41-4	Ethylbenzene	·····	10	U
1330-20-7	(m+p)Xylene		10	U
1330-20-7	o-Xylene		10	U
100-42-5	Styrene		10	U
79-34-5	1,1,2,2-Tetrachloroetha	ne	10	U

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## Quantitation Report

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Data File : J:\ACQUDATA\MSVOA Acq On : 27 Jun 101 8:54 Sample : 468456 1.0 4 Misc : HA '95-1 SDG:OS4S Quant Time: Jun 27 21:29 1910	Vial: : Operator: I Inst : ! Multiplr: :	DLIPANI 5970 - In			
Method : J:\ACQUDATA\MS Title : CLPVOAS ON MS# Last Update : Wed Jun 27 17: Response via : Single Level C	ASP0627.M				
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane 23) 1,4-Difluorobenzene 36) Chlorobenzene-d5	12.72 14.84 22.00		262727 1277557 996295	50.00 ug/l 50.00 ug/l 50.00 ug/l	-0.01
System Monitoring Compounds 21) 1,2-Dichloroethane-d4 38) Toluene-d8 50) Bromofluorobenzene	13.97 18.38 24.99	65 98	536516 1269218 742224	8] 52.11 ug/l 50.96 ug/l 48.95 ug/l	101.92%
<pre>Target Compounds 9) Acetone 10) 1,1-Dichloroethene 17) 2-Butanone 22) 1,2-Dichloroethane 26) Benzene 27) Trichloroethene 39) Toluene 40) 2-Hexanone 43) Chlorobenzene</pre>	$7.52 \\ 7.77 \\ 11.59 \\ 14.20 \\ 14.24 \\ 15.62 \\ 18.56 \\ 19.19 \\ 22.10$	96 43 62 78 130 92 43		5.87 ug/l 52.43 ug/l 1.01 ug/l 1.37 ug/l 51.58 ug/l 50.43 ug/l 51.23 ug/l 1.08 ug/l 52.26 ug/l	96 99 100

(#) = qualifier out of range (m) = manual integration H8334.D ASP0627.M Wed Jun 27 21:29:53 2001

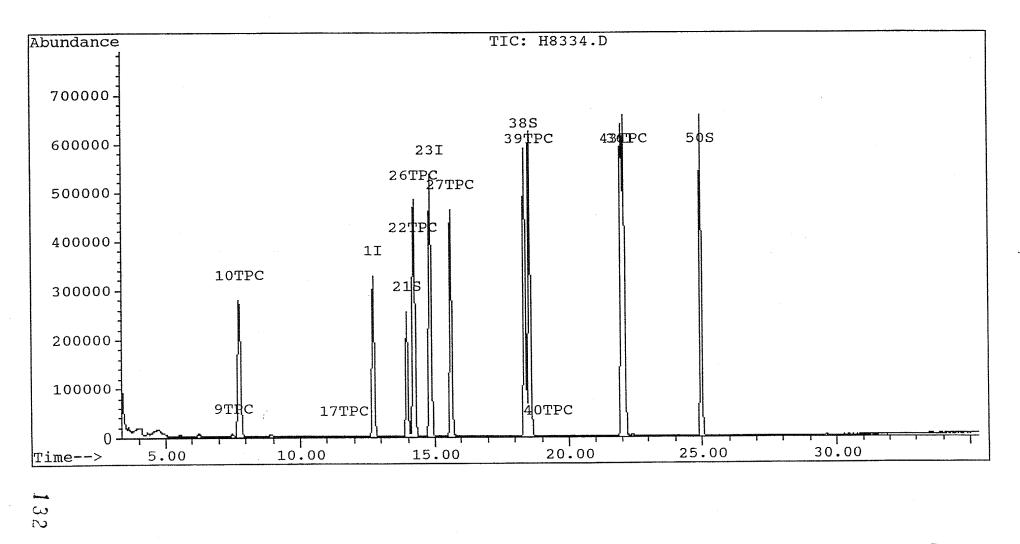
TEST2

Page 1

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Data File Acq On Sample Misc Quant Time
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Method	:	J:\ACQUDATA\MSVOA1\METHODS\ASP0627.M
Title	:	CLPVOAS ON MS#1
Last Update	:	Wed Jun 27 17:55:43 2001
Response via	:	Single Level Calibration



