PORT OF OAKLAND

May 8, 2001

MAY 11 2001

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: **Results of Soil Gas and Surface Vapor Flux Testing Study, Port of Oakland 9th Avenue Terminal, Oakland**

Dear Mr. Chan:

Please find enclosed the results of the soil gas and surface vapor flux conducted to assess soil gas methane concentrations, flux rates, and volatile organic flux rates from subsurface sources at the 9th Avenue Terminal.

If you have any questions concerning the enclosed report, please contact me at (510) 627-1184.

Sincerely,

Douglas P. Herman
Associate Port Environmental Scientist

encl: Results of Soil Gas and Surface Vapor Flux Testing Study

cc w/o encl: Jeff Jones
Jerianne Alexander

RECEIVED
MAY 0 3 2001

530 Water Street ■ Jack London Square ■ P.O. Box 2064 ■ Oakland, California 94604-2064
Telephone (510) 272-1100 ■ Fax (510) 272-1172 ■ TDD (510) 763-5703 ■ Cable address, PORTOFOAK, Oakland

MAY 11 2001

RESULTS OF SOIL GAS AND SURFACE VAPOR FLUX TESTING STUDY PORT OF OAKLAND, NINTH AVENUE TERMINAL OAKLAND, CALIFORNIA

Prepared For:

Port of Oakland
530 Water Street
Oakland, California 94607

Prepared By:

C.E. Schmidt
Environmental Consultant
19200 Live Oak Road
Red Bluff, California 96080

Jeriann Alexander, PE, REA
Subsurface Consultants, Inc.
171-Twelth Street, Suite 200
Oakland, California 94607

March 2001

REGISTERED PROFESSIONAL ENGINEER
JERIANN N. ALEXANDER
No. C040469
Exp. 3/31/01
CIVIL
STATE OF CALIFORNIA

REGISTERED ENVIRONMENTAL ASSESSOR
JERIANN N. ALEXANDER
NO. REA-03130
Expires: 6/30/01
STATE OF CALIFORNIA

TABLE OF CONTENTS

PLATES

TABLES

APPENDIX

Methane LEL = 5% ≈ 50,000 ppm

10% LEL with a 0.5% or 5000ppm. (v)

EXECUTIVE SUMMARY

Previous studies conducted at the Port of Oakland Ninth Avenue Terminal, identified potential methane gas and volatile organic compound emission sources in the subsurface environment. The methane gas source area was described by others to be associated with the biodegradation of heavy petroleum hydrocarbons released from former bulk storage and processing areas located to the north of the wharf bulkhead wall. The volatile organic compound emission source area was described by others to be associated with a former solvent mixing and processing area located in the vicinity of a buried rail spur along the alignment of Ninth Avenue.

Outdoor soil gas testing was conducted under the observation of C. E. Schimdt, Environmental Consultant, and Subsurface Consultants, Inc. (SCI) to evaluate the lateral and vertical limits of methane gas impacts, and to evaluate methane gas and volatile organic compound lateral migration into subsurface utilities. Soil gas samples were collected from depths of 2 feet below the land surface (BLS) at a total of 36 locations in order to map the methane affected areas, and at multiple depths at selected locations where elevated levels of methane gas were detected. Soil gas samples were also collected as a function of tide level, and sequentially in order to determine persistence of soil gas methane levels. Headspace samples were also collected from a total of 8 groundwater wells and 10 manholes or utility vaults.

The soil gas testing data confirmed and substantiated previous findings by others that an explosion hazard due to the accumulation of methane gas does exist over a relatively large area of the Ninth Avenue Terminal property. All confined areas with adequate oxygen and a minimum of 5.5% methane levels are considered potentially explosive. However, as a safeguard, it is recommended that areas where methane concentrations are in excess of 0.55% be identified as areas of potential concern. The largest mass of soil vapor at the site where methane concentrations greatly exceed 0.55% involves the soil at a depth of 2 feet BLS within the limits shown on Plate 1. Hot spots occur at a depth of 0.5 feet in the area of sampling points GP-18 (23% methane). Sampling points GP-12 and GP-18 registered the highest methane concentrations at a depth of 2 feet BLS, 48 and 43 % methane, respectively. Measurements obtained from the 5 foot BLS depth indicated that hot spots exist in the area of sampling points GP-18 (13% methane) and GP-33 (16% methane).

The soil gas testing data further showed that there is active subsurface communication between the screened vadose zone of the groundwater monitoring wells and the methane gas source area. Methane concentrations measured in the headspace areas of wells located in the methane gas source area ranged from 27 to 56%. The well headspace areas allow for the accumulation of methane gas within the well pipe.

Soil gas data obtained from subsurface utility improvements is inconclusive as to whether the utilities are acting as active conduits. Methane concentrations measured within the selected subsurface utility improvements ranged up to 0.20%. The reason behind finding these relatively low concentrations of methane may be more a function of the subsurface utility systems not being closed, air-tight systems which would allow methane concentrations to readily dissipate or become diluted, and not related to a lack of lateral migration within the utility system.

Flux measurements were performed in both the methane gas and volatile organic compound emission source areas, as well as in a control area located along the Clinton Basin shoreline. The flux chamber measurements were obtained to evaluate the extent to which surface coverings (i.e., asphalt pavements) are acting as effective barriers to vapor emissions. The United States Environmental Protection Agency flux chamber testing protocols were followed throughout the testing program. Flux chamber tests were conducted in each potential source area to evaluate conditions where surface coverings appeared (1) continuous (not cracked), (2) cracked, and (3) where no surface covering existed (open soil). The flux chamber testing data shows that the pavement is functioning well, as a whole, in limiting uncontrolled vapor emissions from both the methane gas and solvent vapor source areas. Although interference due to paved surface contamination was noted, the data generated is found to be acceptable from a quality control standpoint for use in completing the human health exposure assessment. Until this assessment is completed care should be taken in these areas so that the integrity of the pavement cap is not impaired. No new structures should be placed over these areas until a remedial action plan/site mitigation plan is developed.

The risk of explosion due to buildup of methane gas vapor is a condition, which in most situations can be mitigated. Given the current site use (open space storage) mitigation measures would include (1) allowing sufficient time for the aeration of confined spaces such as utility vaults and monitoring wells, and (2) providing worker and tenant notification to prohibit the use of equipment and vehicles which generate sparks and the use of possible ignition/flammable sources. Buildings constructed over the methane gas generation area will need to be designed and constructed with methane vapor barriers and passive/active methane gas removal and venting systems. Other remedial activities may also be required to further mitigate site conditions and the risk of explosion pending the results of the human health exposure assessment and additional investigation and evaluation of the need for source removal, as may be required. The results of the risk assessment when completed would provide additional recommendations for incorporation into a remedial action plan and a risk management plan for the site.

Based on the results of this study, the Port of Oakland Environmental Health & Safety Compliance Department should be contacted regarding any activities to be conducted within the limits of the methane gas source area and the VOC source area delineated on Plate 1. It is further suggested that the results of this study be presented to Port staff managers from the Maritime, Commercial Real Estate, Engineering, and Environmental Planning Divisions, at a minimum, which manage and maintain this property and its use. The information contained herein should be discussed so that appropriate hazard disclosures and precautions can be disseminated, as appropriate.

1.0 INTRODUCTION

This report describes the field testing of soil gas and surface vapor flux conducted to assess soil gas methane concentrations and flux rates, and volatile organic compound (VOC) flux rates from subsurface sources at the Port of Oakland, Ninth Avenue Terminal located in Oakland, California. Specifically, the objectives of this study were to:

1) Define the lateral and vertical extent of the explosive methane vapors;
2) Determine the extent to which the subsurface utilities may be acting as migration pathways;
3) Determine whether the existing fill and pavement layers are acting as a barrier to uncontrolled vapor emissions;
4) Determine whether the existing fill and pavement layer is acting as a barrier to vertical migration of organic vapors in the solvent release area.

In general, subsurface soil gas measurements of methane were conducted to provide data regarding the lateral and vertical extent of impacted soil and the potential migration through subsurface utilities, and surface flux measurements were obtained to determine the effectiveness of existing surface coverings to limit vapor emissions and to provide adequate data suitable for use in a site-specific exposure assessment. Field and laboratory activities were performed in accordance with a work plan prepared by C. E. Schimdt[1].

InterPhase Environmental, Inc. conducted soil gas testing and C. E. Schmidt conducted flux chamber testing on July 24 through 27, 2000. Subsurface Consultants, Inc. (SCI) assisted both InterPhase, Inc. and C. E. Schmidt in the field by (1) coordinating site activities with Port tenants, (2) facilitating sample collection from the existing subsurface utility improvements and monitoring wells, and (3) mapping and screening surface cracks. In addition, SCI graphically presented the study data and assisted C. E. Schimdt in the preparation of this report.

2.0 BACKGROUND

In April 1998, Arcadis Geraghty & Miller[2] (AGM) conducted a preliminary evaluation of the potential hazards due to methane gas generation sources at the site. AGM collected vapor and groundwater samples from eight selected groundwater monitoring wells located within an area believed to be impacted by heavy petroleum hydrocarbons. The results of their study showed that dissolved methane gas was present in all the groundwater samples and concentrations ranged from 0.11 parts per million (ppm) to 7.81ppm. Methane gas was also detected in the vapor samples from all the wells except SCIMW-14. Methane gas concentrations varied up to 55.55%. The highest dissolved methane in groundwater and the highest methane gas in the vapor samples were obtained from wells SCIMW-8, SCIMW-9 and SCIMW-13, with SCIMW-13 registering the highest values.

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1 *Work Plan,* Schmidt, December 1999.
2 *Results of Subsurface Vapor Characterization Activities*, Arcadis Geraghty & Miller, June 1998.

AGM conducted a subsequent study in 1999[3] to evaluate the possibility that methane gas may accumulate in subsurface utility improvements including storm drain and sanitary sewer inlets and manholes. Ten sampling locations were selected from across the site and the vapor concentrations measured during the November 1999 sampling event were significantly lower than the concentrations measured in the monitoring wells in April 1998. AGM concluded that although the concentrations measured in the subsurface improvements were markedly lower, they were not interpreted to preclude the possibility that significant accumulations may exist at other times of the year. AGM recommended that additional study and evaluation be conducted.

3.0 METHODOLOGY AND QUALITY CONTROL

3.1 Soil Gas Study

Testing for soil gas was conducted by InterPhase, Inc. using standard soil gas testing protocol as defined by the procedures recommended by the guidelines for soil gas investigations set by California Regional Water Quality Control Board, Los Angeles (February 25, 1997). These guidelines include using a steel probe with a drive tip designed to interface soil gas at a specific depth of interest with clean plastic tubing. The probe is driven to depth and retracted to allow access to the soil gas. The soil gas is purged through the tubing and then sampled using syringe media. The soil gas is analyzed on-site by direct injection into a gas chromatograph (GC) system.

Soil gas testing was conducted in the 'methane generation area' in an effort to determine the lateral and vertical extent of methane in the soil gas. Soil gas was sampled from a depth of 2 feet at 36 test locations spaced on a 100 by 100 foot grid throughout the methane study area. Further, soil gas was repeat-tested at this depth sequentially in order to determine the recharge rate per location and the affect that the tide may have on the soil gas levels. From these 36 locations, 9 locations were selected for multi-depth soil gas testing. These 9 locations were selected based on the highest methane levels detected at the 2 foot sampling depths. Sample locations are shown on Plates 2, 3 and 4.

InterPhase, Inc. collected headspace samples from the groundwater wells and subsurface utility improvements, which AGM sampled in 1998 & 1999. Sample locations are shown on Plate 5. The complete soil gas test data report is included in Attachment A. A field notebook containing data sheets and sample chain-of-custody forms was maintained for the field and analytical testing program. The Emission Measurement Data Sheets are presented in Appendix B.
Method Blank samples were performed by collecting ambient air samples (typically 1-to-3 parts per million as vapor (ppmv) methane) and injecting them into the GC system. A total of 10 blank samples were performed on a regular frequency throughout the program. Of the 10 samples, all but two were reported less than detect at 10 ppmv. One sample was reported just above the detection limit at 11 ppmv, and is considered acceptable. The other sample measured 75 ppmv, and is not acceptable. This blank sample was observed immediately after analyzing sample measuring 43% methane, and the blanks high concentration is judged attributable to system carry-over. As a result of

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3 *Results of Methane Gas Monitoring Study of Subsurface Vaults and Sewers,* Arcadis Geraghty & Miller May 1999.

this analysis, the operator noted the system carry-over and altered protocols to be followed after measuring samples containing high level concentrations.

A total of 10 field replicate samples were performed on a regular frequency throughout the field program. The range of relative percent difference (RPD) was 0 to 40, with an average of 14. The Quality Control (QC) criteria for field replicates is 50 RPD. These data indicate acceptable method performance.

3.2 Surface Flux Chamber Study

Testing for surface flux was conducted by C. E. Schmidt using the United States Environmental Protection Agency recommended Surface Isolation Flux Chamber protocol[4]. In general, the chamber was embedded about 1/4" into the land surface for open soil test areas. Testing on hard surfaces (cracked and uncracked asphalt) was accomplished by using an adaptor collar to seal the chamber to the surface material. Thermocouples were used to monitor surface/air temperatures outside of the chamber. The sweep air flow rate was initiated and the rotometer, which stabilizes the flow rate, was set at 5.0 liters per minute. A constant sweep air flow rate was maintained throughout the measurement for each sampling location.

Flux chamber data were recorded every residence interval (6 minutes) for five intervals, or 30 minutes. At steady-state (assumed to be greater than 5 residence intervals), a canister sample was collected by interfacing the canister to the sample line of the chamber, pulling a vacuum on line with the canister, and collecting a 6 liter canister sample. Canister samples were analyzed by Environmental Analytical Services (EAS) located in San Luis Obispo, California using US EPA Method TO-1, GC/MS full scan for VOCs and GC/FID for methane. The EAS laboratory data report is included in Attachment C.

Seven method spike samples were analyzed by EAS for volatile organic compounds (VOCs). All compounds in all analyses were recovered within the QC criteria of ±40% for one compound and ±30% for most compounds. The recoveries ranged from 71% to 136%. These data represent acceptable method performance. Seven method spike recovery samples were analyzed in replicate and the precision of the method was reported as RPD per compound. The compound RPD for all samples was between 1 and 25. These data, as compared to the QC criteria of 30 RPD, indicate acceptable method performance. Seven laboratory method blank samples were analyzed and no target list compounds were reported in any sample above Method Detection Limit (MDL). These data indicate acceptable method performance.

One method spike sample was analyzed for methane. The spike was recovered within the QC criteria of ±40%; the recovery was 105%. One method spike recovery sample was analyzed in replicate and the precision of the method was reported as RPD for methane. The compound RPD was 2.6, as compared to the QC criteria of 30 RPD. One laboratory method blank sample was analyzed and methane was not detected at or above the MDL of 0.5 ppmv. These data represent acceptable method performance.

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4 US EPA, 1986

One field blank sample was collected and analyzed for methane and VOC. The surface flux blank sample was collected by placing the surface flux chamber on a sheet of Teflon and operating the chamber as per field testing protocol. The surface flux chamber blank was collected prior to initiation of testing. Methane was not detected at 0.5 ppmv in the system blank. Two VOC were detected in the system blank: toluene (3.1 ppbv or 0.47 micrograms per square meter (ug/m^2), min^{-1}) and styrene (0.14 ppbv or 0.024 ug/ m^2, min-1). Surface flux measurements of these compounds at or above these levels, should be considered as possible system contamination.

One field replicate sample was collected and analyzed for methane and VOC by obtaining a second canister sample after sample collection. Sample A007/A008 was collected in replicate. No methane was detected, however, three VOC were detected in replicate; 6 VOC were also detected at low levels in the replicate but were not replicated. The RPD for the replicate sample compounds ranged from 23 to 50 with an average RPD of 34. As such, these data represent acceptable method performance.

Surficial contamination was observed throughout the study area. As such it was difficult to locate areas of undisturbed paved surfaces on which to conduct the study. As a result, evaluation of the data results should take this finding into consideration.

4.0 RESULTS AND DISCUSSIONS

4.1 Soil Gas Study

Soil gas data are presented as percent methane in Table 1. All confined areas with adequate oxygen and a minimum of 5.5% methane levels are considered potentially explosive. However, as a safeguard, it is recommended that areas where methane concentrations are in excess of 0.55% be identified as areas of potential concern. Plates 2, 3 and 4 show contours for both 5.5% and 0.55% methane concentrations as interpreted from the data obtained at various depths BLS. The largest mass of soil vapor at the site where methane concentrations greatly exceed 0.55% involves the soil at a depth of 2 feet BLS within the limits shown on Plate 1 and Plate 3. Hot spots occur at a depth of 0.5 feet in the area of sampling point GP-18 (23% methane). Sampling points GP-12 and GP-18 registered the highest methane concentrations at a depth of 2 feet BLS, 48 and 43% methane, respectively. Measurements obtained from the 5 foot BLS depth indicated that hot spots exist in the area of sampling points GP-18 (13% methane) and GP-33 (16% methane).

Groundwater monitoring well headspace data are presented as percent methane in Table 2, and are graphically presented on Plate 5. These data are similar to data reported from well headspace from earlier AGM sampling events. In general, the data confirmed that direct communication does exist between the methane gas source area and the vadose zone of the wells sampled. Methane concentrations measured in the headspace areas of wells located in the methane gas source area ranged from 27 to 56%. The well headspace areas allow for the accumulation of methane gas within the well pipe. While the concentrations of methane detected are well above the minimum explosion level of 5.5%, dilution of the headspace gas with atmospheric conditions following activities such as opening the well head and sample collection sufficiently mitigate a potential explosive condition. The data show a small change in methane concentrations as a function of tide, with somewhat higher levels detected during in-coming tides and lower levels detected with out-going tide. Correlation

with screening data collected by using a Flame Ionization Detector (FID) did not provide useful data given that the concentrations exceeded the upper limits of the field meter.

Subsurface utility improvement vapor data are presented as percent methane in Table 3, and are graphically presented on Plate 5. These data are similar to the data collected from earlier AGM studies. In general, the data indicate relatively low levels of methane at the utility sampling points (highest value 0.20%, as compared to the levels found in the groundwater well headspaces. This either indicates that the manholes are not connected to methane generation areas like the wells or that there is active flushing of the utility system, thus methane gas is not allowed to accumulate in subsurface improvement areas studied to date. There does not appear to be a correlation between methane levels in these improvements and changes in tide.

Data in Table 4 are useful in showing the levels of methane as a function of depth and the affect of repeat soil gas testing in the same area. Methane levels do not correlate well with changes in depth. The highest levels were recorded most often at the 2 foot BLS level. Depletion of methane per test location was observed and as such it appears that the "recharge" of methane is slow, as these areas did not recover to original methane levels with repeat testing over time periods of one-to-two days. This may suggest that either methane generation is a slow process, and/or the soils do not communicate soil gas quickly.

4.2 Surface Flux Chamber Study

Surface flux chamber measurements were performed in both the methane gas and volatile organic compound (VOC) emission source areas, as well as in a control area located along the Clinton Basin shoreline. The flux chamber measurements were obtained to evaluate the extent to which surface coverings (i.e., asphalt pavements) are acting as effective barriers to vapor emissions. The location of flux chamber tests are presented on Plates 6 and 7.

The United States Environmental Protection Agency flux chamber testing protocols were followed throughout the testing program. Flux chamber tests were conducted in each potential source area to evaluate conditions where surface coverings appeared (1) continuous (not cracked), (2) cracked, and (3) where no surface covering existed (open soil areas). Surface cracking and seams were field mapped and screened using a conventional organic vapor meter to further evaluate these areas as possible air infiltration sources. Relevant sample collection information pertaining to surface flux chamber testing is reported in Table 5. Surface flux data were calculated using measured target compound concentrations and flux chamber operating parameter data (sweep air flow rate of 5.0 liters per minute [L/min], surface area of 0.13 square meters [m^2] or linear feet of seam/crack [feet]). The site emissions can be calculated by multiplying the flux by the surface area or length of the source. The flux is calculated from the sweep air flow rate Q (cubic meters per minute [m^3/min]), the species concentration Yi (micrograms per cubic meter [ug/m^3)], and exposure to the chamber surface area A (square meters [m^2]) or feet, as follows:

$$Fi = \frac{Q \cdot Yi}{A}$$

Flux data collected during this study are reported as surface flux per square meter (ug/m2, min-1) and flux per linear feet of crack (ug/ft, min-1) in Table 6 for the volatile organic compound (VOC) source area and in Table 7 for the methane gas source area. Flux data from cracked asphalt (CR) per test area represent VOC/methane flux through cracks.

Positive flux measurements were recorded for some compounds from the cracked and continuous asphalt test areas, which were not detected in the respective open soil test area. These data should be considered anomalous, as they are viewed to represent surficial contamination and/or volatile residue on the paved surfaces.

To evaluate the effectiveness of the asphalt surfacing as a barrier to vertical emission migration, an asphalt control efficiency factor was calculated as shown below. The infiltration factor was calculated by comparing the total emission measured through the asphalt to the potential emission measured through an open soil test area. The total emission through the asphalt was calculated by multiplying the linear feet of cracks per test area by the measured flux per foot of crack. The potential emission per test area was calculated by multiplying the potential flux per test area as measured at the exposed or open soil test area by the surface area of the test area.

Asphalt control efficiency (%) = (1-Infiltration factor)(100)

$$\text{Infiltration Factor} = \frac{\text{(flux through crack in ug/ft, min-1)(linear feet of cracks)}}{\text{(flux though open soil in ug/m2, min-1)(surface area in square meter)}}$$

The asphalt control efficiency for the VOC source area is presented in Table 8 and for the methane gas source area is presented in Table 9. The flux chamber testing data shows that the pavement surfacing is functioning well, as a whole, in limiting uncontrolled vapor emissions from both the methane gas and VOC source areas. Care should be taken in these areas so that the integrity of the pavement cap is not impaired. No new structures should be placed over these areas until a remedial action plan/site mitigation plan is developed.

Data results were not corrected for compounds, which were also detected in the continuous test areas. These data reflect apparent surficial contamination.

5.0 SUMMARY OF SIGNIFICANT FINDINGS

Based on the results of this study, the Port of Oakland Environmental Health & Safety Compliance Department should be contacted regarding any activities proposed within the limits of the methane gas source area and the VOC source area delineated on Plate 1. It is further suggested that the results of this study be presented to Port staff managers from the Maritime, Commercial Real Estate, Engineering, and Environmental Planning Divisions, at a minimum, which manage and maintain this property and its use. The information contained herein should be discussed so that appropriate hazard disclosures and precautions can be disseminated, as appropriate.

The soil gas testing data confirmed and substantiated previous findings by others that an explosion hazard due to the accumulation of methane gas does exist over a relatively large area of the Ninth Avenue Terminal property.

Multi-depth soil gas data collected at 9 locations indicated that the predominate high methane concentration levels were found at 2 feet BLS.

Data collected at the same locations show a depletion of soil gas methane levels with limited regeneration over time periods between sample collections, suggesting slow migration through the soil or slow generation of the methane gas from the source.

High levels of methane were detected in the headspace of groundwater wells, which suggests active connection between the methane gas source area and the well vadose zone. Methane concentrations measured ranged between 27 and 56 %. Data does suggest that lower concentrations were measured during a low tide than during a high tide.

Levels of methane gas below 0.55% were detected in the headspace of subsurface utility improvements. Levels did not appear to change significantly as a function of tide.

The highest VOC flux of a single compound was toluene in the VOC source area (4.6 ug/m^2, min-1 for continuous asphalt, test area MW31-D; 6.2 ug/m^2, min-1 for cracked asphalt, test area MW32). The highest methane flux was 86 ug/m^2, min-1 for cracked asphalt in test area GP-1 of the methane gas source area.

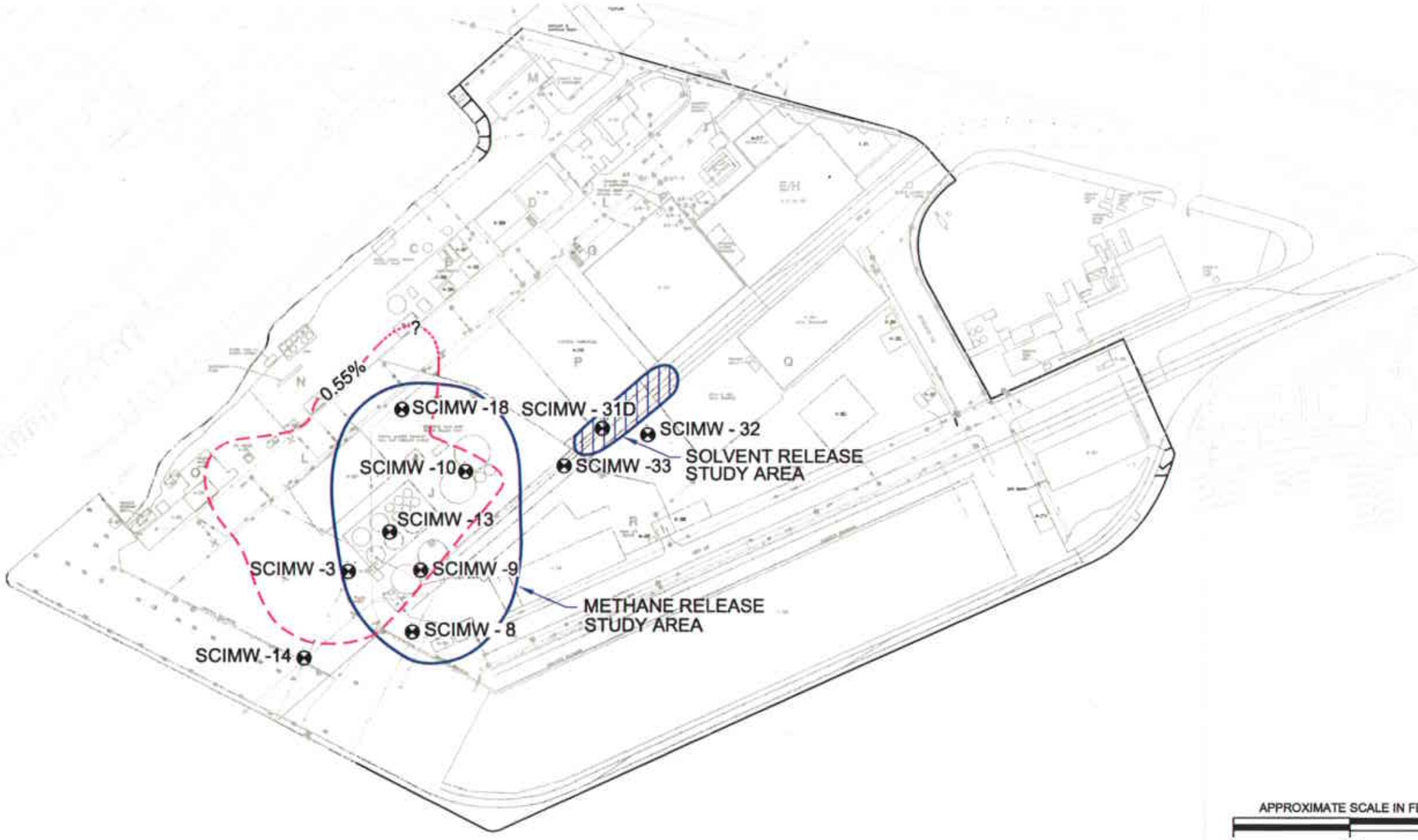
Asphalt control efficiency was generally high in most areas (>95%, when not considering samples where surficial contamination was apparent). However, lower control efficiency was observed in areas where the asphalt was extensively cracked. Control efficiency varied by compound per test area.

6.0 RECOMMENDATIONS

Methane gas and VOC vapors have accumulated below pavement sections in areas where historic releases have occurred. In the case of the methane gas vapors, concentrations have accumulated to potentially explosive levels. The data generated is acceptable from a quality control standpoint for use in completing the human health exposure assessments. Until these assessments are completed care should be taken in these areas so that the integrity of the pavement cap is not impaired. No new structures should be placed over these areas until a remedial action plan/site mitigation plan is developed.

The risk of explosion due to buildup of methane gas vapor is a condition, which in most situations can be mitigated. Given the current site use (open space storage) mitigation measures would include (1) allowing sufficient time for the aeration of confined spaces such as utility vaults and monitoring wells, and (2) providing worker and tenant notification to prohibit the use of equipment and vehicles which generate sparks and the use of possible ignition/flammable sources. Buildings constructed over the methane gas generation area will need to be designed and constructed with methane vapor barriers and passive/active methane gas removal and venting systems. Other remedial activities may also be required to further mitigate site conditions and the risk of explosion pending the results of the

human health exposure assessment and additional investigation and evaluation of the need for source removal, as may be required. The results of the risk assessment when completed would provide additional recommendations for incorporation into a remedial action plan and a risk management plan for the site.



APPROXIMATE SCALE IN FEET

0 200 400

N

LEGEND:

SCIMW -14 APPROXIMATE LOCATION OF SCI MONITORING WELL

METHANE (1/10 LEL = 0.55%) FOR 2 FOOT BLS SAMPLING DATA

Reference:
BASE MAP BY PORT OF OAKLAND, DATED 2/22/96

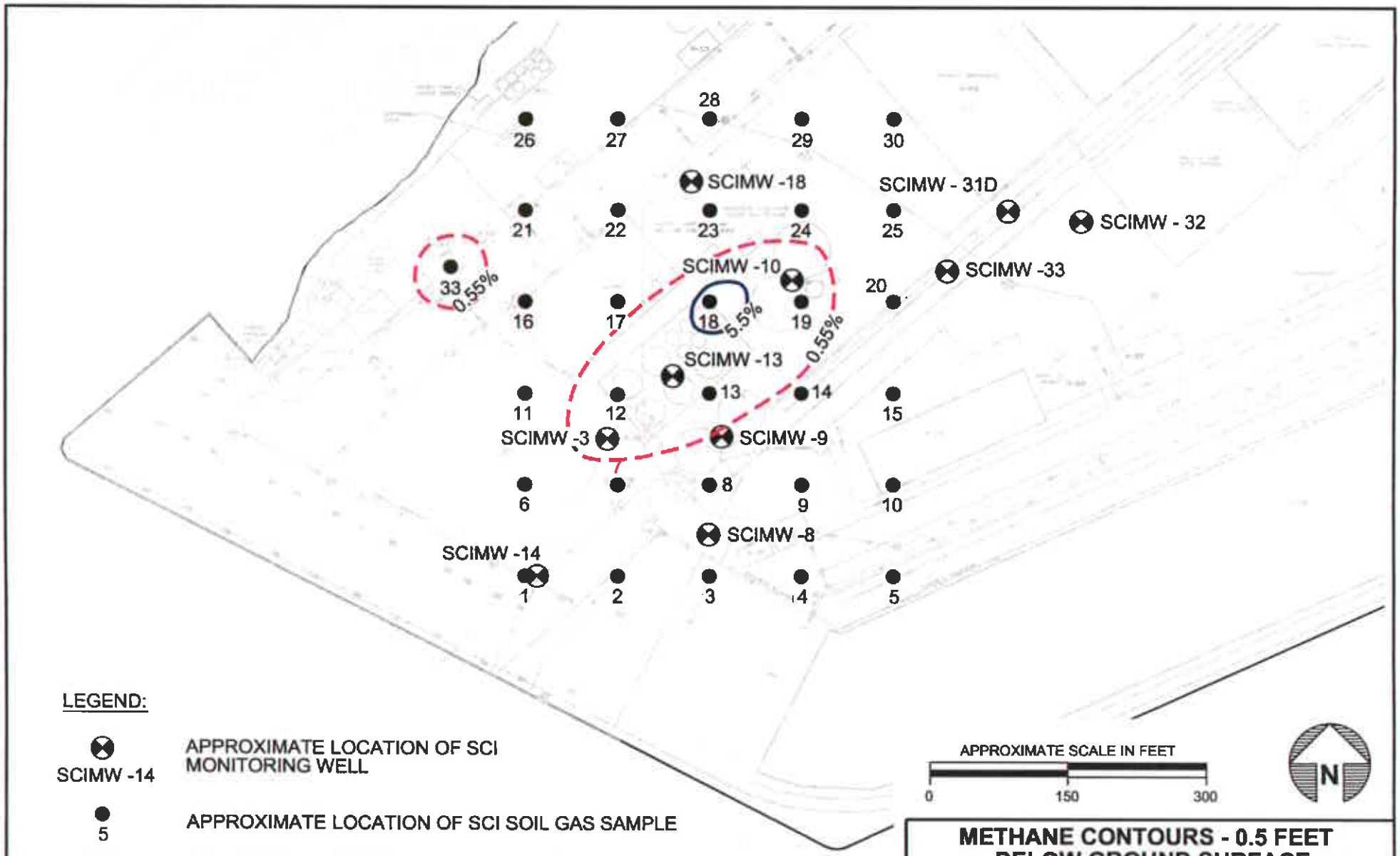
SITE PLAN

NINTH AVENUE TERMINAL
PORT OF OAKLAND, CALIFORNIA

DRAWN BY:	DATE:
CFY	3/01
JOB NUMBER:	FILE NUMBER:
133.009	B133.009.01

SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

PLATE 1



METHANE CONTOURS - 0.5 FEET BELOW GROUND SURFACE

NINTH AVENUE TERMINAL
PORT OF OAKLAND, CALIFORNIA

SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY:	DATE	PLATE
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JOB NUMBER	FILE NUMBER:	
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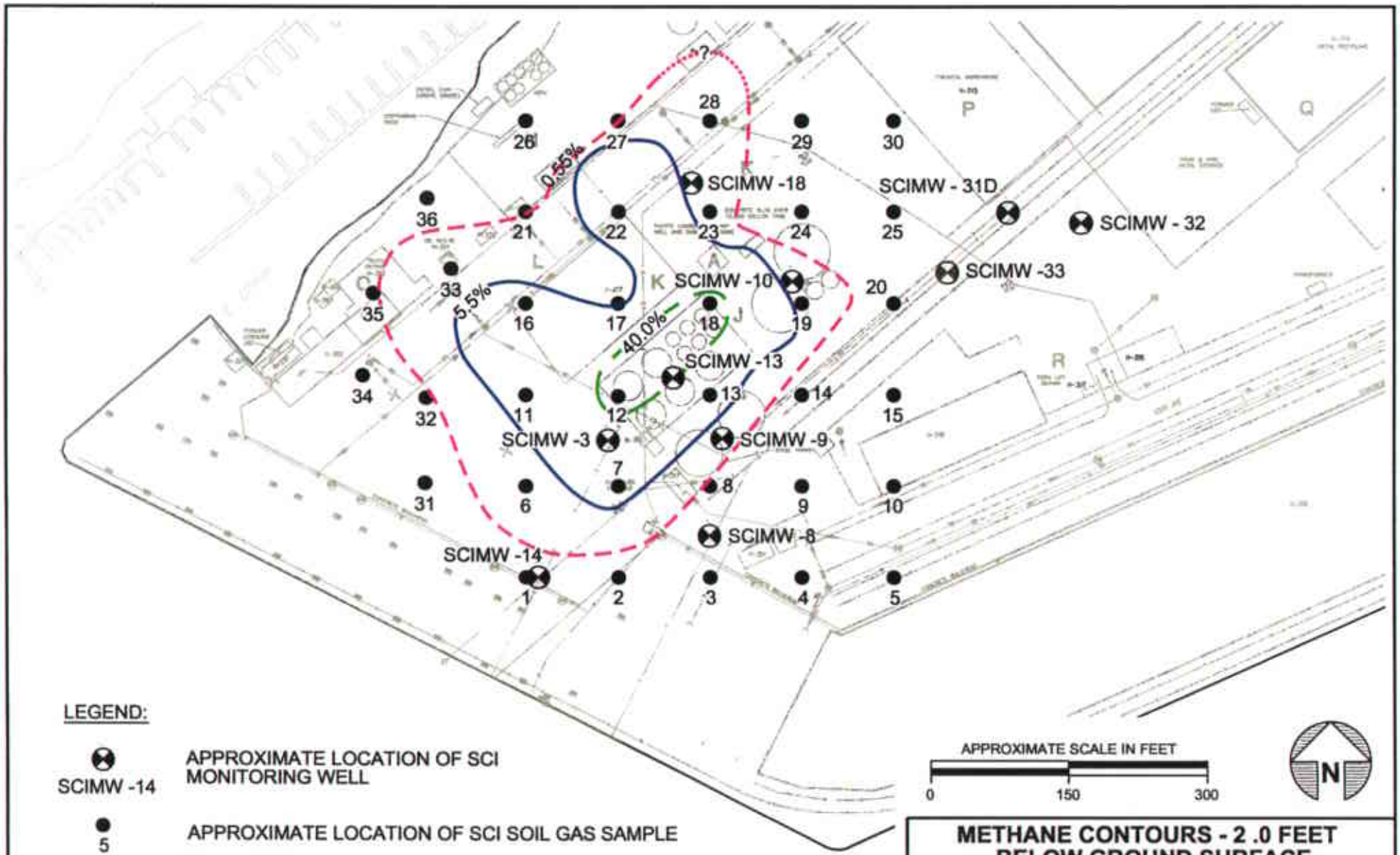

LEGEND:

SCIMW -14 — APPROXIMATE LOCATION OF SCI MONITORING WELL

5 — APPROXIMATE LOCATION OF SCI SOIL GAS SAMPLE

METHANE (LEL = 5.5%)

METHANE (1/10 LEL = 0.55%)

40% METHANE

APPROXIMATE SCALE IN FEET

0 150 300

N

METHANE CONTOURS - 2 .0 FEET BELOW GROUND SURFACE

NINTH AVENUE TERMINAL
PORT OF OAKLAND, CALIFORNIA

SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY:	DATE:	PLATE
CFY	3/01	3
JOB NUMBER:	FILE NUMBER:	
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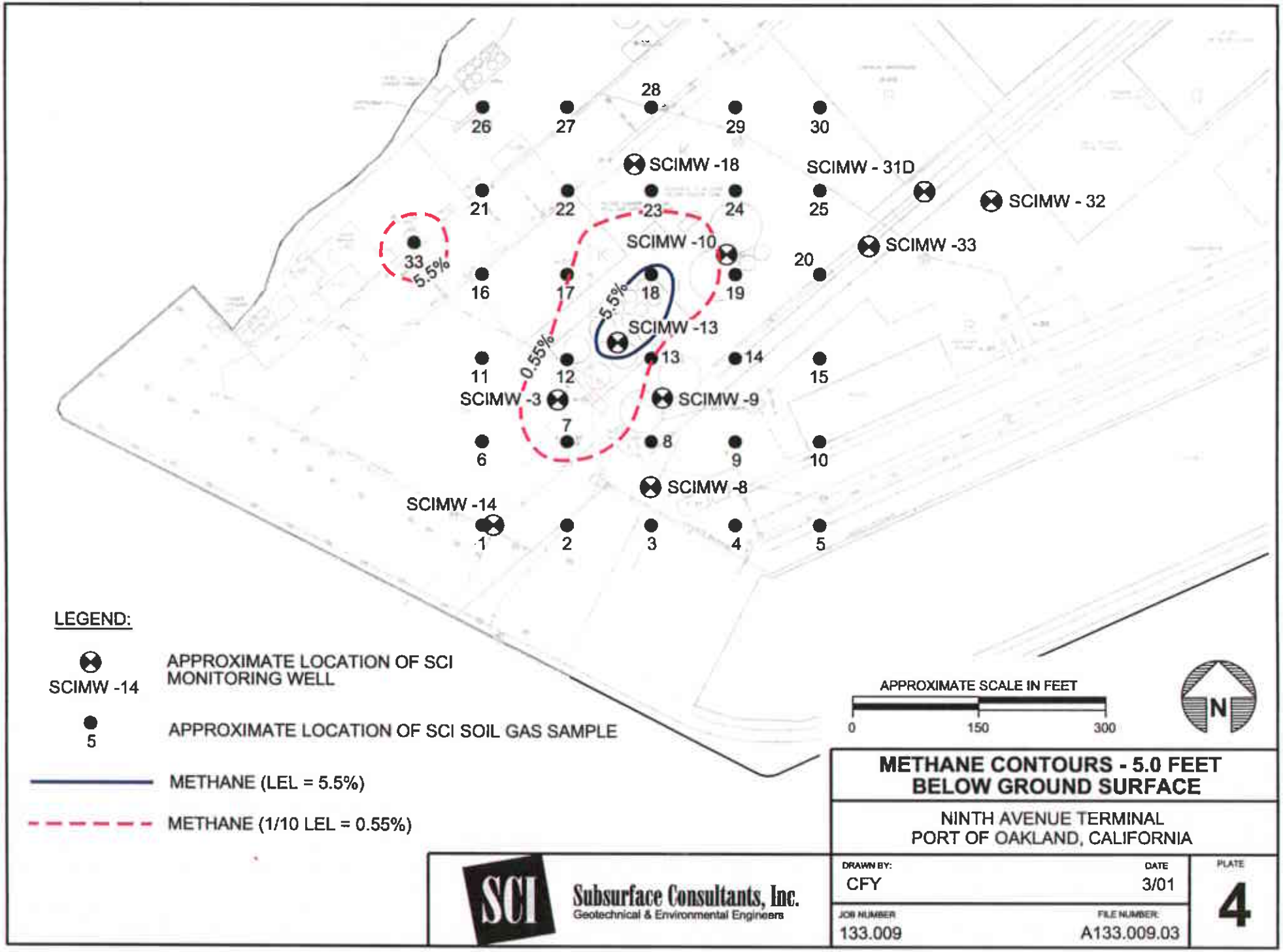

METHANE CONTOURS - 5.0 FEET BELOW GROUND SURFACE

NINTH AVENUE TERMINAL
PORT OF OAKLAND, CALIFORNIA

Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY:	DATE	PLATE
CFY	3/01	4
JOB NUMBER	FILE NUMBER	
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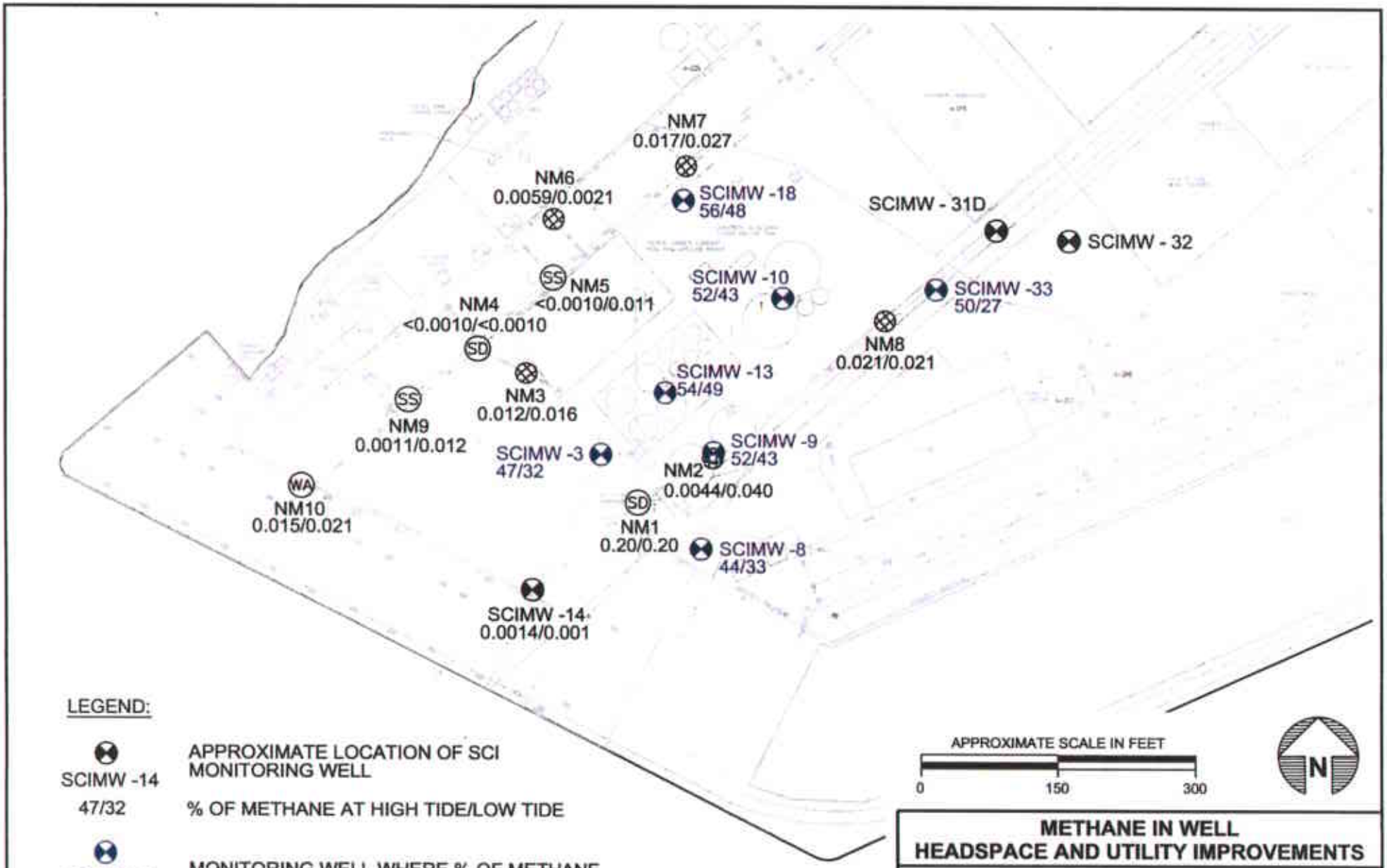

LEGEND:

SCIMW -14 — APPROXIMATE LOCATION OF SCI MONITORING WELL

47/32 — % OF METHANE AT HIGH TIDE/LOW TIDE

SCIMW -3 47/32 — MONITORING WELL WHERE % OF METHANE IS GREATER THAN LEL (LEL = 5.5%)

WA SS SD — NM-1 — MANHOLE

APPROXIMATE SCALE IN FEET

0 150 300

N

METHANE IN WELL HEADSPACE AND UTILITY IMPROVEMENTS

NINTH AVENUE TERMINAL
PORT OF OAKLAND, CALIFORNIA

SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY:	DATE	PLATE
CFY	3/01	5
JOB NUMBER	FILE NUMBER:	
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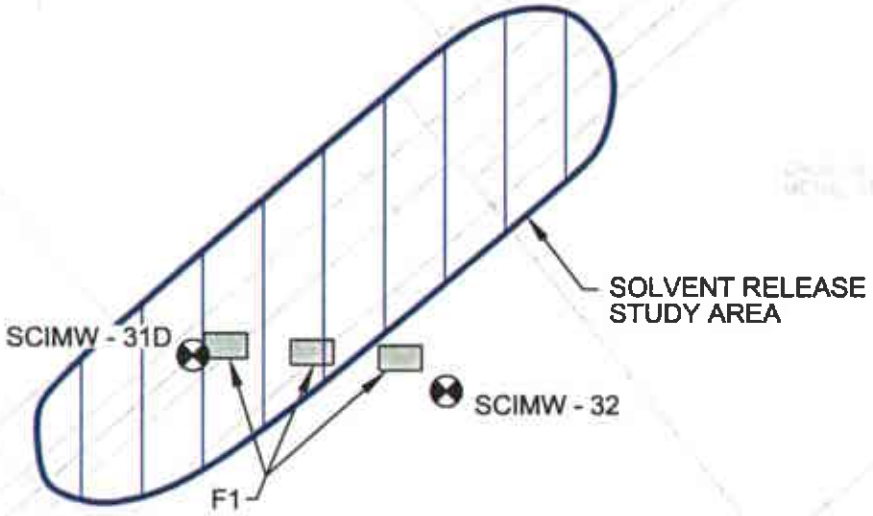


LEGEND:

F1 — APPROXIMATE LOCATION OF FLUX CHAMBER TEST

SCIMW - 31D — APPROXIMATE LOCATION OF SCI MONITORING WELL

NOTE:

THREE FLUX CHAMBER TESTS (UNCRACKED, CRACKED, EXPOSED). SOIL AT EACH OF THE THREE FLUX CHAMBER LOCATIONS WERE CONDUCTED (NINE TESTS TOTAL IN THE SOLVENT RELEASE AREA).

