City of Long Beach Project Report

10/22/2007

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Executive Summary

This report was prepared for the City of Long Beach as a part of the Long Beach Stormwater Filter Project (the "Project"). The results of the Project indicate that AbTech Industries' Ultra-Urban® Filter (UUF) can significantly improve water quality by reducing bacteria concentrations and intercepting large quantities of oil, grease, debris, and sediment.

The objectives of the Project were as follows:

1. Reduce the number of beach closures by providing effective antimicrobial treatment of discharge flows before they enter the Colorado Lagoon and the Los Angeles River.
2. Collect and quantify the mass of oil, grease, debris, and sediment removed by the UUFs.
3. Raise the awareness of Long Beach residents regarding stormwater runoff and its impact.
4. Validate a water quality improvement technology that can be implemented without storm sewer modification.

Based upon empirical test results from composite field samples and extrapolation of this data to the filters deployed, it is estimated that the UUFs deployed in this Project to protect 503 drains, will remove the following quantities of pollutants over a 3 year period:

- **91,963 pounds[1] of total contaminants (trash, debris, sediment, oil, grease, organics, and heavy metals).** If the entire drain infrastructure (about 3,300[2] drains throughout the City) had been retrofitted, it is estimated that over 637,000 lbs. of contaminants would have been removed from stormwater runoff.

- **25,300 lbs of oil derivatives (i.e., volatiles, light hydrocarbons and heavy hydrocarbons), essentially equivalent to a 3,614[3] gallon oil spill being prevented from entering the water bodies.** If the entire drain infrastructure had been retrofitted over the same period, over 175,000 lbs. of hydrocarbons (about 25,000 gallons) would have been removed from stormwater runoff.

With respect to the impact of antimicrobial treatment, the Project generated beneficial data that was both qualitative and quantitative. The UUF performed reliably and as expected when challenged by influent conditions that were not heavily laden with sediment and debris.

[1] This number is generated from the pounds/filter/year maintenance info from the February 2007 cleaning, which equaled approximately 9.4 lbs./filter/yr, and the total contaminants weight obtained from the August 2007 used filter characterization (6.7 lbs./filter) = 16.1 lbs/filter/year. Maintenance records from February 2005 were not provided by Asbury Environmental Services (Contractor) and therefore not incorporated into this extrapolation

[2] Average of 4 filters per drain

[3] Assuming conversion rate of 1 gallon equal to approximately 7 lbs.

Tests conducted after the first eighteen months of deployment, based upon an influent concentration of 10,000 CFUs per 100 milliliters, resulted in a mean removal efficiency of approximately 80% of E.coli from filters[4] with a range of 44% to 97%. These tests were conducted a few days after maintenance and cleaning of the filters were performed.[5]

However, in applications where the influent load of trash, debris and sediment were significant, there was an adverse impact on the performance of the filters due to masking of the filter media. **Testing during heavy loading without any pretreatment protection showed removal rates for total coliforms of 65% with a range of 21% to 94%.[6]**

The results support bacterial reduction as a function of filter cleanliness as outlined below:

I. The average removal rate for filters that were clean was over 90%.[7]
II. The average removal rate for filters that contained little trash and debris was approximately 80%.
III. The average removal rate for filters that were heavily laden with trash and debris and not protected was 65%.

Based upon the findings and experience gained during the Project, AbTech makes the following recommendations listed below for future stormwater treatment projects. In each case, the selected treatment approach would take into consideration pollutant loads, land use, and constituent of concern. It should also be noted that due to the flexible design and ease of installation of the UUF as well as one of its pretreatment devices, the Trash & Debris Guard©, these units can be easily deployed or relocated to best address the needs and contaminant load of each specific area.

1. In areas experiencing significant influent loads of sediment and debris**, a Stormwater Antimicrobial Treatment system (SWAT) must be used.** SWAT systems are custom designed for each geographic location and combine a variety of pretreatment steps to remove the majority of sediment and other debris before the treated water is directed through large beds of Smart Sponge Plus material.
2. In areas experiencing moderate influent loads of sediment and debris, **a Trash & Debris Guard for pre-treatment, combined with UUFs must be used.**
3. In areas experiencing light influent loads of sediment and debris, **UUFs alone can be utilized.**

In all cases, the technology must be properly serviced.

[4] Filters not consistently serviced or with unusually heavy loading of trash, sediment, debris and organic material can increase the bacteria count due to bacteria breeding. This would be common with any filtration system but was minimized due to the anti-microbial technology.
[5] At the halfway point, based on 3/29/06 testing after filters were just cleaned
[6] Based on field sampling events – (12/05 & 2/27/06)
[7] Based on a controlled test performed on September 21, 2006

The results and the knowledge gained from this Project, coupled with additional research conducted by AbTech, have provided greater insight into determining the best suited product solution for specific locations in Long Beach. For future installations, AbTech and Hydrophix, its California distributor, would like to assist the City in assessing each location and developing a recommendation for the optimum treatment system.

Background

The City of Long Beach occupies a land area of about 50 square miles; operates and maintains an international deep-water harbor; manages close to 2,000 oil wells; has 11 linear miles of beaches covering 541 acres, operates two city owned marinas, oversees 468 acres of navigable waterways, manages the Southeast Resource Recovery Facility (SERRF), and hosts a regional airport. The City faces many challenges and opportunities to continue its environmental leadership role.

The City of Long Beach is located south of Los Angeles and bordered by the Los Angeles and San Gabriel rivers. It faces significant environmental challenges with one of the most pressing issues being the ability to maintain and improve receiving water quality. To compound these environmental challenges, the Los Angeles and San Gabriel Rivers run along the east and west borders of the city carrying urban and stormwater runoff and pollutants from over 80 Southern California cities directly to its ocean and beaches. The Colorado Lagoon (See Figure 2), San Gabriel River, and Los Angeles River are 303(d) listed and impaired for constituents such as copper, algae, oil, lead, zinc, and coliforms and impact Long Beach economically and environmentally. The City in search of a solution, took innovative and proactive action by seeking and allocating funding for the Long Beach Stormwater Project.

As part of this progressive environmental effort, the City of Long Beach launched a clean water initiative that resulted in the deployment of an innovative stormwater filter called the AbTech Ultra-Urban® Filter (UUF) with Smart Sponge® Plus technology. The technology and product were chosen by the City based upon a matrix of product attributes. Perhaps most significant was the Smart Sponge technology's ability to inactivate bacteria and other health-threatening pathogens while providing removal of trash, sediment, and hydrocarbons.

Smart Sponge® Technology

AbTech's patented Smart Sponge® technology features a unique molecular structure based on innovative polymer technologies that are chemically selective to hydrocarbons. Smart Sponge recovers and fully encapsulates oil, resulting in a substantially more effective system that prevents the absorbed oil from leaking or leaching. In addition, the Smart Sponge remains buoyant in calm or agitated water, permitting it to remain in one place until fully saturated, thereby resulting in no wasted product. Once the oil is absorbed, the Smart Sponge transforms the pollutants into a stable solid for easy recycling, providing a closed-loop solution to water pollution.

Smart Sponge technology also features a bacteria removal version known as Smart Sponge Plus. It employs an antimicrobial agent that is chemically bound to the Smart Sponge material. Smart Sponge Plus destroys dangerous disease causing microorganisms such as Enterococcus, E.coli,

and Fecal Coliforms on contact. Independent field testing has validated the effectiveness of the Smart Sponge Plus in multiple locations for a variety of microorganisms.

Unlike other antimicrobials that act by poisoning harmful microorganisms, Smart Sponge Plus technology is based on the antimicrobial agent's interaction with the microorganism's cell membrane. Simply put, it acts by rupturing the cell membrane—rendering the microorganism inactive. Because no chemical or physical change occurs in the antimicrobial agent, the filtration system maintains long-term effectiveness without releasing any chemicals or by-products.

Project Description

Within the City limits, there are about 383 miles of active storm water carriers, which include pipes, open channels, ditches, culverts, connector pipes and drains. Of those carriers, 180 miles are City-owned, 142 miles are Los Angeles County-owned, and 40 miles are Caltrans-owned with various other owners making up the difference. The City maintains 5.5 miles of channel and ditches. Los Angeles County has 32 miles of open flood control channels, i.e.; Los Angeles River, San Gabriel River, Los Cerritos Channel, etc. Caltrans has 11 miles of channels and ditches. In addition, the City of Long Beach has an approximate population of 465,000 people.

A comprehensive stormwater management program was developed to protect the city's waterways from nonpoint-source pollution. This Project was one of several initiatives funded by the City of Long Beach in an effort to better manage stormwater runoff. An integral part of this program involved the use of Ultra-Urban Filters (UUFs).

The City of Long Beach sought to exceed its compliance with local, State and Federal water quality guidelines as mandated by the Federal Clean Water Act and RWQCB-issued TMDLs, initiated a two-phase program. In the first phase, the City deployed 1,318 UUF catch basin insert filters in 328 catch basins (approximately 10% of the citywide total of 3,300). In the second phase, the City installed an additional 529 inserts in 175 catch basins for a total of 1,904 inserts in 503 catch basins (15% of the citywide total). The City gave installation priority to drains that are tributary to waters used for recreation. A wide variety of installation locations were selected based on land use, projected pollutant loads and beneficial use designation.

Figure 1 - Map of Colorado Lagoon

Figure 2 - Colorado Lagoon

Monitoring Program

As a part of the stormwater management project, a monitoring program was developed by the City of Long Beach in cooperation with Asbury Environmental Services, a contractor for AbTech Industries. The purpose of the monitoring program was as follows:

1. Collect, quantify, and classify the trash, debris and sediment retained by the filter and assess overall filter conditions.

2. Sample water quality during rainstorms or, in case of no rain, conduct dry weather sampling (simulated rainfall), to measure bacterial reduction. Specific protocols were developed for the sampling activities.

Advanced Monitoring Program

In addition to the original scope of work outlined in the monitoring program above, AbTech took progressive steps to ensure that a more thorough and comprehensive analysis was conducted. While coarse contaminants, such as trash & debris, are easily collected and measured, (see filter cleaning paragraph below), all other contaminants (i.e., fine sediment, oil & grease, suspended heavy metals, etc.) can be more difficult to quantify based only on random sampling events. AbTech took a more advanced approach to quantify and identify the contaminants removed and trapped inside the UUFs. This innovative process required the use of complex analytical techniques to deconstruct the Smart Sponge polymer and selectively extract all the entrapped contaminants collected inside the filters over the duration of the project. This in-depth mapping and finger printing of contaminants (a first of its kind in stormwater treatment) is analogous to a "Black Box" reading of the UUF (see attachment III – "Black Box" Smart Sponge Characterization Report), offering an advanced method of testing that produces more reliable results than mere random sampling with reference to various pollutants present. Random sampling and comparisons of influent and effluent can be misleading due to the non-homogenous concentrations in the storm water runoff. Analyzing all contaminants entrapped in the filter over a period time provides a better indicator of the filter's true performance. Accordingly, the extrapolation of data generated from this quantification of contaminants in the UUF is potentially more consistent and factual than data obtained by other methods.

Findings

Filter Cleanings

As agreed in the monitoring program, AbTech's contractors and sub-contractors performed filter maintenance events after the date of initial installation. According to procedure, the gross contaminants (trash, debris and sediment) were manually removed from the UUFs, bagged, and

labeled with identifying information for each respective catch basin. Upon completion of the field collection, removed materials were shipped offsite for classification and quantification (see Attachment I – Catch Basin Cleanings). Following the analysis, collected materials were disposed of in accordance with all applicable regulations and protocols.

The following cleanings of contaminants (sediment, trash, debris, organic material and vegetation) were performed:

February 2005[8]
December 2005
February 2006
February 2007

91,963 pounds[9] of total contaminants (trash, debris, sediment, oil, grease, organics, and heavy metals). If the entire drain infrastructure (about 3,300[10] drains throughout the City) had been retrofitted, it is estimated that over 637,000 lbs. of contaminants would have been removed from stormwater runoff.

Water Quality Sampling

Due to the large scale of the project, a defined number of drains were selected as a sample for water sample testing. While usual water quality sampling involves a variety of physical and chemical parameters, due to the specific scope of the project, only Fecal Coliforms, E.coli, and Enterococcus were selected for investigation.

Samples were collected using a sterilized plastic bucket (or similar container) to capture grab samples. The sample was transferred to either clean sterile or acid-washed plastic or glass bottles as required. Identification information for each sample was recorded on the field data sheets when the sample was collected. Samples were collected, packed on ice in an ice chest and delivered to the lab within a 6 hour period. A chain of custody form was used to document the transfer from the project manager to the laboratory. The chain of custody form identified the sample location, sample number, date and time of collection, and sampler's initials. The form also indicated the date and time of transfer, and the name and signature of the sampler and the sample recipient.

[8] Maintenance records from February 2005 were not provided by Asbury Environmental Services (Contractor) and therefore not incorporated into this extrapolation

[9] This number is generated from the pounds/filter/year maintenance info from the February 2007 cleaning, which equaled approximately 9.4 lbs./filter/yr, and the total contaminants weight obtained from the August 2007 used filter characterization (6.7 lbs./filter) = 16.1 lbs/filter/year. Maintenance records from February 2005 were not provided by Asbury Environmental (Contractor) and therefore not incorporated into this extrapolation

[10] Average of 4 filters per drain

Due to the nature of southern California weather (lowest amount of rain in years occurred during past 12 months), it was not feasible to perform all sampling in wet weather conditions. Accordingly, simulated runoff was used for several sampling events (see below).

The following water quality sampling events were performed[11]:

- February, 2005 (wet weather)
- December 31, 2005 (wet weather)
- February 19, 2006 (dry weather*)[12]
- February 27, 2006 (wet weather)
- March 29, 2006 (dry weather*)
- April 21, 2007 (dry weather*)
- July 13, 2007 (dry weather*)
- July 27, 2007 (dry weather*)

***Dry weather testing refers to simulated runoff testing in lieu of an actual rain event.**

According to the field data, the initial performance of the filters was in line with expectations, but after the first twelve months, when some of the filters were heavily contaminated and not protected, the heavy effect of sediment and trash started to affect the filter performance and generated mixed results. To confirm these conclusions, a controlled test was conducted separately with both clean filters and heavily loaded UUFs.

Tests conducted after the first eighteen months of deployment, based upon an influent concentration of 10,000 CFUs per 100 milliliters, resulted in a mean removal efficiency of approximately 80% of E.coli from filters[13]. These tests were conducted a few days after maintenance and cleaning of the filters were performed.[14]

"Black Box" Smart Sponge® Characterization

Due to the unique ability of the Smart Sponge® to capture and retain hydrocarbons and other contaminants within its highly porous structure, one of the best measures of its performance is an in-depth look at the spent material to analyze the composition and quantity of the various contaminants retained. AbTech engaged a highly qualified, analytical laboratory, Analyze Inc., to conduct this complex analysis and characterize various samples of used Smart Sponge® generated in this Project. Through extrapolation of these results, an estimation was made of the total contaminants retained in the entire drain network.

Three (3) Smart Sponge® filters were extracted from catch basins in different areas, dried, and shipped to Analyze, Inc. for sample preparation and analysis. Analyze Inc., is a custom chemical technology lab that provides total materials and characterization services. The composite sample

[11] Maintenance records from February 2005 were not provided by Asbury Environmental Services (Contractor) and therefore not incorporated into this extrapolation.

[12] February 19, 2006 data was compromised due to errors in recording the data; therefore the results were inconclusive and not included.

[13] Filters not consistently serviced or with unusually heavy loading of trash, sediment, debris and organic material can increase the bacteria count due to bacteria breeding. This would be common with any filtration system but was minimized due to the anti-microbial technology.

[14] At the halfway point, based on 3/29/06 testing after filters were just cleaned

was subjected to various analytical tests and results were compared to base tests performed on virgin Smart Sponge® material. The difference between the two samples constitutes the contaminants collected by the field deployed Smart Sponge®.

The findings confirm a progressive saturation as field deployment continues.

The following techniques were used:

1. TGA –quantifies the percentage of various contaminants via progressive temperature increase. As indicated in the attached report, TGA is able to separate the initial sample into four categories:
    a. Volatiles (H_2O and light hydrocarbons)
    b. Hydrocarbons
    c. Aromatic products
    d. Inorganic (ashes)

    Based on those specific samples, the used UUFs showed a total increase of 37lbs (average 102% increase vs. initial weight) of which 24.4 lbs. were organic contaminants, **mostly hydrocarbons, equivalent to about 66% of total contaminants** (see Used Smart Sponge Characterization Table).
2. EDS –identifies the presence of specific metals (including heavy metals) in the ashes. Metals identified, not present in virgin material, **include Ti (titanium), Zn (zinc), Mn (manganese)**. Additional tests would be required to quantify each specific metal.
3. CG-MS – allows identification of specific hydrocarbons separated (extracted) from the used Smart Sponge.

This analysis identified the presence of the expected motor oil and transmission oil, in addition to traces of a variety of **other oil derivatives such as solvents, cosmetic products and detergents.**

Used Smart Sponge Characterization

	Origin:	**Long Beach Sample 1**	**Long Beach Sample 2**	**Long Beach Sample 3**
	Product:	**C01414H**	**C01414H**	**C01414H**
Deployment Time		18 months	18 months	30 months
Site Type		Residential	Residential	Commercial
Initial Estimated Weight (Smart Sponge only)	lbs.	12	12	12
Final (Saturated) Weight *	lbs.	25.76	29.42	29.71
Contaminants Weight, Total	lbs.	9.76	13.42	13.71
	%	+81.3	+112	+114.25
Total Inorganic Contaminants (Excluding Initial Ashes)	lbs.	4.67	4.63	3.21
	%	47.9	34.5	23.4
Heavy Metals in Saturated Smart Sponge (not present in virgin Smart Sponge) ND = Non Detect	Ti	✓	✓	✓
	Zn	✓	✓	ND
	Mn	ND	ND	✓
Total Volatiles (including H_2O), Total	lbs.	0	7.15	2.07
	%	0	53.2	15.1
Other Organic Contaminants, Total	lbs.	5.09	1.64	8.43
	%	52.1	12.2	61.5
Top Organic Contaminants Aromatic/Char Hydrocarbon Oil	lbs.	1	0.41	0.45

ATTACHMENT I
(Catch Basin Cleanings)

CITY OF LONG BEACH

Date of Cleaning	District #	Contr #	City	Abtech Installation Location	Volume of Litter to the Quarter Gallon	Weight of Litter to the Ounce	Volume of Sediment to the Quarter Gallon	Weight of Sediment to the Ounce	Volume of Vegetation to the Quarter Gallon	Weight of Vegetation to the Ounce
11/28/05	1	510	Long Beach	EN - 1402 Daisy Avenue	4.5	1	0.5	1.8	2.75	1
11/28/05	1	509	Long Beach	NE - 1402 Daisy Avenue	4	1.8	1	3.2	2	3
11/28/05	1	511	Long Beach	NW - 601 Daisy Avenue	5	6.4	2.5	4	0	0
11/28/05	1	508	Long Beach	WS - 14th Street & Daisy Avenue	3.75	1.5	3	14	2	1
11/28/05	1	507	Long Beach	SW - Oregon Avenue & Cowles Street	0	0	1.5	1.8	1.75	1.2
11/28/05	1	506	Long Beach	SE - Oregon Avenue & Cowles Street	2.5	1.8	0.5	2	2.5	1
11/28/05	1	505	Long Beach	NE - Oregon Avenue & Cowles Street	1	1	2	4.6	1	0.8
.11-28-05	1	504	Long Beach	SW - Long Beach Boulevard & Pacific Coast Highway	2.25	4	3	7	0.5	0.6
11/28/05	1	503	Long Beach	South Side - 538 E Pacific Coast Highway	2	5	2.75	9	0	0
11/28/05	1	142	Long Beach	WS - Pacific Coast Highway & San Francisco	4.25	2.8	4	10.8	1	0.8
11/28/05	1	773	Long Beach	SW - San Francisco & Pacific Coast Highway	7	3.4	3	10	2.5	4.5
11/28/05	1	850	Long Beach	NW - Oregon & Esther Street	2.5	2	0.5	2	1.5	0.8
11/28/05	1	849	Long Beach	SW - Oregon & Esther Street	7.5	6	0.5	1.8	0	0
11/28/05	1	847	Long Beach	NE - San Francisco & 16th Street	2.5	1	1.25	4.8	1	2
11/28/05	1	848	Long Beach	West Side - San Francisco & 16th Street	1	1.4	6	49.6	0	0
11/28/05	1	774	Long Beach	NW - San Francisco & Cowles	2.5	3.4	2.75	11.2	1	2
11/28/05	1	845	Long Beach	SE - Oregon & Cowles	0	0	3	12.8	0.5	1.6
11/28/05	1	846	Long Beach	EN - Cowles & Oregon	6.25	6	2.5	4.4	2.25	1.8
11/28/05	1	843	Long Beach	SE - Esther & Lindon	5	2.5	1	6.2	0.25	0.6
11/28/05	1	844	Long Beach	SW - Esther & Lindon	1	4	0	0	1.25	1
TOTAL					**64.50**	**55.00**	**41.25**	**161.00**	**23.75**	**23.70**
11/28/05	2	536	Long Beach	NW - Alamitos & Broadway	4	2.8	1.5	3.2	2.75	4
11/28/05	2	538	Long Beach	NW - Alamitos & !st Street	1	2.4	0	0	1	0.6
11/28/05	2	535	Long Beach	NW - Alamitos & Medio Street	2	1.6	3.5	16.2	1.5	1.2
11/28/05	2	537	Long Beach	NE - Alamitos & Ocean	1	2.2	3.5	19.2	0.5	0.6
11/28/05	2	522	Long Beach	EN - 2nd Street & Alamitos	2	1.4	2.25	6	0	0

Date of Cleaning	District #	Contr #	City	Abtech Installation Location	Volume of Litter to the Quarter Gallon	Weight of Litter to the Ounce	Volume of Sediment to the Quarter Gallon	Weight of Sediment to the Ounce	Volume of Vegetation to the Quarter Gallon	Weight of Vegetation to the Ounce
11/28/05	2	519	Long Beach	EN - 2nd Street & Alamitos	5	5.6	2.75	8	0	0
11/28/05	2	520	Long Beach	EN - Appleton & Bonita	3	1.8	0.25	1	2.75	4.2
11/28/05	2	521	Long Beach	ES - Appleton & Esperanza	1	1	0.5	2	2	1.2
11/28/05	2	517	Long Beach	ES - Appleton & Gaviota	2.5	1.4	0	0	1	1.4
11/28/05	2	524	Long Beach	EN - Appleton & Gaviota	0.5	1.2	0	0	1.5	5.8
11/28/05	2	526	Long Beach	NW - Gaviota & Appleton	5	2.8	0	0	5	17
11/28/05	2	523	Long Beach	ES - Appleton & Hermosa	2	1.8	0.5	0.5	2	1.8
11/28/05	2	525	Long Beach	NE - Hermosa & Appleton	1	1.4	0.5	1.6	0.5	1
11/28/05	2	516	Long Beach	North Side - 1425 9th Street	0.5	1	2	7	0	0
11/28/05	2	512	Long Beach	ES - Ocean & 9th Street	0	0	0	0	0	0
11/28/05	2	515	Long Beach	ES - 1st Street & Alamitos	2	1.8	1	5	0	0
11/28/05	2	514	Long Beach	ES - 1100 Cerritos	5	10	0	0	1	4.2
11/28/05	2	513	Long Beach	NW - 1545 3rd Street	1	1.6	0.25	0.8	1.5	2
11/28/05	2	539	Long Beach	EN - 1001 Bonita	1.25	1	1	3	0.5	1
11/28/05	2	550	Long Beach	ES - 3rd Street & Alamitos	1.5	2	1	5	0.25	0.2
11/28/05	2	549	Long Beach	EN - 3rd Street & Alamitos	4.5	1.6	4	14.2	0	0
11/28/05	2	548	Long Beach	ES - Appleton & Alamitos	3	1	1.5	2.8	0.5	1
11/28/05	2	547	Long Beach	EN - Appleton & Alamitos	1.5	3	4	17	0	0
11/28/05	2	546	Long Beach	EN - Broadway & Cerritos	3	3.8	1	3.6	2	1.8
11/28/05	2	544	Long Beach	ES - Broadway & Cerritos	2	1	3	12.8	3.5	4.6
11/28/05	2	543	Long Beach	EN - 2nd Street & Cerritos	2	2.8	3	11	2.5	2.4
11/28/05	2	542	Long Beach	EN - Broadway & Alamitos	2.25	2.2	5	25.2	0	0
11/28/05	2	541	Long Beach	ES - Broadway & Esperanza	2	1	0	0	1	3.2
11/28/05	2	139	Long Beach	EN - Broadway & Esperanza	1.5	2	3.75	12.2	0	0
11/28/05	2	138	Long Beach	ES - Broadway & Hermosa	2	1	3.5	13.4	1	1
11/28/05	2	140	Long Beach	EN - Broadway & Hermosa	4.25	3	1	5.2	2.5	2.8
11/28/05	2	1188	Long Beach	ES - 2nd Street & Hermosa	1	0.8	1.5	6.2	2.75	4

Date of Cleaning	District #	Contr #	City	Abtech Installation Location	Volume of Litter to the Quarter Gallon	Weight of Litter to the Ounce	Volume of Sediment to the Quarter Gallon	Weight of Sediment to the Ounce	Volume of Vegetation to the Quarter Gallon	Weight of Vegetation to the Ounce
11/28/05	2	144	Long Beach	EN - 2nd Street & Hermosa	1	1	5	27.2	1	1
11/28/05	2	141	Long Beach	ES - 2nd Street & Hermosa	3	1.8	5	24.4	3	4.6
11/28/05	2	540	Long Beach	EN - 2nd Street & Hermosa	1	1.4	1.25	5	0	0
11/28/05	2	841	Long Beach	ES - 4th Street & Alamitos	1	1.8	4	21	1	2
11/28/05	2	842	Long Beach	EN - 4th Street & Alamitos	1.25	1	1	2.4	0	0
11/28/05	2	840	Long Beach	NE - Alamitos & 4th Street	1.5	1.6	2	4.2	1	1.2
11/28/05	2	755	Long Beach	ES - 3rd Street & Bonita	6.25	10.8	3.75	26.4	0	0
11/28/05	2	134	Long Beach	NW - Bonita & 3rd Street	5.75	10	4.25	23.8	0.5	0.8
11/28/05	2	1191	Long Beach	NE - Bonita & 3rd Street	0.5	0.8	2	6.2	2.5	1.6
11/28/05	2	776	Long Beach	NE - Bonita & Appleton	0.5	1	4	17.8	1.75	2
11/28/05	2	135	Long Beach	ES - Appleton & Bonita	2	2.8	4	11.8	2	2.4
11/28/05	2	137	Long Beach	ES - Appleton & Bonita	1	2	1.5	5.4	0.25	0.8
11/28/05	2	425	Long Beach	EN - Appleton & Bonita	2.5	2	4	16.6	0	0
11/28/05	2	145	Long Beach	ES - Appleton & Orange	4	4	2	7.5	1.5	2
11/28/05	2	143	Long Beach	EN - Appleton & Orange	0.25	0.2	1.5	4	1	0.8
11/28/05	2	783	Long Beach	EN - Appleton & Esperanza	1	2.6	3	11.6	5	7.8
11/28/05	2	780	Long Beach	NW - Falcon & Appleton	3	2.2	4	12.8	4	6.4
11/28/05	2	777	Long Beach	NE - Falcon & Appleton	0.5	0.8	1.75	5.2	0	0
11/28/05	2	778	Long Beach	ES - Appleton & Falcon	2	2.8	0.75	1.4	3	8
11/28/05	2	779	Long Beach	NE - Gaviota & Appleton	0.5	0.4	0	0	2.5	3
11/28/05	2	420	Long Beach	EN - Appleton & Hermosa	0.75	2	2	7.4	15	13.8
11/28/05	2	136	Long Beach	ES - 3rd Street & Gaviota	2	1.8	2	6.4	4.5	3.6
11/28/05	2	784	Long Beach	EN - 3rd Street & Gaviota	2.5	2	1	3	0	0
11/28/05	2	527	Long Beach	NE - Alamitos & 1st Street	5	3	1	4.2	1.25	1
11/28/05	2	528	Long Beach	EN - 1st Street & Alamitos	2	1.4	0.5	1.8	3	1.4
11/28/05	2	529	Long Beach	EN - Ocean Boulevard & Alamitos	2	2	3	11.5	2	3
11/28/05	2	530	Long Beach	ES - Ocean Boulevard & Alamitos	0.5	0.8	1.25	4.8	1	1.6

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11/28/05	2	531	Long Beach	South Side - 13th Place & Ocean	1	1.8	2.5	6	4.2	3
11/28/05	2	532	Long Beach	South Side - 14th Place & Ocean	2	2.6	5	22.6	1	1
11/28/05	2	533	Long Beach	EN - 3rd Street & Walnut	3	2.8	1	3.4	1.5	3.8
11/28/05	2	534	Long Beach	NE - Walnut & 3rd Street	2	2.6	1.5	3.2	2	2
TOTAL					**131.50**	**141.80**	**127.25**	**511.10**	**104.95**	**145.60**
11/28/05	3	113	Long Beach	SE - Redondo Avenue	1.5	1	0.5	1.6	0.5	1
11/28/05	3	741	Long Beach	SW - 543 Newport Avenue	0.25	0.2	1	0.8	0.5	0.8
11/28/05	3	739	Long Beach	SW - 539 Loma Avenue	0.5	0.6	2	3.6	0.5	1.2
11/28/05	3	749	Long Beach	Loma Avenue & 6th Street	1.5	1.2	2.5	9.8	4	4.6
11/28/05	3	750	Long Beach	NW - 601 Termino Avenue	0	0	2.75	14.2	3	4.6
11/28/05	3	738	Long Beach	NE - 541 Termino Avenue	0.25	1	2	7	0	0
11/28/05	3	740	Long Beach	EN - 4143 6th Street	1	1.2	0	0	0.5	1
11/28/05	3	742	Long Beach	WS - 535 Rosewell Avenue	0	0	1	1.8	1.5	1
11/28/05	3	743	Long Beach	SW - 535 Rosewell Avenue	1	0.8	3	8.2	3	3
11/28/05	3	705	Long Beach	SE - Rosewell Avenue	0	0	0	0	0	0
11/28/05	3	702	Long Beach	WN - 4361 Ximeno Avenue	1	0.6	4	7.8	2.5	1.4
11/28/05	3	704	Long Beach	WS - 543 6th Street	1	1.2	3	13.4	1	2
11/28/05	3	701	Long Beach	SW - 543 6th Street	0.75	0.8	2	4.8	2	1.6
11/28/05	3	703	Long Beach	SE - Across from 543 6th Street	0.75	0.2	3	8.8	4.25	3.2
11/28/05	3	709	Long Beach	North Side - 4437 6th Street	0	0	0.5	1.2	3	2
11/28/05	3	707	Long Beach	SE - Park Avenue & 4th Street	0.5	0.8	0	0	1	4
11/28/05	3	708	Long Beach	SW - 393 Park Avenue	0.5	1	3	9.2	0	0
11/28/05	3	411	Long Beach	South Side - Eliot Street west of Marina Drive	1	2	4.5	22	1.25	2
11/28/05	3	1312	Long Beach	ES - Colorado Street & Eliot Street	0.5	1	3	9.8	0	0
11/28/05	3	1310	Long Beach	NS - Colorado Street & Eliot Street	1	0.8	0.5	1.8	1	3
11/28/05	3	1309	Long Beach	SW - Colorado Street & Eliot Street	1.25	1	1.75	5	2	2.8
11/28/05	3	1313	Long Beach	South Side - Colorado Street east of Eliot Street	0.5	1	4.75	16.4	0	0

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11/28/05	3	1324	Long Beach	North Side - Colorado Street east of Eliot Street	1	2	4	12.2	2.5	2.4
11/28/05	3	417	Long Beach	South Side - 6th Street west of Monrovia	2	1.6	0	0	0.5	0.8
11/28/05	3	414	Long Beach	South Side - 7th Street east of Federation Drive	0	0	0.5	2.8	8	5
11/28/05	3	407	Long Beach	North Side - Colorado Street across from Appian way	0	0	0.5	1.8	0.5	0.8
11/28/05	3	430	Long Beach	EN - Appian Way & Colorado Street	0.75	1.2	0.25	1	1	1.2
11/28/05	3	103	Long Beach	North Side - Colorado Street east of Park Avenue	1.25	1.8	0.25	8	0.5	1
11/28/05	3	746	Long Beach	South Side - Colorado Street east of Park Avenue	0.25	0.2	0.25	0.6	1	0.6
11/28/05	3	744	Long Beach	South Side - Appian Way east of Colorado Street	0	0	0	0	2.5	3.2
11/28/05	3	719	Long Beach	SE - 790 Redondo	2	1	0.5	1.8	2	2.6
11/28/05	3	710	Long Beach	SW - 795 Loma Avenue	0.5	0.8	0	0	1.5	1
11/28/05	3	711	Long Beach	SW - 793 Euclid	3	1.2	0.25	0.8	0.5	1.2
11/28/05	3	712	Long Beach	SW - 8th Street & Miramar Avenue	2.5	2	0	0	1.5	2
11/28/05	3	713	Long Beach	NE - 8th Street & Termino Avenue	0	0	3	13.8	0	0
11/28/05	3	714	Long Beach	NW - Termino Avenue & 8th Street	4.25	1.5	2.25	9.2	1	3.2
11/28/05	3	715	Long Beach	WS - 8th Street & Bennett Avenue	1	2	3	9	1	2.2
11/28/05	3	716	Long Beach	WN - 8th Street & Bennett Avenue	0.75	1	3.75	12.2	1	1.6
11/28/05	3	717	Long Beach	NW - 801 Bennett Avenue	1.25	1.4	0.5	1	2	1
11/28/05	3	718	Long Beach	East Side - Bennett Avenue north of 8th Street	1	1.2	1.5	5	1	1.8
11/28/05	3	720	Long Beach	East Side - Bennett Avenue end of 8th Street	2	1	2.25	7.2	2	4
11/28/05	3	721	Long Beach	East Side - Bennett Avenue south of 8th Street	1	1	0.5	2.4	0	0
11/28/05	3	722	Long Beach	SW - 795 Bennett Avenue	0	0	1.75	4.2	1	1.4
11/28/05	3	723	Long Beach	SW - 941 Loma Avenue	2.5	1.2	0.75	2.2	4.75	2.6
11/28/05	3	724	Long Beach	SE - 942 Loma Avenue	3.5	3.2	1	1.8	2.5	3
11/28/05	3	725	Long Beach	WS - 10th Street & Loma Avenue	0.5	1	1.5	3	2.75	2
11/28/05	3	726	Long Beach	WN - 10th Street & Loma Avenue	1.75	2	0.5	1	1.5	0.8
11/28/05	3	727	Long Beach	SE - 938 Euclid Avenue	0.5	1	0.75	1.8	0.5	1.4
11/28/05	3	728	Long Beach	WS - 3640 10th Street	1.5	1.6	1.5	2.8	0	0

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11/28/05	3	729	Long Beach	SW - 943 Belmont Avenue	5	2	0	0	1	2
11/28/05	3	730	Long Beach	SE - 942 Belmont Avenue	2	10	4	14.6	0	0
11/28/05	3	731	Long Beach	SE - Rosewell Avenue & 10th Street	3	1.4	2	10.8	2.5	3
11/28/05	3	732	Long Beach	EN - 4737 9th Street	0	0	0.5	1.8	2	1.8
11/28/05	3	733	Long Beach	NE - 901 Bennett Avenue	0.5	1.8	1.5	3	2.25	2
11/28/05	3	734	Long Beach	WS - 837 8th Street	1	0.8	2	5.4	4.25	5.8
11/28/05	3	735	Long Beach	SE - 346 Ximeno Avenue	0.5	1.4	1.75	5.2	2	1.4
11/28/05	3	737	Long Beach	SW - Ximeno Avenue & Colorado Street	0	0	2	12	0.5	1.8
11/28/05	3	736	Long Beach	WS - 4340 Colorado Street	0.5	0.8	1.25	2.6	1	2
11/28/05	3	431	Long Beach	WN - 4343 Colorado Street	0.25	0.2	3	13.2	0	0
11/28/05	3	801	Long Beach	NW - Ximeno Avenue & Colorado Street	0.75	1.2	0	0	1.5	1.2
11/28/05	3	787	Long Beach	NE - Ximeno Avenue & Colorado Street	0.5	0.8	3	11	2.5	3
11/28/05	3	771	Long Beach	SW - 347 Prospect Avenue	1	1	1.75	7	1.25	2
11/28/05	3	786	Long Beach	WS - Colorado Stree & Prospect Avenue	0.5	0.6	1.5	1.8	1	0.8
11/28/05	3	782	Long Beach	North Side - 4501 Colorado Street	1.25	1.8	0.25	0.8	1.25	1.6
11/28/05	3	788	Long Beach	SE - Prospect Avenue & Colorado Street	1	1	2	8.2	2.5	5
11/28/05	3	805	Long Beach	NE - 620 Prospect Avenue	0.25	0.2	1.25	2.8	3	1.8
11/28/05	3	804	Long Beach	NW - Prosepct Avenue & Grand Avenue	0.5	1	0.5	1.8	0.5	0.4
11/28/05	3	803	Long Beach	North Side - 4546 6th Street	0	0	1.75	2	2	1.6
11/28/05	3	802	Long Beach	South Side - 4600 6th Street	0	0	0.5	1	1	1.8
11/28/05	3	807	Long Beach	West Side - 441 Park Street	1	1.2	0.5	1.6	2.75	2.8
11/28/05	3	806	Long Beach	East Side - Park Street & 5th Street	1	0.6	2	6	4.25	3.8
11/28/05	3	808	Long Beach	West Side 501 Park Street	0.5	1	1.75	4.8	1	1.6
11/28/05	3	1143	Long Beach	WS - 7th Street & Euclid Street	1.25	1	2.5	7	1	2
11/28/05	3	1146	Long Beach	SW - 687 Euclid Street	0	0	3.25	7.6	0	0
11/28/05	3	1145	Long Beach	SE - 688 Euclid Street	0.75	0.2	1.5	2.6	2.25	1.2
11/28/05	3	1144	Long Beach	WN - 7th Street & Euclid Street	1.75	0.8	0.75	1.8	1.75	1.8