Quantitation Report

ASP0627.M 194 06/27/01 (195-1ASP) Init Cal. Changed trap today is new one (Supeleo Hurge Trap K) H8318 Y test Standard VSTD050 - 195-1 H83A YT Tune Check T062701.M (70) Pre-Curve BIK H8320X I.S. 25 SURR25 CLP25 COMB 250 CLP 250 H8321 XS 2 nl 4 nl 10 nl 10 ml 2 ml VSTDOID 10 jul 4 jul H8322 15 VSTD020 H8323 XS 10pl VSTD 050 H8324X5 2 ul Hul 10 ul VSTD100 V.S. 1. 16 C - BLK 17 ICV 14 Time Check 5 VSTD050 6 Met Blk 7 Blk Spite 10 H68456 1. 10 H68456 1. 10 H68457 12 H68458 13 H68459 14 H68460 15 H68460 15 H68466 15 H68466 15 H68466 15 H6846 16 NO 6 Jattol. 10 H6846 14 H7191 14 H7191 H8325 X VSTD200 H8326 O.K. H8327 H8328 XT Tune Check TO62701-M 4:28 PM H8329 YC H8330 YM H8331 XQ R21-7196 [HA 195-1 ASP] pH<2 H 8332 H8333 YQ PH<Z 468456 1.0 MS H8334 XQ DH=2 468456 1.0MSD H8335 Y PH<2 468457 1.0 H8336 ) >H<2 468458 1.0 H8337) 1.0 PHER H8338 468460 1.0 pH <2 H8339 Y PHZO 468462 1.0 H8340 Y 468461 1.0 pH<2 H8341 X 468464 1.0 (T.B.) pH=2 471983 1.0 (C-B.) pH=2 H83421 David highuni Sur 25 MSV 5084H, 2ml/Sml purged tune, also see curve. I.S. 25 MSV5084F, see unve Comb. J.S./Surr MSV50849, 10,00 Surr 250 MSV 50841, see curve CLP 25 VOAS MSV 5085B, see curve, 10 ml/5ml DF for VST DO50 CLP 250 VOAS MSV 5085A, see curve for ICN: 10 ul Comb. + 5 ul MSV5080B (SS SOW 50) into 5ml DI (in syringe) for BS and M5/MSD loyd Comb. + 10µlMSV5082D (CLPSPK 25) into 5mLDI (for B5) or into 5mL sample (M5/MSD). (Made in syringe) 33

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

Haley & Aldrich of New York 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264 Tel: 716.359.9000 ⁻ Fax: 716.359.4650 www.HaleyAldrich.com



11 December 2001 File No. 70600-001

New York State Department of Environmental Conservation Division of Hazardous Waste Remediation – Region 8 6274 East Avon-Lima Road Avon, New York 14485

Attention: David Pratt, P.E.

Subject:

Supplemental Offsite Groundwater Sampling Former Taylor Instruments Site 95 Ames Street Rochester, New York VCA Index No. B8-0508-97-02

Dear Mr. Pratt:

This letter presents the results of supplemental groundwater sampling requested by the New York State Department of Environmental Investigation (NYSDEC) as part of the former Taylor Instruments Site Offsite Groundwater Investigation. The work described herein has been performed for Apogent Technologies Corp. (Apogent), the party responsible for investigating offsite groundwater conditions for the former Taylor site. This work is being performed in conjunction with onsite subsurface investigations and remediation activities by Harding ESE for Combustion Engineering.

Haley & Aldrich, on behalf of Apogent, installed eight overburden and bedrock wells in May 2001, at locations requested by NYSDEC, in accordance with the NYSDEC-approved Work Plan dated 22 December 1999. The Work Plan called for one round of sampling in the wells and laboratory analysis for volatile organic compounds (VOCs). The sampling was performed and the results summarized in a report to NYSDEC entitled "Report on Offsite Groundwater Investigation, Former Taylor Instruments Site, 95 Ames Street, Rochester, New York, VCA Index No. B8-0508-97-02," dated 6 September 2001. In summary, the results did not indicate VOC presence in the samples. Very low levels of acetone detected in some of the samples were attributed to laboratory contamination due to the presence of acetone in a lab quality control sample. One of the overburden wells (OS-3 OB) was "dry" and was therefore not sampled during this event.

NYSDEC subsequently requested that an additional round of sampling be performed to confirm the initial results. Apogent agreed to this request, and the sampling was performed on 18 October 2001. NYSDEC personnel were present during the sampling, and obtained

#### OFFICES

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Washington District of Columbia NYSDEC 10 December 2001 Page 2 of 2

split samples for independent analysis. Once again, OS-3 OB was dry at the time of sampling. Our samples were submitted to CAS Laboratories Inc., of Rochester, New York, where they were analyzed for VOC presence using USEPA Method 8260b. The laboratory analytical results are attached to this letter. In summary, no VOCs were detected in any of the groundwater samples above the analytical method detection limits. When available, we request copies of the NYSDEC's split sample results for our records.

The results of this supplemental investigation confirm the conclusion of the 6 September 2001 report that VOCs related to the Taylor Instruments Site are not present above analytical detection limits either in the overburden or bedrock groundwater at any of the offsite well locations. We will continue to perform the remaining tasks dictated by the approved work plan, namely to continue performing quarterly water level monitoring in the offsite wells, and providing those data to Harding ESE for incorporation into the Quarterly Progress Reports for the ongoing onsite remedial activities.

Please contact us at any time with any questions you may have.