APPROXIMATE SCALE IN FEET

0 60 120

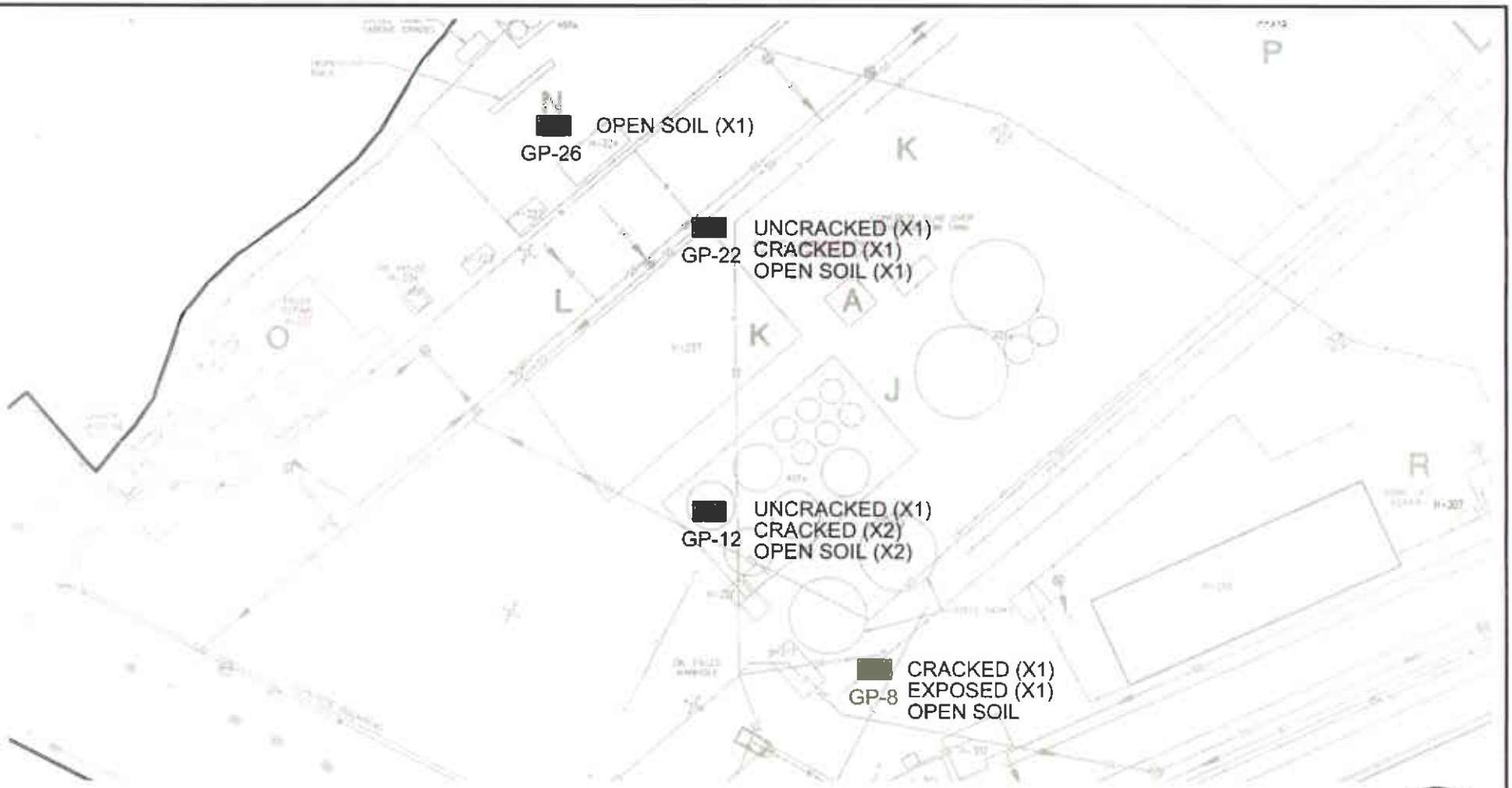
N

SOLVENT RELEASE AREA

NINTH AVENUE TERMINAL
PORT OF OAKLAND, CALIFORNIA

SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY:	DATE	PLATE
CFY	3/01	6
JOB NUMBER	FILE NUMBER:	
133.009	A133.009.04	



LEGEND:

GP-8 APPROXIMATE LOCATION OF FLUX CHAMBER TESTING AREAS

(X1) NUMBER OF FLUX CHAMBER TESTS FOR EACH SURFACE TYPE AT SPECIFIC LOCATIONS

APPROXIMATE SCALE IN FEET

0 60 120

N

METHANE GENERATION AREA

NINTH AVENUE TERMINAL
PORT OF OAKLAND, CALIFORNIA

SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY:	DATE:	PLATE
CFY	1/26/01	7
JOB NUMBER: 133.009	FILE NUMBER: A133.009.05	

Table 1
Summary of Soil Gas Ground Probe
Data for Methane
9th Avenue Terminal
Port of Oakland
Oakland, California

Sample	Depth Feet	Date	Time	Methane %
GP-01	2	7/24/2000	1103	0.017
GP-02	2	7/24/2000	1118	0.064
GP-03	2	7/24/2000	1128	0.050
GP-04	2	7/24/2000	1135	0.018
GP-05	2	7/24/2000	1415	0.013
GP-06	0.5	7/25/2000	1350	0.0082
GP-06	2	7/24/2000	1320	1.9
GP-06	2	7/25/2000	1355	0.4
GP-06	5	7/25/2000	1400	0.3
GP-07	2	7/24/2000	1330	6.5
GP-08	0.5	7/25/2000	1125	0.011
GP-08	2	7/24/2000	1345	0.0080
GP-08	2	7/25/2000	1130	0.0022
GP-08	5	7/25/2000	1133	0.0022
GP-09	2	7/24/2000	1400	0.20
GP-10	2	7/25/2000	1015	0.014
GP-11	2	7/24/2000	1200	11
GP-12	0.5	7/25/2000	950	1.0
GP-12	2	7/24/2000	1150	48
GP-12	2	7/25/2000	955	24
GP-12	5	7/25/2000	1000	4.1
GP-13	2A	7/24/2000	1035	6.3
GP-13	2B	7/24/2000	1035	5.7
GP-13	2C	7/24/2000	1035	7.7
GP-14	2	7/24/2000	1433	0.072
GP-15	2	7/24/2000	1447	0.0040
GP-15	2/DUP	7/24/2000	1447	0.0036
GP-16	2	7/24/2000	1500	9.7
GP-17	0.5	7/25/2000	1430	0.067
GP-17	2	7/24/2000	1209	0.10
GP-17	2	7/25/2000	1435	0.050
GP-17	5	7/25/2000	1440	<0.0010
GP-17	5	7/25/2000	1440	<0.0010
GP-18	0.5	7/25/2000	905	23
GP-18	2	7/25/2000	910	17
GP-18	2	7/24/2000	1230	43
GP-18	5	7/25/2000	915	13

Table 1
Summary of Soil Gas Ground Probe
Data for Methane
9th Avenue Terminal
Port of Oakland
Oakland, California

Sample	Depth Feet	Date	Time	Methane %
GP-19	2	7/24/2000	1259	3.3
GP-20	2	7/25/2000	832	0.20
GP-21	2	7/24/2000	1310	0.010
GP-22	2	7/25/2000	930	21
GP-23	2	7/24/2000	1220	0.60
GP-23	2	7/26/2000	930	0.30
GP-23	2	7/26/2000	930	0.30
GP-24	2	7/25/2000	1155	0.0029
GP-24	0.5	7/25/2000	1150	0.0021
GP-24	2	7/24/2000	1240	2.6
GP-24	5	7/25/2000	1200	0.0038
GP-24	5/DUP	7/25/2000	1200	0.0048
GP-24C	2	7/25/2000	1525	0.0099
GP-24C	2	7/26/2000	912	0.064
GP-25	2	7/25/2000	850	0.015
GP-25	2/DUP	7/25/2000	850	0.017
GP-26	0.5	7/25/2000	1030	0.014
GP-26	2	7/24/2000	1530	0.20
GP-26	2	7/25/2000	1035	0.0085
GP-26	5	7/25/2000	1040	0.012
GP-26	2	7/26/2000	1415	0.0057
GP-27	2	7/24/2000	1539	0.0047
GP-28	2	7/25/2000	940	1.4
GP-29	2	7/24/2000	1555	0.0066
GP-30	0.5	7/25/2000	1324	0.037
GP-30	2	7/25/2000	819	0.042
GP-30	2	7/25/2000	1335	0.0022
GP-30	5	7/25/2000	1335	0.0063
GP-30C	2	7/26/2000	1400	0.047
GP-31	2	7/25/2000	1050	0.038
GP-32	2	7/25/2000	1105	0.026
GP-33	0.5	7/25/2000	1542	0.90
GP-33	2	7/25/2000	1110	4.4
GP-33	2	7/25/2000	1547	5.2
GP-33	5	7/25/2000	1552	16
GP-33	5/DUP	7/25/2000	1552	16
GP-34	2	7/25/2000	1508	0.0023
GP-35	2	7/26/2000	833	0.069
GP-36	2	7/26/2000	847	0.046

Notes:
GP = Ground Probe
<0.0010 = Not detected at concentration greater than method detection limit
2/DUP = Duplicate analysis for quality control purposes

Table 2
Summary of Well Headspace
Methane Concentration
9th Avenue Terminal
Port of Oakland
Oakland, California

		High Tide [a]				Low Tide [b]			
ID	Date	Time	DTW (ft)	FID [c]	Methane [d]	Time	DTW (ft)	FID [c]	Methane [d]
SCIMW-3	7/26/2000	1031	4.41	>100,000	47%	1505	7.5	>100,000	32%
SCIMW-8	7/26/2000	1031	5.31	>100,000	44%	1514	5.25	>100,000	33%*
SCIMW-9	7/26/2000	1039	3.62	>100,000	52%	1528	4.54	>100,000	43%
SCIMW-10	7/26/2000	1046	5.32	>100,000	52%	1540	5.49	>100,000	43%
SCIMW-13	7/26/2000	1109	5.24	>100,000	54%	1533	4.82	>100,000	49%
SCIMW-14	7/26/2000	1005	8	>100,000	0.0014%	1459	8.15	<10,000	<0.001%
SCIMW-18	7/26/2000	1052	3.37	>100,000	56%	1547	3.29	>100,000	45%
SCIMW-33	7/26/2000	1100	3.55	>100,000	50%	1520	3.48	>100,000	27%

Notes:
a High tide at 0940
b Low tide at 1301
c = Field measurement using a FID
d = Methane Concentrations analyzed by InterPhase using GC
FID = Flame Ionization Detector
>100,000 = Detected at concentrations exceeding the detection limit of the FID
* = Duplicate is 31%

Table 3
Summary of Manhole Utility Headspace
Methane Concentration
9th Avenue Terminal
Port of Oakland
Oakland, California

		High Tide [a]				Low Tide [b]			
ID	Date	Time	DTW (ft)	FID [c]	Methane [d]	Time	DTW (ft)	FID [c]	Methane [d]
NM-1	7/26/2000	1149	8.25	50,000	0.20%	1618	12.2	>100,000	0.20%
NM-2	7/26/2000	1153	6.1	8	0.0044%	1620	7.2	25	0.040%
NM-3	7/26/2000	1211	7.4	4.5	0.012%*	1558	7.3	500	0.016%
NM-4	7/26/2000	1218	3.9	4	<0.0010%	1633	3.5	9	<0.0010%*
NM-5	7/26/2000	1236	--	7	<0.0010%	1607	3.2	20	0.011%
NM-6	7/26/2000	1202	2	4	0.0059%	1602	--	1.7	0.0021%*
NM-7	7/26/2000	1159	4.9	6	0.017%	1551	5.3	150	0.027%
NM-8	7/26/2000	1155	3.93	7	0.021%	1623	--	1.7	0.021%
NM-9	7/26/2000	1209	3.8	1.5	0.0011%	1610	2.4	1.7	0.012%
NM-10	7/26/2000	1227	10.3	1.7	0.015%	1620	9.6	1.7	0.021%

Notes:

a High tide at 0940
b Low tide at 1301
c = Field measurement using a FID
d = Methane Concentrations analyzed by InterPhase using GC
<0.0010% = Not detected at concentrations greater than method detection limit
-- = No water measured in sewer
*- Duplicate is 0.018% for NM-3
*- Duplicate is 0.0013% for NM-4
*- Duplicate is 0.0016% for NM-6

Table 4
Summary of Soil Gas Probe
Methane Data Showing Depth Profile Data
and Repeat Testing
9th Avenue Terminal
Port of Oakland
Oakland, California

	% Methane				
	2 feet	0.5 feet	5 feet		
GP-1	0.017			0.6	
GP-2	0.064			0.6	
GP-3	0.050			11.9	
GP-4	0.018			0.8	
GP-5	0.013			0.1	
GP-6	1.9	0.0082	0.3	12.1	
second	0.40				
GP-7	6.5			13.7	
GP-8	0.0080	0.011	0.0022	1.6	
second	0.0022				
GP-9	0.20			2	
GP-10	0.014			1.7	
GP-11	11*			9	* Duplicate is 11%
GP-12	48	1	4.1	24.1	
second	24				
GP-13	7.7			5.9	Purge test- 6.3%/5.7%/7.7%
GP-14	0.072			1.3	
GP-15	0.0040			0.2	
second	0.0036				
GP-16	9.7			8.7	
GP-17	0.10	0.067	<0.0010	10.3	
second	0.050				
GP-18	43	23	13	10.6	
second	17				
GP-19	3.3			10.2	
GP-20	0.20			2.7	
GP-21	0.010			4.8	
GP-22	21			9.9	
GP-23	0.60			5.3	
second	0.30*				*- Duplicate is 0.30%
GP-24	2.6	0.0021	0.0037	1.5	
second	0.0029				
third	0.0099				
fourth	0.0064				
GP-25	0.0015*			1.9	*- Duplicate is 0.017%
GP-26	0.20	0.014	0.012	5.6	
second	0.0085				
third	0.0057				
GP-27	0.0047			4.2	
GP-28	1.4			1.2	
GP-29	0.0060			2.6	
GP-30	0.042	0.037	0.0063	3	

Table 4
Summary of Soil Gas Probe
Methane Data Showing Depth Profile Data
and Repeat Testing
9th Avenue Terminal
Port of Oakland
Oakland, California

	% Methane		
	2 feet	0.5 feet	5 feet
second	0.0022		
third	0.047		
GP-31	0.038		
GP-32	0.026		
GP-33	4.4	0.90	16*
second	5.2		
GP-34	0.0023		
GP-35	0.069		
GP-36	0.0040		

1
0.1
4.9 *- Duplicate is 16%

Table 5
Summary of Flux Chamber
Sample Collection Information
9th Avenue Terminal
Port of Oakland
Oakland, California

DATE	TIME	AREA	LOCATION	SURFACE	SAMPLE ID	CAN ID
7/24/2000	1235	QC	Blank	Teflon	A-001	668
7/24/2000	1418	SRA	MW-32	Contin. Asph.	A-002	703
7/24/2000	1508	SRA	MW-32	Cracked Asph.	A-003	654
7/24/2000	1552	SRA	MW-31D	Contin. Asph.	A-004	641
7/24/2000	1642	SRA	MW-31D	Cracked Asph.	A-005	643
7/24/2000	948	SRA	Between	Contin. Asph.	A-006	818
7/24/2000	1048	SRA	Between	Cracked Asph.	A-007	731
7/24/2000	1048	SRA	Between	Replicate	A-008	695
7/24/2000	1234	MGA	GP-12	Cracked Asph.	A-009	779
7/24/2000	1315	MGA	GP-12	Cracked Asph.	A-010	612
7/24/2000	1358	MGA	GP-12	Contin. Asph.	A-011	686
7/24/2000	1455	MGA	GP-8	Cracked Asph.	A-012	699
7/24/2000	1554	MGA	GP-22	Contin. Asph.	A-013	602
7/24/2000	1638	MGA	GP-22	Cracked Asph.	A-014	776
7/24/2000	1105	MGA	GP-26	Open Soil	A-015	675
7/24/2000	1006	SRA	MW-31D	Excavation	A-016	670
7/24/2000	1050	SRA	Between	Excavation	A-017	717
7/24/2000	1240	SRA	MW-32	Excavation	A-018	405
7/24/2000	1249	MGA	GP-8	Excavation	A-019	732
7/24/2000	1345	MGA	GP-22	Excavation	A-020	412
7/24/2000	1457	MGA	GP-12	Excavation	A-021	630
7/24/2000	1457	MGA	GP-12	Excavation	A-022	416

Notes:
MGA Methane Generation Area
SRA Solvent Release Area

Table 6
Summary of Surface Flux Data
for the Solvent Release Area
9th Avenue Terminal
Port of Oakland
Oakland, California

	Blank	SCIMW-32	SCIMW-32	SCIMW-32	SCIMW-32	SCIMW-31D	SCIMW-31D	SCIMW-31D	SCIMW-31D	Midway	Midway	Midway	Replicate	Replicate	Midway
Surface Condition		**Continuous**	**Cracked**	**Cracked**	**Exposed**	**Continuous**	**Cracked**	**Cracked**	**Exposed**	**Continuous**	**Cracked**	**Cracked**			**Exposed**
COMPOUNDS	**A-001**	**A-002**	**A-003**	**ug/ft,min-1**	**A-017**	**A-004**	**A-005**	**ug/ft,min-1**	**A-016**	**A-006**	**A-007**	**ug/ft,min-1**	**A-008**	**ug/ft,min-1**	**A-018**
Methane- ug/m^2,min-1	ND	**21**	**18**	**1.8**	ND	ND	**15**	**1.5**	ND	ND	ND	ND	ND	ND	**14**
Freon 12	ND	ND	ND	ND	**0.12**	**0.031**	ND	ND	**0.11**	ND	**0.034**	**0.0034**	ND	ND	**0.18**
Chloromethane	ND	**0.12**	**0.061**	**0.0061**	ND	**0.11**	**0.26**	**0.025**	**0.052**	**0.034**	**0.33**	**0.032**	ND	ND	**0.078**
Freon 114	ND	ND	ND	ND	**0.14**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	**0.031**	ND	ND	ND	ND	ND	ND
Bromomethane	ND	**0.51**	**0.093**	**0.0092**	ND	**0.58**	**0.55**	**0.054**	ND	**0.087**	**0.049**	**0.0048**	ND	ND	ND
Chloroethane	ND	ND	ND	ND	**0.12**	ND	ND	ND	ND	ND	**0.078**	**0.0077**	ND	ND	ND
Trichlorofluoromethane	ND	ND	**0.033**	**0.0033**	ND	ND	**0.029**	**0.0028**	**0.065**	ND	ND	ND	ND	ND	**0.075**
1,1-Dichloroethene	ND	ND	ND	ND	**0.55**	ND	ND	ND	**0.023**	ND	ND	ND	ND	ND	ND
Freon 113	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	**0.021**	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	**1.5**	ND	ND	ND	**1.1**	ND	**0.024**	**0.0023**	**0.030**	**0.0029**	ND
c-1,2-Dichloroethene	ND	ND	ND	ND	**4.2**	ND	ND	ND	**1.9**	ND	**0.028**	**0.0028**	**0.040**	**0.0040**	ND
Chloroform	ND	ND	ND	ND	**0.040**	ND	ND	ND	**0.056**	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	**2.0**	ND	ND	ND	**2.2**	ND	**0.046**	**0.0046**	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	**0.11**	ND	ND	ND	**0.11**	ND	ND	ND	ND	ND	ND
Benzene	ND	**0.019**	**0.018**	**0.0018**	**0.13**	**0.021**	**0.024**	**0.0024**	**0.225**	**0.15**	ND	ND	ND	ND	**0.031**
Trichloroethene	ND	ND	ND	ND	**2.8**	ND	ND	ND	**2.7**	ND	ND	ND	ND	ND	ND
Toluene	0.47	**1.8**	**6.2**	**0.61**	0.16	**4.6**	**2.4**	0.24	0.225	0.15	0.28	0.028	0.36	0.035	0.080
t-1,3-Dichloropropene	ND	ND	ND	ND	ND	**0.048**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	**0.059**	ND	ND	ND	**0.040**	ND	ND	ND	**0.079**	**0.0078**	ND
Ethylbenzene	ND	ND	**0.033**	**0.0032**	**0.026**	**0.022**	ND	ND	**0.024**	ND	ND	ND	ND	ND	ND
m,p-Xylene	ND	**0.0422**	**0.069**	**0.0068**	**0.12**	**0.043**	**0.044**	**0.0044**	**0.049**	ND	ND	ND	ND	ND	**0.032**
Styrene	0.024	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.039**	0.0038	ND	ND	ND
o-Xylene	ND	ND	0.021	0.0021	**0.12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Ethyltoluene	ND	**0.031**	**0.032**	**0.0032**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Chloride	ND	**0.040**	ND	ND	ND	**0.038**	ND	ND	ND	ND	ND	ND	ND	ND	ND

Data reported in surface area units (ug/m^2,min-1) and linear feet of crack units (ug/ft,min-1).
Bold- Data reported as bold are reported above system blank levels.

Table 7
Summary of Surface Flux Data
for the Methane Generation Area
9th Avenue Terminal
Port of Oakland
Oakland, California

	Blank	GP-12	GP-12	GP-12	GP-12	GP-12	Replicate	GP-8	GP-8	GP-8	GP-8	GP-22	GP-22	GP-22	GP-22	GP-26
		Cracked	Cracked	Cracked	Cracked	Exposed		Continuous	Cracked	Cracked	Exposed	Continuous	Cracked	Cracked	Exposed	Open
COMPOUNDS	A-001	A-009	ug/ft,min-1	A-010	ug/ft,min-1	A-021	A-022	A-011	A-012	ug/ft,min-1	A-019	A-013	A-014	ug/ft,min-1	A-020	A015
Methane- ug/m^2,min-1	ND	21	2.1	86	8.5	360	340	24	17	1.7	22	23	23	2.3	5,300	ND
Freon 12	ND	**0.26**	**0.026**	**0.15**	**0.015**	ND	ND	**0.26**	**0.081**	**0.0080**	**0.24**	**0.37**	**0.035**	**0.0034**	ND	ND
Chloromethane	ND	**0.11**	**0.011**	**0.072**	**0.0071**	ND	ND	**0.026**	**0.044**	**0.0043**	**0.097**	**0.15**	ND	ND	ND	**0.27**
Freon 114	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.040**	**0.0039**	ND	ND
Vinyl Chloride	ND	ND	ND	**0.013**	**0.0034**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.061**
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.15**
Trichlorofluoromethane	ND	**0.12**	**0.012**	**0.079**	**0.0078**	ND	ND	**0.053**	**0.039**	**0.0038**	**0.098**	**0.16**	**0.064**	**0.0063**	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Freon 113	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.044**	ND	ND	ND	ND
Dichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.020**	**0.026**	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
c-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	**0.016**	**0.0015**	**0.019**	**0.0018**	ND	ND	**0.021**	**0.022**	**0.0022**	**0.027**	ND	**0.024**	**0.0024**	**0.48**	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	0.47	**4.5**	0.45	**2.6**	**0.27**	**0.71**	**0.70**	0.34	0.19	0.018	0.35	0.28	0.14	0.013	**0.96**	0.36
t-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	**0.022**	**0.0021**	ND	ND	ND	ND	ND	ND	ND	**0.050**	ND	ND	ND	ND	**0.043**
m,p-Xylene	ND	**0.046**	**0.0045**	**0.045**	**0.0045**	ND	ND	**0.036**	**0.037**	**0.0036**	**0.17**	**0.044**	**0.055**	**0.0054**	ND	**0.14**
Styrene	0.024	ND	ND	ND	ND	**0.52**	**0.54**	ND	ND	ND	ND	ND	ND	ND	**0.63**	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.045**	ND	ND	ND	ND	**0.049**
4-Ethyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.73**	ND
Benzyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Data reported in surface area units (ug/m2,min-1) and linear feet of crack units (ug/ft,min-1).
Bold- Data reported as bold are reported above system blank levels.

Table 8
Summary of Asphalt Control Efficiency
Calculations for the VOC
or Solvent Release Source Area
9th Avenue Terminal
Port of Oakland
Oakland, California

MW-32 Test Area: Surface area of test area = 110 square meters; 42 feet of cracks

	Total Emission	Potential Emission	Infiltration Factor	Efficiency %
Freon 12	ND	13 ug/min	NA	100
Freon 114	ND	15 ug/min	NA	100
Chloroethane	ND	13 ug/min	NA	100
1,1-Dichloroethane	ND	61 ug/min	NA	100
1,1-Dichloroethene	ND	170 ug/min	NA	100
c-1,2-Dichloroethene	ND	460 ug/min	NA	100
Chloroform	ND	4.4 ug/min	NA	100
1,1,1-Trichloroethene	ND	220 ug/min	NA	100
1,2-Dichloroethane	ND	12 ug/min	NA	100
Benzene	0.076 ug/min	14 ug/min	0.0054	99*
Trichloroethene	ND	310 ug/min	NA	100
Toluene	26 ug/min	18 ug/min	NA	NA
Tetrachloroethene	ND	6.5 ug/min	NA	100
Ethylbenzene	0.13 ug/min	2.9 ug/min	0.045	96
m,p-Xylene	0.29 ug/min	13 ug/min	0.022	98*
o-Xylene	0.088 ug/min	13 ug/min	0.0068	99*

*- Compound detected in the continuous sample but not baseline subtracted.

Table 8
Summary of Asphalt Control Efficiency
Calculations for the VOC
or Solvent Release Source Area
9th Avenue Terminal
Port of Oakland
Oakland, California

MW-31D Test Area: Surface area of test area = 110 square meters; 89 feet of cracks

	Total Emission	Potential Emission	Infiltration Factor	Efficiency %
Freon 12	ND	12 ug/min	NA	100
Chloromethane	2.2 ug/min	5.7 ug/min	0.39	61*
Vinyl Chloride	ND	3.4 ug/min	NA	100
Trichlorofluoromethane	0.25 ug/min	7.2 ug/min	0.035	97*
1,1-Dichloroethene	ND	3.2 ug/min	NA	100
Dichloromethane	ND	2.3 ug/min	NA	100
c-1,2-Dichloroethene	ND	210 ug/min	NA	100
Chloroform	ND	6.2 ug/min	NA	100
1,1,1-Trichloroethene	ND	240 ug/min	NA	100
1,2-Dichloroethane	ND	12 ug/min	NA	100
Benzene	0.21 ug/min	1.7 ug/min	0.12	89*
Trichloroethene	ND	310 ug/min	NA	100
Toluene	21 ug/min	24.7 ug/min	0.85	13*
Tetrachloroethene	ND	4.4 ug/min	NA	100*
Ethylbenzene	ND	2.9 ug/min	NA	92*
m,p-Xylene	0.39 ug/min	13 ug/min	0.022	98*

Midway Test Area: Surface area of test area = 110 square meters; 100 feet of cracks

	Total Emission	Potential Emission	Infiltration Factor	Efficiency %
Methane	ND	1,500 ug/min	NA	100
Freon 12	0.34 ug/min	20 ug/min	0.017	98
Chloromethane	3.2 ug/min	5.7 ug/min	0.57	43*
Trichlorofluoromethane	ND	8.3 ug/min	NA	100
Benzene	ND	3.4 ug/min	NA	100
Toluene	3.5 ug/min	8.8 ug/min	0.40	60*
Tetrachloroethene	ND	0.78 ug/min	NA	100
M,p-Xylene	ND	3.5 ug/min	NA	100

*- Compound detected in the continuous sample but not baseline subtracted.

Table 9
Summary of Asphalt Control Efficiency Calculations
for the VOC or Solvent Release Source Area
9th Avenue Terminal
Port of Oakland
Oakland, California

GP-22 Test Area: Surface area of test area = 110 square meters; 140 feet of cracks

	Total Emission	Potential Emission	Infiltration Factor	Efficiency %
Methane	320 ug/min	580,000 ug/min	0.00055	100
Benzene	0.36 ug/min	53 ug/min	0.068	93
Toluene	1.8 ug/min	110 ug/min	0.016	98*
Styrene	ND	69 ug/min	NA	100
4-Ethyl Toluene	ND	80 ug/min	NA	100

GP-12 Test Area: Surface area of test area = 110 square meters; 20% cracked or 3' per square foot, 3,600 feet

	Total Emission	Potential Emission	Infiltration Factor	Efficiency %
Methane	31,000 ug/min	39,000 ug/min	0.79	21*
Toluene	1,600 ug/min	78 ug/min	NA	NA
Styrene	ND	58 ug/min	NA	100

GP-8 Test Area: Surface area of test area = 110 square meters; 140 feet of cracks

	Total Emission	Potential Emission	Infiltration Factor	Efficiency %
Methane	240 ug/min	2,400 ug/min	0.10	90*
Freon 12	1.1 ug/min	26 ug/min	0.042	96*
Chloromethane	0.6 ug/min	11 ug/min	0.56	94*
Trichlorofluoromethane	0.53 ug/min	11 ug/min	0.048	95*
Dichloromethane	ND	2.2 ug/min	NA	100*
Benzene	0.31 ug/min	3.0 ug/min	0.10	90*
Toluene	2.5 ug/min	39 ug/min	0.064	94*
Ethylbenzene	ND	5.5 ug/min	NA	100*
m,p-Xylene	0.50 ug/min	19 ug/min	0.026	97*
o-Xylene	ND	5.0 ug/min	NA	100*

*- Compound detected in the continuous sample but not baseline subtracted.

APPENDIX A
INTERPHASE INC. LABORATORY DATA REPORT

INTERPHASE ENVIRONMENTAL, INC.

MOBILE LABORATORIES AND DIRECT PUSH DRILLING

Tuesday, August 29, 2000

Mr. Chuck Schmidt
CE Schmidt
19200 Live Oak Road
Red Bluff, CA 96080

Re: Soil Gas Investigation
InterPhase Project #: 00199
Port of Oakland, CA

Dear Mr. Schmidt:

This report presents the results of the soil gas investigation performed Monday, July 24 through Wednesday, July 26, 2000 at Port of Oakland, Ninth Street Terminal in Oakland, CA. The investigation was conducted by InterPhase Environmental, Inc. (InterPhase) under contract to the CE Schmidt.

Soil gas sampling and analyses were performed in accordance with our firms Standard Operating Procedures, which was based on the guidelines for soil gas investigation set by California Regional Water Quality Control Board, Los Angeles (February 25, 1997).

Please do not hesitate to give us a call if you have any questions or need further information.

Sincerely,

InterPhase Environmental, Inc.
David Q. Feng
Director of Laboratories

6200 PEACHTREE STREET, LOS ANGELES, CA 90040 1-800-457-3300 - FAX 323-278-7707 OFFICE@INTERPHASE-INC.COM

Table I. Analytical Result of Samples

Lab ID: Phase 3
Operator: David Feng

INTERPHASE
ENVIRONMENTAL, INC

Sample ID :				GP-13-2A	GP-13-2B	GP-13-2C	GP-01-2	GP-02-2	GP-03-2	GP-04-2	GP-12-2	GP-11-2	GP-11-2/DUP
Date Collected :				07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00
Time Collected :				10:35	10:35	10:35	11:03	11:18	11:28	11:35	11:50	12:00	12:00
Date Analyzed :				07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00
Time Analyzed :				10:38	10:45	10:52	11:06	11:20	11:30	11:42	11:51	12:01	12:10
Volume Analyzed (ml) :				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*										
Carbon Dioxide	TCD	1.13	%	3.6	3.1	5.9	0.6	0.6	12	0.8	24	9.0	8.9
Oxygen	TCD	1.77	%	10	12	8.4	20	19	9.0	19	3	15	15
Nitrogen	TCD	2.56	%	80	80	77	79	81	79	80	25	65	65
Methane	TCD	4.05	%	6.3	5.7	7.7	<0.1	<0.1	<0.1	<0.1	48	11	11
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	>1000	>1000	>1000	170	640	500	180	>1000	>1000	>1000

Sample ID :				GP-17-2	GP-23-2	GP-18-2	AA000724	GP-24-2	GP-19-2	GP-21-2	GP-06-2	AB000724	GP-07-2
Date Collected :				07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00
Time Collected :				12:09	12:20	12:30	12:40	12:40	12:59	13:10	13:20	13:32	13:30
Date Analyzed :				07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00
Time Analyzed :				12:17	12:24	12:32	12:41	12:50	13:01	13:12	13:24	13:33	13:42
Volume Analyzed (ml) :				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*										
Carbon Dioxide	TCD	1.13	%	10	5.3	11	<0.1	1.5	10.2	4.8	12	<0.1	14
Oxygen	TCD	1.77	%	5.0	9.5	3.1	21	19	2.3	15	11	21	4.4
Nitrogen	TCD	2.56	%	85	85	43	79	77	84	80	75	79	75
Methane	TCD	4.05	%	0.1	0.6	43	<0.1	2.6	3.3	<0.1	1.9	<0.1	6.5
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	>1000	>1000	>1000	75	>1000	>1000	100	>1000	<10	>1000

Table I. Analytical Result of Samples

Lab ID: Phase 3
Operator: David Feng

INTERPHASE
ENVIRONMENTAL, INC

Sample ID :				GP-08-2	GP-09-2	GP-05-2	GP-14-2	GP-15-2	GP-15-2/DUP	GP-16-2	GP-26-2	GP-27-2
Date Collected :				07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00
Time Collected :				13:45	14:00	14:15	14:33	14:47	14:47	15:00	15:30	15:39
Date Analyzed :				07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00	07/24/00
Time Analyzed :				13:50	14:02	14:20	14:38	14:55	15:05	15:15	15:35	15:46
Volume Analyzed (ml) :				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*									
Carbon Dioxide	TCD	1.13	%	1.6	2.0	0.1	1.3	0.2	0.2	8.7	5.6	4.2
Oxygen	TCD	1.77	%	19	20	21	19	21	21	5.4	14	16
Nitrogen	TCD	2.56	%	79	78	79	80	79	79	76	80	80
Methane	TCD	4.05	%	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	9.7	0.2	<0.1
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	80	>1000	125	715	40	36	>1000	>1000	47

Sample ID :				GP-29-2	AA000725	GP-30-2	GP-20-2	GP-25-2	GP-25-2/DUP	AA000725B	GP-18-0.5	GP-18-2
Date Collected :				07/24/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
Time Collected :				15:55	7:55	8:19	8:32	8:50	8:50	9:16	9:05	9:10
Date Analyzed :				07/24/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
Time Analyzed :				15:59	7:56	8:28	8:38	8:53	9:03	9:17	9:25	9:32
Volume Analyzed (ml) :				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*									
Carbon Dioxide	TCD	1.13	%	2.6	<0.1	3.0	2.7	1.9	1.9	<0.1	3.7	4.5
Oxygen	TCD	1.77	%	19	21	19	17	19	19	21	8.4	11
Nitrogen	TCD	2.56	%	78	79	78	80	79	79	79	65	67
Methane	TCD	4.05	%	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	23	17
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	66	<10	420	>1000	150	170	<10	>1000	>1000

INTERPHASE
ENVIRONMENTAL, INC

Table I. Analytical Result of Samples

Lab ID: Phase 3
Operator: David Feng

Sample ID :				GP-18-5	GP-22-2	GP-28-2	GP-12-0.5	GP-12-2	GP-12-5	GP-10-2	GP-26-0.5	GP-26-2	GP-26-5
Date Collected :				07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
Time Collected :				9:15	9:30	9:40	9:50	9:55	10:00	10:15	10:30	10:35	10:40
Date Analyzed :				07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
Time Analyzed :				9:40	9:48	9:56	10:10	10:19	10:26	10:34	10:41	11:04	10:57
Volume Analyzed (ml) :				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	***Detector***	***RT (min)***	***Units***										
Carbon Dioxide	TCD	1.13	%	5.0	9.9	1.2	2.7	12.9	3.8	1.7	0.8	3.6	0.1
Oxygen	TCD	1.77	%	15	3.6	20	18	11	19	19	20	16	21
Nitrogen	TCD	2.56	%	67	65	78	79	52	73	79	79	80	79
Methane	TCD	4.05	%	13	21	1.4	1.0	24	4.1	<0.1	<0.1	<0.1	<0.1
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	>1000	>1000	>1000	>1000	>1000	>1000	140	140	85	120

Sample ID :				GP-31-2	GP-32-2	GP-33-2	GP-08-0.5	GP-08-2	GP-08-5	GP-24-0.5	GP-24-2	GP-24-5	GP-24-5/DUP
Date Collected :				07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
Time Collected :				10:50	11:05	11:10	11:25	11:30	11:33	11:50	11:55	12:00	12:00
Date Analyzed :				07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
Time Analyzed :				11:14	11:21	11:29	11:38	11:45	11:52	12:04	12:12	12:20	12:28
Volume Analyzed (ml) :				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	***Detector***	***RT (min)***	***Units***										
Carbon Dioxide	TCD	1.13	%	1.0	0.1	4.9	2.3	4.2	0.6	0.2	<0.1	<0.1	<0.1
Oxygen	TCD	1.77	%	19	21	12	18	16	20	21	21	21	21
Nitrogen	TCD	2.56	%	80	79	79	80	80	79	79	79	79	79
Methane	TCD	4.05	%	<0.1	<0.1	4.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	380	260	>1000	110	22	22	21	29	38	48

Table I. Analytical Result of Samples

Lab ID: Phase 3
Operator: David Feng

INTERPHASE
ENVIRONMENTAL, INC

Sample ID :				AA000725C	AA000725C	GP-30-0.5	GP-30-2	GP-30-5	GP-06-0.5	GP-06-2	GP-06-5	GP-17-0.5
Date Collected :				07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
Time Collected :				12:35	12:44	13:24	13:35	13:35	13:50	13:55	14:00	14:30
Date Analyzed :				07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
Time Analyzed :				12:36	12:44	13:40	13:48	13:56	14:03	14:11	14:18	14:51
Volume Analyzed (ml) :				0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*									
Carbon Dioxide	TCD	1.13	%	<0.1	<0.1	1.2	0.1	0.2	<0.1	2.2	0.6	7.0
Oxygen	TCD	1.77	%	21	NA	20	21	21	21	19	21	12
Nitrogen	TCD	2.56	%	79	NA	79	79	79	79	78	78	81
Methane	TCD	4.05	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.3	<0.1
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	<10	<10	370	22	63	82	>1000	>1000	670

Sample ID :				GP-17-2	GP-17-5	GP-17-5	GP-34-2	GP-24C-2	GP-33-0.5	GP-33-2	GP-33-5	GP-33-5/DUP
Date Collected :				07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
Time Collected :				14:35	14:40	14:40	15:08	15:25	15:42	15:47	15:52	15:52
Date Analyzed :				07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
Time Analyzed :				15:00	15:09	15:19	15:27	15:36	15:55	16:02	16:10	16:18
Volume Analyzed (ml) :				0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*									
Carbon Dioxide	TCD	1.13	%	3.5	<0.1	<0.1	<0.1	3.8	1.7	2.5	7.2	7.0
Oxygen	TCD	1.77	%	17	21	NA	21	12	17	17	12	12
Nitrogen	TCD	2.56	%	79	79	NA	79	85	80	76	64	65
Methane	TCD	4.05	%	<0.1	<0.1	<0.1	<0.1	<0.1	0.9	5.2	16	16
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	500	<10	<10	23	99	>1000	>1000	>1000	>1000

Table I. Analytical Result of Samples

Lab ID: Phase 3
Operator: David Feng

INTERPHASE
ENVIRONMENTAL, INC

Sample ID :				AA000726A	AA000726A	GP-35-2	GP-36-2	GP-24C-2	GP-23-2	GP-23-2/DUP	MW-14	MW-3	MW-8
Date Collected :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Collected :				8:09	8:18	8:33	8:47	9:12	9:30	9:30	10:10	10:27	10:35
Date Analyzed :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Analyzed :				8:10	8:19	8:43	8:56	9:21	9:34	9:47	10:13	10:31	10:39
Volume Analyzed (ml) :				0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*										
Carbon Dioxide	TCD	1.13	%	<0.1	<0.1	0.2	<0.1	0.5	0.4	0.4	0.5	31	33
Oxygen	TCD	1.77	%	21	NA	21	21	20	17	17	20	4.6	3.8
Nitrogen	TCD	2.56	%	79	NA	79	79	80	83	83	79	17	19
Methane	TCD	4.05	%	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.3	<0.1	47	44
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	<10	<10	690	46	64	>1000	>1000	14	>1000	>1000

Sample ID :				MW-9	MW-18	MW-10	MW-33	MW-13	AA000726B	NM-1	NM-2	NM-8	NM-7
Date Collected :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Collected :				10:40	10:50	10:57	11:03	11:07	11:36	11:50	11:55	11:53	11:59
Date Analyzed :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Analyzed :				10:47	11:05	11:12	11:20	11:28	11:37	11:50	11:58	12:08	12:15
Volume Analyzed (ml) :				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*										
Carbon Dioxide	TCD	1.13	%	33	31	39	25	37	<0.1	0.8	<0.1	0.2	<0.1
Oxygen	TCD	1.77	%	2.2	2.8	1.9	5.0	2.0	21	20	21	21	21
Nitrogen	TCD	2.56	%	13	11	7.4	21	6.8	79	79	79	79	79
Methane	TCD	4.05	%	52	56	52	50	54	<0.1	0.2	<0.1	<0.1	<0.1
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	>1000	>1000	>1000	>1000	>1000	11	>1000	44	210	170

Table I. Analytical Result of Samples

Lab ID: Phase 3
Operator: David Feng

INTERPHASE
ENVIRONMENTAL, INC

Sample ID :				NM-6	NM-3	NM-3/DUP	NM-4	NM-4	NM-10	NM-5	NM-9	AA000726C	GP-30C-2
Date Collected :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Collected :				11:59	12:07	12:07	12:17	12:17	12:25	12:35	12:40	13:27	14:00
Date Analyzed :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Analyzed :				12:22	12:31	12:40	12:47	12:56	13:04	13:11	13:19	13:28	14:27
Volume Analyzed (ml) :				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*										
Carbon Dioxide	TCD	1.13	%	0.1	0.1	0.2	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	8.8
Oxygen	TCD	1.77	%	21	21	21	21	NA	21	21	21	NA	16
Nitrogen	TCD	2.56	%	79	79	79	79	NA	79	79	79	NA	75
Methane	TCD	4.05	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	59	120	180	<10	<10	150	<10	11	<10	470

Sample ID :				GP-26-2	MW-14	MW-14	MW-3	MW-8	MW-8/DUP	MW-33	MW-9	MW-13	MW-10
Date Collected :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Collected :				14:15	14:55	14:55	15:05	15:15	15:15	15:20	15:30	15:35	NA
Date Analyzed :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Analyzed :				14:35	15:03	15:10	15:18	15:25	15:33	15:40	15:47	15:59	16:06
Volume Analyzed (ml) :				0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*										
Carbon Dioxide	TCD	1.13	%	4.1	0.7	0.6	22	25	24	14	30	33	33
Oxygen	TCD	1.77	%	16	20	NA	9.6	6.8	7.3	12.0	4.0	3.4	4.6
Nitrogen	TCD	2.56	%	80	79	NA	36	35	37	47	22	15	19
Methane	TCD	4.05	%	<0.1	<0.1	<0.1	32	33	31	27	43	49	43
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	57	<10	<10	>1000	>1000	>1000	>1000	>1000	>1000	>1000

Table I. Analytical Result of Samples

Lab ID: Phase 3
Operator: David Feng

INTERPHASE
ENVIRONMENTAL, INC

Sample ID :				MW-18	NM-7	NM-3	NM-6	NM-6/DUP	NM-5	NM-9	NM-1
Date Collected :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Collected :				15:48	15:53	16:00	16:05	16:05	16:10	16:15	16:20
Date Analyzed :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Analyzed :				16:14	16:21	16:28	16:35	16:43	16:50	16:58	17:05
Volume Analyzed (ml) :				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*								
Carbon Dioxide	TCD	1.13	%	26	<0.1	0.2	<0.1	<0.1	0.1	0.1	0.9
Oxygen	TCD	1.77	%	6.1	21	21	21	21	21	21	20
Nitrogen	TCD	2.56	%	23	79	79	79	79	79	79	79
Methane	TCD	4.05	%	45	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	>1000	270	160	21	16	110	120	>1000

Sample ID :				NM-2	NM-8	NM-10	NM-4	NM-4/DUP
Date Collected :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Collected :				16:25	16:28	16:32	16:30	16:30
Date Analyzed :				07/26/00	07/26/00	07/26/00	07/26/00	07/26/00
Time Analyzed :				17:12	17:20	17:28	17:36	17:44
Volume Analyzed (ml) :				0.1	0.1	0.1	0.1	0.1
Compound Name	*Detector*	*RT (min)*	*Units*					
Carbon Dioxide	TCD	1.13	%	0.3	0.1	0.2	<0.1	<0.1
Oxygen	TCD	1.77	%	21	21	21	21	21
Nitrogen	TCD	2.56	%	79	79	79	79	79
Methane	TCD	4.05	%	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon Monoxide	TCD	4.95	%	<0.1	<0.1	<0.1	<0.1	<0.1
Methane	FID	0.83/4.05	ppm	400	210	210	<10	13

Table II. Initial Calibration Results

Lab ID: Phase 3

INTERPHASE
ENVIRONMENTAL, INC

Date Calibrated: July 24, 2000
Analyst: David Feng
Standard: Scott Mix #237 & #705
Date Standard Prepared: June 2000
Concentration Level: LEVEL 2 | LEVEL 3 | LEVEL 4
Amount of Standard Injected (mL): 0.04 (Mix237) | 0.1 (Mix237) | 0.1 (Mix705)

Compound Name	*Detector*	*RT (min)*	*Stnd Conc.* (% v/v)	Amount (uL)	Area	RF	Amount (uL)	Area	RF	Amount (uL)	Area	RF
Carbon Dioxide	TCD	1.13	15	6.00	454727	1.32E-05	15.00	1033327	1.45E-05			
Oxygen	TCD	1.77	7	2.80	558911	5.01E-06	7.00	1299943	5.38E-06			
Nitrogen	TCD	2.56	66.5	26.60	5438550	4.89E-06	66.50	12467537	5.33E-06			
Methane	TCD	4.05	4.5	1.80	307860	5.85E-06	4.50	716011	6.28E-06			
Carbon Monoxide	TCD	4.95	7	2.80	563351	4.97E-06	7.00	1304480	5.37E-06			
Methane 1	FID	0.83/4.05	4.5	1.80	2276560	7.91E-07	4.50	4591402	9.80E-07	0.005	10269	
Methane 2				1.80	7025953	2.56E-07	4.50	15939754	2.82E-07	0.005	23125	2.16E-07

Table II. Initial Calibration Results

Lab ID: Phase 3

INTERPHASE
ENVIRONMENTAL, INC

Date Calibrated: July 24, 2000
Analyst: David Feng
Standard: Scott Mix #237 & #705
Date Standard Prepared: June 2000
Concentration Level: LEVEL 5 / LEVEL 6
Amount of Standard Injected (mL): 1 (Mix705) / 0.2 (Mix705)

Compound Name	*Detector*	*RT (min)*	*Stnd Conc.* (% v/v)	Amount (uL)	Area	RF	Amount (uL)	Area	RF	Aver. RF	Std. Div.	%RSD	Acpt. Rng.
Carbon Dioxide	TCD	1.13	15							1.39E-05	9.34E-07	6.7	<30
Oxygen	TCD	1.77	7							5.20E-06	2.65E-07	5.1	<30
Nitrogen	TCD	2.56	66.5							5.11E-06	3.13E-07	6.1	<30
Methane	TCD	4.05	4.5							6.07E-06	3.10E-07	5.1	<30
Carbon Monoxide	TCD	4.95	7							5.17E-06	2.80E-07	5.4	<30
Methane 1	FID	0.83/4.05	4.5	0.05	68911	7.26E-07	0.01	14245	7.02E-07	8.00E-07	1.26E-07	15.8	<30
Methane 2				0.05	195033	2.56E-07	0.01	17829		2.53E-07	2.73E-08	10.8	<30

Table IV. Daily Calibration Check Results

Lab ID: Phase 3

INTERPHASE
ENVIRONMENTAL, INC

Date Calibrated: July 24, 2000
Analyst: David Feng
Standard: Scott Mix #237 & #705
Date Standard Prepared: June 2000

				25-Jul-00			26-Jul-00		
Date Calibration Checked:									
Time Calibration Checked:				8:11			8:01		
Amount of Standard Injected (mL)				0.1			0.1		
Compound Name	***Detector***	***RT (min)***	***Stnd Conc. (% v/v)***	**Found Conc.**	**% Dev.**	**Acpt. Rng.**	**Found Conc.**	**% Dev.**	**Acpt. Rng.**
Carbon Dioxide	TCD	1.13	15	14.8	-1.6	±25	15.4	2.9	±25
Oxygen	TCD	1.77	7	6.6	-6.0	±25	6.8	-2.9	±25
Nitrogen	TCD	2.56	67	69	3.7	±25	66	-0.6	±25
Methane	TCD	4.05	4.5	3.7	-18.7	±25	4.6	2.2	±25
Carbon Monoxide	TCD	4.95	7	6.1	-13.6	±25	7.1	0.9	±25
Methane(ppm)	FID	0.83/4.05	4.5	4.5	-0.4	±25	4.5	0.0	±25

APPENDIX B
EMISSION MEASUREMENT DATA SHEETS

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/24/20 SAMPLERS CES

LOCATION PORT OF OAKLAND - BLANK 1

SURFACE DESCRIPTION TEFLON

CURRENT ACTIVITY

INSTRUMENT TYPE ____ I.D. NO. ____ TYPE ____ ID NO. ____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒

AMBIENT CONCENTRATIONS

CHAMBER I.D. H PHOTO TAKEN: Yes ☐ No ☒

CHAMBER SEAL IN VAN / COLLAR CONDENSATION: Yes ☐ No ☒ BARM PRESS ____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', IN VAN mph Wind at Seal, ____ mph

TEMP ____ RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☐ None ☐ ____ WATER WASH + MEOH WIPE

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

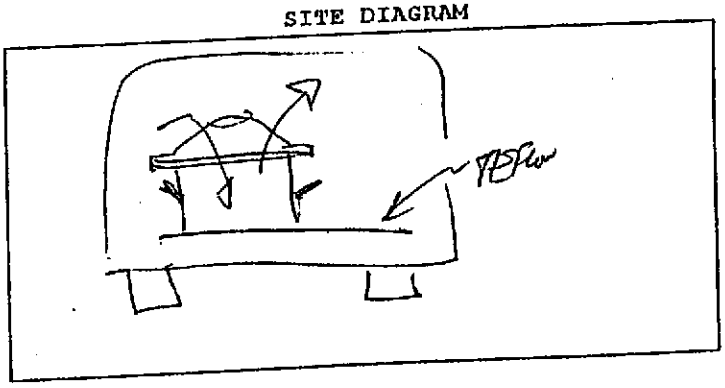
SWEEP AIR UHP ~0.01 ppmv HC CC 60209 SUPPLIER SM PSIG START 1700 PSIG STOP ____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Temperature (°F) Chamber Air	Temperature (°F) Ambient Surf	Temperature (°F) Ambient Air	Real-Time (ppmv) NA	Real-Time (ppmv)	Sample Number	Comments
1205	5.0	0								~29"
1211	↓	1								
1217	↓	2		NA						
1223	↓	3								
1229		4							A-001	#668
1235		5								

COMMENTS:

SCIMW-32 ½ mw SCIMW-38D 3/1 (WESTERN)

SITE DIAGRAM



SRA #1
UNCRACKED

SURFACE FLUX MEASUREMENT DATA FORM

DATE _____ SAMPLERS _____

LOCATION PORT OF OAKLAND - SOLVENT RELEASE AREA LOCATION #1

SURFACE DESCRIPTION CO-LOCATED @ SCDMW-32 CONTINUOUS ASPHALT

CURRENT ACTIVITY _____

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE _____

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS _____

CHAMBER I.D. 14 PHOTO TAKEN: Yes ☒ No ☐ _____

CHAMBER SEAL Y - COLAR/SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5' 3-5 mph Wind at Seal, ____ mph

TEMP MK RAIN: Yes ☐ No ☒ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☒ Wet Wipe ☐ Dry Wipe ☐ None ☐ _____

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☐ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