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11/28/05	3	770	Long Beach	WS - 3740 7th Street	0.5	1	1.75	5	0	0
11/28/05	3	1198	Long Beach	SW - Grand Avenue & 7th Street	0.75	1	2	9	1	2
11/28/05	3	1183	Long Beach	SE - Grand Avenue & 7th Street	0.5	0.4	0	0	1.75	3
11/28/05	3	1149	Long Beach	ES - 7th Street & Grand Avenue	0.25	0.8	0	0	2	6.5
11/28/05	3	1148	Long Beach	EN - 7th Street & Grand Avenue	0.25	0.6	0.5	1.8	1.75	2.2
11/28/05	3	1147	Long Beach	WN - 7th Street & Grand Avenue	0	0	1	3	1	2
11/28/05	3	772	Long Beach	SW - 691 Miramar Avenue	1	1.4	2.75	9.2	0	0
11/28/05	3	781	Long Beach	SE - 688 Miramar Avenue	1.25	2	4	16.2	5	7.8
11/28/05	3	789	Long Beach	North Side - 7th Street & across from 4442 7th Street	2.75	2.8	2	8.2	0	0
11/28/05	3	811	Long Beach	NW - Santiago Avenue & 8th Street	0.5	1	3	9.4	0.5	1
11/28/05	3	809	Long Beach	NE - 800 Santiago Avenue	0	0	1.75	3.4	5	2.8
11/28/05	3	810	Long Beach	EN - 8th Street & Santiago Avenue	0.75	1.4	5	23	0	0
11/28/05	3	829	Long Beach	SE - 7th Street & Havanna Avenue	0	0	1.5	3.8	4.25	6
11/28/05	3	836	Long Beach	East Side - 650 Los Altos Avenue	1	0.6	2.5	4.8	3.5	4.6
11/28/05	3	817	Long Beach	SE - 6th Street & Terriane Avenue	0.25	0.2	1.5	4	1.75	1.8
11/28/05	3	816	Long Beach	EN - 6th Street & Terriane Avenue	0.75	0.8	1.75	4.2	5	9.6
11/28/05	3	815	Long Beach	NE - 600 Terraine Avenue	0.5	0.6	1.25	2.8	3.25	6.2
11/28/05	3	819	Long Beach	EN - 6th Street & Santiago Avenue	0.5	0.8	0	0	2	4.4
11/28/05	3	818	Long Beach	NE - 600 Santiago Avenue	0.75	1.2	0.75	1.6	1.5	2.8
11/28/05	3	820	Long Beach	ES - 6th Street & Santiago Avene	0	0	2	5.8	3.5	2
11/28/05	3	822	Long Beach	North Side - 6th Street across from Panama Avenue	0.25	0.2	1.5	2.4	2.75	3.8
11/28/05	3	821	Long Beach	ES - 6th Street & Panama Avenue	0	0	0.75	1.2	1.75	1
11/28/05	3	827	Long Beach	NW - Olean Avenue & 4th Street	0.25	0.6	1	2.2	3	5.6
11/28/05	3	828	Long Beach	NE - Olean Avenue & 4th Street	1	1.2	5	25.2	2.5	3.4
11/28/05	3	826	Long Beach	SW - 395 Panama Avenue	0	0	0.75	1.8	0.5	3
11/28/05	3	825	Long Beach	SE - 5300 4th Street	1.75	1.6	0.25	0.8	2.25	1.8
11/28/05	3	824	Long Beach	NE - 402 Panama Avenue	1	0.6	1.25	2.2	2	5.4

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11/28/05	3	823	Long Beach	NW - 401 Panama Avenue	0.5	0.6	1	2	5	3.4
11/28/05	3	835	Long Beach	SE - 396 Santiago Avenue	0	0	1.5	4.5	3.75	3.8
11/28/05	3	834	Long Beach	EN - 4th Street & Santiago Avenue	0	0	2.5	3.8	4	5.2
11/28/05	3	111	Long Beach	NE - 5401 Anaheim Road	1.75	1.2	0.5	1.8	1.75	2.4
11/28/05	3	102	Long Beach	NW - 5377 La Pasada	0.5	0.8	2	7.4	2	4.6
11/28/05	3	748	Long Beach	SE - 5400 Anaheim Road	0.25	0.2	0.5	1	1	1.6
11/28/05	3	747	Long Beach	SW - 5355 La Pasada	0	0	1.25	2.6	2.75	7
11/28/05	3	745	Long Beach	South Side - 5412 Oleta Street	0.25	0.6	1.5	4.8	1	4
11/28/05	3	101	Long Beach	North Side - 5409 Oleta Street	0.5	1	0	0	4.25	10.2
11/28/05	3	837	Long Beach	NW - 900 Bryant Road	0	0	2.75	5.8	2	7
11/28/05	3	838	Long Beach	North Side - 5521 Oleta Street	0	0	1	4	4	5.6
11/28/05	3	839	Long Beach	South Side - 5524 Oleta Street	0.75	1.2	1	1.8	1.5	2
11/28/05	3	833	Long Beach	East Side - 5525 Pacific Coast Highway	2.5	3	1.75	3	4.25	2
11/28/05	3	832	Long Beach	West Side - 5524 Pacific Coast Highway	0	0	0	0	0	0
11/28/05	3	830	Long Beach	East Side 742 Havana Avenue	0	0	0.5	2.5	0	0
11/28/05	3	831	Long Beach	West Side - 745 Havana Avenue	0	0	2	5.8	4.25	2.8
11/28/05	3	814	Long Beach	NW - 805 Terraine Avenue	0	0	1.75	4	1	1.6
11/28/05	3	812	Long Beach	NE - 800 Terraine Avenue	0.25	0.2	2.5	5.4	0.5	2.8
11/28/05	3	813	Long Beach	EN - 8th Street & Terraine Avenue	0.5	1	4	21.4	4.5	3.8
11/28/05	3	1197	Long Beach	ES - 7th Street & Termino	1	1.8	2.5	4	1.75	1.2
11/28/05	3	150	Long Beach	SW - Termino & 7th Street	1.25	1.2	3	19.2	1	1
11/28/05	3	146	Long Beach	WN - 7th Street & Belmont	4.5	1.8	0	0	1.5	2.6
11/28/05	3	148	Long Beach	WS - 7th Street & Rosewell	2	1.2	1	3.4	0	0
11/28/05	3	147	Long Beach	WN - 7th Street & Bennett	2.75	2.2	1.5	4.2	1	0.8
11/28/05	3	149	Long Beach	WS - 7th Street & Ximeno	1.75	1.2	2	6.2	1	1.2
11/28/05	3	785	Long Beach	SW - Ximeno & 7th Street	0.5	2	1	4.2	0	0
11/28/05	3	1177	Long Beach	SE - Ximeno & 7th Street	0.75	1.6	2.2	9	1	1.8

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11/28/05	3	1142	Long Beach	NE - Ximeno & 7th Street	1.5	1.8	0.5	3	0.25	0.8
11/28/05	3	1140	Long Beach	NW - Ximeno Avenue & 7th Street	3	2.8	0.5	1.6	0	0
11/28/05	3	1141	Long Beach	WN - 7th Street & Ximeno	0.5	0.6	2	4	0	0
11/28/05	3	1195	Long Beach	WN - 5th Street & Ximeno	1.25	1	4	6.8	2.5	3
11/28/05	3	1139	Long Beach	WS - 5th Street & Ximeno	2.5	2.4	5.75	12.6	1.25	0.8
11/28/05	3	1194	Long Beach	SE - Ximeno & 5th Street	1	1.2	1.25	3	0.5	1
11/28/05	3	1193	Long Beach	WS - 4th Street & Ximeno	2.75	1.6	2	5.8	3	8.2
11/28/05	3	1189	Long Beach	WN - Vermont & Ximeno Avenue	2	1.4	2.75	12	2	1.8
11/28/05	3	1192	Long Beach	WS - Vermont & Ximeno Avenue	1	0.4	1	4.2	2.5	2.4
11/28/05	3	1190	Long Beach	SW - Redondo & 7th Street	2.5	3	0	0	2	1.8
11/28/05	3	421	Long Beach	NE - Redondo & 7th Street	3.25	5.4	1	1.6	0	0
TOTAL					**134.25**	**143.30**	**225.95**	**726.60**	**245.75**	**325.10**
11/28/05	4	502	Long Beach	WN - Atherton & Knoxville	2.5	1.8	1	5	5	2.6
11/28/05	4	501	Long Beach	South Side - Atherton & Knoxville	0	0	1	7.2	0	0
11/28/05	4	651	Long Beach	NW - 1801 Knoxville	0.5	1.2	0	0	1	2
11/28/05	4	652	Long Beach	West Side - 1809 Knoxville	0	0	0	0	0.5	2.8
11/28/05	4	653	Long Beach	WN - Atherton & Josie	0	0	1.75	2.8	4	5.6
11/28/05	4	654	Long Beach	NW - 1801 Josie	0	0	3	11.8	3	4.2
11/28/05	4	655	Long Beach	NE - 1800 Josie	0	0	0.75	1.2	1	2
11/28/05	4	656	Long Beach	WN - Atherton & Iroquois	23	1.6	0.5	3.2	2	2.8
11/28/05	4	657	Long Beach	NW - 1801 Iroquois	0.25	8	0.5	1.5	1	2.8
11/28/05	4	658	Long Beach	NE - 1800 Iroquois	0	0	0.25	0.8	0.5	3
11/28/05	4	659	Long Beach	East Side - 1808-1800 Iroquois	1	0.8	2	1.8	7.5	9
11/28/05	4	660	Long Beach	NW - 1801 Hackett	1.75	1.6	1.25	1.2	0.5	2.2
11/28/05	4	661	Long Beach	South Side - Atherton & Palo Verde	0.25	0.2	0.5	1.8	1	2.2
11/28/05	4	662	Long Beach	WN - Atherton & Palo Verde	1.5	2.4	0	0	1.75	2.8
11/28/05	4	662	Long Beach	NW - 1801 Palo Verde	2.5	1.6	0.5	1.2	0	0

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11/28/05	4	664	Long Beach	West Side - across from 1801 Palo Verde	0.5	0.6	0	0	0.5	1
11/28/05	4	665	Long Beach	NW - Palo Verde & Atherton	0	0	0	0	0	0
11/28/05	4	666	Long Beach	WN - Atherton & Carfax	1	1.4	1.75	6	2.25	3.4
11/28/05	4	667	Long Beach	NW - 1801 Carfax	0	0	2	4.8	2.75	4.2
11/28/05	4	668	Long Beach	NE - 1800 Carfax	0.5	1.8	0	0	0.5	2.8
11/28/05	4	670	Long Beach	North Side - Atherton west of Mcnab	0	0	0.5	2.5	0	0
11/28/05	4	669	Long Beach	WN - Atherton & Mcnab	0.5	1.4	0	0	0.5	1
11/28/05	4	671	Long Beach	NW - 1801 Mcnab	0	0	0.75	1	1	2.4
11/28/05	4	672	Long Beach	West Side - 1809 Mcnab	0	0	1	1.2	2	3.2
11/28/05	4	673	Long Beach	NE - 1800 Mcnab	0	0	2.25	8.4	5	8.2
11/28/05	4	674	Long Beach	EN - Atherton & Mcnab	0.25	0.2	1.5	2.6	3.5	4.4
11/28/05	4	675	Long Beach	WN - 1802 Litchfield	0	0	3	9.2	0	0
11/28/05	4	676	Long Beach	SW - Atherton & Litchfield	0	0	0	0	0.5	1.4
11/28/05	4	678	Long Beach	NE - 2206 Ocana Street	1	1.5	2.25	7	3	2.4
11/28/05	4	677	Long Beach	NW - 2207 Ocana Street	0.75	0.6	1.5	2.4	3.25	1.8
11/28/05	4	679	Long Beach	North Side - Sterns east of Radnor	0	0	1.25	1.6	0.5	1.8
11/28/05	4	680	Long Beach	NW - Sterns & Clark	1.25	2.6	1.5	3.2	4.5	2
11/28/05	4	681	Long Beach	ES - Los Coyotes & Charlemange	1	0.8	0	0	3.75	6.6
11/28/05	4	682	Long Beach	NE - Los Coyotes & Charlemange	4.25	1	4	17.4	5	4.8
TOTAL					**44.25**	**31.10**	**36.25**	**106.80**	**67.25**	**95.40**
11/28/05	5	875	Long Beach	SE - 2856 Ladoga Avenue	1	0.2	3	10.2	5	5.4
11/28/05	5	874	Long Beach	SW - 2957 Ladoga Avenue	0.5	0.4	1.75	6	2	2.8
11/28/05	5	873	Long Beach	WS - Spring & Ladoga Avenue	0	0	2	6	0	0
11/28/05	5	851	Long Beach	ES - Spring & Ladoga Avenue	1.5	1.4	3	11.4	7	10.2
11/28/05	5	1196	Long Beach	North Side - Park Avenue & Spring	0.5	1	1.5	3.8	9.25	4.2
11/28/05	5	1170	Long Beach	SW - 2509 Ladoga Avenue	0	0	0	0	0.5	1.8
11/28/05	5	799	Long Beach	SE - 2508 Ladoga Avenue	0	0	0	0	2	4.6

Date of Cleaning	District #	Contr #	City	Abtech Installation Location	Volume of Litter to the Quarter Gallon	Weight of Litter to the Ounce	Volume of Sediment to the Quarter Gallon	Weight of Sediment to the Ounce	Volume of Vegetation to the Quarter Gallon	Weight of Vegetation to the Ounce
11/28/05	5	886	Long Beach	SW - Cantel St. & Don Julio Street	2	1.4	3	14.8	7.5	11
11/28/05	5	869	Long Beach	SE - 2371 Cantel Street	0	0	1	1.6	1	1.4
11/28/05	5	868	Long Beach	North Side - 2372 Knoxville Avenue	1	0.8	1.75	5.2	0	0
11/28/05	5	885	Long Beach	NE - Ladoga Avenue & Vuelta Grande	0	0	3.25	10.8	10	11.2
11/28/05	5	867	Long Beach	NW - Ladoga Avenue & Vuelta Grande	0	0	1.5	6.2	0.5	1.8
11/28/05	5	866	Long Beach	South Side - 2431 Vuelta Grande Avenue	0	0	6	30.4	3	4.6
11/28/05	5	865	Long Beach	South Side - 2369 Vuelta Grande Avenue	0	0	2.5	12.6	3	2
11/28/05	5	863	Long Beach	NW - 2603 Ladoga Avenue	0	0	0	0	1.75	3.2
11/28/05	5	864	Long Beach	NE - 2602 Ladoga Avenue	0.5	0.8	0	0	4	15.4
11/28/05	5	700	Long Beach	NE - Los Coyotes & Deborah Street	2.25	1.8	0.25	0.8	0.5	0.8
11/28/05	5	900	Long Beach	NW - Los Coyotes & Deborah Street	2	1.4	2	4.8	2.5	2.2
11/28/05	5	699	Long Beach	WN - Deborah & Los Coyotes	2.75	2	0	0	3.25	6.8
11/28/05	5	895	Long Beach	NE - Forman Avenue & Deborah Street	0.5	1	4.25	23	0	0
11/28/05	5	896	Long Beach	West Side - Forman Avenue of Deborah Street	0.5	1.2	1	4	2.5	4
11/28/05	5	893	Long Beach	SW - 2645 Forman Avenuen	1.5	0.8	2	9.2	9.5	11
11/28/05	5	899	Long Beach	NW - Forman Avenue & Chatwin	0	0	1	5.8	1	1.6
11/28/05	5	897	Long Beach	East Side - 2662 Forman Avenue	0.25	0.8	1.5	3.6	0.75	1.2
11/28/05	5	891	Long Beach	NE - Deborah Street & San Vincente	0.5	1	0	0	4	13.6
11/28/05	5	892	Long Beach	WS - 5876 Deborah Street	0	0	3	21	2.5	4.2
11/28/05	5	898	Long Beach	WN - 5877 Deborah Street	1	1.5	1.75	4.8	1	2.4
11/28/05	5	890	Long Beach	West Side San Vincente north of Deborah Street	1	2.4	1	3.6	5.5	4.8
11/28/05	5	889	Long Beach	SW - San Vincente & Walton Street	0.5	0.6	5	23	5	15.2
11/28/05	5	888	Long Beach	SE - San Vincente & Walton Street	0.5	0.2	4	13.4	2.5	4
11/28/05	5	887	Long Beach	WN - 5873 Walton Street	1	1	4	12.6	2.5	3.4
11/28/05	5	884	Long Beach	South Side - 5930 Deborah Street	0	0	5	28.2	2	2.8
11/28/05	5	883	Long Beach	WN - Deborah Street & Fanwood Avenue	1.25	1.2	3	12.4	1	1.8
11/28/05	5	872	Long Beach	EN - Deborah Street & Fanwood Avenue	0	0	3.5	13.6	0	0

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11/28/05	5	871	Long Beach	ES - Deborah Street & Faust Avenue	0.5	0.8	2.2	7	1.25	2.4
11/28/05	5	870	Long Beach	EN - Deborah Street & Faust Avenue	0.5	0.4	2.75	13.4	2.5	6
11/28/05	5	862	Long Beach	EN - 6201 Willow	0	0	2	6	4.5	4
11/28/05	5	882	Long Beach	NW - Oakbrook Street & Willow	2.75	1.8	4.25	18	5	6.8
11/28/05	5	881	Long Beach	NW - Los Arcos Street & Vuelta Grande Avenue	1	0.6	2	4.2	4.5	8.2
11/28/05	5	880	Long Beach	NE - 6702 Los Arcos Street	1.5	0.6	2	9.4	9.25	11.2
11/28/05	5	878	Long Beach	NW - Palo Verde Avenue & Vuelta Grande Avenue	1	1	3	13.8	4.5	6.2
11/28/05	5	879	Long Beach	North Side - Palo Verde Avenue & Vuelta Grande Avenue	0.5	0.8	1	5.6	2.25	5
11/28/05	5	877	Long Beach	SW - Palo Verde Avenue & Vuelta Grande Avenue	1	0.4	0.5	1.2	3	3.4
11/28/05	5	861	Long Beach	South Side - Ladoga & Willow Street	0	0	0	0	2.25	5.8
11/28/05	5	860	Long Beach	EN - Willow Street & Ladoga Avenue	0.5	0.4	0.75	2.6	3	1.6
11/28/05	5	859	Long Beach	WN - Willow Street & Ladoga Avenue	4	3	0.5	2	1	1.8
11/28/05	5	857	Long Beach	East Side - 2712 Ladoga Avenue	0	0	2	6.3	2	2.2
11/28/05	5	858	Long Beach	West Side - 2713 Ladoga Avenue	0	0	2.25	9	1	2.6
11/28/05	5	856	Long Beach	EN - Barrios Street & Ladoga Avenue	0.25	1	4	24	1	1.4
11/28/05	5	853	Long Beach	NE - 2802 Ladoga Avenue	0	0	2.75	11	4	6.5
11/28/05	5	854	Long Beach	NW - 2803 Ladoga Avenue	1	1	2	3.6	5.5	3
11/28/05	5	855	Long Beach	WN - Barrios Street & Ladoga Avenue	5	3.6	3	9	0.5	0.8
11/28/05	5	852	Long Beach	East Side - 2856 Ladoga Avenue	0.25	0.2	0.5	1	3.5	13.4
11/28/05	5	876	Long Beach	West Side - 2857 Ladoga Avenue	0.5	0.8	1.75	3.8	2	2
TOTAL					**42.75**	**39.30**	**111.70**	**453.70**	**165.00**	**253.70**
11/28/05	6	683	Long Beach	NE - Cedar & Willow Street	0.5	1	0	0	0.5	1.6
11/28/05	6	684	Long Beach	NW - Cedar & Willow Street	2.5	2	0.5	1.5	2	2
11/28/05	6	685	Long Beach	NE - Chestnut & Willow Street	2	1.8	1.25	3	5	3
11/28/05	6	686	Long Beach	NW - Chestnut & Willow Street	0.5	1.6	1	3.2	2	2
11/28/05	6	687	Long Beach	NW - Eucalyptus Avenue & Willow Street	1.25	2	2.25	5.8	1.75	3
11/28/05	6	688	Long Beach	NE - Eucalyptus Avenue & Willow Street	5	4	5	24.6	2	2.8
11/28/05	6	689	Long Beach	NE - Magnolia Avenue & Willow Street	0.5	1	2.75	12	0	0

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11/28/05	6	690	Long Beach	ES - Anaheim & Lime	1.25	1	1	3	2.5	1
11/28/05	6	691	Long Beach	SW - Lime & Anaheim	2	2.8	0.5	22	0	0
11/28/05	6	692	Long Beach	NE - Lime & Anaheim	1	1.2	2	5.4	0.5	1
11/28/05	6	693	Long Beach	NW - Lime & Anaheim	1	0.6	0	0	1	2.6
11/28/05	6	694	Long Beach	ES - Anaheim & Olive	0.5	0.8	0.25	1	1.75	2
11/28/05	6	695	Long Beach	SW Olive & Anaheim	1.5	1.6	2	4.8	6	4.8
11/28/05	6	696	Long Beach	SW - Martin Luther King & Anaheim	1	3	1	2.6	0.5	1
11/28/05	6	697	Long Beach	WN - 11th Street & Atlantic	7.5	7	0	0	4	15.5
11/28/05	6	698	Long Beach	SW - Atlantic & 11th Street	2	1.8	1	3	1	1.8
TOTAL					**30.00**	**33.20**	**20.50**	**91.90**	**30.50**	**44.10**
TOTAL OF ALL					**447.25**	**443.70**	**562.90**	**2051.10**	**637.20**	**887.60**

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1	510	Long Beach	EN - 1402 Daisy Avenue	5	1	1.25	2.6	1.5	1.4
1	509	Long Beach	NE - 1402 Daisy Avenue	1	8	1.75	2.6	2.75	1.2
1	511	Long Beach	NW - 601 Daisy Avenue	2.25	3	1	3.2	1	0.8
1	508	Long Beach	WS - 14th Street & Daisy Avenue	1.75	0.8	2.25	9.4	2.25	1.6
1	507	Long Beach	SW - Oregon Avenue & Cowles Street	1.25	1.4	2	1.2	2	0.8
1	506	Long Beach	SE - Oregon Avenue & Cowles Street	1	0.6	1.5	1	1.25	0.4
1	505	Long Beach	NE - Oregon Avenue & Cowles Street	6.25	0.4	1	2	0.5	0.4
1	504	Long Beach	SW - Long Beach Boulevard & Pacific Coast Highway	1.75	1.8	3.25	3.6	0.5	0.2
1	503	Long Beach	South Side - 538 E Pacific Coast Highway	3.25	3.6	1.5	3.8	0.25	0.6
1	142	Long Beach	WS - Pacific Coast Highway & San Francisco	2	2.2	3	6.8	0.75	0.4
1	773	Long Beach	SW - San Francisco & Pacific Coast Highway	6.25	1.6	4.25	4.4	1	1.8
1	850	Long Beach	NW - Oregon & Esther Street	0.75	2.8	1	1	2.75	1.2
1	849	Long Beach	SW - Oregon & Esther Street	3	4.8	0.75	8	1.5	0.8
1	847	Long Beach	NE - San Francisco & 16th Street	1.5	2	0.5	2	3.25	1.4
1	848	Long Beach	West Side - San Francisco & 16th Street	1.25	0.6	4.25	21.2	0.5	0.2
1	774	Long Beach	NW - San Francisco & Cowles	1.5	3	1.25	10	0.75	0.8
1	845	Long Beach	SE - Oregon & Cowles	0.25	1.2	1.5	8.4	0.75	0.6
1	846	Long Beach	EN - Cowles & Oregon	1.75	3.8	1.25	4.6	2	2.4
1	843	Long Beach	SE - Esther & Lindon	2	1.6	0.75	2.8	2.5	1.8
1	844	Long Beach	SW - Esther & Lindon	1.5	3.6	0.5	1.2	1.75	1.6
				45.25	**47.80**	**34.50**	**99.80**	**29.50**	**20.40**
2	536	Long Beach	NW - Alamitos & Broadway	3.25	1.4	0.75	1.4	1.5	6.6
2	538	Long Beach	NW - Alamitos & !st Street	0.5	2	0.25	0.4	0.5	2
2	535	Long Beach	NW - Alamitos & Medio Street	1.25	0.8	1.25	9.2	0.25	1.4
2	537	Long Beach	NE - Alamitos & Ocean	1.25	1.2	2.75	8.8	0.25	1.8
2	522	Long Beach	EN - 2nd Street & Alamitos	2.5	1.6	1.5	2.8	0.75	0.2
2	519	Long Beach	EN - 2nd Street & Alamitos	3.75	2.8	1.75	4	1.25	0.2
2	520	Long Beach	EN - Appleton & Bonita	2.25	3	0.75	1.2	2.5	1.8

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2	521	Long Beach	ES - Appleton & Esperanza	0.5	1.2	0.5	1.6	1.5	1.8
2	517	Long Beach	ES - Appleton & Gaviota	1	0.6	0.25	0.6	1.25	0.6
2	524	Long Beach	EN - Appleton & Gaviota	1	0.8	0.5	0.4	0.5	2.2
2	526	Long Beach	NW - Gaviota & Appleton	2.75	1.8	0.25	0.4	4.25	6.2
2	523	Long Beach	ES - Appleton & Hermosa	3	2.6	0.25	0.8	1.5	0.6
2	525	Long Beach	NE - Hermosa & Appleton	2.25	1.8	1.25	2	1	0.8
2	516	Long Beach	North Side - 1425 9th Street	1	0.2	1	2.8	0.25	0.2
2	512	Long Beach	ES - Ocean & 9th Street	0.2	0.2	1	0.4	0.25	0.4
2	515	Long Beach	ES - 1st Street & Alamitos	0.75	0.8	0.75	2.8	0.75	0.2
2	514	Long Beach	ES - 1100 Cerritos	4.25	6.8	0.5	0.6	0.5	2
2	513	Long Beach	NW - 1545 3rd Street	2.75	0.8	1.75	1	2	2.8
2	539	Long Beach	EN - 1001 Bonita	1	0.4	2.25	1.8	1	0.4
2	550	Long Beach	ES - 3rd Street & Alamitos	1	1.2	0.75	3.2	0.75	0.2
2	549	Long Beach	EN - 3rd Street & Alamitos	2.75	1.2	2.5	8.8	0.5	0.2
2	548	Long Beach	ES - Appleton & Alamitos	2	0.4	1	1.6	1.25	0.8
2	547	Long Beach	EN - Appleton & Alamitos	0.75	1.2	3.75	12	0.25	1
2	546	Long Beach	EN - Broadway & Cerritos	1.75	2	1.5	2.8	1.5	2
2	544	Long Beach	ES - Broadway & Cerritos	1.25	2.2	1.25	7.4	2	1.6
2	543	Long Beach	EN - 2nd Street & Cerritos	1	1.8	1	6.8	3.25	1.4
2	542	Long Beach	EN - Broadway & Alamitos	1.5	0.8	1.75	10	1.25	0.8
2	541	Long Beach	ES - Broadway & Esperanza	0.8	0.6	0.25	1.8	1.75	1.8
2	139	Long Beach	EN - Broadway & Esperanza	0	0.8	2.25	1.8	1	0.2
2	138	Long Beach	ES - Broadway & Hermosa	1.25	1.2	2	2.6	0.25	0.2
2	140	Long Beach	EN - Broadway & Hermosa	1.75	1.8	2.25	4.4	0.25	1.6
2	1188	Long Beach	ES - 2nd Street & Hermosa	0.5	1.4	1.25	2.2	1.5	1.2
2	144	Long Beach	EN - 2nd Street & Hermosa	2.5	2.4	2.75	2.6	1.75	0.8
2	141	Long Beach	ES - 2nd Street & Hermosa	1.5	1.2	2	0.1	2.25	1.8
2	540	Long Beach	EN - 2nd Street & Hermosa	0.5	0.8	1	7.8	0.75	2.4

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2	841	Long Beach	ES - 4th Street & Alamitos	0.25	0.8	3.25	18.2	1.5	2.8
2	842	Long Beach	EN - 4th Street & Alamitos	1.75	1.6	0.25	1.8	0.25	0.8
2	840	Long Beach	NE - Alamitos & 4th Street	0.75	2	1	2	0.25	6
2	755	Long Beach	ES - 3rd Street & Bonita	2.5	4.8	0.5	9.8	0.5	1.4
2	134	Long Beach	NW - Bonita & 3rd Street	2.25	6.6	1.25	6.6	1.25	1.6
2	1191	Long Beach	NE - Bonita & 3rd Street	0.75	1.8	1.75	10.2	1.75	3.4
2	776	Long Beach	NE - Bonita & Appleton	0.25	0.2	1.5	14	0.5	1.2
2	135	Long Beach	ES - Appleton & Bonita	0.75	3	2.25	4.2	0.25	6.2
2	137	Long Beach	ES - Appleton & Bonita	0.5	1.2	1.25	2.4	0.75	0.6
2	425	Long Beach	EN - Appleton & Bonita	1.75	1.4	2.75	9.8	0.25	2.6
2	145	Long Beach	ES - Appleton & Orange	3.5	1.8	1.25	3.6	0.25	4
2	143	Long Beach	EN - Appleton & Orange	1.25	1.6	0.75	8.2	0.75	1.2
2	783	Long Beach	EN - Appleton & Esperanza	0.25	0.3	1.5	7.8	1.5	3
2	780	Long Beach	NW - Falcon & Appleton	1.5	3.4	2.25	5.6	1.75	2.6
2	777	Long Beach	NE - Falcon & Appleton	0.25	1.2	1.25	12.4	1.25	1
2	778	Long Beach	ES - Appleton & Falcon	1.5	1.6	1.5	4.2	0.75	7.4
2	779	Long Beach	NE - Gaviota & Appleton	1	0.6	2	1.8	1.5	1.2
2	420	Long Beach	EN - Appleton & Hermosa	0.5	0.8	3.75	2.8	2	3.2
2	136	Long Beach	ES - 3rd Street & Gaviota	0.75	1.2	1	3	6	1.4
2	784	Long Beach	EN - 3rd Street & Gaviota	1.25	0.8	0.5	4.8	0.25	0.6
2	527	Long Beach	NE - Alamitos & 1st Street	1.75	1.4	1.5	2.6	1	0.8
2	528	Long Beach	EN - 1st Street & Alamitos	1.25	1	1	0.8	1.75	1
2	529	Long Beach	EN - Ocean Boulevard & Alamitos	1.75	1.4	0.25	0.4	1	0.8
2	530	Long Beach	ES - Ocean Boulevard & Alamitos	1.5	0.2	1.5	3.4	1.25	0.4
2	531	Long Beach	South Side - 13th Place & Ocean	0.5	0.2	2.75	7.2	1.5	1.4
2	532	Long Beach	South Side - 14th Place & Ocean	0.75	1.2	1.75	2.6	0.5	6
2	533	Long Beach	EN - 3rd Street & Walnut	1.5	2.4	1.5	4.4	0.5	2.2
2	534	Long Beach	NE - Walnut & 3rd Street	2.25	3.2	2	12.4	0.75	0.8

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				90.50	99.50	90.25	285.90	73.50	115.80
3	113	Long Beach	SE - Redondo Avenue	0.5	0.4	1.75	3	1	1.2
3	741	Long Beach	SW - 543 Newport Avenue	0.25	0.6	0.25	2.6	0.25	1.4
3	739	Long Beach	SW - 539 Loma Avenue	0.25	0.8	1.25	8	0.25	0.6
3	749	Long Beach	Loma Avenue & 6th Street	0.75	1.8	0.75	3.2	1.5	1
3	750	Long Beach	NW - 601 Termino Avenue	0.25	0.2	0.5	1.8	2.75	1.4
3	738	Long Beach	NE - 541 Termino Avenue	1.5	0.2	1.25	2.2	1	0.2
3	740	Long Beach	EN - 4143 6th Street	1.25	0.8	1.75	2.8	0.75	0.2
3	742	Long Beach	WS - 535 Rosewell Avenue	0.35	0.4	1.5	1.2	0.5	0.4
3	743	Long Beach	SW - 535 Rosewell Avenue	0.5	0.6	0.5	5.4	1.25	1
3	705	Long Beach	SE - Rosewell Avenue	0.5	1.6	0.5	1	0.5	2.6
3	702	Long Beach	WN - 4361 Ximeno Avenue	1.75	1.2	0.25	2.4	0.75	1.8
3	704	Long Beach	WS - 543 6th Street	0.25	1.8	1.75	1.8	0.25	3.6
3	701	Long Beach	SW - 543 6th Street	0.5	1.4	1.25	2.8	1	1
3	703	Long Beach	SE - Across from 543 6th Street	0.5	3	0.25	5	1.25	2
3	709	Long Beach	North Side - 4437 6th Street	0.25	0.4	1.5	1.4	2.5	0.8
3	707	Long Beach	SE - Park Avenue & 4th Street	0.5	0.2	1.75	1.2	2.75	1.8
3	708	Long Beach	SW - 393 Park Avenue	2.25	1.2	1.25	1.6	0.5	0.4
3	411	Long Beach	South Side - Eliot Street west of Marina Drive	0.75	1.6	1.35	10.8	0.75	0.8
3	1312	Long Beach	ES - Colorado Street & Eliot Street	0.25	1.4	1.5	11	0.25	1
3	1310	Long Beach	NS - Colorado Street & Eliot Street	0.75	4	1	1.4	3	1.2
3	1309	Long Beach	SW - Colorado Street & Eliot Street	0.25	0.6	1.5	2.2	1.5	1.4
3	1313	Long Beach	South Side - Colorado Street east of Eliot Street	0.75	1.2	3.25	3.8	0.25	1
3	1324	Long Beach	North Side - Colorado Street east of Eliot Street	0.25	0.2	1	6.8	1	0.8
3	417	Long Beach	South Side - 6th Street west of Monrovia	0.5	0.6	1.75	3.2	0.25	0.2
3	414	Long Beach	South Side - 7th Street east of Federation Drive	0.25	0.4	2.25	1.4	0.25	1.8
3	407	Long Beach	North Side - Colorado Street across from Appian way	0.75	0.8	1.5	1	0.75	2.2
3	430	Long Beach	EN - Appian Way & Colorado Street	0.25	0.2	1.5	0.2	0.25	1.4