Sincerely yours, HALEY & ALDRICH OF NEW YORK

1ah

Robert J. Mahoney, P.G./ Senior Environmental Geologist

Edward L. Hynes

Vice President

G:\Projects\70600\001\Offsite Drilling\1 DEC supplemental sampling.doc

Attachment: Analytical Laboratory Data

Distribution:

James D. Charles, Esq., NYSDEC G. Anders Carlson, NYSDOH David Napier, NYSDOH Joseph Albert, MCHD Libby Ford, Nixon Peabody Rick Ryan, P.E., Harding ESE Brian Murphy, Esq., Apogent Technologies Corp Art Harrington, Esq., Godfrey & Khan





H&A OF NY

NOV 16 2001

RECEIVED

A FULL SERVICE ENVIRONMENTAL LABORATORY

November 13, 2001

Mr. Robert Mahoney Haley & Aldrich of New York 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264

PROJECT: FORMER TAYLOR SITE - #70600-001 Submission #:R2109076

Dear Mr. Mahoney

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

( 00

Karen Bunker Project Manager

Enc.



1 Mustard ST. Suite 250 Rochester, NY 14609

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client :	Haley & Aldrich of New York
Project Reference:	FORMER TAYLOR SITE - #70600-001
Lab Submission # :	R2109076
Reported :	11/13/01

Report Contains a total of db pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. Mubau K. Jana

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Effective 9/24/01

# **CAS LIST OF QUALIFIERS**

- U Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J Indicates an estimated value. For further explanation see case narrative / cover letter.
- B This flag is used when the analyte is found in the associated blank as well as in the sample.
- E This flag identifies compounds whose concentrations exceed the calibration range.
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- N Spiked sample recovery not within control limits. (Flag the entire batch - Inorganic analysis only)

* - Inorganic Duplicate analysis not within control limits. Flag the entire batch - Inorganic analysis only

- * Organics QC data outside limits.
- D Spike diluted out.
- S Reported value determined by Method of Standard Additions. (MSA)
- X As specified in the case narrative.

# CAS/Rochester Lab ID # for State Certifications

NELAP Accredited New York ID # 10145 Connecticut ID # PH0556 Massachusetts ID # M-NY032 American Industrial Hygiene Assoc. ID #:100314 Navy Facilities Engineering Service Center Approved



Delaware Accredited New Jersey ID # 73004 Rhode Island ID # 158 New Hampshire ID # 294100 A/B West Virginia ID # 292 Florida ID # Pending



This report contains analytical results for the following samples: Submission #: R2109076

Lab ID	<u>Client ID</u>
501374	OS4-OB
501375	OS4-BR
501376	OS2-OW
502277	OS2-BR
502278	OS1-OR
502279	OS1-BR
502280	OS3-BR
502281	TRIP BLANK



## CASE NARRATIVE

## COMPANY: Haley & Aldrich PROJECT: Former Taylor Site #70600-001 CAS SUBMISSION #: R2109076

Water samples were collected on 10/18//01 and were received at CAS on the same day as sampled at a cooler temperature of 6°C. All samples were received in good condition without breakage or bubbles in the vials.

### VOLATILE ORGANICS GC/MS

A total of 7 waters and 1 Trip Blank were analyzed for the Target Compound List of Volatile Organics and "602 Compounds" (as requested on the chain) by EPA Method 8260B from SW-846. The TCL compounds are reported on separate data forms from the "602 Compounds" although all were analyzed at the same time.

All Tuning criteria for BFB were within limits.

The Initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within acceptance limits.

Samples were run within holding time.

The Laboratory Method Blanks associated with the samples were free of contamination.

No other analytical or QC problems were encountered.

COLUMBIA ANALYTICAL SERVICES	<b>VOLATILE C</b> METHOD 826 Reported:	50B	· · · · · · · · · · · · · · · · · · ·
Haley & Aldrich of New York <b>Project Reference:</b> FORMER TAYLOR SI <b>Client Sample ID :</b> OS4-OB	IE - #70600-	001	
Date Sampled : 10/18/01 09:40 Order = Date Received: 10/18/01 Submission =		Sample Matrix: Analytical Run:	
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
ACETONE BENZENE BROMODICHLOROMETHANE BROMODICHLOROMETHANE BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROETHANE CHLOROETHANE CHLOROFORM CHLOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE 1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYLENE CHLORIDE 1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE 1,2,3-TRICHLOROBENZENE 1,2,3-TRICHLOROBENZENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2,3-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE	20 5.0 5.0 5.0 10 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
SURROGATE RECOVERIES QC LI	MITS		
TOLUENE-D8 (87 -	111) 108) 117)	103 95 99	° °

# VOLATILE ORGANICS METHOD 8260B

Reported: 11/13/01

Haley & Aldrich of New York **Project Reference:** FORMER TAYLOR SITE - #70600-001 **Client Sample ID :** OS4-OB

 Date Sampled : 10/18/01 09:40 Order #: 501374
 Sample Matrix: WATER

 Date Received: 10/18/01
 Submission #: R2109076
 Analytical Run: 71201

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
CHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE	5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L UG/L