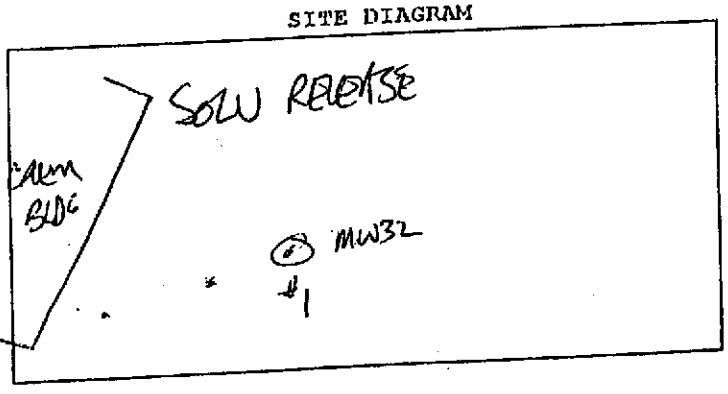
SWEEP AIR UHP CC 60209 SUPPLIER SM PSIG START 1600 PSIG STOP _____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv)		Sample Number	Comments
							NA			
1348	50	0								~24"
1354	↓	1								
1400		2			NA					
1406	↓	3								
1412		4							A002	#703
1418		5								

COMMENTS: 20' AAWS ~1200 SQ FT

CRACKS APPROX 42' CRACKS/SEAM

SITE DIAGRAM



SRA / LOC #1 CRACKED

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/24/20 SAMPLERS OBS

LOCATION PORT OF OAKLAND - SOLVENT RELEASE AREA ; LOCATION #1

SURFACE DESCRIPTION LARGEST CRACK WITHIN 20' RADIUS OF MW32 / UNCR MW32

CURRENT ACTIVITY NA 16"

INSTRUMENT TYPE NA I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE NA

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☐ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS _____

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐ _____

CHAMBER SEAL 4-COLLAR/SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', 3-5' mph Wind at Seal, ____ mph

TEMP NA RAIN: Yes ☐ No ☒ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☒ _____

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

SWEEP AIR UHP CC 60209 SUPPLIER SM PSIG START 1400 PSIG STOP _____

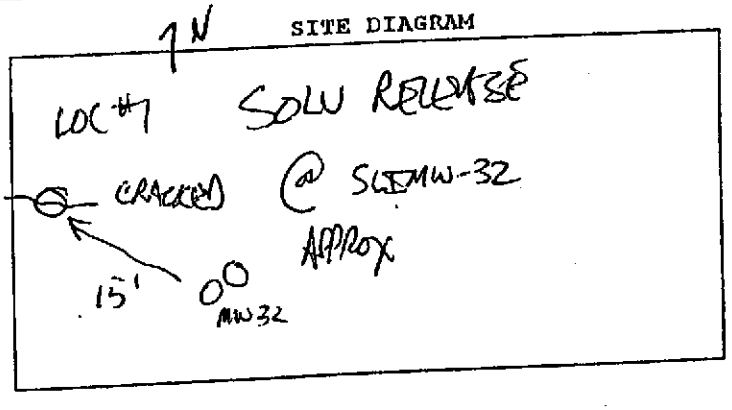
Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) NA		Sample Number	Comments
1436	5.0	0								~29"
1444	↓	1								
1450	↓	2			NA					
1456		3								
1502		4							A-003	# 654
1508		5								

COMMENTS: 20' DIAM OMW31D

FEW CRACKS/SEAMS

NO SURVEY (DONE 7/25 DVA ND)

SITE DIAGRAM



Loc #3 SOLV REL AREA UNCR

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/24/20 SAMPLERS CES

LOCATION SE PORT OF OAKLAND; SOLVENT RELEASE AREA, LOC #3 #1 OK #3

SURFACE DESCRIPTION UNCRACKED ASPHALT

CURRENT ACTIVITY NA

INSTRUMENT TYPE ____ I.D. NO. ____ TYPE ____ ID NO. ____

INSTRUMENT BASELINE ____

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS ____

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐ ____

CHAMBER SEAL 4-COLLAR/SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS ____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', 3-5 mph Wind at Seal, ____ mph

TEMP 77° RAIN: Yes ☐ No ☒ Comment ____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☒ ____

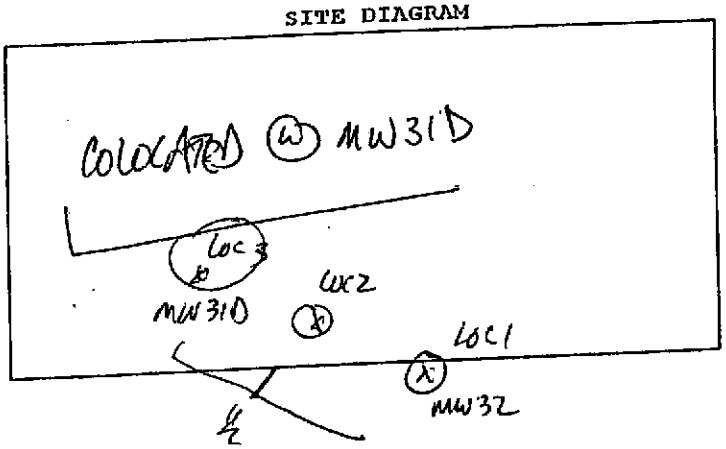
SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

SWEEP AIR UHP cc 60209 SUPPLIER SM PSIG START 1300 PSIG STOP ____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) UK		Sample Number	Comments
1522	5.0	0								-29"
1528	↓	1								
1534		2								
1540		3								
1546	↓	4								
1552		5	90°	81	90°	77°			A-004	#641

COMMENTS: 1200 SQ FT
89' CRACK

SITE DIAGRAM



LOC #3
SOLV
CRACKED

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/24/20 SAMPLERS CBS

LOCATION PORT OF OAKLAND; SOLVENT RELEASE AREA; LOC #3

SURFACE DESCRIPTION CRACKED, 16"

CURRENT ACTIVITY NA

INSTRUMENT TYPE — I.D. NO. ____ TYPE ____ ID NO. ____

INSTRUMENT BASELINE ____

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒

AMBIENT CONCENTRATIONS ____

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y-COLLAR/SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS ____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', 3-5 mph Wind at Seal, ____ mph

TEMP ____ RAIN: Yes ☐ No ☒ Comment ____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☒

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

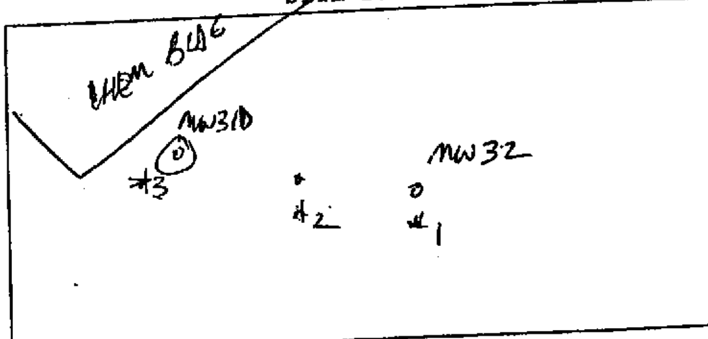
SWEEP AIR UHP CC 60209 SUPPLIER SM PSIG START 1150 PSIG STOP ____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv)		Sample Number	Comments
							NA			-24"
1612	5.0	0								
1618	↓	1								
1624		2		NA						
1630		3								
1636		4							A-005	#643
1642		5								

COMMENTS: 1200 SQ FT (RADIUS 20')
~6' CRACK

OVA SURVEY ND (7/23)

SITE DIAGRAM



LOC #2
UNCR

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/25/20 SAMPLERS CES

LOCATION PORT OF OAKLAND; SOLVENT RELEASE AREA LOC #2

SURFACE DESCRIPTION UNCRACKED ASPHALT

CURRENT ACTIVITY —

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE _____

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☐ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS _____

CHAMBER I.D. H PHOTO TAKEN: Yes ☐ No ☐ _____

CHAMBER SEAL Y-GOLF/SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP NA RAIN: Yes ☐ No ☒ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☒ _____

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

SWEEP AIR UHP CC — SUPPLIER SM PSIG START 1000 PSIG STOP _____

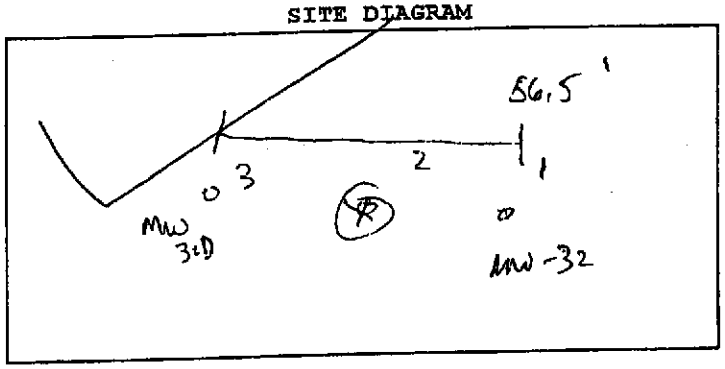
Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) NA		Sample Number	Comments
0918	5.0	0								24'
0924	↓	1								
0930		2								
0936		3								
0942	↓	4								
0948		5							A-006	818

COMMENTS:

1200 SQFT AREA (20'R)

100' CRACKS

SITE DIAGRAM



LOC #2

SURFACE FLUX MEASUREMENT DATA FORM

CRACKED

DATE 7/25/20 SAMPLERS CB

LOCATION PORT OF OAKLAND : SOLVENT RELEASE AREA LOC #2

SURFACE DESCRIPTION ~~[illegible]~~ CRACKED ASPHALT

CURRENT ACTIVITY —

INSTRUMENT TYPE — I.D. NO. ____ TYPE ____ ID NO. ____

INSTRUMENT BASELINE —

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒

AMBIENT CONCENTRATIONS ____

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL V-COLLAR / SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS ____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', 1-2 mph Wind at Seal, ____ mph

TEMP ____ RAIN: Yes ☐ No ☒ Comment ____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☒

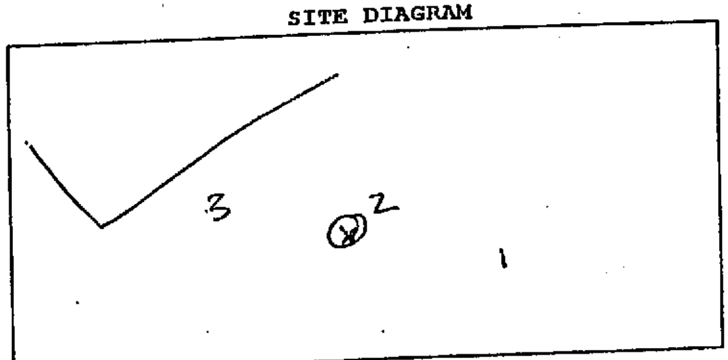
SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

SWEEP AIR UHP CC — SUPPLIER SM PSIG START 900 PSIG STOP ____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv)		Sample Number	Comments
							NA			
1018	5.0	0								-29°
1024	↓	1								
1030		2								
1036		3		NA						
1042		4							A-007	# 731
1048		5							A-008	# 695
OVA CALIB		BKGD 2.5 PPM	ON 99 PPM - 100 PPM ✓							
1126		ON 9,900 ppm - 8500 ppm	10:1	ADJ @ 800						

COMMENTS: GP-⑫ CR/WC/EXC
GP-~~24~~㉒ " "
GP-㉖ SF ONLY } NO PAVEM
GP-⑧ ~~OR 9~~ OUT
SURVEY ND 7/25
{ ~~20' RADIUS~~
EST 100' CRACKS

SITE DIAGRAM



GP-12 CRACKED HIGH DENSITY BUT ND ON ONA

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/25/20 SAMPLERS CES

LOCATION PORT OF OAKLAND / METHANE CONCENTRATION AREA / LOCATION GP-12

SURFACE DESCRIPTION GRID-CRACKED SURFACE APPROX 24" CRACKS PER > BASICALLY ALL

CURRENT ACTIVITY HIGH DENSITY BUT ND ON ONA SCREEN IS CRACKED IN 20' RADIUS

INSTRUMENT TYPE — I.D. NO. — TYPE — ID NO. —

INSTRUMENT BASELINE —

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS —

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐ —

CHAMBER SEAL 4-COLLAR/SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS —

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', 2-5 mph Wind at Seal, — mph

TEMP NR RAIN: Yes ☐ No ☒ Comment —

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☒ —

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☐ New ☐ Used ☒

SWEEP AIR UHP CC — SUPPLIER SM PSIG START 700 PSIG STOP —

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) NA		Sample Number	Comments
1204	5.0	0								~29"
1210	↓	1								
1216		2			ND					
1222		3								
1228		4					ONA			
1234		5					< BKGD @ ~1 ppm		A-009	#779 ND OVER CRACKS
							BKGD A-B			IN THIS AREA
							A-D ~2.5 ppm			DESPITE HIGH
										DENSITY

COMMENTS: 20' RADIUS 1200 SQ FT

APPROX 24" CRACKS PER SQ FT

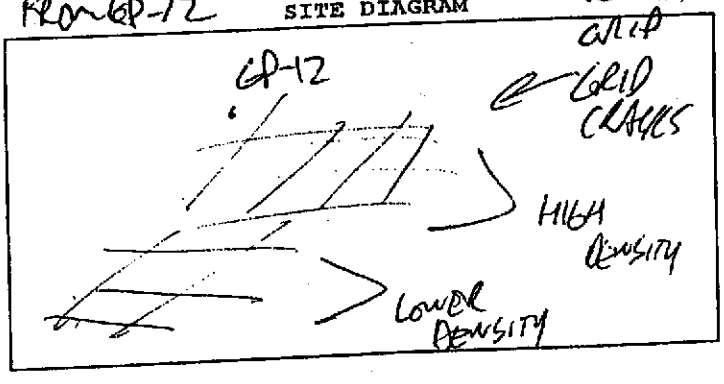
*AREA LIKE THIS - GRID CRACKED

1-TO-2 100'X100' GRIDS PER

AREA

NON-DETECT IN MORE THAN ½ CRACKED GRID

4' FROM GP-12 SITE DIAGRAM



GP-12 CRACKED @ OVA DETECT

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/25/20 SAMPLERS CES

LOCATION PORT OF OAKLAND; METHANE GEN AREA; GP-12 CRACKED @

SURFACE DESCRIPTION (~20% CRACKS LEAK)

CURRENT ACTIVITY AVE CRACK SCREEN ~10 ppmv; LIMITED AREA

INSTRUMENT TYPE OVA I.D. NO. 108 TYPE ______ ID NO. ______

INSTRUMENT BASELINE 2.5 ppmv

PROJECT QC: BACKGROUND MEASUREMENTS [ ] BLANK MEASUREMENTS [X] REPLICATE MEASUREMENTS [ ]

AMBIENT CONCENTRATIONS ______

CHAMBER I.D. H PHOTO TAKEN: Yes [X] No [ ] ______

CHAMBER SEAL Y-COLLAR/SKIRT CONDENSATION: Yes [ ] No [X] BARM PRESS ______

AMBIENT CONDITIONS: Sun [X] P.Sun [ ] Cloudy [ ] Wind at 5', 5-7 mph Wind at Seal, ____ mph

TEMP ______ RAIN: Yes [ ] No [X] Comment ______

PRIOR CHAMBER CLEANING: Full Wash [ ] Wet Wipe [ ] Dry Wipe [X] None [X] ______

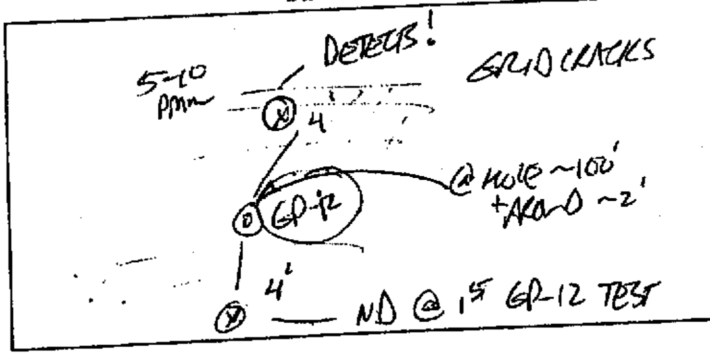
SAMPLE LINE: BACK FLUSHED PRIOR TO START [X] PURGED PRIOR TO SAMPLING [X] New [ ] Used [X]

SWEEP AIR UHP CC — SUPPLIER SM PSIG START — PSIG STOP ______

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) OVA		Sample Number	Comments
										SOME (1-2
1245	5.0	0								ppm) OVA AMB
1251	↓	1								FLUCTUATIONS
1257		2					Δ2 ppmv			
1303		3					Δ2 ppmv			
1309		4					Δ2 ppmv			
1315		5					Δ2 ppmv		A-010	* 612

COMMENTS: UNUSUALLY CRACKED IN GRID PATTERN; PROBABLY DUE TO EXTRA HEAVY LOADS. ~100 ppmv SCREEN @ GP 12 @ UPHEAVAL DUE TO PROBE WITHDRAWAL ~20% CRACKS IN RADIUS LEAK

SITE DIAGRAM



GP-8
NOT CRACKED

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/21/20 SAMPLERS CES

LOCATION PORT OF OAKLAND, METHANE GEN AREA GP-8

SURFACE DESCRIPTION NOT CRACKED

CURRENT ACTIVITY —

INSTRUMENT TYPE OVA I.D. NO. 108 TYPE _____ ID NO. _____

INSTRUMENT BASELINE _____

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒

AMBIENT CONCENTRATIONS _____

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐ _____

CHAMBER SEAL 4 COLLAR/SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☒ _____

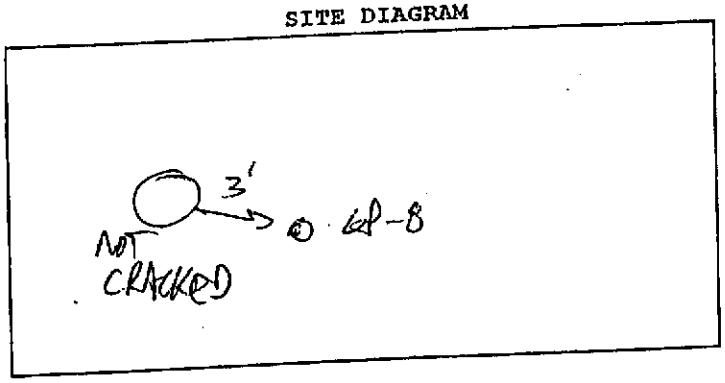
SAMPLE LINE: BACK FLUSHED PRIOR TO START ☐ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

SWEEP AIR UMP CC — SUPPLIER SM PSIG START 500 PSIG STOP _____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) OVA		Sample Number	Comments
1328	5.0	0								-29"
1334	↓	1								
1340		2			NA					
1346		3								
1352	↓	4							A-011	#606
1358		5								

COMMENTS: 1,200 SQ FT
APPROX. 140' CRACKS

SITE DIAGRAM



GP-8 CRACKED ND

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/25/20 SAMPLERS LES

LOCATION PORT OF OAKLAND, GP-8, CRACKED - ND @ OVA

SURFACE DESCRIPTION CRACK 16"

CURRENT ACTIVITY —

INSTRUMENT TYPE OVA I.D. NO. 108 TYPE _____ ID NO. _____

INSTRUMENT BASELINE 2.5 ppmv

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS _____

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐ _____

CHAMBER SEAL 4 COLLAR-SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', 2-3 mph Wind at Seal, ____ mph

TEMP _____ RAIN: Yes ☐ No ☒ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐ _____

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

SWEEP AIR UHP CC — SUPPLIER SM PSIG START 200 PSIG STOP _____

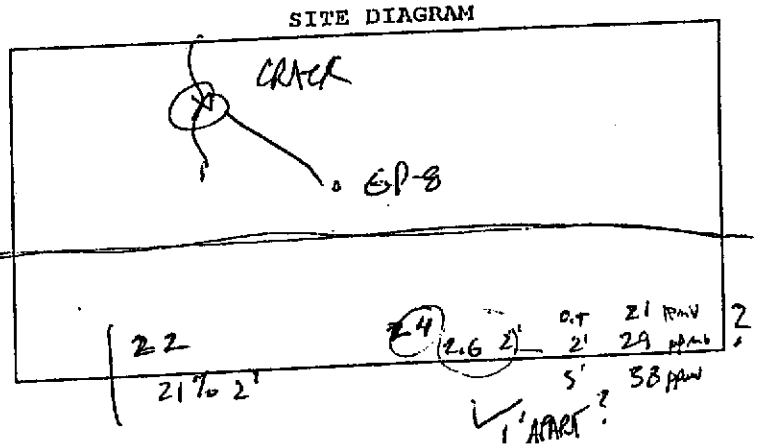
Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Temperature (°F) Chamber Air	Temperature (°F) Ambient Surf	Temperature (°F) Ambient Air	Real-Time (ppmv) OVA	Real-Time (ppmv)	Sample Number	Comments
1425	5.0	0								29'
1431	↓	1								
1437	↓	2		ND						
1443		3								
1449		4							A-012	#699
1455		5								

COMMENTS: 140' CRACK IN 20' R

OR 1200 SQ FT

NO DETECT @ OVA HERE

SITE DIAGRAM



GP-8 0.5' 110 ppmv
2' 22 ppmv
5' 22 ppmv

GP-9 2,000 ppmv @ 2'

GP-24 22
UNCRACKED

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/25/20 SAMPLERS CES

LOCATION PORT OF OAKLAND; METHANE GENERATION AREA; GP-24 -22

SURFACE DESCRIPTION UNCRACKED

CURRENT ACTIVITY

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☒

AMBIENT CONCENTRATIONS

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y-TOWAR/SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP NA RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☒

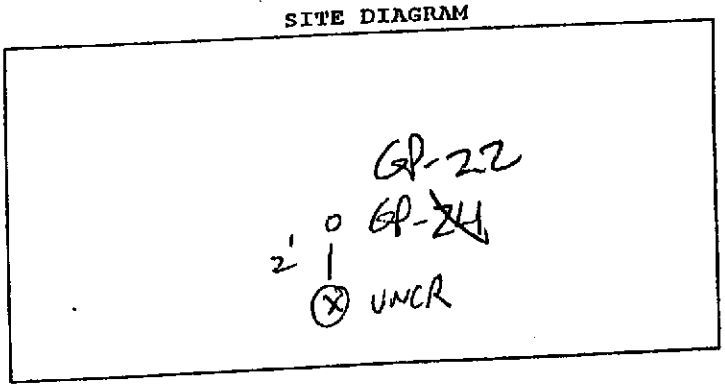
SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

SWEEP AIR UHP CC ____ SUPPLIER SM PSIG START 200 PSIG STOP _____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv)		Sample Number	Comments
							NA			-29"
1524	5.0	0								
1530	↓	1			NR					
1536	↓	2								
1542	↓	3								
1548		4							A013	#602
1554		5								

COMMENTS: 140' CRACK PER 20' RADIUS OR 1,200 SQ FT

SITE DIAGRAM



GP-22
CRACKED

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/25/20 SAMPLERS QS

LOCATION PORT OF OAKLAND; METHANE GENERATION AREA GP-22

SURFACE DESCRIPTION CRACKED 16" NO OVA

CURRENT ACTIVITY —

INSTRUMENT TYPE — I.D. NO. — TYPE — ID NO. —

INSTRUMENT BASELINE —

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☐ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS —

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐ —

CHAMBER SEAL 4-COLLAR/SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS —

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP — RAIN: Yes ☐ No ☒ Comment —

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☐ None ☐ —

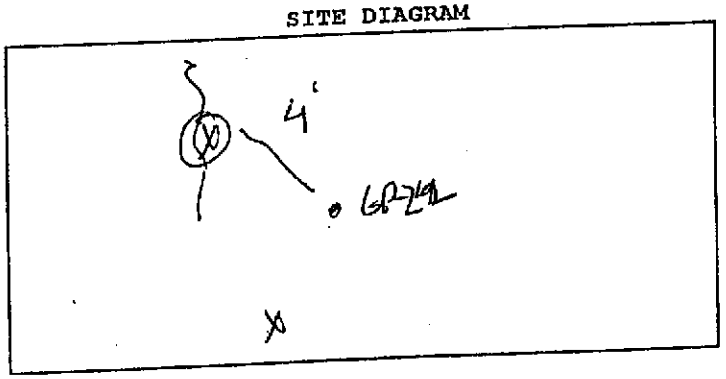
SAMPLE LINE: BACK FLUSHED PRIOR TO START ☐ PURGED PRIOR TO SAMPLING ☒ New ☒ Used ☐

SWEEP AIR VAP cc 140BT SUPPLIER SM PSIG START 1000 PSIG STOP —

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) N/K		Sample Number	Comments
1608	5.0	0								-24
1614	"	1								
1620	"	2								
1626	"	3								
1632		4							A-014	776
1638		5								

COMMENTS: OVA SCREEN - NO AIR

SITE DIAGRAM



GP-26

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/26/20 SAMPLERS OES

LOCATION PORT OF OAKLAND : METHANE GEN AREA : GP-26

SURFACE DESCRIPTION OPEN SOIL (GRAVEL BAY UNDER SOIL)

CURRENT ACTIVITY —

INSTRUMENT TYPE _____ I.D. NO. _____ TYPE _____ ID NO. _____

INSTRUMENT BASELINE —

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS _____

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐ _____

CHAMBER SEAL Y-OSMR/SILICONE CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP 78° RAIN: Yes ☐ No ☒ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐ _____

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☐ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP CC 14087 SUPPLIER SM PSIG START 500 PSIG STOP _____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) NA		Sample Number	Comments
1035	5.0	0								-29°
1041	↓	1								
1047		2								
1053		3								
1059		4								
1105		5	106°	88°	104°	78°			A015	#175

COMMENTS:

SITE DIAGRAM

IN YARD

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/27/20 SAMPLERS CLSS

LOCATION PORT OF OAKLAND LOCATION #3 @ MW31D SOLVENT RELEASE AREA

SURFACE DESCRIPTION EXCAVATED @ 0930 ~10"-12" DEPTH (4 LAYERS CLEAN BRN (LIGHT) FILL/GRAVEL/SAND

CURRENT ACTIVITY NA

INSTRUMENT TYPE OVA I.D. NO. 108 TYPE _____ ID NO. _____

INSTRUMENT BASELINE ~1 ppmv AMB

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS _____

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐ _____

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☐ P.Sun ☒ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP 65° RAIN: Yes ☐ No ☒ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐ _____

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR UHP CC _____ SUPPLIER SM PSIG START 2000 PSIG STOP _____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) PPM OVA		Sample Number	Comments
0936	50	0					1			BKGD (PPM
0942	↓	1					1			NON-DETECT
0948		2					1			
0954		3					<1			
1000		4					<1			
1006		5	77	67°	72°	65°	<1		A016	#670
									~~A017~~	~~#679~~ NO

COMMENTS: OUT CHBR - AMB 1 ppmv ; ADJ @ 100 PPMV

SEDIMENT AREA (METHANE GEN AREA)

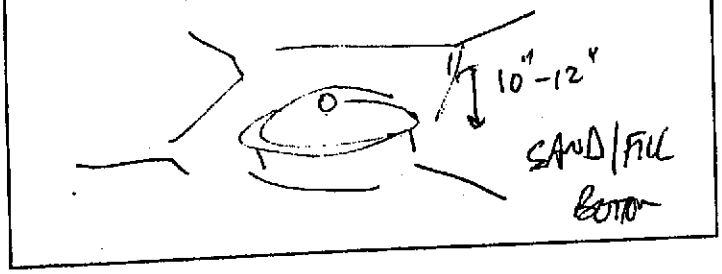
LOC 1 MW 32 GP-B

LOC 2 MIDWAY GP T2

LOC 3 MW31D GP-22

EXCAV @ 0930 (@ BOTH TEST SPOTS)

SITE DIAGRAM



LOC #2

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/27/20 SAMPLERS CB

LOCATION PORT OF OAKLAND; SOLVENT RELEASE AREA, LOC #2

SURFACE DESCRIPTION MID-WAY, WELL 31D - WELL 32, BELOW ASPHALT ~6"

CURRENT ACTIVITY EXCAVATED @ 1010

INSTRUMENT TYPE OVA I.D. NO. 108 TYPE _____ ID NO. _____

INSTRUMENT BASELINE 1 ppmv

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS _____

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐ _____

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☐ P.Sun ☐ Cloudy ☒ Wind at 5', 1-3 mph Wind at Seal, ____ mph

TEMP 63° RAIN: Yes ☐ No ☒ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐ _____

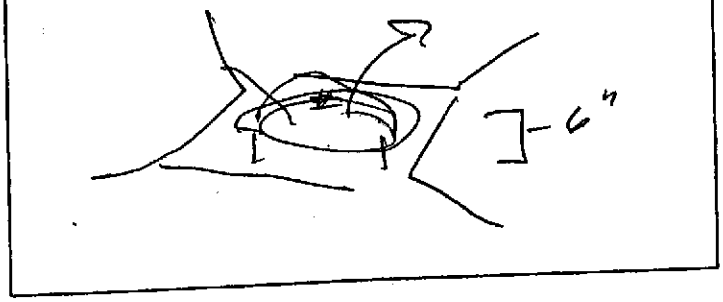
SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☐ New ☐ Used ☐

SWEEP AIR UHP cc — SUPPLIER SM PSIG START 1900 PSIG STOP _____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) OVA		Sample Number	Comments
1020	5.0	0					<1			BKGD
1026		1					1			
1032		2					<1			
1038		3					<1			
1044		4					<1			
1050		5	77°	72°	75°	63°			A-017	#717

COMMENTS: (@ BOTH TEST SPOTS)
EXCAVATED ~1010

SITE DIAGRAM



SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/27/20 SAMPLERS CES

LOCATION PORT OF OAKLAND; SOLVENT RELEASE AREA; LOC #1 MW-32

SURFACE DESCRIPTION WET SOIL / FILL UNDER ASPHALT

CURRENT ACTIVITY NA

INSTRUMENT TYPE OVA I.D. NO. 108 TYPE _____ ID NO. _____

INSTRUMENT BASELINE 1 ppm

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☐
AMBIENT CONCENTRATIONS _____

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐ _____

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☒ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', 1-3 mph Wind at Seal, ____ mph

TEMP 78° RAIN: Yes ☐ No ☒ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☒ Dry Wipe ☒ None ☐ _____

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

SWEEP AIR VHP CC — SUPPLIER SM PSIG START 1500 PSIG STOP _____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F)				Real-Time (ppmv)		Sample Number	Comments
			Chamber		Ambient					
			Surf	Air	Surf	Air	OVA			
1110	5.0	0					1			BKGD 1
1116	↓	1					<1			
1122		2								
1228	↓	3								
1234		4								
1240		5	101°	88°	91°	68°			A-01B	# 405

COMMENTS: EXCAVATED 1230

SITE DIAGRAM

~6" ASPHALT

GP-8 exc

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/27/20 SAMPLERS

LOCATION PORT OF OAKLAND; EXCAVATED, WESTWARD GEN AREA GP-8

SURFACE DESCRIPTION ASPHALT REMOVED

CURRENT ACTIVITY

INSTRUMENT TYPE OVA I.D. NO. 108 TYPE ID NO.

INSTRUMENT BASELINE 1ppmv

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☒ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS 1ppmv

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☒ No ☒ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ___ mph Wind at Seal, ___ mph

TEMP 68° RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☐

SWEEP AIR VAP cc — SUPPLIER CM PSIG START 1200 PSIG STOP

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) OVA	Real-Time (ppmv)	Sample Number	Comments
1219	5.0	0					<1			BKGD 1-2 ppmv
1225	↓	1					1			
1231		2					1			
1237	↓	3								
1243		4							A-019	732
1249		5	92°	86°	89°	68°				

COMMENTS: 1205 STARTED EXCAVATION; SCREENED CRACKS DURING ASPHALT REMOVAL - ND OVA SCREENING - ND UNDER ASPHALT EXCAVATION COMPLETE ~1215; SCREEN @ 1219 (ND PPM ~6"

SITE DIAGRAM

@ GP-8

GP-22

SURFACE FLUX MEASUREMENT DATA FORM

CES

DATE 7/27/20 SAMPLERS

LOCATION PORT OF OAKLAND - METHANE GEN AREA, ~6" ASPHALT EXCAV GP22

SURFACE DESCRIPTION FRESHLY EXCAVATED

CURRENT ACTIVITY ID NO.

INSTRUMENT TYPE OVA I.D. NO. 10B TYPE

INSTRUMENT BASELINE 1-2 PPM

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☐ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS ~1-2 PPM

CHAMBER I.D. H PHOTO TAKEN: Yes ☒ No ☐

CHAMBER SEAL Y CONDENSATION: Yes ☒ No ☐ BARM PRESS

AMBIENT CONDITIONS: Sun ☒ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP 71° RAIN: Yes ☐ No ☒ Comment

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☒ None ☐

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☒ PURGED PRIOR TO SAMPLING ☒ New ☐ Used ☒

SWEEP AIR UHP CC — SUPPLIER SM PSIG START 900 PSIG STOP

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) OVA	ADS CAL	Sample Number	Comments
							1-2	1-2		-29°
1315	50	0					180	130		
1321		1					260	160		
1327		2					→	150		
1333		3						170		STEADY SCALES!
1339		4		91°				160	A-020	#412
1345		5	98°	98	89°	71°		170		
							POST SAMPLE	180		

COMMENTS: ~½ PPM SCREEN @ EXCAVATION

1327 100 ppm CAL OVA - 150 ppm ABOVE

PROBABLY VOC (PETROLEUM ?)

SITE DIAGRAM

GP-22
6' DEPTH (BELOW GRADE)

GP-12

SURFACE FLUX MEASUREMENT DATA FORM

DATE 7/27/20 SAMPLERS CES

LOCATION PORT OF OAKLAND; METHANE GENERATION AREA GP-12

SURFACE DESCRIPTION EXPOSED ASPHALT

CURRENT ACTIVITY NA

INSTRUMENT TYPE OVA I.D. NO. 108 TYPE _____ ID NO. _____

INSTRUMENT BASELINE 1-2 PPM

PROJECT QC: BACKGROUND MEASUREMENTS ☐ BLANK MEASUREMENTS ☐ REPLICATE MEASUREMENTS ☐

AMBIENT CONCENTRATIONS _____

CHAMBER I.D. H PHOTO TAKEN: Yes ☐ No ☐ _____

CHAMBER SEAL Y CONDENSATION: Yes ☐ No ☐ BARM PRESS _____

AMBIENT CONDITIONS: Sun ☐ P.Sun ☐ Cloudy ☐ Wind at 5', ____ mph Wind at Seal, ____ mph

TEMP NM RAIN: Yes ☐ No ☐ Comment _____

PRIOR CHAMBER CLEANING: Full Wash ☐ Wet Wipe ☐ Dry Wipe ☐ None ☐ _____

SAMPLE LINE: BACK FLUSHED PRIOR TO START ☐ PURGED PRIOR TO SAMPLING ☐ New ☐ Used ☐

SWEEP AIR UHP CC — SUPPLIER SM PSIG START 500 PSIG STOP _____

Time	Sweep Air (L/min)	Residence Number	Temperature (°F) Chamber Surf	Chamber Air	Ambient Surf	Ambient Air	Real-Time (ppmv) OVA		Sample Number	Comments
1417	5.0	0					1			-24"/-24"
1423		1					50			1-2 PPM BKGD OVA
1429		2				NM	—			
1435		3					15			
1441	↓	4					18			
1447		5					18		A-021	#630
1453						POS1	18		A-022	#416
						POS2	19			

COMMENTS: $\frac{(4\ g/m^3)(0.005)}{1.33} = 0.0038$ lb/ft

VERY STABLE SOURCE

SITE DIAGRAM

@ GP-12

ENVIRONMENTAL
Analytical Service, Inc.

173 Cross Street
San Luis Obispo, CA
93401 - 7597
805.781.3585
Fax 805.541.4550

CHAIN OF CUSTODY RECORD

Project Number	Project Name: PORT OF OAKLAND	Quote Number:

REPORT TO:

Company: CB SCHMIDT
Address: 19200 LWE OAK RD
City/State/Zip: RED BLUFF CA 96080
Phone: 530 529 4252 (FAX) -4878
ATTENTION: CBS

MATRIX LEGEND: A = Ambient Air, Low Level; I = Indoor Air; S = Source Air, High Level; G = Gas/Propane

SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	CANISTER NUMBER	FLOW CONTROLLER ID	MATRIX A	MATRIX I	MATRIX S	MATRIX G	INITIAL PRESSURE	FINAL PRESSURE	LAB ID	TO-14 VOCs STD LIST (0.1ppbv)	ASTM 3416 FOR METHANE @ 1ppmV	He	TP	REMARKS	FP
A001	7/24/20	1235	688		X	X		X	-29"	0"	200336-1	X	X		745		911
A-002	"	1418	703								-2				745		913
A-003 *	"	1508	684								-3				742		906
A-004	"	1552	641								-4				746		923
A-005 *	"	1642	643								-5				760		917
A-006	7/25/20	0948	818								-6				748		919
A-007 *	"	1048	731								-7				743		914
A-008 *	"	1048	695								-8				732		919

SHELF L

COMMENTS: PLEASE REPORT ppbV, ug/m^3 FLUX $ug/m^2,min^{-1}$ FLUX = 0.0385 X ug/m^3
NOTE - FOR HIGH LEVEL, PROBABLY METHANE REPORT ppmV, mg/m^3 OR $mg/m^2,min^{-1}$

SEE NOTE ABOUT REPORTING FOR (*)

BILLING INFORMATION

Company: CB SCHMIDT
Address: SAME
City/State/Zip:
ATTENTION:
Purchase Order/Billing Reference:

		Date	Time		Date	Time
SAMPLED BY:	CB SCHMIDT	7/25/20	1800	Received by: FED EX	7/27/20	
Relinquished By:	CB SCHMIDT	Date	Time	Received by:	Date	Time
Relinquished By:		Date	Time	Received by:	Date	Time
Relinquished By:		Date	Time	Received for lab by: CHUCK VIROSN	Date 7/28/00	Time 1155

APPENDIX C
EAS LABORATORY DATA REPORTS

August 18, 2000
Sample Delivery Group (SDG): 200336

Chuck Schmidt
C.E. Schmidt
19200 Live Oak Road
Red Bluff, CA 96080

Dear Chuck:

Enclosed is the analytical report for the sample(s) received and analyzed by Environmental Analytical Service, Inc. for the following project:

Project Name: Port of Oakland
Project Number: None Given

The report consists of the following sections:

I. Sample Description
II. Laboratory Narrative and Chain of Custody Forms
III. Laboratory Certification
IV. Quality Control Reports
V. Analytical Results

If you have any questions on the report or the analytical data please contact me at (805) 781-3585.

Sincerely,

Steven D. Hoyt, Ph.D.
Laboratory Director

SDH/lims

173 Cross Street
San Luis Obispo, CA
93401-7597

805.781.3585

Fax 805.541.4550

Analytical Report

SDG Number 200336

Client: C.E. Schmidt **Date Received:** 7/31/00

I. SAMPLE DESCRIPTION AND ANALYSIS REQUESTED

Client Sample No.	EAS Lab No.	Analysis Requested	Date Sampled	Pressure (torr) Rec	Final
A-001	2003361	ASTM 3416 Methane	7/24/00	745	911
A-001	2003361	EPA TO-14 Volatile Organics	7/24/00	745	911
A-002	2003362	ASTM 3416 Methane	7/24/00	745	913
A-002	2003362	EPA TO-14 Volatile Organics	7/24/00	745	913
A-003	2003363	EPA TO-14 Volatile Organics	7/24/00	742	906
A-003	2003363	ASTM 3416 Methane	7/24/00	742	906
A-004	2003364	EPA TO-14 Volatile Organics	7/24/00	746	923
A-004	2003364	ASTM 3416 Methane	7/24/00	746	923
A-005	2003365	EPA TO-14 Volatile Organics	7/24/00	760	917
A-005	2003365	ASTM 3416 Methane	7/24/00	760	917
A-006	2003366	EPA TO-14 Volatile Organics	7/25/00	748	919
A-006	2003366	ASTM 3416 Methane	7/25/00	748	919
A-007	2003367	EPA TO-14 Volatile Organics	7/25/00	743	914
A-007	2003367	ASTM 3416 Methane	7/25/00	743	914
A-008	2003368	EPA TO-14 Volatile Organics	7/25/00	732	919
A-008	2003368	ASTM 3416 Methane	7/25/00	732	919
A-009	2003369	EPA TO-14 Volatile Organics	7/25/00	756	915
A-009	2003369	ASTM 3416 Methane	7/25/00	756	915
A-010	20033610	EPA TO-14 Volatile Organics	7/25/00	738	911
A-010	20033610	ASTM 3416 Methane	7/25/00	738	911
A-011	20033611	EPA TO-14 Volatile Organics	7/25/00	748	907
A-011	20033611	ASTM 3416 Methane	7/25/00	748	907
A-012	20033612	ASTM 3416 Methane	7/25/00	750	908
A-012	20033612	EPA TO-14 Volatile Organics	7/25/00	750	908
A-013	20033613	ASTM 3416 Methane	7/25/00	733	905
A-013	20033613	EPA TO-14 Volatile Organics	7/25/00	733	905
A-014	20033614	ASTM 3416 Methane	7/25/00	748	911
A-014	20033614	EPA TO-14 Volatile Organics	7/25/00	748	911
A-015	20033615	ASTM 3416 Methane	7/26/00	747	909
A-015	20033615	EPA TO-14 Volatile Organics	7/26/00	747	909
A-016	20033616	EPA TO-14 Volatile Organics	7/27/00	763	910
A-016	20033616	ASTM 3416 Methane	7/27/00	763	910
A-017	20033617	ASTM 3416 Methane	7/27/00	757	922
A-017	20033617	EPA TO-14 Volatile Organics	7/27/00	757	922
A-018	20033618	EPA TO-14 Volatile Organics	7/27/00	745	912
A-018	20033618	ASTM 3416 Methane	7/27/00	745	912
A-019	20033619	ASTM 3416 Methane	7/27/00	744	910
A-019	20033619	EPA TO-14 Volatile Organics	7/27/00	744	910
A-020	20033620	ASTM 3416 Methane	7/27/00	736	901

Client Sample No.	EAS Lab No.	Analysis Requested	Date Sampled	Pressure (torr) Rec	Final
A-020	20033620	EPA TO-14 Volatile Organics	7/27/00	736	901
A-021	20033621	EPA TO-14 Volatile Organics	7/27/00	736	911
A-021	20033621	ASTM 3416 Methane	7/27/00	736	911
A-022	20033622	ASTM 3416 Methane	7/27/00	749	905
A-022	20033622	EPA TO-14 Volatile Organics	7/27/00	749	905

II. LABORATORY CASE NARRATIVE and CHAIN OF CUSTODY FORMS

EAS SDG Number 200336

Client: C.E. Schmidt

All analysis met the QC requirements for the method except benzene exceeds the QC limits for % recovery on the laboratory control spike duplicate analysis on 08/14/00. The QC limits for benzene % recovery are 70% - 130%. On the laboratory control spike duplicate analysis the recovery for benzene was 69%. This does not affect data quality.

For samples associated with QC Batch 080200-MS2, PQL was used instead of the MDL for toluene due to matrix interference.

For samples associated with QC Batch 080300-MS2, PQL was used instead of the MDL for toluene and styrene due to matrix interference.

III. LABORATORY CERTIFICATION

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness other than the condition noted above.

Steven D. Hoyt, Ph.D.
Laboratory Director

ENVIRONMENTAL
Analytical Service, Inc.

173 Cross Street
San Luis Obispo, CA
93401 - 7597
805.781.3585
Fax 805.541.4550

CHAIN OF CUSTODY RECORD

Project Number | Project Name: PORT OF OAKLAND | Quote Number:

REPORT TO:

Company CES/CHMIDT
Address 19200 LWE OAK RD
City/State/Zip RED BLUFF CA 96080
Phone 530 529 4256 (FAX) -4878
ATTENTION CES

MATRIX LEGEND: A = Ambient Air Low Level; I = Indoor Air; S = Source Air High Level; O = Gas/Product

SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	CANISTER NUMBER	FLOW CONTROLLER	GRAB	MATRIX A	MATRIX I	MATRIX S	MATRIX O	INITIAL PRESSURE	FINAL PRESSURE	LAB LABORATORY ID	TO-14 VOCs STD LIST (0.1 ppbv)	ASTM 3416 FOR METHANE @ 1 ppmV	SHELF: L He	IP	REMARKS FP
A001	7/24/20	1235	668		X	X		X		-29"	0"	200336-1	X	X		745	911
A-002	"	1418	703									-2				745	913
* A-003	"	1508	684									-3				742	906
A-004	"	1552	641									-4				746	923
* A-005	"	1642	643									-5				760	917
A-006	7/25/20	0948	818									-6				748	919
* A-007	"	1048	731									-7				743	914
* A-008	"	1048	695									-8				732	919

COMMENTS: PLEASE REPORT ppbV, mg/m³ FLUX mg/m² min⁻¹ FLUX = 0.0385 X mg/m³
NOTE - FOR HIGH LEVEL, PROBABLY METHANE REPORT ppmV, mg/m³ OR mg/m² min⁻¹

SEE NOTE ABOUT REPORTING FOR (*)

BILLING INFORMATION

Company CES/CHMIDT
Address SAME
City/State/Zip
ATTENTION
Purchase Order/Billing Reference

SAMPLED BY: CES/CHMIDT	Date/Time 7/25/20 1000	Received by: FED EX	Date/Time 7/27/20
Relinquished By: CES/CHMIDT	Date Time	Received by:	Date Time
Relinquished By:	Date Time	Received by:	Date Time
Relinquished By:	Date Time	Received for lab by: CHUCK VIROEN	Date/Time 7/27/20 1155

ENVIRONMENTAL
Analytical Service, Inc.

173 Cross Street
San Luis Obispo, CA
93401 - 7597
805.781.3585
Fax 805.541.4550

CHAIN OF CUSTODY RECORD

Project Number:
Project Name: PORT OF OAKLAND
Quote Number:

REPORT TO:

Company: CE SCHMIDT
Address: 19200 LIVE OAK RD
City/State/Zip: RED BLUFF CA 96080
Phone: (530) 529-42[illegible] -4878
ATTENTION: CES

MATRIX LEGEND: A - Ambient Air Low Level; I - Indoor Air; S - Source Air High Level; G - Gas/Product

Analytical tests: SCD FULL SCAN (0.1 ppbv) TO-14; METHANE BY ASTM D 3416 @ 1 ppmv

SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	CANISTER NUMBER	C G M P	G R A B	MATRIX A	MATRIX I	MATRIX S	MATRIX G	INITIAL PRESSURE	FINAL PRESSURE	EAS LABORATORY ID	SCD FULL SCAN	METHANE					REMARKS (He) IP / FP
* A-009	7/25/20	1234	~~A-009~~ 771	X	X		X			-29"	0"	200336-9	X	X					756 / 915
* A-010	"	1315	~~A-010~~ 612	↓	↓		↓			↓	↓	-10	↓	↓					738 / 911
A-011	"	1358	686									-11							748 / 907
* A-012	"	1455	699									-12							750 / 908
A-013	"	1554	602									-13							733 / 905
* A-014	7/25/20	1638	776									-14							748 / 911
A-018	7/26/20	1105	675									-15							747 / 909
A-016	7/27/20	1006	670									-16							763 / 910

* SEE NOTE

COMMENTS: PLEASE REPORT ppbv µg/m³ µg/m², min⁻¹ FLUX = µg/m³ X 0.0385
FOR HIGH LEVEL OK TO USE mg/m³ ppmv AND mg/m², min⁻¹

SHELF: G

BILLING INFORMATION:

Company: CES
Address: SAME
City/State/Zip:
ATTENTION:
Purchase Order/Billing Reference:

	Date	Time		Date	Time
SAMPLED BY: CE SCHMIDT	7/25/20	1000	Received by: FED EX	7/27/20	
Relinquished By: CE SCHMIDT			Received by:		
Relinquished By:			Received by:		
Relinquished By:			Received for lab by: CHUCK VIRDEN	7/31/00	1153

ENVIRONMENTAL
Analytical Service, Inc.

173 Cross Street
San Luis Obispo, CA
93401 - 7597
805.781.3585
Fax 805.541.4550

3 OF 3

CHAIN OF CUSTODY RECORD

Project Number	Project Name: PORT OF OAKLAND	Quote Number:

REPORT TO:

Company: CESCHMIDT
Address: 19200 LIVE OAK RD
City/State/Zip: RED BLUFF CA 96080
Phone: (530) 529-4282 (FAX) -4878
ATTENTION: CES

MATRIX LEGEND: A = Ambient Air - Low Level; I = Indoor Air; S = Source Air - High Level; G = Gas Chromatograph

SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	CANISTER NUMBER	FIELD FILTER	LAB FILTER	MATRIX A	MATRIX I	MATRIX S	MATRIX G	INITIAL PRESSURE	FINAL PRESSURE	LABORATORY ID	ANALYSIS REQUESTED: TO-14	ANALYSIS REQUESTED: 3116	ANALYSIS REQUESTED: BULGAS	ANALYSIS REQUESTED: METHANE	ANALYSIS REQUESTED: 0.1 PPBV 1 PPMV	REMARKS (P / FP)
A-017	7/27/20	1050	717		X	X		X		-29"	0"	200336-17	X	X				757 / 922
A-018	"	1240	405									-18						745 / 912
A-019	"	0249	732									-19						744 / 910
A-020	"	1345	412									-20						736 / 901
A-021	"	1437	1030									-21						736 / 911
A-022	"	1449	416									-22						749 / 905
																		SHELF: H

SEE NOTE

COMMENTS: PLEASE REPORT PPBV µg/m3 FLUX µg/m2 MIN-1 FLUX = 0.0365 X µg/m3
CAN 791 $ 637 RETURNED @ VAC

BILLING INFORMATION

Company: CES
Address: SAME
City/State/Zip:
ATTENTION:
Purchase Order/Billing Reference:

SAMPLED BY: CESCHMIDT	Date / Time: 7/27/20 1600	Received by: FED EX	Date / Time: 7/27/20 1600
Relinquished By: CESCHMIDT	Date / Time:	Received by:	Date / Time:
Relinquished By:	Date / Time:	Received by:	Date / Time:
Relinquished By:	Date / Time:	Received for lab by: CHUCK VIRDEN	Date / Time: 7/31/00 1155

IV. QUALITY CONTROL REPORT

SDG Number: 200336
Client: C.E. Schmidt

LABORATORY QC REPORT

QC NARRATIVE

This report was run with the standard laboratory QC.

STANDARD LABORATORY QC REPORT

Unless project specific QC was requested, this Section contains the standard laboratory QC supplied with the analytical reports, which includes the daily method blank and the daily duplicate control samples as described below. Each day that samples are analyzed comprises a Daily Analytical Batch for a particular instrument. A Daily Analytical Batch QC report will be supplied for each method and each day samples from this SDG Group were analyzed.