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District #	Contr #	City	Abtech Installation Location	Volume of Litter to the Quarter Gallon	Weight of Litter to the Ounce	Volume of Sediment to the Quarter Gallon	Weight of Sediment to the Ounce	Volume of Vegetation to the Quarter Gallon	Weight of Vegetation to the Ounce
3	103	Long Beach	North Side - Colorado Street east of Park Avenue	0.25	0.2	0.5	1.4	0.5	2.8
3	746	Long Beach	South Side - Colorado Street east of Park Avenue	1	1.8	0.5	2.2	0.75	1
3	744	Long Beach	South Side - Appian Way east of Colorado Street	0.5	0.8	2	0.8	1	1.2
3	719	Long Beach	SE - 790 Redondo	0.75	2.2	1.75	0.4	1.5	1.4
3	710	Long Beach	SW - 795 Loma Avenue	0.5	4.6	0.25	0.6	1.75	1.4
3	711	Long Beach	SW - 793 Euclid	1.5	2.4	1.5	0.6	1.25	1
3	712	Long Beach	SW - 8th Street & Miramar Avenue	2	0.4	2	0.2	1.25	1.6
3	713	Long Beach	NE - 8th Street & Termino Avenue	1	0.2	3.75	3.4	0.75	0.2
3	714	Long Beach	NW - Termino Avenue & 8th Street	1.5	0.4	1.25	2.8	2.25	1.2
3	715	Long Beach	WS - 8th Street & Bennett Avenue	0.2	0.4	1.5	4.6	0.75	0.8
3	716	Long Beach	WN - 8th Street & Bennett Avenue	0.2	0.8	2	4	0.5	0.2
3	717	Long Beach	NW - 801 Bennett Avenue	0.2	2.2	1.25	3.6	1.25	0.8
3	718	Long Beach	East Side - Bennett Avenue north of 8th Street	0.75	0.4	1	1.8	1.25	0.4
3	720	Long Beach	East Side - Bennett Avenue end of 8th Street	0.25	1.6	1.25	2.4	1	3.2
3	721	Long Beach	East Side - Bennett Avenue south of 8th Street	0.25	1.6	0.25	2.2	0.5	2.2
3	722	Long Beach	SW - 795 Bennett Avenue	1.25	0.8	1.25	1.6	0.25	1
3	723	Long Beach	SW - 941 Loma Avenue	0.75	3.8	1	2	2	0.4
3	724	Long Beach	SE - 942 Loma Avenue	1.25	1.4	0.5	1.2	1.25	1.2
3	725	Long Beach	WS - 10th Street & Loma Avenue	2.75	0.8	0.5	1	1	0.6
3	726	Long Beach	WN - 10th Street & Loma Avenue	1.25	0.4	0.25	0.3	0.5	0.2
3	727	Long Beach	SE - 938 Euclid Avenue	1	2.8	0.25	0.6	0.25	0.8
3	728	Long Beach	WS - 3640 10th Street	0.5	0.4	3.5	10	1.75	3.6
3	729	Long Beach	SW - 943 Belmont Avenue	1.75	2.8	3.25	8.8	2.5	4.4
3	730	Long Beach	SE - 942 Belmont Avenue	2.5	7.2	4.25	9	0.5	3.6
3	731	Long Beach	SE - Rosewell Avenue & 10th Street	1.25	1	3.5	7.4	1	2.2
3	732	Long Beach	EN - 4737 9th Street	0.5	0.2	1.75	3.2	1.25	5.2
3	733	Long Beach	NE - 901 Bennett Avenue	0.25	8.2	3.75	6.4	0.75	2.2
3	734	Long Beach	WS - 837 8th Street	0.25	0.6	3	2.8	3.25	3.6

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3	735	Long Beach	SE - 346 Ximeno Avenue	0.75	0.6	3.25	12	1.5	2.8
3	737	Long Beach	SW - Ximeno Avenue & Colorado Street	0.25	1.4	4.75	7.4	0.75	3.6
3	736	Long Beach	WS - 4340 Colorado Street	0.25	0.8	1.75	5	1.5	1.6
3	431	Long Beach	WN - 4343 Colorado Street	1.5	0.6	2.25	4.2	0.25	1.8
3	801	Long Beach	NW - Ximeno Avenue & Colorado Street	1	0.2	2.75	2.2	0.5	3.6
3	787	Long Beach	NE - Ximeno Avenue & Colorado Street	0.75	5.6	2.25	5	1.25	2.6
3	771	Long Beach	SW - 347 Prospect Avenue	3.25	0.8	3.75	4.4	0.5	1.8
3	786	Long Beach	WS - Colorado Stree & Prospect Avenue	1.5	1.6	2.75	2.8	1.75	0.6
3	782	Long Beach	North Side - 4501 Colorado Street	0.5	0.4	2.25	3.2	2	4.2
3	788	Long Beach	SE - Prospect Avenue & Colorado Street	2.75	0.2	3.5	6	1.75	3.4
3	805	Long Beach	NE - 620 Prospect Avenue	0.25	0.4	2.5	4.2	2	4.8
3	804	Long Beach	NW - Prosepct Avenue & Grand Avenue	0.75	0.2	4.25	8.2	1.25	2.2
3	803	Long Beach	North Side - 4546 6th Street	1.25	0.2	3.75	4.4	1.25	2.4
3	802	Long Beach	South Side - 4600 6th Street	0.25	0.2	4.25	3	0.5	1
3	807	Long Beach	West Side - 441 Park Street	0.25	0.6	4.75	2.8	1.5	2
3	806	Long Beach	East Side - Park Street & 5th Street	0.75	0.2	2.25	7.6	1.75	1.8
3	808	Long Beach	West Side 501 Park Street	0.5	1.2	3	9.2	0.5	0.8
3	1143	Long Beach	WS - 7th Street & Euclid Street	2.25	8	4.25	5.8	0.25	0.2
3	1146	Long Beach	SW - 687 Euclid Street	2	1.2	3.5	4.8	0.25	0.2
3	1145	Long Beach	SE - 688 Euclid Street	1.5	2.8	1.75	3.2	1.75	0.6
3	1144	Long Beach	WN - 7th Street & Euclid Street	1.25	1.6	3	4	1.25	1
3	770	Long Beach	WS - 3740 7th Street	1.25	2.2	2.5	17	0.25	0.2
3	1198	Long Beach	SW - Grand Avenue & 7th Street	0.25	0.8	1.75	11	0.5	0.8
3	1183	Long Beach	SE - Grand Avenue & 7th Street	0.75	0.8	0.75	6.4	0.5	0.8
3	1149	Long Beach	ES - 7th Street & Grand Avenue	0.25	0.2	2	4.2	1.5	3
3	1148	Long Beach	EN - 7th Street & Grand Avenue	0.5	0.4	0.75	9.6	2.25	6.2
3	1147	Long Beach	WN - 7th Street & Grand Avenue	0.25	0.2	1.25	2.2	1.25	2.8
3	772	Long Beach	SW - 691 Miramar Avenue	1.75	2	0.75	1.6	0.5	0.6

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3	781	Long Beach	SE - 688 Miramar Avenue	2	3.2	0.5	1.8	1.5	2.8
3	789	Long Beach	North Side - 7th Street & across from 4442 7th Street	1.5	1.4	0.25	2	2.75	3.6
3	811	Long Beach	NW - Santiago Avenue & 8th Street	0.75	0.8	2.25	6.4	1	1.8
3	809	Long Beach	NE - 800 Santiago Avenue	0.25	0.6	1.5	2.8	3	4
3	810	Long Beach	EN - 8th Street & Santiago Avenue	1.25	3.2	1.25	6	1.25	1
3	829	Long Beach	SE - 7th Street & Havanna Avenue	0.5	1	4	4.8	3	2.2
3	836	Long Beach	East Side - 650 Los Altos Avenue	0.25	0.2	1.75	3.2	2.5	3.8
3	817	Long Beach	SE - 6th Street & Terriane Avenue	0.75	0.2	2.75	4.2	2	1.8
3	816	Long Beach	EN - 6th Street & Terriane Avenue	0.5	0.4	1.5	3	4.25	12
3	815	Long Beach	NE - 600 Terraine Avenue	0.25	0.8	0.75	1.8	2.75	5.4
3	819	Long Beach	EN - 6th Street & Santiago Avenue	1.25	2	3.75	6.2	1.5	3.2
3	818	Long Beach	NE - 600 Santiago Avenue	2	3.8	0.25	1	1	2
3	820	Long Beach	ES - 6th Street & Santiago Avene	1.25	2.2	4.75	12.2	1.25	3.4
3	822	Long Beach	North Side - 6th Street across from Panama Avenue	1	1.4	1.25	5	0.75	1
3	821	Long Beach	ES - 6th Street & Panama Avenue	0.5	0.6	2	6.4	1.5	1.6
3	827	Long Beach	NW - Olean Avenue & 4th Street	0.75	0.8	1.75	8.4	2.5	3
3	828	Long Beach	NE - Olean Avenue & 4th Street	0.5	1	4	14.8	1.25	0
3	826	Long Beach	SW - 395 Panama Avenue	1.75	1.4	0.25	1.2	3	5.8
3	825	Long Beach	SE - 5300 4th Street	3.25	5	0.5	1.4	1.75	2.4
3	824	Long Beach	NE - 402 Panama Avenue	0.75	1	1.5	3	0.75	1.2
3	823	Long Beach	NW - 401 Panama Avenue	0.25	6	1.75	5.4	2	2.6
3	835	Long Beach	SE - 396 Santiago Avenue	0.25	1	2	4.5	4	4.6
3	834	Long Beach	EN - 4th Street & Santiago Avenue	0.75	0.25	2.75	4.2	5.25	6.8
3	111	Long Beach	NE - 5401 Anaheim Road	1.25	1	0.75	1.9	2.25	3
3	102	Long Beach	NW - 5377 La Pasada	0.75	1.4	2.25	7.6	3	5.2
3	748	Long Beach	SE - 5400 Anaheim Road	0.5	0.4	0	0	1.75	3.6
3	747	Long Beach	SW - 5355 La Pasada	0.25	0.6	1.5	2.6	3.25	9.1
3	745	Long Beach	South Side - 5412 Oleta Street	0.75	1.2	1.25	4	2.5	5

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3	101	Long Beach	North Side - 5409 Oleta Street	1	0.8	0.5	1	5	14.6
3	837	Long Beach	NW - 900 Bryant Road	0.75	0.6	3	5.4	3.25	8.5
3	838	Long Beach	North Side - 5521 Oleta Street	0.25	1	0.5	3	4.75	7.2
3	839	Long Beach	South Side - 5524 Oleta Street	0.75	1	0.75	2.2	1.25	2
3	833	Long Beach	East Side - 5525 Pacific Coast Highway	2.75	3.2	1.75	3.1	4.75	4
3	832	Long Beach	West Side - 5524 Pacific Coast Highway	0.75	0.8	0.5	1	1.25	3
3	830	Long Beach	East Side 742 Havana Avenue	0.25	0.4	0.75	3	1	3.6
3	831	Long Beach	West Side - 745 Havana Avenue	0.5	0.2	2.75	6.2	4.5	4.2
3	814	Long Beach	NW - 805 Terraine Avenue	0.25	0.4	2	4	1.5	2.6
3	812	Long Beach	NE - 800 Terraine Avenue	0.75	0.8	3.25	6	2.25	4.1
3	813	Long Beach	EN - 8th Street & Terraine Avenue	0.5	1.2	5	23.2	5.25	6.1
3	1197	Long Beach	ES - 7th Street & Termino	0.75	1.2	2.75	4.2	1.5	1
3	150	Long Beach	SW - Termino & 7th Street	1.5	1.5	3.75	20.1	3.25	5.6
3	146	Long Beach	WN - 7th Street & Belmont	5	2.2	2	3.3	2	4.2
3	148	Long Beach	WS - 7th Street & Rosewell	2.5	1.6	1.75	3.8	3	7.4
3	147	Long Beach	WN - 7th Street & Bennett	3	2.8	2.25	6.4	1.75	3.1
3	149	Long Beach	WS - 7th Street & Ximeno	1.75	1.6	4	8.4	1.25	4.2
3	785	Long Beach	SW - Ximeno & 7th Street	0.75	2.2	2.25	6.1	2	7.6
3	1177	Long Beach	SE - Ximeno & 7th Street	1	1.8	2.5	10	1.75	5.1
3	1142	Long Beach	NE - Ximeno & 7th Street	2	2.4	1.25	4.2	0.75	2.2
3	1140	Long Beach	NW - Ximeno Avenue & 7th Street	3.25	2.8	1.2	2.6	2	4
3	1141	Long Beach	WN - 7th Street & Ximeno	1.25	1.8	4.25	5.2	1.5	2.2
3	1195	Long Beach	WN - 5th Street & Ximeno	1.75	2.2	5	8.8	3.25	4.1
3	1139	Long Beach	WS - 5th Street & Ximeno	3	3.3	6.25	13	2.75	2.3
3	1194	Long Beach	SE - Ximeno & 5th Street	1.75	2.1	1.75	4.6	1.75	1.8
3	1193	Long Beach	WS - 4th Street & Ximeno	3.5	2.6	2.25	7.1	4.25	9.4
3	1189	Long Beach	WN - Vermont & Ximeno Avenue	2.25	4.2	3	15.6	2.75	3.7
3	1192	Long Beach	WS - Vermont & Ximeno Avenue	1.75	2.2	3.25	5.2	3.25	4.5

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3	1190	Long Beach	SW - Redondo & 7th Street	3	4.1	2	3.1	2.5	2.6
3	421	Long Beach	NE - Redondo & 7th Street	4.25	6.8	1.5	2.8	1.5	3
				149.70	**216.05**	**280.80**	**654.30**	**231.00**	**378.80**
4	502	Long Beach	WN - Atherton & Knoxville	2.75	3.2	2.25	6.7	6.5	3.4
4	501	Long Beach	South Side - Atherton & Knoxville	2	2.2	2.5	9.1	1.5	2.1
4	651	Long Beach	NW - 1801 Knoxville	2	4.6	2	3.8	2	2.2
4	652	Long Beach	West Side - 1809 Knoxville	1	2	1.5	2.5	1.75	3.6
4	653	Long Beach	WN - Atherton & Josie	1.5	3.1	2.5	4.1	5.25	7.1
4	654	Long Beach	NW - 1801 Josie	0.5	2.6	3.75	13.6	4.25	5.4
4	655	Long Beach	NE - 1800 Josie	1	1.7	2	4.1	1.75	4.6
4	656	Long Beach	WN - Atherton & Iroquois	27	2.3	1.5	4.6	3.25	3.1
4	657	Long Beach	NW - 1801 Iroquois	0.75	9.1	1.25	3.2	2.25	2.5
4	658	Long Beach	NE - 1800 Iroquois	2	4.2	0.75	1.6	2.5	5.6
4	659	Long Beach	East Side - 1808-1800 Iroquois	2.5	4.5	3.25	2.8	8.5	11.2
4	660	Long Beach	NW - 1801 Hackett	3.5	2.2	2.5	4.1	3.5	7.5
4	661	Long Beach	South Side - Atherton & Palo Verde	0.75	3.4	1.5	2.6	2.25	4.2
4	662	Long Beach	WN - Atherton & Palo Verde	2.85	2.8	1.75	3	3.5	5.1
4	662	Long Beach	NW - 1801 Palo Verde	3.75	1.9	2.75	2.6	1	3.2
4	664	Long Beach	West Side - across from 1801 Palo Verde	0.75	2.1	1.5	3.2	1.5	2.1
4	665	Long Beach	NW - Palo Verde & Atherton	2	4.2	2	4.1	1.5	1.1
4	666	Long Beach	WN - Atherton & Carfax	3	2.3	2.25	8	3	6.3
4	667	Long Beach	NW - 1801 Carfax	0.25	2	1.25	2.6	1.75	3
4	668	Long Beach	NE - 1800 Carfax	1.5	0.8	0.75	0.8	0.25	1.2
4	670	Long Beach	North Side - Atherton west of Mcnab	1	0.4	0.75	1	0.25	0.6
4	669	Long Beach	WN - Atherton & Mcnab	0.75	0.8	0.25	0.6	0.75	0.8
4	671	Long Beach	NW - 1801 Mcnab	0.5	6	1.5	2.2	0.5	0.6
4	672	Long Beach	West Side - 1809 Mcnab	1.75	2.8	1.25	1.8	1.25	1
4	673	Long Beach	NE - 1800 Mcnab	1.5	1	2	5.4	3.75	6.4

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4	674	Long Beach	EN - Atherton & Mcnab	1	0.75	2.75	3.8	4	5.2
4	675	Long Beach	WN - 1802 Litchfield	0.25	0.6	2	4.2	0.5	0.6
4	676	Long Beach	SW - Atherton & Litchfield	0.25	0.6	1.25	2.4	0.25	0.4
4	678	Long Beach	NE - 2206 Ocana Street	0.5	0.8	3.5	3.8	1.5	2
4	677	Long Beach	NW - 2207 Ocana Street	1.25	1.2	2.25	0	4.5	3.8
4	679	Long Beach	North Side - Sterns east of Radnor	2.25	3.6	1	1	2.25	2.6
4	680	Long Beach	NW - Sterns & Clark	1.25	2.4	1.25	1.2	3.25	4.2
4	681	Long Beach	ES - Los Coyotes & Charlemange	1.5	1.2	1	0.6	1.75	2.8
4	682	Long Beach	NE - Los Coyotes & Charlemange	3.25	4.4	2.75	10	4	3
				78.35	**87.75**	**63.00**	**125.10**	**86.25**	**118.50**
5	875	Long Beach	SE - 2856 Ladoga Avenue	0.5	0.4	1.75	6.4	3.75	2.8
5	874	Long Beach	SW - 2957 Ladoga Avenue	0.75	0.8	2.25	3.4	3	2.4
5	873	Long Beach	WS - Spring & Ladoga Avenue	0.5	0.8	1.5	2.4	2.25	1.8
5	851	Long Beach	ES - Spring & Ladoga Avenue	2	3.4	2	3.4	5.25	8.2
5	1196	Long Beach	North Side - Park Avenue & Spring	1.5	1.8	4.25	6.2	7.5	5
5	1170	Long Beach	SW - 2509 Ladoga Avenue	2.5	3.2	0.25	0.8	1.75	2.2
5	799	Long Beach	SE - 2508 Ladoga Avenue	1.25	2.4	0.25	0.4	1.25	2.6
5	886	Long Beach	SW - Cantel St. & Don Julio Street	2.75	5	1.5	8	4.5	9.4
5	869	Long Beach	SE - 2371 Cantel Street	1.25	2.4	1.25	0	0.75	0.8
5	868	Long Beach	North Side - 2372 Knoxville Avenue	2.25	3.6	0	3	0.25	0.2
5	885	Long Beach	NE - Ladoga Avenue & Vuelta Grande	1.5	2.2	3.5	7.6	8.75	14.4
5	867	Long Beach	NW - Ladoga Avenue & Vuelta Grande	0.5	3.2	2	7.4	1	3.2
5	866	Long Beach	South Side - 2431 Vuelta Grande Avenue	1.25	2.5	6.25	22.1	4	6.5
5	865	Long Beach	South Side - 2369 Vuelta Grande Avenue	1.75	2.6	3.75	15	4.5	2.2
5	863	Long Beach	NW - 2603 Ladoga Avenue	0.75	4.7	0.75	2	7.25	4.6
5	864	Long Beach	NE - 2602 Ladoga Avenue	0.75	1.8	2.25	4.1	5.75	17.9
5	700	Long Beach	NE - Los Coyotes & Deborah Street	3.25	2.1	1.25	1.6	1.75	1.2
5	900	Long Beach	NW - Los Coyotes & Deborah Street	2.75	1.7	2.75	5.2	32.5	2.9

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5	699	Long Beach	WN - Deborah & Los Coyotes	3.25	2.8	1.75	3.5	4	7.8
5	895	Long Beach	NE - Forman Avenue & Deborah Street	1	2.2	5	17.6	2	4
5	896	Long Beach	West Side - Forman Avenue of Deborah Street	1.25	1.5	2.25	6.2	3	6.2
5	893	Long Beach	SW - 2645 Forman Avenuen	1.75	0.9	2.75	10.2	9.75	11.7
5	899	Long Beach	NW - Forman Avenue & Chatwin	2.25	0.7	2	7.5	2.25	4.1
5	897	Long Beach	East Side - 2662 Forman Avenue	0.75	2.1	2.25	4.6	1.25	3.6
5	891	Long Beach	NE - Deborah Street & San Vincente	3.25	1.7	1.75	2.1	4.25	17.9
5	892	Long Beach	WS - 5876 Deborah Street	1.5	0.7	3.25	23.8	3.5	6.7
5	898	Long Beach	WN - 5877 Deborah Street	1.75	2.1	2.25	5	4.25	3.5
5	890	Long Beach	West Side San Vincente north of Deborah Street	2.25	3.4	2	4.8	5.75	6.2
5	889	Long Beach	SW - San Vincente & Walton Street	2.5	1.8	6.5	26.1	6	17.1
5	888	Long Beach	SE - San Vincente & Walton Street	1.75	2.1	5.25	14.6	4	5.4
5	887	Long Beach	WN - 5873 Walton Street	2	3.1	5.5	15.2	3.25	6.2
5	884	Long Beach	South Side - 5930 Deborah Street	1.5	2.6	4.75	30	4.25	3.5
5	883	Long Beach	WN - Deborah Street & Fanwood Avenue	1.75	1.5	4.5	14	3	2.6
5	872	Long Beach	EN - Deborah Street & Fanwood Avenue	2.25	0.8	4.25	17.6	1.5	4.2
5	871	Long Beach	ES - Deborah Street & Faust Avenue	2	2.1	3	7.7	1.5	3.6
5	870	Long Beach	EN - Deborah Street & Faust Avenue	1.75	1.4	3.25	16.2	3.25	7.1
5	862	Long Beach	EN - 6201 Willow	2	1	4.5	7.1	4.75	4.2
5	882	Long Beach	NW - Oakbrook Street & Willow	3.25	2.2	5	19.2	6	8.8
5	881	Long Beach	NW - Los Arcos Street & Vuelta Grande Avenue	1.75	1.2	2.5	6.1	5.5	9.7
5	880	Long Beach	NE - 6702 Los Arcos Street	2.25	2.1	3	10	10.5	16
5	878	Long Beach	NW - Palo Verde Avenue & Vuelta Grande Avenue	1.5	1.6	3.5	14.2	7.5	7
5	879	Long Beach	North Side - Palo Verde Avenue & Vuelta Grande Avenue	2	1.9	1.5	6.1	3	6.4
5	877	Long Beach	SW - Palo Verde Avenue & Vuelta Grande Avenue	2.25	2.2	2.5	3.4	3.25	4.1
5	861	Long Beach	South Side - Ladoga & Willow Street	1.75	0.9	2	2	2.75	7.2
5	860	Long Beach	EN - Willow Street & Ladoga Avenue	1.5	0.6	1.75	2.8	3.25	3.1
5	859	Long Beach	WN - Willow Street & Ladoga Avenue	4.75	4.2	1.5	3.1	1.5	2.2

City of Long Beach Cleaning - February 2006

District #	Contr #	City	Abtech Installation Location	Volume of Litter to the Quarter Gallon	Weight of Litter to the Ounce	Volume of Sediment to the Quarter Gallon	Weight of Sediment to the Ounce	Volume of Vegetation to the Quarter Gallon	Weight of Vegetation to the Ounce
5	857	Long Beach	East Side - 2712 Ladoga Avenue	0.75	1.1	2.5	7.4	2.25	4.1
5	858	Long Beach	West Side - 2713 Ladoga Avenue	1.25	2.3	3	9.9	2	3.5
5	856	Long Beach	EN - Barrios Street & Ladoga Avenue	0.75	1.6	4.25	27	2.75	1.7
5	853	Long Beach	NE - 2802 Ladoga Avenue	2.25	0.6	3	14.2	4.5	7.1
5	854	Long Beach	NW - 2803 Ladoga Avenue	1.25	2.6	3.25	7.1	6.5	4.7
5	855	Long Beach	WN - Barrios Street & Ladoga Avenue	6.5	4.7	4.25	11.2	0.75	1.1
5	852	Long Beach	East Side - 2856 Ladoga Avenue	1.5	2.3	1.5	2.7	3.75	14.2
5	876	Long Beach	West Side - 2857 Ladoga Avenue	2.2	1.7	2	3.9	2.75	3.1
				101.70	**112.90**	**151.25**	**483.10**	**235.75**	**317.90**
6	683	Long Beach	NE - Cedar & Willow Street	1.75	2.1	2	1.1	2	1.9
6	684	Long Beach	NW - Cedar & Willow Street	3.25	3.3	1.5	1.9	3	4.2
6	685	Long Beach	NE - Chestnut & Willow Street	2.75	1.9	2.25	7.1	5.5	5.2
6	686	Long Beach	NW - Chestnut & Willow Street	2	1.8	2	6.5	2.25	3.1
6	687	Long Beach	NW - Eucalyptus Avenue & Willow Street	1.75	3.8	3	6.8	3	4.6
6	688	Long Beach	NE - Eucalyptus Avenue & Willow Street	5.25	4.2	5.25	27	2.5	3
6	689	Long Beach	NE - Magnolia Avenue & Willow Street	2.5	1.7	3	14.2	1	2.1
6	690	Long Beach	ES - Anaheim & Lime	1.75	2.2	1.75	4.1	3	1.5
6	691	Long Beach	SW - Lime & Anaheim	3.25	3.1	1.25	22.5	1.5	0.8
6	692	Long Beach	NE - Lime & Anaheim	1.25	2.1	3	6.5	2	1.7
6	693	Long Beach	NW - Lime & Anaheim	2.75	1.7	2.5	0.7	2.25	4.5
6	694	Long Beach	ES - Anaheim & Olive	1.5	1.2	1	17	2.5	3.1
6	695	Long Beach	SW Olive & Anaheim	2.25	3.2	3.25	6.2	4.25	3.6
6	696	Long Beach	SW - Martin Luther King & Anaheim	0.75	1.6	1.5	2.2	0.75	1.2
6	697	Long Beach	WN - 11th Street & Atlantic	4.5	5	0.75	1.6	2.75	6.4
6	698	Long Beach	SW - Atlantic & 11th Street	1.5	4.2	0.5	0.8	2	2.2
				38.75	**43.10**	**34.50**	**126.20**	**40.25**	**49.10**
				504.25	**607.10**	**654.30**	**1774.40**	**696.25**	**1000.50**

Long Beach Cleanout

Catch Basin #	Location	Volume of litter to the quarter gallon (excluding sediment & vegatation)	Weight of litter to the ounce (excluding sediment & vegatation)	Volume of Sediment & Vegetation to the Quarter Gallon (excluding litter)	Weight of Sediment & Vegetation to the ounce (excluding litter)
1	North/West corner of South Pine Ave & West Shoreline Drive	2.25	3.6	3.75	21.2
2	West/South corner of West Shoreline Drive & South Pine Ave	1.25	2.8	2.25	16
3	South/West corner of South Pine Ave & West Shoreline Drive	1.5	1.4	3	19.4
4	East/South corner of West Shoreline Drive & South Pine Ave	0.75	1.5	2.5	13
5	In Yacht Club parking	4.25	6.2	2.75	14.6
6	In front of Toyota Grandprix winner circle	0.5	1.4	1.5	10.2
7	West/South corner East Shoreline Drive across from Toyota Grandprix winner circle	1.25	1.8	2.25	11.8
8	In front of Toyota Grandprix winner circle	0.75	0.8	1.25	7.4
9	North/West corner East Shoreline drive across from Toyota Grandprix winner circle	1.25	1	1	2.8
10	East/South corner East Shoreline Drive across from Toyota Grandprix winner circle	1.5	0.8	2.25	7.8
11	North/West corner South Cedar Ave & West Shoreline Drive	1.75	3.2	0.5	2.2
12	North/East corner South Cedar Ave & West Shoreline Drive	1.25	1.8	1	5.6
13	West/North corner West Shoreline Drive & Cedar Ave	0.5	0.8	1.25	7.2
14	North side at end of Aquarium	1	2.2	2.25	11.4
15	South side at end of Aquarium	1.25	1.8	2.75	4
16	In Yacht Club parking	0.75	0.8	2.75	9.8
17	East side of Aquarium Road just south of Aquarium way	0.25	0.6	1.75	8.2
18	West side of Aquarium Road just south of Aquarium way	0.25	0.2	1.25	6.8
19	North/East corner South Linden Ave & East Seaside way	0.5	1	2.5	5.4
20	West/North corner South Linden Ave. & East Seaside way	1.25	1.6	1.5	3
21	South side of East Seaside way at end of South Linden Ave	1.25	0.8	2.75	7.8
22	North side of West Seaside way just West of South Pine	0.75	1.2	2.5	12.6
23	North/West corner West Shoreline Drive & South Cedar Ave.	0.25	0.2	1.75	10.4
24	In Parking Lot off East Shoreline Drive just south of East Ocean Blvd.	1	2.8	2.25	15.2
25	In Parking Lot off East Shoreline Drive just south of East Ocean Blvd.	2.75	9.2	4	28
26	South/West corner Queens Way & West Shoreline Drive	1.25	2.6	2.25	14.2
27	In Yacht Club parking lot	1.5	1.8	1.5	5.2
28	East/North corner West Shoreline Drive & Chestnut Place	0.5	0.8	1.75	6.8
29	East side of Queens way just South of West Shoreline Drive	0.25	0.2	1	4.6
30	South/East corner Aquarium way & West Shoreline Drive	0.75	1.2	2.5	17.8
31	South/West corner Aquarium way & West Shoreline Drive	2.25	4.8	2.25	11
32	In Yacht Club parking lot	3.25	5.8	2.5	19.2
33	South side of Bay Street East of Aquarium way	1.25	2.2	3	24.6
34	West/North corner Goldenshore & Access Road	0.25	1.2	3.25	12.4
35	South side of Bay street West of South Pine Ave	2.5	1.8	0.5	2.2
36	East side of Goldenshore South of West Seaside way	1.25	0.8	0.75	3.6
37	South side of West Shoreline Drive West of Goldenshore overpass	0.75	0.6	1.5	4.4
38	South side of West Shoreline Drive Under Queens way overpass	0.5	0.8	1.25	8.6
39	North/East South Pine Ave & West Shoreline Drive	1.5	2.2	2.75	15.2
40	North/East South Pine Ave & East Seaside way	0.5	0.6	2.25	16.4

Long Beach Cleanout

Catch Basin #	Location	Volume of litter to the quarter gallon (excluding sediment & vegatation)	Weight of litter to the ounce (excluding sediment & vegatation)	Volume of Sediment & Vegetation to the Quarter Gallon (excluding litter)	Weight of Sediment & Vegetation to the ounce (excluding litter)
41	West/North corner West Ocean Blvd. & South Pine Ave	0.25	0.6	2.5	14.8
42	East/North West Ocean Blvd & World Trade Center	0.75	1.2	1.25	10.6
43	North side of Ocean Blvd. West of World Trade Center	0.25	2.2	4	18.4
44	West/South corner Golden Ave & West Ocean Blvd	0.5	1	1.5	11.8
45	South/East corner West Seaside way & Chestnut Place	1	1.4	2.75	8.2
46	West/South corner West Seaside way & South Cedar Ave	0.75	0.6	3.5	14.8
47	North side of West Seaside way Westof South Cedar Ave.	1.5	1.75	1.25	10.2
48	North side fo West Seaside way East of South Cedar	0.25	0.2	2.75	9.8
49	East/South corner South Cedar Ave & West Seaside way	1.5	3.6	3	16.4
50	North side of West Seaside way at the end of Aquarium way	1.25	2.2	2.25	14.6
51	East/South corner West Seaside way & Aquarium way	0.75	1.8	2	8.4
52	West/South corner West Seaside way & Aquarium way	1.25	1.4	1.75	11.2
53	North side of West Seaside way East of Aquarium way	0.5	0.8	2	9.4
54	West/South corner West Seaside way & South Pine Ave	0.25	0.6	2.5	5.8
55	South side of East Seaside way East of South Pine Ave.	1.25	1.2	3.25	12.8
56	East/South corner East Seaside way & Collins Way	0.75	0.4	1.5	2.2
57	North side of Aquarium Way South of Bay St.	2	4.6	2.75	16
58	South side of E.Seaside Way East of Linden Ave.	0.25	1.8	1	4
59	North Side of E.Seaside Way West of Elm Ave.	1.75	2	3.75	13.2
60	North Side of E.Seaside Way West of Hart Pl.	0.25	0.4	3.25	10.6
61	North/West corner E.Seaside Way & Hart Pl.	0.75	0.6	5.75	28.4
62	West/North corner E.Seaside Way & Hart Pl.	1.5	2.2	4.5	15.8
63	West side of Hart Pl. North of E.Seaside Way	0.5	1.8	3.25	11.6
64	East/North corner West Seaside Way & Chestnut Pl.	1.25	2.8	2.5	12
65	North/West corner Collins Way & E.Seaside Way	0.25	0.8	3.5	17.2
66	North/East corner Atlantic Ave. & Ocean Blvd.	0.75	2	1.75	11.2
67	North/East corner Paloma Ave. & E.Ocean Blvd.	1.25	3.2	0.75	6.4
68	North/West corner Paloma Ave. & E.Ocean Blvd.	1.75	3.6	2	11.4
69	North Side of Shoreline dr. just East of S.Cedar Ave.	3.25	5.8	1.75	9.6
70	North Side of Acces Rd. on East of Catalina Landings	1.5	2.4	1.25	2.8
71	West/North Goldenshore at Entranc to Trailer Park	4.25	6.2	1.75	1.6
72	North Side of Acces Rd. South of West Shoreline dr.	0.75	2.8	2.5	9
73	North Side of Acces Rd. South of West Shoreline dr.	0.25	0.8	3.75	22.6
74	East Side of Goldenshore South of Trailer Park Entrence	1.75	1.6	1.75	12.4
75	North Side of Seaside Way East of Linden Ave.	1.25	3.2	1.25	11.2
76	North/East corner Pier Pl. & East Seaside Way	1.5	1.8	4.5	32.6
77	East/South corner West Ocean Blvd. & Golden Ave.	2.25	3.6	1.25	5.6
78	East/South corner West Ocean Blvd. & World Trade Center	2.75	6.8	1.25	6.2
79	East/South West Ocean Blvd. & Magnolia Ave.	1.75	2.4	3.75	15.2
80	North/West corner South Pacific Ave. & West Ocean Blvd.	2.5	3.4	2.25	7.8
81	East/North East 1st. St.& Long Beach Blvd.	4.75	17.8	1.5	13

Long Beach Cleanout

Catch Basin #	Location	Volume of litter to the quarter gallon (excluding sediment & vegatation)	Weight of litter to the ounce (excluding sediment & vegatation)	Volume of Sediment & Vegetation to the Quarter Gallon (excluding litter)	Weight of Sediment & Vegetation to the ounce (excluding litter)
82	North/East corner Long Beach Blvd. & East 1st. St.	2.75	10.6	3.75	23.6
83	North/East Acces Rd. East of Catalina Landings	1.25	1.8	5.25	35.2
84	Suth Side of East Ocean Blvd. at end of Park Ave.	0.25	0.6	1.25	9.8
85	South Side of East Ocean Blvd. at end of Lavern Ave.	7	11.2	3.5	21.6
86	South Side of East Ocean Blvd. at end of Santa Ana Av.	4.5	9.8	3	16.2
87	South Sidde of East Ocean Blvd. at end of Nieto Av.	2.25	13.6	1.25	7.6
88	North/West corner Loma Av. & 1st. St.	3.75	5.8	3.25	19.2
89	West/North corner of 1st. St. & Loma Av.	2.5	4	2.75	14
90	North/East corner Loma Av. & 1st. St	1.25	2.5	2.25	18.6
91	East/North corner 1st. St & Loma Av.	6	9.6	1.75	10.2
92	South/West corner Redondo Av. & 1st. St.	1.25	2.8	1.5	9
93	West/South corner 1st. St & Redondo Av.	4.75	7.8	4.25	27.4
94	South/East corner Redondo Av. & 1st. St.	1	1.6	2.75	13.6
95	West/North corner 1st. St & Redondo Av.	5.25	4.8	4.75	30.2
96	North/East corner Paloma Ave. & East 1st. St.	2.5	4	2.25	14.6
97	North/West corner Paloma Ave. & East 1st. St.	6	9.8	1.75	11.2
98	North/East corner Orizaba Ave. & East 1st.St.	4.25	7.12	2.5	15.6
99	North/West corner Orizaba Ave. & East 1st.St	7.75	12.6	2.75	18.4
100	North/East corner TempleAve. & East 1st. St.	2.25	3.8	3.25	21.2
101	North/West corner TempleAve. & East 1st. St.	1.25	2.2	2.25	16
102	West/North corner E.1st. St. & Lindero Ave.	1.5	1.6	3	19.2
103	West/South corner E.1st. St. & Lindero Ave.	0.5	0.8	1.75	3.2
104	West/North corner The Paseo & South Pine Ave.	4.25	6.4	2.75	18
105	West/South corner The Paseo & South Pine Ave.	6.25	10.6	2.25	14.4
106	East/North corner The Paseo & Aquarium Way	2.25	3.2	3.25	23
107	East/South corner The Paseo & Aquarium Way	4	6.4	2.5	14.4
108	South/East corner Aquarium way & The Paseo	2.75	4.8	1.25	6.2
109	South/West corner Aquarium way & The Paseo	0.25	0.6	2.75	12.4
110	West/North corner East Ocean Blvd.& Santa Ana Av.	2	3.2	2.25	16.2
111	West/North corner East Ocean Blvd. & Lavern Av.	1.28	2.6	1.75	11.6
112	East/North corner E.Ocean Blvd. & Covina Av.	4.25	6.8	1.25	8.2
113	North/West corner East Ocean Blvd. & St. Joseph Av.	1.25	2	9.75	62.6
114	North/West corner Long Beach Blvd. & West 1st. St.	1.25	1.8	4.25	27.2
115	East/North corner West Ocean Blvd. & Golden Ave.	1.75	21.2	2	13.4
116	West/South corner Bay St. & Aquarium Way	3	4.6	1.25	8.2
117	North Side of West Ocean Blvd West of Golden Ave.	1.25	2.4	2.5	3.6
118	East/South corner West Broadway & Pacific Ave.	1.75	2.6	1.8	2.4
119	East/North corner East Seaside way & Collins way	0.25	0.8	1.25	10
120	East South West Broadway & Maine Ave	1	1.6	6.25	42.6
121	North West Molino Ave & East 1st Street	1.75	2.2	2.75	17.2
122	North East Molino Ave & East 1st Street	0.75	1.2	2.25	16.4