COLUMBIA ANALYTICAL SERVICES	<b>VOLATILE OF</b> METHOD 8260		
	Reported: 1		
Haley & Aldrich of New York Project Reference: FORMER TAYLOR SIT Client Sample ID : OS4-BR	FE - #70600-0	001	
Date Sampled : 10/18/01 09:45 Order # Date Received: 10/18/01 Submission #	<b>#:</b> 501375 <b>#:</b> R2109076	Sample Matrix: Analytical Run:	
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROETHANE CHLOROETHANE CHLOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE 1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE 1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE 1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE 1,2,4-TRICHLOROBENZENE 1,2,3-TRICHLOROBENZENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE VINYL CHLORIDE O-XYLENE M+P-XYLENE SURROGATE RECOVERIES QC LII	20 5.0 5.0 5.0 10 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
4-BROMOFLUOROBENZENE (87 - TOLUENE-D8 (87 -	111)	103 97 98	° 7

## VOLATILE ORGANICS

METHOD 8260B Reported: 11/13/01

Haley & Aldrich of New York **Project Reference:** FORMER TAYLOR SITE - #70600-001 **Client Sample ID :** OS4-BR

Date Sampled :	10/18/01	09:45 Order #	501375	Sample Matrix:	WATER
Date Received:	10/18/01	Submission #	R2109076	Analytical Run:	71201

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
CHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE	5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L UG/L

COLUMBIA ANALYTICAL SERVICES	METH	ATILE ORG HOD 8260E Drted: 11	3	
Haley & Aldrich of New York <b>Project Reference:</b> FORMER TAYL <b>Client Sample ID :</b> OS2-OW	OR SITE - ‡	‡70600-0C	)1	
Date Sampled : 10/18/01 12:00 O Date Received: 10/18/01 Submis	rder #: 501 sion #: R21	L376 L09076	Sample Matrix: Analytical Run:	
ANALYTE	I	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1	.0			-
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROFTHANE CHLOROFTHANE DIBROMOCHLOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE 1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE 1,2,4-TRICHLOROBENZENE 1,1,2-TRICHLOROBENZENE 1,1,2-TRICHLOROETHANE 1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE O-XYLENE M+P-XYLENE		$\begin{array}{c} 20\\ 5.0\\ 5.0\\ 5.0\\ 10\\ 5.0\\ 5.0\\ 5.0\\ 5.0\\ 5.0\\ 5.0\\ 5.0\\ 5.$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
SURROGATE RECOVERIES	QC LIMITS			
TOLUENE-D8	(87 - 111) (87 - 108) (86 - 117)		101 96 98	0 [°] 9

# VOLATILE ORGANICS

METHOD 8260B Reported: 11/13/01

Haley & Aldrich of New York **Project Reference:** FORMER TAYLOR SITE - #70600-001 **Client Sample ID :** OS2-OW

Date Sampled :	10/18/01	12:00 Order #	<b>‡ :</b>	501376	Sample Matrix:	WATER
Date Received:	10/18/01	Submission #	<b>‡ :</b>	R2109076	Analytical Run:	71201

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
CHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE	5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L UG/L

4	COLUMBIA ANALYTICAL SERVICES	M	<b>OLATILE OF</b> ETHOD 8260 eported: 1	B				
	Haley & Aldrich of New York Project Reference: FORMER TAYLOR SITE - #70600-001 Client Sample ID : OS2-BR							
	Date Sampled : 10/18/01 12:05 Date Received: 10/18/01 Subm							
	ANALYTE		PQL	RESULT	UNITS			
	DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION:	1.0						
	ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROETHANE CHLOROFORM CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHENE 1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE 1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE 1,2,3-TRICHLOROBENZENE 1,1,2-TRICHLOROBENZENE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE O-XYLENE M+P-XYLENE		20 5.0 5.0 5.0 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L			
	SURROGATE RECOVERIES	QC LIMIT			_			
	4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(87 - 11 (87 - 10 (86 - 11	8)	102 95 98	00 00 10 10			

# VOLATILE ORGANICS

METHOD 8260B Reported: 11/13/01

Haley & Aldrich of New York **Project Reference:** FORMER TAYLOR SITE - #70600-001 **Client Sample ID :** OS2-BR

Date Sampled :	10/18/01	12:05 Order #:	502277	Sample Matrix:	WATER
Date Received:	10/18/01	Submission #:	R2109076	Analytical Run:	71201

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
CHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE	5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L UG/L

COLUMBIA ANALYTICAL SERVICES	<b>VOLATILE OI</b> METHOD 8260 Reported: 3	DB	
Haley & Aldrich of New York Project Reference: FORMER TAYLOR Client Sample ID : OS1-OR	SITE - #70600-0	001	
Date Sampled : 10/18/01 13:30 Orde Date Received: 10/18/01 Submission	r #: 502278 n #: R2109076	Sample Matrix Analytical Run	
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROETHANE CHLOROFORM CHLOROMETHANE 7IBROMOCHLOROMETHANE 1, 2-DICHLOROETHANE 1, 2-DICHLOROETHANE 1, 2-DICHLOROETHANE 1, 2-DICHLOROETHENE TRANS-1, 2-DICHLOROETHENE 1, 2-DICHLOROPROPANE CIS-1, 3-DICHLOROPROPENE TRANS-1, 3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE 1, 1, 2, 2-TETRACHLOROETHANE TETRACHLOROETHENE 1, 2, 4-TRICHLOROBENZENE 1, 1, 1-TRICHLOROBENZENE 1, 1, 1-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE O-XYLENE M+P-XYLENE	20 5.0 5.0 5.0 10 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
	LIMITS		
4 - BROMOFLUOROBENZENE(87TOLUENE - D8(87DIBROMOFLUOROMETHANE(86	-	90 95 98	° 1°3