METHOD BLANK

A method blank is a laboratory-generated sample which assesses the degree to which laboratory operations and procedures cause false-positive analytical results for your samples. A copy of the batch blank is included with the report.

DUPLICATE CONTROL SAMPLES

A duplicate or duplicate control sample (DCS) was analyzed as part of each daily analytical batch. A DCS is a well-characterized matrix (blank water, ambient air, or actual sample) which may or may not be spiked and run in duplicate with your sample batch. The results are on the attached Duplicate Sample/Spike results. Precision is measured in a duplicate test by Relative Percent Difference (RPD) as in:

$$RPD = \frac{[\%\ \text{Recovery Test 1} - \%\ \text{Recovery Test 2}] \times 100}{(\text{Recovery Test 1} + \text{Recovery Test 2}) / 2}$$

METHOD BLANK REPORT

EPA TO-14 Full Scan GC/MS
File: B080200D.D
Client:
Description: METHOD BLANK
Analyst: CC/KK

SDG : LABQC
Laboratory Number: B08020
Date Sampled:
Date Analyzed: 08/02/00
Flux Factor: 0.0385
QC Batch: 080200-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12	U	0.10	ND	0.51	ND	0.0197
74-87-3	Chloromethane	U	0.10	ND	0.21	ND	0.0082
76-14-2	Freon 114	U	0.10	ND	0.72	ND	0.0278
75-01-4	Vinyl chloride	U	0.10	ND	0.26	ND	0.0102
74-83-9	Bromomethane	U	0.10	ND	0.40	ND	0.0154
75-00-3	Chloroethane	U	0.10	ND	0.27	ND	0.0105
75-69-4	Trichlorofluoromethane	U	0.10	ND	0.58	ND	0.0223
75-35-4	1,1-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
76-13-1	Freon 113	U	0.10	ND	0.79	ND	0.0304
75-09-2	Dichloromethane	U	0.10	ND	0.36	ND	0.0138
75-34-3	1,1-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
156-59-2	c-1,2-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
67-66-3	Chloroform	U	0.10	ND	0.50	ND	0.0193
71-55-6	1,1,1-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
107-06-2	1,2-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
71-43-2	Benzene	U	0.10	ND	0.33	ND	0.0127
56-23-5	Carbon Tetrachloride	U	0.10	ND	0.65	ND	0.0250
78-87-5	1,2-Dichloropropane	U	0.10	ND	0.48	ND	0.0184
79-01-6	Trichloroethene	U	0.10	ND	0.55	ND	0.0213
10061-01-5	c-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
108-88-3	Toluene **	U	0.25	ND	0.78	ND	0.0300
10061-02-6	t-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
79-00-5	1,1,2-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
106-93-4	1,2-Dibromoethane	U	0.10	ND	0.79	ND	0.0306
127-18-4	Tetrachloroethene	U	0.10	ND	0.70	ND	0.0270
108-90-7	Chlorobenzene	U	0.10	ND	0.48	ND	0.0184
100-41-4	Ethylbenzene	U	0.10	ND	0.45	ND	0.0172
108-38-3	m,p-Xylenes	U	0.10	ND	0.45	ND	0.0172
100-42-5	Styrene	U	0.10	ND	0.44	ND	0.0169
95-47-6	o-Xylene	U	0.10	ND	0.45	ND	0.0172
79-34-5	1,1,2,2-Tetrachloroethane	U	0.10	ND	0.71	ND	0.0273
622-96-8	4-Ethyltoluene	U	0.10	ND	0.51	ND	0.0195
108-67-8	1,3,5-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
95-63-6	1,2,4-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
541-73-1	1,3-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
100-44-7	Benzyl Chloride	U	0.10	ND	0.54	ND	0.0206
106-46-7	1,4-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
95-50-1	1,2-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
120-82-1	1,2,4-Trichlorobenzene	U	0.10	ND	0.76	ND	0.0294
87-68-3	Hexachlorobutadiene	U	0.10	ND	1.10	ND	0.0424

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

METHOD BLANK REPORT

SDG : LABQC

EPA TO-14 Full Scan GC/MS — Laboratory Number: B08030

File: B08030A.D — Date Sampled:

Client: — Date Analyzed: 08/03/00

Description: METHOD BLANK — Flux Factor: 0.0385

Analyst: CC — QC Batch: 080300-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12	U	0.10	ND	0.51	ND	0.0197
74-87-3	Chloromethane	U	0.10	ND	0.21	ND	0.0082
76-14-2	Freon 114	U	0.10	ND	0.72	ND	0.0278
75-01-4	Vinyl chloride	U	0.10	ND	0.26	ND	0.0102
74-83-9	Bromomethane	U	0.10	ND	0.40	ND	0.0154
75-00-3	Chloroethane	U	0.10	ND	0.27	ND	0.0105
75-69-4	Trichlorofluoromethane	U	0.10	ND	0.58	ND	0.0223
75-35-4	1,1-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
76-13-1	Freon 113	U	0.10	ND	0.79	ND	0.0304
75-09-2	Dichloromethane	U	0.10	ND	0.36	ND	0.0138
75-34-3	1,1-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
156-59-2	c-1,2-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
67-66-3	Chloroform	U	0.10	ND	0.50	ND	0.0193
71-55-6	1,1,1-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
107-06-2	1,2-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
71-43-2	Benzene	U	0.10	ND	0.33	ND	0.0127
56-23-5	Carbon Tetrachloride	U	0.10	ND	0.65	ND	0.0250
78-87-5	1,2-Dichloropropane	U	0.10	ND	0.48	ND	0.0184
79-01-6	Trichloroethene	U	0.10	ND	0.55	ND	0.0213
10061-01-5	c-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
108-88-3	Toluene	U	0.10	ND	0.39	ND	0.0150
10061-02-6	t-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
79-00-5	1,1,2-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
106-93-4	1,2-Dibromoethane	U	0.10	ND	0.79	ND	0.0306
127-18-4	Tetrachloroethene	U	0.10	ND	0.70	ND	0.0270
108-90-7	Chlorobenzene	U	0.10	ND	0.48	ND	0.0184
100-41-4	Ethylbenzene	U	0.10	ND	0.45	ND	0.0172
108-38-3	m,p-Xylenes	U	0.10	ND	0.45	ND	0.0172
100-42-5	Styrene	U	0.10	ND	0.44	ND	0.0169
95-47-6	o-Xylene	U	0.10	ND	0.45	ND	0.0172
79-34-5	1,1,2,2-Tetrachloroethane	U	0.10	ND	0.71	ND	0.0273
622-96-8	4-Ethyltoluene	U	0.10	ND	0.51	ND	0.0195
108-67-8	1,3,5-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
95-63-6	1,2,4-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
541-73-1	1,3-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
100-44-7	Benzyl Chloride	U	0.10	ND	0.54	ND	0.0206
106-46-7	1,4-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
95-50-1	1,2-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
120-82-1	1,2,4-Trichlorobenzene	U	0.10	ND	0.76	ND	0.0294
87-68-3	Hexachlorobutadiene	U	0.10	ND	1.10	ND	0.0424

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

METHOD BLANK REPORT

EPA TO-14 Full Scan GC/MS

SDG : LABQC
Laboratory Number: B08030
File: B08030A.D
Date Sampled:
Client:
Date Analyzed: 08/03/00
Description: METHOD BLANK
Flux Factor: 0.0038
Analyst: CC
QC Batch: 080300-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(foot*min)
75-71-8	Freon 12	U	0.10	ND	0.51	ND	0.0019
74-87-3	Chloromethane	U	0.10	ND	0.21	ND	0.0008
76-14-2	Freon 114	U	0.10	ND	0.72	ND	0.0027
75-01-4	Vinyl chloride	U	0.10	ND	0.26	ND	0.0010
74-83-9	Bromomethane	U	0.10	ND	0.40	ND	0.0015
75-00-3	Chloroethane	U	0.10	ND	0.27	ND	0.0010
75-69-4	Trichlorofluoromethane	U	0.10	ND	0.58	ND	0.0022
75-35-4	1,1-Dichloroethene	U	0.10	ND	0.41	ND	0.0016
76-13-1	Freon 113	U	0.10	ND	0.79	ND	0.0030
75-09-2	Dichloromethane	U	0.10	ND	0.36	ND	0.0014
75-34-3	1,1-Dichloroethane	U	0.10	ND	0.42	ND	0.0016
156-59-2	c-1,2-Dichloroethene	U	0.10	ND	0.41	ND	0.0016
67-66-3	Chloroform	U	0.10	ND	0.50	ND	0.0019
71-55-6	1,1,1-Trichloroethane	U	0.10	ND	0.56	ND	0.0021
107-06-2	1,2-Dichloroethane	U	0.10	ND	0.42	ND	0.0016
71-43-2	Benzene	U	0.10	ND	0.33	ND	0.0013
56-23-5	Carbon Tetrachloride	U	0.10	ND	0.65	ND	0.0025
78-87-5	1,2-Dichloropropane	U	0.10	ND	0.48	ND	0.0018
79-01-6	Trichloroethene	U	0.10	ND	0.55	ND	0.0021
10061-01-5	c-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0018
108-88-3	Toluene	U	0.10	ND	0.39	ND	0.0015
10061-02-6	t-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0018
79-00-5	1,1,2-Trichloroethane	U	0.10	ND	0.56	ND	0.0021
106-93-4	1,2-Dibromoethane	U	0.10	ND	0.79	ND	0.0030
127-18-4	Tetrachloroethene	U	0.10	ND	0.70	ND	0.0027
108-90-7	Chlorobenzene	U	0.10	ND	0.48	ND	0.0018
100-41-4	Ethylbenzene	U	0.10	ND	0.45	ND	0.0017
108-38-3	m,p-Xylenes	U	0.10	ND	0.45	ND	0.0017
100-42-5	Styrene	U	0.10	ND	0.44	ND	0.0017
95-47-6	o-Xylene	U	0.10	ND	0.45	ND	0.0017
79-34-5	1,1,2,2-Tetrachloroethane	U	0.10	ND	0.71	ND	0.0027
622-96-8	4-Ethyltoluene	U	0.10	ND	0.51	ND	0.0019
108-67-8	1,3,5-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0019
95-63-6	1,2,4-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0019
541-73-1	1,3-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0024
100-44-7	Benzyl Chloride	U	0.10	ND	0.54	ND	0.0020
106-46-7	1,4-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0024
95-50-1	1,2-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0024
120-82-1	1,2,4-Trichlorobenzene	U	0.10	ND	0.76	ND	0.0029
87-68-3	Hexachlorobutadiene	U	0.10	ND	1.10	ND	0.0042

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

METHOD BLANK REPORT

EPA TO-14 Full Scan GC/MS

SDG : LABQC
Laboratory Number: B08030

File: B080300.D
Client:
Description: METHOD BLANK
Analyst: CC/KK

Date Sampled:
Date Analyzed: 08/03/00
Flux Factor: 0.0385
QC Batch: 080300-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12	U	0.10	ND	0.51	ND	0.0197
74-87-3	Chloromethane	U	0.10	ND	0.21	ND	0.0082
76-14-2	Freon 114	U	0.10	ND	0.72	ND	0.0278
75-01-4	Vinyl chloride	U	0.10	ND	0.26	ND	0.0102
74-83-9	Bromomethane	U	0.10	ND	0.40	ND	0.0154
75-00-3	Chloroethane	U	0.10	ND	0.27	ND	0.0105
75-69-4	Trichlorofluoromethane	U	0.10	ND	0.58	ND	0.0223
75-35-4	1,1-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
76-13-1	Freon 113	U	0.10	ND	0.79	ND	0.0304
75-09-2	Dichloromethane	U	0.10	ND	0.36	ND	0.0138
75-34-3	1,1-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
156-59-2	c-1,2-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
67-66-3	Chloroform	U	0.10	ND	0.50	ND	0.0193
71-55-6	1,1,1-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
107-06-2	1,2-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
71-43-2	Benzene	U	0.10	ND	0.33	ND	0.0127
56-23-5	Carbon Tetrachloride	U	0.10	ND	0.65	ND	0.0250
78-87-5	1,2-Dichloropropane	U	0.10	ND	0.48	ND	0.0184
79-01-6	Trichloroethene	U	0.10	ND	0.55	ND	0.0213
10061-01-5	c-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
108-88-3	Toluene **	U	0.25	ND	0.78	ND	0.0300
10061-02-6	t-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
79-00-5	1,1,2-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
106-93-4	1,2-Dibromoethane	U	0.10	ND	0.79	ND	0.0306
127-18-4	Tetrachloroethene	U	0.10	ND	0.70	ND	0.0270
108-90-7	Chlorobenzene	U	0.10	ND	0.48	ND	0.0184
100-41-4	Ethylbenzene	U	0.10	ND	0.45	ND	0.0172
108-38-3	m,p-Xylenes	U	0.10	ND	0.45	ND	0.0172
100-42-5	Styrene **	U	0.20	ND	0.88	ND	0.0338
95-47-6	o-Xylene	U	0.10	ND	0.45	ND	0.0172
79-34-5	1,1,2,2-Tetrachloroethane	U	0.10	ND	0.71	ND	0.0273
622-96-8	4-Ethyltoluene	U	0.10	ND	0.51	ND	0.0195
108-67-8	1,3,5-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
95-63-6	1,2,4-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
541-73-1	1,3-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
100-44-7	Benzyl Chloride	U	0.10	ND	0.54	ND	0.0206
106-46-7	1,4-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
95-50-1	1,2-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
120-82-1	1,2,4-Trichlorobenzene	U	0.10	ND	0.76	ND	0.0294
87-68-3	Hexachlorobutadiene	U	0.10	ND	1.10	ND	0.0424

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

METHOD BLANK REPORT

EPA TO-14 Full Scan GC/MS

File: B080300.D
Client:
Description: METHOD BLANK
Analyst: CC/KK

SDG : LABQC
Laboratory Number: B08030
Date Sampled:
Date Analyzed: 08/03/00
Flux Factor: 0.0038
QC Batch: 080300-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(foot*min)
75-71-8	Freon 12	U	0.10	ND	0.51	ND	0.0019
74-87-3	Chloromethane	U	0.10	ND	0.21	ND	0.0008
76-14-2	Freon 114	U	0.10	ND	0.72	ND	0.0027
75-01-4	Vinyl chloride	U	0.10	ND	0.26	ND	0.0010
74-83-9	Bromomethane	U	0.10	ND	0.40	ND	0.0015
75-00-3	Chloroethane	U	0.10	ND	0.27	ND	0.0010
75-69-4	Trichlorofluoromethane	U	0.10	ND	0.58	ND	0.0022
75-35-4	1,1-Dichloroethene	U	0.10	ND	0.41	ND	0.0016
76-13-1	Freon 113	U	0.10	ND	0.79	ND	0.0030
75-09-2	Dichloromethane	U	0.10	ND	0.36	ND	0.0014
75-34-3	1,1-Dichloroethane	U	0.10	ND	0.42	ND	0.0016
156-59-2	c-1,2-Dichloroethene	U	0.10	ND	0.41	ND	0.0016
67-66-3	Chloroform	U	0.10	ND	0.50	ND	0.0019
71-55-6	1,1,1-Trichloroethane	U	0.10	ND	0.56	ND	0.0021
107-06-2	1,2-Dichloroethane	U	0.10	ND	0.42	ND	0.0016
71-43-2	Benzene	U	0.10	ND	0.33	ND	0.0013
56-23-5	Carbon Tetrachloride	U	0.10	ND	0.65	ND	0.0025
78-87-5	1,2-Dichloropropane	U	0.10	ND	0.48	ND	0.0018
79-01-6	Trichloroethene	U	0.10	ND	0.55	ND	0.0021
10061-01-5	c-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0018
108-88-3	Toluene **	U	0.25	ND	0.78	ND	0.0030
10061-02-6	t-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0018
79-00-5	1,1,2-Trichloroethane	U	0.10	ND	0.56	ND	0.0021
106-93-4	1,2-Dibromoethane	U	0.10	ND	0.79	ND	0.0030
127-18-4	Tetrachloroethene	U	0.10	ND	0.70	ND	0.0027
108-90-7	Chlorobenzene	U	0.10	ND	0.48	ND	0.0018
100-41-4	Ethylbenzene	U	0.10	ND	0.45	ND	0.0017
108-38-3	m,p-Xylenes	U	0.10	ND	0.45	ND	0.0017
100-42-5	Styrene **	U	0.20	ND	0.88	ND	0.0033
95-47-6	o-Xylene	U	0.10	ND	0.45	ND	0.0017
79-34-5	1,1,2,2-Tetrachloroethane	U	0.10	ND	0.71	ND	0.0027
622-96-8	4-Ethyltoluene	U	0.10	ND	0.51	ND	0.0019
108-67-8	1,3,5-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0019
95-63-6	1,2,4-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0019
541-73-1	1,3-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0024
100-44-7	Benzyl Chloride	U	0.10	ND	0.54	ND	0.0020
106-46-7	1,4-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0024
95-50-1	1,2-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0024
120-82-1	1,2,4-Trichlorobenzene	U	0.10	ND	0.76	ND	0.0029
87-68-3	Hexachlorobutadiene	U	0.10	ND	1.10	ND	0.0042

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

METHOD BLANK REPORT

EPA TO-14 Full Scan GC/MS
File: B08040A.D
Client:
Description: METHOD BLANK
Analyst: CC

SDG : LABQC
Laboratory Number: B08040
Date Sampled:
Date Analyzed: 08/04/00
Flux Factor: 0.0038
QC Batch: 080400-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(foot*min)
75-71-8	Freon 12	U	0.10	ND	0.51	ND	0.0019
74-87-3	Chloromethane	U	0.10	ND	0.21	ND	0.0008
76-14-2	Freon 114	U	0.10	ND	0.72	ND	0.0027
75-01-4	Vinyl chloride	U	0.10	ND	0.26	ND	0.0010
74-83-9	Bromomethane	U	0.10	ND	0.40	ND	0.0015
75-00-3	Chloroethane	U	0.10	ND	0.27	ND	0.0010
75-69-4	Trichlorofluoromethane	U	0.10	ND	0.58	ND	0.0022
75-35-4	1,1-Dichloroethene	U	0.10	ND	0.41	ND	0.0016
76-13-1	Freon 113	U	0.10	ND	0.79	ND	0.0030
75-09-2	Dichloromethane	U	0.10	ND	0.36	ND	0.0014
75-34-3	1,1-Dichloroethane	U	0.10	ND	0.42	ND	0.0016
156-59-2	c-1,2-Dichloroethene	U	0.10	ND	0.41	ND	0.0016
67-66-3	Chloroform	U	0.10	ND	0.50	ND	0.0019
71-55-6	1,1,1-Trichloroethane	U	0.10	ND	0.56	ND	0.0021
107-06-2	1,2-Dichloroethane	U	0.10	ND	0.42	ND	0.0016
71-43-2	Benzene	U	0.10	ND	0.33	ND	0.0013
56-23-5	Carbon Tetrachloride	U	0.10	ND	0.65	ND	0.0025
78-87-5	1,2-Dichloropropane	U	0.10	ND	0.48	ND	0.0018
79-01-6	Trichloroethene	U	0.10	ND	0.55	ND	0.0021
10061-01-5	c-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0018
108-88-3	Toluene	U	0.10	ND	0.39	ND	0.0015
10061-02-6	t-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0018
79-00-5	1,1,2-Trichloroethane	U	0.10	ND	0.56	ND	0.0021
106-93-4	1,2-Dibromoethane	U	0.10	ND	0.79	ND	0.0030
127-18-4	Tetrachloroethene	U	0.10	ND	0.70	ND	0.0027
108-90-7	Chlorobenzene	U	0.10	ND	0.48	ND	0.0018
100-41-4	Ethylbenzene	U	0.10	ND	0.45	ND	0.0017
108-38-3	m,p-Xylenes	U	0.10	ND	0.45	ND	0.0017
100-42-5	Styrene	U	0.10	ND	0.44	ND	0.0017
95-47-6	o-Xylene	U	0.10	ND	0.45	ND	0.0017
79-34-5	1,1,2,2-Tetrachloroethane	U	0.10	ND	0.71	ND	0.0027
622-96-8	4-Ethyltoluene	U	0.10	ND	0.51	ND	0.0019
108-67-8	1,3,5-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0019
95-63-6	1,2,4-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0019
541-73-1	1,3-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0024
100-44-7	Benzyl Chloride	U	0.10	ND	0.54	ND	0.0020
106-46-7	1,4-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0024
95-50-1	1,2-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0024
120-82-1	1,2,4-Trichlorobenzene	U	0.10	ND	0.76	ND	0.0029
87-68-3	Hexachlorobutadiene	U	0.10	ND	1.10	ND	0.0042

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

METHOD BLANK REPORT

EPA TO-14 Full Scan GC/MS
File: B08040A.D
Client:
Description: METHOD BLANK
Analyst: CC

SDG : LABQC
Laboratory Number: B08040
Date Sampled:
Date Analyzed: 08/04/00
Flux Factor: 0.0385
QC Batch: 080400-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12	U	0.10	ND	0.51	ND	0.0197
74-87-3	Chloromethane	U	0.10	ND	0.21	ND	0.0082
76-14-2	Freon 114	U	0.10	ND	0.72	ND	0.0278
75-01-4	Vinyl chloride	U	0.10	ND	0.26	ND	0.0102
74-83-9	Bromomethane	U	0.10	ND	0.40	ND	0.0154
75-00-3	Chloroethane	U	0.10	ND	0.27	ND	0.0105
75-69-4	Trichlorofluoromethane	U	0.10	ND	0.58	ND	0.0223
75-35-4	1,1-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
76-13-1	Freon 113	U	0.10	ND	0.79	ND	0.0304
75-09-2	Dichloromethane	U	0.10	ND	0.36	ND	0.0138
75-34-3	1,1-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
156-59-2	c-1,2-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
67-66-3	Chloroform	U	0.10	ND	0.50	ND	0.0193
71-55-6	1,1,1-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
107-06-2	1,2-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
71-43-2	Benzene	U	0.10	ND	0.33	ND	0.0127
56-23-5	Carbon Tetrachloride	U	0.10	ND	0.65	ND	0.0250
78-87-5	1,2-Dichloropropane	U	0.10	ND	0.48	ND	0.0184
79-01-6	Trichloroethene	U	0.10	ND	0.55	ND	0.0213
10061-01-5	c-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
108-88-3	Toluene	U	0.10	ND	0.39	ND	0.0150
10061-02-6	t-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
79-00-5	1,1,2-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
106-93-4	1,2-Dibromoethane	U	0.10	ND	0.79	ND	0.0306
127-18-4	Tetrachloroethene	U	0.10	ND	0.70	ND	0.0270
108-90-7	Chlorobenzene	U	0.10	ND	0.48	ND	0.0184
100-41-4	Ethylbenzene	U	0.10	ND	0.45	ND	0.0172
108-38-3	m,p-Xylenes	U	0.10	ND	0.45	ND	0.0172
100-42-5	Styrene	U	0.10	ND	0.44	ND	0.0169
95-47-6	o-Xylene	U	0.10	ND	0.45	ND	0.0172
79-34-5	1,1,2,2-Tetrachloroethane	U	0.10	ND	0.71	ND	0.0273
622-96-8	4-Ethyltoluene	U	0.10	ND	0.51	ND	0.0195
108-67-8	1,3,5-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
95-63-6	1,2,4-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
541-73-1	1,3-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
100-44-7	Benzyl Chloride	U	0.10	ND	0.54	ND	0.0206
106-46-7	1,4-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
95-50-1	1,2-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
120-82-1	1,2,4-Trichlorobenzene	U	0.10	ND	0.76	ND	0.0294
87-68-3	Hexachlorobutadiene	U	0.10	ND	1.10	ND	0.0424

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

METHOD BLANK REPORT

SDG : LABQC

EPA TO-14 Full Scan GC/MS — Laboratory Number: B08070

File: B08070A.D — Date Sampled:

Client: — Date Analyzed: 08/07/00

Description: METHOD BLANK — Flux Factor: 0.0385

Analyst: CC — QC Batch: 080700-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12	U	0.10	ND	0.51	ND	0.0197
74-87-3	Chloromethane	U	0.10	ND	0.21	ND	0.0082
76-14-2	Freon 114	U	0.10	ND	0.72	ND	0.0278
75-01-4	Vinyl chloride	U	0.10	ND	0.26	ND	0.0102
74-83-9	Bromomethane	U	0.10	ND	0.40	ND	0.0154
75-00-3	Chloroethane	U	0.10	ND	0.27	ND	0.0105
75-69-4	Trichlorofluoromethane	U	0.10	ND	0.58	ND	0.0223
75-35-4	1,1-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
76-13-1	Freon 113	U	0.10	ND	0.79	ND	0.0304
75-09-2	Dichloromethane	U	0.10	ND	0.36	ND	0.0138
75-34-3	1,1-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
156-59-2	c-1,2-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
67-66-3	Chloroform	U	0.10	ND	0.50	ND	0.0193
71-55-6	1,1,1-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
107-06-2	1,2-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
71-43-2	Benzene	U	0.10	ND	0.33	ND	0.0127
56-23-5	Carbon Tetrachloride	U	0.10	ND	0.65	ND	0.0250
78-87-5	1,2-Dichloropropane	U	0.10	ND	0.48	ND	0.0184
79-01-6	Trichloroethene	U	0.10	ND	0.55	ND	0.0213
10061-01-5	c-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
108-88-3	Toluene	U	0.10	ND	0.39	ND	0.0150
10061-02-6	t-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
79-00-5	1,1,2-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
106-93-4	1,2-Dibromoethane	U	0.10	ND	0.79	ND	0.0306
127-18-4	Tetrachloroethene	U	0.10	ND	0.70	ND	0.0270
108-90-7	Chlorobenzene	U	0.10	ND	0.48	ND	0.0184
100-41-4	Ethylbenzene	U	0.10	ND	0.45	ND	0.0172
108-38-3	m,p-Xylenes	U	0.10	ND	0.45	ND	0.0172
100-42-5	Styrene	U	0.10	ND	0.44	ND	0.0169
95-47-6	o-Xylene	U	0.10	ND	0.45	ND	0.0172
79-34-5	1,1,2,2-Tetrachloroethane	U	0.10	ND	0.71	ND	0.0273
622-96-8	4-Ethyltoluene	U	0.10	ND	0.51	ND	0.0195
108-67-8	1,3,5-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
95-63-6	1,2,4-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
541-73-1	1,3-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
100-44-7	Benzyl Chloride	U	0.10	ND	0.54	ND	0.0206
106-46-7	1,4-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
95-50-1	1,2-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
120-82-1	1,2,4-Trichlorobenzene	U	0.10	ND	0.76	ND	0.0294
87-68-3	Hexachlorobutadiene	U	0.10	ND	1.10	ND	0.0424

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

METHOD BLANK REPORT

EPA TO-14 Full Scan GC/MS
File: CC413A.D
Client:
Description: CHECK CAN#413 500ML
Analyst: KK

SDG : LABQC
Laboratory Number: CC413
Date Sampled:
Date Analyzed: 08/08/00
Flux Factor: 0.0385
QC Batch: 080800-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12	U	0.10	ND	0.51	ND	0.0197
74-87-3	Chloromethane	U	0.10	ND	0.21	ND	0.0082
76-14-2	Freon 114	U	0.10	ND	0.72	ND	0.0278
75-01-4	Vinyl chloride	U	0.10	ND	0.26	ND	0.0102
74-83-9	Bromomethane	U	0.10	ND	0.40	ND	0.0154
75-00-3	Chloroethane	U	0.10	ND	0.27	ND	0.0105
75-69-4	Trichlorofluoromethane	U	0.10	ND	0.58	ND	0.0223
75-35-4	1,1-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
76-13-1	Freon 113	U	0.10	ND	0.79	ND	0.0304
75-09-2	Dichloromethane	U	0.10	ND	0.36	ND	0.0138
75-34-3	1,1-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
156-59-2	c-1,2-Dichloroethene	U	0.10	ND	0.41	ND	0.0158
67-66-3	Chloroform	U	0.10	ND	0.50	ND	0.0193
71-55-6	1,1,1-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
107-06-2	1,2-Dichloroethane	U	0.10	ND	0.42	ND	0.0161
71-43-2	Benzene	U	0.10	ND	0.33	ND	0.0127
56-23-5	Carbon Tetrachloride	U	0.10	ND	0.65	ND	0.0250
78-87-5	1,2-Dichloropropane	U	0.10	ND	0.48	ND	0.0184
79-01-6	Trichloroethene	U	0.10	ND	0.55	ND	0.0213
10061-01-5	c-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
108-88-3	Toluene	U	0.10	ND	0.39	ND	0.0150
10061-02-6	t-1,3-Dichloropropene	U	0.10	ND	0.47	ND	0.0180
79-00-5	1,1,2-Trichloroethane	U	0.10	ND	0.56	ND	0.0216
106-93-4	1,2-Dibromoethane	U	0.10	ND	0.79	ND	0.0306
127-18-4	Tetrachloroethene	U	0.10	ND	0.70	ND	0.0270
108-90-7	Chlorobenzene	U	0.10	ND	0.48	ND	0.0184
100-41-4	Ethylbenzene	U	0.10	ND	0.45	ND	0.0172
108-38-3	m,p-Xylenes	U	0.10	ND	0.45	ND	0.0172
100-42-5	Styrene	U	0.10	ND	0.44	ND	0.0169
95-47-6	o-Xylene	U	0.10	ND	0.45	ND	0.0172
79-34-5	1,1,2,2-Tetrachloroethane	U	0.10	ND	0.71	ND	0.0273
622-96-8	4-Ethyltoluene	U	0.10	ND	0.51	ND	0.0195
108-67-8	1,3,5-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
95-63-6	1,2,4-Trimethylbenzene	U	0.10	ND	0.51	ND	0.0195
541-73-1	1,3-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
100-44-7	Benzyl Chloride	U	0.10	ND	0.54	ND	0.0206
106-46-7	1,4-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
95-50-1	1,2-Dichlorobenzene	U	0.10	ND	0.62	ND	0.0239
120-82-1	1,2,4-Trichlorobenzene	U	0.10	ND	0.76	ND	0.0294
87-68-3	Hexachlorobutadiene	U	0.10	ND	1.10	ND	0.0424

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

METHOD BLANK REPORT

SDG: LABQC

EPA TO-14 Full Scan GC/MS — Laboratory Number: B08140

File: B08140A.D — Date Sampled:

Client: — Date Analyzed: 08/14/00

Description: METHOD BLANK — Flux Factor: 0.0385

Analyst: KK\RC — QC Batch: 081400-MS3

CAS #	Compound	Flag	MDL ppbV	Amount ppbV	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Dichlorodifluoromethane	U	0.1	ND	0.5	ND	0.0197
74-87-3	Chloromethane	U	0.1	ND	0.2	ND	0.0082
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	U	0.1	ND	0.7	ND	0.0278
75-01-4	Vinyl chloride	U	0.1	ND	0.3	ND	0.0102
74-83-9	Bromomethane	U	0.1	ND	0.4	ND	0.0154
75-00-3	Chloroethane	U	0.1	ND	0.3	ND	0.0105
75-69-4	Trichlorofluoromethane	U	0.1	ND	0.6	ND	0.0223
75-35-4	1,1-Dichloroethene	U	0.1	ND	0.4	ND	0.0158
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	U	0.1	ND	0.8	ND	0.0304
75-09-2	Methylene chloride	U	0.1	ND	0.4	ND	0.0138
75-34-3	1,1-Dichloroethane	U	0.1	ND	0.4	ND	0.0161
156-59-2	cis-1,2-Dichloroethene	U	0.1	ND	0.4	ND	0.0158
67-66-3	Chloroform	U	0.1	ND	0.5	ND	0.0193
71-55-6	1,1,1-Trichloroethane	U	0.1	ND	0.6	ND	0.0216
107-06-2	1,2-Dichloroethane	U	0.1	ND	0.4	ND	0.0161
71-43-2	Benzene	U	0.1	ND	0.3	ND	0.0127
56-23-5	Carbon tetrachloride	U	0.1	ND	0.7	ND	0.0250
78-87-5	1,2-Dichloropropane	U	0.1	ND	0.5	ND	0.0184
79-01-6	Trichloroethene	U	0.1	ND	0.6	ND	0.0213
10061-01-5	cis-1,3-Dichloropropene	U	0.1	ND	0.5	ND	0.0180
108-88-3	Toluene	U	0.1	ND	0.4	ND	0.0150
10061-02-6	trans-1,3-Dichloropropene	U	0.1	ND	0.5	ND	0.0180
79-00-5	1,1,2-Trichloroethane	U	0.1	ND	0.6	ND	0.0216
106-93-4	1,2-Dibromoethane	U	0.1	ND	0.8	ND	0.0306
127-18-4	Tetrachloroethene	U	0.1	ND	0.7	ND	0.0270
108-90-7	Chlorobenzene	U	0.1	ND	0.5	ND	0.0184
100-41-4	Ethylbenzene	U	0.1	ND	0.4	ND	0.0172
108-38-3	m & p-Xylene	U	0.1	ND	0.4	ND	0.0172
100-42-5	Styrene	U	0.1	ND	0.4	ND	0.0169
95-47-6	o-Xylene	U	0.1	ND	0.4	ND	0.0172
79-34-5	1,1,2,2-Tetrachloroethane	U	0.1	ND	0.7	ND	0.0273
622-96-8	4-Ethyltoluene	U	0.1	ND	0.5	ND	0.0195
108-67-8	1,3,5-Trimethylbenzene	U	0.1	ND	0.5	ND	0.0195
95-63-6	1,2,4-Trimethylbenzene	U	0.1	ND	0.5	ND	0.0195
541-73-1	1,3-Dichlorobenzene	U	0.1	ND	0.6	ND	0.0239
100-44-7	Benzyl chloride	U	0.1	ND	0.5	ND	0.0206
106-46-7	1,4-Dichlorobenzene	U	0.1	ND	0.6	ND	0.0239
95-50-1	1,2-Dichlorobenzene	U	0.1	ND	0.6	ND	0.0239
120-82-1	1,2,4-Trichlorobenzene	U	0.1	ND	0.8	ND	0.0294
87-68-3	Hexachlorobutadiene	U	0.1	ND	1.1	ND	0.0424

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

METHOD BLANK REPORT

SDG: LABQC

EPA TO-14 Full Scan GC/MS Laboratory Number: B08140

File: B08140A.D Date Sampled:

Client: Date Analyzed: 08/14/00

Description: METHOD BLANK Flux Factor: 0.0038

Analyst: KK\RC QC Batch: 081400-MS3

CAS #	Compound	Flag	MDL ppbV	Amount ppbV	MDL ug/m3*	Amount ug/m3*	Flux ug/(foot*min)
75-71-8	Dichlorodifluoromethane	U	0.1	ND	0.5	ND	0.0019
74-87-3	Chloromethane	U	0.1	ND	0.2	ND	0.0008
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	U	0.1	ND	0.7	ND	0.0027
75-01-4	Vinyl chloride	U	0.1	ND	0.3	ND	0.0010
74-83-9	Bromomethane	U	0.1	ND	0.4	ND	0.0015
75-00-3	Chloroethane	U	0.1	ND	0.3	ND	0.0010
75-69-4	Trichlorofluoromethane	U	0.1	ND	0.6	ND	0.0022
75-35-4	1,1-Dichloroethene	U	0.1	ND	0.4	ND	0.0016
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	U	0.1	ND	0.8	ND	0.0030
75-09-2	Methylene chloride	U	0.1	ND	0.4	ND	0.0014
75-34-3	1,1-Dichloroethane	U	0.1	ND	0.4	ND	0.0016
156-59-2	cis-1,2-Dichloroethene	U	0.1	ND	0.4	ND	0.0016
67-66-3	Chloroform	U	0.1	ND	0.5	ND	0.0019
71-55-6	1,1,1-Trichloroethane	U	0.1	ND	0.6	ND	0.0021
107-06-2	1,2-Dichloroethane	U	0.1	ND	0.4	ND	0.0016
71-43-2	Benzene	U	0.1	ND	0.3	ND	0.0013
56-23-5	Carbon tetrachloride	U	0.1	ND	0.7	ND	0.0025
78-87-5	1,2-Dichloropropane	U	0.1	ND	0.5	ND	0.0018
79-01-6	Trichloroethene	U	0.1	ND	0.6	ND	0.0021
10061-01-5	cis-1,3-Dichloropropene	U	0.1	ND	0.5	ND	0.0018
108-88-3	Toluene	U	0.1	ND	0.4	ND	0.0015
10061-02-6	trans-1,3-Dichloropropene	U	0.1	ND	0.5	ND	0.0018
79-00-5	1,1,2-Trichloroethane	U	0.1	ND	0.6	ND	0.0021
106-93-4	1,2-Dibromoethane	U	0.1	ND	0.8	ND	0.0030
127-18-4	Tetrachloroethene	U	0.1	ND	0.7	ND	0.0027
108-90-7	Chlorobenzene	U	0.1	ND	0.5	ND	0.0018
100-41-4	Ethylbenzene	U	0.1	ND	0.4	ND	0.0017
108-38-3	m & p-Xylene	U	0.1	ND	0.4	ND	0.0017
100-42-5	Styrene	U	0.1	ND	0.4	ND	0.0017
95-47-6	o-Xylene	U	0.1	ND	0.4	ND	0.0017
79-34-5	1,1,2,2-Tetrachloroethane	U	0.1	ND	0.7	ND	0.0027
622-96-8	4-Ethyltoluene	U	0.1	ND	0.5	ND	0.0019
108-67-8	1,3,5-Trimethylbenzene	U	0.1	ND	0.5	ND	0.0019
95-63-6	1,2,4-Trimethylbenzene	U	0.1	ND	0.5	ND	0.0019
541-73-1	1,3-Dichlorobenzene	U	0.1	ND	0.6	ND	0.0024
100-44-7	Benzyl chloride	U	0.1	ND	0.5	ND	0.0020
106-46-7	1,4-Dichlorobenzene	U	0.1	ND	0.6	ND	0.0024
95-50-1	1,2-Dichlorobenzene	U	0.1	ND	0.6	ND	0.0024
120-82-1	1,2,4-Trichlorobenzene	U	0.1	ND	0.8	ND	0.0029
87-68-3	Hexachlorobutadiene	U	0.1	ND	1.1	ND	0.0042

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

LABORATORY CONTROL AND DUPLICATE CONTROL SPIKE REPORT

SDG: LABQC
Analytical Method: **TO-14** Laboratory Number: QA08020

Spike: QC08020 Spike Dup. QC08020DUP
Client:
Client ID: S-062200-3 Date Analyzed: 08/02/00
Sam_Type: LCS LCD Dilution Factor: 1.0
QC Batch: 080200-MS2 Method: Full Scan GC/MS

Compound	Theoretical Conc. ppbv	Spike ppbv	Spike Dup. ppbv	% Rec. Spike	% Rec. Spike Dup.	%RPD	% Rec. Limits
1,1-dichloroethene	0.69	0.66	0.61	96	89	8	70-140
benzene	0.80	0.76	0.75	95	93	2	70-130
trichloroethene	0.41	0.36	0.33	87	80	9	70-130
toluene	0.76	0.57	0.57	75	74	1	70-130
chlorobenzene	0.67	0.52	0.49	77	74	5	70-130

* %RPD QC Limits are </= 30%.

ENVIRONMENTAL
Analytical Service, Inc.

LABORATORY CONTROL AND DUPLICATE CONTROL SPIKE REPORT

SDG: LABQC

Analytical Method: **TO-14** Laboratory Number: QA08030

Spike: QC08030 Spike Dup. QC08030DUP
Client:
Client ID: S-062200-1 Date Analyzed: 08/03/00
Sam_Type: LCS LCD Dilution Factor: 1.0
QC Batch: 080300-MS1 Method: Full Scan GC/MS

Compound	Theoretical Conc. ppbv	Spike ppbv	Spike Dup. ppbv	% Rec. Spike	% Rec. Spike Dup.	%RPD	% Rec. Limits
1,1-dichloroethene	0.62	0.45	0.53	73	85	15	70-140
benzene	0.91	0.73	0.68	80	75	7	70-130
trichloroethene	0.78	0.67	0.64	85	81	5	70-130
toluene	0.87	0.75	0.65	86	75	13	70-130
chlorobenzene	0.66	0.60	0.50	92	76	19	70-130

* %RPD QC Limits are </= 30%.

ENVIRONMENTAL
Analytical Service, Inc.

LABORATORY CONTROL AND DUPLICATE CONTROL SPIKE REPORT

SDG: LABQC

Analytical Method: TO-14 Laboratory Number: QA08030

Spike: QC08030 Spike Dup. QC08030DUP
Client:
Client ID: S-062200-3 Date Analyzed: 08/03/00
Sam_Type: LCS LCD Dilution Factor: 1.0
QC Batch: 08030-MS2 Method: Full Scan GC/MS

Compound	Theoretical Conc. ppbv	Spike ppbv	Spike Dup. ppbv	% Rec. Spike	% Rec. Spike Dup.	%RPD	% Rec. Limits
1,1-dichloroethene	0.69	0.85	0.66	123	95	25	70-140
benzene	0.80	0.87	0.70	108	87	22	70-130
trichloroethene	0.41	0.40	0.32	96	77	22	70-130
toluene	0.76	0.66	0.67	86	88	2	70-130
chlorobenzene	0.67	0.54	0.49	81	73	9	70-130

* %RPD QC Limits are </= 30%.

ENVIRONMENTAL
Analytical Service, Inc.

LABORATORY CONTROL AND DUPLICATE CONTROL SPIKE REPORT

SDG: LABQC

Analytical Method: TO-14 Laboratory Number: QA08040

Spike: QC08040 Spike Dup. QC08040DUP
Client:
Client ID: S-062200-1 Date Analyzed: 08/04/00
Sam_Type: LCS LCD Dilution Factor: 1.0
QC Batch: 080400-MS1 Method: Full Scan GC/MS

Compound	Theoretical Conc. ppbv	Spike ppbv	Spike Dup. ppbv	% Rec. Spike	% Rec. Spike Dup.	%RPD	% Rec. Limits
1,1-dichloroethene	0.62	0.50	0.58	81	94	15	70-140
benzene	0.91	0.70	0.73	77	80	4	70-130
trichloroethene	0.78	0.67	0.61	85	78	8	70-130
toluene	0.87	0.72	0.68	82	78	5	70-130
chlorobenzene	0.66	0.58	0.54	89	82	8	70-130

* %RPD QC Limits are </= 30%.

LABORATORY CONTROL AND DUPLICATE CONTROL SPIKE REPORT

SDG: LABQC

Analytical Method: **TO-14** Laboratory Number: QA08070

Spike: QC08070 Spike Dup. QC08070DUP
Client:
Client ID: S-062200-1 Date Analyzed: 08/07/00
Sam_Type: LCS LCD Dilution Factor: 1.0
QC Batch: 080700-MS1 Method: Full Scan GC/MS

Compound	Theoretical Conc. ppbv	Spike ppbv	Spike Dup. ppbv	% Rec. Spike	% Rec. Spike Dup.	%RPD	% Rec. Limits
1,1-dichloroethene	0.62	0.51	0.49	83	79	4	70-140
benzene	0.91	0.74	0.67	81	73	10	70-130
trichloroethene	0.78	0.71	0.65	91	83	9	70-130
toluene	0.87	0.77	0.72	89	82	7	70-130
chlorobenzene	0.66	0.62	0.61	94	92	2	70-130

* %RPD QC Limits are </= 30%.

LABORATORY CONTROL AND DUPLICATE CONTROL SPIKE REPORT

Analytical Method: TO-14 SDG: LABQC
Laboratory Number: QA08080

Spike: QC08080 Spike Dup. QC08080DUP
Client:
Client ID: S-062200-3 Date Analyzed: 08/08/00
Sam_Type: LCS LCD Dilution Factor: 1.0
QC Batch: 080800-MS2 Method: Full Scan GC/MS

Compound	Theoretical Conc. ppbv	Spike ppbv	Spike Dup. ppbv	% Rec. Spike	% Rec. Spike Dup.	%RPD	% Rec. Limits
1,1-dichloroethene	0.69	0.77	0.67	111	98	13	70-140
benzene	0.80	0.74	0.72	93	90	3	70-130
trichloroethene	0.41	0.49	0.48	119	115	3	70-130
toluene	0.76	0.65	0.72	86	94	9	70-130
chlorobenzene	0.67	0.58	0.55	87	82	5	70-130

* %RPD QC Limits are </= 30%.

ENVIRONMENTAL
Analytical Service, Inc.

LABORATORY CONTROL AND DUPLICATE CONTROL SPIKE REPORT

SDG: LABQC

Analytical Method: TO-14 Laboratory Number: QA08140

Spike: QC08140 Spike Dup. QC08140DUP
Client:
Client ID: S-062200-1 Date Analyzed: 08/14/00
Sam_Type: LCS LCD Dilution Factor: 1.0
QC Batch: 081400-MS3 Method: Full Scan GC/MS

Compound	Theoretical Conc. ppbv	Spike ppbv	Spike Dup. ppbv	% Rec. Spike	% Rec. Spike Dup.	%RPD	% Rec. Limits
1,1-dichloroethene	0.62	0.84	0.68	136	110	21	70-140
benzene	0.91	0.72	0.63	79	69	13	70-130
trichloroethene	0.78	0.81	0.69	103	88	16	70-130
toluene	0.87	0.62	0.61	71	70	2	70-130
chlorobenzene	0.66	0.59	0.61	90	93	3	70-130

* %RPD QC Limits are </= 30%.

V. ANALYTICAL RESULTS

SDG Number: 200336
Client: C.E. Schmidt

The following pages contain the certified reports for the analytical methods and the compounds requested. The reports are in order of analytical method then EAS ID number. A brief description of the units that appear on the reports is given below:

ppbV, ppmV, Percent

Parts per billion by volume (also known as mole ratio) and other related units. This is the primary reporting unit for all volatile organic compound analysis except the hydrocarbon speciation and total hydrocarbons. This unit is independent of temperature and pressure.

$$\text{ppbV} = \frac{\text{nanomoles of compound}}{\text{moles of air}}$$

ug/m3, mg/m3

Micrograms of compound per cubic meter of air and other related units. This is the primary reporting unit for semi volatile organic compounds. It is not a primary reporting unit for volatile organic compounds because it is temperature and pressure dependent, so the result will vary depending on the conditions when the sample was collected. EAS provides the units on its analytical reports as a convenience to the client, but they should be used with caution. The following equation can be used to convert from ppbV to ug/m3.

$$\text{ug/m3} = \frac{\text{ppbV x MW compound}}{23.68}$$

23.68 is the molar volume of a gas at 60 F and 1 atm pressure

ppbC, ppmC

Parts per billion by volume as carbon (methane) and other related units. This unit is the primary reporting unit for hydrocarbon analysis, even if it does not appear on the report. This unit is used because the flame ionization detector response is proportional to the number of carbons in the compound, so an accurate concentration can be reported even if the identification of the compound is not known.

$$\text{ppbC} = \text{ppbV x number of carbons in compound}$$

ENVIRONMENTAL
Analytical Service, Inc.

ANALYTICAL REPORT

CH4 by GC/FID

Client:	C.E. Schmidt	Date Analyzed:	8/3/00
		Analyst:	RC
		Flux Factor:	0.0038

EAS ID Number	Client ID	MDL ppmV	Spk Amount	Result ppmV	% Rec.	% RPD	QC Limit
Lab Blank		0.5	----	ND	----	----	
Laboratory Spike		0.5	1060.0	1111.9	104.9	----	Rec = 80 -120
Laboratory Spike Duplicate		0.5	1060.0	1083.3	102.2	2.60	RPD = <30

		MDL ppmV	MDL ug/m3	Result ppmV	Result ug/m3	Flux ug/(foot*min)
200336-3	A-003	0.5	338.68	0.7	469	1.782
200336-5	A-005	0.5	338.68	0.6	397	1.509
200336-7	A-007	0.5	338.68	ND	ND	1.287
200336-8	A-008	0.5	338.68	ND	ND	1.287
200336-9	A-009	0.5	338.68	0.8	547	2.077
200336-10	A-010	0.5	338.68	3.3	2229	8.470
200336-12	A-012	0.5	338.68	0.6	435	1.653
200336-14	A-014	0.5	338.68	0.9	607	2.306

ENVIRONMENTAL
Analytical Service, Inc.