Long Beach Cleanout

Catch Basin #	Location	Volume of litter to the quarter gallon (excluding sediment & vegatation)	Weight of litter to the ounce (excluding sediment & vegatation)	Volume of Sediment & Vegetation to the Quarter Gallon (excluding litter)	Weight of Sediment & Vegetation to the ounce (excluding litter)
123	North East Redondo Ave & 2nd Street	3	4.6	3.75	23.6
124	North West Coronado Ave & 2nd Street	6.25	10.8	1.75	11.2
125	West North Coronado Ave & 2nd Street	3.25	4.2	4.25	28.6
126	West South 2nd Street & Coronado Ave	4.25	7	1.25	9.2
127	North West Temple Ave & 2nd Street	4	6.2	2.25	7.4
128	North East Temple Ave & 2nd Street	0.25	0.6	3.75	24.6
129	North East Molino Ave & 2nd Street	3.75	5.2	1.25	4.2
130	North West Molino Ave & 2nd street	3.5	2.8	3.25	22.6
131	North East Lindero Ave & 2nd	6.75	10.2	5.5	35
132	North West Lindero Ave & 2nd Street	4.25	7.6	3.75	23.2
133	North East Kennebec Ave & 2nd Street	1.5	2.8	3.25	21.4
134	North West Kennebec Ave & 2nd street	7	11.4	1.75	10.8
135	East Side of Redondo Ave at end of Dodge way	3.75	6	1.25	5.2
136	East Side of Redondo Ave North of east 1st street	2.5	4.4	1	6
137	North East Orizaba Ave & 2nd street	3.25	5.6	3.25	21.2
138	North West Orizaba Ave & 2nd street	21.25	34	0.75	2.4
139	North East Maine Ave & West 3rd street	4	6.8	3.5	23.8
140	North West Daisy Ave & West Broadway	1.25	2.6	3	18.2
141	North East Daisy Ave & West Broadway	3.25	5.2	1.25	10
142	East North West 3rd Street & Pacific	3.75	5.8	1.5	8.2
143	North East Pacific Ave & West 3rd Street	0.75	0.6	2.25	16.8
144	South Side of West Broadway & Golden Ave	0.5	0.4	2.75	12.2
145	East North West 9th street & Maine Ave	6	9.6	4.25	27
146	East South West 9th street & Maine Ave	2.25	3.6	2.25	14.2
147	South West Maine Ave & Park Circle	4.5	7.8	2	12.4
148	East north Maine Ave. & West 8th Street	6.75	10.2	3	19.8
149	North West Maine & Loma Vista Drive	1.25	2	0.25	2.4
150	East North West 5th street & Maine Ave	8.25	13.8	7.5	47
151	East South West 5th street & Maine Ave	1.75	2.6	2	12.6
152	South West Maine Ave & West 5th street	0.75	1	1.25	8.2
153	East North West 4th street & Maine Ave	0.75	1.2	1.75	3.8
154	East South West 4th street & Maine Ave	2.25	3.4	2.25	10.4
155	South Maine street & West 4th street	2.5	3	3.75	20.6
156	East North West 3rd street & Cedar Ave	2.5	3.6	2	13.8
157	North East Cedar Ave & West 3rd Street	3.75	6	1.25	10.8
158	East South West 3rd street & Cedar Ave	17.25	27.8	9.25	61.2
159	In Yacht Club parking lot	5	8.2	4.25	28.4
160	In Yacht Club parking lot	2.75	4.4	2.25	16
161	North side of Bay street East of Aquarium way	5.5	9.8	0.25	2

Long Beach Cleanout

Catch Basin #	Location	Volume of litter to the quarter gallon (excluding sediment & vegatation)	Weight of litter to the ounce (excluding sediment & vegatation)	Volume of Sediment & Vegetation to the Quarter Gallon (excluding litter)	Weight of Sediment & Vegetation to the ounce (excluding litter)
162	West North East Seaside Way & Linden Ave	0.25	1.6	9.75	63.4
163	East South West 5th Street & Chestnut Ave	1.5	2.8	6.5	43.2
164	North West Chestnut Ave & West 5th Street	2	3.6	3.25	23
165	West South West 5th street & Magnolia Ave	1.75	2.2	3.25	20.6
166	East North Magnolia Ave & West 5th Street	2.25	4	1.75	8.2
167	East North Bay Street & South Cedar Ave	5.5	8.4	3	16
168	West South Bay street & South Cedar Ave	1.75	2.6	2.75	18.4
169	North side of Bay street West of Aquarium way	0.75	1	5.75	37.2
170	South side of Bay street West of Aquarium way	4.25	6.8	6.5	43.8
171	North West Aquarium way & Bay street	2.75	4.2	3.5	22.2
172	North East Aquarium way & Bay street	2.5	3.8	6	40
173	East North Bay street & Aquarium way	1	1.6	1.75	3.8
174	East South Bay street & Aquarium way	5.25	8.8	0.75	5
175	East side of Aquarium way South of Bay	2.75	1.6	5.25	34.8
	GRAND TOTAL WEIGHT	**412.78**	**711.47**	**463.55**	**2654.4**

City of Long Beach

District #	Contractor#	Installation Location	Volume of litter to the quarter gallon (excluding sediment & vegetation)	Weight of litter to the ounce (excluding sediment & vegetation)	Volume of Sediment & Vegetation to the Quarter Gallon (excluding litter	Weight of Sediment & Vegetation to the ounce (excluding litter)
2	512	ES-Ocean & 9th street	2.8	1.6	2.4	5.4
2	515	ES-1st street & Alamitos	0.25	1.2	1.75	12.2
2	514	ES-1100 Cerritos	4	2.2	4.2	9.6
2	513	NW-1545 3rd street	2.25	2.4	3.75	24.2
2	539	EN- 1001 Bonita	0.25	0.8	1.75	14.8
2	550	ES- 3rd street & Alamitos	0.75	1.4	2.5	20.2
2	549	EN-3rd street & Alamitos	1.25	2	2.25	9
2	548	ES- Appleton & Alamitos	0.75	1	4.5	15
2	547	EN-Appleton & Alamitos	1.5	1.6	4	14.8
2	546	EN-Broadway & Cerritos	0.25	2.4	1.75	12.6
2	544	ES- Broadway &Cerritos	2.5	1.8	1	6
2	543	EN- 2nd street & Cerritos	1.75	1.2	1.75	4.2
2	542	EN-Broadway & Alamitos	0.25	0.6	1.25	7.6
2	541	ES- Broadway & Esperanza	0.25	1.4	2.25	18
2	139	EN-Broadway & Esperanza	0.5	0.6	2	14.8
2	138	ES-Broadway & Hermosa	2.2	1.8	2.8	12.2
2	140	EN- Broadway & Hermosa	0.25	1.2	3.25	11.2
2	1188	ES- 2nd street & Hermosa	1.75	2.8	2.5	9.8
2	144	EN- 2nd street & Hermosa	1	3.2	1.25	2.6
2	141	ES- 2nd street & Hermosa	1.25	1.8	1.75	2.8
2	540	EN- 2nd street & Hermosa	0.75	2.6	3	16
2	841	ES- 4th street & Alamitos	2.6	3.2	1.4	4.4
2	842	EN- 4th street & Alamitos	1.75	2.4	1.75	6.2
2	840	NE- Alamitos & 4th street	2.25	2.2	1.5	4
2	755	ES- 3rd street & Bonita	4	3.2	2.5	9.2
2	134	NW- Bonita & 3rd street	1.25	1	2	5.6
2	1191	NE- Bonita & 3rd street	0.75	0.8	1.5	2.2
2	776	NE- Bonita & Appleton	1.25	1.6	1	2.6
2	135	ES- Appleton & Bonita	3	2.4	1.75	2

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2	137	ES- Appleton & Bonita	1.25	1.8	2.5	7.2
2	425	EN- Appleton & Bonita	0.25	0.4	2	3.4
2	145	ES- Appleton & Orange	0.75	0.6	2.25	7.8
2	143	EN- Appleton & Orange	1	2.8	2.5	18.2
2	783	EN-Appleton & Esperanza	0.5	2.6	2.25	14.4
2	780	NW- Falcon & Appleton	5	11.2	1.5	4
2	777	NE- Falcon & Appleton	0.5	0.8	3	10
2	778	NS- Appleton & Falcon	0.75	0.8	2.25	12.2
2	779	NE- Gaviota & Appleton	1.25	2.2	2.5	6.6
2	420	EN- Appleton & Hermosa	1.5	1.6	3.5	12.6
2	136	ES- 3rd street & Gaviota	0.25	0.4	2	8.2
2	784	EN- 3rd street & Gaviota	0.75	2.4	2.75	7.4
2	527	NE-Alamitos & 1st street	1.25	1.4	2.5	8.2
2	528	EN- 1st street & Alamitos	0.5	0.8	1.75	6.6
2	529	EN- Ocean Blvd & Alamitos	0.75	0.6	1.25	9.8
2	530	ES- Ocean Blvd & Alamitos	1	2.2	1.5	12
2	531	South side -13th place & Ocean	1.5	2	1.75	5.4
2	532	South side -14th place & Ocean	1	2.8	2.5	2.4
2	533	En- 3rd street & Walnut	1.25	1.4	3	6.8
2	534	NE- Walnut & 3rd street	0.25	1	1.75	9.2
District 3						
3	113	SE- Redondo Ave	0.25	1	1.75	9.2
3	741	SW- 543 Newport Ave.	0.5	1.2	2.25	12.8
3	739	SW- 539 Loma Ave	1	0.6	3.75	26.4
3	749	Loma Ave & 8th street	0.75	2	1.5	10.6
3	750	NW- 601 Termino	0.5	1	2.75	21.2
3	738	NE- 541 Termino Ave.	0.5	1.2	3	11.8
3	740	EN- 4143 6th street	1.5	1.8	2.25	12.8
3	742	WS- 535 Rosewell Ave.	2	1.4	1.5	7.6

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3	743	SW-535 Rosewell Ave.	0.5	1.6	2	6.4
3	705	SE- Rosewell Ave.	0.75	0.4	3.25	18.8
3	702	WN- 4361 Ximeno Ave.	1.25	1.2	3	20
3	704	WS-543 6th street	0.25	1.4	3.5	12.6
3	701	SW- 543 6th street	0.75	1.6	3.25	21.4
3	703	SE-Across from 543 6th street	2.25	2.2	2.5	18.4
3	709	North side -4437 6th street	1.25	1	1.5	6.4
3	707	SE- Park Ave. & 4th street	1.5	0.8	2	8
3	708	SW-393 Park Ave	0.5	0.4	1.75	10.6
3	411	South side - Elliot street West of Marina drive	1.75	2.4	3	28.2
3	1312	ES- Colorado street & Elliot street	0.75	1.8	2.25	26.4
3	1310	NS-Colorado street & Eliot street	0.25	0.2	1.75	8.2
3	1309	SW- Colorado & Eliot street	1.75	1	1.75	9.6
3	1313	South Side - Colorado street east of Eliot street	1.25	1.6	2.75	14.6
3	1324	North Side -Colorado street east of Eliot street	1.5	1.8	3.5	28
3	417	South Side - 6th street west of Monrovia	1	1.6	2.5	10.2
3	414	South Side -7th street east of Federation Drive	0.75	0.6	2.75	12.6
3	407	North Side- Colorado street across from Appian way	0.75	1.4	3	18.6
3	430	EN-Appian way& Colorado street	0.5	2	2.25	15
3	103	North Side -Colorado street East of Park Ave	1.5	1.2	3.25	12.2
3	746	South Side - Colorado street Eastof Park Ave	0.75	1	2	14.6
3	744	South Side-Appian way East of Colorado street	2.5	1.2	1.25	3.6
3	719	SE- 790 Redondo	1	1.6	0.75	4.2
3	710	SW- 795 Loma Ave	0.75	0.8	1.75	3.4
3	711	SW- 793 Euclid	0.5	1	2.25	7.8
3	712	SW- 8th street & Miramar Ave	1.5	1.2	0.75	4.2
3	713	NE- 8th street & Termino Ave	1.25	0.8	2	8.2
3	714	NW- Termino Ave & 8th street	1	0.4	1.75	14.6
3	715	WS- 8th street & Bennett Ave	0.75	1.2	2.25	12

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3	716	WN- 8th street & Bennett Ave	0.5	0.4	3.75	20.6
3	717	NW-801 Bennett Ave	0.75	0.8	1.75	12.4
3	718	East Side- Bennett Ave North of 8th street	1.25	2	2.25	14.8
3	720	East Side- Bennett Ave end of 8th street	1.5	1.8	2	6
3	721	East Side- Bennett Ave South of 8th street	2	1.6	1.75	12.6
3	722	SW- 795 Bennett Ave	0.25	0.8	2.25	16.4
3	723	SW- 941 Loma Ave	0.5	1.2	1.5	12.8
3	724	SE- 942 Loma Ave	1.5	1.4	2.25	10.2
3	725	WS-10th Street & Loma Ave	1	2.4	3	13
3	726	WN-10th Street & Loma Ave	0.75	0.6	1.75	14
3	727	SE- 938 Euclid Ave	1.75	1.4	2.25	18.2
3	728	WS- 3640 10th street	1	0.2	2.75	18
3	729	SW- 943 Belmont Ave	0.75	1.8	2.25	16.8
3	730	SE- 942 Belmont Ave	0.25	1.6	3	14
3	731	SE- Rosewell Ave. & 1oth street	1.75	1.4	3.5	18.6
3	732	EN- 4737 9th street	1	0.4	2.75	12.6
3	733	NE- 901 Bennett Ave	0.25	0.6	1.75	14.4
3	734	WS- 837 9th street	0.5	0.8	3.25	13.6
3	735	SE- 346 Ximeno Ave	1	1.2	1.75	14.2
3	737	SW- Ximeno Ave. & Colorado street	2	1.4	2.5	13.8
3	736	WS- 4340 Colorado street	1.5	2	2	9
3	431	WN- 4343 Colorado street	1.5	1.6	2.25	17.2
3	801	NW- Ximeno Ave & Colorado	0.25	0.6	4	22.6
3	787	NE- Ximeno Ave. & Colorado street	1.75	1.4	3	18.8
3	771	SW- 347 Prospect Ave	2.25	1.8	4.75	44.2
3	786	WS- Colorado street & Prospect Ave.	0.75	1.2	2.25	16
3	782	North Side - 4501 Colorado street	1.5	0.8	3	10
3	788	SE- Prospect Ave & Colorado street	0.5	2.4	18.25	4.6
3	805	NE- 620 Prospect Ave.	0.25	1.6	2.25	12.8

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3	804	NW- Prospect Ave. & Grand Ave.	1	1.2	2.5	10.2
3	803	North Side- 4546 6th street	1.25	0.8	2.75	16.4
3	802	South Side - 4600 6th	0.75	1.6	2.5	14.6
3	807	West Side - 441 Park street	0.5	0.4	3.25	20
3	806	East Side - Park street & 5th street	1.75	4.2	3.5	19.2
3	808	West Side- 501 Park street	1.5	1.6	3.75	24.6
3	1143	WS- 7th street & Euclid street	0.5	2.2	3	12.6
3	1146	SW- 687 Euclid street	2	3.4	1.75	12.8
3	1145	SE- 688 Euclid street	1.5	0.8	4	30.2
3	1144	WN- 3740 7th street	1	1.2	4.25	29.6
3	770	WS- 3740 7th street	0.5	0.6	2.25	18.4
3	1198	SW- Grand Ave & 7th street	1.25	0.8	2.5	18.6
3	1183	SE- Grand Ave & 7th street	0.75	1.8	2.75	23.8
3	1149	ES- 7th street & Grand Ave.	0.25	2	2	17.8
3	1148	EN- 7th street & Grand Ave	0.5	1.4	2	12.6
3	1147	WN- 7th street & Grand Ave	1.75	1.8	2.75	10.2
3	772	SW- 691 Miramar Ave.	1.25	1.4	2.25	13.6
3	781	SE- 688 Miramar Ave.	0.5	1	1.5	11.4
3	789	North Side- 7th street & across from 4442 7th street	0.5	1.8	2.25	22.8
3	811	NW-Santiago Ave.& 8th street	1.25	2.5	1.5	14.2
3	809	NE- 800 Santiago Ave.	1.75	0.8	2	12.8
3	810	EN- 8th street & Santiago Ave	0.25	0.8	1.5	10.6
3	829	SE- 7th street & Havanna Ave.	1.25	2	2.25	14.4
3	836	East Side- 650 Los Altos Ave.	0.5	1	2.5	13.2
3	817	SE- 6th street & Terriane Ave.	0.25	0.2	2.75	16.2
3	816	EN- 6th street & Terriane Ave.	0.25	1.2	3.25	18.6
3	815	NE- 600 Terraine Ave.	0.5	0.8	2.75	15.4
3	819	EN - 6th street & Santiago Ave.	0.25	0.2	2.5	12.6
3	818	NE- 600 Santiago Ave.	1	1.6	2.75	18.8

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3	820	ES- 6th street & Santiago Ave	0.5	0.8	1.75	16.4
3	822	North Side- 6th street across from Panama Ave	1.25	1.6	2.25	11.8
3	821	ES- 6th street & Panama Ave	1	2.6	2.5	13.4
3	827	NW- Olean Ave. & 4th street	0.75	0.8	3	25.6
3	828	NE- Olean Ave & 4th street	0.5	0.6	2.25	18.8
3	826	SW- 395 Panama Ave.	0.5	0.8	2	12.4
3	825	SE- 5300 4th street	0.25	8	2.75	12.6
3	824	NE- 402 Panama Ave.	1	2	2	7.8
3	823	NW- 401 Panama Ave.	0.75	1.8	1.5	7.4
3	835	SE- 396 Santiago Ave	0.25	2.2	2.25	9.8
3	834	EN- 4th street & Santiago Ave.	0.5	1.6	4.25	40.8
3	111	NE- 5401 Anaheim Road	0.25	0.8	2.75	12.6
3	102	NW- 5377 La Pasada	1	2.2	2.25	10.2
3	748	SE- 5400 Anaheim Road	0.25	1.2	1.25	3
3	747	SW- 5355 La Pasada	0.75	1.8	2.5	15.2
3	745	South Side -5412 Oleta street	2	2.6	2.5	14.6
3	101	North Side - 5409 Oleta street	0.5	0.6	1.75	6
3	837	NW- 900 Bryant Road	0.25	1.8	3	13.4
3	838	North Side- 5521 Oleta street	0.75	1.2	1.5	7.2
3	839	South Side- 5524 Oleta street	1	0.8	2.25	8.2
3	833	East Side- 5525 Pacific Coast Highway	0.75	1.2	2	12.8
3	832	West Side - 5524 Pacific Coast Highway	0.5	1.6	2.75	23.8
3	830	East Side - 742 Havana Ave	0.5	0.6	2.25	10.6
3	831	West Side- 745 Havana Ave	0.75	1.2	3	14.8
3	814	NW- 805 Terraine Ave	1	0.8	2.5	10.2
3	812	NE- 800 Terraine Ave	1.25	1	2.25	8.6
3	813	EN - 8th street & Terraine Ave	1	3.8	1.5	4.2
3	1197	ES- 7th street & Termino	0.75	1.2	2.25	6.8
3	150	SW- Termino & 7th street	0.5	0.8	2.5	10

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3	146	WN- 7th street & Belmont	3	2.4	1.25	2.8
3	148	WS- 7th street & Rosewell	1.25	1.6	2	14.6
3	147	WN- 7th street & Bennett	1	1.2	1.25	2.8
3	149	WS- 7th street & Ximeno	2	3.8	1	6.2
3	785	SW- Ximeno & 7th street	3.25	1.4	0.75	4.6
3	1177	SE- Ximeno & 7th street	1.5	2.6	2	8.8
3	1142	NE- Ximeno & 7th street	0.5	0.8	2.25	10.4
3	1140	NW- Ximeno Ave.& 7th street	0.75	1	1.5	3.2
3	1141	WN- 7th street & Ximeno	2	3.4	2	6.6
3	1195	WN- 5th street & Ximeno	2.2	5.6	2.5	9.6
3	1139	WS- 5th street & Ximeno	1.75	2.8	2.25	6.2
3	1194	SE- Ximeno & 5th street	1.5	1.4	2.75	13.4
3	1193	WS- 4th street & Ximeno	0.75	1.2	3	9.6
3	1189	WN- Vermont & Ximeno Ave	1.25	1	1.75	8.2
3	1192	WS- Vermont & Ximeno Ave	0.75	0.6	2.25	12.6
3	1190	SW-Renondo & 7th street	1	0.8	2.75	13.8
3	421	NE- Redondo & 7th street	0.5	1.4	1	9.8
District 4						
4	502	WN- Atherton & Knoxville	0.25	1	1.75	12.4
4	501	South Side- Atherton & Knoxville	1.5	2	2.25	11.2
4	651	NW- 1801 Knoxville	0.75	0.6	1.75	8.2
4	652	West Side -1809 Knoxville	0.25	0.8	1.25	5.4
4	653	WN- Atherton & Josie	0.25	1.2	3	20
4	654	NW- 1801 Josie	1	1	2.5	13.8
4	655	NE- 1800 Josie	0.75	1.4	1.5	6.4
4	656	WN - Atherton & Iroquois	0.5	0.6	1.5	10.8
4	657	NW- 1801 Iroquois	1.25	1.4	1.5	8.2
4	658	NE - 1800 Iroquois	1.5	2.8	3.25	12.6
4	659	East Side- 1808-1800 Iroquois	2	3	3.5	17.6

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4	660	NW - 1801 Hackett	1	1.2	2.25	8.2
4	661	South Side - Atherton & Palo Verde	0.75	2	2.5	9.6
4	662	WN - Atherton & Palo Verde	1.25	1.8	2.5	12
4	663	NW - 1801 Palo Verde	0.75	1.2	3.25	11.4
4	664	West Side- across from 1801 Palo Verde	0.75	1.4	1.25	7.6
4	665	NW- Palo Verde & Atherton	2.25	1.8	3	14.6
4	666	WN - Atherton & Carfax	3	3	2.25	8.2
4	667	NW- 1801 Carfax	1.75	1.2	1.25	6.4
4	668	NE- 1800 Carfax	1	0.8	1.5	3.2
4	670	North Side- Atherton West of Mcnab	1.75	2.8	0.75	5.2
4	669	WN- Atherton & Mcnab	0.25	0.6	2.75	9.8
4	671	NW - 1801 Mcnab	0.75	0.8	2.25	4.6
4	672	West Side - 1809 Mcnab	1	1	1.75	6
4	673	NE -1800 Mcnab	1.25	1	2.25	10.2
4	674	EN - Atherton & Mcnab	0.5	0.6	2	3.8
4	675	WN- 1802 Litchfield	0.75	0.8	1.25	3.4
4	676	SW- Atherton & Litchfield	0.5	1.2	2.5	16.8
4	678	NE- 2206 Ocana street	1.25	1.4	2.25	10.2
4	677	NW - 2207 Ocana street	1.5	0.8	1.75	11.6
4	679	North Side -Sterns East of Radnor	0.5	0.8	1.75	8.2
4	680	NW - Sterns & Clark	1.25	1.6	1	4.2
4	681	ES- Los Coyotes & Charlemange	0.75	1.8	1.25	6.6
4	682	NE- Los Coyotes & Charlemange	0.25	0.2	4	2.4
District 5						
5	875	SE - 2856 Ladgoa Ave	0.5	0.4	2.25	4.2
5	874	SW- 2957 Ladoga Ave	1.5	1.6	2.25	9.6
5	873	WS- Spring & Ladoga Ave	2.25	2.4	2	8.4
5	851	ES- Spring & Ladoga Ave	1.75	1.8	3	13.2
5	1196	North side - Park Ave & Spring	0.75	1.4	2.25	11.2

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5	1170	SW- 2509 Ladoga Ave	0.5	2	1.5	8.4
5	799	SE- 2508 Ladoga Ave	1.25	1	1.75	5.8
5	886	SW- Cantel street & Don Julio street	0.5	1.2	1.5	5.6
5	869	SE- 2371 Cantel street	0.75	0.4	1.25	6.6
5	868	North Side -2372 Knoxville Ave	1	1.6	2.5	14
5	885	NE- Ladoga Ave & Vuelta Grande	1.25	1.4	1.75	4.8
5	867	NW - Ladoga Ave & Vuelta Grande	0.75	0.8	2.75	16.2
5	866	South Side- 2431 Vuelta Grande Ave	0.5	0.6	2.5	10.4
5	865	South Side - 2369 Vuelta Grande Ave	1.25	1.2	3.25	17.6
5	863	NW- 2603 Ladoga Ave	0.5	0.6	2.25	11.8
5	864	NE- 2602 Ladoga Ave	0.75	1	2.75	12.2
5	700	NE- Los Coyotes & Deborah street	1	2.6	2.25	14.4
5	900	NW- Los Coyotes & Deborah street	1.25	1	2.75	9.6
5	699	WN- Deborah street & Los Coyotes	2.25	3.4	2.75	6.8
5	895	NE- Forman Ave & Deborah street	1	1.6	2.25	5.8
5	896	West Side - Forman Ave of Deborah street	1.25	1.8	2	10.6
5	893	SW- 2645 Foeman Ave	0.75	0.8	2.5	8.2
5	899	NW- Forman Ave & Chatwin	0.25	1.2	1.5	3.8
5	897	East Side -2662 Forman Ave	2.25	2.4	2.25	17.8
5	891	NE - Deborah street & San Vincente	1.25	2.8	1.25	4.6
5	892	WS- 5876 Deborah street	1.5	1.2	1.25	8.8
5	898	WN- 5877 Deborah street	0.25	0.6	3.75	14.6
5	890	West Side - San Vincente North of Deborah street	0.5	1	2.75	15
5	889	SW- San Vincente & Walton street	0.5	0.8	3.25	9.6
5	888	SE - San Vincente & Walton street	2.25	4.2	1.75	11.8
5	887	WN - 5873 Walton street	1.25	2.2	0.5	1.2
5	884	South Side - 5930 Deborah street	1.5	3.6	2.75	18.6
5	883	WN - Deborah street & Fanwood Ave	0.75	1.6	3	16.2
5	872	EN - Deborah street & Fanwood Ave	0.5	0.75	2.5	12.4

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5	871	ES- Deborah street & Faust Ave	1.25	1.4	1.5	8
5	870	EN- Deborah street & Faust Ave	0.25	0.2	2.75	12.6
5	862	EN- 6201 Willow	0.75	0.4	2.5	11.8
5	882	NW- Oakbrook street & Willow	0.25	0.8	1.75	6
5	881	NW- Los Arcos street & Vuelta Grande Ave	1	1.2	2	10.4
5	880	NE- 6702 Las Arcos street	0.5	0.8	2.25	13.6
5	878	NW- Palo Verde Ave & Vuelta Grande Ave	1.75	3.2	2.5	12
5	879	North Side - Palo Verde Ave & Vuelta Grande Ave	2.5	6.8	1.75	10.4
5	877	SW- Palo Verde Ave & Vuelta Grande Ave	1.25	2.8	2.75	15.4

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5	861	South Side- Ladoga & Willow street	0.5	0.6	4	28
5	860	EN- Willow street & Ladoga Ave	1.25	1.2	2.25	14.2
5	859	WN- Willow street & Ladoga Ave	2	2.8	2.25	13.4
5	857	East Side - 2712 Ladoga Ave	0.5	0.4	1.75	6.8
5	858	West Side- 2713 Ladoga Ave	0.25	0.2	1	7.2
5	856	EN- Barrios street & Ladoga Ave	0.5	0.4	2.5	11.6
5	853	NE- 2802 Ladoga Ave	1.5	1.8	2.2	18.2
5	854	NW-2803 Ladoga Ave	0.75	0.8	2.5	13.8
5	855	WN- Barrios & Ladoga Ave	0.25	0.4	3	16.8
5	852	East Side- 2856 Ladoga Ave	1.75	5.8	2.5	16
5	876	West Side- 2857 Ladoga Ave	1	3	3	17.6
District 6						
6	683	NE- Cedar & willow street	1.25	2.4	2.5	12.8
6	684	NW- Cedar & Willow street	2.75	8.6	1	3.6
6	685	NE- Chestnut & Willow street	1	2.8	3.25	18
6	686	NW- Chestnut & Willow street	1.25	1.8	1.75	6.2
6	687	NW- Eucalyptus Ave & Willow street	0.25	1.4	3.75	13.8
6	688	NE- Eucalyptus Ave & Willow street	0.5	2	2	4.4
6	689	NE- Magnolia Ave & Willow street	1.25	3.4	1.75	12.2
6	690	ES- Anaheim & Lime	4.75	7.6	5.25	34.6
6	691	SW- Lime & Anaheim	1.25	2.2	1.25	8.2
6	692	NW-Lime & Anaheim	1.5	2.2	2.75	9.8
6	693	ES-Anaheim & Olive	0.25	0.6	1.75	5.4
6	694	ES- Anaheim & Olive	3.5	4.4	2.75	10.6
6	695	SW- Olive & Anaheim	1.25	2.2	3.25	13.4
6	696	SW- Martin Luther King & Anaheim	2.75	2.4	4.5	19.8
6	697	WN- 11th street & Atlantic	6.25	4.8	2.5	7.8
6	698	SW- Atlantic & 11th street	1.75	2.8	2	6.4
			2	3.6	1.75	3.6

City of Long Beach

District #	Contractor#	Installation Location	Volume of litter to the quarter gallon (excluding sediment & vegetation)	Weight of litter to the ounce (excluding sediment & vegetation)	Volume of Sediment & Vegetation to the Quarter Gallon (excluding litter	Weight of Sediment & Vegetation to the ounce (excluding litter)
		GRAND TOTAL WEIGHT	329.05	485.85	697.5	3498.4

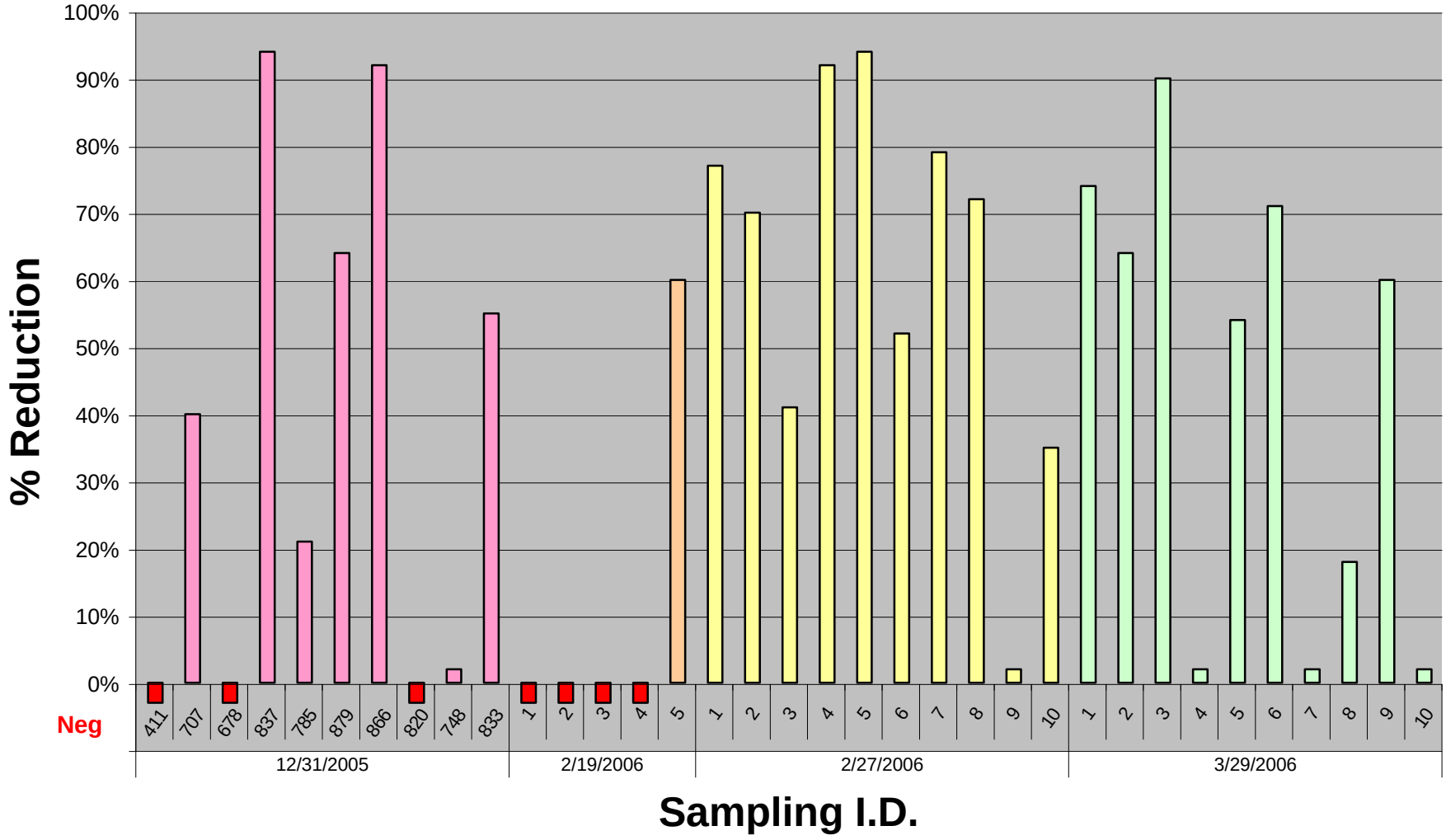
ATTACHMENT II
(Antimicrobial Testing)

Long Beach Smart Sponge® Plus Project

				Total Coliforms Concentration (Influent)				
Sampling Date	**?t to Lab (Days)**	**Sample I.D.**	**SSPlus Gen. (3 or 4)**	**10^3 cfu/100ml**	**10^4 cfu/100ml**	**10^5 cfu/100ml**	**% Reduction**	**Note**
12/31/2005	4	411	3			1.9×10^5		Neg
	4	707	3			1×10^5	40%	
	4	678	3		1×10^4			Neg
	4	837	3			3.4×10^5	94%	
	4	785	3			1.4×10^5	21%	
	4	879	3			3.5×10^5	64%	
	4	866	3			2.5×10^5	~92%	
	4	820	3		6×10^4			Neg
	4	748	3		2×10^4			-
	4	833	3			2×10^5	55%	
2/19/2006	4	1	3		5.8×10^4			SAMPLES CROSS CONTAM-INATED
	4	2	3		8.7×10^4			
	4	3	3		6.6×10^4			
	4	4	3		8.3×10^4			
	4	5	3	8.1×10^3			~60%	
2/27/2006	0	1	3		3.9×10^4		77%	
	0	2	3		1.5×10^4		70%	
	0	3	3		4.9×10^4		41%	
	0	4	3		1.3×10^4		92%	
	0	5	3	3.2×10^3			94%	
	0	6	3	1.3×10^3			52%	
	0	7	3	2×10^3			79%	
	0	8	3	1.5×10^3			72%	
	0	9	3	8.5×10^3				-
	0	10	3	1.5×10^3			35%	
3/29/2006	2	1	3			$>2.4 \times 10^5$	>74%	
	2	2	3			$>2.4 \times 10^5$	>64%	
	2	3	3			$>2.4 \times 10^5$	>90%	
	2	4	3			$>2.4 \times 10^5$		?
	2	5	3			$>2.4 \times 10^5$	>54%	
	2	6	3			$>2.4 \times 10^5$	>71%	
	2	7	3			$>2.4 \times 10^5$		?
	2	8	3			$>2.4 \times 10^5$	>18%	
	2	9	3			$>2.4 \times 10^5$	>60%	
	2	10	3			$>2.4 \times 10^5$		?