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COLUMBIA ANALYTICAL SERVICES	<b>VOLATILE OR</b> METHOD 8260 Reported: 1	В	
Haley & Aldrich of New York <b>Project Reference:</b> FORMER TAYLOR SITH <b>Client Sample ID :</b> OS1-OR	E - #70600-0	01	
Date Sampled : 10/18/01 13:30 Order # Date Received: 10/18/01 Submission #	502278 R2109076	Sample Matrix Analytical Run	
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
CHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE	5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L UG/L

COLUMBIA ANALYTICAL SERVICES		<b>VOLATILE</b> METHOD 82 Reported:				
Haley & Aldrich of New York <b>Project Reference:</b> FORMER TAYLOR SITE - #70600-001 <b>Client Sample ID :</b> OS1-BR						
Date Sampled : 10/18/01 13:35 C Date Received: 10/18/01 Submis	order #: sion #:	502279 R2109076	Sample Matrix: Analytical Run:			
ANALYTE		PQL	RESULT	UNITS		
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1	0					
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROETHANE CHLOROFORM CHLOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE 1,2,4-TRICHLOROBENZENE 1,1,2-TRICHLOROBENZENE 1,1,2-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE O-XYLENE M+P-XYLENE		$\begin{array}{c} 2 \\ 0 \\ 5 \\ 0 \\ 5 \\ 0 \\ 5 \\ 0 \\ 0 \\ 5 \\ 0 \\ 0$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L		
SURROGATE RECOVERIES	QC LIM	ITS				
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(87 - 1 (87 - 1 (86 -		90 94 97	00 00 00 00 00 00 00 00 00 00 00 00 00		

# COLUMBIA ANALYTICAL SERVICES VOLATILE ORGANICS METHOD 8260B Reported: 11/13/01 Haley & Aldrich of New York Project Reference: FORMER TAYLOR SITE - #70600-001 Client Sample ID : OS1-BR Date Sampled : 10/18/01 13:35 Order #: 502279 Sample Matrix: WATER Date Received: 10/18/01 Submission #: R2109076 Analytical Run: 71201

Date Received: 10/18/01 Submission #	R2109076	Analytical Ru	<b>n:</b> 71201
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
CHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE	5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L UG/L

COLUMBIA ANALYTICAL SERVICES	<b>VOLATILE OF</b> METHOD 8260 Reported: 1	)B	
Haley & Aldrich of New York <b>Project Reference:</b> FORMER TAYLOR & <b>Client Sample ID :</b> OS3-BR	SITE - #70600-0	001	
Date Sampled : 10/18/01 14:50 Orde: Date Received: 10/18/01 Submission		Sample Matrix Analytical Run	
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
ACETONE BENZENE BROMODI CHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DI SULFIDE CARBON TETRACHLORIDE CHLOROFORM CHLOROFORM CHLOROFTHANE 7.1-DI CHLOROETHANE 1,1-DI CHLOROETHANE 1,2-DI CHLOROETHANE 1,2-DI CHLOROETHENE TRANS-1,2-DI CHLOROETHENE 1,2-DI CHLOROPROPANE CIS-1,3-DI CHLOROPROPENE TRANS-1,3-DI CHLOROPROPENE TRANS-1,3-DI CHLOROPROPENE TRANS-1,3-DI CHLOROPROPENE TRANS-1,3-DI CHLOROPROPENE TRANS-1,3-DI CHLOROPROPENE TRANS-1,3-DI CHLOROPROPENE TRANS-1,3-DI CHLOROPROPENE TRANS-1,2-PENTANONE (MIBK) STYRENE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE 1,2,3-TRI CHLOROBENZENE 1,2,3-TRI CHLOROBENZENE 1,1,1-TRI CHLOROETHANE 1,1,2-TRI CHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE O-XYLENE M+P-XYLENE SURROGATE RECOVERIES QC	20 5.0 5.0 5.0 10 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
SURROGATE RECOVERIESQC4-BROMOFLUOROBENZENE(87TOLUENE-D8(87DIBROMOFLUOROMETHANE(86	- 111) - 108) - 117)	90 94 99	or or or or or or 17
			<u> </u>

## **VOLATILE ORGANICS** METHOD 8260B Reported: 11/13/01

Haley & Aldrich of New York **Project Reference:** FORMER TAYLOR SITE - #70600-001 **Client Sample ID :** OS3-BR

Date Sampled :	10/18/01	14:50 Order #:	502280	Sample Matrix:	WATER
Date Received:	10/18/01	Submission #:	R2109076	Analytical Run:	71201