ANALYTICAL REPORT

CH4 by GC/FID

Client:	C.E. Schmidt	Date Analyzed:	8/3/00
		Analyst:	RC
		Flux Factor:	0.0385

EAS ID Number	Client ID	MDL ppmV	Spk Amount	Result ppmV	% Rec.	% RPD	QC Limit
Lab Blank		0.5	----	ND	----	----	
Laboratory Spike		0.5	1060.0	1111.9	104.9	----	Rec = 80 -120
Laboratory Spike Duplicate		0.5	1060.0	1083.3	102.2	2.60	RPD = <30
		MDL ppmV	MDL ug/m3	Result ppmV	Result ug/m3	Flux ug/(m2*min)	
200336-1	A-001	0.5	338.68	ND	ND	13.039	
200336-2	A-002	0.5	338.68	0.8	546	21.002	
200336-3	A-003	0.5	338.68	0.7	469	18.052	
200336-4	A-004	0.5	338.68	ND	ND	13.039	
200336-5	A-005	0.5	338.68	0.6	397	15.286	
200336-6	A-006	0.5	338.68	ND	ND	13.039	
200336-7	A-007	0.5	338.68	ND	ND	13.039	
200336-8	A-008	0.5	338.68	ND	ND	13.039	
200336-9	A-009	0.5	338.68	0.8	547	21.045	
200336-10	A-010	0.5	338.68	3.3	2229	85.818	
200336-11	A-011	0.5	338.68	0.9	631	24.290	
200336-12	A-012	0.5	338.68	0.6	435	16.752	
200336-13	A-013	0.5	338.68	0.9	590	22.705	
200336-14	A-014	0.5	338.68	0.9	607	23.365	
200336-15	A-015	0.5	338.68	ND	ND	13.039	
200336-16	A-016	0.5	338.68	ND	ND	13.039	
200336-17	A-017	0.5	338.68	ND	ND	13.039	
200336-18	A-018	0.5	338.68	0.5	353	13.583	
200336-19	A-019	0.5	338.68	0.8	569	21.922	
200336-20	A-020	0.5	338.68	203.8	138073	5315.792	
200336-21	A-021	0.5	338.68	13.6	9235	355.541	
200336-22	A-022	0.5	338.68	13.1	8884	342.019	

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 01

File: 0033601A.D — Date Sampled: 07/24/00
Client: C.E. SCHMIDT — Date Analyzed: 08/02/00
Description: A-001 CAN#668 500ML — Flux Factor: 0.0385
Analyst: CC/KK/MF — QC Batch: 080200-ms2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux (ug/m2*min)
75-71-8	Freon 12	U	0.12	ND	0.62	ND	0.0240
74-87-3	Chloromethane	U	0.12	ND	0.26	ND	0.0100
76-14-2	Freon 114	U	0.12	ND	0.88	ND	0.0339
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0124
74-83-9	Bromomethane	U	0.12	ND	0.49	ND	0.0188
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0128
75-69-4	Trichlorofluoromethane	U	0.12	ND	0.71	ND	0.0272
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0371
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0168
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0236
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
71-43-2	Benzene	U	0.12	ND	0.40	ND	0.0155
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0305
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0224
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0260
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
108-88-3	Toluene **		0.25	3.14	0.78	12.22	0.4707
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.97	ND	0.0373
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0329
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0224
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0210
108-38-3	m,p-Xylenes	U	0.12	ND	0.55	ND	0.0210
100-42-5	Styrene		0.12	0.14	0.54	0.62	0.0238
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0210
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0333
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0238
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0252
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.93	ND	0.0359
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.34	ND	0.0518

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

ANALYTICAL REPORT

EPA TO-14 Full Scan GC/MS

SDG : 200336
Laboratory Number: 02

File: 0033602A.D
Client: C.E. SCHMIDT
Description: A-002 CAN#703 500ML
Analyst: CC/KK/MF

Date Sampled: 07/24/00
Date Analyzed: 08/02/00
Flux Factor: 0.0385
QC Batch: 080200-ms2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux (ug/m2*min)
75-71-8	Freon 12	U	0.12	ND	0.63	ND	0.0242
74-87-3	Chloromethane		0.12	1.51	0.26	3.22	0.1240
76-14-2	Freon 114	U	0.12	ND	0.89	ND	0.0342
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0125
74-83-9	Bromomethane		0.12	3.30	0.49	13.23	0.5093
75-00-3	Chloroethane	U	0.12	ND	0.34	ND	0.0129
75-69-4	Trichlorofluoromethane	U	0.12	ND	0.71	ND	0.0274
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0194
76-13-1	Freon 113	U	0.12	ND	0.97	ND	0.0374
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0170
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0198
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0194
67-66-3	Chloroform	U	0.12	ND	0.62	ND	0.0238
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0266
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0198
71-43-2	Benzene		0.12	0.15	0.41	0.49	0.0190
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.80	ND	0.0308
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.59	ND	0.0226
79-01-6	Trichloroethene	U	0.12	ND	0.68	ND	0.0262
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0222
108-88-3	Toluene **		0.25	11.99	0.78	46.62	1.7947
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0222
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0266
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.98	ND	0.0376
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0332
108-90-7	Chlorobenzene	U	0.12	ND	0.59	ND	0.0226
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0212
108-38-3	m,p-Xylenes		0.12	0.24	0.55	1.10	0.0422
100-42-5	Styrene	U	0.12	ND	0.54	ND	0.0208
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0212
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0336
622-96-8	4-Ethyltoluene		0.12	0.16	0.62	0.79	0.0305
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0240
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0240
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
100-44-7	Benzyl Chloride		0.12	0.19	0.66	1.04	0.0400
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.94	ND	0.0362
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.36	ND	0.0522

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 03

File: 0033603A.D — Date Sampled: 07/24/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-003 CAN#654 500ML — Flux Factor: 0.0385

Analyst: CC/KK/MF — QC Batch: 080300-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux (ug/m2*min)
75-71-8	Freon 12	U	0.12	ND	0.62	ND	0.0240
74-87-3	Chloromethane		0.12	0.75	0.26	1.59	0.0614
76-14-2	Freon 114	U	0.12	ND	0.88	ND	0.0339
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0124
74-83-9	Bromomethane		0.12	0.60	0.49	2.42	0.0933
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0128
75-69-4	Trichlorofluoromethane		0.12	0.15	0.71	0.86	0.0332
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0371
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0168
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0236
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
71-43-2	Benzene		0.12	0.14	0.40	0.47	0.0179
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0305
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0224
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0260
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
108-88-3	Toluene **		0.25	41.23	0.78	160.35	6.1733
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.97	ND	0.0373
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0329
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0224
100-41-4	Ethylbenzene		0.12	0.19	0.55	0.85	0.0329
108-38-3	m,p-Xylenes		0.12	0.40	0.55	1.79	0.0690
100-42-5	Styrene **	U	0.20	ND	0.88	ND	0.0338
95-47-6	o-Xylene		0.12	0.12	0.55	0.55	0.0211
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0333
622-96-8	4-Ethyltoluene		0.12	0.17	0.62	0.84	0.0324
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0252
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.93	ND	0.0359
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.34	ND	0.0518

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 03

File: 0033603A.D — Date Sampled: 07/24/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-003 CAN#654 500ML — Flux Factor: 0.0038

Analyst: CC/KK/MF — QC Batch: 080300-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux (ug/foot*min)
75-71-8	Freon 12	U	0.12	ND	0.62	ND	0.0024
74-87-3	Chloromethane		0.12	0.75	0.26	1.59	0.0061
76-14-2	Freon 114	U	0.12	ND	0.88	ND	0.0033
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0012
74-83-9	Bromomethane		0.12	0.60	0.49	2.42	0.0092
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0013
75-69-4	Trichlorofluoromethane		0.12	0.15	0.71	0.86	0.0033
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0037
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0017
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0019
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0023
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0026
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0019
71-43-2	Benzene		0.12	0.14	0.40	0.47	0.0018
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0030
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0022
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0026
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0022
108-88-3	Toluene **		0.25	41.23	0.78	160.35	0.6093
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0022
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0026
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.97	ND	0.0037
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0032
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0022
100-41-4	Ethylbenzene		0.12	0.19	0.55	0.85	0.0032
108-38-3	m,p-Xylenes		0.12	0.40	0.55	1.79	0.0068
100-42-5	Styrene **	U	0.20	ND	0.88	ND	0.0033
95-47-6	o-Xylene		0.12	0.12	0.55	0.55	0.0021
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0033
622-96-8	4-Ethyltoluene		0.12	0.17	0.62	0.84	0.0032
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0023
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0023
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0025
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.93	ND	0.0035
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.34	ND	0.0051

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 04

File: 0033604A.D — Date Sampled: 07/24/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-004 CAN#641 500ML — Flux Factor: 0.0385

Analyst: CC/KK/MF — QC Batch: 080300-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux (ug/m2*min)
75-71-8	Freon 12		0.12	0.16	0.63	0.79	0.0306
74-87-3	Chloromethane		0.12	1.36	0.26	2.91	0.1119
76-14-2	Freon 114	U	0.12	ND	0.90	ND	0.0345
75-01-4	Vinyl chloride	U	0.12	ND	0.33	ND	0.0126
74-83-9	Bromomethane		0.12	3.77	0.50	15.12	0.5823
75-00-3	Chloroethane	U	0.12	ND	0.34	ND	0.0130
75-69-4	Trichlorofluoromethane	U	0.12	ND	0.72	ND	0.0276
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.51	ND	0.0195
76-13-1	Freon 113	U	0.12	ND	0.98	ND	0.0377
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0171
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.52	ND	0.0200
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.51	ND	0.0195
67-66-3	Chloroform	U	0.12	ND	0.62	ND	0.0240
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.70	ND	0.0268
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.52	ND	0.0200
71-43-2	Benzene		0.12	0.17	0.41	0.55	0.0212
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.81	ND	0.0310
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.59	ND	0.0228
79-01-6	Trichloroethene	U	0.12	ND	0.69	ND	0.0264
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0224
108-88-3	Toluene **		0.25	30.54	0.78	118.79	4.5735
10061-02-6	t-1,3-Dichloropropene		0.12	0.27	0.58	1.25	0.0481
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.70	ND	0.0268
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.98	ND	0.0379
127-18-4	Tetrachloroethene	U	0.12	ND	0.87	ND	0.0335
108-90-7	Chlorobenzene	U	0.12	ND	0.59	ND	0.0228
100-41-4	Ethylbenzene		0.12	0.13	0.56	0.56	0.0216
108-38-3	m,p-Xylenes		0.12	0.25	0.56	1.12	0.0429
100-42-5	Styrene **	U	0.20	ND	0.88	ND	0.0338
95-47-6	o-Xylene	U	0.12	ND	0.56	ND	0.0214
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.88	ND	0.0339
622-96-8	4-Ethyltoluene	U	0.12	ND	0.63	ND	0.0242
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.63	ND	0.0242
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.63	ND	0.0242
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.77	ND	0.0296
100-44-7	Benzyl Chloride		0.12	0.18	0.67	0.99	0.0381
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.77	ND	0.0296
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.77	ND	0.0296
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.95	ND	0.0365
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.37	ND	0.0526

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 05

File: 0033605A.D — Date Sampled: 07/24/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-005 CAN#643 500ML — Flux Factor: 0.0385

Analyst: CC/KK/MF — QC Batch: 080300-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux (ug/m2*min)
75-71-8	Freon 12	U	0.12	ND	0.62	ND	0.0238
74-87-3	Chloromethane		0.12	3.11	0.26	6.63	0.2551
76-14-2	Freon 114	U	0.12	ND	0.87	ND	0.0336
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0123
74-83-9	Bromomethane		0.12	3.54	0.48	14.17	0.5455
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0127
75-69-4	Trichlorofluoromethane		0.12	0.13	0.70	0.75	0.0289
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0191
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0368
75-09-2	Dichloromethane	U	0.12	ND	0.43	ND	0.0167
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0195
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0191
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0234
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.68	ND	0.0262
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0195
71-43-2	Benzene		0.12	0.19	0.40	0.63	0.0241
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0303
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0222
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0258
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0218
108-88-3	Toluene **		0.25	15.95	0.78	62.04	2.3887
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0218
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.68	ND	0.0262
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.96	ND	0.0370
127-18-4	Tetrachloroethene	U	0.12	ND	0.85	ND	0.0327
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0222
100-41-4	Ethylbenzene	U	0.12	ND	0.54	ND	0.0209
108-38-3	m,p-Xylenes		0.12	0.26	0.54	1.15	0.0441
100-42-5	Styrene **	U	0.20	ND	0.88	ND	0.0338
95-47-6	o-Xylene	U	0.12	ND	0.54	ND	0.0209
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.86	ND	0.0331
622-96-8	4-Ethyltoluene	U	0.12	ND	0.61	ND	0.0236
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0236
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0236
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0250
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.92	ND	0.0356
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.33	ND	0.0513

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 05

File: 0033605A.D — Date Sampled: 07/24/00
Client: C.E. SCHMIDT — Date Analyzed: 08/03/00
Description: A-005 CAN#643 500ML — Flux Factor: 0.0038
Analyst: CC/KK/MF — QC Batch: 080300-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux (ug/foot*min)
75-71-8	Freon 12	U	0.12	ND	0.62	ND	0.0023
74-87-3	Chloromethane		0.12	3.11	0.26	6.63	0.0252
76-14-2	Freon 114	U	0.12	ND	0.87	ND	0.0033
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0012
74-83-9	Bromomethane		0.12	3.54	0.48	14.17	0.0538
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0013
75-69-4	Trichlorofluoromethane		0.12	0.13	0.70	0.75	0.0028
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0036
75-09-2	Dichloromethane	U	0.12	ND	0.43	ND	0.0016
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0019
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0023
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.68	ND	0.0026
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0019
71-43-2	Benzene		0.12	0.19	0.40	0.63	0.0024
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0030
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0022
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0025
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0022
108-88-3	Toluene **		0.25	15.95	0.78	62.04	0.2358
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0022
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.68	ND	0.0026
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.96	ND	0.0037
127-18-4	Tetrachloroethene	U	0.12	ND	0.85	ND	0.0032
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0022
100-41-4	Ethylbenzene	U	0.12	ND	0.54	ND	0.0021
108-38-3	m,p-Xylenes		0.12	0.26	0.54	1.15	0.0044
100-42-5	Styrene **	U	0.20	ND	0.88	ND	0.0033
95-47-6	o-Xylene	U	0.12	ND	0.54	ND	0.0021
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.86	ND	0.0033
622-96-8	4-Ethyltoluene	U	0.12	ND	0.61	ND	0.0023
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0023
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0023
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0029
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0025
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0029
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0029
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.92	ND	0.0035
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.33	ND	0.0051

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

ENVIRONMENTAL
Analytical Service, Inc.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 06

File: 0033606A.D — Date Sampled: 07/25/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-006 CAN#818 500ML — Flux Factor: 0.0385

Analyst: CC/KK/MF — QC Batch: 080300-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux (ug/m2*min)
75-71-8	Freon 12	U	0.12	ND	0.63	ND	0.0242
74-87-3	Chloromethane		0.12	0.41	0.26	0.88	0.0340
76-14-2	Freon 114	U	0.12	ND	0.89	ND	0.0342
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0125
74-83-9	Bromomethane		0.12	0.56	0.49	2.25	0.0865
75-00-3	Chloroethane	U	0.12	ND	0.34	ND	0.0129
75-69-4	Trichlorofluoromethane	U	0.12	ND	0.71	ND	0.0274
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0194
76-13-1	Freon 113	U	0.12	ND	0.97	ND	0.0374
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0170
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0198
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0194
67-66-3	Chloroform	U	0.12	ND	0.62	ND	0.0238
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0266
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0198
71-43-2	Benzene	U	0.12	ND	0.41	ND	0.0156
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.80	ND	0.0308
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.59	ND	0.0226
79-01-6	Trichloroethene	U	0.12	ND	0.68	ND	0.0262
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0222
108-88-3	Toluene **		0.25	0.99	0.78	3.86	0.1484
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0222
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0266
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.98	ND	0.0376
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0332
108-90-7	Chlorobenzene	U	0.12	ND	0.59	ND	0.0226
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0212
108-38-3	m,p-Xylenes	U	0.12	ND	0.55	ND	0.0212
100-42-5	Styrene **	U	0.20	ND	0.88	ND	0.0338
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0212
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0336
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0240
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0240
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0240
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
100-44-7	Benzyl Chloride	U	0.12	ND	0.66	ND	0.0254
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.94	ND	0.0362
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.36	ND	0.0522

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 07

File: 0033607A.D — Date Sampled: 07/25/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-007 CAN#731 500ML — Flux Factor: 0.0385

Analyst: CC/KK/MF — QC Batch: 080300-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux (ug/m2*min)
75-71-8	Freon 12		0.12	0.17	0.63	0.89	0.0342
74-87-3	Chloromethane		0.12	3.96	0.26	8.45	0.3255
76-14-2	Freon 114	U	0.12	ND	0.89	ND	0.0342
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0125
74-83-9	Bromomethane		0.12	0.32	0.49	1.27	0.0487
75-00-3	Chloroethane		0.12	0.74	0.34	2.01	0.0775
75-69-4	Trichlorofluoromethane	U	0.12	ND	0.71	ND	0.0274
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0194
76-13-1	Freon 113	U	0.12	ND	0.97	ND	0.0374
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0170
75-34-3	1,1-Dichloroethane		0.12	0.15	0.51	0.62	0.0237
156-59-2	c-1,2-Dichloroethene		0.12	0.18	0.50	0.73	0.0281
67-66-3	Chloroform	U	0.12	ND	0.62	ND	0.0238
71-55-6	1,1,1-Trichloroethane		0.12	0.21	0.69	1.20	0.0463
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0198
71-43-2	Benzene	U	0.12	ND	0.41	ND	0.0156
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.80	ND	0.0308
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.59	ND	0.0226
79-01-6	Trichloroethene	U	0.12	ND	0.68	ND	0.0262
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0222
108-88-3	Toluene **		0.25	1.88	0.78	7.33	0.2821
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0222
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0266
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.98	ND	0.0376
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0332
108-90-7	Chlorobenzene	U	0.12	ND	0.59	ND	0.0226
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0212
108-38-3	m,p-Xylenes	U	0.12	ND	0.55	ND	0.0212
100-42-5	Styrene **		0.20	0.23	0.88	1.01	0.0389
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0212
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0336
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0240
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0240
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0240
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
100-44-7	Benzyl Chloride	U	0.12	ND	0.66	ND	0.0254
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.94	ND	0.0362
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.36	ND	0.0522

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 07

File: 0033607A.D — Date Sampled: 07/25/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-007 CAN#731 500ML — Flux Factor: 0.0038

Analyst: CC/KK/MF — QC Batch: 080300-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux (ug/foot*min)
75-71-8	Freon 12		0.12	0.17	0.63	0.89	0.0034
74-87-3	Chloromethane		0.12	3.96	0.26	8.45	0.0321
76-14-2	Freon 114	U	0.12	ND	0.89	ND	0.0034
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0012
74-83-9	Bromomethane		0.12	0.32	0.49	1.27	0.0048
75-00-3	Chloroethane		0.12	0.74	0.34	2.01	0.0077
75-69-4	Trichlorofluoromethane	U	0.12	ND	0.71	ND	0.0027
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
76-13-1	Freon 113	U	0.12	ND	0.97	ND	0.0037
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0017
75-34-3	1,1-Dichloroethane		0.12	0.15	0.51	0.62	0.0023
156-59-2	c-1,2-Dichloroethene		0.12	0.18	0.50	0.73	0.0028
67-66-3	Chloroform	U	0.12	ND	0.62	ND	0.0023
71-55-6	1,1,1-Trichloroethane		0.12	0.21	0.69	1.20	0.0046
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0020
71-43-2	Benzene	U	0.12	ND	0.41	ND	0.0015
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.80	ND	0.0030
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.59	ND	0.0022
79-01-6	Trichloroethene	U	0.12	ND	0.68	ND	0.0026
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0022
108-88-3	Toluene **		0.25	1.88	0.78	7.33	0.0278
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0022
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0026
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.98	ND	0.0037
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0033
108-90-7	Chlorobenzene	U	0.12	ND	0.59	ND	0.0022
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0021
108-38-3	m,p-Xylenes	U	0.12	ND	0.55	ND	0.0021
100-42-5	Styrene **		0.20	0.23	0.88	1.01	0.0038
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0021
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0033
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0024
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0024
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0024
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
100-44-7	Benzyl Chloride	U	0.12	ND	0.66	ND	0.0025
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.94	ND	0.0036
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.36	ND	0.0052

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.
** compounds are reported with PQLs instead of MDLs.

ANALYTICAL REPORT

SDG: 200336

EPA TO-14 Full Scan GC/MS Laboratory Number: 08

File: 0033608A.D Date Sampled: 07/25/00
Client: C.E. SCHMIDT Date Analyzed: 08/14/00
Description: A-008 CAN#695 500ML Flux Factor: 0.0385
Analyst: KK\RC QC Batch: 081400-MS3

CAS #	Compound	Flag	MDL ppbV	Amount ppbV	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Dichlorodifluoromethane	U	0.1	ND	0.6	ND	0.0248
74-87-3	Chloromethane	U	0.1	ND	0.3	ND	0.0103
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	U	0.1	ND	0.9	ND	0.0350
75-01-4	Vinyl chloride	U	0.1	ND	0.3	ND	0.0128
74-83-9	Bromomethane	U	0.1	ND	0.5	ND	0.0194
75-00-3	Chloroethane	U	0.1	ND	0.3	ND	0.0132
75-69-4	Trichlorofluoromethane	U	0.1	ND	0.7	ND	0.0281
75-35-4	1,1-Dichloroethene	U	0.1	ND	0.5	ND	0.0199
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	U	0.1	ND	1.0	ND	0.0383
75-09-2	Methylene chloride	U	0.1	ND	0.5	ND	0.0174
75-34-3	1,1-Dichloroethane		0.1	0.2	0.5	0.8	0.0295
156-59-2	cis-1,2-Dichloroethene		0.1	0.3	0.5	1.0	0.0402
67-66-3	Chloroform	U	0.1	ND	0.6	ND	0.0244
71-55-6	1,1,1-Trichloroethane	U	0.1	ND	0.7	ND	0.0272
107-06-2	1,2-Dichloroethane	U	0.1	ND	0.5	ND	0.0203
71-43-2	Benzene	U	0.1	ND	0.4	ND	0.0160
56-23-5	Carbon tetrachloride	U	0.1	ND	0.8	ND	0.0315
78-87-5	1,2-Dichloropropane	U	0.1	ND	0.6	ND	0.0231
79-01-6	Trichloroethene	U	0.1	ND	0.7	ND	0.0268
10061-01-5	cis-1,3-Dichloropropene	U	0.1	ND	0.6	ND	0.0227
108-88-3	Toluene		0.1	2.4	0.5	9.3	0.3578
10061-02-6	trans-1,3-Dichloropropene	U	0.1	ND	0.6	ND	0.0227
79-00-5	1,1,2-Trichloroethane	U	0.1	ND	0.7	ND	0.0272
106-93-4	1,2-Dibromoethane	U	0.1	ND	1.0	ND	0.0385
127-18-4	Tetrachloroethene		0.1	0.3	0.9	2.1	0.0794
108-90-7	Chlorobenzene	U	0.1	ND	0.6	ND	0.0231
100-41-4	Ethylbenzene	U	0.1	ND	0.6	ND	0.0217
108-38-3	m & p-Xylene	U	0.1	ND	0.6	ND	0.0217
100-42-5	Styrene	U	0.1	ND	0.6	ND	0.0213
95-47-6	o-Xylene	U	0.1	ND	0.6	ND	0.0217
79-34-5	1,1,2,2-Tetrachloroethane	U	0.1	ND	0.9	ND	0.0344
622-96-8	4-Ethyltoluene	U	0.1	ND	0.6	ND	0.0246
108-67-8	1,3,5-Trimethylbenzene	U	0.1	ND	0.6	ND	0.0246
95-63-6	1,2,4-Trimethylbenzene	U	0.1	ND	0.6	ND	0.0246
541-73-1	1,3-Dichlorobenzene	U	0.1	ND	0.8	ND	0.0301
100-44-7	Benzyl chloride	U	0.1	ND	0.7	ND	0.0260
106-46-7	1,4-Dichlorobenzene	U	0.1	ND	0.8	ND	0.0301
95-50-1	1,2-Dichlorobenzene	U	0.1	ND	0.8	ND	0.0301
120-82-1	1,2,4-Trichlorobenzene	U	0.1	ND	1.0	ND	0.0371
87-68-3	Hexachlorobutadiene	U	0.1	ND	1.4	ND	0.0535

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG: 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 08

File: 0033608A.D — Date Sampled: 07/25/00

Client: C.E. SCHMIDT — Date Analyzed: 08/14/00

Description: A-008 CAN#695 500ML — Flux Factor: 0.0038

Analyst: KK\RC — QC Batch: 081400-MS3

CAS #	Compound	Flag	MDL ppbV	Amount ppbV	MDL ug/m3*	Amount ug/m3*	Flux ug/(foot*min)
75-71-8	Dichlorodifluoromethane	U	0.1	ND	0.6	ND	0.0024
74-87-3	Chloromethane	U	0.1	ND	0.3	ND	0.0010
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	U	0.1	ND	0.9	ND	0.0035
75-01-4	Vinyl chloride	U	0.1	ND	0.3	ND	0.0013
74-83-9	Bromomethane	U	0.1	ND	0.5	ND	0.0019
75-00-3	Chloroethane	U	0.1	ND	0.3	ND	0.0013
75-69-4	Trichlorofluoromethane	U	0.1	ND	0.7	ND	0.0028
75-35-4	1,1-Dichloroethene	U	0.1	ND	0.5	ND	0.0020
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	U	0.1	ND	1.0	ND	0.0038
75-09-2	Methylene chloride	U	0.1	ND	0.5	ND	0.0017
75-34-3	1,1-Dichloroethane		0.1	0.2	0.5	0.8	0.0029
156-59-2	cis-1,2-Dichloroethene		0.1	0.3	0.5	1.0	0.0040
67-66-3	Chloroform	U	0.1	ND	0.6	ND	0.0024
71-55-6	1,1,1-Trichloroethane	U	0.1	ND	0.7	ND	0.0027
107-06-2	1,2-Dichloroethane	U	0.1	ND	0.5	ND	0.0020
71-43-2	Benzene	U	0.1	ND	0.4	ND	0.0016
56-23-5	Carbon tetrachloride	U	0.1	ND	0.8	ND	0.0031
78-87-5	1,2-Dichloropropane	U	0.1	ND	0.6	ND	0.0023
79-01-6	Trichloroethene	U	0.1	ND	0.7	ND	0.0026
10061-01-5	cis-1,3-Dichloropropene	U	0.1	ND	0.6	ND	0.0022
108-88-3	Toluene		0.1	2.4	0.5	9.3	0.0353
10061-02-6	trans-1,3-Dichloropropene	U	0.1	ND	0.6	ND	0.0022
79-00-5	1,1,2-Trichloroethane	U	0.1	ND	0.7	ND	0.0027
106-93-4	1,2-Dibromoethane	U	0.1	ND	1.0	ND	0.0038
127-18-4	Tetrachloroethene		0.1	0.3	0.9	2.1	0.0078
108-90-7	Chlorobenzene	U	0.1	ND	0.6	ND	0.0023
100-41-4	Ethylbenzene	U	0.1	ND	0.6	ND	0.0021
108-38-3	m & p-Xylene	U	0.1	ND	0.6	ND	0.0021
100-42-5	Styrene	U	0.1	ND	0.6	ND	0.0021
95-47-6	o-Xylene	U	0.1	ND	0.6	ND	0.0021
79-34-5	1,1,2,2-Tetrachloroethane	U	0.1	ND	0.9	ND	0.0034
622-96-8	4-Ethyltoluene	U	0.1	ND	0.6	ND	0.0024
108-67-8	1,3,5-Trimethylbenzene	U	0.1	ND	0.6	ND	0.0024
95-63-6	1,2,4-Trimethylbenzene	U	0.1	ND	0.6	ND	0.0024
541-73-1	1,3-Dichlorobenzene	U	0.1	ND	0.8	ND	0.0030
100-44-7	Benzyl chloride	U	0.1	ND	0.7	ND	0.0026
106-46-7	1,4-Dichlorobenzene	U	0.1	ND	0.8	ND	0.0030
95-50-1	1,2-Dichlorobenzene	U	0.1	ND	0.8	ND	0.0030
120-82-1	1,2,4-Trichlorobenzene	U	0.1	ND	1.0	ND	0.0037
87-68-3	Hexachlorobutadiene	U	0.1	ND	1.4	ND	0.0053

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 09

File: 0033609A.D — Date Sampled: 07/25/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-009 CAN#779 500ML — Flux Factor: 0.0385

Analyst: CC — QC Batch: 080300-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12		0.12	1.33	0.62	6.78	0.2609
74-87-3	Chloromethane		0.12	1.32	0.26	2.81	0.1081
76-14-2	Freon 114	U	0.12	ND	0.87	ND	0.0336
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0123
74-83-9	Bromomethane	U	0.12	ND	0.48	ND	0.0187
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0127
75-69-4	Trichlorofluoromethane		0.12	0.56	0.70	3.24	0.1246
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0191
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0368
75-09-2	Dichloromethane	U	0.12	ND	0.43	ND	0.0167
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0195
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0191
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0234
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.68	ND	0.0262
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0195
71-43-2	Benzene		0.12	0.12	0.40	0.40	0.0156
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0303
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0222
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0258
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0218
108-88-3	Toluene		0.12	30.38	0.47	118.18	4.5498
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0218
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.68	ND	0.0262
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.96	ND	0.0370
127-18-4	Tetrachloroethene	U	0.12	ND	0.85	ND	0.0327
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0222
100-41-4	Ethylbenzene		0.12	0.13	0.54	0.56	0.0215
108-38-3	m,p-Xylenes		0.12	0.27	0.54	1.19	0.0458
100-42-5	Styrene	U	0.12	ND	0.53	ND	0.0205
95-47-6	o-Xylene	U	0.12	ND	0.54	ND	0.0209
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.86	ND	0.0331
622-96-8	4-Ethyltoluene	U	0.12	ND	0.61	ND	0.0236
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0236
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0236
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0250
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.92	ND	0.0356
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.33	ND	0.0513

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 09

File: 0033609A.D — Date Sampled: 07/25/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-009 CAN#779 500ML — Flux Factor: 0.0038

Analyst: CC — QC Batch: 080300-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(foot*min)
75-71-8	Freon 12		0.12	1.33	0.62	6.78	0.0257
74-87-3	Chloromethane		0.12	1.32	0.26	2.81	0.0107
76-14-2	Freon 114	U	0.12	ND	0.87	ND	0.0033
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0012
74-83-9	Bromomethane	U	0.12	ND	0.48	ND	0.0018
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0013
75-69-4	Trichlorofluoromethane		0.12	0.56	0.70	3.24	0.0123
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0036
75-09-2	Dichloromethane	U	0.12	ND	0.43	ND	0.0016
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0019
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0023
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.68	ND	0.0026
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0019
71-43-2	Benzene		0.12	0.12	0.40	0.40	0.0015
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0030
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0022
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0025
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0022
108-88-3	Toluene		0.12	30.38	0.47	118.18	0.4491
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0022
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.68	ND	0.0026
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.96	ND	0.0037
127-18-4	Tetrachloroethene	U	0.12	ND	0.85	ND	0.0032
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0022
100-41-4	Ethylbenzene		0.12	0.13	0.54	0.56	0.0021
108-38-3	m,p-Xylenes		0.12	0.27	0.54	1.19	0.0045
100-42-5	Styrene	U	0.12	ND	0.53	ND	0.0020
95-47-6	o-Xylene	U	0.12	ND	0.54	ND	0.0021
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.86	ND	0.0033
622-96-8	4-Ethyltoluene	U	0.12	ND	0.61	ND	0.0023
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0023
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0023
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0029
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0025
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0029
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0029
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.92	ND	0.0035
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.33	ND	0.0051

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 10

File: 0033610A.D — Date Sampled: 07/25/00
Client: C.E. SCHMIDT — Date Analyzed: 08/03/00
Description: A-010 CAN#612 500ML — Flux Factor: 0.0385
Analyst: CC — QC Batch: 080300-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12		0.12	0.76	0.63	3.89	0.1498
74-87-3	Chloromethane		0.12	0.87	0.26	1.87	0.0718
76-14-2	Freon 114	U	0.12	ND	0.89	ND	0.0342
75-01-4	Vinyl chloride		0.12	0.12	0.32	0.33	0.0126
74-83-9	Bromomethane	U	0.12	ND	0.49	ND	0.0190
75-00-3	Chloroethane	U	0.12	ND	0.34	ND	0.0129
75-69-4	Trichlorofluoromethane		0.12	0.36	0.71	2.06	0.0794
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0194
76-13-1	Freon 113	U	0.12	ND	0.97	ND	0.0374
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0170
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0198
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0194
67-66-3	Chloroform	U	0.12	ND	0.62	ND	0.0238
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0266
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0198
71-43-2	Benzene		0.12	0.15	0.41	0.48	0.0185
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.80	ND	0.0308
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.59	ND	0.0226
79-01-6	Trichloroethene	U	0.12	ND	0.68	ND	0.0262
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0222
108-88-3	Toluene		0.12	17.93	0.48	69.74	2.6851
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0222
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0266
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.98	ND	0.0376
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0332
108-90-7	Chlorobenzene	U	0.12	ND	0.59	ND	0.0226
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0212
108-38-3	m,p-Xylenes		0.12	0.26	0.55	1.17	0.0452
100-42-5	Styrene	U	0.12	ND	0.54	ND	0.0208
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0212
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0336
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0240
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0240
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0240
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
100-44-7	Benzyl Chloride	U	0.12	ND	0.66	ND	0.0254
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.94	ND	0.0362
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.36	ND	0.0522

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 10

File: 0033610A.D — Date Sampled: 07/25/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-010 CAN#612 500ML — Flux Factor: 0.0038

Analyst: CC — QC Batch: 080300-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(foot*min)
75-71-8	Freon 12		0.12	0.76	0.63	3.89	0.0148
74-87-3	Chloromethane		0.12	0.87	0.26	1.87	0.0071
76-14-2	Freon 114	U	0.12	ND	0.89	ND	0.0034
75-01-4	Vinyl chloride		0.12	0.12	0.32	0.33	0.0012
74-83-9	Bromomethane	U	0.12	ND	0.49	ND	0.0019
75-00-3	Chloroethane	U	0.12	ND	0.34	ND	0.0013
75-69-4	Trichlorofluoromethane		0.12	0.36	0.71	2.06	0.0078
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
76-13-1	Freon 113	U	0.12	ND	0.97	ND	0.0037
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0017
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0020
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
67-66-3	Chloroform	U	0.12	ND	0.62	ND	0.0023
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0026
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0020
71-43-2	Benzene		0.12	0.15	0.41	0.48	0.0018
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.80	ND	0.0030
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.59	ND	0.0022
79-01-6	Trichloroethene	U	0.12	ND	0.68	ND	0.0026
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0022
108-88-3	Toluene		0.12	17.93	0.48	69.74	0.2650
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0022
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0026
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.98	ND	0.0037
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0033
108-90-7	Chlorobenzene	U	0.12	ND	0.59	ND	0.0022
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0021
108-38-3	m,p-Xylenes		0.12	0.26	0.55	1.17	0.0045
100-42-5	Styrene	U	0.12	ND	0.54	ND	0.0021
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0021
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0033
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0024
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0024
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0024
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
100-44-7	Benzyl Chloride	U	0.12	ND	0.66	ND	0.0025
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.94	ND	0.0036
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.36	ND	0.0052

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 11

File: 0033611A.D — Date Sampled: 07/25/00
Client: C.E. SCHMIDT — Date Analyzed: 08/03/00
Description: A-011 CAN#686 500ML — Flux Factor: 0.0385
Analyst: CC/MF — QC Batch: 080300-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12		0.12	1.32	0.62	6.76	0.2603
74-87-3	Chloromethane		0.12	0.32	0.26	0.68	0.0263
76-14-2	Freon 114	U	0.12	ND	0.87	ND	0.0336
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0123
74-83-9	Bromomethane	U	0.12	ND	0.48	ND	0.0187
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0127
75-69-4	Trichlorofluoromethane		0.12	0.24	0.70	1.38	0.0531
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0191
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0368
75-09-2	Dichloromethane	U	0.12	ND	0.43	ND	0.0167
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0195
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0191
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0234
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.68	ND	0.0262
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0195
71-43-2	Benzene		0.12	0.16	0.40	0.54	0.0209
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0303
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0222
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0258
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0218
108-88-3	Toluene		0.12	2.25	0.47	8.77	0.3376
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0218
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.68	ND	0.0262
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.96	ND	0.0370
127-18-4	Tetrachloroethene	U	0.12	ND	0.85	ND	0.0327
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0222
100-41-4	Ethylbenzene	U	0.12	ND	0.54	ND	0.0209
108-38-3	m,p-Xylenes		0.12	0.21	0.54	0.93	0.0358
100-42-5	Styrene	U	0.12	ND	0.53	ND	0.0205
95-47-6	o-Xylene	U	0.12	ND	0.54	ND	0.0209
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.86	ND	0.0331
622-96-8	4-Ethyltoluene	U	0.12	ND	0.61	ND	0.0236
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0236
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0236
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0250
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.92	ND	0.0356
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.33	ND	0.0513

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 12

File: 0033612A.D — Date Sampled: 07/25/00

Client: C.E. SCHMIDT — Date Analyzed: 08/04/00

Description: A-012 CAN#699 500ML — Flux Factor: 0.0385

Analyst: CC — QC Batch: 080400-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12		0.12	0.41	0.62	2.10	0.0808
74-87-3	Chloromethane		0.12	0.53	0.26	1.13	0.0436
76-14-2	Freon 114	U	0.12	ND	0.87	ND	0.0336
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0123
74-83-9	Bromomethane	U	0.12	ND	0.48	ND	0.0187
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0127
75-69-4	Trichlorofluoromethane		0.12	0.17	0.70	1.01	0.0388
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0191
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0368
75-09-2	Dichloromethane	U	0.12	ND	0.43	ND	0.0167
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0195
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0191
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0234
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.68	ND	0.0262
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0195
71-43-2	Benzene		0.12	0.18	0.40	0.58	0.0223
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0303
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0222
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0258
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0218
108-88-3	Toluene		0.12	1.24	0.47	4.82	0.1855
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0218
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.68	ND	0.0262
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.96	ND	0.0370
127-18-4	Tetrachloroethene	U	0.12	ND	0.85	ND	0.0327
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0222
100-41-4	Ethylbenzene	U	0.12	ND	0.54	ND	0.0209
108-38-3	m,p-Xylenes		0.12	0.21	0.54	0.96	0.0369
100-42-5	Styrene	U	0.12	ND	0.53	ND	0.0205
95-47-6	o-Xylene	U	0.12	ND	0.54	ND	0.0209
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.86	ND	0.0331
622-96-8	4-Ethyltoluene	U	0.12	ND	0.61	ND	0.0236
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0236
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0236
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0250
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0289
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.92	ND	0.0356
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.33	ND	0.0513

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS Laboratory Number: 12

File: 0033612A.D
Client: C.E. SCHMIDT
Description: A-012 CAN#699 500ML
Analyst: CC

Date Sampled: 07/25/00
Date Analyzed: 08/04/00
Flux Factor: 0.0038
QC Batch: 080400-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(foot*min)
75-71-8	Freon 12		0.12	0.41	0.62	2.10	0.0080
74-87-3	Chloromethane		0.12	0.53	0.26	1.13	0.0043
76-14-2	Freon 114	U	0.12	ND	0.87	ND	0.0033
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0012
74-83-9	Bromomethane	U	0.12	ND	0.48	ND	0.0018
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0013
75-69-4	Trichlorofluoromethane		0.12	0.17	0.70	1.01	0.0038
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0036
75-09-2	Dichloromethane	U	0.12	ND	0.43	ND	0.0016
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0019
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0023
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.68	ND	0.0026
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0019
71-43-2	Benzene		0.12	0.18	0.40	0.58	0.0022
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0030
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0022
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0025
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0022
108-88-3	Toluene		0.12	1.24	0.47	4.82	0.0183
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0022
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.68	ND	0.0026
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.96	ND	0.0037
127-18-4	Tetrachloroethene	U	0.12	ND	0.85	ND	0.0032
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0022
100-41-4	Ethylbenzene	U	0.12	ND	0.54	ND	0.0021
108-38-3	m,p-Xylenes		0.12	0.21	0.54	0.96	0.0036
100-42-5	Styrene	U	0.12	ND	0.53	ND	0.0020
95-47-6	o-Xylene	U	0.12	ND	0.54	ND	0.0021
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.86	ND	0.0033
622-96-8	4-Ethyltoluene	U	0.12	ND	0.61	ND	0.0023
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0023
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.61	ND	0.0023
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0029
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0025
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0029
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.75	ND	0.0029
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.92	ND	0.0035
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.33	ND	0.0051

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 13

File: 0033613A.D — Date Sampled: 07/25/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-013 CAN#602 500ML — Flux Factor: 0.0385

Analyst: CC/MF — QC Batch: 080300-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12		0.12	1.88	0.63	9.58	0.3690
74-87-3	Chloromethane		0.12	1.86	0.26	3.96	0.1524
76-14-2	Freon 114	U	0.12	ND	0.89	ND	0.0342
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0125
74-83-9	Bromomethane	U	0.12	ND	0.49	ND	0.0190
75-00-3	Chloroethane	U	0.12	ND	0.34	ND	0.0129
75-69-4	Trichlorofluoromethane		0.12	0.74	0.71	4.26	0.1640
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0194
76-13-1	Freon 113		0.12	0.15	0.97	1.15	0.0442
75-09-2	Dichloromethane		0.12	0.19	0.44	0.67	0.0257
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0198
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0194
67-66-3	Chloroform	U	0.12	ND	0.62	ND	0.0238
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0266
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0198
71-43-2	Benzene	U	0.12	ND	0.41	ND	0.0156
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.80	ND	0.0308
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.59	ND	0.0226
79-01-6	Trichloroethene	U	0.12	ND	0.68	ND	0.0262
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0222
108-88-3	Toluene		0.12	1.86	0.48	7.25	0.2792
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.58	ND	0.0222
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0266
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.98	ND	0.0376
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0332
108-90-7	Chlorobenzene	U	0.12	ND	0.59	ND	0.0226
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0212
108-38-3	m,p-Xylenes		0.12	0.25	0.55	1.14	0.0439
100-42-5	Styrene	U	0.12	ND	0.54	ND	0.0208
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0212
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0336
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0240
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0240
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0240
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
100-44-7	Benzyl Chloride	U	0.12	ND	0.66	ND	0.0254
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0294
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.94	ND	0.0362
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.36	ND	0.0522

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 14

File: 0033614A.D — Date Sampled: 07/25/00
Client: C.E. SCHMIDT — Date Analyzed: 08/03/00
Description: A-014 CAN#776 500ML — Flux Factor: 0.0385
Analyst: CC/MF — QC Batch: 080300-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12		0.12	0.18	0.62	0.90	0.0348
74-87-3	Chloromethane	U	0.12	ND	0.26	ND	0.0100
76-14-2	Freon 114		0.12	0.14	0.88	1.04	0.0399
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0124
74-83-9	Bromomethane	U	0.12	ND	0.49	ND	0.0188
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0128
75-69-4	Trichlorofluoromethane		0.12	0.29	0.71	1.67	0.0642
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0371
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0168
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0236
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
71-43-2	Benzene		0.12	0.19	0.40	0.63	0.0242
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0305
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0224
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0260
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
108-88-3	Toluene		0.12	0.90	0.47	3.52	0.1355
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.97	ND	0.0373
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0329
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0224
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0210
108-38-3	m,p-Xylenes		0.12	0.32	0.55	1.43	0.0549
100-42-5	Styrene	U	0.12	ND	0.54	ND	0.0206
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0210
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0333
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0238
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0252
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.93	ND	0.0359
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.34	ND	0.0518

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 14

File: 0033614A.D — Date Sampled: 07/25/00

Client: C.E. SCHMIDT — Date Analyzed: 08/03/00

Description: A-014 CAN#776 500ML — Flux Factor: 0.0038

Analyst: CC/MF — QC Batch: 080300-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(foot*min)
75-71-8	Freon 12		0.12	0.18	0.62	0.90	0.0034
74-87-3	Chloromethane	U	0.12	ND	0.26	ND	0.0010
76-14-2	Freon 114		0.12	0.14	0.88	1.04	0.0039
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0012
74-83-9	Bromomethane	U	0.12	ND	0.49	ND	0.0019
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0013
75-69-4	Trichlorofluoromethane		0.12	0.29	0.71	1.67	0.0063
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0037
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0017
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0019
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0019
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0023
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0026
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0019
71-43-2	Benzene		0.12	0.19	0.40	0.63	0.0024
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0030
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0022
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0026
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0022
108-88-3	Toluene		0.12	0.90	0.47	3.52	0.0134
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0022
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0026
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.97	ND	0.0037
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0032
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0022
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0021
108-38-3	m,p-Xylenes		0.12	0.32	0.55	1.43	0.0054
100-42-5	Styrene	U	0.12	ND	0.54	ND	0.0020
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0021
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0033
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0023
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0023
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0023
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0025
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0029
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.93	ND	0.0035
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.34	ND	0.0051

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 15

File: 0033615A.D — Date Sampled: 07/26/00
Client: C.E. SCHMIDT — Date Analyzed: 08/04/00
Description: A-015 CAN#675 500ML — Flux Factor: 0.0385
Analyst: CC — QC Batch: 080400-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12	U	0.12	ND	0.62	ND	0.0240
74-87-3	Chloromethane		0.12	3.23	0.26	6.89	0.2652
76-14-2	Freon 114	U	0.12	ND	0.88	ND	0.0339
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0124
74-83-9	Bromomethane		0.12	0.40	0.49	1.59	0.0611
75-00-3	Chloroethane		0.12	1.40	0.33	3.81	0.1467
75-69-4	Trichlorofluoromethane	U	0.12	ND	0.71	ND	0.0272
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0371
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0168
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0236
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
71-43-2	Benzene	U	0.12	ND	0.40	ND	0.0155
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0305
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0224
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0260
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
108-88-3	Toluene		0.12	2.40	0.47	9.35	0.3600
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.97	ND	0.0373
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0329
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0224
100-41-4	Ethylbenzene		0.12	0.25	0.55	1.11	0.0426
108-38-3	m,p-Xylenes		0.12	0.82	0.55	3.66	0.1408
100-42-5	Styrene	U	0.12	ND	0.54	ND	0.0206
95-47-6	o-Xylene		0.12	0.28	0.55	1.27	0.0490
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0333
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0238
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0252
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.93	ND	0.0359
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.34	ND	0.0518

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 16

File: 0033616A.D — Date Sampled: 07/27/00
Client: C.E. SCHMIDT — Date Analyzed: 08/07/00
Description: A-016 CAN#670 500ML — Flux Factor: 0.0385
Analyst: CC — QC Batch: 080700-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12		0.12	0.57	0.61	2.94	0.1131
74-87-3	Chloromethane		0.12	0.64	0.25	1.36	0.0524
76-14-2	Freon 114	U	0.12	ND	0.86	ND	0.0331
75-01-4	Vinyl chloride		0.12	0.30	0.31	0.80	0.0309
74-83-9	Bromomethane	U	0.12	ND	0.48	ND	0.0184
75-00-3	Chloroethane	U	0.12	ND	0.32	ND	0.0125
75-69-4	Trichlorofluoromethane		0.12	0.29	0.69	1.68	0.0646
75-35-4	1,1-Dichloroethene		0.12	0.15	0.49	0.60	0.0233
76-13-1	Freon 113	U	0.12	ND	0.94	ND	0.0362
75-09-2	Dichloromethane		0.12	0.15	0.43	0.53	0.0205
75-34-3	1,1-Dichloroethane		0.12	7.00	0.50	29.27	1.1267
156-59-2	c-1,2-Dichloroethene		0.12	12.14	0.49	49.68	1.9128
67-66-3	Chloroform		0.12	0.29	0.60	1.45	0.0559
71-55-6	1,1,1-Trichloroethane		0.12	10.10	0.67	56.75	2.1850
107-06-2	1,2-Dichloroethane		0.12	0.71	0.50	2.96	0.1139
71-43-2	Benzene		0.12	1.19	0.39	3.92	0.1508
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.77	ND	0.0298
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.57	ND	0.0219
79-01-6	Trichloroethene		0.12	12.47	0.66	68.98	2.6556
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.56	ND	0.0215
108-88-3	Toluene		0.12	1.50	0.46	5.84	0.2250
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.56	ND	0.0215
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.67	ND	0.0257
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.94	ND	0.0364
127-18-4	Tetrachloroethene		0.12	0.15	0.83	1.04	0.0401
108-90-7	Chlorobenzene	U	0.12	ND	0.57	ND	0.0219
100-41-4	Ethylbenzene		0.12	0.14	0.53	0.62	0.0237
108-38-3	m,p-Xylenes		0.12	0.29	0.53	1.28	0.0494
100-42-5	Styrene	U	0.12	ND	0.52	ND	0.0201
95-47-6	o-Xylene	U	0.12	ND	0.53	ND	0.0205
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.84	ND	0.0325
622-96-8	4-Ethyltoluene	U	0.12	ND	0.60	ND	0.0232
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.60	ND	0.0232
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.60	ND	0.0232
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.74	ND	0.0284
100-44-7	Benzyl Chloride	U	0.12	ND	0.64	ND	0.0246
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.74	ND	0.0284
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.74	ND	0.0284
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.91	ND	0.0350
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.31	ND	0.0505

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 17

File: 0033617A.D — Date Sampled: 07/27/00
Client: C.E. SCHMIDT — Date Analyzed: 08/04/00
Description: A-017 CAN#717 500ML — Flux Factor: 0.0385
Analyst: CC — QC Batch: 080400-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12		0.12	0.62	0.62	3.17	0.1221
74-87-3	Chloromethane	U	0.12	ND	0.26	ND	0.0100
76-14-2	Freon 114		0.12	0.50	0.88	3.64	0.1400
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0124
74-83-9	Bromomethane	U	0.12	ND	0.49	ND	0.0188
75-00-3	Chloroethane		0.12	1.16	0.33	3.16	0.1216
75-69-4	Trichlorofluoromethane	U	0.12	ND	0.71	ND	0.0272
75-35-4	1,1-Dichloroethene		0.12	3.49	0.50	14.29	0.5501
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0371
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0168
75-34-3	1,1-Dichloroethane		0.12	9.19	0.51	38.43	1.4797
156-59-2	c-1,2-Dichloroethene		0.12	26.74	0.50	109.43	4.2130
67-66-3	Chloroform		0.12	0.20	0.61	1.03	0.0396
71-55-6	1,1,1-Trichloroethane		0.12	9.32	0.69	52.34	2.0151
107-06-2	1,2-Dichloroethane		0.12	0.67	0.51	2.80	0.1077
71-43-2	Benzene		0.12	0.97	0.40	3.19	0.1227
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0305
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0224
79-01-6	Trichloroethene		0.12	13.10	0.67	72.48	2.7906
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
108-88-3	Toluene		0.12	1.08	0.47	4.20	0.1617
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.97	ND	0.0373
127-18-4	Tetrachloroethene		0.12	0.22	0.86	1.54	0.0594
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0224
100-41-4	Ethylbenzene		0.12	0.15	0.55	0.67	0.0259
108-38-3	m,p-Xylenes		0.12	0.67	0.55	3.01	0.1159
100-42-5	Styrene	U	0.12	ND	0.54	ND	0.0206
95-47-6	o-Xylene		0.12	0.72	0.55	3.24	0.1249
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0333
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0238
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0252
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.93	ND	0.0359
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.34	ND	0.0518

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 18

File: 0033618A.D — Date Sampled: 07/27/00

Client: C.E. SCHMIDT — Date Analyzed: 08/04/00

Description: A-018 CAN#405 500ML — Flux Factor: 0.0385

Analyst: CC — QC Batch: 080400-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12		0.12	0.92	0.62	4.71	0.1814
74-87-3	Chloromethane		0.12	0.95	0.26	2.04	0.0784
76-14-2	Freon 114	U	0.12	ND	0.88	ND	0.0339
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0124
74-83-9	Bromomethane	U	0.12	ND	0.49	ND	0.0188
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0128
75-69-4	Trichlorofluoromethane		0.12	0.34	0.71	1.96	0.0754
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0371
75-09-2	Dichloromethane	U	0.12	ND	0.44	ND	0.0168
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0236
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
71-43-2	Benzene		0.12	0.25	0.40	0.81	0.0311
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0305
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0224
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0260
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
108-88-3	Toluene		0.12	0.54	0.47	2.08	0.0802
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.97	ND	0.0373
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0329
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0224
100-41-4	Ethylbenzene	U	0.12	ND	0.55	ND	0.0210
108-38-3	m,p-Xylenes		0.12	0.19	0.55	0.84	0.0323
100-42-5	Styrene	U	0.12	ND	0.54	ND	0.0206
95-47-6	o-Xylene	U	0.12	ND	0.55	ND	0.0210
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0333
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0238
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0252
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.93	ND	0.0359
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.34	ND	0.0518