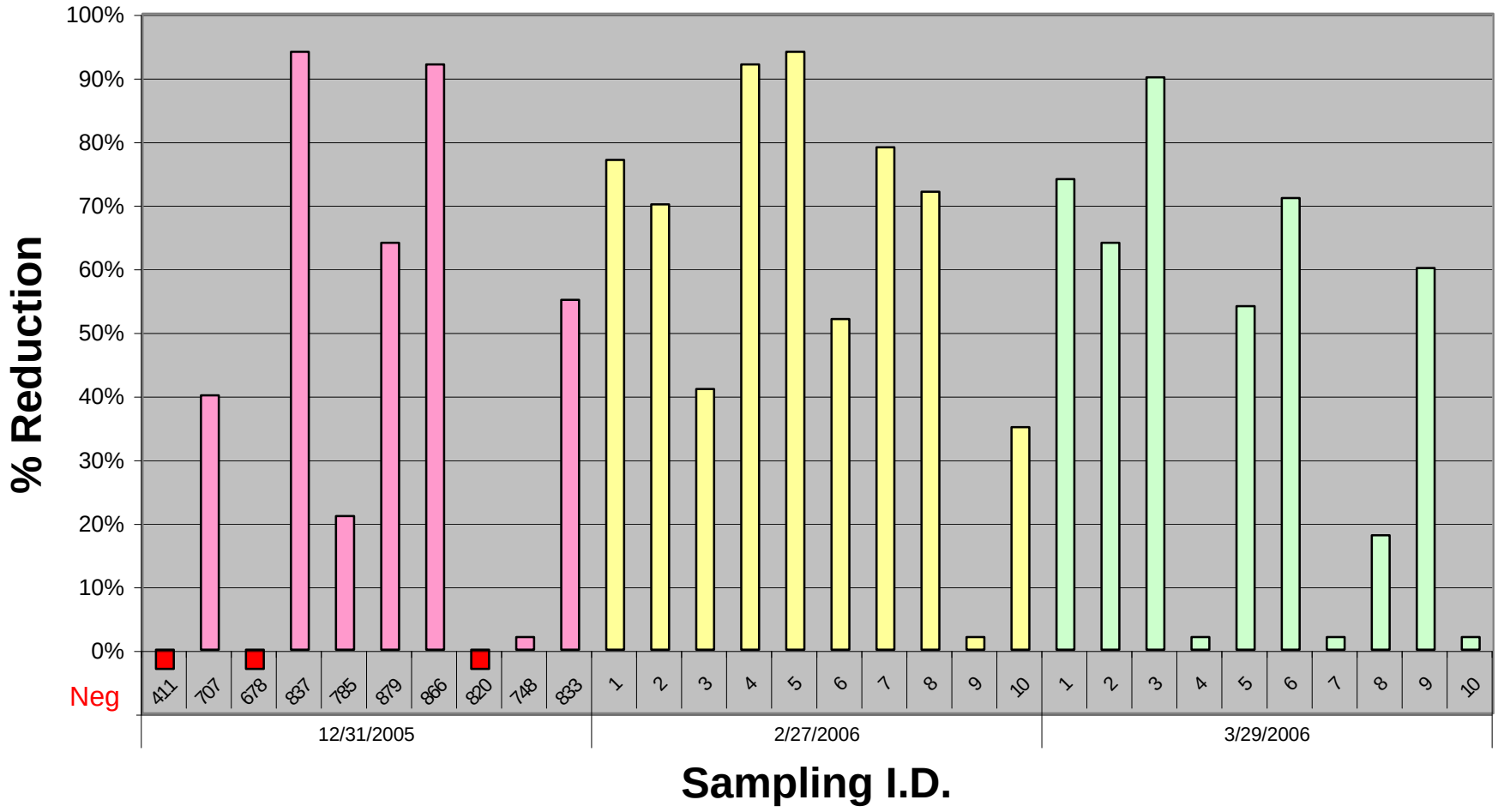
Note:	Neg	=	Negative
	-	=	Negligible
	?	=	Influent and effluent out of range

Long Beach Project - Total Coliforms



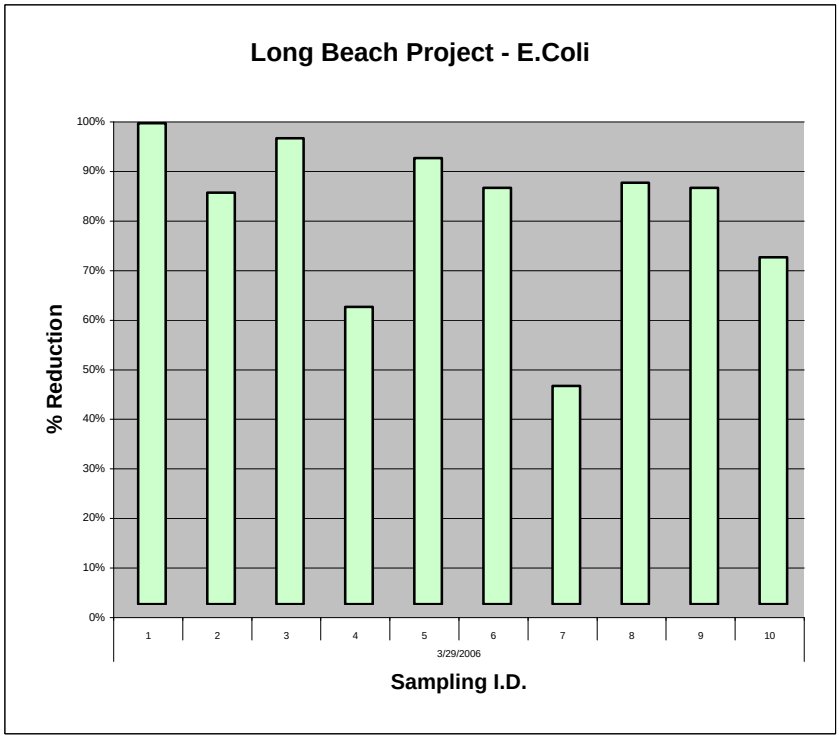
Long Beach Project - Total Coliforms

(Excluding Feb. 19 Samples)



Long Beach Project
Smart Sponge® Plus

				Total E.Coli Concentration (Influent)	
Sampling Date	**?t to Lab (Days)**	**Sample I.D.**	**SSPlus Gen. (3 or 4)**	**10^4 cfu/100ml**	**% Reduction**
3/29/2006	2	1	3	5.8×10^4	97%
	2	2	3	6.9×10^4	83%
	2	3	3	4.8×10^4	94%
	2	4	3	4.9×10^4	60%
	2	5	3	4.6×10^4	90%
	2	6	3	6.5×10^4	84%
	2	7	3	4.9×10^4	44%
	2	8	3	5.2×10^4	85%
	2	9	3	4.9×10^4	84%
	2	10	3	4.9×10^4	70%



LA Testing
159 Pasadena Avenue, South Pasadena, CA 91030
Phone: (323) 254-9960 Fax: (323) 254-9982 Email: pasadenalab@latesting.com

Attn: **Duane Cook**
AbTech Industries
1045 N. Main Street
Riverside, CA 92501

Fax: (951) 788-7667 Phone: (951) 532-8607
Project: **Project Name: Long Beach**

Customer ID: 32ABTE62
Customer PO:
Received: 01/04/06 12:15 PM
LA Testing Order: 320600055

LA Testing Proj:
Analysis Date: 1/17/2006
Report Date: 1/18/2006

Microbiological Analysis: Sewage Screen

Method: SM-9222B, 9222D, 9230C for Water Samples

Sample	Sampling Location Date/Time Collected	Amt Rec'd mL	Total Coliform CFU/100ml	Fecal Coliform CFU/100ml	*Escherichia coli* Present/Absent	Fecal *Streptococcus* CFU/100ml
320600055-0001 *411 INF*	Long Beach 12/31/2005	250	190,000	<1	Absent	7,000
320600055-0002 *411 EFF*	Long Beach 12/31/2005	250	310,000	22,000	Present	5,000
320600055-0003 *707 INF*	Long Beach 12/31/2005	250	100,000	3,000	Present	9,000
320600055-0004 *707 EFF*	Long Beach 12/31/2005	250	60,000	9,000	Present	19,000
320600055-0005 *678 INF*	Long Beach 12/31/2005	250	10,000	<1	Absent	9,000
320600055-0006 *678 EFF*	Long Beach 12/31/2005	250	160,000	1,000	Present	5,000
320600055-0007 *837 INF*	Long Beach 12/31/2005	250	340,000	<1	Absent	8,000

Greg Saenz, Ph.D.
or other approved signatory

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Analysis Date: 1/17/2006
Report Date: 1/18/2006

Microbiological Analysis: Sewage Screen

Method: SM-9222B, 9222D, 9230C for Water Samples

Sample	Sampling Location Date/Time Collected	Amt Rec'd mL	Total Coliform CFU/100ml	Fecal Coliform CFU/100ml	*Escherichia coli* Present/Absent	Fecal *Streptococcus* CFU/100ml
320600055-0008 *837 EFF*	Long Beach 12/31/2005	250	20,000	1,000	Present	6,000
320600055-0009 *785 INF*	Long Beach 12/31/2005	250	140,000	<1	Absent	3,000
320600055-0010 *785 EFF*	Long Beach 12/31/2005	250	110,000	5,000	Present	7,000
320600055-0011 *879 INF*	Long Beach 12/31/2005	250	350,000	5,000	Present	32,000
320600055-0012 *879 EFF*	Long Beach 12/31/2005	250	160,000	3,000	Present	8,000
320600055-0013 *866 INF*	Long Beach 12/31/2005	250	250,000	<1	Absent	4,000
320600055-0014 *866 EFF*	Long Beach 12/31/2005	250	20,000	2,000	Present	13,000

Greg Saenz, Ph.D.
or other approved signatory

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LA Testing Proj:
Analysis Date: 1/17/2006
Report Date: 1/18/2006

Microbiological Analysis: Sewage Screen

Method: SM-9222B, 9222D, 9230C for Water Samples

Sample	Sampling Location Date/Time Collected	Amt Rec'd mL	Total Coliform CFU/100ml	Fecal Coliform CFU/100ml	*Escherichia coli* Present/Absent	Fecal *Streptococcus* CFU/100ml
320600055-0015 *820 INF*	Long Beach 12/31/2005	250	60,000	<1	Absent	12,000
320600055-0016 *820 EFF*	Long Beach 12/31/2005	250	250,000	9,000	Present	14,000
320600055-0017 *748 INF*	Long Beach 12/31/2005	250	20,000	<1	Absent	15,000
320600055-0018 *748 EFF*	Long Beach 12/31/2005	250	20,000	<1	Absent	6,000
320600055-0019 *833 INF*	Long Beach 12/31/2005	250	200,000	20,000	Present	15,000
320600055-0020 *833 EFF*	Long Beach 12/31/2005	250	90,000	2,000	Present	4,000

The level of detection is equal to 1 cfu/100 ml of sample analyzed. CFU = colony forming unit; NA = not applicable; TNTC = too numerous to count

Greg Saenz, Ph.D.
or other approved signatory

LA TESTING

159 Pasadena Ave, South Pasadena, CA 91030
Phone:(800) 303-0047, Fax: (323) 254-9982

Client: AbTech Industries
1045 Main St.
Riverside, CA 92509
Attn. Duane Cook
Project: Long Beach

LA Testing Order ID#: **320602179**
Date/Time Received: 2/23/06/1:30PM
Date Analyzed: 2/24/2006
Date Reported: 2/28/2006

Sewage Screen

Most Probable Number Methods: SM 9223/IDEXX Quanti-Tray 2000™

Sample Number	Location	Sampling Date/Time	Total Coliform CFU's/100 mL	*E. coli* CFU'S/100 mL	*Enterococcus* CFU'S/100 mL
1 Inf	None given	02/19/06/No time given	57,840	1,090	1,391
1 Eff	None given	02/19/06/No time given	91,390	2,790	850
2 Inf	None given	02/19/06/No time given	87,040	960	1,336
2 Eff	None given	02/19/06/No time given	101,120	6,770	1,408
3 Inf	None given	02/19/06/No time given	65,860	1,580	1,095
3 Eff	None given	02/19/06/No time given	913,900	3,930	3,044
4 Inf	None given	02/19/06/No time given	82,970	2,010	1,430
4 Eff	None given	02/19/06/No time given	96,060	4,800	2,878
5 Inf	None given	02/19/06/No time given	8,130	100	71
5 Eff	None given	02/19/06/No time given	2,920	100	302

Sample Received Cold: __X_ Yes ____No

Gregory S. Saenz

Approved LA TESTING Signatory
Gregory S. Saenz Ph.D. Director Microbiology Laboratory

LA TESTING

159 Pasadena Ave, South Pasadena, CA 91030
Phone:(800) 303-0047, Fax: (323) 254-9982

Client: AbTech Industries
1045 N. Main St. Suite 106
Riverside, CA 92501
Attn. D. Cook
Project: Long Beach

LA Testing Order ID#: 320602393
Date/Time Received: 02/27/06/8;30PM
Date Analyzed: 3/1/2006
Date Reported: 3/2/2006

Sewage Screen

Most Probable Number Methods: SM 9223/IDEXX Quanti-Tray 2000™

Sample	Location	Sampling Date/Time	Total Coliform CFU's/100 mL	*E. coli* CFU'S/100 mL	*Enterococcus* CFU'S/100 mL
1 Inf	None given	02/27/06/1600	38,730	<100	20
1 Eff	None given	02/27/06/1603	9,060	200	10
2 Inf	None given	02/27/06/1620	15,650	310	10
2 Eff	None given	02/27/06/1623	4,710	410	20
3 Inf	None given	02/27/06/1630	48,840	100	20
3 Eff	None given	02/27/06/1633	28,510	520	7,270
4 Inf	None given	02/27/06/1645	12,590	<100	20
4 Eff	None given	02/27/06/1647	970	<100	20
5 Inf	None given	02/27/06/1659	3,170	<100	20
5 Eff	None given	02/27/06/1703	200	<100	10
6 Inf	None given	02/27/06/1710	1,310	<100	31
6 Eff	None given	02/27/06/1713	630	<100	10
7 Inf	None given	02/27/06/1720	1,990	<100	62
7 Eff	None given	02/27/06/1723	410	<100	20
8 Inf	None given	02/27/06/1730	1,460	<100	63
8 Eff	None given	02/27/06/1733	410	<100	<10
9 Inf	None given	02/27/06/1740	850	<100	52
9 Eff	None given	02/27/06/1743	970	<100	<10
10 Inf	None given	02/27/06/1750	1,530	<100	62
10 Eff	None given	02/27/06/1755	980	<100	<10

Sample Received Cold: _X__ **Yes** ____**No**

Gregory S. Saenz

Approved LA TESTING Signatory
Gregory S. Saenz Ph.D. Director Microbiology Laboratory

LA Testing Order # 3206037768
For Lab use only

MICROBIOLOGY—CHAIN OF CUSTODY

Sales Rep		
Company: AbTech Industries	Contact: D. Cook	Phone: 951-788-2667
Address: 1045 N. Main St. Riverside Ca 92509	Bill to: AbTech Industries	Fax:
		E-mail: dcook909@hotmail.com
Project Name: Long Beach 32906	Date Collected: 3/29/06	Date Sent: 3/31/06

Sample #	Sample Type	Air volume (L), area (ins.sq)	Sample location	Analysis requested (1)	Turn Around time (2)	Comments
#10I 0444	L		LB			
#1I 0300	L		LB	M025	24 hr	
#2I 0310	L		LB			
#3I 0330	L		LB			
#4I 0342	L		LB			
#5I 0350	L		LB			
#6I 0400	L		LB			
#7I 0415	L		LB			
#8I 0420	L		LB			
#9I 0430	L		LB			

(2) TURN AROUND TIME If turn around time is not chosen standard turn around time applies(6 + DAYS)

Applies to total fungal spore count, fungi by direct examination and endotoxin analysis.

3 hour / 6 hour / (24 hour) / 48 hour / 72 hour / 4 day / 5 day / 6+days

(1) TYPES OF ANALYSES

M001 Total Fungal Spore count Air-O-Cell
M002 Total Fungal Spore count Cyclex-D
M003 Total Fungal Spore count Burkard
M004 Total Fungal Spore count Allergengo
M042 Total Fungal Spore count Laro
M043 Total Fungal Spore count Cyclex
M041 Fungi, Direct Exam
M005 Viable Fungi ID and Count
M006 Viable Fungi ID and Count W/Group Speciation
M007 Culturable Fungi
M008 Culturable Fungi W/Group Speciation
M009 Bacterial Count & Gram Stain
M010 Bacterial Count and ID 3 Most Prominent
M011 Bacterial Count & Speciation
M013 Sewage Contamination in Buildings
M012 Pseudomonas aeruginosa analysis
M014 Endotoxin Analysis
M015 Heterotrophic Plate Count
M017 Total Coliform (Presence or Absence)P/A
M018 Total Coliform (Membrane Filtration Tech.)MFT
M019 Fecal Coliform (MFT.)
M020 Fecal Streptococcus (MFT)
M021 *E.Coli* (P/A)
M022 *E.Coli* (MFT)
M023 Legionella
(M025) Sewage Screen → Idexx
M026 Recreational Water
M027 Mycotoxin Analysis
M028 Cryptococcus Neoformans
M033-39 Allergen testing
(please specify allergen(s) to be tested)
M044 Group allergen test
M045 Cryptosporidium and Giardia

SAMPLES ACCEPTED FOR ANALYSIS BY LA TESTING

Relinquished by:	Date: 3/31/06	Time: 10:10A
Received by: D.O.	Date: 3-31-6	Time: 10:10 AM
Relinquished by:	Date:	Time:
Received by:	Date:	Time:

LA Testing Order # 3206 0 3768
For Lab use only

MICROBIOLOGY—CHAIN OF CUSTODY

Sales Rep		
Company: AbTech Industries	Contact: D. Cook	Phone:
Address:	Bill to: AbTech Industries	Fax:
		E-mail:
Project Name: Long Beach 32906	Date Collected: 3/29/06	Date Sent: 3/31/06

Sample #	Sample Type	Air volume (L), area (ins.sq)	Sample location	Analysis requested (1)	Turn Around time (2)	Comments
#1E 0300	L					
#2E 0310	L		LB	M025	24hr	
#3E 0330	L					
#4E 0342	L					
#5E 0350	L					
#6E 0400	L					
#7E 0415	L					
#8E 0420	L					
#9E 0430	L					
#10E 0444	L					

(2) TURN AROUND TIME If turn around time is not chosen standard turn around time applies(6 + DAYS)

Applies to total fungal spore count, fungi by direct examination and endotoxin analysis.

3 hour / 6 hour / (24 hour) / 48 hour / 72 hour / 4 day / 5 day / 6+days

(1) TYPES OF ANALYSES

M001 Total Fungal Spore count Air-O-Cell
M002 Total Fungal Spore count Cyclex-D
M003 Total Fungal Spore count Burkard
M004 Total Fungal Spore count Allergengo
M042 Total Fungal Spore count Laro
M043 Total Fungal Spore count Cyclex
M041 Fungi, Direct Exam
M005 Viable Fungi ID and Count
M006 Viable Fungi ID and Count W/Group Speciation
M007 Culturable Fungi
M008 Culturable Fungi W/Group Speciation
M009 Bacterial Count & Gram Stain
M010 Bacterial Count and ID 3 Most Prominent
M011 Bacterial Count & Speciation
M013 Sewage Contamination in Buildings
M012 Pseudomonas aeruginosa analysis
M014 Endotoxin Analysis
M015 Heterotrophic Plate Count
M017 Total Coliform (Presence or Absence)P/A
M018 Total Coliform (Membrane Filtration Tech.)MFT
M019 Fecal Coliform (MFT.)
M020 Fecal Streptococcus (MFT)
M021 *E.Coli* (P/A)
M022 *E.Coli* (MFT)
M023 Legionella
M025 Sewage Screen Idexx
M026 Recreational Water
M027 Mycotoxin Analysis
M028 Cryptococcus Neoformans
M033-39 Allergen testing
(please specify allergen(s) to be tested)
M044 Group allergen test
M045 Cryptosporidium and Giardia

SAMPLES ACCEPTED FOR ANALYSIS BY LA TESTING

Relinquished by: [signature]	Date: 3/31/06	Time: 10:00
Received by: [signature] D.O.	Date: 3-31-6	Time: 10:10AM.
Relinquished by:	Date:	Time:
Received by:	Date:	Time:

LA TESTING

159 Pasadena Ave, South Pasadena, CA 91030
Phone:(800) 303-0047, Fax: (323) 254-9982

Client: AbTech Industries
1045 N. Main St. Suite 106
Riverside, CA 92509
Attn. D. Cook
Project: Long Beach 32906

LA Testing Order ID#: **320603768**
Date/Time Received: 03/31/06/10:10AM
Date Analyzed: 4/1/2006
Date Reported: 4/4/2006

Sewage Screen

Most Probable Number Methods: SM 9223/IDEXX Quanti-Tray 2000™

Sample	Location	Sampling Date/Time	Total Coliform CFU's/100 mL	*E. coli* CFU'S/100 mL	*Enterococcus* CFU'S/100 mL
#1E	LB	3/29/2006/0300	63,100	1,600	840
#2E	LB	3/29/2006/0310	86,640	11,620	794
#3E	LB	3/29/2006/0330	22,820	3,090	108
#4E	LB	3/29/20060342	>241960	19,350	2,224
#5E	LB	3/29/20060350	111,990	4,800	496
#6E	LB	3/29/2006/0400	69,100	10,500	233
#7E	LB	3/29/2006/0415	>241,960	27,230	700
#8E	LB	3/29/2006/0420	198,630	7,850	166
#9E	LB	3/29/2006/0430	98,040	6,630	131
#10E	LB	3/29/2006/0444	>241,960	14,500	153

Sample Received Cold: _X__ Yes ____No

Gregory S. Saenz

Approved LA TESTING Signatory
Gregory S. Saenz Ph.D. Director Microbiology Laboratory

LA TESTING

159 Pasadena Ave, South Pasadena, CA 91030
Phone:(800) 303-0047, Fax: (323) 254-9982

Client: AbTech Industries
1045 N. Main St. Suite 106
Riverside, CA 92509
Attn. D. Cook
Project: Long Beach 32906

LA Testing Order ID#: **320603768**
Date/Time Received: 03/31/06/10:10AM
Date Analyzed: 4/1/2006
Date Reported: 4/4/2006

Sewage Screen

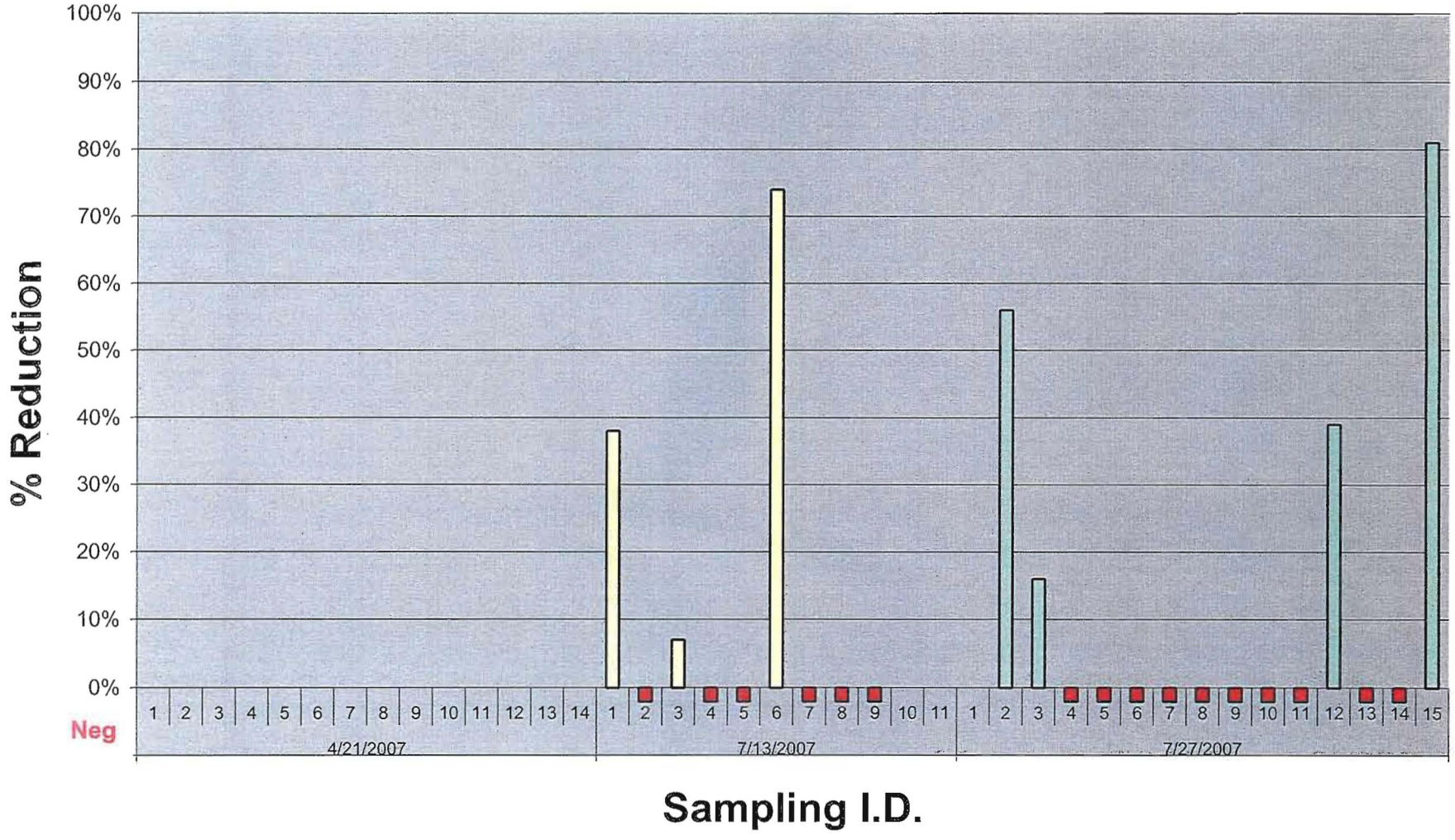
Most Probable Number Methods: SM 9223/IDEXX Quanti-Tray 2000™

Sample	Location	Sampling Date/Time	Total Coliform CFU's/100 mL	*E. coli* CFU'S/100 mL	*Enterococcus* CFU'S/100 mL
#1I	LB	3/29/2006/0300	>241,960	57,940	551
#2I	LB	3/29/2006/0310	>241,960	68,670	393
#3I	LB	3/29/2006/0330	>241,960	47,860	368
#4I	LB	3/29/2006/0342	>241,960	48,840	512
#5I	LB	3/29/2006/0350	>241,960	46,110	908
#6I	LB	3/29/2006/0400	>241,960	64,880	788
#7I	LB	3/29/2006/0415	>241,960	48,840	328
#8I	LB	3/29/2006/0420	>241,960	51,720	958
#9I	LB	3/29/2006/0430	>241,960	48,840	307
#10I	LB	3/29/2006/0444	>241,960	48,840	981

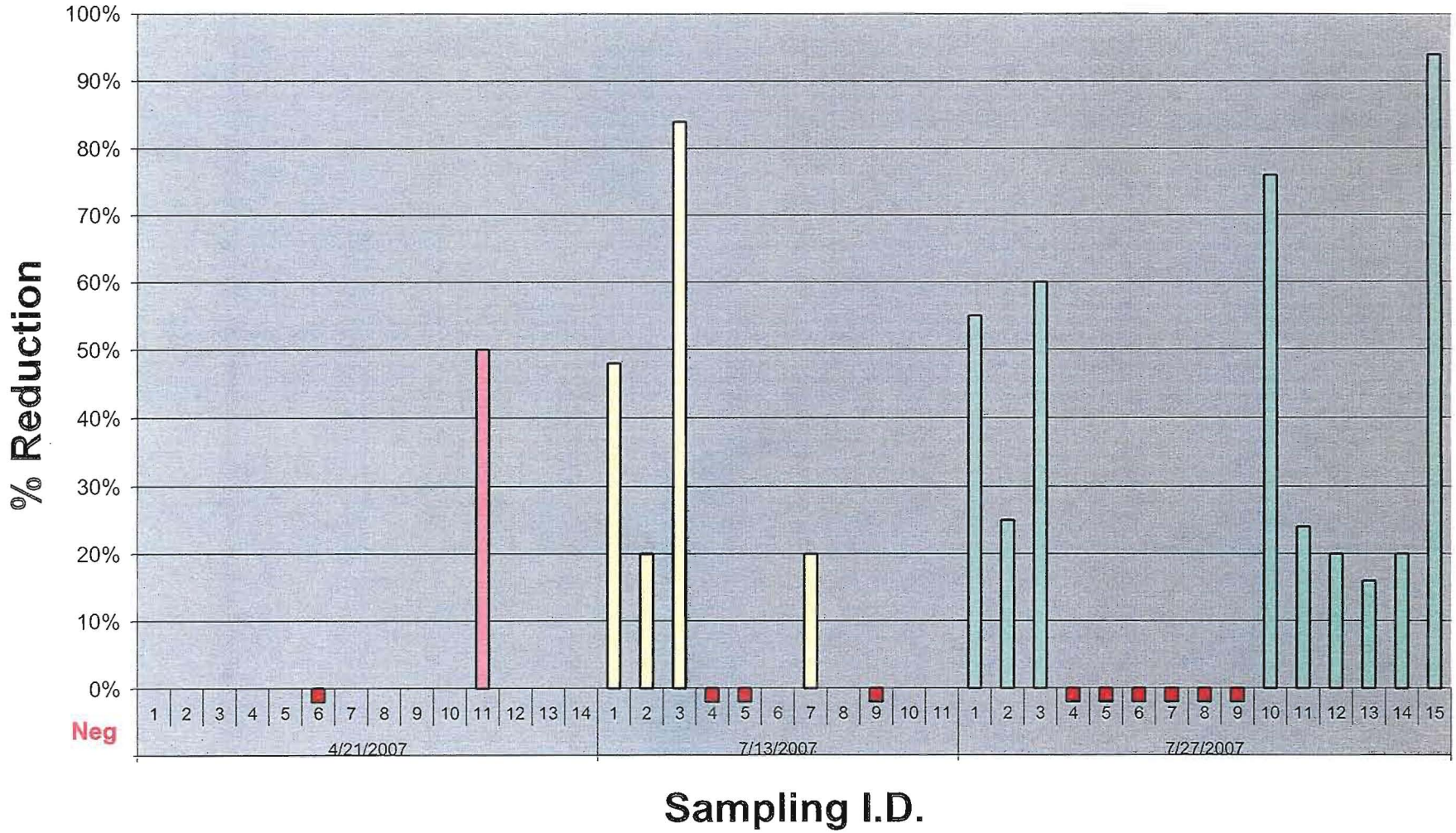
Sample Received Cold: _X__ Yes ____No

Approved LA TESTING Signatory
Gregory S. Saenz Ph.D. Director Microbiology Laboratory

Long Beach Project - Enterococcus



Long Beach Project - e Coli



Long Beach April 21, 2007 Sampling

e Coli

#	1	2	3	4	5	6	7	8	9	10	11	12	13	14
In (cfu/100ml)	< 100	<100	<100	<100	100	<100	200	100	100	<100	200	100	100	<100
Out (cfu/100ml)	<100	<100	<100	<100	<100	100	<100	<100	<100	<100	100	<100	100	<100
% Removal Efficiency	N/A	N/A	N/A	N/A	?	Neg	>50	?	?	N/A	50	?	-	N/A

Enterococcus

#	1	2	3	4	5	6	7	8	9	10	11	12	13	14
In (cfu/100ml)	839	573	613	602	683	934	624	670	860	538	627	537	359	528
Out (cfu/100ml)	884	886	836	933	932	110	771	763	657	541	657	820	457	563
% Removal Efficiency														

LA TESTING

159 Pasadena Ave, South Pasadena, CA 91030
Phone:(800) 303-0047, Fax: (323) 254-9982

Client: AbTech Industries
1045 N. Main St. Suite 106
Riverside, CA 92501
Attn. D. Cook
Project: Long Beach

LA Testing Order ID#: 320704761
Date/Time Received: 4/21/2007
Date Analyzed: 4/23/2007
Date Reported: 5/1/2007

Sewage Screen

Most Probable Number Methods: SM 9223/IDEXX Quanti-Tray 2000™

Sample	Location	Sampling Date/Time	Total Coliform CFU's/100 mL	*E. coli* CFU'S/100 mL	*Enterococcus* CFU'S/100 mL
1-I*	4th & Maine	4/20/07 10:50 AM	35,500	<100	839
1-I*	4th & Maine	4/20/07 11:05 AM	36,400	<100	573
1-I*	4th & Maine	4/20/07 11:20 AM	69,700	<100	613
2-I*	Seaside & Linden	4/20/07 11:43 AM	44,100	<100	602
2-I*	Seaside & Linden	4/20/07 11:58 AM	18,600	100	683
2-I*	Seaside & Linden	4/20/07 12:13 PM	20,300	<100	934
3-I*	4th & Panama	4/20/07 12:25 PM	59,100	200	624
3-I*	4th & Panama	4/20/07 12:40 PM	26,500	100	670
3-I*	4th & Panama	4/20/07 12:55 PM	30,900	100	860
4-I*	Anaheim & La Pasada	4/20/07 1:10 PM	15,600	<100	538
4-I*	Anaheim & La Pasada	4/20/07 1:25 PM	13,500	200	627
4-I*	Anaheim & La Pasada	4/20/07 1:40 PM	20,100	100	537
5-I*	Bryant & Oleta	4/20/07 1:50 PM	15,800	100	359
5-I*	Bryant & Oleta	4/20/07 2:05 PM	17,300	<100	528
5-I*	Bryant & Oleta	4/20/07 2:20 PM	28,800	<100	374
1-E*	4th & Maine	4/20/07 10:50 AM	21,600	<100	884
1-E*	4th & Maine	4/20/07 11:05 AM	14,800	<100	886
1-E*	4th & Maine	4/20/07 11:20 AM	52,900	<100	836
2-E*	Seaside & Linden	4/20/07 11:43 AM	13,500	<100	933
2-E*	Seaside & Linden	4/20/07 11:58 AM	48,100	<100	932
2-E*	Seaside & Linden	4/20/07 12:13 PM	60,900	100	110
3-E*	4th & Panama	4/20/07 12:25 PM	6,300	<100	771
3-E*	4th & Panama	4/20/07 12:40 PM	24,900	<100	763
3-E*	4th & Panama	4/20/07 12:55 PM	23,100	<100	657
4-E*	Anaheim & La Pasada	4/20/07 1:10 PM	18,700	<100	591
4-E*	Anaheim & La Pasada	4/20/07 1:25 PM	36,900	100	657
4-E*	Anaheim & La Pasada	4/20/07 1:40 PM	20,100	<100	820
5-E*	Bryant & Oleta	4/20/07 1:50 PM	10,800	100	457
5-E*	Bryant & Oleta	4/20/07 2:05 PM	8,400	<100	563
5-E*	Bryant & Oleta	4/20/07 2:20 PM	100	<100	426

***Sample processed out of hold time.**
Sample Received Cold: _X__ Yes ____No

Approved LA TESTING Signatory
Regina Norman, Microbiology Laboratory Manager

Long Beach July 13, 2007 Sampling

e Coli

#	1	2	3	4	5	6	7	8	9	10	11
Sample ID	55390/91	55392/93	55394/95	55396/97	55398/99	55400/01	55402/03	55404/05	55406/07	55408/09	55410/11
In (cfu/100ml)	457	216	369	10	-	529	384	399	62	-	-
Out (cfu/100ml)	238	173	52	776	670	557	309	393	345	-	-
% Removal Efficiency	48	20	84	Neg	Neg	-	20	-	Neg	-	-

Enterococcus

#	1	2	3	4	5	6	7	8	9	10	11
Sample ID	55390/91	55392/93	55394/95	55396/97	55398/99	55400/01	55402/03	55404/05	55406/07	55408/09	55410/11
In (cfu/100ml)	11,199	1,401	1,722	9,170	263	13,990	14,136	5,172	3,873	-	20
Out (cfu/100ml)	6,930	1,539	1,607	14,136	5,794	3,654	16,070	19,863	15,000	-	-
% Removal Efficiency	38	Neg	7	Neg	Neg	74	Neg	Neg	Neg	-	-