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
CHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE	5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L UG/L

COLUMBIA ANALYTICAL SERVICES	<b>VOLATILE OI</b> METHOD 8260 Reported: 3	OB				
Haley & Aldrich of New York <b>Project Reference:</b> FORMER TAYLOR SITE - #70600-001 <b>Client Sample ID :</b> TRIP BLANK						
Date Sampled : 10/18/01 Order Date Received: 10/18/01 Submission	<b>‡:</b> 502281 <b>‡:</b> R2109076	Sample Matrix: Analytical Run:				
ANALYTE	PQL	RESULT	UNITS			
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0						
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROETHANE CHLOROETHANE CHLOROHETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE CIS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE 1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE 1,2,3-TRICHLOROBENZENE 1,2,3-TRICHLOROBENZENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE O-XYLENE M+P-XYLENE SURROGATE RECOVERIES QC LI	20 5.0 5.0 5.0 5.0 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L			
4 - BROMOFLUOROBENZENE(87 -TOLUENE - D8(87 -	111)	87 94 97	or or or 19			

COLUMBIA ANALYTICAL SERVICES

## VOLATILE ORGANICS

METHOD 8260B Reported: 11/13/01

Haley & Aldrich of New York **Project Reference:** FORMER TAYLOR SITE - #70600-001 **Client Sample ID :** TRIP BLANK

Date Sampled :	10/18/01	Order #:	502281	Sample Matrix:	WATER
Date Received:		Submission #:	R2109076	Analytical Run:	71201

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 11/01/01 ANALYTICAL DILUTION: 1.0			
CHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE	5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L UG/L

# VOLATILE ORGANICS

METHOD 8260B Reported: 11/13/01

Date Sampled : Date Received:	Order # Submission #	508430	Sample Matrix: Analytical Run:	WATER 71201
ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/3 ANALYTICAL DILUTION:	1.0			
ACETONE BENZENE BROMODICHLOROMETHANE BROMOMETHANE COMOMETHANE CARBON DISULFIDE CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROETHANE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 1, 2-DICHLOROETHANE 1, 2-DICHLOROETHANE CIS-1, 2-DICHLOROETHENE CIS-1, 2-DICHLOROETHENE CIS-1, 3-DICHLOROPROPENE FRANS-1, 3-DICHLOROPROPENE CIS-1, 3-DICHLOROPROPENE CIS-1	Κ)	20 5.0 5.0 5.0 10 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
M+P-XYLENE SURROGATE RECOVERIES	QC LIM	5.0 ITS	5.0 U	UG/L
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(87 - (87 - (86 -		90 92 100	۶ ۶ 21

# VOLATILE ORGANICS

METHOD 8260B Reported: 11/13/01

## Project Reference: Client Sample ID : METHOD BLANK

Date Sampled : Order # Date Received: Submission #	: 508430	Sample Matrix: Analytical Run:	
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/31/01 ANALYTICAL DILUTION: 1.0			
CHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE	5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L UG/L

## VOLATILE ORGANICS

METHOD 8260B Reported: 11/13/01

Date Sampled : Date Received:	Order Submission		508432	Sample Matrix Analytical Run	
ANALYTE			PQL	RESULT	UNITS
DATE ANALYZED : 11/0	01/01				
ANALYTICAL DILUTION:	1.0		6		
ACETONE			20	20 U	UG/L
BENZENE			5.0	5.0 U	UG/L
BROMODICHLOROMETHANE			5.0	5.0 U	UG/L
BROMOFORM			5.0	5.0 U	UG/L
BROMOMETHANE			5.0	5.0 U	UG/L
2-BUTANONE (MEK)			10	10 U	UG/L
CARBON DISULFIDE			10	10 U	UG/L
CARBON TETRACHLORIDE			5.0	5.0 U	UG/L
CHLOROETHANE			5.0	5.0 U	UG/L
			5.0	5.0 U	UG/L
CHLOROFORM			5.0	5.0 U	UG/L
THLOROMETHANE					UG/L UG/L
IBROMOCHLOROMETHANE			5.0	5.0 U	
,1-DICHLOROETHANE			5.0	5.0 U	UG/L
,2-DICHLOROETHANE			5.0	5.0 U	UG/L
L,1-DICHLOROETHENE			5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE			5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE			5.0	5.0 U	UG/L
,2-DICHLOROPROPANE			5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE			5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE			5.0	5.0 U	UG/L
ETHYLBENZENE			5.0	5.0 U	UG/L
2-HEXANONE			10	10 U	UG/L
METHYLENE CHLORIDE			5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIB	K)		10	10 U	UG/L
STYRENE			5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE			5.0	5.0 U	UG/L
L'ETRACHLOROETHENE			5.0	5.0 U	UG/L
FOLUENE	$t_{\rm eff}(a) = -b$		5.0	5.0 U	UG/L
L,2,4-TRICHLOROBENZENE			5.0	5.0 U	UG/L
L, 2, 3 - TRICHLOROBENZENE			5.0	5.0 U	UG/L
L, 1, 1 - TRICHLOROETHANE			5.0	5.0 U	UG/L
			5.0	5.0 U	UG/L
L, 1, 2 - TRICHLOROETHANE			5.0	5.0 U	UG/L UG/L
FRICHLOROETHENE			5.0	5.0 U 5.0 U	UG/L UG/L
/INYL CHLORIDE					UG/L UG/L
D-XYLENE M+P-XYLENE			5.0 5.0	5.0 U 5.0 U	UG/L UG/L
				2.00	00, 2
SURROGATE RECOVERIES	QC I	JIMI	TS		
4-BROMOFLUOROBENZENE	(87	- 1		89	010
TOLUENE-D8	(87	- 1	08)	94	alo
	· -		/		<u></u>