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 19

File: 0033619A.D — Date Sampled: 07/27/00

Client: C.E. SCHMIDT — Date Analyzed: 08/07/00

Description: A-019 CAN#732 500ML — Flux Factor: 0.0385

Analyst: CC/MF — QC Batch: 080700-MS1

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12		0.12	1.23	0.62	6.30	0.2427
74-87-3	Chloromethane		0.12	1.18	0.26	2.51	0.0966
76-14-2	Freon 114	U	0.12	ND	0.88	ND	0.0339
75-01-4	Vinyl chloride	U	0.12	ND	0.32	ND	0.0124
74-83-9	Bromomethane	U	0.12	ND	0.49	ND	0.0188
75-00-3	Chloroethane	U	0.12	ND	0.33	ND	0.0128
75-69-4	Trichlorofluoromethane		0.12	0.44	0.71	2.55	0.0982
75-35-4	1,1-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
76-13-1	Freon 113	U	0.12	ND	0.96	ND	0.0371
75-09-2	Dichloromethane		0.12	0.14	0.44	0.51	0.0195
75-34-3	1,1-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
156-59-2	c-1,2-Dichloroethene	U	0.12	ND	0.50	ND	0.0192
67-66-3	Chloroform	U	0.12	ND	0.61	ND	0.0236
71-55-6	1,1,1-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
107-06-2	1,2-Dichloroethane	U	0.12	ND	0.51	ND	0.0196
71-43-2	Benzene		0.12	0.21	0.40	0.70	0.0269
56-23-5	Carbon Tetrachloride	U	0.12	ND	0.79	ND	0.0305
78-87-5	1,2-Dichloropropane	U	0.12	ND	0.58	ND	0.0224
79-01-6	Trichloroethene	U	0.12	ND	0.67	ND	0.0260
10061-01-5	c-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
108-88-3	Toluene		0.12	2.34	0.47	9.10	0.3503
10061-02-6	t-1,3-Dichloropropene	U	0.12	ND	0.57	ND	0.0220
79-00-5	1,1,2-Trichloroethane	U	0.12	ND	0.69	ND	0.0264
106-93-4	1,2-Dibromoethane	U	0.12	ND	0.97	ND	0.0373
127-18-4	Tetrachloroethene	U	0.12	ND	0.86	ND	0.0329
108-90-7	Chlorobenzene	U	0.12	ND	0.58	ND	0.0224
100-41-4	Ethylbenzene		0.12	0.29	0.55	1.31	0.0504
108-38-3	m,p-Xylenes		0.12	1.00	0.55	4.49	0.1728
100-42-5	Styrene	U	0.12	ND	0.54	ND	0.0206
95-47-6	o-Xylene		0.12	0.26	0.55	1.16	0.0447
79-34-5	1,1,2,2-Tetrachloroethane	U	0.12	ND	0.87	ND	0.0333
622-96-8	4-Ethyltoluene	U	0.12	ND	0.62	ND	0.0238
108-67-8	1,3,5-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
95-63-6	1,2,4-Trimethylbenzene	U	0.12	ND	0.62	ND	0.0238
541-73-1	1,3-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
100-44-7	Benzyl Chloride	U	0.12	ND	0.65	ND	0.0252
106-46-7	1,4-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
95-50-1	1,2-Dichlorobenzene	U	0.12	ND	0.76	ND	0.0292
120-82-1	1,2,4-Trichlorobenzene	U	0.12	ND	0.93	ND	0.0359
87-68-3	Hexachlorobutadiene	U	0.12	ND	1.34	ND	0.0518

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ENVIRONMENTAL
Analytical Service, Inc.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 20

File: 0033620B.D — Date Sampled: 07/27/00
Client: C.E.SCHMIDT — Date Analyzed: 08/08/00
Description: A-020 CAN#412 20ML — Flux Factor: 0.0385
Analyst: KK/MF — QC Batch: 080800-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12	U	3.65	ND	18.65	ND	0.7181
74-87-3	Chloromethane	U	3.65	ND	7.78	ND	0.2997
76-14-2	Freon 114	U	3.65	ND	26.36	ND	1.0148
75-01-4	Vinyl chloride	U	3.65	ND	9.63	ND	0.3709
74-83-9	Bromomethane	U	3.65	ND	14.63	ND	0.5632
75-00-3	Chloroethane	U	3.65	ND	9.94	ND	0.3828
75-69-4	Trichlorofluoromethane	U	3.65	ND	21.12	ND	0.8130
75-35-4	1,1-Dichloroethene	U	3.65	ND	14.94	ND	0.5750
76-13-1	Freon 113	U	3.65	ND	28.82	ND	1.1097
75-09-2	Dichloromethane	U	3.65	ND	13.09	ND	0.5038
75-34-3	1,1-Dichloroethane	U	3.65	ND	15.26	ND	0.5875
156-59-2	c-1,2-Dichloroethene	U	3.65	ND	14.94	ND	0.5750
67-66-3	Chloroform	U	3.65	ND	18.34	ND	0.7062
71-55-6	1,1,1-Trichloroethane	U	3.65	ND	20.50	ND	0.7893
107-06-2	1,2-Dichloroethane	U	3.65	ND	15.26	ND	0.5875
71-43-2	Benzene		3.65	3.77	12.04	12.42	0.4783
56-23-5	Carbon Tetrachloride	U	3.65	ND	23.74	ND	0.9139
78-87-5	1,2-Dichloropropane	U	3.65	ND	17.42	ND	0.6706
79-01-6	Trichloroethene	U	3.65	ND	20.19	ND	0.7774
10061-01-5	c-1,3-Dichloropropene	U	3.65	ND	17.11	ND	0.6587
108-88-3	Toluene		3.65	6.42	14.20	24.97	0.9612
10061-02-6	t-1,3-Dichloropropene	U	3.65	ND	17.11	ND	0.6587
79-00-5	1,1,2-Trichloroethane	U	3.65	ND	20.50	ND	0.7893
106-93-4	1,2-Dibromoethane	U	3.65	ND	28.98	ND	1.1157
127-18-4	Tetrachloroethene	U	3.65	ND	25.59	ND	0.9851
108-90-7	Chlorobenzene	U	3.65	ND	17.42	ND	0.6706
100-41-4	Ethylbenzene	U	3.65	ND	16.34	ND	0.6290
108-38-3	m,p-Xylenes	U	3.65	ND	16.34	ND	0.6290
100-42-5	Styrene		3.65	3.72	16.03	16.35	0.6296
95-47-6	o-Xylene	U	3.65	ND	16.34	ND	0.6290
79-34-5	1,1,2,2-Tetrachloroethane	U	3.65	ND	25.90	ND	0.9970
622-96-8	4-Ethyltoluene		3.65	3.74	18.50	18.97	0.7305
108-67-8	1,3,5-Trimethylbenzene	U	3.65	ND	18.50	ND	0.7121
95-63-6	1,2,4-Trimethylbenzene	U	3.65	ND	18.50	ND	0.7121
541-73-1	1,3-Dichlorobenzene	U	3.65	ND	22.66	ND	0.8723
100-44-7	Benzyl Chloride	U	3.65	ND	19.58	ND	0.7537
106-46-7	1,4-Dichlorobenzene	U	3.65	ND	22.66	ND	0.8723
95-50-1	1,2-Dichlorobenzene	U	3.65	ND	22.66	ND	0.8723
120-82-1	1,2,4-Trichlorobenzene	U	3.65	ND	27.90	ND	1.0741
87-68-3	Hexachlorobutadiene	U	3.65	ND	40.23	ND	1.5489

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 21

File: 0033621A.D — Date Sampled: 07/27/00

Client: C.E.SCHMIDT — Date Analyzed: 08/08/00

Description: A-021 CAN#630 20ML — Flux Factor: 0.0385

Analyst: KK/MF — QC Batch: 080800-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12	U	3.10	ND	15.84	ND	0.6099
74-87-3	Chloromethane	U	3.10	ND	6.61	ND	0.2545
76-14-2	Freon 114	U	3.10	ND	22.39	ND	0.8619
75-01-4	Vinyl chloride	U	3.10	ND	8.18	ND	0.3150
74-83-9	Bromomethane	U	3.10	ND	12.42	ND	0.4783
75-00-3	Chloroethane	U	3.10	ND	8.44	ND	0.3251
75-69-4	Trichlorofluoromethane	U	3.10	ND	17.93	ND	0.6905
75-35-4	1,1-Dichloroethene	U	3.10	ND	12.69	ND	0.4884
76-13-1	Freon 113	U	3.10	ND	24.48	ND	0.9425
75-09-2	Dichloromethane	U	3.10	ND	11.11	ND	0.4279
75-34-3	1,1-Dichloroethane	U	3.10	ND	12.96	ND	0.4990
156-59-2	c-1,2-Dichloroethene	U	3.10	ND	12.69	ND	0.4884
67-66-3	Chloroform	U	3.10	ND	15.58	ND	0.5998
71-55-6	1,1,1-Trichloroethane	U	3.10	ND	17.41	ND	0.6703
107-06-2	1,2-Dichloroethane	U	3.10	ND	12.96	ND	0.4990
71-43-2	Benzene	U	3.10	ND	10.22	ND	0.3936
56-23-5	Carbon Tetrachloride	U	3.10	ND	20.16	ND	0.7762
78-87-5	1,2-Dichloropropane	U	3.10	ND	14.79	ND	0.5695
79-01-6	Trichloroethene	U	3.10	ND	17.15	ND	0.6603
10061-01-5	c-1,3-Dichloropropene	U	3.10	ND	14.53	ND	0.5595
108-88-3	Toluene		3.10	4.72	12.06	18.36	0.7067
10061-02-6	t-1,3-Dichloropropene	U	3.10	ND	14.53	ND	0.5595
79-00-5	1,1,2-Trichloroethane	U	3.10	ND	17.41	ND	0.6703
106-93-4	1,2-Dibromoethane	U	3.10	ND	24.61	ND	0.9475
127-18-4	Tetrachloroethene	U	3.10	ND	21.73	ND	0.8367
108-90-7	Chlorobenzene	U	3.10	ND	14.79	ND	0.5695
100-41-4	Ethylbenzene	U	3.10	ND	13.88	ND	0.5343
108-38-3	m,p-Xylenes	U	3.10	ND	13.88	ND	0.5343
100-42-5	Styrene		3.10	3.10	13.61	13.63	0.5247
95-47-6	o-Xylene	U	3.10	ND	13.88	ND	0.5343
79-34-5	1,1,2,2-Tetrachloroethane	U	3.10	ND	21.99	ND	0.8467
622-96-8	4-Ethyltoluene	U	3.10	ND	15.71	ND	0.6048
108-67-8	1,3,5-Trimethylbenzene	U	3.10	ND	15.71	ND	0.6048
95-63-6	1,2,4-Trimethylbenzene	U	3.10	ND	15.71	ND	0.6048
541-73-1	1,3-Dichlorobenzene	U	3.10	ND	19.24	ND	0.7409
100-44-7	Benzyl Chloride	U	3.10	ND	16.63	ND	0.6401
106-46-7	1,4-Dichlorobenzene	U	3.10	ND	19.24	ND	0.7409
95-50-1	1,2-Dichlorobenzene	U	3.10	ND	19.24	ND	0.7409
120-82-1	1,2,4-Trichlorobenzene	U	3.10	ND	23.70	ND	0.9123
87-68-3	Hexachlorobutadiene	U	3.10	ND	34.17	ND	1.3155

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

SDG : 200336

EPA TO-14 Full Scan GC/MS — Laboratory Number: 22

File: 0033622A.D — Date Sampled: 07/27/00

Client: C.E.SCHMIDT — Date Analyzed: 08/08/00

Description: A-022 CAN#416 20ML — Flux Factor: 0.0385

Analyst: KK/MF — QC Batch: 080800-MS2

CAS#	Compound	Flag	MDL ppbv	Amount ppbv	MDL ug/m3*	Amount ug/m3*	Flux ug/(m2*min)
75-71-8	Freon 12	U	3.03	ND	15.46	ND	0.5951
74-87-3	Chloromethane	U	3.03	ND	6.45	ND	0.2484
76-14-2	Freon 114	U	3.03	ND	21.84	ND	0.8410
75-01-4	Vinyl chloride	U	3.03	ND	7.98	ND	0.3074
74-83-9	Bromomethane	U	3.03	ND	12.12	ND	0.4667
75-00-3	Chloroethane	U	3.03	ND	8.24	ND	0.3172
75-69-4	Trichlorofluoromethane	U	3.03	ND	17.50	ND	0.6738
75-35-4	1,1-Dichloroethene	U	3.03	ND	12.38	ND	0.4766
76-13-1	Freon 113	U	3.03	ND	23.89	ND	0.9197
75-09-2	Dichloromethane	U	3.03	ND	10.85	ND	0.4176
75-34-3	1,1-Dichloroethane	U	3.03	ND	12.65	ND	0.4869
156-59-2	c-1,2-Dichloroethene	U	3.03	ND	12.38	ND	0.4766
67-66-3	Chloroform	U	3.03	ND	15.20	ND	0.5853
71-55-6	1,1,1-Trichloroethane	U	3.03	ND	16.99	ND	0.6541
107-06-2	1,2-Dichloroethane	U	3.03	ND	12.65	ND	0.4869
71-43-2	Benzene	U	3.03	ND	9.98	ND	0.3841
56-23-5	Carbon Tetrachloride	U	3.03	ND	19.67	ND	0.7574
78-87-5	1,2-Dichloropropane	U	3.03	ND	14.44	ND	0.5558
79-01-6	Trichloroethene	U	3.03	ND	16.73	ND	0.6443
10061-01-5	c-1,3-Dichloropropene	U	3.03	ND	14.18	ND	0.5459
108-88-3	Toluene		3.03	4.69	11.77	18.22	0.7016
10061-02-6	t-1,3-Dichloropropene	U	3.03	ND	14.18	ND	0.5459
79-00-5	1,1,2-Trichloroethane	U	3.03	ND	16.99	ND	0.6541
106-93-4	1,2-Dibromoethane	U	3.03	ND	24.02	ND	0.9246
127-18-4	Tetrachloroethene	U	3.03	ND	21.21	ND	0.8164
108-90-7	Chlorobenzene	U	3.03	ND	14.44	ND	0.5558
100-41-4	Ethylbenzene	U	3.03	ND	13.54	ND	0.5213
108-38-3	m,p-Xylenes	U	3.03	ND	13.54	ND	0.5213
100-42-5	Styrene		3.03	3.20	13.29	14.06	0.5413
95-47-6	o-Xylene	U	3.03	ND	13.54	ND	0.5213
79-34-5	1,1,2,2-Tetrachloroethane	U	3.03	ND	21.46	ND	0.8263
622-96-8	4-Ethyltoluene	U	3.03	ND	15.33	ND	0.5902
108-67-8	1,3,5-Trimethylbenzene	U	3.03	ND	15.33	ND	0.5902
95-63-6	1,2,4-Trimethylbenzene	U	3.03	ND	15.33	ND	0.5902
541-73-1	1,3-Dichlorobenzene	U	3.03	ND	18.78	ND	0.7230
100-44-7	Benzyl Chloride	U	3.03	ND	16.22	ND	0.6246
106-46-7	1,4-Dichlorobenzene	U	3.03	ND	18.78	ND	0.7230
95-50-1	1,2-Dichlorobenzene	U	3.03	ND	18.78	ND	0.7230
120-82-1	1,2,4-Trichlorobenzene	U	3.03	ND	23.12	ND	0.8902
87-68-3	Hexachlorobutadiene	U	3.03	ND	33.34	ND	1.2836

Notes: ND = Not detected at or above the listed minimum detection limit (MDL).
Reported results are to be interpreted to two significant figures.
*ug/m3 calculated assuming conditions at 60 F and 1 atm.

Library Search Compound Report

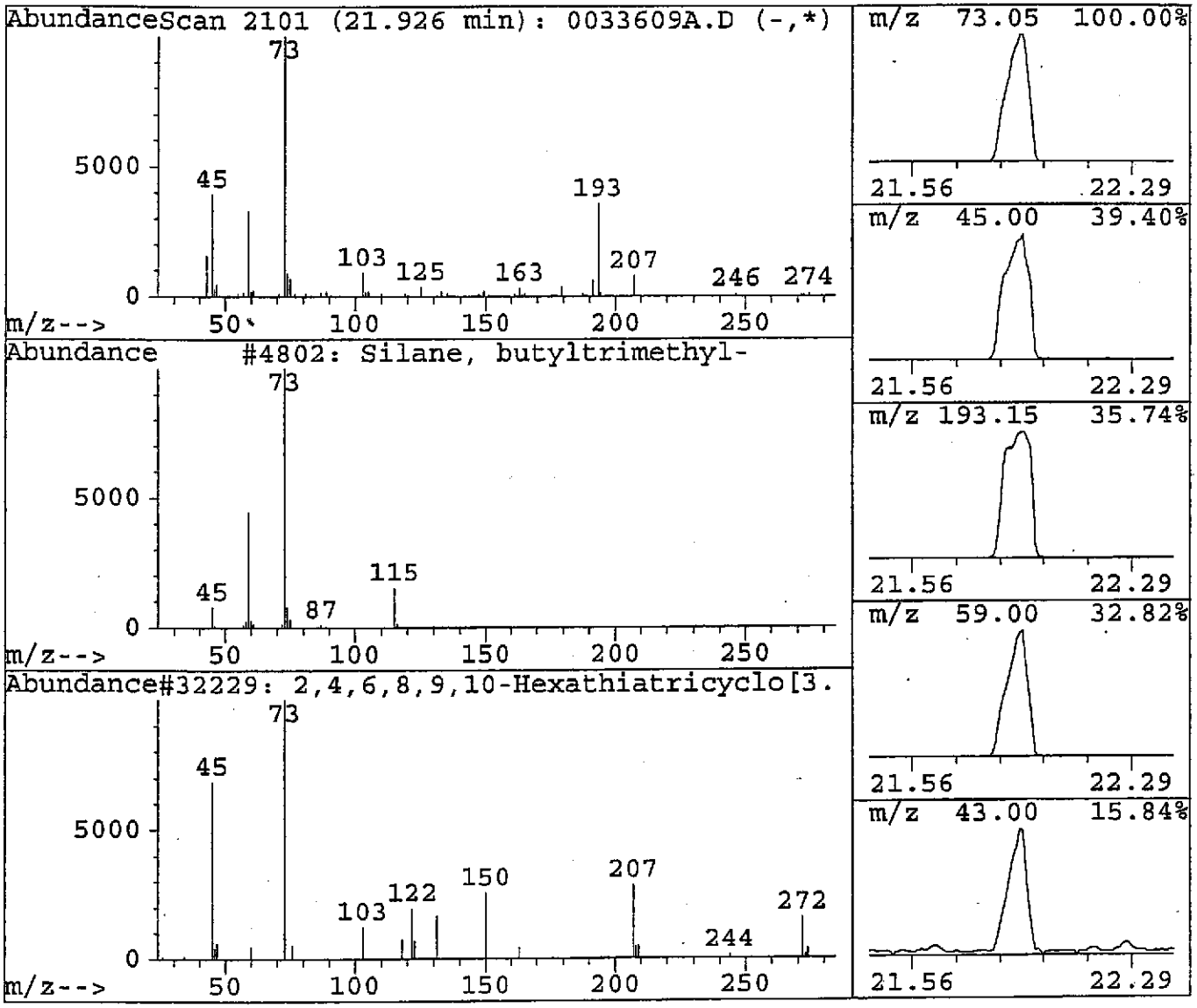
Data File : C:\MSCHEM\1\DATA\08030MS1\0033609A.D
Acq Time : 3 Aug 100 3:33 pm
Sample : A-009 CAN#779 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.42

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.93	30.55 ppbV	12190801	1,4-Difluorobenzene	14.35

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Silane, butyltrimethyl-	4802	001000-49-3	10
2	2,4,6,8,9,10-Hexathiatricyclo[3.3.1	32229	057274-64-3	8



Library Search Compound Report

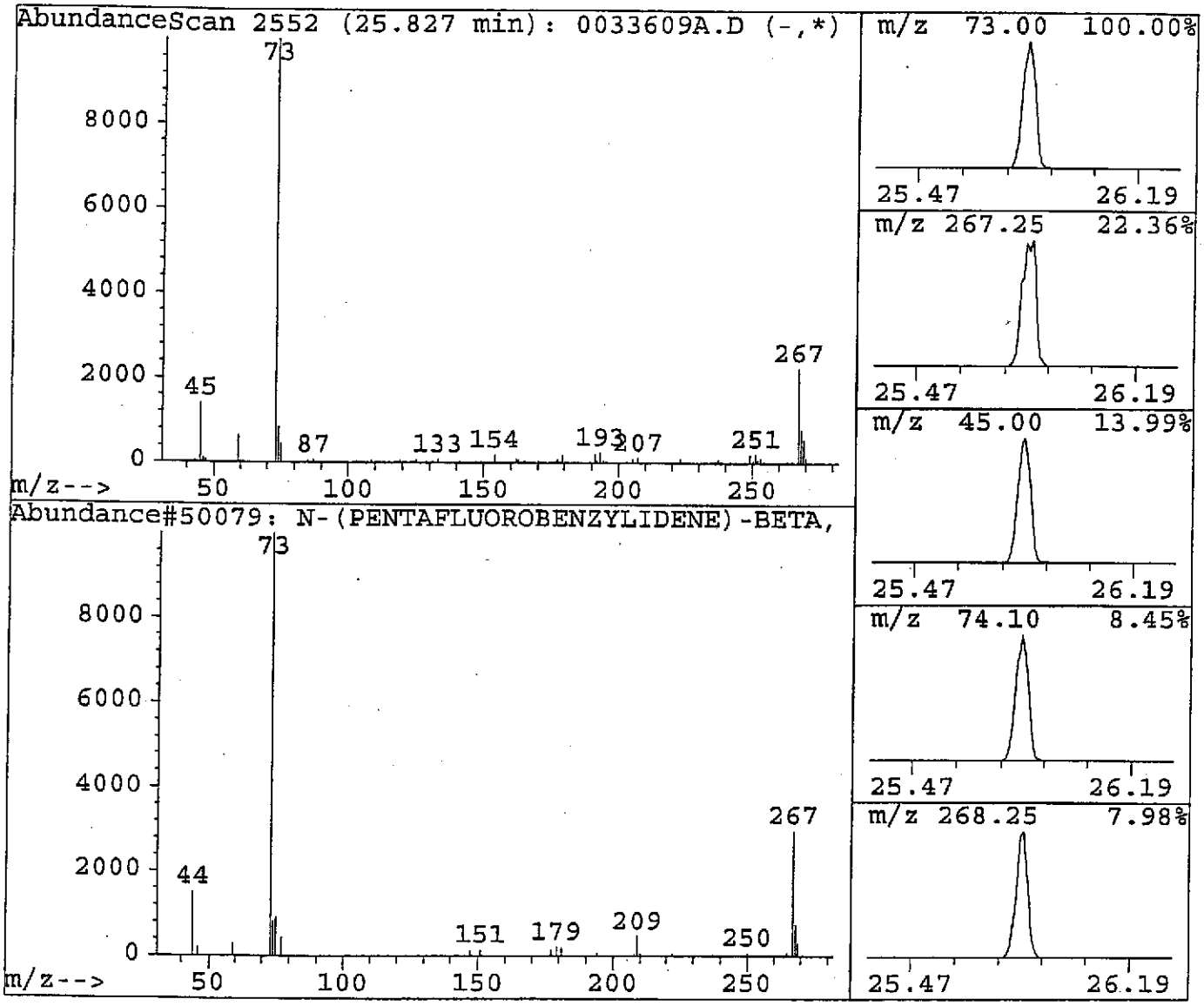
Data File : C:\MSCHEM\1\DATA\08030MS1\0033609A.D
Acq Time : 3 Aug 100 3:33 pm
Sample : A-009 CAN#779 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.42

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.83	24.74 ppbV	9871070	1,4-Difluorobenzene	14.35

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	N-(PENTAFLUOROBENZYLIDENE)-BETA,4-B	50079	000000-00-0	42



N-(PENTAFLUOROBENZYLIDENE)-BETA,4-BIS(TRIMETHYLSILOXY)PHENYLETHYLAMINE

Match Quality	:	36
Entry Number	:	50079
CAS Number	:	000000-00-0
Molecular Weight	:	475.14
Molecular Formula	:	C21H26F5NO2Si2
Retention Index	:	0
Company ID	:	NIST 1/90
Melting Point	:	
Boiling Point	:	
Misc Information	:	

Library Search Compound Report

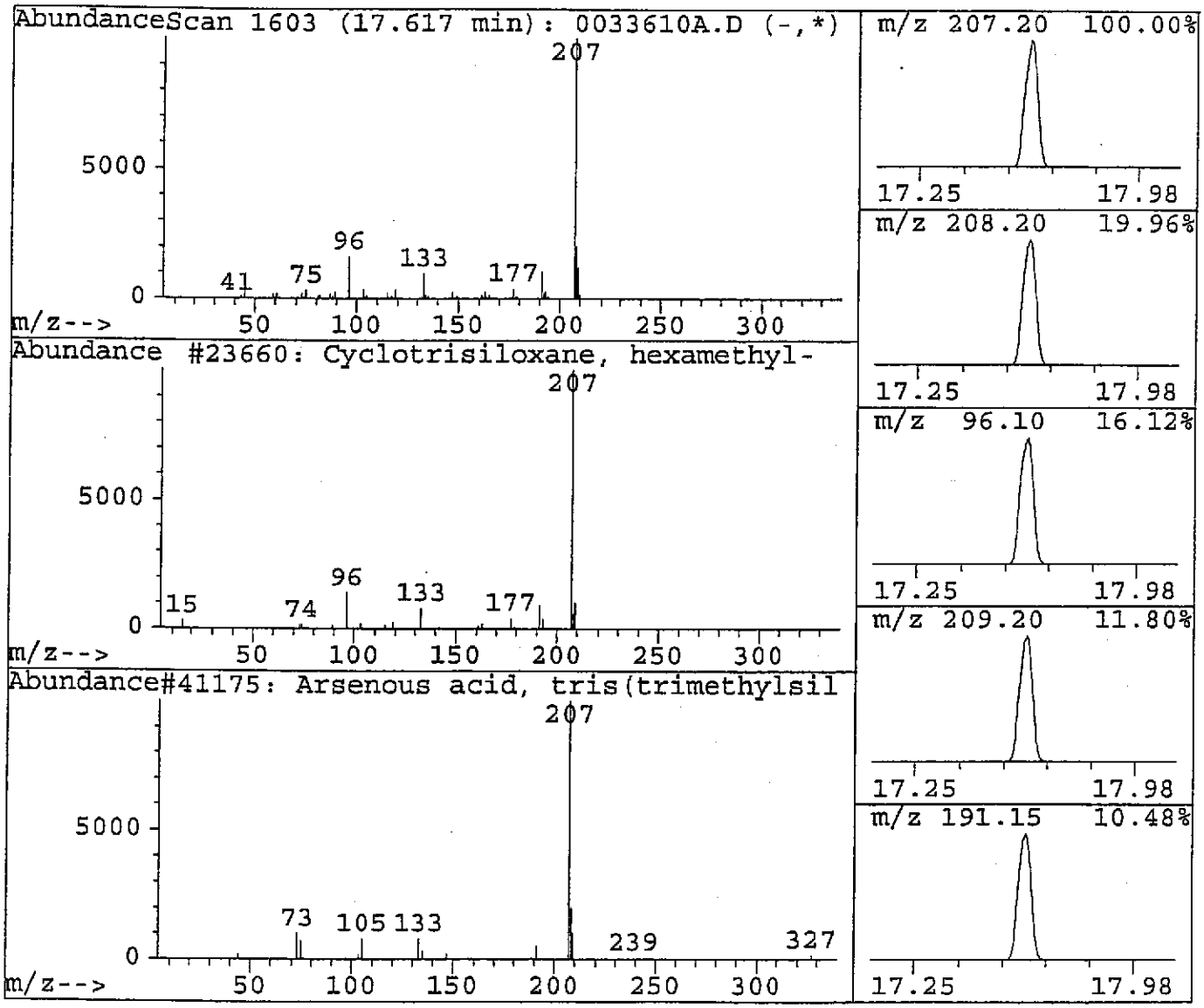
Data File : C:\MSCHEM\1\DATA\08030MS1\0033610A.D
Acq Time : 3 Aug 100 4:41 pm
Sample : A-010 CAN#612 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.46

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
17.62	53.22 ppbV	21567210	1,4-Difluorobenzene	14.32

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	23660	000541-05-9	80
2	Arsenous acid, tris(trimethylsilyl)	41175	055429-29-3	50



Library Search Compound Report

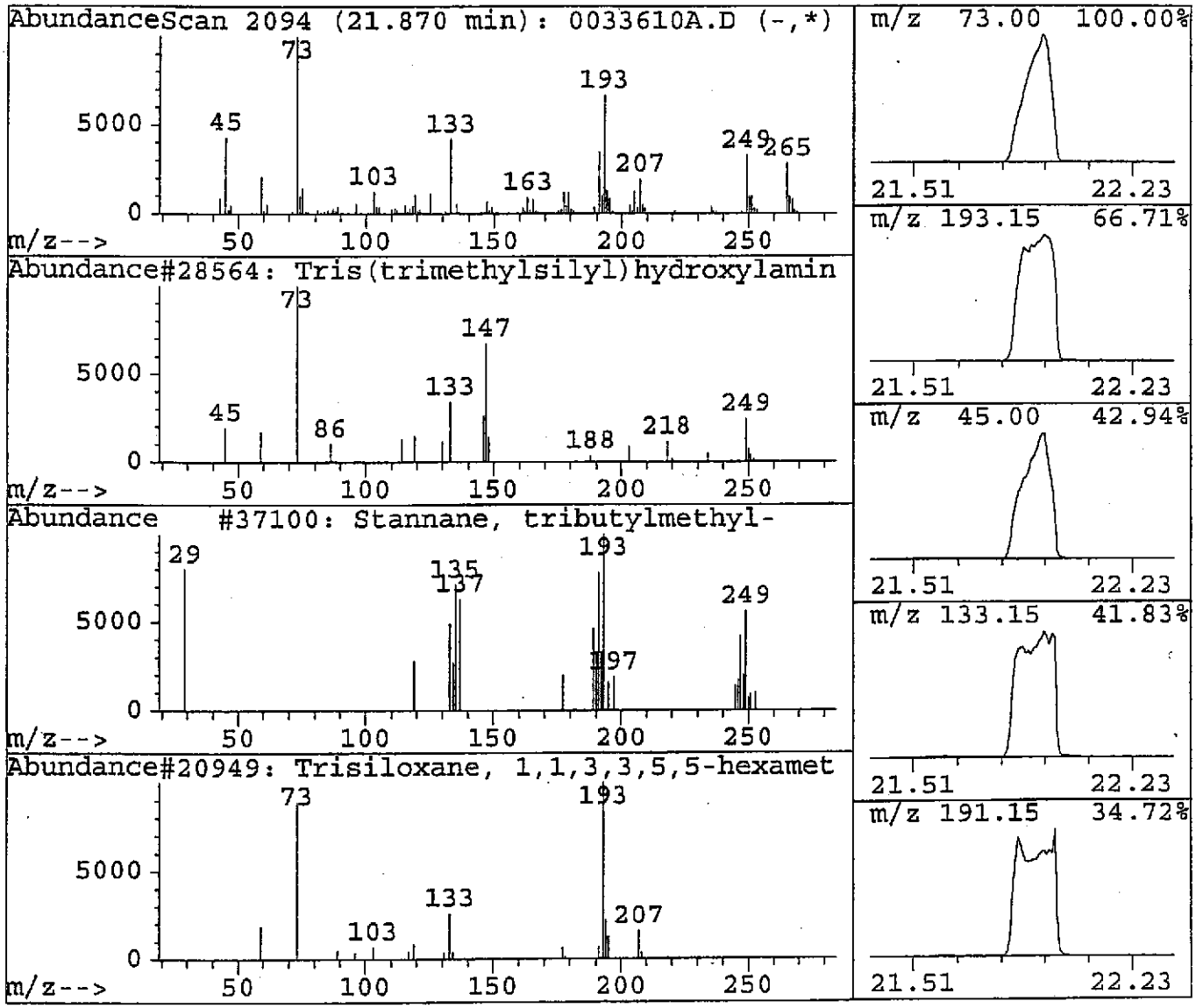
Data File : C:\MSCHEM\1\DATA\08030MS1\0033610A.D
Acq Time : 3 Aug 100 4:41 pm
Sample : A-010 CAN#612 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.46

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA T0-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.87	23.05 ppbV	9340871	1,4-Difluorobenzene	14.32

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tris(trimethylsilyl)hydroxylamine	28564	021023-20-1	27
2	Stannane, tributylmethyl-	37100	001528-01-4	23
3	Trisiloxane, 1,1,3,3,5,5-hexamethyl	20949	001189-93-1	14
4	5H-Dibenzo[a,d]cycloheptene, 5-chlo	25147	001210-33-9	14
5	Benzene, 1,1'-(1-heptenylidene)bis-	28895	001530-20-7	12



Library Search Compound Report

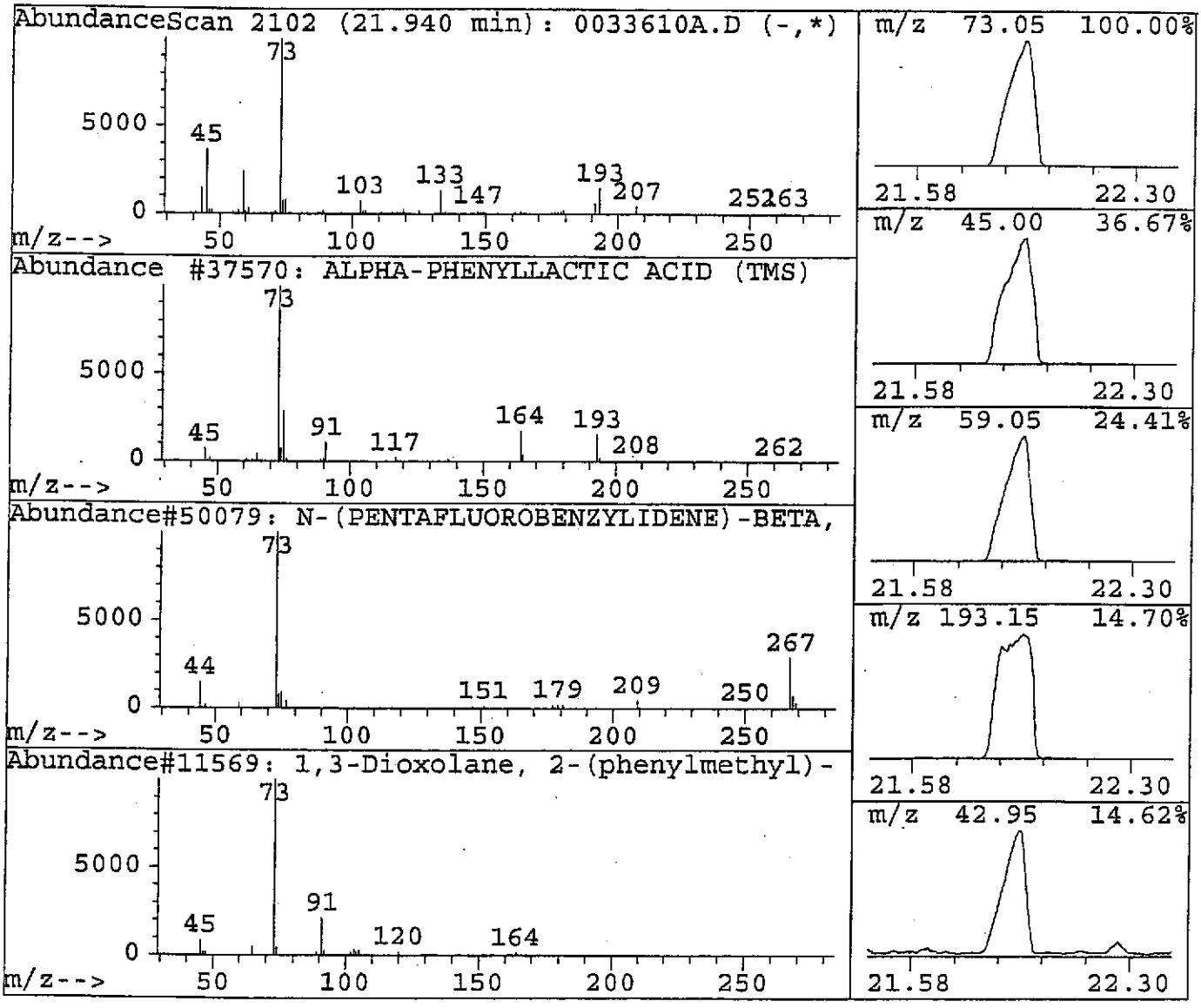
Data File : C:\MSCHEM\1\DATA\08030MS1\0033610A.D
Acq Time : 3 Aug 100 4:41 pm
Sample : A-010 CAN#612 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.46

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.94	51.04 ppbV	20683331	1,4-Difluorobenzene	14.32

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	ALPHA-PHENYLLACTIC ACID (TMS)	37570	000000-00-0	12
2	N-(PENTAFLUOROBENZYLIDENE)-BETA,4-B	50079	000000-00-0	10
3	1,3-Dioxolane, 2-(phenylmethyl)-	11569	000101-49-5	8



Library Search Compound Report

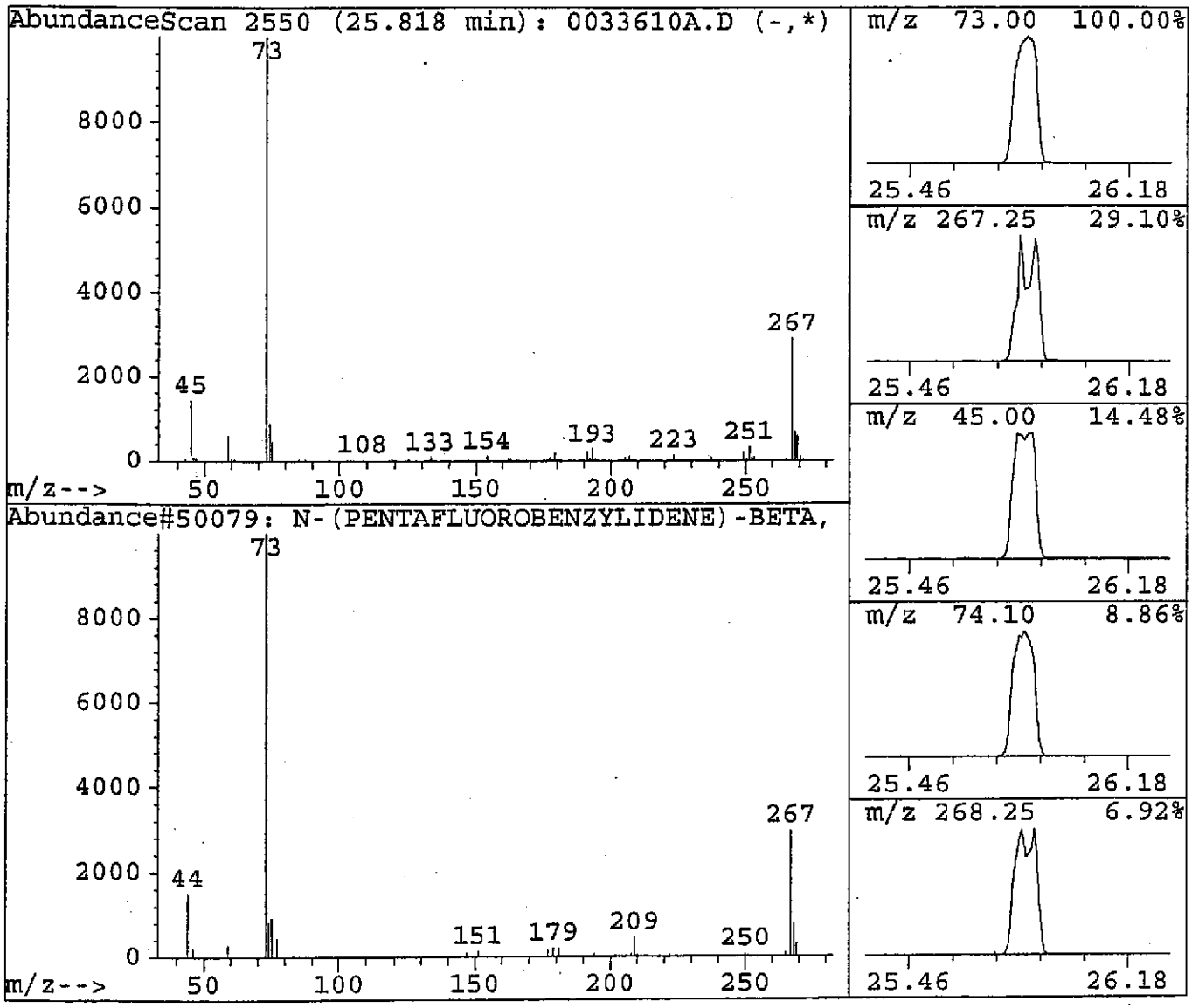
Data File : C:\MSCHEM\1\DATA\08030MS1\0033610A.D
Acq Time : 3 Aug 100 4:41 pm
Sample : A-010 CAN#612 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.46

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA T0-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.82	70.71 ppbV	28653036	1,4-Difluorobenzene	14.32

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	N-(PENTAFLUOROBENZYLIDENE)-BETA,4-B	50079	000000-00-0	33



Library Search Compound Report

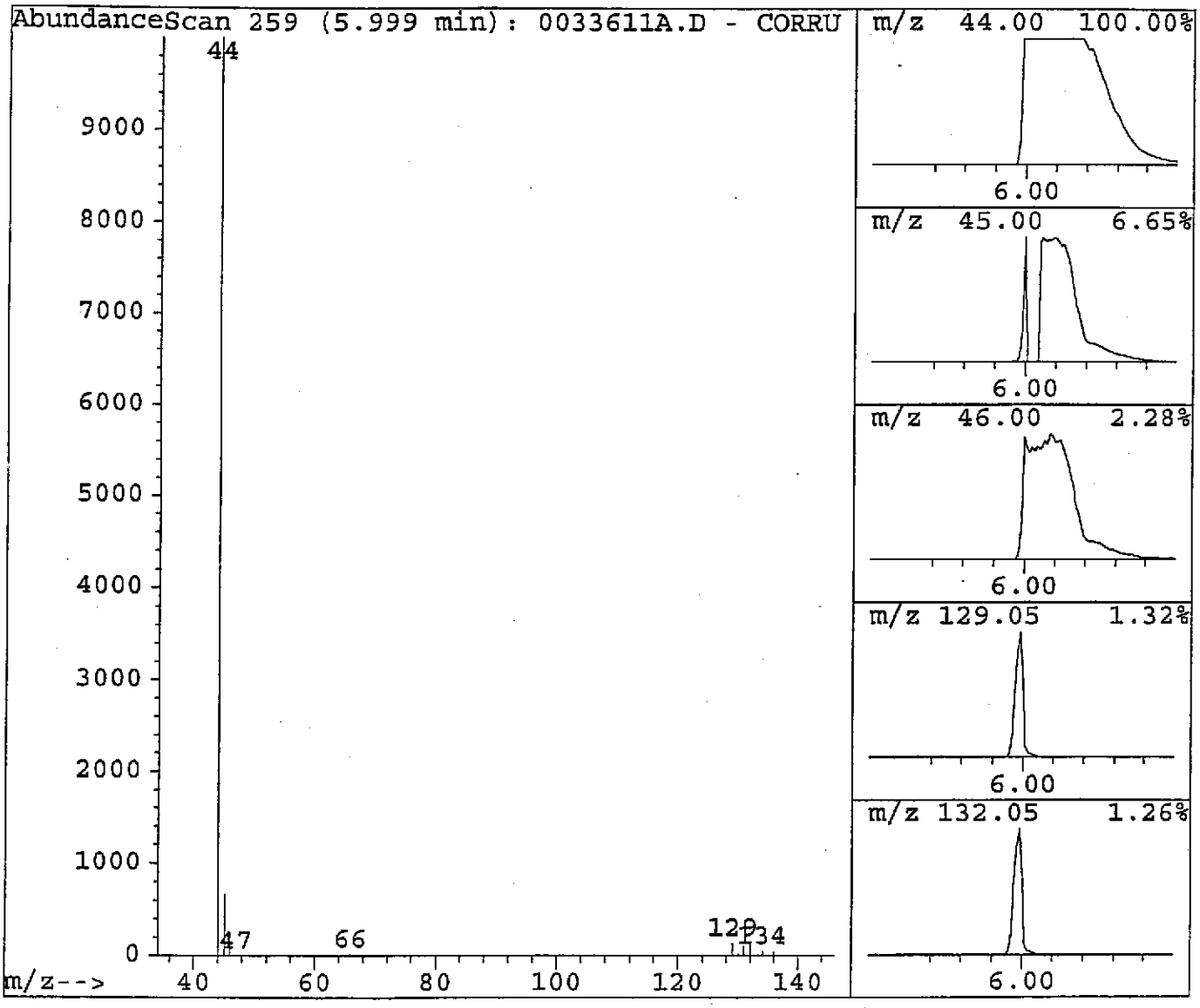
Data File : C:\MSCHEM\1\DATA\08030MS1\0033611A.D
Acq Time : 3 Aug 100 8:18 pm
Sample : A-011
Misc : C.E. SCHMIDT

Operator: CC/MF
Inst : 5970 - In
Multiplr: 2.42

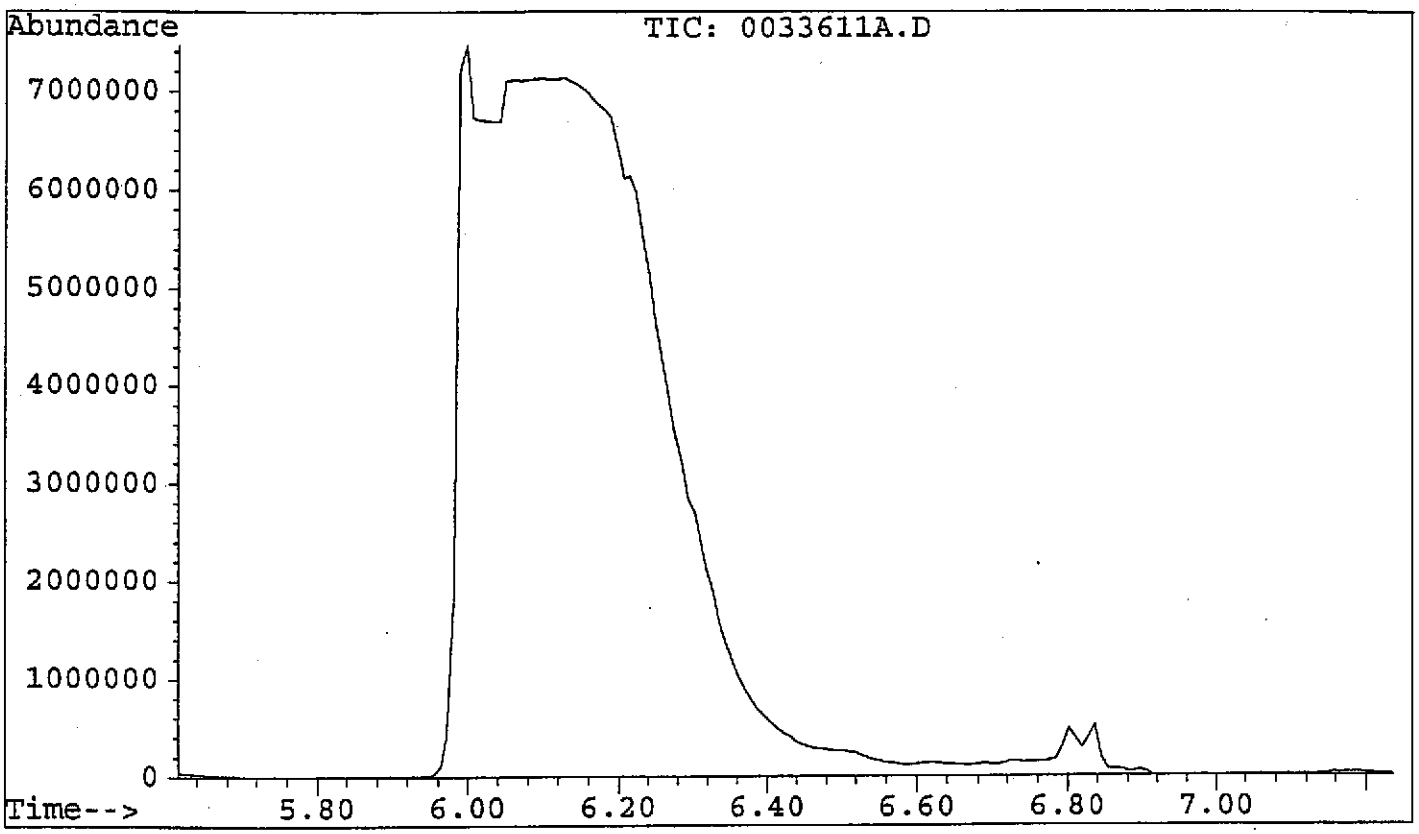
Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