*** Additional samples not listed are N.D.**

Sample ID	Project ID	Project Desc	Client Sample ID	Sample Desc	Time Collected	Replicate Number	Parameter	Qualifier	Result	Units	QA Qualifier	MDL	RL	Batch ID	Date Sampled	Date Received	Date Processed	Date Analyzed	Time Analyzed	Matrix	Category	Dilution Factor	Client Name	Project Officer	True Value	True Value Units	UCL	LCL	Fraction	Instrument	Analyst	Group	Method	CASNo	Accept Range
55390	27188	Long Beach	IF # 824		11:55	R1	Enterococci / Enterolert		11199	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55390	27188	Long Beach	IF # 824		11:55	R1	E. coli / Colilert		457	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55390	27188	Long Beach	IF # 824		11:55	R1	Total Coliform / Colilert		1046200	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55391	27188	Long Beach	EF # 824		11:55	R1	E. coli / Colilert		238	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55391	27188	Long Beach	EF # 824		11:55	R1	Total Coliform / Colilert		2419600	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55391	27188	Long Beach	EF # 824		11:55	R1	Enterococci / Enterolert		6930	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55392	27188	Long Beach	IF # 824		11:57	R1	E. coli / Colilert		216	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55392	27188	Long Beach	IF # 824		11:57	R1	Total Coliform / Colilert		133300	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55392	27188	Long Beach	IF # 824		11:57	R1	Enterococci / Enterolert		1401	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55393	27188	Long Beach	EF # 824		11:57	R1	Enterococci / Enterolert		1539	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55393	27188	Long Beach	EF # 824		11:57	R1	E. coli / Colilert		173	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55393	27188	Long Beach	EF # 824		11:57	R1	Total Coliform / Colilert		235900	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55394	27188	Long Beach	IF # 824		11:59	R1	E. coli / Colilert		369	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55394	27188	Long Beach	IF # 824		11:59	R1	Enterococci / Enterolert		1722	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55394	27188	Long Beach	IF # 824		11:59	R1	Total Coliform / Colilert		133300	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55395	27188	Long Beach	EF # 824		11:59	R1	Total Coliform / Colilert		547500	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55395	27188	Long Beach	EF # 824		11:59	R1	E. coli / Colilert		52	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55395	27188	Long Beach	EF # 824		11:59	R1	Enterococci / Enterolert		1607	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55396	27188	Long Beach	IF # 825		12:06	R1	Total Coliform / Colilert		240000	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55396	27188	Long Beach	IF # 825		12:06	R2	Enterococci / Enterolert		9150	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55396	27188	Long Beach	IF # 825		12:06	R2	E. coli / Colilert		10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55396	27188	Long Beach	IF # 825		12:06	R2	Total Coliform / Colilert		307600	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55396	27188	Long Beach	IF # 825		12:06	R1	E. coli / Colilert		10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55396	27188	Long Beach	IF # 825		12:06	R1	Enterococci / Enterolert		9170	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55397	27188	Long Beach	EF # 825		12:06	R1	Total Coliform / Colilert		2755000	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55397	27188	Long Beach	EF # 825		12:06	R1	E. coli / Colilert		776	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55397	27188	Long Beach	EF # 825		12:06	R1	Enterococci / Enterolert		14136	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55398	27188	Long Beach	IF # 825		12:08	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55398	27188	Long Beach	IF # 825		12:08	R1	Total Coliform / Colilert		7400	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55398	27188	Long Beach	IF # 825		12:08	R1	Enterococci / Enterolert		263	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55399	27188	Long Beach	EF # 825		12:08	R1	Total Coliform / Colilert		2098000	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55399	27188	Long Beach	EF # 825		12:08	R1	E. coli / Colilert		670	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55399	27188	Long Beach	EF # 825		12:08	R1	Enterococci / Enterolert		5794	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55400	27188	Long Beach	IF # 825		12:10	R1	E. coli / Colilert		529	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55400	27188	Long Beach	IF # 825		12:10	R1	Total Coliform / Colilert		11199000	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55400	27188	Long Beach	IF # 825		12:10	R1	Enterococci / Enterolert		13990	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55401	27188	Long Beach	EF # 825		12:10	R1	Enterococci / Enterolert		3654	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55401	27188	Long Beach	EF # 825		12:10	R1	Total Coliform / Colilert		988000	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55401	27188	Long Beach	EF # 825		12:10	R1	E. coli / Colilert		557	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55402	27188	Long Beach	IF # 839		12:40	R1	Enterococci / Enterolert		14136	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55402	27188	Long Beach	IF # 839		12:40	R1	Total Coliform / Colilert		325500	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55402	27188	Long Beach	IF # 839		12:40	R1	E. coli / Colilert		384	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55403	27188	Long Beach	EF # 839		12:40	R1	E. coli / Colilert		309	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55403	27188	Long Beach	EF # 839		12:40	R1	Total Coliform / Colilert		1413600	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55403	27188	Long Beach	EF # 839		12:40	R1	Enterococci / Enterolert		16070	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55404	27188	Long Beach	IF # 839		12:42	R1	E. coli / Colilert		399	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55404	27188	Long Beach	IF # 839		12:42	R1	Enterococci / Enterolert		5172	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55404	27188	Long Beach	IF # 839		12:42	R1	Total Coliform / Colilert		248100	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55405	27188	Long Beach	EF # 839		12:42	R1	Enterococci / Enterolert		19863	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55405	27188	Long Beach	EF # 839		12:42	R1	Total Coliform / Colilert		579400	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55405	27188	Long Beach	EF # 839		12:42	R1	E. coli / Colilert		393	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55406	27188	Long Beach	IF # 839		12:44	R1	Total Coliform / Colilert		95900	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55406	27188	Long Beach	IF # 839		12:44	R1	E. coli / Colilert		62	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55406	27188	Long Beach	IF # 839		12:44	R1	Enterococci / Enterolert		3873	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55407	27188	Long Beach	EF # 839		12:44	R1	Enterococci / Enterolert		15000	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55407	27188	Long Beach	EF # 839		12:44	R1	Total Coliform / Colilert		613100	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55407	27188	Long Beach	EF # 839		12:44	R1	E. coli / Colilert		345	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55408	27188	Long Beach	IF # 774		13:23	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55408	27188	Long Beach	IF # 774		13:23	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55408	27188	Long Beach	IF # 774		13:23	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55409	27188	Long Beach	EF # 774		13:23	R2	Total Coliform / Colilert		20	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55409	27188	Long Beach	EF # 774		13:23	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55409	27188	Long Beach	EF # 774		13:23	R2	Enterococci / Enterolert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55409	27188	Long Beach	EF # 774		13:23	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55409	27188	Long Beach	EF # 774		13:23	R2	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55409	27188	Long Beach	EF # 774		13:23	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55410	27188	Long Beach	IF # 715		12:55	R1	Total Coliform / Colilert		10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55410	27188	Long Beach	IF # 715		12:55	R1	Enterococci / Enterolert		20	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55410	27188	Long Beach	IF # 715		12:55	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55411	27188	Long Beach	EF # 715		12:55	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55411	27188	Long Beach	EF # 715		12:55	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55411	27188	Long Beach	EF # 715		12:55	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55412	27188	Long Beach	IF # 715		12:57	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55412	27188	Long Beach	IF # 715		12:57	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55412	27188	Long Beach	IF # 715		12:57	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55413	27188	Long Beach	EF # 715		12:57	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55413	27188	Long Beach	EF # 715		12:57	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55413	27188	Long Beach	EF # 715		12:57	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55414	27188	Long Beach	IF # 715		13:00	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55414	27188	Long Beach	IF # 715		13:00	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55414	27188	Long Beach	IF # 715		13:00	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55415	27188	Long Beach	EF # 715		13:00	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55415	27188	Long Beach	EF # 715		13:00	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55415	27188	Long Beach	EF # 715		13:00	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55416	27188	Long Beach	IF # 774		13:19	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55416	27188	Long Beach	IF # 774		13:19	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55416	27188	Long Beach	IF # 774		13:19	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55417	27188	Long Beach	EF # 774		13:19	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55417	27188	Long Beach	EF # 774		13:19	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55417	27188	Long Beach	EF # 774		13:19	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%
55418	27188	Long Beach	IF # 774		13:21	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado					NA		R. Blanche	Microbiology	Colilert		70 - 130%

55418	27188	Long Beach	IF # 774		13:21	R1	E. coli / Colilert	<	10	MPN/100 mL		10	0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Colilert		70 - 130%
55418	27188	Long Beach	IF # 774		13:21	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10	0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55419	27188	Long Beach	EF # 774		13:21	R1	E. coli / Colilert	<	10	MPN/100 mL		10	0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Colilert		70 - 130%
55419	27188	Long Beach	EF # 774		13:21	R2	Enterococci / Enterolert	<	10	MPN/100 mL		10	0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55419	27188	Long Beach	EF # 774		13:21	R2	E. coli / Colilert	<	10	MPN/100 mL		10	0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Colilert		70 - 130%
55419	27188	Long Beach	EF # 774		13:21	R1	Total Coliform / Colilert	<	10	MPN/100 mL		10	0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Colilert		70 - 130%
55419	27188	Long Beach	EF # 774		13:21	R2	Total Coliform / Colilert	<	10	MPN/100 mL		10	0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Colilert		70 - 130%
55419	27188	Long Beach	EF # 774		13:21	R1	Enterococci / Enterolert	<	10	MPN/100 mL		10	0713	13-Jul-07	13-Jul-07	13-Jul-07	13-Jul-07	15:30	water	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55420	27188	Long Beach	QAQC	Blank		B1	E. coli / Colilert	<	10	MPN/100 mL		10	0713			13-Jul-07	13-Jul-07	15:30	ent	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Colilert		70 - 130%
55420	27188	Long Beach	QAQC	Blank		B1	Total Coliform / Colilert	<	10	MPN/100 mL		10	0713			13-Jul-07	13-Jul-07	15:30	ent	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Colilert		70 - 130%
55420	27188	Long Beach	QAQC	Blank		B1	Enterococci / Enterolert	<	10	MPN/100 mL		10	0713			13-Jul-07	13-Jul-07	15:30	ent	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55421	27188	Long Beach	QAQC	Control		PC1	Total Coliform / Colilert	PASS		MPN/100 mL		10	0713			13-Jul-07	13-Jul-07	15:30	e	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Colilert		70 - 130%
55421	27188	Long Beach	QAQC	Control		PC1	Enterococci / Enterolert	PASS		MPN/100 mL		10	0713			13-Jul-07	13-Jul-07	15:30	e	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Enterolert		70 - 130%
55421	27188	Long Beach	QAQC	Control		PC1	E. coli / Colilert	PASS		MPN/100 mL		10	0713			13-Jul-07	13-Jul-07	15:30	e	L		Hydrophix	Angel Maldonado				NA		R. Blanche	Microbiology	Colilert		70 - 130%

Sample ID	Project ID	Project Description	Client Sample ID	Sample Description	Time Collected	Replicate Number	Parameter	Qualifier	Result	Units	QA Qualifier	MDL	RL	Batch ID	Date Sampled	Date Received	Date Processed	Date Analyzed	Time Analyzed	Matrix	Category	Dilution Factor	Client Name	Project Officer	True Value	True Value Units	UCL	LCL	Fraction	Instrument	Analyst	Group	Method	CASNo	Acceptance Range
55694	27188b	Long Beach	IF 713		9:58	R1	Enterococci / Enterolert		81640	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55694	27188b	Long Beach	IF 713		9:58	R1	E. coli / Colilert		12033	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55694	27188b	Long Beach	IF 713		9:58	R1	Total Coliform / Colilert		1050000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55695	27188b	Long Beach	EF 713		9:58	R1	E. coli / Colilert		5475	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55695	27188b	Long Beach	EF 713		9:58	R1	Total Coliform / Colilert		410600	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55695	27188b	Long Beach	EF 713		9:58	R1	Enterococci / Enterolert		81640	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55696	27188b	Long Beach	IF 713		10:00	R1	E. coli / Colilert		9208	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55696	27188b	Long Beach	IF 713		10:00	R1	Total Coliform / Colilert		1414000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55696	27188b	Long Beach	IF 713		10:00	R1	Enterococci / Enterolert		129970	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55697	27188b	Long Beach	EF 713		10:00	R1	Enterococci / Enterolert		57940	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55697	27188b	Long Beach	EF 713		10:00	R1	E. coli / Colilert		4884	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55697	27188b	Long Beach	EF 713		10:00	R1	Total Coliform / Colilert		204600	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55698	27188b	Long Beach	IF 713		10:02	R1	E. coli / Colilert		9804	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55698	27188b	Long Beach	IF 713		10:02	R1	Enterococci / Enterolert		81640	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55698	27188b	Long Beach	IF 713		10:02	R1	Total Coliform / Colilert		2359000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55699	27188b	Long Beach	EF 713		10:02	R1	Total Coliform / Colilert		770100	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55699	27188b	Long Beach	EF 713		10:02	R1	E. coli / Colilert		3873	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55699	27188b	Long Beach	EF 713		10:02	R1	Enterococci / Enterolert		68670	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55700	27188b	Long Beach	IF Seaside & Cedar		10:48	R1	Enterococci / Enterolert		125	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55700	27188b	Long Beach	IF Seaside & Cedar		10:48	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55700	27188b	Long Beach	IF Seaside & Cedar		10:48	R1	Total Coliform / Colilert		2613	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55701	27188b	Long Beach	EF Seaside & Cedar		10:48	R1	Total Coliform / Colilert		6131000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55701	27188b	Long Beach	EF Seaside & Cedar		10:48	R1	E. coli / Colilert		480	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55701	27188b	Long Beach	EF Seaside & Cedar		10:48	R1	Enterococci / Enterolert		173290	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55702	27188b	Long Beach	IF Seaside & Cedar		10:50	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55702	27188b	Long Beach	IF Seaside & Cedar		10:50	R1	Total Coliform / Colilert		1314	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55702	27188b	Long Beach	IF Seaside & Cedar		10:50	R1	Enterococci / Enterolert		90	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55703	27188b	Long Beach	EF Seaside & Cedar		10:50	R1	Enterococci / Enterolert		129970	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55703	27188b	Long Beach	EF Seaside & Cedar		10:50	R2	Total Coliform / Colilert		3255000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55703	27188b	Long Beach	EF Seaside & Cedar		10:50	R1	Total Coliform / Colilert		2481000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55703	27188b	Long Beach	EF Seaside & Cedar		10:50	R1	E. coli / Colilert		482	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55703	27188b	Long Beach	EF Seaside & Cedar		10:50	R2	E. coli / Colilert		504	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55703	27188b	Long Beach	EF Seaside & Cedar		10:50	R2	Enterococci / Enterolert		141360	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55704	27188b	Long Beach	IF Seaside & Cedar		10:52	R1	Enterococci / Enterolert		862	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55704	27188b	Long Beach	IF Seaside & Cedar		10:52	R1	E. coli / Colilert	<	10	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55704	27188b	Long Beach	IF Seaside & Cedar		10:52	R1	Total Coliform / Colilert		21100	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%

55705	27188b	Long Beach	EF Seaside & Cedar		10:52	R1	Enterococci / Enterolert		173290	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55705	27188b	Long Beach	EF Seaside & Cedar		10:52	R1	Total Coliform / Colilert		3255000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55705	27188b	Long Beach	EF Seaside & Cedar		10:52	R1	E. coli / Colilert		528	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55706	27188b	Long Beach	IF Queen Mary Way		11:19	R1	Enterococci / Enterolert		22470	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55706	27188b	Long Beach	IF Queen Mary Way		11:19	R1	Total Coliform / Colilert		959000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55706	27188b	Long Beach	IF Queen Mary Way		11:19	R1	E. coli / Colilert		512	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55707	27188b	Long Beach	EF Queen Mary Way		11:19	R1	E. coli / Colilert		12200	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55707	27188b	Long Beach	EF Queen Mary Way		11:19	R1	Total Coliform / Colilert		727000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55707	27188b	Long Beach	EF Queen Mary Way		11:19	R1	Enterococci / Enterolert		111990	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55708	27188b	Long Beach	IF Queen Mary Way		11:21	R1	E. coli / Colilert		31	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55708	27188b	Long Beach	IF Queen Mary Way		11:21	R1	Enterococci / Enterolert		12110	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55708	27188b	Long Beach	IF Queen Mary Way		11:21	R1	Total Coliform / Colilert		2359000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55709	27188b	Long Beach	EF Queen Mary Way		11:21	R1	Enterococci / Enterolert		173290	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55709	27188b	Long Beach	EF Queen Mary Way		11:21	R1	Total Coliform / Colilert		987000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55709	27188b	Long Beach	EF Queen Mary Way		11:21	R1	E. coli / Colilert		9800	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55710	27188b	Long Beach	IF Queen Mary Way		11:23	R1	Total Coliform / Colilert		686700	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55710	27188b	Long Beach	IF Queen Mary Way		11:23	R1	E. coli / Colilert		86	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55710	27188b	Long Beach	IF Queen Mary Way		11:23	R1	Enterococci / Enterolert		9804	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55711	27188b	Long Beach	EF Queen Mary Way		11:23	R1	Enterococci / Enterolert		48840	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55711	27188b	Long Beach	EF Queen Mary Way		11:23	R1	Total Coliform / Colilert		5794000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55711	27188b	Long Beach	EF Queen Mary Way		11:23	R1	E. coli / Colilert		359	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55712	27188b	Long Beach	IF 1312		11:59	R1	Enterococci / Enterolert		92080	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55712	27188b	Long Beach	IF 1312		11:59	R1	E. coli / Colilert		9208	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55712	27188b	Long Beach	IF 1312		11:59	R1	Total Coliform / Colilert		2143000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55713	27188b	Long Beach	EF 1312		11:59	R2	Total Coliform / Colilert		11199000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55713	27188b	Long Beach	EF 1312		11:59	R1	Enterococci / Enterolert		111990	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55713	27188b	Long Beach	EF 1312		11:59	R2	Enterococci / Enterolert		98040	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55713	27188b	Long Beach	EF 1312		11:59	R1	E. coli / Colilert		2224	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55713	27188b	Long Beach	EF 1312		11:59	R2	E. coli / Colilert		3130	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55713	27188b	Long Beach	EF 1312		11:59	R1	Total Coliform / Colilert		12033000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55714	27188b	Long Beach	IF 1312		12:01	R1	Total Coliform / Colilert		1793000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55714	27188b	Long Beach	IF 1312		12:01	R1	Enterococci / Enterolert		92080	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55714	27188b	Long Beach	IF 1312		12:01	R1	E. coli / Colilert		7270	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55715	27188b	Long Beach	EF 1312		12:01	R1	Total Coliform / Colilert		12997000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55715	27188b	Long Beach	EF 1312		12:01	R1	Enterococci / Enterolert		111990	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55715	27188b	Long Beach	EF 1312		12:01	R1	E. coli / Colilert		5475	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55716	27188b	Long Beach	IF 1312		12:03	R1	Total Coliform / Colilert		1396000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55716	27188b	Long Beach	IF 1312		12:03	R1	E. coli / Colilert		7270	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55716	27188b	Long Beach	IF 1312		12:03	R1	Enterococci / Enterolert		141360	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55717	27188b	Long Beach	EF 1312		12:03	R1	E. coli / Colilert		5794	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55717	27188b	Long Beach	EF 1312		12:03	R1	Total Coliform / Colilert		6488000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%

55717	27188b	Long Beach	EF 1312		12:03	R1	Enterococci / Enterolert		86640	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55718	27188b	Long Beach	IF 1324		12:28	R1	E. coli / Colilert		6488	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55718	27188b	Long Beach	IF 1324		12:28	R1	Total Coliform / Colilert		2359000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55718	27188b	Long Beach	IF 1324		12:28	R1	Enterococci / Enterolert		57940	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55719	27188b	Long Beach	EF 1324		12:28	R1	Total Coliform / Colilert		17329000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55719	27188b	Long Beach	EF 1324		12:28	R1	E. coli / Colilert		5475	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55719	27188b	Long Beach	EF 1324		12:28	R1	Enterococci / Enterolert		77010	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55720	27188b	Long Beach	IF 1324		12:30	R1	Total Coliform / Colilert		717000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55720	27188b	Long Beach	IF 1324		12:30	R1	E. coli / Colilert		6867	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55720	27188b	Long Beach	IF 1324		12:30	R1	Enterococci / Enterolert		77010	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55721	27188b	Long Beach	EF 1324		12:30	R1	Enterococci / Enterolert		86640	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55721	27188b	Long Beach	EF 1324		12:30	R1	E. coli / Colilert		5475	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55721	27188b	Long Beach	EF 1324		12:30	R1	Total Coliform / Colilert		5172000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55722	27188b	Long Beach	IF 1324		12:32	R1	Total Coliform / Colilert		1658000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55722	27188b	Long Beach	IF 1324		12:32	R1	E. coli / Colilert		86640	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55722	27188b	Long Beach	IF 1324		12:32	R1	Enterococci / Enterolert		68930	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55723	27188b	Long Beach	EF 1324		12:32	R1	E. coli / Colilert		4884	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55723	27188b	Long Beach	EF 1324		12:32	R2	Enterococci / Enterolert		129970	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55723	27188b	Long Beach	EF 1324		12:32	R2	E. coli / Colilert		4106	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55723	27188b	Long Beach	EF 1324		12:32	R1	Total Coliform / Colilert		8664000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55723	27188b	Long Beach	EF 1324		12:32	R2	Total Coliform / Colilert		9208000	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55723	27188b	Long Beach	EF 1324		12:32	R1	Enterococci / Enterolert		129970	MPN/100 mL		10		0727	27-Jul-07	27-Jul-07	27-Jul-07	27-Jul-07	17:00	Stormwater	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55724	27188b	Long Beach	QAQC	Reagent Blank		B1	E. coli / Colilert	<	10	MPN/100 mL		10		0727			27-Jul-07	27-Jul-07	17:00	Reagent	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55724	27188b	Long Beach	QAQC	Reagent Blank		B1	Total Coliform / Colilert	<	10	MPN/100 mL		10		0727			27-Jul-07	27-Jul-07	17:00	Reagent	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55724	27188b	Long Beach	QAQC	Reagent Blank		B1	Enterococci / Enterolert	<	10	MPN/100 mL		10		0727			27-Jul-07	27-Jul-07	17:00	Reagent	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55725	27188b	Long Beach	QAQC	Positive Control		PC1	Total Coliform / Colilert	PASS		MPN/100 mL		10		0727			27-Jul-07	27-Jul-07	17:00	Culture	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%
55725	27188b	Long Beach	QAQC	Positive Control		PC1	Enterococci / Enterolert	PASS		MPN/100 mL		10		0727			27-Jul-07	27-Jul-07	17:00	Culture	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Enterolert		70 - 130%
55725	27188b	Long Beach	QAQC	Positive Control		PC1	E. coli / Colilert	PASS		MPN/100 mL		10		0727			27-Jul-07	27-Jul-07	17:00	Culture	L		Hydrophix	Angel Maldonado					NA		M. Staff	Microbiology	Colilert		70 - 130%

CRG Marine Laboratories, Inc.
"A Center for Excellence in Analytical Chemistry and Environmental Microbiology"

July 20, 2007

Hydrophix
3873 Carter Ave
Siute 202
Riverside, CA 92501

Re:	CRG Marine Laboratories	Project ID:	P 27188
	Hydrophix	Project ID:	Long Beach

ATTN: Angel Maldonado

CRG Laboratories is pleased to provide you with the enclosed analytical data report for your Long Beach project. According to the chain-of-custody, 30 samples were received intact at CRG on 7/13/2007. Per your instructions, the samples were analyzed for:

- Enterococci / Enterolert Using Method Enterolert
- E. coli / Colilert Using Method Colilert
- Total Coliform / Colilert Using Method Colilert

Please don't hesitate to call if you have any questions and thank you very much for using our laboratory for your analtytical needs.

Regards,
Antony Basil

Reviewed and Approved _____

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Project Sample List

Hydrophix
CRG Project ID: **27188**
Project Officer: Angel Maldonado
Project Description: Long Beach

CRG Sample ID#	Client Sample ID	Sample Description	Date Sampled	Matrix
55390	IF # 824		13-Jul-07	Stormwater
55391	EF # 824		13-Jul-07	Stormwater
55392	IF # 824		13-Jul-07	Stormwater
55393	EF # 824		13-Jul-07	Stormwater
55394	IF # 824		13-Jul-07	Stormwater
55395	EF # 824		13-Jul-07	Stormwater
55396	IF # 825		13-Jul-07	Stormwater
55397	EF # 825		13-Jul-07	Stormwater
55398	IF # 825		13-Jul-07	Stormwater
55399	EF # 825		13-Jul-07	Stormwater
55400	IF # 825		13-Jul-07	Stormwater
55401	EF # 825		13-Jul-07	Stormwater
55402	IF # 839		13-Jul-07	Stormwater
55403	EF # 839		13-Jul-07	Stormwater
55404	IF # 839		13-Jul-07	Stormwater
55405	EF # 839		13-Jul-07	Stormwater
55406	IF # 839		13-Jul-07	Stormwater
55407	EF # 839		13-Jul-07	Stormwater
55408	IF # 774		13-Jul-07	Stormwater
55409	EF # 774		13-Jul-07	Stormwater
55410	IF # 715		13-Jul-07	Stormwater
55411	EF # 715		13-Jul-07	Stormwater
55412	IF # 715		13-Jul-07	Stormwater

Project Sample List

Hydrophix

CRG Project ID: **27188**

Project Officer: Angel Maldonado

Project Description: Long Beach

55413	EF # 715	13-Jul-07	Stormwater
55414	IF # 715	13-Jul-07	Stormwater
55415	EF # 715	13-Jul-07	Stormwater
55416	IF # 774	13-Jul-07	Stormwater
55417	EF # 774	13-Jul-07	Stormwater
55418	IF # 774	13-Jul-07	Stormwater
55419	EF # 774	13-Jul-07	Stormwater

CRG's QUALITY ASSURANCE PROGRAM SUMMARY

BATCH: CRG's Quality Assurance Program Document defines a batch as a group of 20 or fewer samples of similar matrix, processed together under the same conditions and with the same reagents. Quality control samples are associated with each batch and are used to assess the validity of the sample analyses. CRG typically uses batch sizes of 10-15 samples.

PROCEDURAL BLANKS: Laboratory contamination was controlled through the analysis of procedural blanks on a minimum frequency of 1 per batch. CRG's Quality Assurance Program Document requires that all procedural blanks be below 10 times the MDL and all detectable constituents in the blanks be flagged in the sample results. The Procedural Blanks are presented in the Procedural Blank section of this report.

ACCURACY: Accuracy of the project data was indicated by analysis of matrix spikes, surrogate spikes, certified reference materials, positive controls, and/or laboratory control materials on a minimum frequency of 1 per batch. CRG's Quality Assurance Program Document requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits. The Acceptance Ranges are presented in the Accuracy Data section of this report.

PRECISION: Precision of the project data was determined by analysis of duplicate matrix spikes, blank spikes, and/or duplicate test sample analysis on a minimum frequency of 1 per batch. CRG's Quality Assurance Program Document requires that for 95% of the compounds >10 times the MDL, the % Relative Percent Difference (%RPD) should be within the specified acceptance range. The %RPD for the duplicate test sample analysis can be significantly affected by the homogeneity of the sample matrix within the sample container itself causing additional variability in the analytical results. In these cases, the QA/QC Acceptance Limits may be exceeded. The %RPD and Acceptance Ranges are presented in the Precision Data section of this report.

GLOSSARY OF TERMS

Qualifier	Definition
B	Analyte was detected in the associated method blank.
E	Analyte concentration exceeds the calibration range
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
M1	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference.
M2	The MS/MSD RPD was out of control due to matrix interference.
M3	Detection of the analyte was difficult due to matrix interference.
M4	Spike or surrogate compound recovery was out of control due to matrix interference. The associated method blank spike or surrogate compound was in control and therefore the sample data was reported without further clarification.
ND or U	Parameter not detected at the indicated reporting limit.
NES	Not enough sample.
Q1	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration.
Q2	The sample RPD was out of control. Sample is heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices.
R	Analyte was removed by the sample preparation/extraction procedure as seen by the MS/MSD recoveries. RPD acceptance ranges do not apply.

DATA REPORT

CRG Marine Laboratories, Inc.

2020 Del Amo Blvd., Suite 200, Torrance, CA 90501-1206 (310) 533-5190 FAX (310) 533-5003 crglabs@sbcglobal.net

Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55390***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 824 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 11:55
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	457	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	11199	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	1046200	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55391***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 824
Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 11:55
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	238	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	6930	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	2419600	MPN/100 mL	10	15:30	13-Jul-07	0713

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55392***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 824 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 11:57
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	216	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	1401	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	133300	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55393***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 824 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 11:57
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	173	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	1539	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	235900	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55394***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 824 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 11:59
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	369	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	1722	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	133300	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55395***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 824 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 11:59
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	52	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	1607	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	547500	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55396***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 825 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:06
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	9170	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	240000	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55397***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 825 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:06
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	776	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	14136	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	2755000	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55398***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 825 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:08
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	263	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	7400	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55399***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 825 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:08
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	670	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	5794	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	2098000	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55400***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 825 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:10
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	529	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	13990	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	1.1199E+07	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55401***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 825 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:10
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	557	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	3654	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	988000	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55402***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 839 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:40
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	384	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	14136	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	325500	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55403***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 839 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:40
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	309	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	16070	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	1413600	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55404***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 839 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:42
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	399	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	5172	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	248100	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55405***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 839
Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:42
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	393	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	19863	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	579400	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55406***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 839 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:44
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	62	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	3873	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	95900	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55407***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 839 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:44
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	345	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	15000	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	613100	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55408***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 774 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 13:23
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55409***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 774
Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 13:23
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55410***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 715 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:55
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	20	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55411***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 715 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:55
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55412***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 715 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:57
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55413***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 715 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:57
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55414***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 715 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 13:00
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55415***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 715 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 13:00
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55416***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 774 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 13:19
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55417***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 774
Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 13:19
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55418***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF # 774 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 13:21
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55419***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF # 774 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 13:21
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55396***
Replicate #: R2
DILUTION FACTOR:

Sample Description: IF # 825 Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 12:06
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	9150	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	307600	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55409***
Replicate #: R2
DILUTION FACTOR:

Sample Description: EF # 774
Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 13:23
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	20	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55419***
Replicate #: R2
DILUTION FACTOR:

Sample Description: EF # 774
Long Beach
Matrix: Stormwater

Date Sampled: 13-Jul-07 13:21
Date Received: 13-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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QUALITY CONTROL REPORT

PROCEDURAL BLANK RESULTS

CRG Marine Laboratories, Inc.

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55420*** **Sample Description:** QAQC Reagent Blank **Date Sampled:**

Replicate #: B1 Long Beach **Date Received:**

DILUTION FACTOR: **Matrix:** Reagent

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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ACCURACY DATA

CRG Marine Laboratories, Inc.

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188***

CRG ID#: ***55421***
Replicate #: PC1
DILUTION FACTOR:

Sample Description: QAQC Positive Control
Long Beach
Matrix: Culture

Date Sampled:
Date Received:

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	PASS	MPN/100 mL	10	15:30	13-Jul-07	0713
Enterococci / Enterolert	Enterolert	PASS	MPN/100 mL	10	15:30	13-Jul-07	0713
Total Coliform / Colilert	Colilert	PASS	MPN/100 mL	10	15:30	13-Jul-07	0713

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

California ELAP Certificate # 2261

CHAIN-OF-CUSTODY

CRG Marine Laboratories, Inc.
2020 Del Amo Blvd., Suite 200, Torrance, CA 90501-1206
PHONE (310) 533-5190 FAX (310) 533-5003

CHAIN-OF-CUSTODY RECORD

Client Name	HYDROPHIX
Address	3873 CARTER AVE SUITE 202 RIVERSIDE CA 92501
Sampled By	ANGEL MALDONADO
Project Manager	ANGEL MALDONADO
Phone	951-788-7667
FAX	951-788-7722
Email	MRMALDONADO1@HOTMAIL.COM
Project Name/Number	LONG BEACH
P.O. Number	

REQUESTED ANALYSIS: Total Coliforms Colilert; E. Coli by Colilert; Enterococcus by Enterolert

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Quantity	Container Type	Total Coliforms Colilert	E. Coli by Colilert	Enterococcus by Enterolert
1	IF # 824	7-13	11:55		1				
2	EF # 824	7-13	11:55						
3	IF # 824	7-13	11:57						
4	EF # 824	7-13	11:57						
5	IE # 824	7-13	11:59						
6	EF # 824	7-13	11:59						
7	IF # 825	7-13	12:06						
8	EF # 825	7-13	12:06						
9	IF # 825	7-13	12:08						
10	EF # 825	7-13	12:08						

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	
Report Format:	pdf	EDD	hardcopy

Comments:

CRG Project ID: 27188 (lab use only)
CRG Sample ID: 55390-55421 (lab use only)

RELINQUISHED BY			
Signature:	[signature]		
Print:	ANGEL MALDONADO		
Company:	HYDROPHIX		
DATE:	7-13-07	TIME:	2:07

RECEIVED BY			
Signature:	[signature]		
Print:	Adam Ibell		
Company:	CRG		
DATE:	7/13/07	TIME:	2:07

*MATRIX CODES: (SED = Sediment); (TISS = Tissue); (SW = Seawater, Saltwater); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

CRG Marine Laboratories, Inc.
2020 Del Amo Blvd., Suite 200, Torrance, CA 90501-1206
PHONE (310) 533-5190 FAX (310) 533-5003

CHAIN-OF-CUSTODY RECORD

Client Name	Hydrophix
Address	
Sampled By	
Project Manager	
Phone	
FAX	
Email	
Project Name/Number	
P.O. Number	

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Quantity	Container Type	Total Coliforms by Colilert	E. Coli by Colilert	Enterococcus by Enterolert								
11	EF # 825	7-13	12:10														
12	EF # 825	7-13	12:10														
13	EF # 839	7-13	12:40														
14	EF # 839	7-13	12:40														
15	EF # 839	7-13	12:42														
16	EF # 839	7-13	12:42														
17	EF # 839	7-13	12:44														
18	EF # 839	7-13	12:44														
19	EF # 774	7-13	1:23														
20	EF # 774	7-13	1:23														

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	
Report Format:	pdf	EDD	hardcopy

Comments:

CRG Project ID: 27188 (lab use only)

CRG Sample ID: 55390-55421 (lab use only)

RELINQUISHED BY			
Signature:	[signature]		
Print:	ANGEL MALDONADO		
Company:	HYDROPHIX		
DATE:	7-13-07	TIME:	2:07

RECEIVED BY			
Signature:	[signature]		
Print:	Adam Idell		
Company:	CRG		
DATE:	7/13/07	TIME:	2:07

*MATRIX CODES: (SED = Sediment); (TISS = Tissue); (SW = Seawater, Saltwater); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

CRG Marine Laboratories, Inc.
2020 Del Amo Blvd., Suite 200, Torrance, CA 90501-1206
PHONE (310) 533-5190 FAX (310) 533-5003

CHAIN-OF-CUSTODY RECORD

Client Name / Address	Hydrophix
Sampled By	
Project Manager	
Phone	
FAX	
Email	
Project Name/Number	
P.O. Number	

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Quantity	Container Type	Total Coliforms by Colilert	E. Coli by Colilert	Enterococcus by Enterolert								
21	IF # 715	7-13	12:55														
22	EF # 715	7-13	12:55														
23	IF # 715	7-13	12:57														
24	EF # 715	7-13	12:57														
25	IF # 715	7-13	1:00														
26	EF # 715	7-13	1:00														
27	IF # 774	7-13	1:19														
28	EF # 774	7-13	1:19														
29	IF # 774	7-13	1:21														
30	EF # 774	7-13	1:21														

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	
Report Format:	pdf	EDD	hardcopy

Comments:

CRG Project ID: 27188 (lab use only)

CRG Sample ID: 55390-55421 (lab use only)

RELINQUISHED BY			
Signature:	ANGEL MALDONADO		
Print:	[illegible]		
Company:	HYDROPHIX		
DATE:	7-13-07	TIME:	2:07

RECEIVED BY			
Signature:	[illegible]		
Print:	Adam Sdell		
Company:	CRG		
DATE:	7/13/07	TIME:	2:07

*MATRIX CODES: (SED = Sediment); (TISS = Tissue); (SW = Seawater, Saltwater); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

CRG
Marine Laboratories, Inc.

SAMPLE RECEIVING

CRG Project ID
27188

CLIENT NAME: Hydrophix

DATE RECEIVED: 07/13/07

COURIER INFORMATION		
☐ CRG	☐ FEDEX	TRACKING NUMBER
☒ OTHER*	☐ UPS	

TEMPERATURE
2 °C ☐ BLUE ICE ☒ WET ICE ☐ NO ICE

Chain-of-Custody
☒ INCLUDED
☒ SIGNED
☐ NOT INCLUDED

SAMPLE MATRIX
☒ LIQUID
☐ SOLID
☐ OTHER*

CONDITION OF SAMPLES UPON ARRIVAL	YES	NO*	NA
All sample containers intact and good condition	☒	☐	☐
All samples listed on COC are present	☒	☐	☐
Sample ID on containers consistent with COC	☒	☐	☐
Correct containers used for analyses requested	☒	☐	☐
All samples received within method holding time	☒	☐	☐

*NOTES

COMPLETED BY: RB

2020 Del Amo Boulevard Suite 200, Torrance, CA 90501 · (310) 533-5190 · FAX (310) 533-5003

CRG Marine Laboratories, Inc.
"A Center for Excellence in Analytical Chemistry and Environmental Microbiology"

August 09, 2007

Hydrophix
3873 Carter Ave
Siute 202
Riverside, CA 92501

Re:	CRG Marine Laboratories	Project ID:	P 27188b
	Hydrophix	Project ID:	Long Beach

ATTN: Angel Maldonado

CRG Laboratories is pleased to provide you with the enclosed analytical data report for your Long Beach project. According to the chain-of-custody, 30 samples were received intact at CRG on 7/27/2007. Per your instructions, the samples were analyzed for:

- E. coli / Colilert Using Method Colilert
- Enterococci / Enterolert Using Method Enterolert
- Total Coliform / Colilert Using Method Colilert

Please don't hesitate to call if you have any questions and thank you very much for using our laboratory for your analtytical needs.