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# VOLATILE ORGANICS METHOD 8260B

Reported: 11/13/01

# Project Reference: Client Sample ID : METHOD BLANK

Date Sampled : Date Received:	Order #: Submission #:		Sample Matriz Analytical Run	
ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : ANALYTICAL DILUTION:	11/01/01 1.0			
CHLOROBENZENE 1,3-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,4-DICHLOROBENZENE		5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L UG/L

Colume CHAIN OF CUSTODY/LABORA	TORY	<b>VALYSIS REQUE</b>	ST FORM	a
An Employee-Owned Company An Employee-Owned Company One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (716) 288-5380 • 8				Contact
Project Name Project Number	T		nclude Method Number and Contained	r Preservative)
FORNER laylor LNST	PRESERV			
K. MAHONEY				/ / Preservative Key
Company/Address ACDRICHOFNY	CONTAINERS		Plant Plant	0. NONE 1. HCL 2. HNO3 3. H2SO4
200 Town Centre DR.		DA CLA DA CLA DA CLA CLA CLA CLA CLA CLA CLA CLA CLA CLA	ALS CORPORT	2. HNO3 3. H ₂ SO ₄ 4. NaOH 5. Zn. Acetate
RaitESTER, NY 14623		22 22 22 22 22 22 22 22 22 22 22 22 22		6. MeOH 7. NaHSO ₄
$\frac{1}{259-9000}$		20 20 20 20 20 20 20 20 20 20 20 20 20 2		8. Other
Sampler's Signature Rohatt Sampler's Printed Name DRVID MINOSTAN	NUMBER	Переко У ОЧ'S 1 2 2 2 0 0 4'S 1 2 2 0 4'S 1 2 2 0 4'S 1 2 2 0 1 6 2 1 2 0 1 2 1 5 1 0 0 4'S 1 1 0 1 4 1 5 1 8 0 2 1 0 4'S 1 1 0 1 4 1 5 1 8 0 2 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 7 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 1 0 4'S 1 1 0 1 4 1 5 1 5 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1		ALTERNATE DESCRIPTION
FOR OFFICE USE ONLY SAMPLING CLIENT SAMPLE ID LAB ID DATE TIME MATRIX				CALLWITH
054-0B 501374 1018/01 0940 AQ	$ 3\rangle$			MBL/PQL
054-BR 501375 10/18/01 0945 AQ	3 X			grestions
052-08 501376 101801200 AQ 1052-132 502277 101801205 AQ	3 X			
1052-13R 502277 10100 1205 AQ	3 X			
1051-013 SOZA2 (8 10/18/01/1330 AQ	3 X			
1051-BR KBINE 50228079 10 180 1335 AQ	3 x	-		
1053-BR 502280 10/18/01 1450 AQ	3 X			
TRIPBLANK SODD& NIBOI - AD	3 X		ĸ	
TEMPBLANK 10/18/01 - 12Q			<u> </u>	
SPECIAL INSTRUCTIONS/COMMENTS		TURNAROUND REQUIREMENTS	REPORT REQUIREMENTS	INVOICE INFORMATION
Metals		RUSH (SURCHARGES APPLY)	I. Results Only	
602 Compounds - Chioropen cene		24 hr 48 hr 5 day	II. Results + QC Summaries (LCS, DUP, MS/MSD as required)	PO#
1 -1,3 Di Chioro Den cone		REQUESTED FAX DATE	III. Results + QC and Calibration	BILL TO:
602 Compounds - Chlorobenzene -1,3 Dichlorobenzene 1,4 Dichlorobenzene		REQUESTED TAX DATE	Summaries	······································
	-	REQUESTED REPORT DATE	IV. Data Validation Report with Raw Data	
2 MARCART HARE CONTRACT SOME	Cal.		V. Speicalized Forms / Custom Report	Ra109076
SAMPLE RECEIPT: CONDITION/COOLER TEMP: CUSTODY SE/	ALS: Y N		EdataYesNo	SUBMISSION #:
	BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature ) The signature builts of Signature here be	Khr!	Signature Havey Provants	Signature	Signature
Printed Name A Printed Name A Printed Name A	<u> </u>	Printed Name Gregoly C. Smen'zh	Printed Name	Printed Name
First 2 A Firm 12-18-01 1525 Firm 10-18-01 15	545	Firm CAS	Firm	Firm
Date/Time Date/Time Date/Time		Date/Time 16-18-01 15145	Date/Time	Date/Time SCOC-0101-08