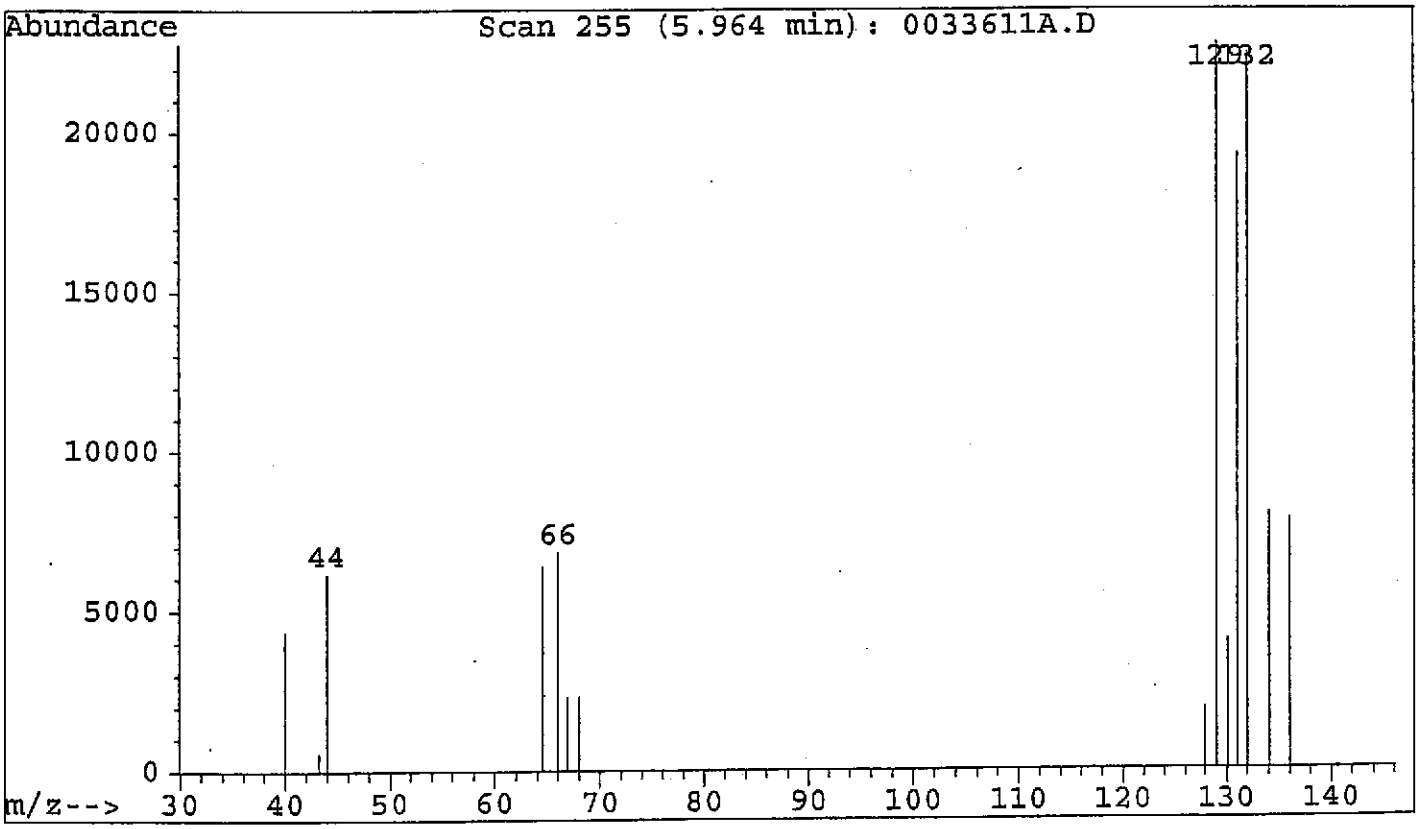
R.T.	Conc	Area	Relative to ISTD	R.T.
6.00	58.46 ppbV	22744071	Pentafluorobenzene	13.30

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NBS54K.L	0	000000-00-0	0

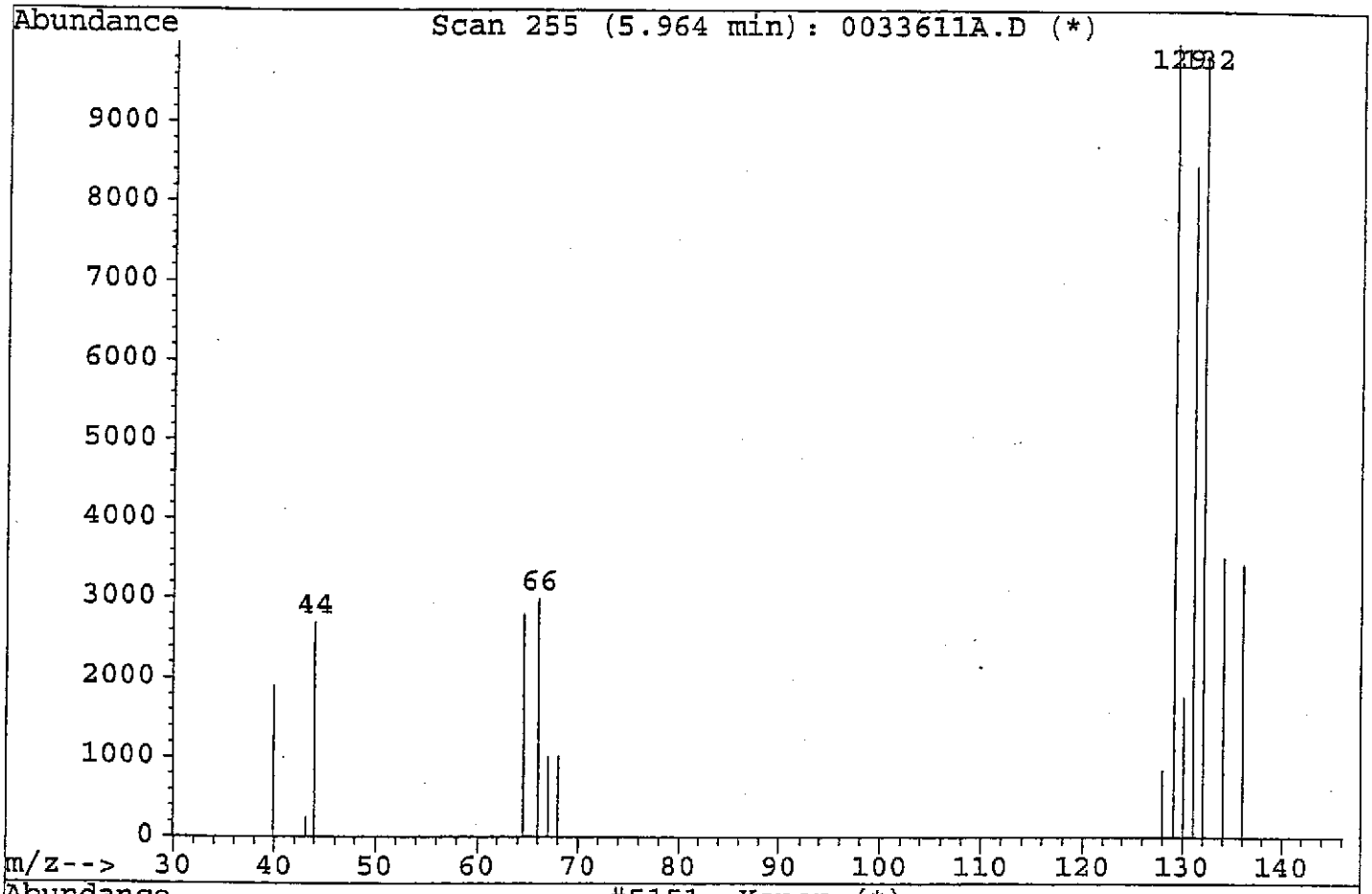


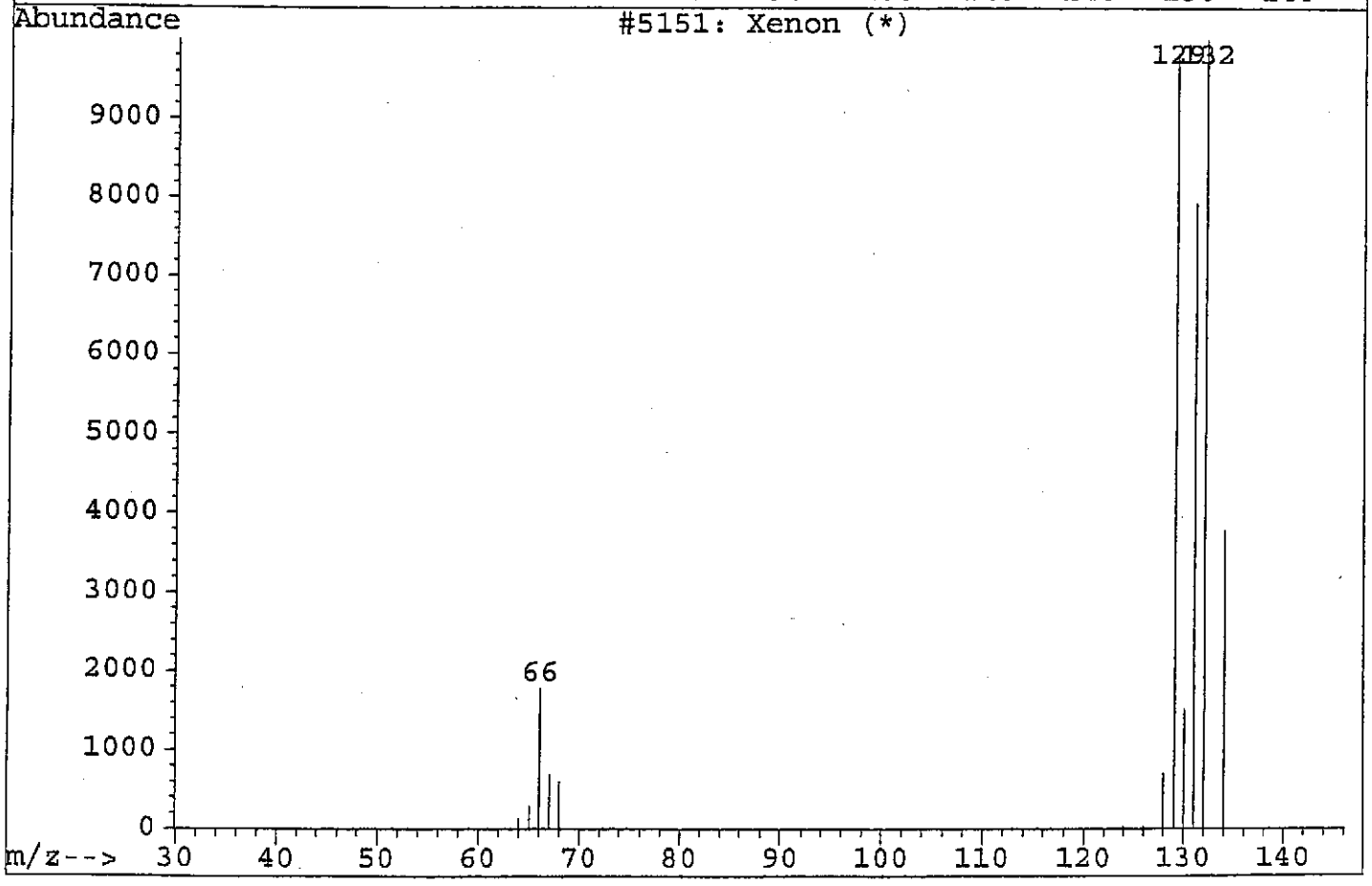
File : C:\MSCHEM\1\DATA\08030MS1\0033611A.D
Operator : CC/MF
Acquired : 3 Aug 100 8:18 pm using AcqMethod TO14_40F.M
Instrument : 5970 - In
Sample Name: A-011
Misc Info : C.E. SCHMIDT
Vial Number: 1





Library Searched : C:\DATABASE\NBS54K.L
Quality : 90
ID : Xenon





Xenon

Match Quality	:	90
Entry Number	:	5151
CAS Number	:	007440-63-3
Molecular Weight	:	132.00
Molecular Formula	:	Xe
Retention Index	:	0
Company ID	:	NIST 1/90
Melting Point	:	
Boiling Point	:	
Misc Information	:	

Metals;

Library Search Compound Report

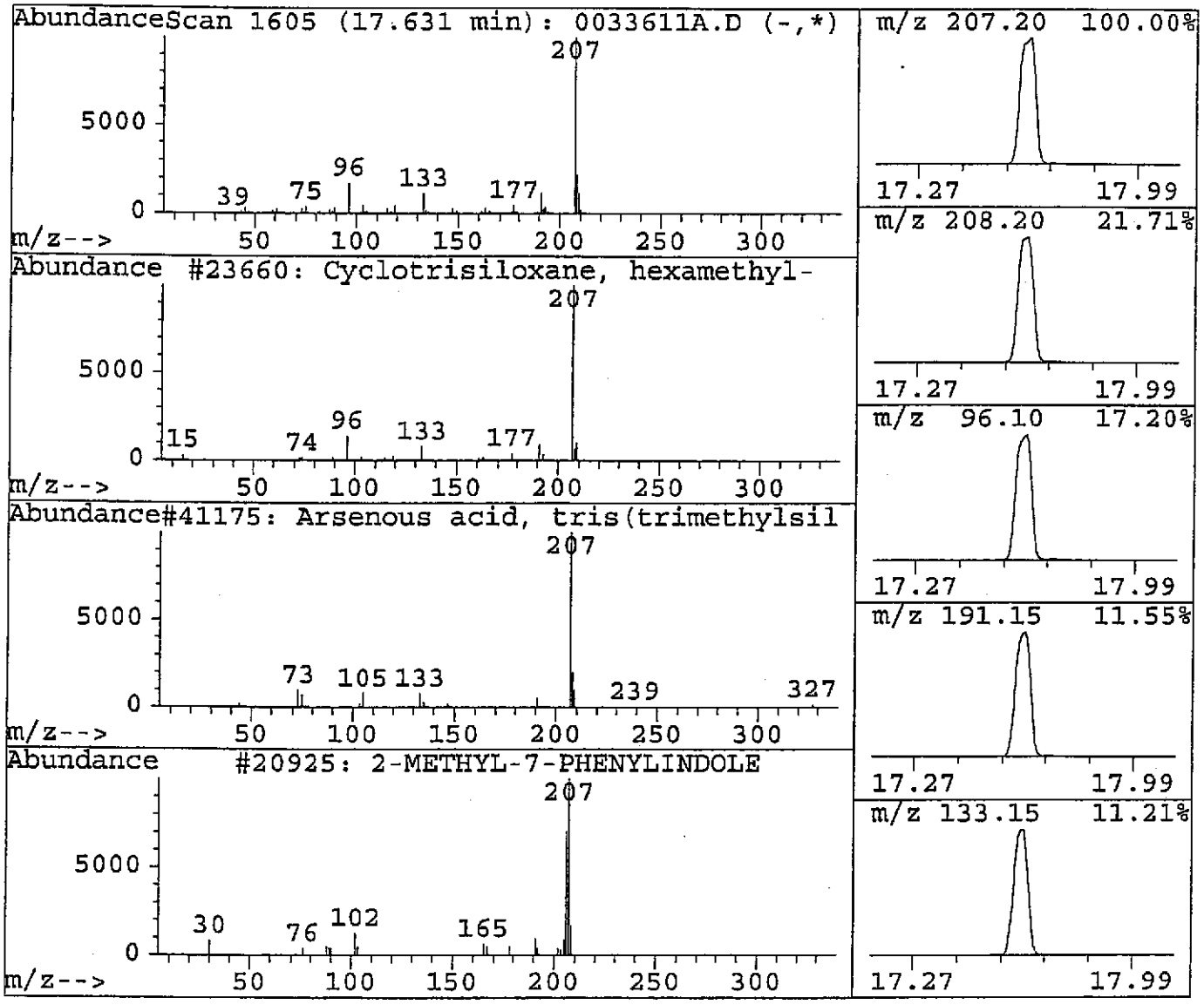
Data File : C:\MSCHEM\1\DATA\08030MS1\0033611A.D
Acq Time : 3 Aug 100 8:18 pm
Sample : A-011
Misc : C.E. SCHMIDT

Operator: CC/MF
Inst : 5970 - In
Multiplr: 2.42

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA T0-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
17.63	54.50 ppbV	24005681	1,4-Difluorobenzene	14.39

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	23660	000541-05-9	80
2	Arsenous acid, tris(trimethylsilyl)	41175	055429-29-3	50
3	2-METHYL-7-PHENYLINDOLE	20925	000000-00-0	42



Library Search Compound Report

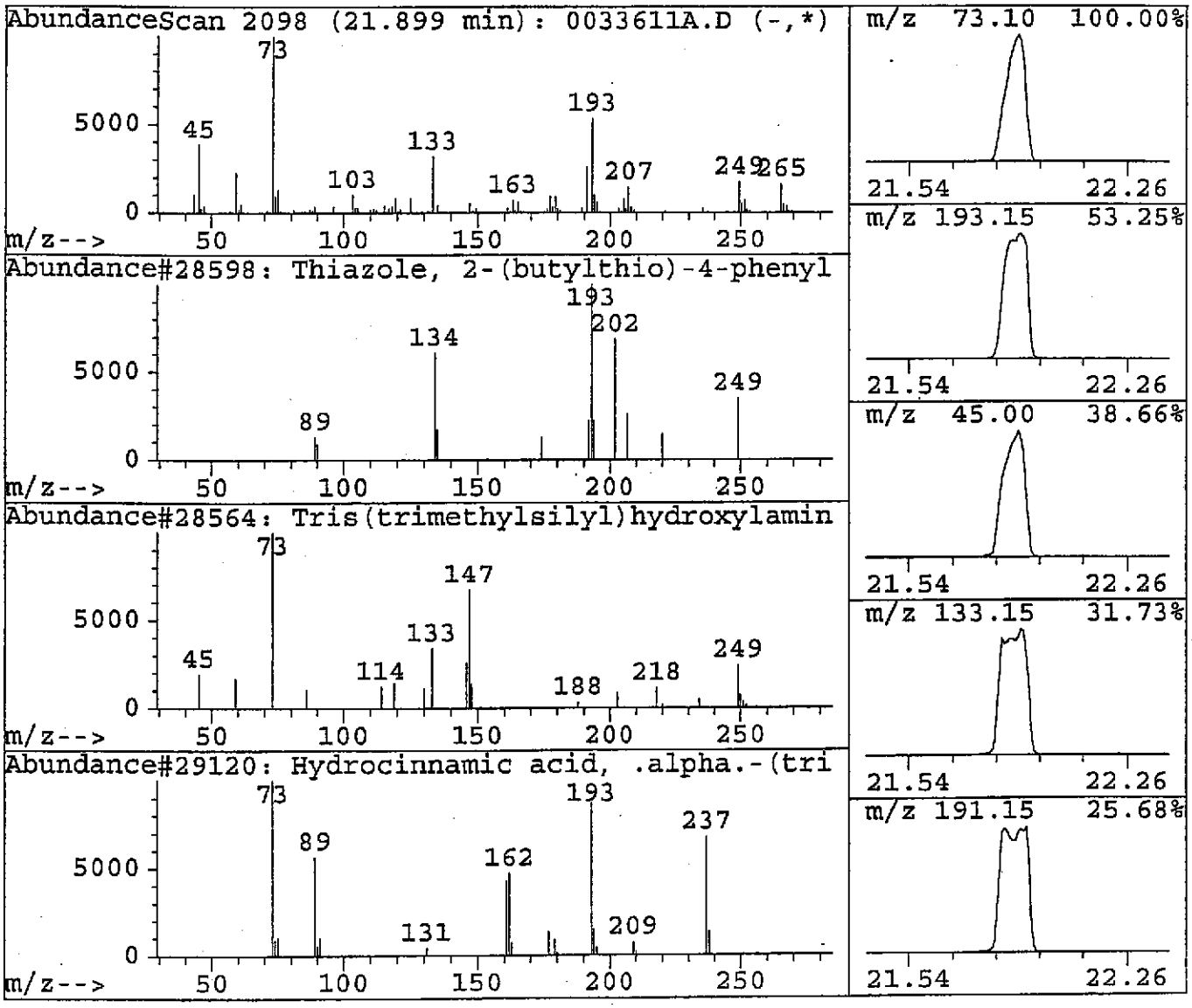
Data File : C:\MSCHEM\1\DATA\08030MS1\0033611A.D
Acq Time : 3 Aug 100 8:18 pm
Sample : A-011
Misc : C.E. SCHMIDT

Operator: CC/MF
Inst : 5970 - In
Multiplr: 2.42

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.90	40.85 ppbV	17992187	1,4-Difluorobenzene	14.39

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Thiazole, 2-(butylthio)-4-phenyl-	28598	069390-10-9	38
2	Tris(trimethylsilyl)hydroxylamine	28564	021023-20-1	25
3	Hydrocinnamic acid, .alpha.-(trimet	29120	027854-49-5	25
4	Benzeneacetic acid, trimethylsilyl	21077	002078-18-4	25
5	Trisiloxane, 1,1,3,3,5,5-hexamethyl	20949	001189-93-1	20



Library Search Compound Report

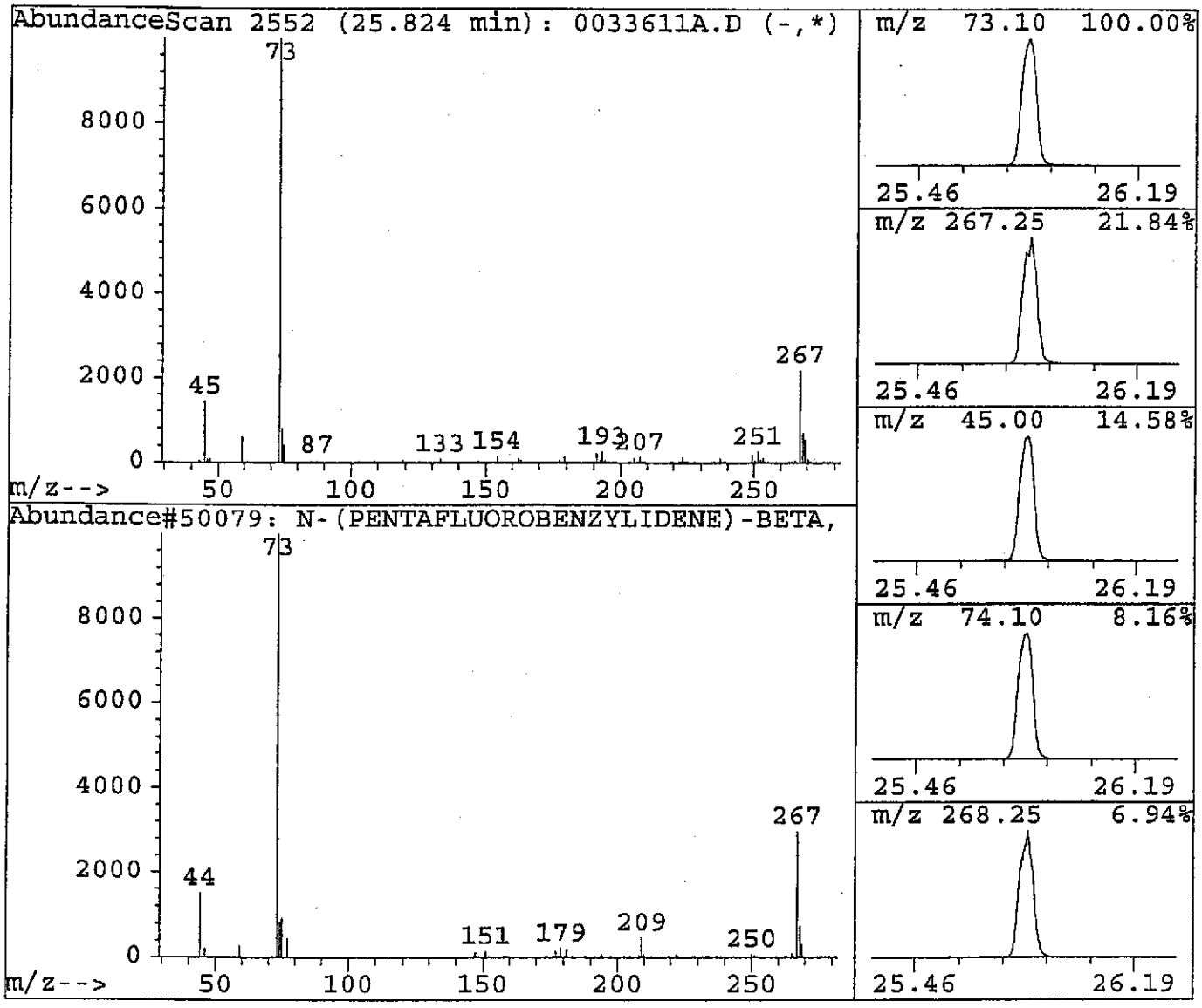
Data File : C:\MSCHEM\1\DATA\08030MS1\0033611A.D
Acq Time : 3 Aug 100 8:18 pm
Sample : A-011
Misc : C.E. SCHMIDT

Operator: CC/MF
Inst : 5970 - In
Multiplr: 2.42

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.82	23.05 ppbV	10151964	1,4-Difluorobenzene	14.39

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	N-(PENTAFLUOROBENZYLIDENE)-BETA,4-B	50079	000000-00-0	53



Library Search Compound Report

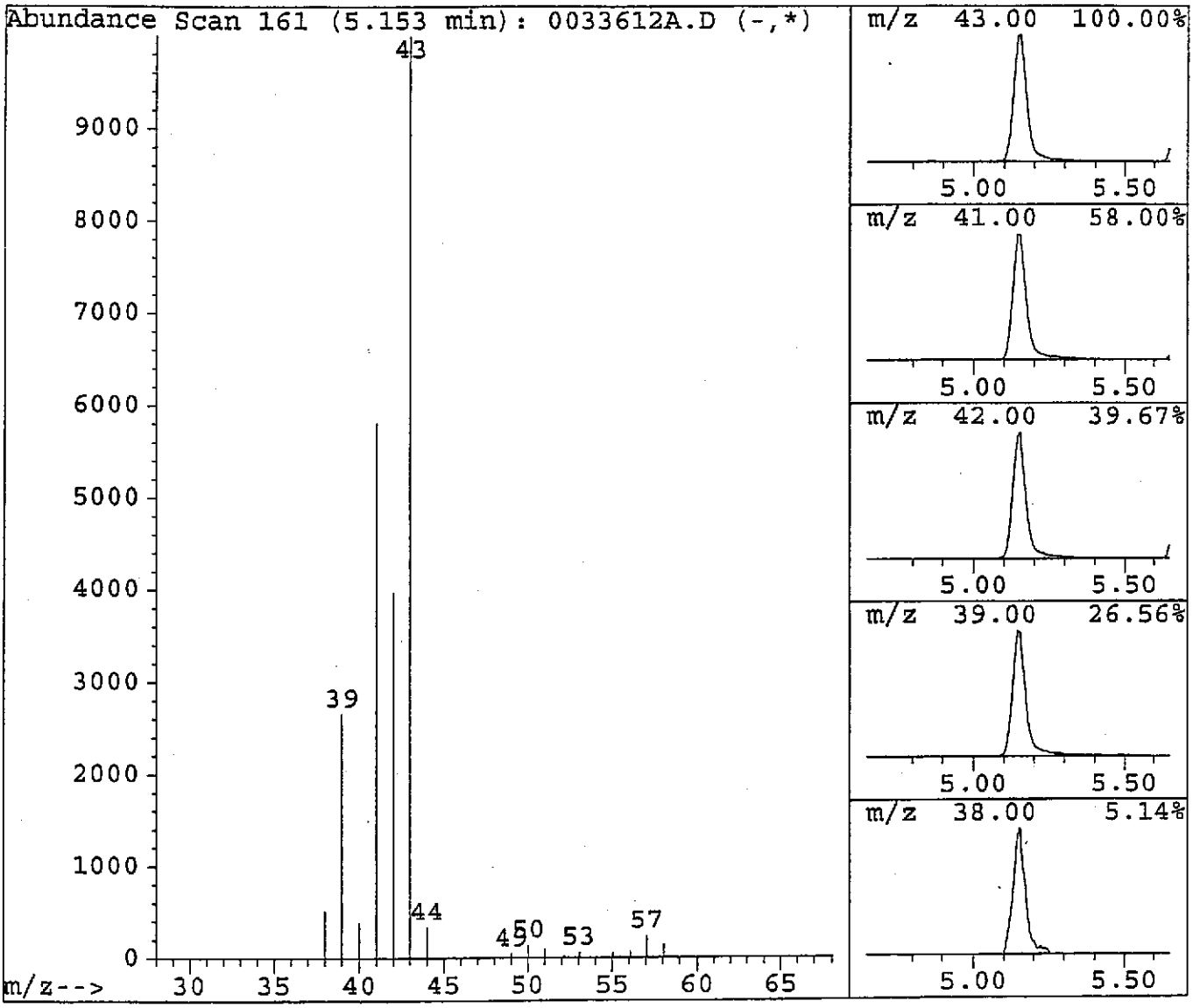
Data File : C:\MSCHEM\1\DATA\08040MS1\0033612A.D
Acq Time : 4 Aug 100 1:07 pm
Sample : A-012 CAN#699 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.42

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
5.15	5.56 ppbV	2654807	Pentafluorobenzene	13.20

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1 No Hits From C:\DATABASE\NBS54K.L		0	000000-00-0	0



Library Search Compound Report

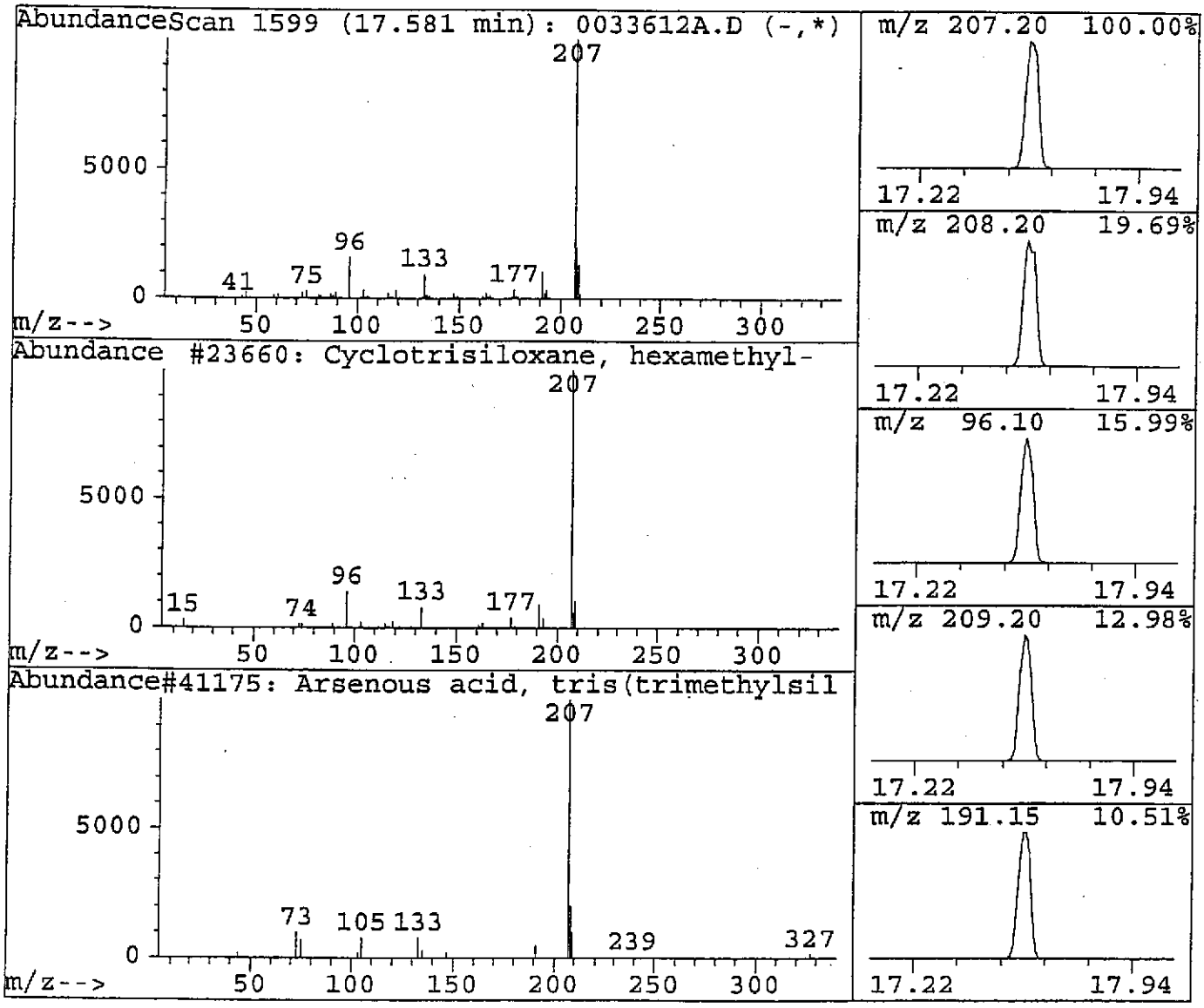
Data File : C:\MSCHEM\1\DATA\08040MS1\0033612A.D
Acq Time : 4 Aug 100 1:07 pm
Sample : A-012 CAN#699 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.42

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
17.58	37.27 ppbV	22424317	1,4-Difluorobenzene	14.30

Hit# of 2	Tentative ID	Ref#	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	23660	000541-05-9	80
2	Arsenous acid, tris(trimethylsilyl)	41175	055429-29-3	56



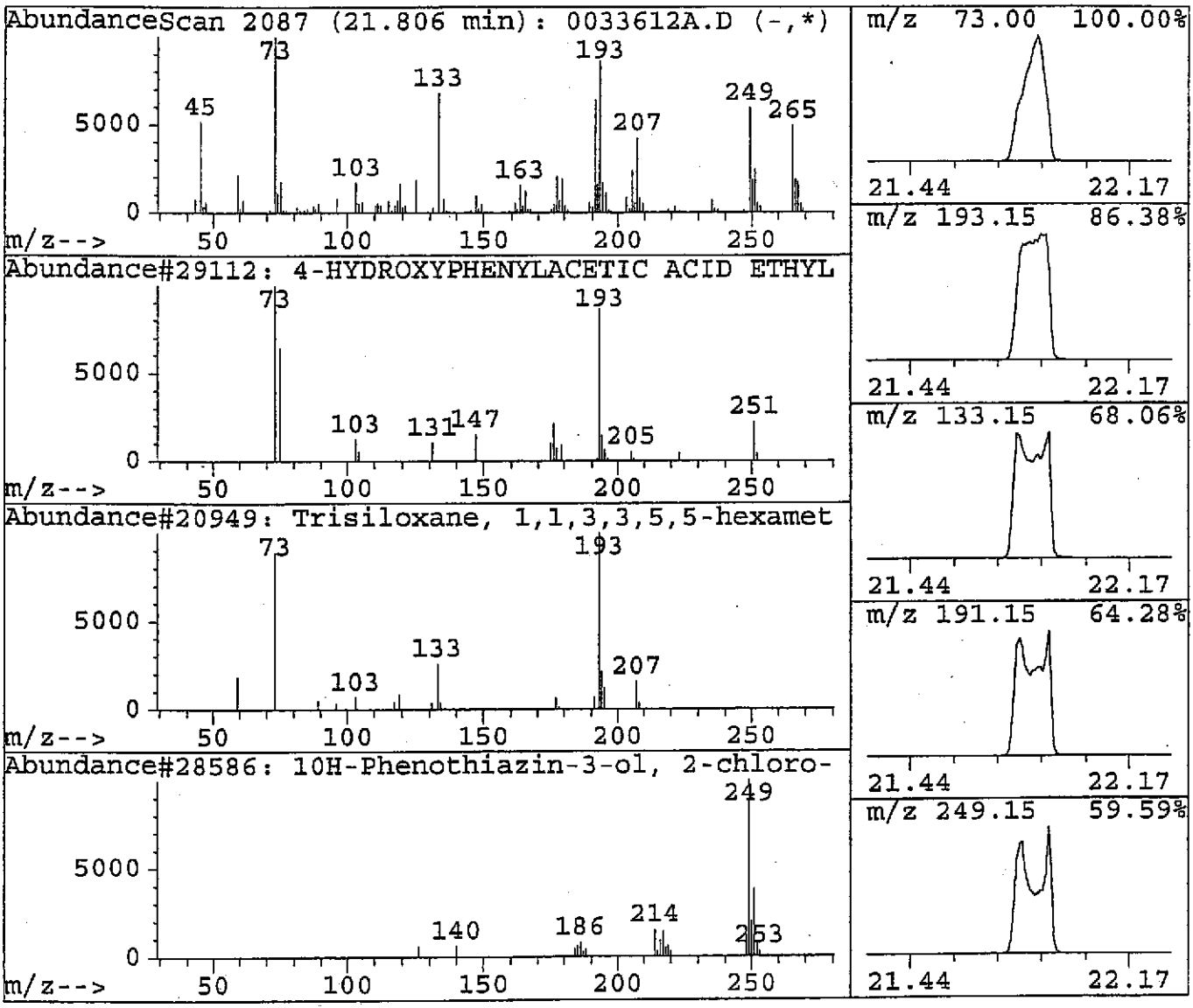
Data File : C:\MSCHEM\1\DATA\08040MS1\0033612A.D
Acq Time : 4 Aug 100 1:07 pm
Sample : A-012 CAN#699 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.42

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA T0-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.81	21.00 ppbV	12636681	1,4-Difluorobenzene	14.30

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4-HYDROXYPHENYLACETIC ACID ETHYL ES	29112	000000-00-0	35
2	Trisiloxane, 1,1,3,3,5,5-hexamethyl	20949	001189-93-1	14
3	10H-Phenothiazin-3-ol, 2-chloro-	28586	016770-99-3	10
4	4H-Pyrido[1,2-a]pyrimidine-3-carbox	31200	064399-30-0	10
5	4H-Pyrido[1,2-a]pyrimidine-3-acetic	31318	050609-68-2	10



Library Search Compound Report

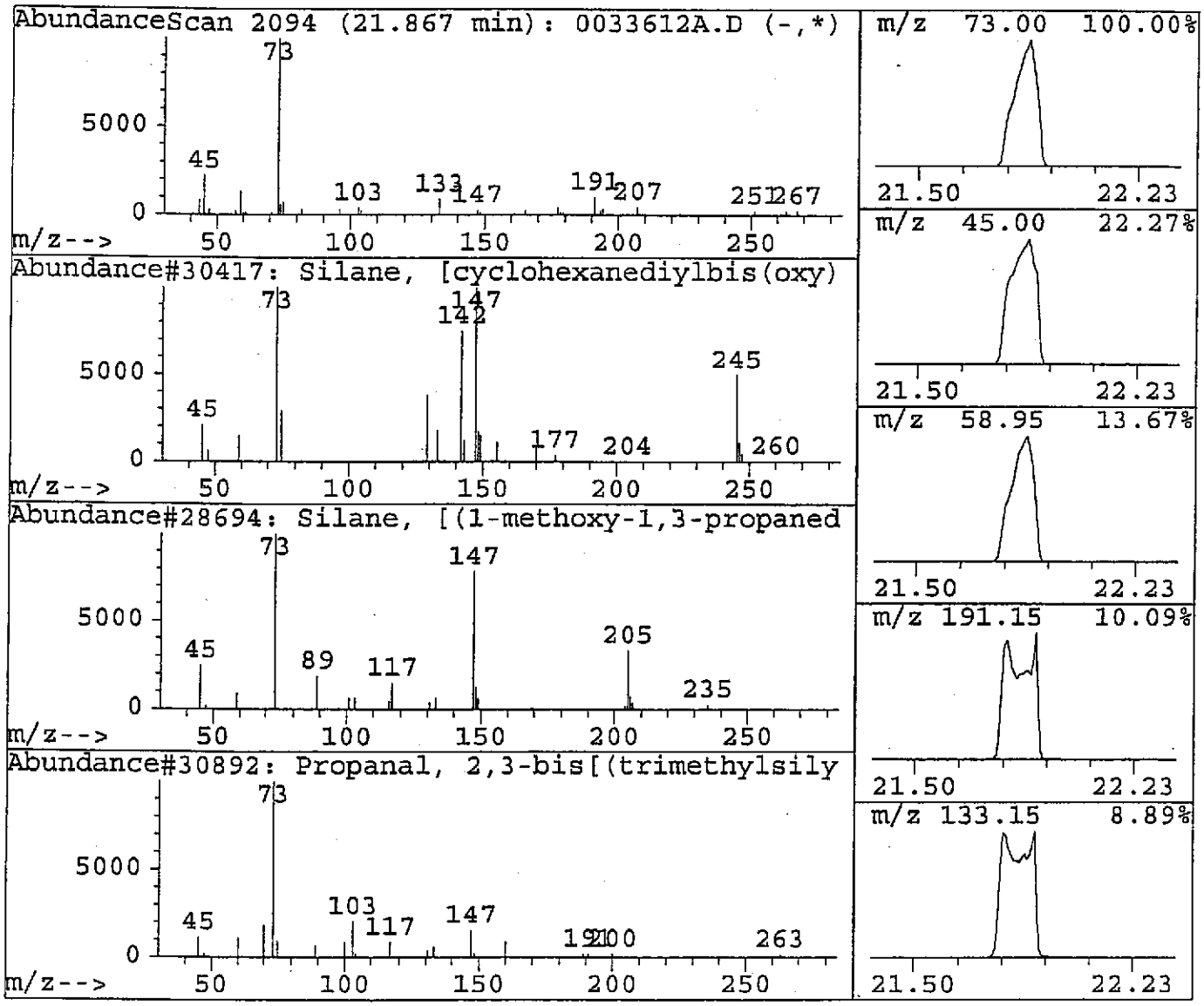
Data File : C:\MSCHEM\1\DATA\08040MS1\0033612A.D
Acq Time : 4 Aug 100 1:07 pm
Sample : A-012 CAN#699 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.42

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.87	22.73 ppbV	13676871	1,4-Difluorobenzene	14.30

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	Silane, [cyclohexanediylbis(oxy)]bi	30417	072088-20-1	40
2	Silane, [(1-methoxy-1,3-propanediyl	28694	062185-57-3	36
3	Propanal, 2,3-bis[(trimethylsilyl)o	30892	056196-02-2	17
4	3,6,9-Trioxa-2-silaundecane, 2,2-di	20557	016654-46-9	10



Library Search Compound Report

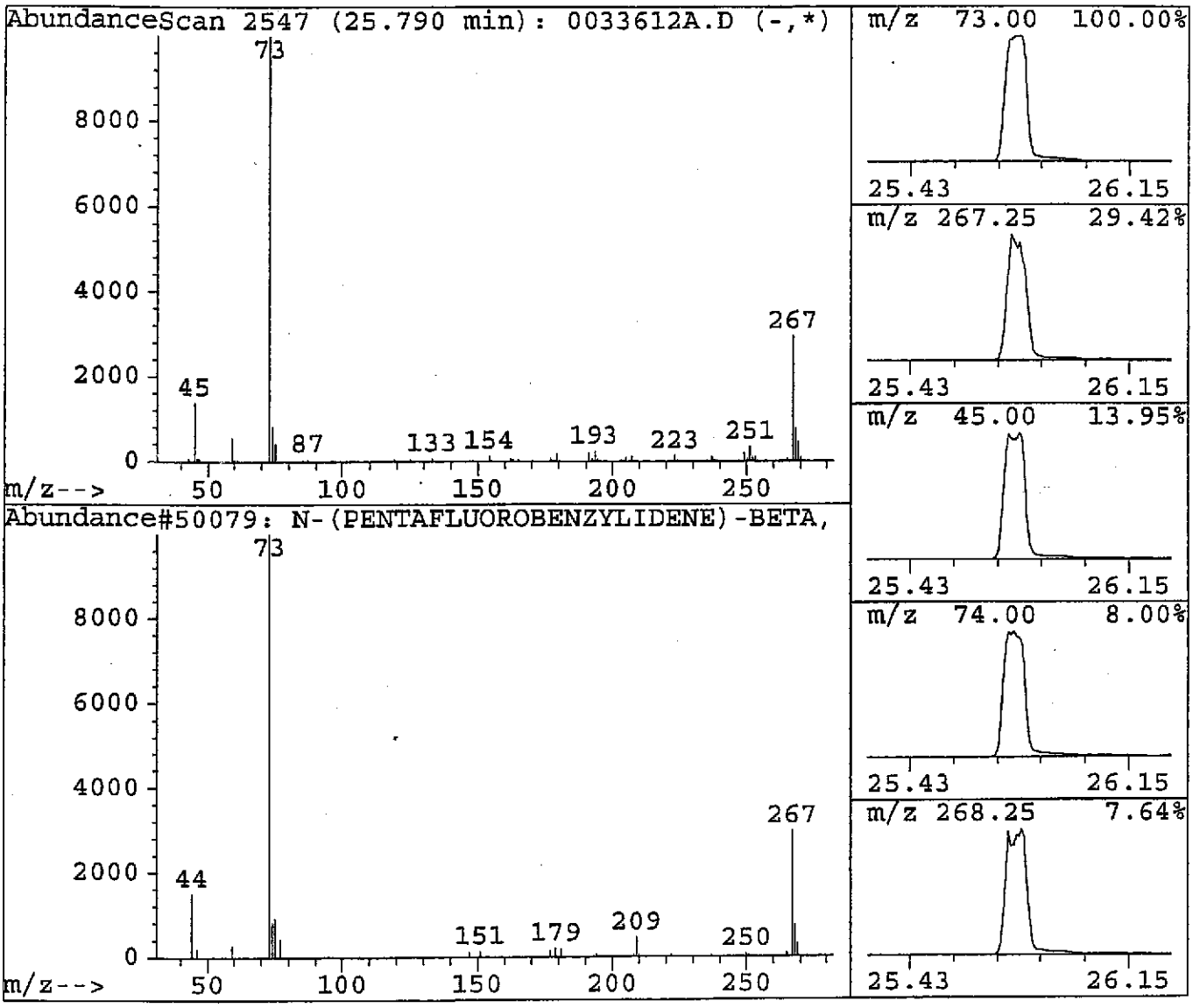
Data File : C:\MSCHEM\1\DATA\08040MS1\0033612A.D
Acq Time : 4 Aug 100 1:07 pm
Sample : A-012 CAN#699 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.42

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.79	64.21 ppbV	38632385	1,4-Difluorobenzene	14.30

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	N-(PENTAFLUOROBENZYLIDENE)-BETA,4-B	50079	000000-00-0	45



Library Search Compound Report

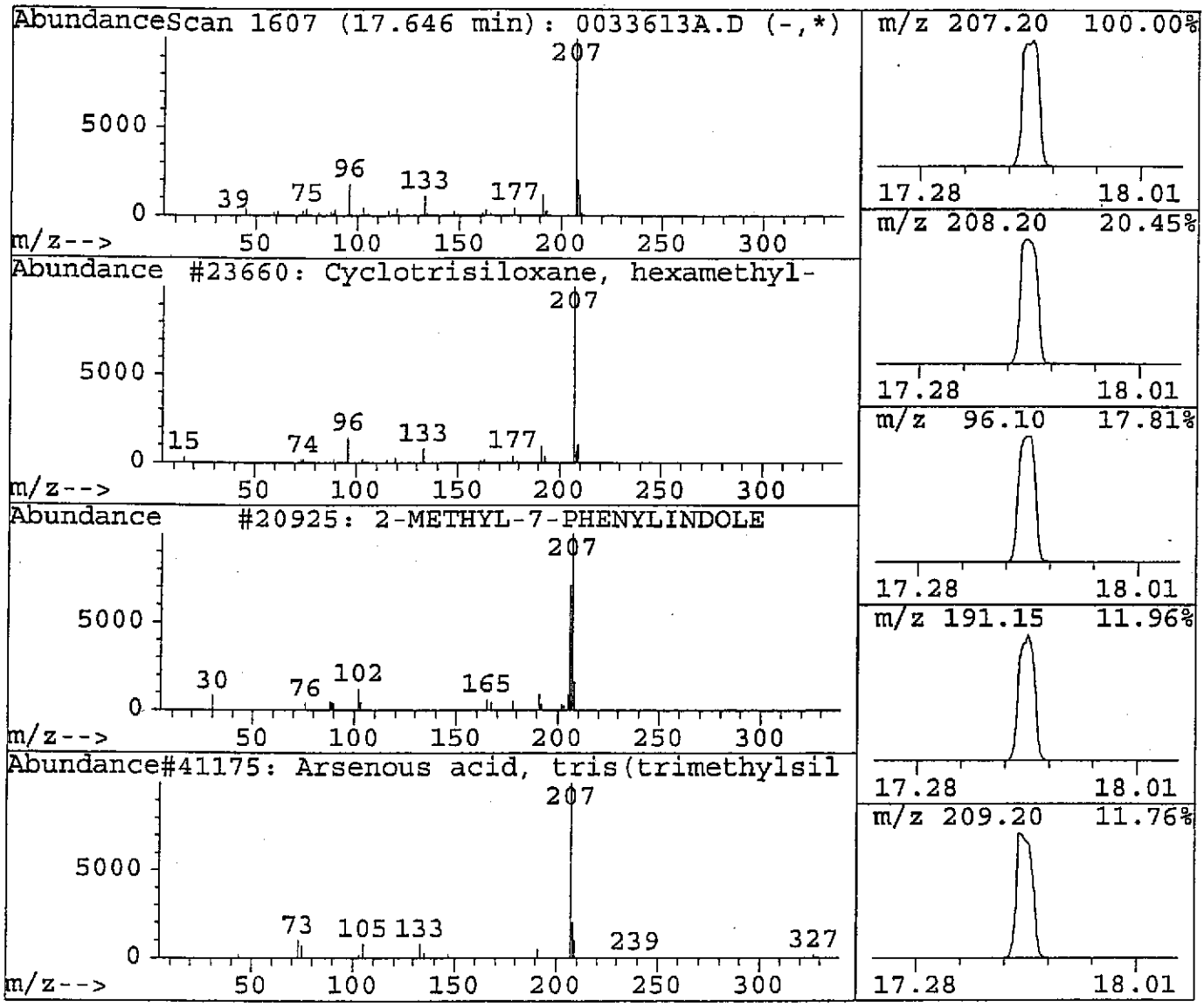
Data File : C:\MSCHEM\1\DATA\08030MS1\0033613A.D
Acq Time : 3 Aug 100 9:14 pm
Sample : A-013
Misc : C.E. SCHMIDT

Operator: CC/MF
Inst : 5970 - In
Multiplr: 2.46

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
17.65	43.40 ppbV	15240142	1,4-Difluorobenzene	14.34

Hit# of 3	Tentative ID	Ref#	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	23660	000541-05-9	72
2	2-METHYL-7-PHENYLINDOLE	20925	000000-00-0	42
3	Arsenous acid, tris(trimethylsilyl)	41175	055429-29-3	39