Regards,
Antony Basil

Reviewed and Approved _____

2020 Del Amo Blvd., Suite 200, Torrance, CA 90501-1206 (310) 533-5190 FAX (310) 533-5003 crglabs@sbcglobal.net

Project Sample List

Hydrophix
CRG Project ID: **27188b**
Project Officer: Angel Maldonado
Project Description: Long Beach

CRG Sample ID#	Client Sample ID	Sample Description	Date Sampled	Matrix
55694	IF 713		27-Jul-07	Stormwater
55695	EF 713		27-Jul-07	Stormwater
55696	IF 713		27-Jul-07	Stormwater
55697	EF 713		27-Jul-07	Stormwater
55698	IF 713		27-Jul-07	Stormwater
55699	EF 713		27-Jul-07	Stormwater
55700	IF Seaside & Cedar		27-Jul-07	Stormwater
55701	EF Seaside & Cedar		27-Jul-07	Stormwater
55702	IF Seaside & Cedar		27-Jul-07	Stormwater
55703	EF Seaside & Cedar		27-Jul-07	Stormwater
55704	IF Seaside & Cedar		27-Jul-07	Stormwater
55705	EF Seaside & Cedar		27-Jul-07	Stormwater
55706	IF Queen Mary Way		27-Jul-07	Stormwater
55707	EF Queen Mary Way		27-Jul-07	Stormwater
55708	IF Queen Mary Way		27-Jul-07	Stormwater
55709	EF Queen Mary Way		27-Jul-07	Stormwater
55710	IF Queen Mary Way		27-Jul-07	Stormwater
55711	EF Queen Mary Way		27-Jul-07	Stormwater
55712	IF 1312		27-Jul-07	Stormwater
55713	EF 1312		27-Jul-07	Stormwater
55714	IF 1312		27-Jul-07	Stormwater
55715	EF 1312		27-Jul-07	Stormwater
55716	IF 1312		27-Jul-07	Stormwater

Project Sample List

Hydrophix

CRG Project ID: **27188b**

Project Officer: Angel Maldonado

Project Description: Long Beach

55717	EF 1312	27-Jul-07	Stormwater
55718	IF 1324	27-Jul-07	Stormwater
55719	EF 1324	27-Jul-07	Stormwater
55720	IF 1324	27-Jul-07	Stormwater
55721	EF 1324	27-Jul-07	Stormwater
55722	IF 1324	27-Jul-07	Stormwater
55723	EF 1324	27-Jul-07	Stormwater

CRG's QUALITY ASSURANCE PROGRAM SUMMARY

BATCH: CRG's Quality Assurance Program Document defines a batch as a group of 20 or fewer samples of similar matrix, processed together under the same conditions and with the same reagents. Quality control samples are associated with each batch and are used to assess the validity of the sample analyses. CRG typically uses batch sizes of 10-15 samples.

PROCEDURAL BLANKS: Laboratory contamination was controlled through the analysis of procedural blanks on a minimum frequency of 1 per batch. CRG's Quality Assurance Program Document requires that all procedural blanks be below 10 times the MDL and all detectable constituents in the blanks be flagged in the sample results. The Procedural Blanks are presented in the Procedural Blank section of this report.

ACCURACY: Accuracy of the project data was indicated by analysis of matrix spikes, surrogate spikes, certified reference materials, positive controls, and/or laboratory control materials on a minimum frequency of 1 per batch. CRG's Quality Assurance Program Document requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits. The Acceptance Ranges are presented in the Accuracy Data section of this report.

PRECISION: Precision of the project data was determined by analysis of duplicate matrix spikes, blank spikes, and/or duplicate test sample analysis on a minimum frequency of 1 per batch. CRG's Quality Assurance Program Document requires that for 95% of the compounds >10 times the MDL, the % Relative Percent Difference (%RPD) should be within the specified acceptance range. The %RPD for the duplicate test sample analysis can be significantly affected by the homogeneity of the sample matrix within the sample container itself causing additional variability in the analytical results. In these cases, the QA/QC Acceptance Limits may be exceeded. The %RPD and Acceptance Ranges are presented in the Precision Data section of this report.

GLOSSARY OF TERMS

Qualifier	Definition
B	Analyte was detected in the associated method blank.
E	Analyte concentration exceeds the calibration range
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
M1	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference.
M2	The MS/MSD RPD was out of control due to matrix interference.
M3	Detection of the analyte was difficult due to matrix interference.
M4	Spike or surrogate compound recovery was out of control due to matrix interference. The associated method blank spike or surrogate compound was in control and therefore the sample data was reported without further clarification.
ND or U	Parameter not detected at the indicated reporting limit.
NES	Not enough sample.
Q1	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration.
Q2	The sample RPD was out of control. Sample is heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices.
R	Analyte was removed by the sample preparation/extraction procedure as seen by the MS/MSD recoveries. RPD acceptance ranges do not apply.

DATA REPORT

CRG Marine Laboratories, Inc.

2020 Del Amo Blvd., Suite 200, Torrance, CA 90501-1206 (310) 533-5190 FAX (310) 533-5003 crglabs@sbcglobal.net

Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55694***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF 713 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 9:58
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	12033	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	81640	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	1050000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

California ELAP Certificate # 2261

CRG Marine Laboratories, Inc.

2020 Del Amo Blvd., Suite 200, Torrance, CA 90501-1206 (310) 533-5190 FAX (310) 533-5003 crglabs@sbcglobal.net

Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55695***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF 713 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 9:58
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	5475	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	81640	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	410600	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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CRG Marine Laboratories, Inc.

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55696***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF 713 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:00
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	9208	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	129970	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	1414000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55697***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF 713 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:00
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	4884	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	57940	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	204600	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55698***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF 713 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:02
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	9804	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	81640	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	2359000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55699***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF 713 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:02
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	3873	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	68670	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	770100	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55700***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF Seaside & Cedar Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:48
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	125	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	2613	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55701***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF Seaside & Cedar Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:48
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	480	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	173290	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	6131000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55702***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF Seaside & Cedar Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:50
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	90	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	1314	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55703***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF Seaside & Cedar Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:50
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	482	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	129970	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	2481000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55704***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF Seaside & Cedar Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:52
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	862	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	21100	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

California ELAP Certificate # 2261

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55705***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF Seaside & Cedar Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:52
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	528	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	173290	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	3255000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55706***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF Queen Mary Way, Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 11:19
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	512	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	22470	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	959000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55707***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF Queen Mary Way
Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 11:19
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	12200	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	111990	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	727000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55708***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF Queen Mary Way, Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 11:21
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	31	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	12110	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	2359000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55709***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF Queen Mary Way, Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 11:21
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	9800	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	173290	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	987000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55710***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF Queen Mary Way, Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 11:23
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	86	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	9804	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	686700	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55711***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF Queen Mary Way, Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 11:23
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	359	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	48840	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	5794000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55712***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF 1312 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 11:59
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	9208	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	92080	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	2143000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55713***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF 1312
Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 11:59
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	2224	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	111990	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	12033000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55714***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF 1312 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:01
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	7270	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	92080	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	1793000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55715***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF 1312 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:01
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	5475	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	111990	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	12997000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55716***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF 1312 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:03
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	7270	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	141360	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	1396000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55717***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF 1312
Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:03
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	5794	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	86640	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	6488000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55718***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF 1324 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:28
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	6488	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	57940	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	2359000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55719***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF 1324 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:28
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	5475	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	77010	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	17329000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55720***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF 1324 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:30
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	6867	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	77010	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	717000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55721***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF 1324 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:30
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	5475	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	86640	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	5172000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55722***
Replicate #: R1
DILUTION FACTOR:

Sample Description: IF 1324 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:32
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	86640	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	68930	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	1658000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55723***
Replicate #: R1
DILUTION FACTOR:

Sample Description: EF 1324 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:32
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	4884	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	129970	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	8664000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55703***
Replicate #: R2
DILUTION FACTOR:

Sample Description: EF Seaside & Cedar Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 10:50
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	504	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	141360	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	3255000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55713***
Replicate #: R2
DILUTION FACTOR:

Sample Description: EF 1312
Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 11:59
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	3130	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	98040	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	11199000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55723***
Replicate #: R2
DILUTION FACTOR:

Sample Description: EF 1324 Long Beach
Matrix: Stormwater

Date Sampled: 27-Jul-07 12:32
Date Received: 27-Jul-07

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	4106	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	129970	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	9208000	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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QUALITY CONTROL REPORT

PROCEDURAL BLANK RESULTS

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55724***
Replicate #: B1
DILUTION FACTOR:

Sample Description: QAQC Reagent Blank
Long Beach
Matrix: Reagent

Date Sampled:
Date Received:

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	< 10	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	< 10	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	< 10	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

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ACCURACY DATA

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Microbiology

Client: ***Hydrophix*** **CRG Project ID:** ***27188b***

CRG ID#: ***55725***
Replicate #: PC1
DILUTION FACTOR:

Sample Description: QAQC Positive Control
Long Beach
Matrix: Culture

Date Sampled:
Date Received:

CONSTITUENT	METHOD	RESULT	UNITS	MDL	TIME ANALYZED	DATE ANALYZED	BATCH ID
E. coli / Colilert	Colilert	PASS	MPN/100 mL	10	17:00	27-Jul-07	0727
Enterococci / Enterolert	Enterolert	PASS	MPN/100 mL	10	17:00	27-Jul-07	0727
Total Coliform / Colilert	Colilert	PASS	MPN/100 mL	10	17:00	27-Jul-07	0727

MDL= Method Detection Limit (CFR 40 Part 136); RL= Reporting Limit; J= Estimated Value below the RL and above the MDL; ND= Not Detected; NA= Not Applicable; MI = Matrix Interferance

California ELAP Certificate # 2261

CRG Laboratories, Inc.
2020 Del Amo Blvd., Suite 200, Torrance, CA 90501-1206
(310) 320-3211 FAX (310) 320-1276

CHAIN-OF-CUSTODY RECORD

Client Name and Address:	HYDROPHIX 3873 Carter Ave Suite # 202 Riverside, CA 92501
Sampled By:	Angel Maldonado
Phone:	951-788-7667
FAX:	951-788-7722
Email	mrmaldonado1@hotmail.com
Project Manager:	Angel Maldonado
Project Name:	Long Beach
Project/PO Number:	

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container #	Container Type	Total Coliforms by Colilert ®	*E. coli* by Colilert®	Enterococcus by Enterolert ®								
1	IF 713	7-27-07	09:58														
2	EF 713		09:58														
3	IF 713		10:00														
4	EF 713		10:00														
5	IF 713		10:02														
6	EF 713		10:02														
7	IF SEASIDE & CEDAR		10:48														
8	EF SEASIDE & CEDAR		10:48														
9	IF SEASIDE & CEDAR		10:50														
10	EF SEASIDE & CEDAR		10:50														

Correct Containers:	Yes	No		
Sample Temperature:	Ambient	Cold		
Sample Preservative:	Yes	No		
Turnaround Time:	Specify:	Standard TAT		
Holding Time:	Specify:		OK	NA

Comments:

CRG Project ID : 271886 (lab use only)

CRG Sample ID: 55694 ~ 55703 (lab use only)

RELIQUINSHED BY

Signature:	[signature]
Print:	ERIC OWEN
Company:	HYDROPHIX
DATE:	7-27-07 TIME: 1:10 pm

RECEIVED BY

Signature:	S. Antony Basil
Print:	ANTONY BASIL
Company:	CRG Laboratories, Inc.
DATE:	7-27-07 TIME: 1:10pm.

CRG Laboratories, Inc.
2020 Del Amo Blvd., Suite 200, Torrance, CA 90501-1206
(310) 320-3211 FAX (310) 320-1276

CHAIN-OF-CUSTODY RECORD

Client Name and Address:	HYDROPHIX 3873 Carter Ave Suite # 202 Riverside, CA 92501
Sampled By:	Angel Maldonado
Phone:	951-788-7667
FAX:	951-788-7722
Email	mrmaldonado1@hotmail.com
Project Manager:	Angel Maldonado
Project Name:	Long Beach
Project/PO Number:	

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container #	Container Type	Total Coliforms by Colilert ®	*E. coli* by Colilert ®	Enterococcus by Enterolert ®								
11	IF SEASIDE & CEDAR	7-27-07	10:52														
12	EF SEASIDE & CEDAR		10:52														
13	IF QUEEN MARY WAY		11:19														
14	EF QUEEN MARY WAY		11:19														
15	IF QUEEN MARY WAY		11:21														
16	EF QUEEN MARY WAY		11:21														
17	IF QUEEN MARY WAY		11:23														
18	EF QUEEN MARY WAY		11:23														
19	IF 1312		11:59														
20	EF 1312		11:59														

Correct Containers:	**Yes**	**No**		
Sample Temperature:	**Ambient**	**Cold**		
Sample Preservative:	**Yes**	**No**		
Turnaround Time:	**Specify:**	**Standard TAT**		
Holding Time:	**Specify:**		**OK**	**NA**

Comments:

CRG Project ID : 27188b (lab use only)

CRG Sample ID: 55704 – 55713 (lab use only)

RELIQUINSHED BY

Signature:	[signature]
Print:	ERIC OWEN
Company:	HYDROPHIX
DATE:	7-27-07 **TIME:** 1:10 pm

RECEIVED BY

Signature:	S. Antony Basil
Print:	ANTONY BASIL
Company:	CRG Laboratories, Inc.
DATE:	7-27-07 **TIME:** 1:10pm

CRG Laboratories, Inc.
2020 Del Amo Blvd., Suite 200, Torrance, CA 90501-1206
(310) 320-3211 FAX (310) 320-1276

CHAIN-OF-CUSTODY RECORD

Client Name and Address:	HYDROPHIX 3873 Carter Ave Suite # 202 Riverside, CA 92501
Sampled By:	Angel Maldonado
Phone:	951-788-7667
FAX:	951-788-7722
Email	mrmaldonado1@hotmail.com
Project Manager:	Angel Maldonado
Project Name:	Long Beach
Project/PO Number:	

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container #	Container Type	Total Coliforms by Colilert ®	*E. coli* by Colilert ®	Enterococcus by Enterolert ®								
21	IF 1312	7-27-07	12:01														
22	EF 1312	↓	12:01														
23	IF 1312		12:03														
24	EF 1312		12:03														
25	IF 1324		12:28														
26	EF 1324		12:28														
27	IF 1324		12:30														
28	EF 1324		12:30														
29	IF 1324		12:32														
30	EF 1324	↓	12:32														

Correct Containers:	Yes	No		
Sample Temperature:	Ambient	Cold		
Sample Preservative:	Yes	No		
Turnaround Time:	Specify:	Standard TAT		
Holding Time:	Specify:		OK	NA

Comments:

CRG Project ID : 27188b (lab use only)

CRG Sample ID: 55714~55726 (lab use only)

RELIQUINSHED BY

Signature:	[signature]		
Print:	Eric Owen		
Company:	HYDROPHIX		
DATE:	7-27-07	**TIME:**	1:10 pm

RECEIVED BY

Signature:	S. Antony Basil		
Print:	ANTONY BASIL		
Company:	CRG Laboratories, Inc.		
DATE:	7-27-07	**TIME:**	1:10 pm

CHAIN-OF-CUSTODY

CRG
Marine Laboratories, Inc.

SAMPLE RECEIVING

CRG Project ID
271886

CLIENT NAME: Hydrophix

DATE RECEIVED: 7/27/07

COURIER INFORMATION		
☐ CRG	☐ FEDEX	TRACKING NUMBER
☒ OTHER*	☐ UPS	

TEMPERATURE	
2 °C	☐ BLUE ICE
	☒ WET ICE
	☐ NO ICE

Chain-of-Custody	
☒	INCLUDED
☒	SIGNED
☐	NOT INCLUDED

SAMPLE MATRIX	
☐	LIQUID
☐	SOLID
☐	OTHER*

CONDITION OF SAMPLES UPON ARRIVAL

	YES	NO*	NA
All sample containers intact and good condition	☒	☐	☐
All samples listed on COC are present	☒	☐	☐
Sample ID on containers consistent with COC	☒	☐	☐
Correct containers used for analyses requested	☒	☐	☐
All samples received within method holding time	☒	☐	☐

*NOTES

COMPLETED BY: AG

2020 Del Amo Boulevard Suite 200, Torrance, CA 90501 · (310) 533-5190 · FAX (310) 533-5003

ATTACHMENT III
(“Black Box” Smart Sponge®
Characterization Report)

MATERIALS CHARACTERIZATION REPORT

Report No.: 0708.22 **Date:** August 24, 2007

Customer: Rodolfo Manzone, Ph.D.
AbTech Industries
4110 N Scottsdale Rd Ste. 235
Scottsdale, AZ 85251

Customer P.O.: 5589

Samples: Three SmartSponge® based products, designated:

Sample 1, Long Beach UUF, P/N C01414H
Sample 2, Long Beach UUF, P/N C01414H
Sample 3, Long Beach UUF, P/N C01414H

Objectives: Utilizing Thermal Gravimetric Analysis (TGA), Energy Dispersive Spectroscopy (EDS) and Thermal Desorption Gas Chromatograph Mass Spectroscopy (TD-GC-MS):

Characterize "hydrocarbons, sediment and other foreign elements" Observed in Used SmartSponge® Products

Tel: 480.814.8200
Fax: 480.814.8201
www.analyzeinc.com
318 South Bracken Lane • Chandler, Arizona 85224
ANALYZE
THE MATERIALS PROBLEM SOLVERS

SUMMARY

1. Comparisons of the field samples contents based on TGA data is shown in Summary Table I. The values are listed in weight percent (raw TGA data) and weight of each type of material based the known weights of as received UUF and the weight of the materials used in their manufacture. Thus, the results are corrected for the contribution from the New Popcorn. Elemental data from the residue remaining from the TGA experiment is based on EDS assignment. While the two most intense emission lines from the EDS trace are reflected by being typed in bold, the technique (EDS) is considered a qualitative analysis. A more accurate measure of the individual elemental content requires additional analysis.

Summary Table I – TGA Based Averaged Content Data and EDS Results

Sample ID	Volatiles*	Semi-Volatiles	Aromatics/ Char	Inorganic	Elements in Residue***
Sample 1, Normalized Average**	0	69.79 % 3.38 lbs	8.30 % 1.71 lbs	21.91 % 4.67 lbs	C,O,Fe,Mg,Al,**Si**,P,S,K,**Ca**,Ti,Zn
Sample 2, Average	28.14 % 7.15 lbs	51.28 % 1.23 lbs	1.98 % 0.41 lbs	18.60 % 4.63 lbs	C,O,Fe,Na,Mg,**Al**,**Si**,P,S,K,Ca,Ti,Zn
Sample 3, Average	8.05 % 2.07 lbs	76.98 % 7.98 lbs	2.11 % 0.45 lbs	12.87 % 3.21 lbs	C,O,Fe,Na,Mg,**Al**,**Si**,P,S,K,Ca,Ti,Mn

*Based on weight loss below 200 °C, volatiles results likely include moisture.
**Sample 1 data contains high levels of volatiles (likely moisture), hence are not a good approximation of used Popcorn for this type of calculation. Normalization of the averaged data from the two trials whereby the "volatiles" are assumed to be zero are provided.
***Data obtained from wall Popcorn specimen from each UUF.

2. Differences in sample content were found such that within the same UUF;
   wall samples show increased "aromatics/char" and "inorganics" loading,
   bottom samples show increased "semi-volatiles" loading,
   "volatiles" showed varied trending (attributed largely to water content).

3. Of the inorganic elements detected, the intensity (noted in bold in the table) of the EDS signals for aluminum, silicon and calcium may arise from casual contamination (e.g., dust, dirt) as the predominant species. The inorganic content (0.8%) is low in the New Popcorn and contains the same predominant elements.

4. Carbon and oxygen was detected in all residues by EDS. It is likely calcium carbonate is present which reforms from calcium oxide after cooling and exposure to air. Elements detected in the used samples that are not detected in the New Popcorn include sodium, sulfur, titanium, manganese and zinc.

5. Summary Table II contains the volatiles/semi-volatiles detected in each of the field samples (bottom sample from each UUF) by TD-GC-MS. All three UUF samples contained hydrocarbon oil (e.g., motor oil, transmission oil, etc.). The UUF samples contained a variety of components ranging from mixed hydrocarbons, solvents, components of cosmetic products (e.g., stearates from cosmetic products, lotions, shampoos, detergents, etc.). Tetralkylammonium salts of hydrocarbon acids are commonly used in cosmetic/detergent products. Samples 2 and 3 also contained substituted phenols other than the BHT anti-oxidant that may be attributed to collection from the environment. Samples 2 and 3 were very similar to each other and differed from Sample 1 in the C_{16}/C_{18} acids collected.

Summary Table II – Volatile Identification Data by GC-MS

Sample ID	Volatiles/Semi-volatiles*
Sample 1	Solvents (chloromethane, acetaldehyde, acetic acid, methyl acetate), trimethylamine, Crotonic acid, Methylthio-benzothiazole, N,N-Dimethyl Octadecanamine, C_{16} & C_{18} acids (and their esters), Hydrocarbon Oil
Sample 2	Solvents (acetic acid, acetone), N,N-Dimethyl Octadecanamine, substituted phenols, Hydrocarbon Oil
Sample 3	Solvents (acetic acid, acetone), N,N-Dimethyl Octadecanamine, Palmitic acid, substituted phenols, Hydrocarbon Oil

*Components listed for used samples are not those detected in the New Popcorn. It is unknown if the effects of environmental exposure degradation on the alpha-olefin sponge are the source of the long chain alkanes/acids or if they are actually being trapped by the sponge.

INTRODUCTION

The Long Beach UUF samples were received from R Manzone on August 14th. The objectives are listed on the Title page.

ANALYSIS

Sample Preparation. The samples were removed from their cardboard boxes and weighed just prior to analysis. The weights of each are provided in Table I. The weight of the completely assembled P/N C01414H (16 lbs) and the weight of the SmartSponge® Popcorn material (12 lbs) used in the product was provided by AbTech. All devices contained visible residual moisture in their "as received" state.

Table I – Weight of "As Received" UUF Samples, P/N C01414H

Sample ID	Weight, lbs
Sample 1	25.76
Sample 2	29.42
Sample 3	29.71

Analytical specimens of used Popcorn product were taken from two locations, at the side-wall of the UUF approximately half way up and from the bottom (below the surface webbing). Thermal gravimetric analysis data was acquired from each area sampled. Energy Dispersive Spectroscopy and Gas Chromatography-Mass Spectrometry data was obtained from only one sample from each device.

Photographs of the "as received" samples and the locations where bottom and wall Popcorn specimens were obtained are provided in Photos 1-3.

Photo 1 – Sample 1

Photo 2 – Sample 2

Photo 3 – Sample 3

Thermal Gravimetric Analysis (TGA). TGA measures the change in weight of a material as it is heated. Typically, organic based materials (e.g., polymers and additives) thermally degrade at moderate temperatures (300-500 °C) with loss of weight while inorganic materials do not exhibit weight loss in this temperature range. With carbon black filled formulations or aromatic polymers, further weight loss can be observed when oxygen or air is introduced as purge gas to complete the oxidation of the organic materials and carbon black.

A Perkin-Elmer TGA7 Analysis Module and Perkin-Elmer Pyris software for windows were used for the analysis. The sample was heated from 40 °C to 600 °C in a nitrogen atmosphere at a rate of 10 °C/min then heated from 600 °C to 950 °C (ramped at 10 °C/min) in an air atmosphere.

Previous efforts (see ANALYZE Report No. 0705.16) found that the following generic content categories (and potential sources) may be determined based on TGA results. The types of materials collected by the devices may be described as organic (volatiles, semi-volatiles, aromatic/char) and inorganic (sediment):

- volatiles (water, solvents),
- semi-volatiles (Popcorn resin, adsorbed organic materials, “hydrocarbons”),
- aromatics/char (Popcorn AO package, carbon black, environmental aromatics), and
- inorganic (Popcorn filler/catalysts, adsorbed sediment, metals).

The contribution of Popcorn itself (see AR0705.16) to the TGA data for used samples is mainly from the resin constituting 98.4 % of weight loss due to Popcorn in the detected “semi-volatiles” region. A small amount of weight loss (0.8%) from Popcorn is associated with each of the aromatic/char and inorganic residue remaining regions.

Based on the TGA data from new Popcorn, collected weights of the used devices and the provided weights of product (new, data provided by AbTech), the thermal gravimetric experimental results were used to calculate contents of environmental components collected by the devices. The assumptions made are:

- Popcorn does not change with respect to the manufactured product (i.e., high lot to lot consistency level),
- Popcorn resin does not show significant changes (losses) due to environmental degradation,
- Non-Popcorn device components do not contribute significantly to the use parameters related to absorbency (i.e., lack of absorbent characteristics of reinforced walls, webbing, etc.),
- Weight losses of Popcorn (i.e., breakage of large Popcorn clusters to smaller ones then lost to environment) and/or non-Popcorn device components through usage are negligible.

The calculated weight of collected components and the wt.-% data from the TGA trace is provided in Table II. All TGA traces are included in the Appendix; the TGA traces of Sample 3 are shown in Figures 2a-b. Differences in sample content are found such that within the same UUF; the wall samples show increased "aromatics/char" and "inorganics" loading, bottom samples show increased "semi-volatiles" loading, "volatiles" content showed varied trending but may be attributed largely to water content.

Table II – TGA Data

Sample ID	Volatiles*	Semi-Volatiles	Aromatics/ Char	Inorganic
Sample 1, Wall**	39.01 % 8.49 lbs	37.09 % 11.81 lbs	7.46 % 1.53 lbs	16.43 % 3.48 lbs
Sample 1, Bottom**	40.16 % 8.74 lbs	47.23 % 11.81 lbs	2.57 % 0.46 lbs	10.04 % 2.09 lbs
Sample 1, Normalized**	0	69.79 % 3.38 lbs	8.30 % 1.71 lbs	21.91 % 4.67 lbs
Sample 2, Wall	26.45 % 6.72 lbs	48.32 % 0.47 lbs	2.29 % 0.49 lbs	22.95 % 5.74 lbs
Sample 2, Bottom	29.84 % 7.58 lbs	54.24 % 1.98 lbs	1.67 % 0.33 lbs	14.26 % 3.53 lbs
Sample 3, Wall	3.73 % 7.78 lbs	76.21 % 7.78 lbs	2.56 % 0.56 lbs	17.50 % 4.40 lbs
Sample 3, Bottom	12.37 % 3.18 lbs	77.75 % 8.18 lbs	1.65 % 0.33 lbs	8.24 % 2.02 lbs

*Based on weight loss below 200 °C, volatiles results likely include moisture.
**Sample 1 data contains high levels of volatiles (likely moisture), hence are not a good approximation of used Popcorn for this type of calculation. Normalization of the averaged data from the two trials whereby the "volatiles" are assumed to be zero are provided.

Data listed in Table II was calculated to exclude contributions from the Popcorn.

For "volatiles" (no contribution from Popcorn), in Sample 3, bottom:

[TGA fraction] x [wt. of UUF (minus non-Popcorn components)] = wt. of "volatiles"

[0.1237] x [29.71 lbs – 4 lbs] = 3.18 lbs of "volatiles" collected

For "semi-volatiles" (contribution from Popcorn), in Sample 3, bottom:

{[TGA fraction] x [wt. of UUF (minus non-Popcorn components)]}
– {[TGA fraction] x [wt. of Popcorn used in manufacture]} = wt. of "semi-volatiles"

{[0.7775] x [29.71 – 4 lbs]} – {[0.984] x [12 lbs]} = 8.18 lbs of "semi-volatiles" collected

Figure 2a – Sample 3, Bottom

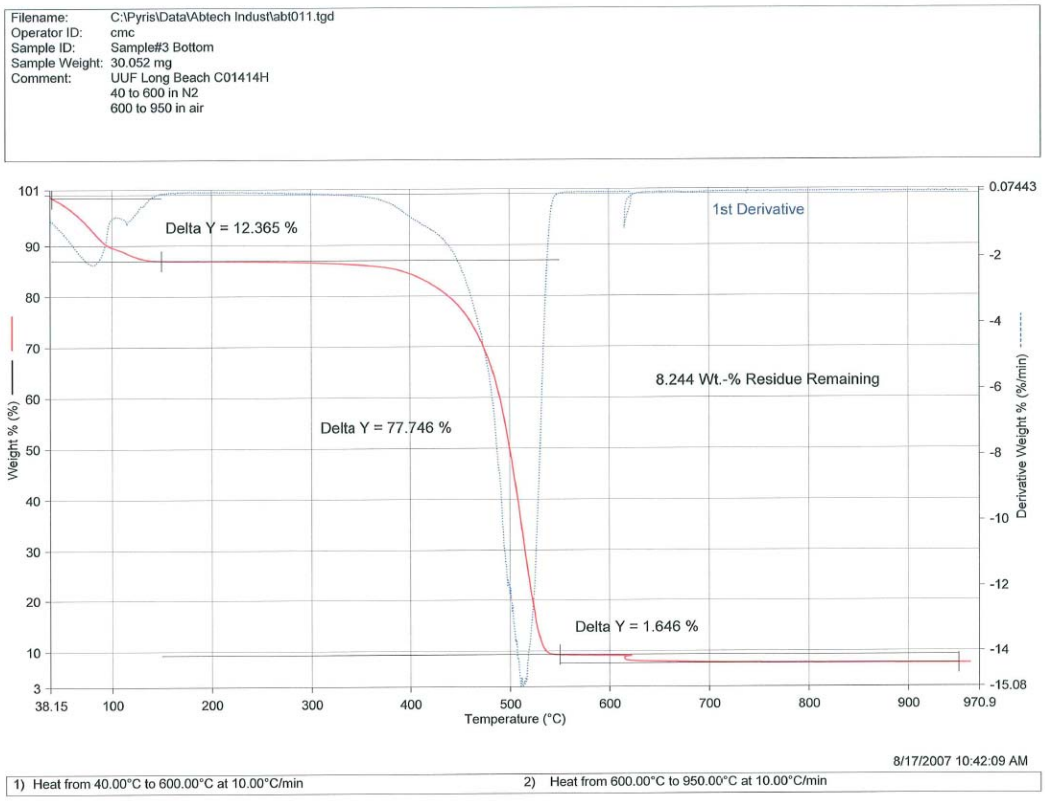
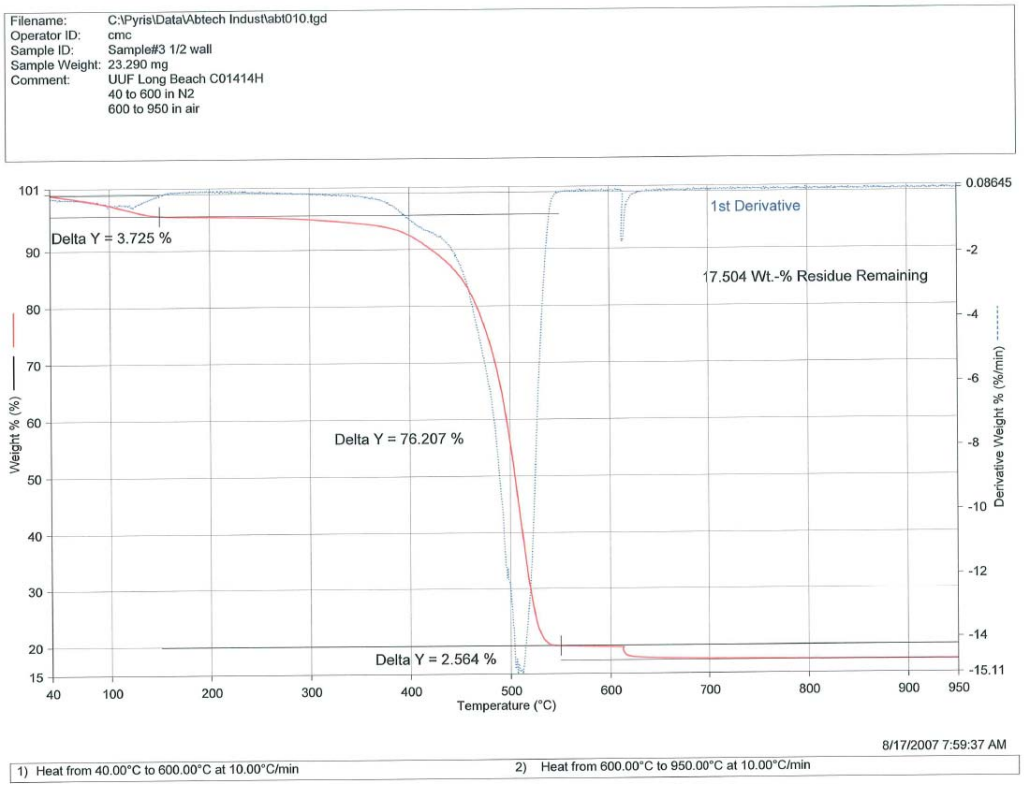


Figure 2b – Sample 3, Wall



Energy Dispersive Spectroscopy (EDS). Analyses were conducted using SEM/EDS procedures by SEMTEC Laboratories (Phoenix, AZ). A 20 KV beam potential was employed. Typically, lower atomic weight elements such as hydrogen and nitrogen are not detectable by EDS methods. Carbon and oxygen are detectable when present in relatively large quantities. In some cases minor amounts of one element may be masked by a large peak from a major element.

The EDS trace of the inorganic residue is displayed in Figures 3a-c. Samples obtained from the wall of the UUF devices were used for this analysis. The elements detected may be treated in a qualitative manner. Accurate elemental content data may be determined by metals analysis techniques. Elemental data are listed in the Summary section.

Figure 3a

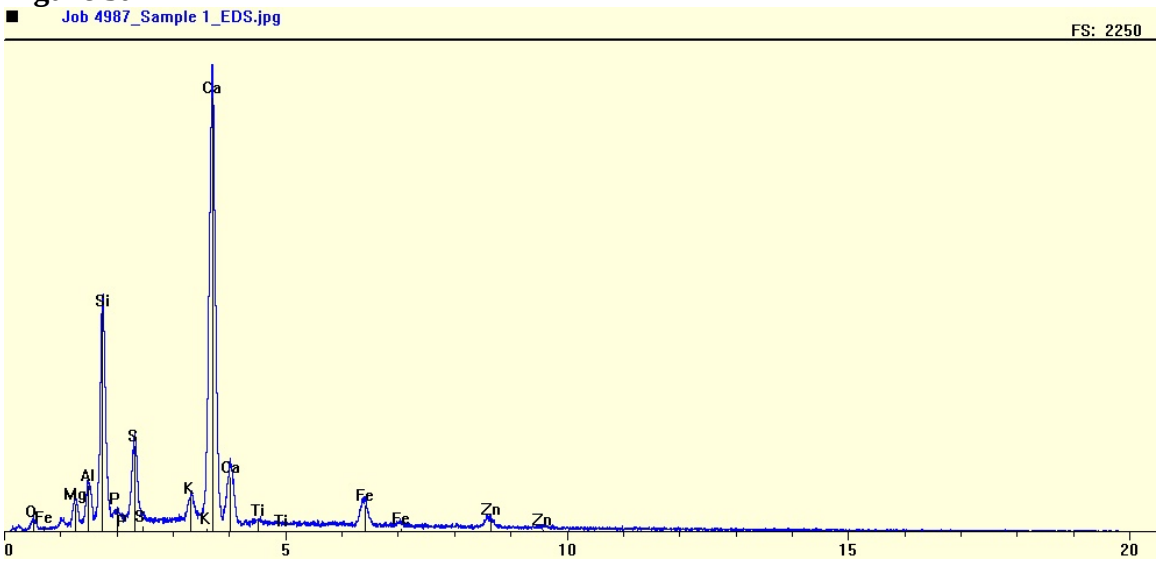


Figure 3b

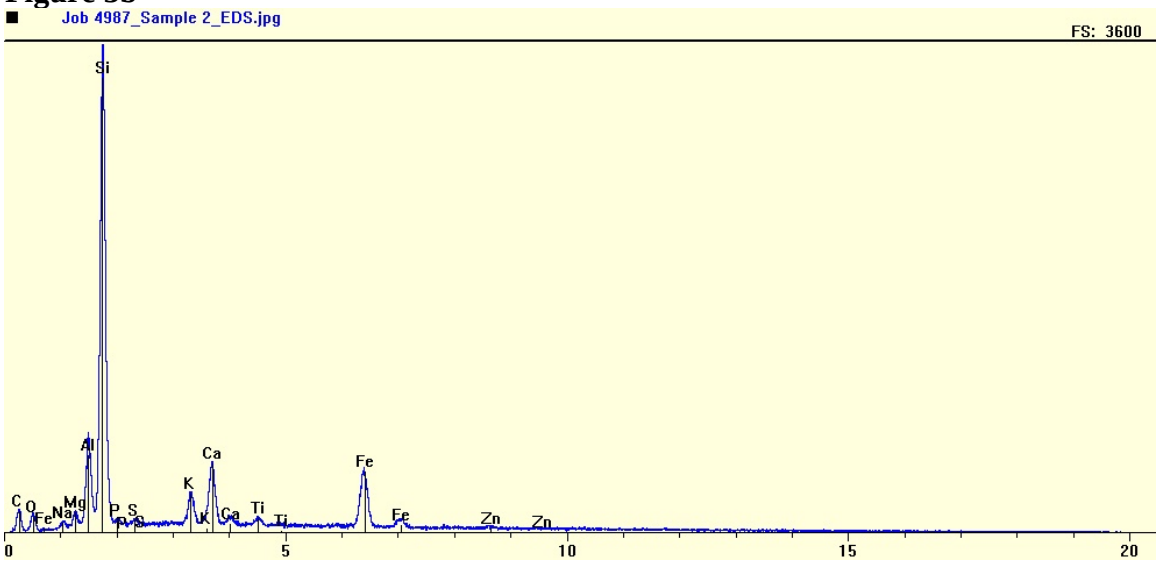
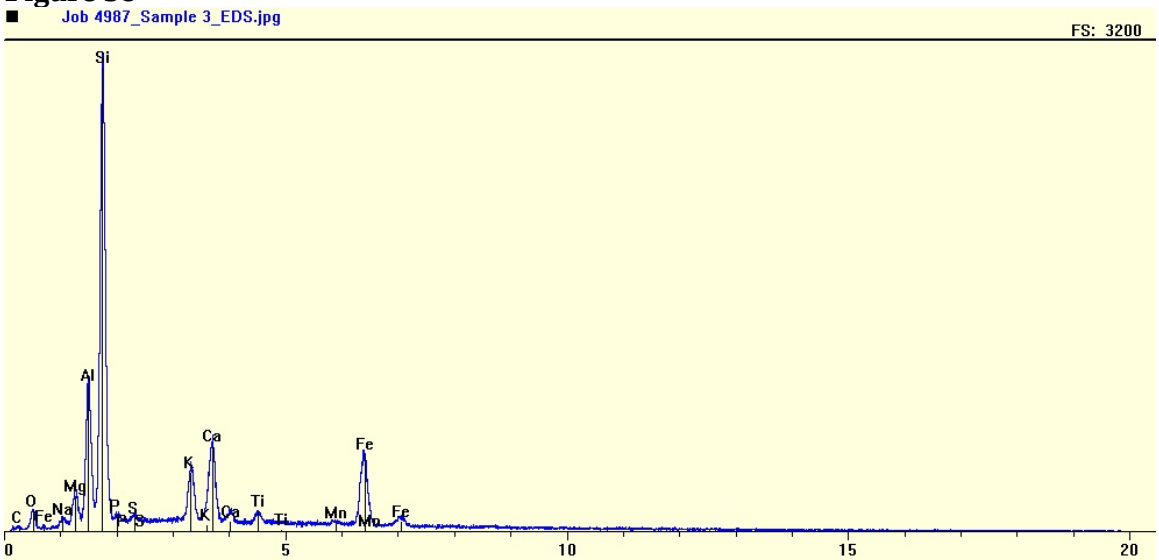


Figure 3c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FS: 3200
Si
Al
Mg
O
C
Fe
Na
P
S
K
Ca
Ti
Mn
Mo
0
5
10
15
20

Thermal Desorption Gas Chromatography-Mass Spectroscopy (TD-GC-MS). GC-MS is a valuable analytical technique for the separation and identification of volatile organic compounds. The compounds, which are separated on the GC column, are positively identified by matching their mass spectra to those of the reference spectra contained in the 390,000 spectra NIST digital library.