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

#1229

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Columbia Analytical Services Inc. Cooler Receipt And Preservation Check Form

roject/Client	HOA			Sut	omission N	lumber	Ralo	9076.
Cooler received on	10-18-01 by:	HE	(	COURIER: CAS	UPS	FEDEX	CD&L	CLIENT
<ol> <li>Were custo</li> <li>Did all bott</li> <li>Did any VC</li> <li>Were Ice of</li> <li>Where did to</li> </ol>	dy seals on outside dy papers properly les arrive in good c )A vials have signif r Ice packs present the bottles originate re of cooler(s) upon	filled or condition icant ain t? e?	ut (ink n (unbr r bubbl	oken)?		YES ( YES N YES N YES N (YES N CAS/R	10 10 10 10 10 10 10	ENT
Is the temperature	ature within 0° - 6° C?	4		Yes 🛛 Yes 🖉	Yes		Yes 🛛	Yes 🛛
lf No, Expla	in Below	:		No X No D	No		No 🗖	No 🗆 🔹
	Temperatures Take		0-1	8-01@	15:55	,		
Thermomet	er ID: IR-bun	T	'emp B	lank Sample Bo	ttle Co	oler Temp	. IR. Ĝ	un
If out of Temperatur	e, Client Approval t	o Run S	amples					
2. Did all bottl	ttle labels complete e labels and tags ag			preservation, etc.) dy papers?	?	YES	-	••
	ct containers used f s: Cassettes / Tul ancies:			licated? Canisters Pressuriz	ed To	YES dlar® Ba	<u> </u>	N/A
4. Air Samples	s: Cassettes / Tul				ed To Regard	edlar® Ba	NO	· · ·
4. Air Samples	s: Cassettes / Tul	oes Intad		Canisters Pressuriz		edlar® Ba	NO gs Inflated	· · ·
4. Air Sample: Explain any discrep	s: Cassettes / Tul ancies:	oes Intad		Canisters Pressuriz		edlar® Ba	NO gs Inflated	· · ·
4. Air Samples Explain any discrep pH 12 2	s: Cassettes / Tul ancies:	oes Intad		Canisters Pressuriz		edlar® Ba	NO gs Inflated	· · ·
4. Air Sample: Explain any discrep pH 12	s: Cassettes / Tul ancies: Reagent NaOH	oes Intad		Canisters Pressuriz		edlar® Ba	NO gs Inflated	· · ·
4. Air Samples Explain any discrep pH 12 2	s: Cassettes / Tul ancies: Reagent NaOH HNO3 H2SO4	oes Intad		Canisters Pressuriz		edlar® Ba	NO gs Inflated	· · ·
4. Air Samples Explain any discrep pH 12 2 2 Residual Chlorine (+/- 5-9*	s: Cassettes / Tul ancies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only)	YES	no	Canisters Pressuriz	Reigent	ediar®-Ba	NO gs Inflated	· · ·
4. Air Samples Explain any discrep pH 12 2 2 Residual Chlorine (+/-)	s: Cassettes / Tul ancies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = San	YES	no	Canisters Pressuriz	Reigent	edlar® Ba	NO gs Inflated	· · ·
4. Air Samples Explain any discrep pH 12 2 2 Residual Chlorine (+/-) 5-9* YES = All samples OK *If pH adjustment is requ	s: Cassettes / Tul ancies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = San	YES	no	Canisters Pressuriz	Reigent	ediar®-Ba	NO gs Inflated	· · ·
4. Air Samples Explain any discrep pH 12 2 2 Residual Chlorine (+/-) 5-9* YES = All samples OK *If pH adjustment is requ	s: Cassettes / Tul ancies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = San ired, use NaOH and/or 1 OC Vial pH Verification (Tested after Analysis) Following Samples	YES	no	Canisters Pressuriz	Reigent	ediar®-Ba	NO gs Inflated	· · ·
4. Air Samples Explain any discrep pH 12 2 2 Residual Chlorine (+/-) 5-9* YES = All samples OK *If pH adjustment is requ	s: Cassettes / Tul ancies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = San ired, use NaOH and/or 1 OC Vial pH Verification (Tested after Analysis) Following Samples	YES	no	Canisters Pressuriz	Reigent	ediar®-Ba	NO gs Inflated	· · ·
4. Air Samples Explain any discrep pH 12 2 2 Residual Chlorine (+/-) 5-9* YES = All samples OK *If pH adjustment is requ	s: Cassettes / Tul ancies: Reagent NaOH HNO3 H2SO4 for TCN & Phenol P/PCBs (608 only) NO = San ired, use NaOH and/or 1 OC Vial pH Verification (Tested after Analysis) Following Samples	YES	no	Canisters Pressuriz	Reigent	ediar®-Ba	NO gs Inflated	· · ·

Other Comments:

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