Library Search Compound Report

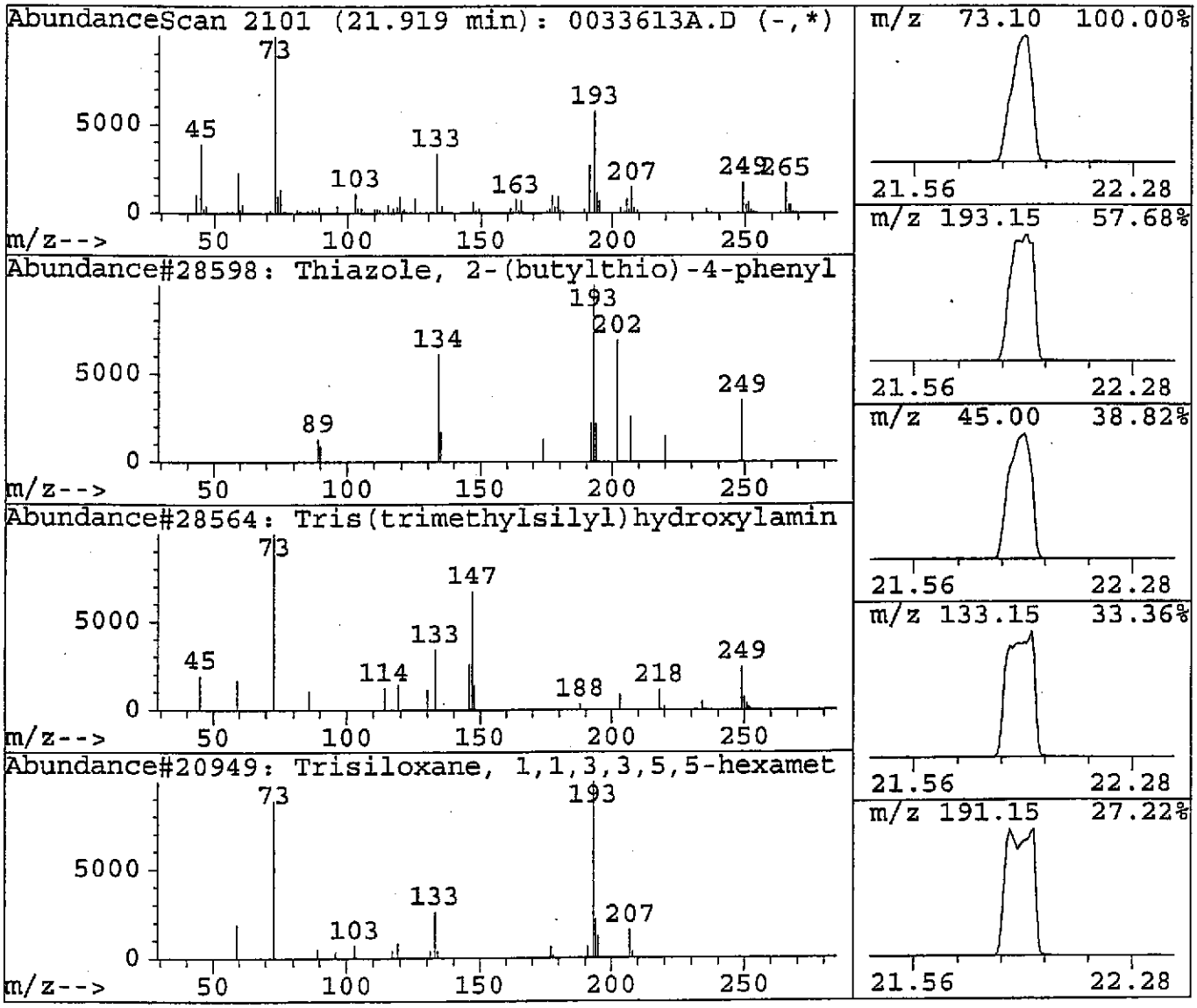
Data File : C:\MSCHEM\1\DATA\08030MS1\0033613A.D
Acq Time : 3 Aug 100 9:14 pm
Sample : A-013
Misc : C.E. SCHMIDT

Operator: CC/MF
Inst : 5970 - In
Multiplr: 2.46

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA T0-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.92	35.14 ppbV	12338737	1,4-Difluorobenzene	14.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Thiazole, 2-(butylthio)-4-phenyl-	28598	069390-10-9	38
2	Tris(trimethylsilyl)hydroxylamine	28564	021023-20-1	35
3	Trisiloxane, 1,1,3,3,5,5-hexamethyl	20949	001189-93-1	30
4	Terephthalaldehydic acid, methyl es	17821	033499-35-3	27
5	Hydrocinnamic acid, .alpha.-(trimet	29120	027854-49-5	25



Library Search Compound Report

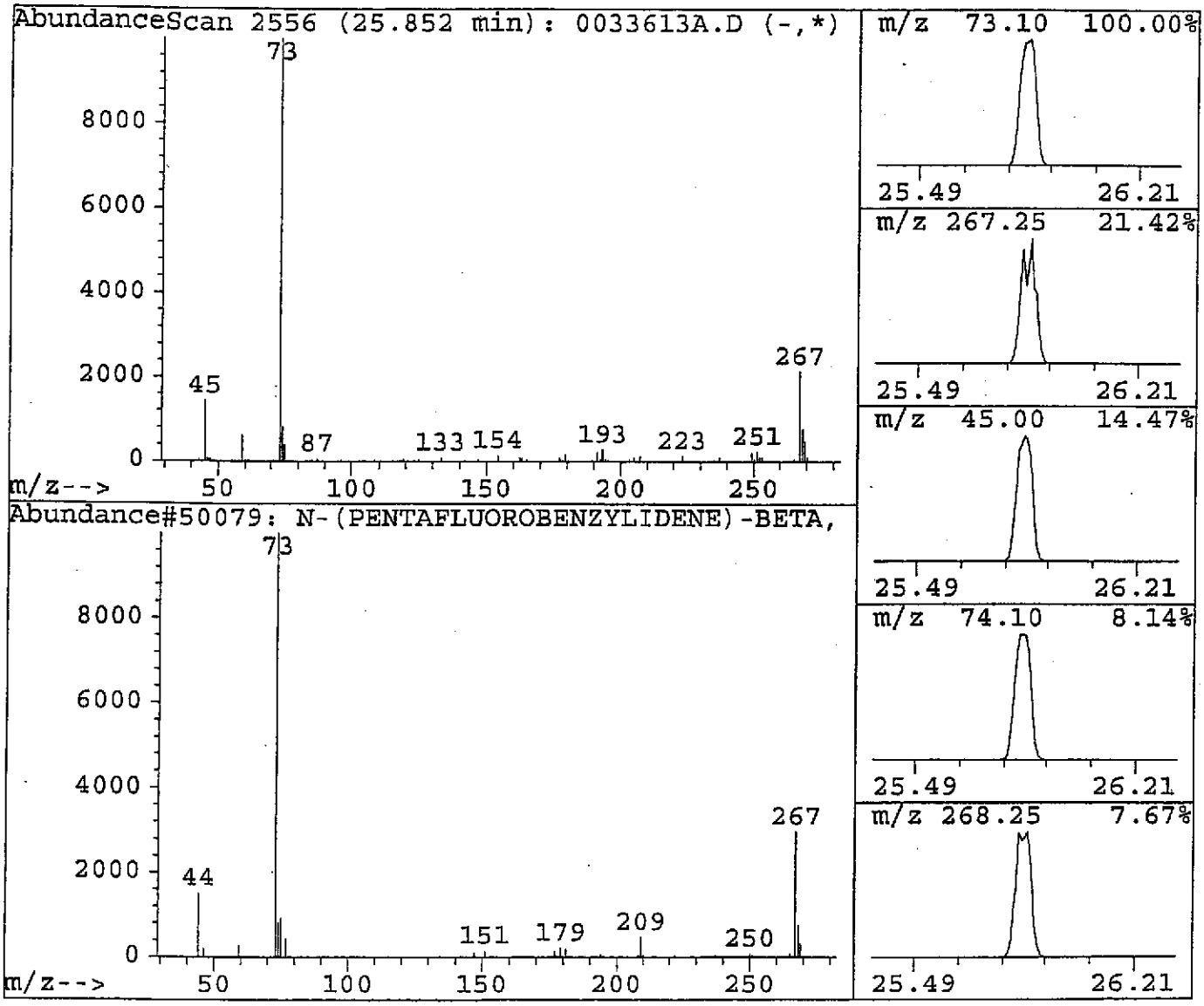
Data File : C:\MSCHEM\1\DATA\08030MS1\0033613A.D
Acq Time : 3 Aug 100 9:14 pm
Sample : A-013
Misc : C.E. SCHMIDT

Operator: CC/MF
Inst : 5970 - In
Multiplr: 2.46

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.85	42.20 ppbV	14815727	1,4-Difluorobenzene	14.34

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	N-(PENTAFLUOROBENZYLIDENE)-BETA,4-B	50079	000000-00-0	42



Library Search Compound Report

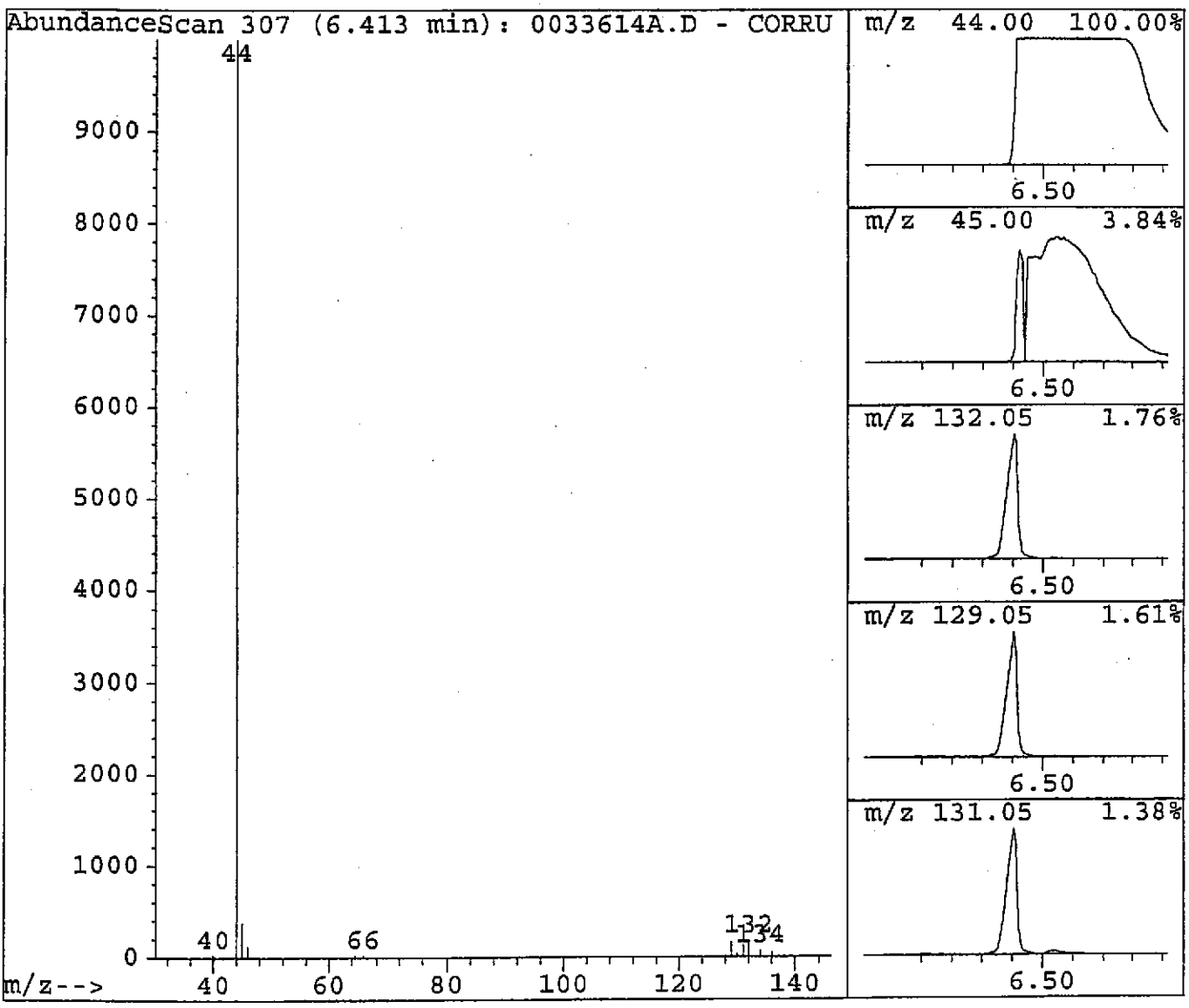
Data File : C:\MSCHEM\1\DATA\08030MS1\0033614A.D
Acq Time : 3 Aug 100 7:22 pm
Sample : A-014
Misc : C.E. SCHMIDT

Operator: CC/MF
Inst : 5970 - In
Multiplr: 2.44

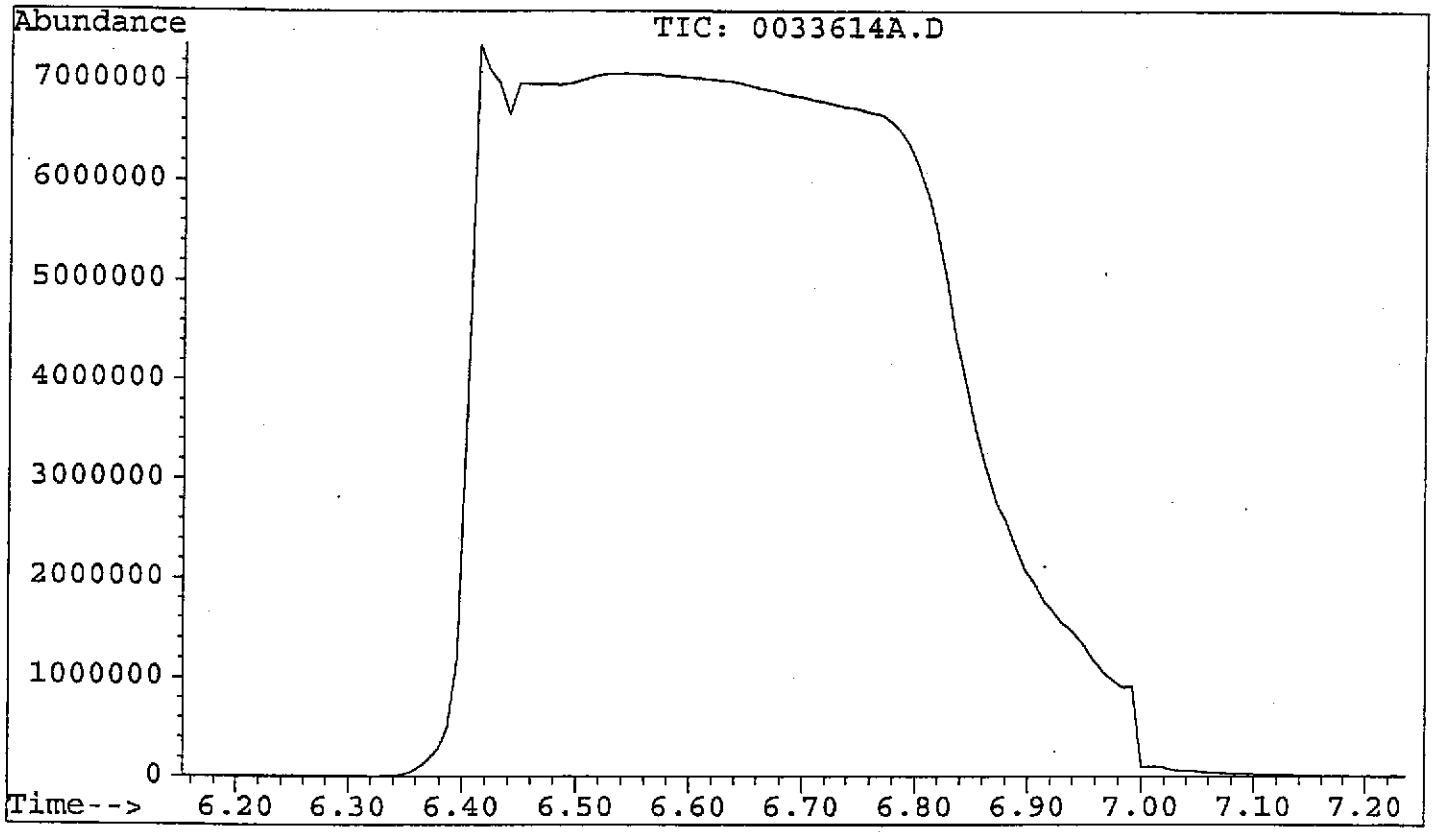
Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA T0-14
Library : C:\DATABASE\NBS54K.L

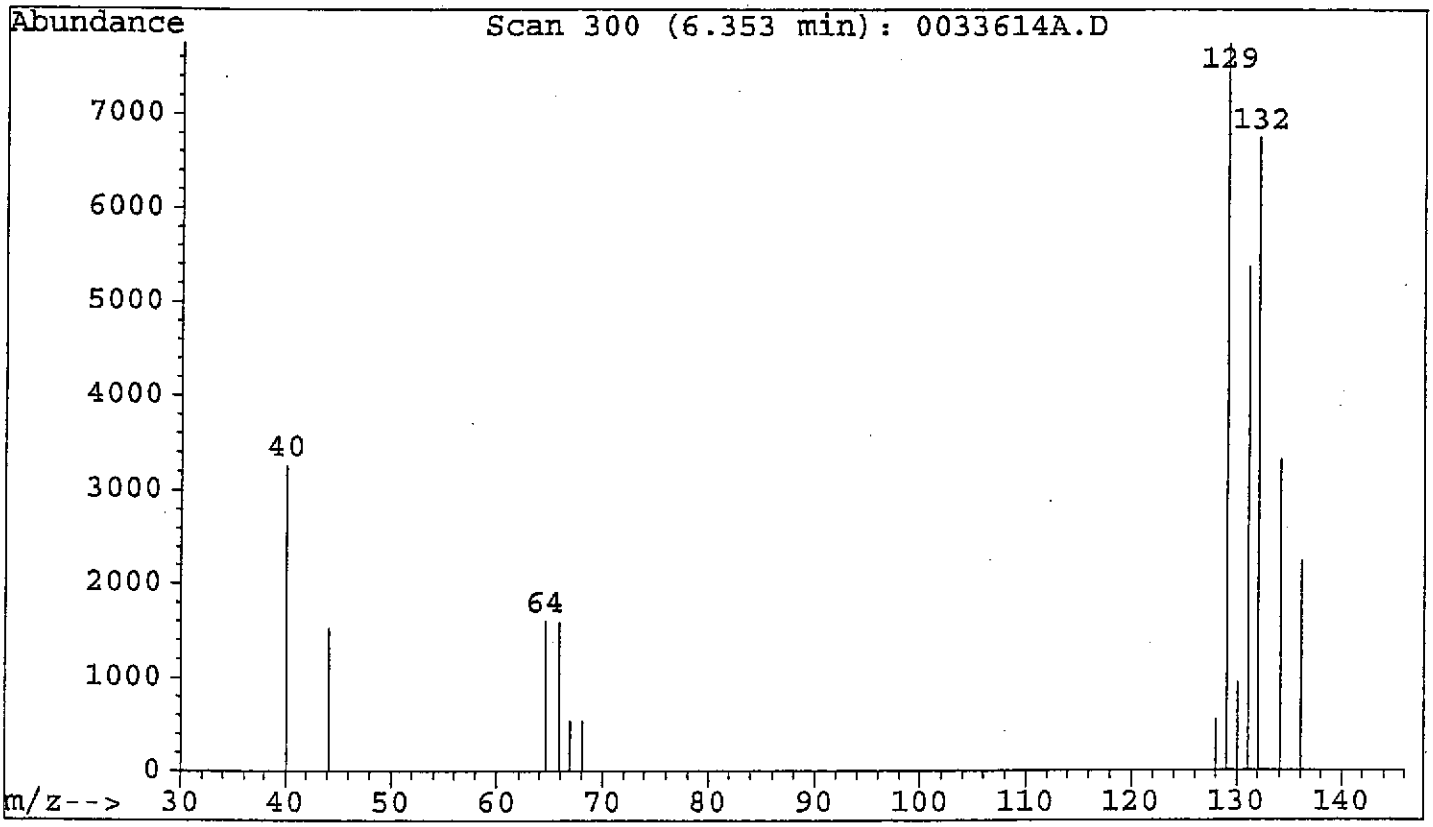
R.T.	Conc	Area	Relative to ISTD	R.T.
6.41	50.45 ppbV	17718571	Pentafluorobenzene	13.43

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NBS54K.L	0	000000-00-0	0



File : C:\MSCHEM\1\DATA\08030MS1\0033614A.D
Operator : CC/MF
Acquired : 3 Aug 100 7:22 pm using AcqMethod TO14_40F.M
Instrument : 5970 - In
Sample Name: A-014
Misc Info : C.E. SCHMIDT
Vial Number: 1





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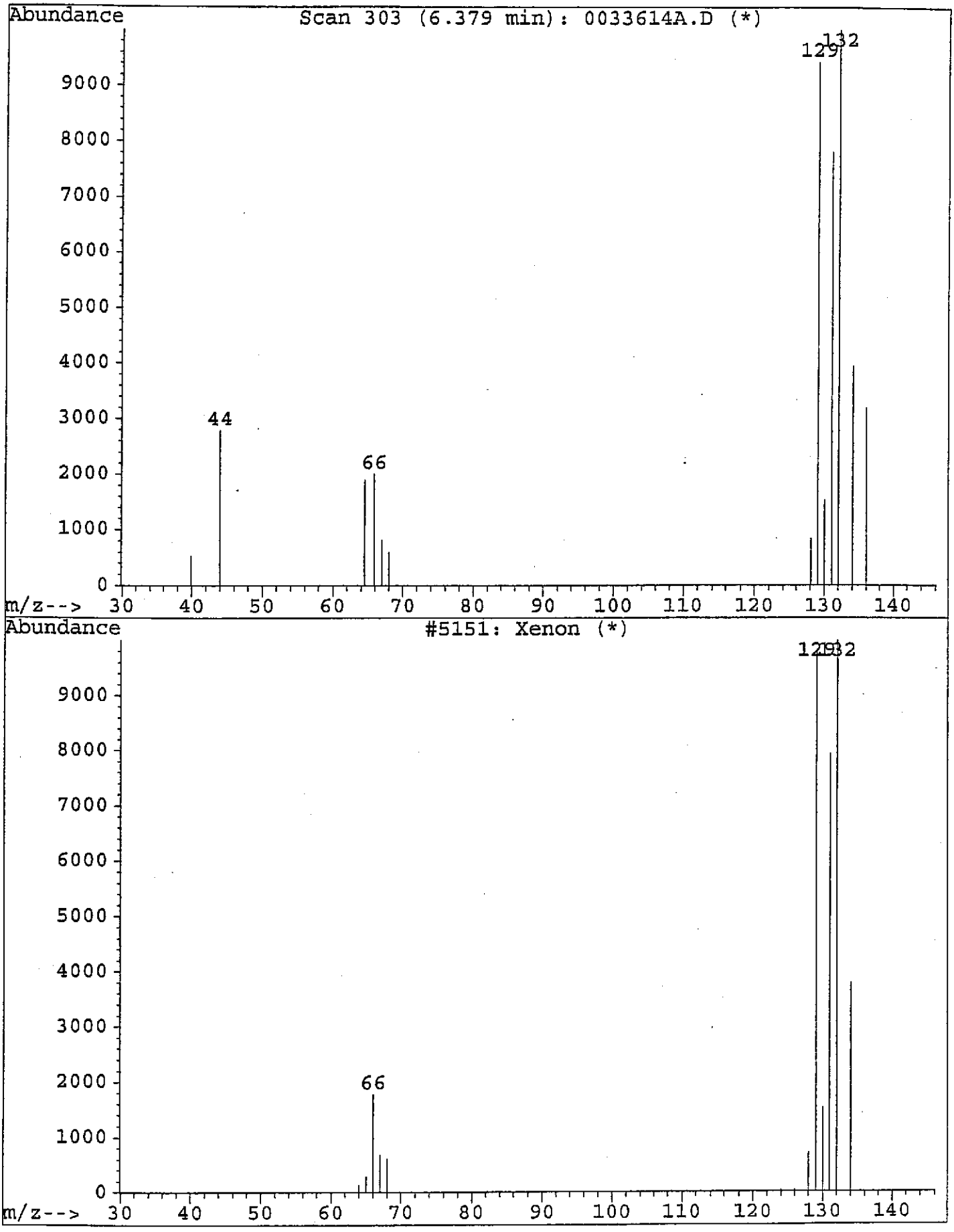


Library Search Compound Report

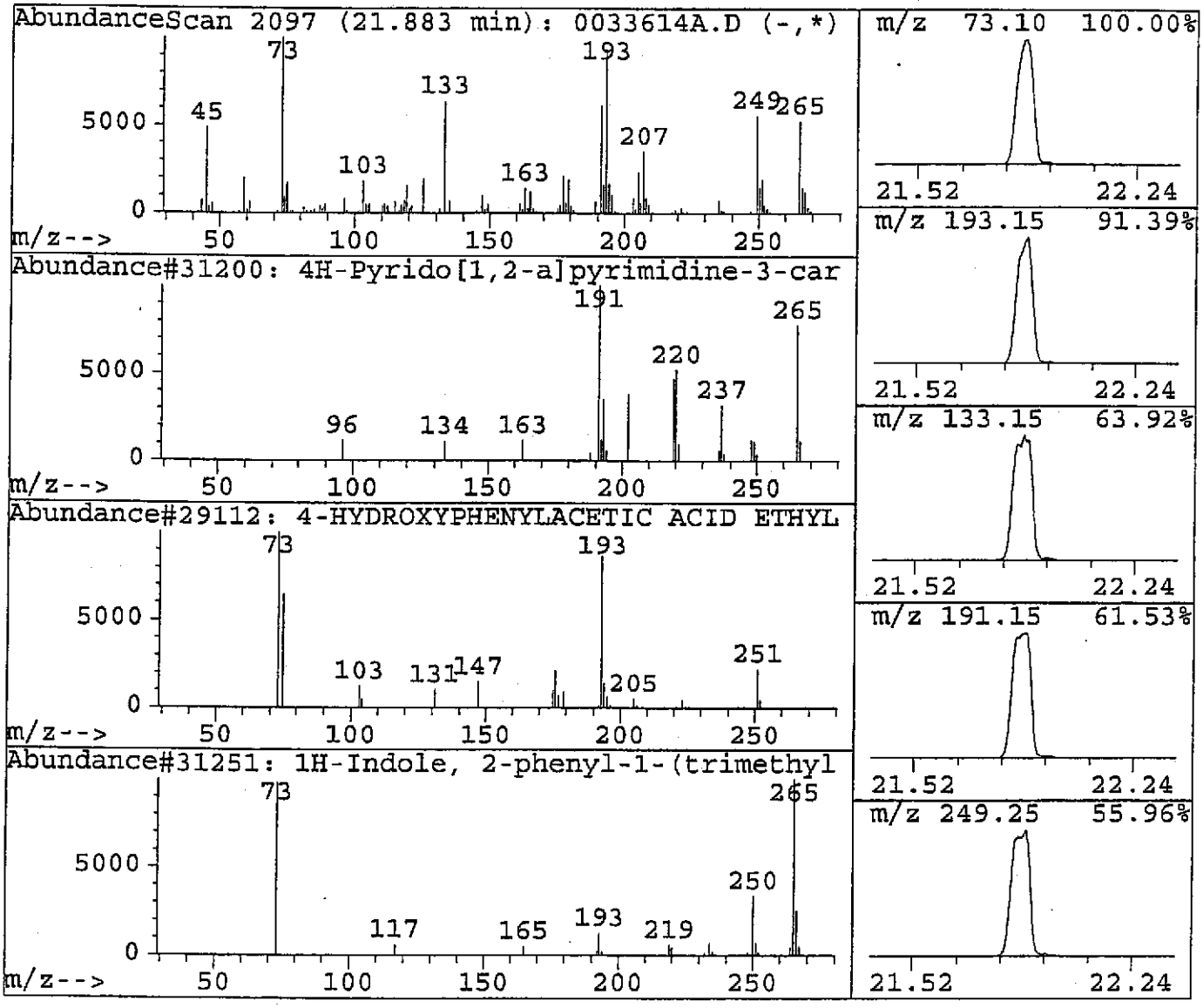
Data File : C:\MSCHEM\1\DATA\08030MS1\0033614A.D
Acq Time : 3 Aug 100 7:22 pm
Sample : A-014
Misc : C.E. SCHMIDT

Operator: CC/MF
Inst : 5970 - In
Multiplr: 2.44

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.88	16.06 ppbV	7617235	1,4-Difluorobenzene	14.48

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	4H-Pyrido[1,2-a]pyrimidine-3-carbox	31200	064399-30-0	25
2	4-HYDROXYPHENYLACETIC ACID ETHYL ES	29112	000000-00-0	20
3	1H-Indole, 2-phenyl-1-(trimethylsil	31251	074367-54-7	14
4	Trisiloxane, 1,1,3,3,5,5-hexamethyl	20949	001189-93-1	12
5	1-Anthracenamine	17883	000610-49-1	11



Library Search Compound Report

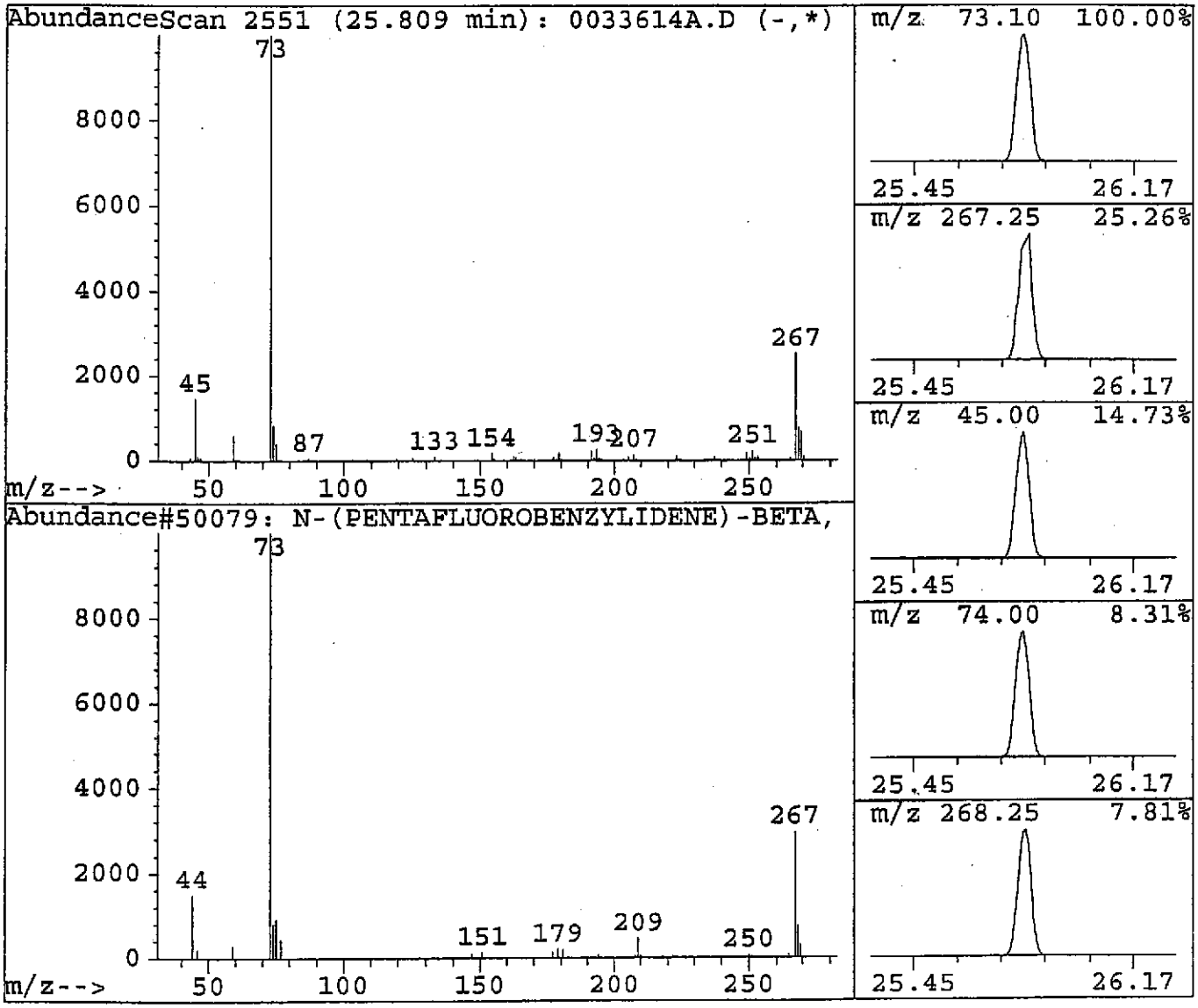
Data File : C:\MSCHEM\1\DATA\08030MS1\0033614A.D
Acq Time : 3 Aug 100 7:22 pm
Sample : A-014
Misc : C.E. SCHMIDT

Operator: CC/MF
Inst : 5970 - In
Multiplr: 2.44

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.81	15.09 ppbV	7159108	1,4-Difluorobenzene	14.48

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	N-(PENTAFLUOROBENZYLIDENE)-BETA,4-B	50079	000000-00-0	42



Library Search Compound Report

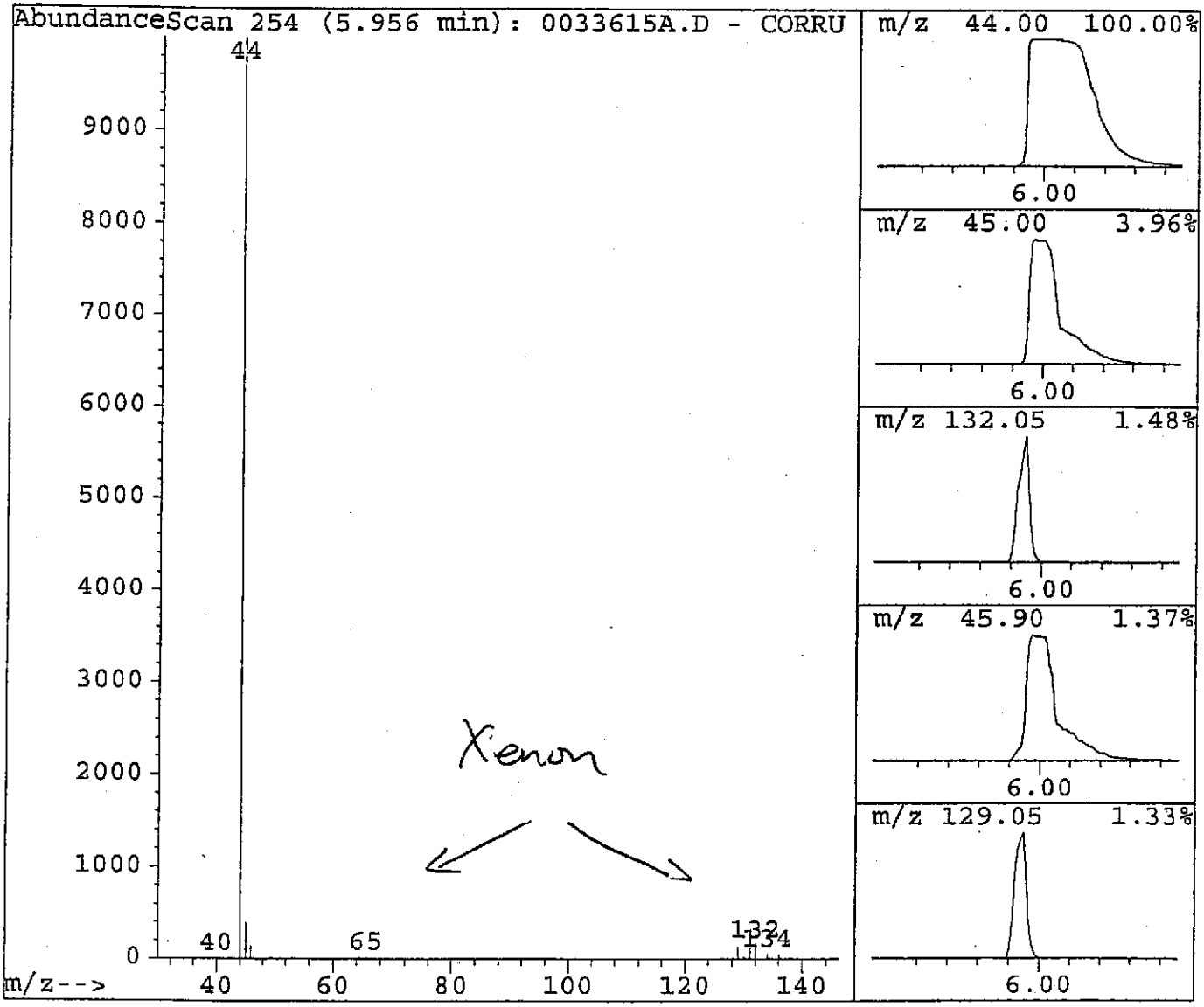
Data File : C:\MSCHEM\1\DATA\08040MS1\0033615A.D
Acq Time : 4 Aug 100 2:13 pm
Sample : A-015 CAN#675 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.44

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
5.96	304.83 ppbV	100882321	Pentafluorobenzene	13.31

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NBS54K.L	0	000000-00-0	0



Library Search Compound Report

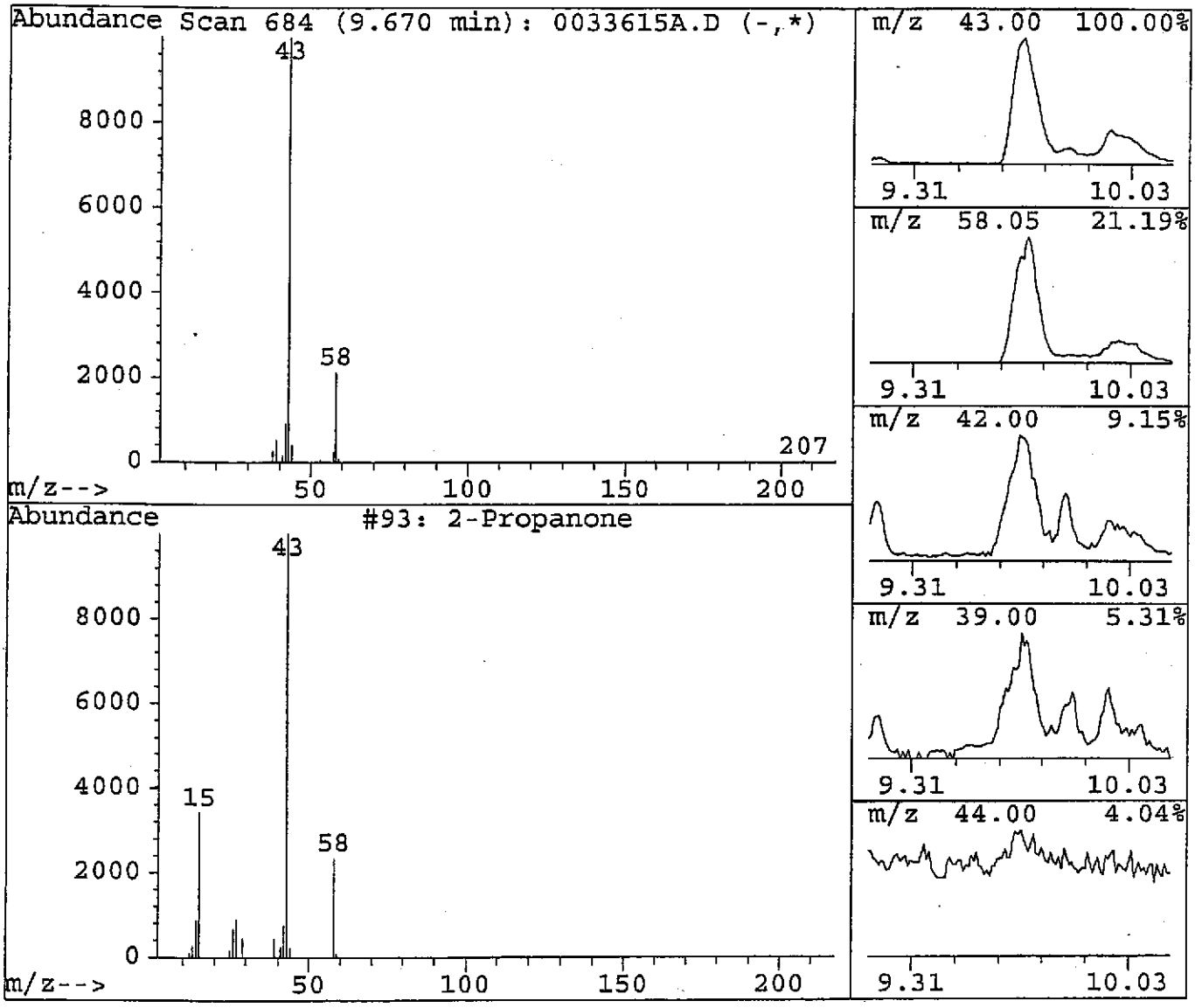
Data File : C:\MSCHEM\1\DATA\08040MS1\0033615A.D
Acq Time : 4 Aug 100 2:13 pm
Sample : A-015 CAN#675 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.44

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA T0-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.67	5.35 ppbV	1771041	Pentafluorobenzene	13.31

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	2-Propanone	93	000067-64-1	56



Library Search Compound Report

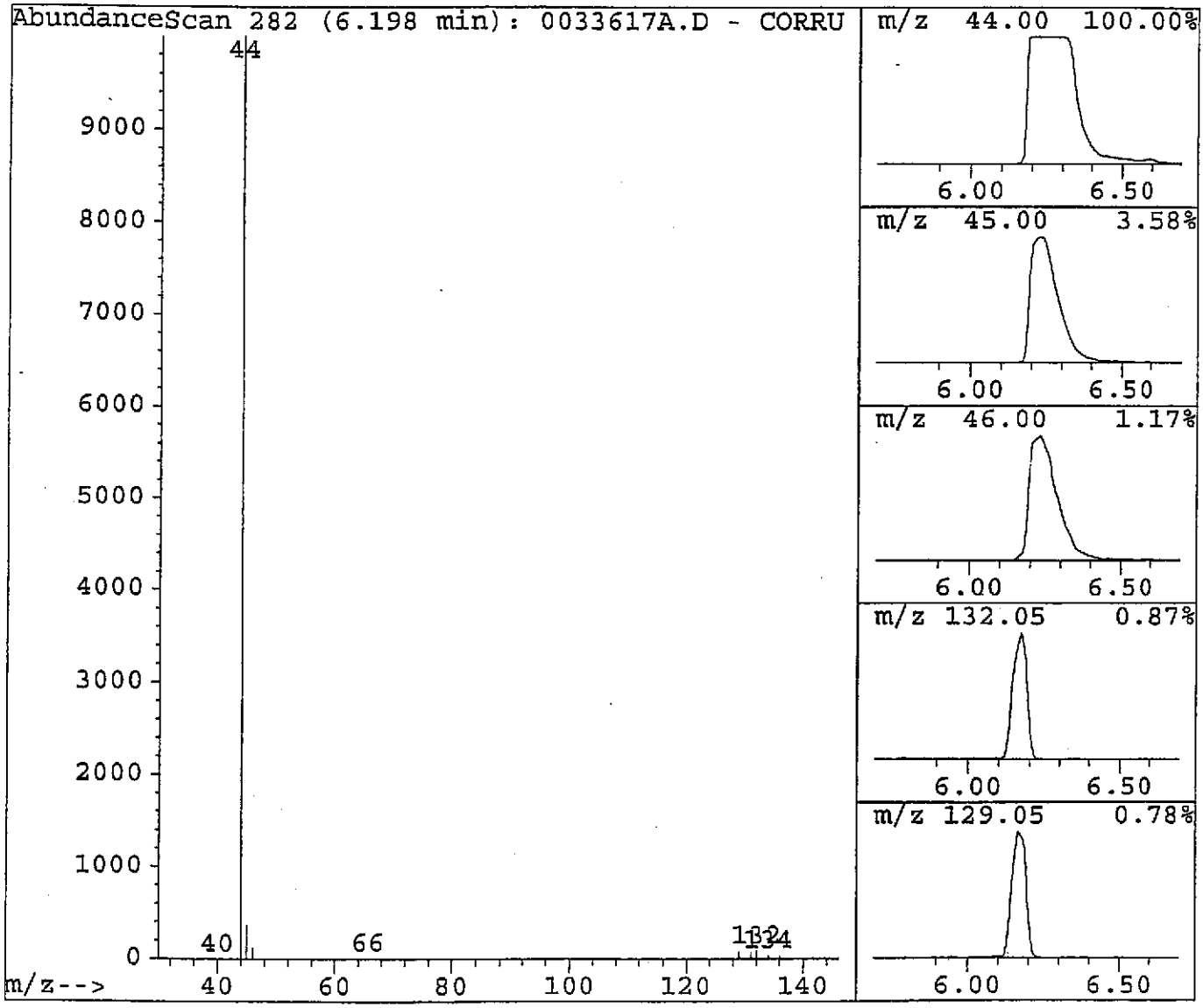
Data File : C:\MSCHEM\1\DATA\08040MS1\0033617A.D
Acq Time : 4 Aug 100 4:26 pm
Sample : A-017 CAN#717 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.44

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
6.20	312.00 ppbV	78150537	Pentafluorobenzene	13.37

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	No Hits From C:\DATABASE\NBS54K.L	0	000000-00-0	0



Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\08040MS1\0033617A.D
Acq Time : 4 Aug 100 4:26 pm
Sample : A-017 CAN#717 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.44

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA T0-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
6.60	3.01 ppbV	754792	Pentafluorobenzene	13.37

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
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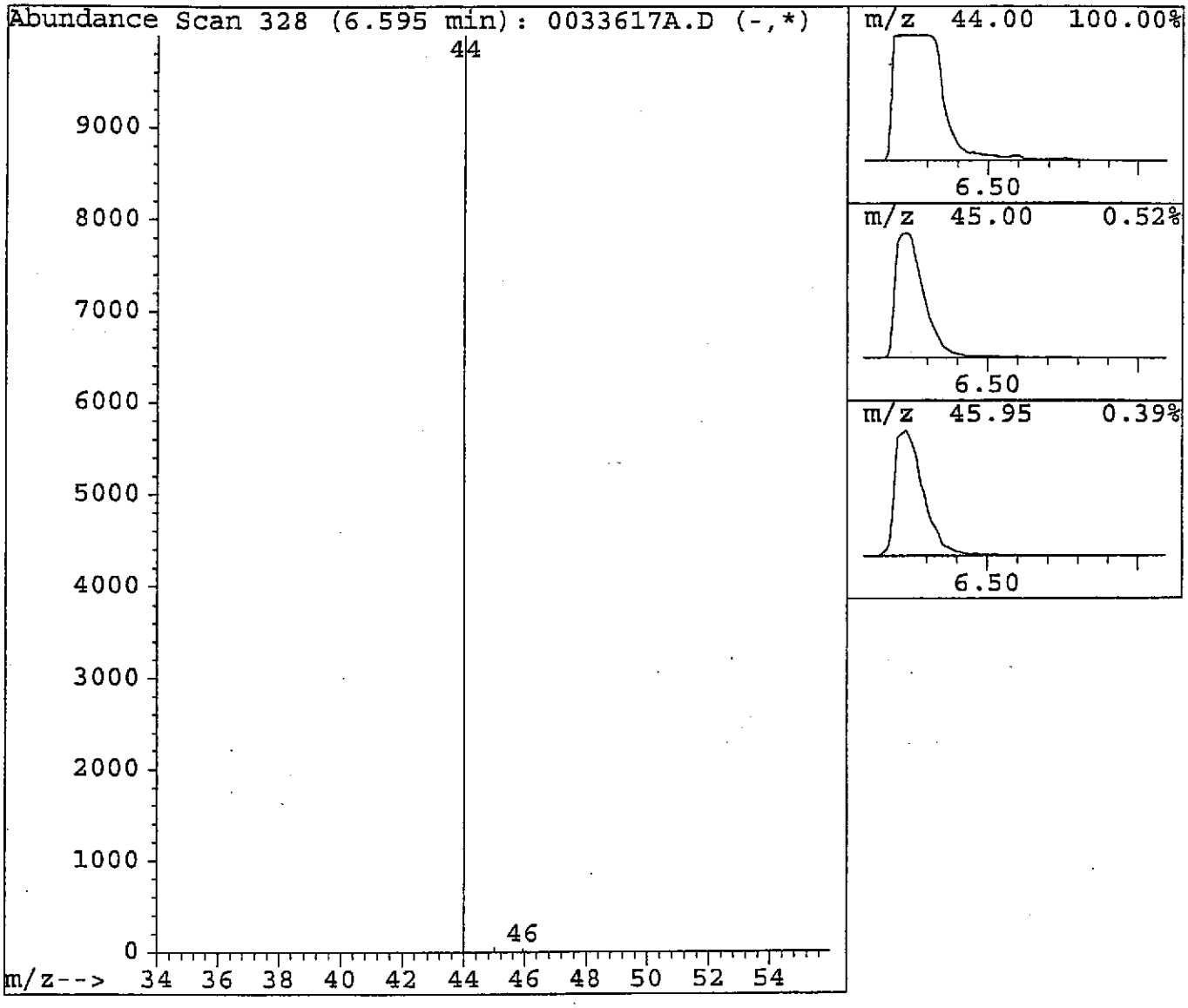

Library Search Compound Report

Data File : C:\MSCHEM\1\DATA\08040MS1\0033617A.D
Acq Time : 4 Aug 100 4:26 pm
Sample : A-017 CAN#717 500ML
Misc : C.E. SCHMIDT

Operator: CC
Inst : 5970 - In
Multiplr: 2.44

Method : C:\MSCHEM\1\METHODS\TO14_40F.M
Title : EPA TO-14
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
6.71	15.50 ppbV	3882753	Pentafluorobenzene	13.37

Hit# of 4	Tentative ID	Ref#	CAS#	Qual
1	3-Butenoic acid	624	000625-38-7	74
2	1-Propene	31	000115-07-1	50
3	3(2H)-Pyridazinone, 4,5-dihydro-6-m	2244	005157-08-4	43
4	2-Butenal, (E)-	209	000123-73-9	43