Thermal desorption is a sampling technique in which a small amount of a solid sample is heated. Any compound that is volatilized is entrained in a stream of helium and trapped by a cryo-focusing sample inlet system, located at the head of the GC column. Subsequent flash vaporization ensures that the entire sample enters the GC column at one time, leading to a proper separation of the various components.

Instrumentation. GC-MS analysis was performed using an Agilent 6890N Gas Chromatograph (GC) equipped with an Agilent 5975B Quadrupole Mass Selective Detector and Gerstel Thermal Desorption System, which included a Gerstel Cooled Injection System split/splitless injection port that supplied the cryo-focusing capability. An Agilent HP5ms capillary GC column (30 m x 0.25 mm with 0.25 μm film thickness) was used for chromatography under the following conditions:

Injector Temp.:	-150 °C to 280 C at 12 C/sec
MS Transfer Line Temp.:	300 °C
Injector Split Ratio:	30:1 (solvent vent)
He Flow Rate:	1.0 ml/min
Column Oven:	40 °C – 280 C at 15 °C/min hold 10 min
MSD:	m/z 29-550
Thermal Desorption System:	
	splitless mode
	desorb flow: 50 ml/min
	Transfer line temp 300 C
Desorption Range:	30 °C – 300 °C at 60 C/min, hold 3 min

The thermal desorption system (unit, transfer line) and the GC column were baked out to remove any contaminants prior to sample analysis.

Approximately 10 - 20 mg of each sample was added to a clean desorption tube. It is worthy of noting that due to the nature of the samples (e.g., each portion containing various amounts of debris and solids), the size of the portion of “Popcorn”, as well as the weight of the portion, was utilized to determine appropriate sample size. After weight determination, each tube was inserted into the thermal desorption system and heated to the desired temperature (300 °C). The cryo-focusing chamber was held at -150 °C during the heating of the sample, and then rapidly ramped to 280 °C. During cryo-trapping, the MSD was off.

When analyzing multiple samples, of different or unknown makeup, by thermal desorption, a “pre sample blank” is required to verify that the system is free from “carry over” from the previous sample.

The blank analyzed prior to desorption of each sample was observed to contain only an air peak. This component is expected, and not due to the makeup of the sample.

Total Ion Chromatographic (TIC) plots of each of the samples (sampled areas, bottom) are compared to that of New Popcorn (acquired previously, see AR0705.16) in Figures 4a, 5a and 6a. The components detected that are not from the popcorn are listed in Tables III-V in black.

Late eluting broad peaks were present in the chromatogram which could not be identified discretely to one molecule by MS correlation. It is possible that these peaks are due to the presence of higher molecular weight hydrocarbons – as compounds of this species (e.g., oils) will sometimes respond chromatographically in this manner. Figures 4b, 5b and 6b contain a scale expansion plot of the region of the chromatogram in which these late eluting broad peaks were observed.

Table III – Sample 1, Long Beach UUF 300°C Desorption

Retention Time (min)	Component Identity	Retention Time (min)	Component Identity
1.682	Chloromethane	10.848	Nonylphenol
1.821	Acetaldehyde	10.917	Diphenylpropane
2.711	Bis-methylene cyclopentane	11.125	Heptadecane
3.370	Ethenyl cyclohexene	11.2-11.6	Nonylphenol isomers
3.416	Trimethylamine	11.807	Octadecene
3.509	Acetic acid	12.581	N,N-Dimethyl-hexadecanamine
3.636	Methyl acetate	12.708	Methyl palmitate
3.890	Styrene	13.044	Palmitic acid
4.110	Crotonic acid	13.425	Hexylbenzene
5.265	m/z 29,58,114,136	13.760	m/z 29,43,57,69,83,97,111,125,357 (hydrocarbon)
5.612	m/z 29,39,43,58,87,113,128	13.922	Stearyl trimethylammonium chloride
6.005	m/z 29,43,57,72,95,128,168	14.014	Methyl stearate
6.109	m/z 29,41,67,79,91,105,121,133,148	14.234	Stearic acid
7.519	m/z 41,79,91,105,120,133,162	14.800	m/z 43,58,86,296
10.582	Methylthio-benzothiazole	15.979	Styrene dimer

Components listed in red may arise from New Popcorn.

Figure 4a - Popcorn NEW and Sample 1, Long Beach 300°C Desorption

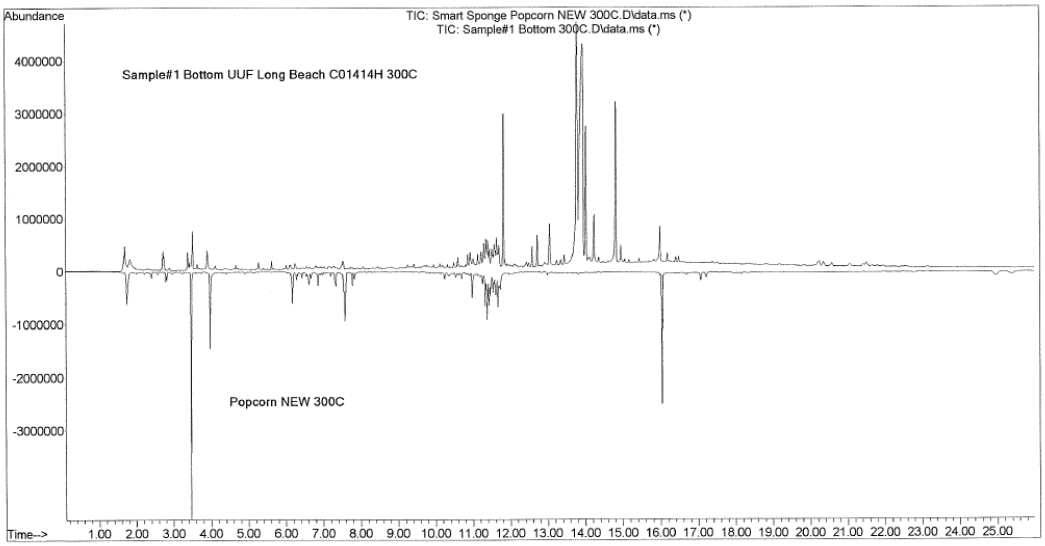


Figure 4b - Sample 1, Long Beach 300°C Desorption Expansion Plot

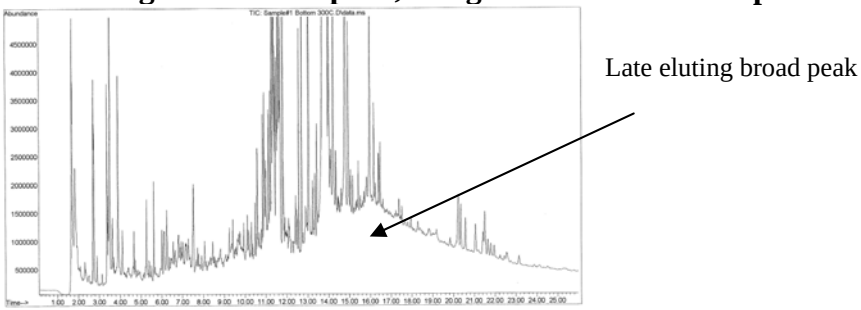


Table IV – Sample 2, Long Beach UUF 300°C Desorption

Retention Time (min)	Component Identity	Retention Time (min)	Component Identity
1.717	Butadiene	11.1-11.7	Nonylphenol isomers
1.890	Acetone	11.795	heptadecenal
3.046	Acetic acid	12.940	Palmitic acid
3.497	Ethenyl cyclohexene	13.760	Octadecyl chloride
3.994	Styrene	13.860	N,N-Dimethyl-octadecanamine
5.161	m/z 29,58,114	14.223	m/z 29,105,178,202,223,251,324
5.543	m/z 29,43,58,87,113,128	14.350	m/z 29,105,178,202,223,251,324
9.172	Bis-t-butyl phenol	14.789	m/z 43,58,86,247,261,296,360
9.426	Di-t-butyl benzoquinone	15.517	m/z 57,241,297,312,353,368,409
9.507	BHT-quinone-methide	15.979	Styrene dimer
9.773	BHT	17.470	Dihydroxy-tetrabutylbiphenyl
10.917	Diphenylpropane	18.071	Ethylenebis(di-t-butyl-phenol)

Components listed in red may arise from New Popcorn.

Figure 5a - Popcorn NEW and Sample 2, Long Beach 300°C Desorption

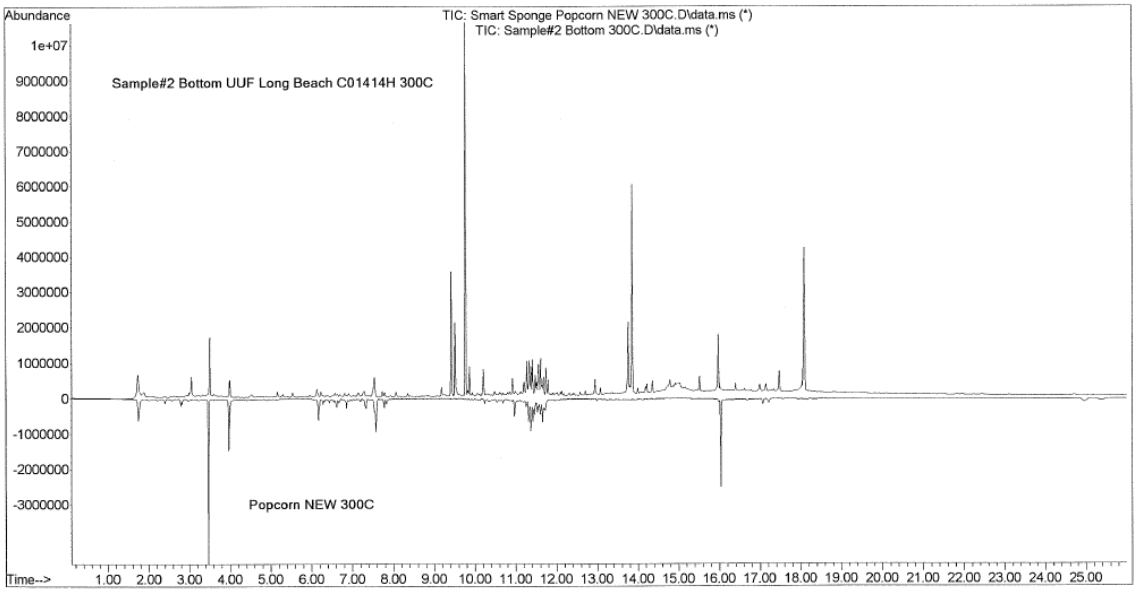


Figure 5b - Sample 2, Long Beach 300°C Desorption Expansion Plot

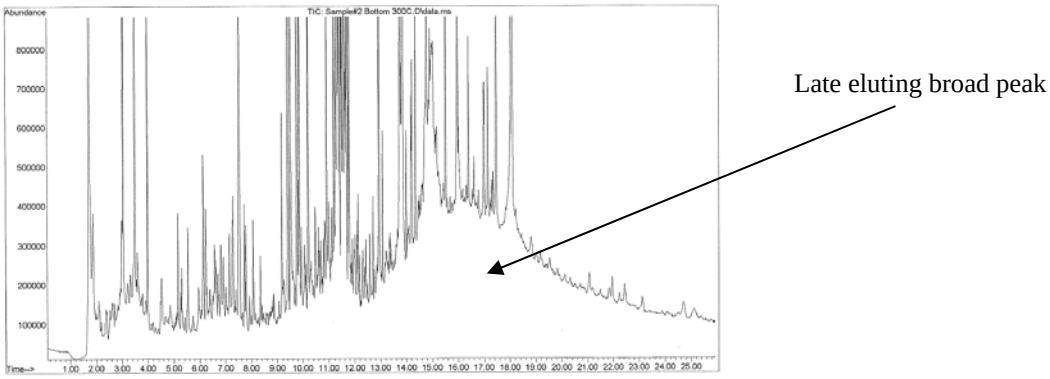


Table V – Sample 3, Long Beach UUF 300°C Desorption

Retention Time (min)	Component Identity	Retention Time (min)	Component Identity
1.717	Butadiene	11.1-11.7	Nonylphenol isomers
1.890	Acetone	11.795	heptadecenal
3.046	Acetic acid	12.940	Palmitic acid
3.497	Ethenyl cyclohexene	13.760	Octadecyl chloride
3.994	Styrene	13.860	N,N-Dimethyl-octadecanamine
5.161	m/z 29,58,114	14.223	m/z 29,105,178,202,223,251,324
5.543	m/z 29,43,58,87,113,128	14.350	m/z 29,105,178,202,223,251,324
9.172	Bis-t-butyl phenol	14.789	m/z 43,58,86,247,261,296,360
9.426	Di-t-butyl benzoquinone	15.517	m/z 57,241,297,312,353,368,409
9.507	BHT-quinone-methide	15.979	Styrene dimer
9.773	BHT	17.470	Dihydroxy-tetrabutylbiphenyl
10.917	Diphenylpropane	18.071	Ethylenebis(di-t-butyl-phenol)

Components listed in red may arise from New Popcorn.

Figure 6a - Popcorn NEW and Sample 3, Long Beach 300°C Desorption

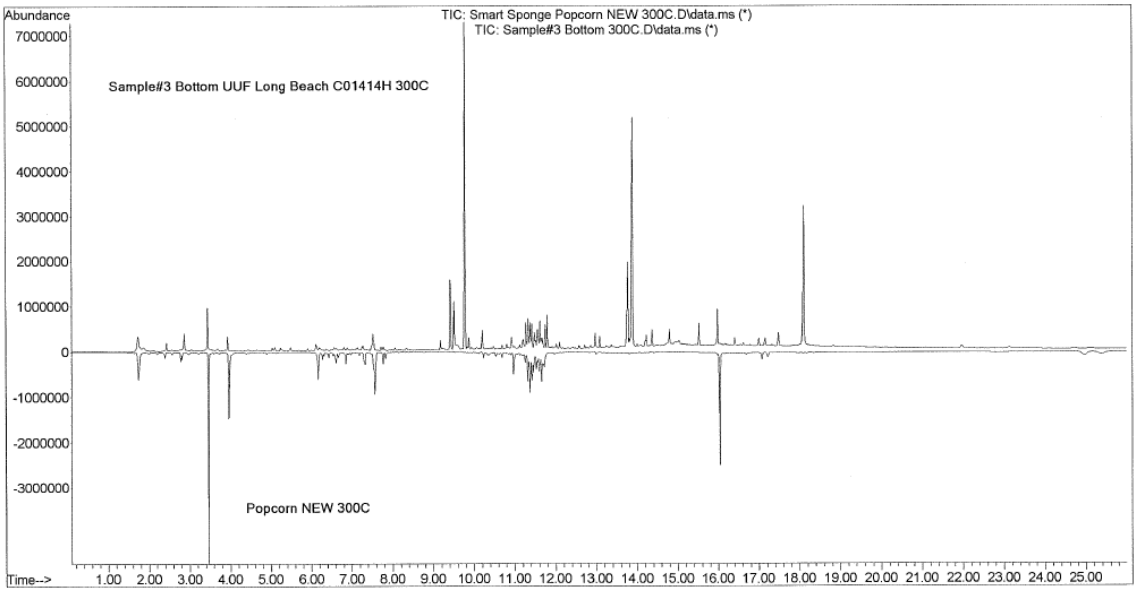
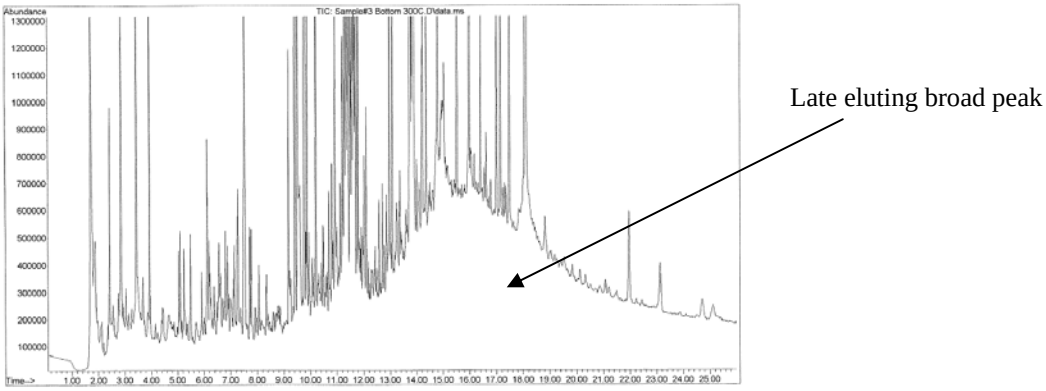


Figure 6b - Sample 3, Long Beach 300°C Desorption Expansion Plot



As questions arise during your review of this report do not hesitate to call.

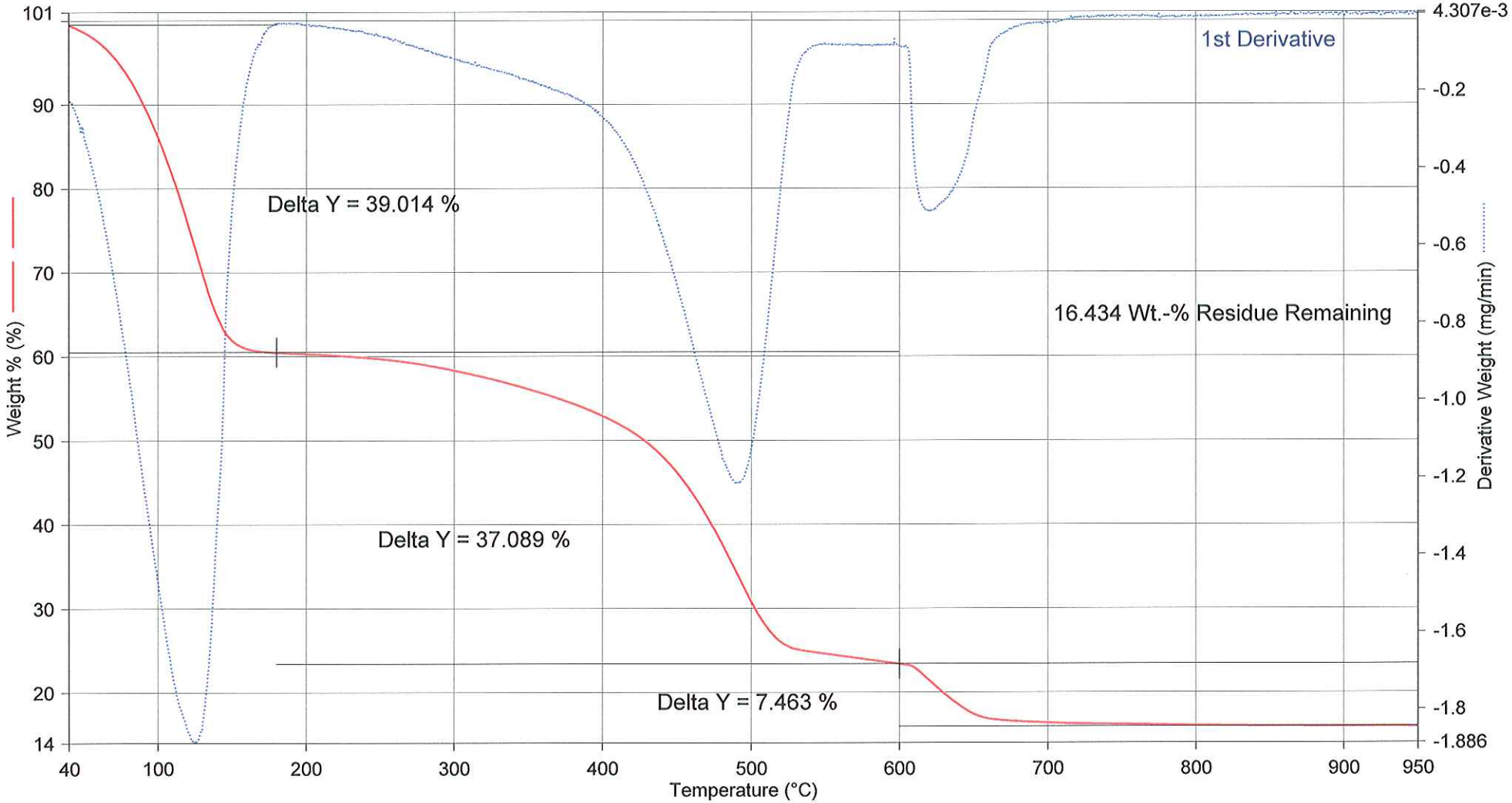
ANALYZE Inc.

Andrej (Andy) Sodoma, Ph.D.
Consulting Services Manager

Craig M. Caggiano
Consulting Chemist

Appendix

Filename:	C:\Pyris\Data\Abtech Indust\abt006.tgd
Operator ID:	cmc
Sample ID:	Sample#1 1/2 wall
Sample Weight:	32.596 mg
Comment:	UUF Long Beach C01414H 40 to 600 in N2 600 to 950 in air

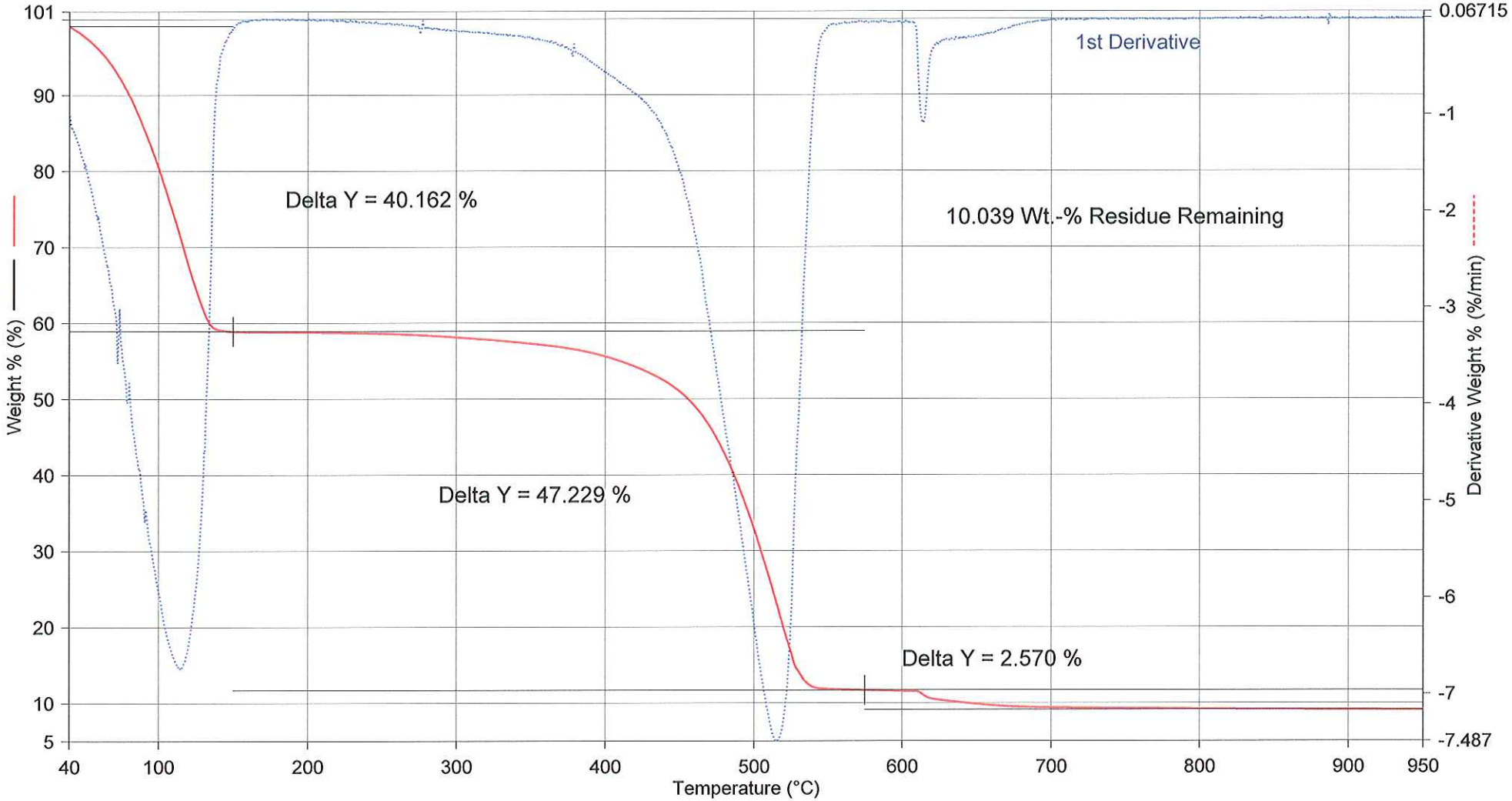


8/16/2007 9:19:49 AM

1) Heat from 40.00°C to 600.00°C at 10.00°C/min

2) Heat from 600.00°C to 950.00°C at 10.00°C/min

Filename:	C:\Pyris\Data\Abtech Indust\abt007.tgd
Operator ID:	cmc
Sample ID:	Sample#1 bottom
Sample Weight:	25.907 mg
Comment:	UUF Long Beach C01414H 40 to 600 in N2 600 to 950 in air



8/16/2007 10:56:56 AM

1) Heat from 40.00°C to 600.00°C at 10.00°C/min

2) Heat from 600.00°C to 950.00°C at 10.00°C/min

Long Beach Samples

Sample 1 P/N C01414H — **Colored areas denote entered experimental data**

Wt. "as received" used device	25.76	pounds
Wt. "as received" minus Non-Popcorn	21.76	pounds
Wt. of Popcorn in New Device	12.00	pounds
Wt. of Non-Popcorn in Device New	4.00	pounds
Wt. Gained	9.76	pounds

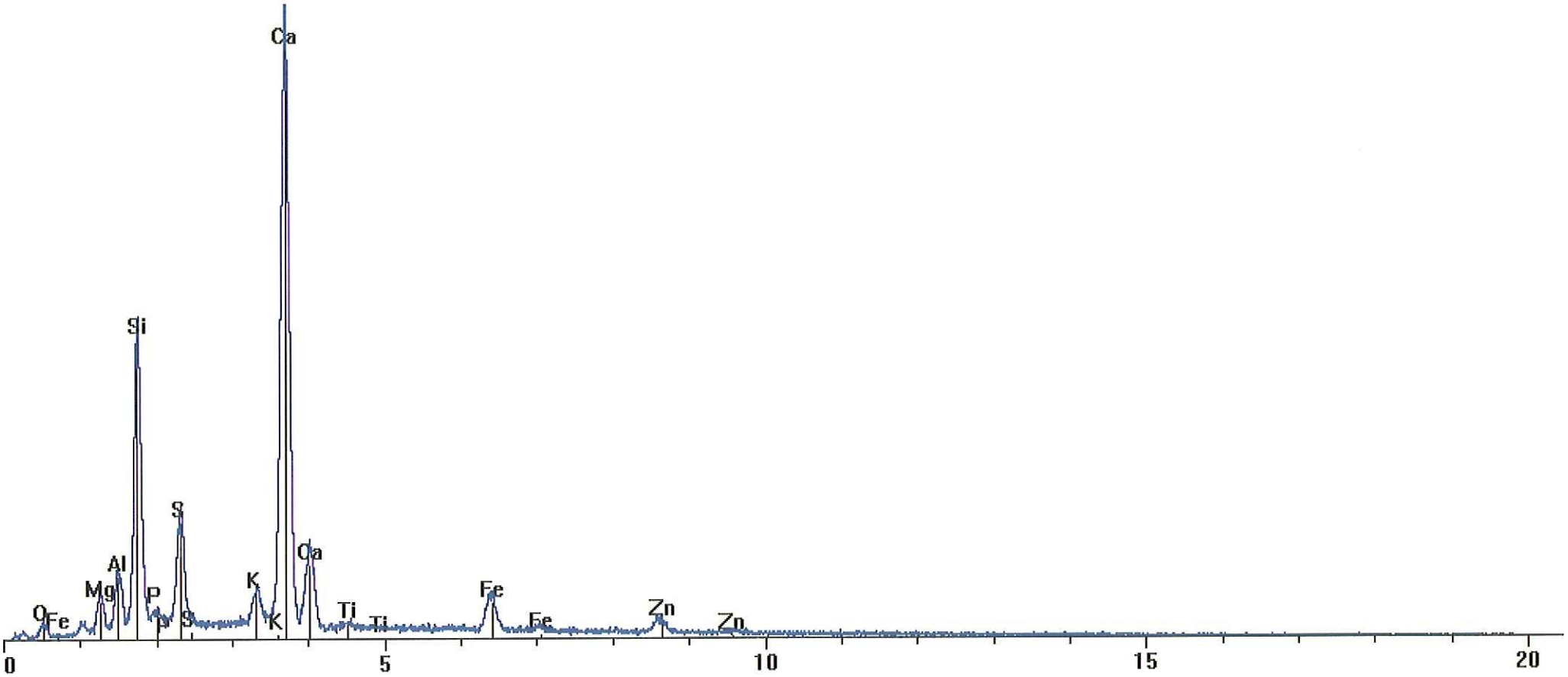
Losses in TGA Expts.	Sample Analysis wt-% TGA data as decimal fraction	Sample Device Mass Collected in Pounds	Wt-% Contribution from from New Popcorn as decimal fraction	Mass Contributed from New Popcorn Pounds
Wall Sample				
Volatiles	0.39014	8.49	0.000	0.00
Semi-volatiles (includes Popcorn)	0.37089	11.81	0.984	11.808
Aromatics-Char	0.07463	1.53	0.008	0.096
Inorganic Residue	0.16434	3.48	0.008	0.096
Total	1.00000	25.31		12.00
Bottom Sample				
Volatiles	0.40162	8.74	0.000	0.00
Semi-volatiles (includes Popcorn)	0.47229	11.81	0.984	11.808
Aromatics-Char	0.02570	0.46	0.008	0.096
Inorganic Residue	0.10039	2.09	0.008	0.096
Total	1.00000	23.10		12.00

Averaged TGA Values	Sample Analysis wt-% TGA data as decimal fraction	Sample Device Mass Collected in Pounds	Wt-% Contribution from from New Popcorn as decimal fraction	Mass Contributed from New Popcorn Pounds
Averaged				
Volatiles	0.39588	8.61	0.000	0.00
Semi-volatiles (includes Popcorn)	0.42159	11.81	0.984	11.808
Aromatics-Char	0.05017	1.00	0.008	0.096
Inorganic Residue	0.13237	2.78	0.008	0.096
Total	1.00000	24.20		12.00

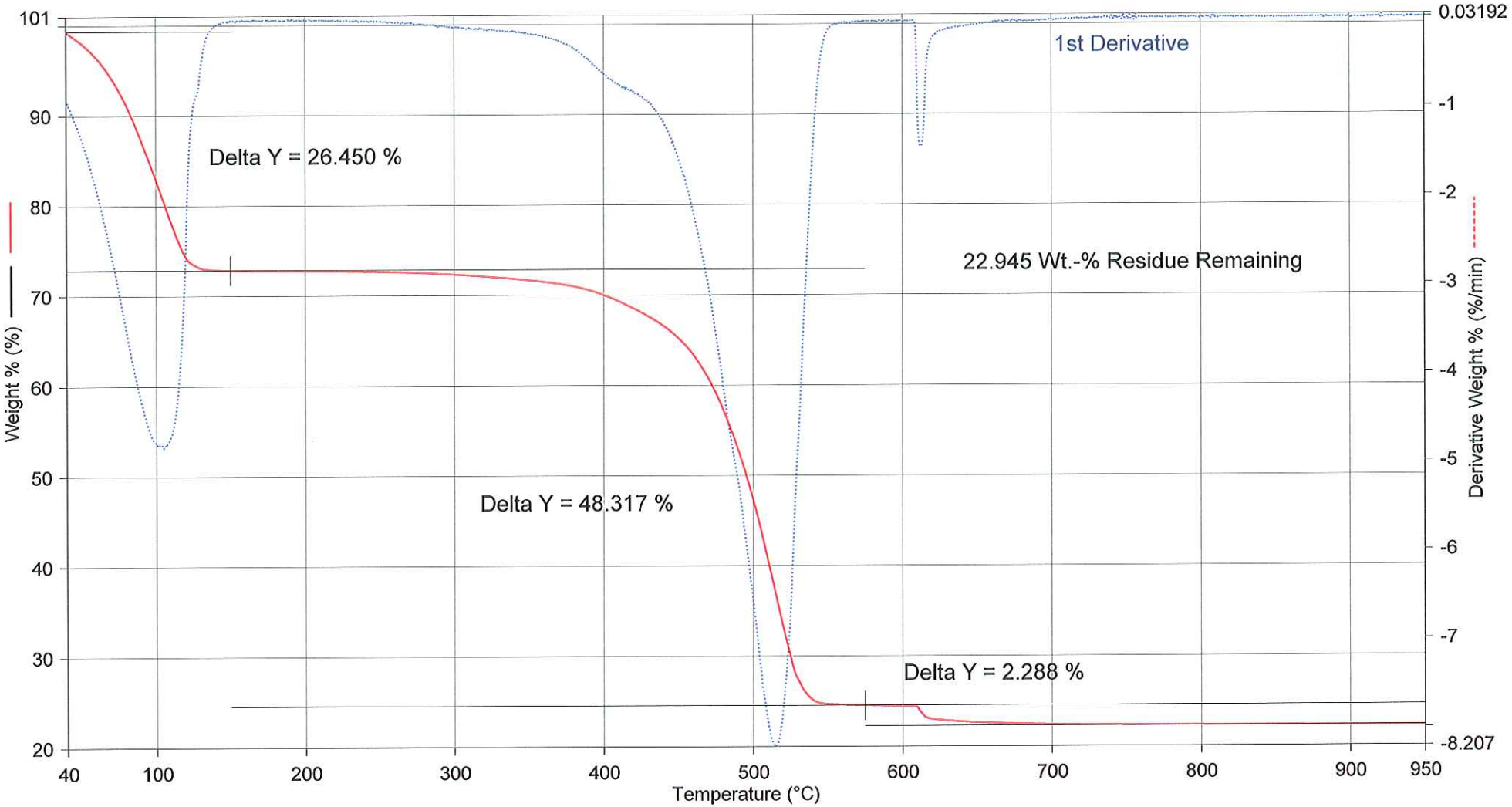
Normalized TGA Values To Exclude Volatiles From Averaged Data	Sample Analysis wt-% TGA data as decimal fraction	Sample Device Mass Collected in Pounds	Wt-% Contribution from from New Popcorn as decimal fraction	Mass Contributed from New Popcorn Pounds
Volatiles	0	0.00	0.000	0.00
Semi-volatiles (non-Popcorn)	0.69786	3.38	0.984	11.808
Aromatics-Char	0.08304	1.71	0.008	0.096
Inorganic Residue	0.21910	4.67	0.008	0.096
Total	1.00000	9.76		12.00

Job 4987_Sample 1_EDS.jpg

FS: 2250



Filename: C:\Pyris\Data\Abtech Indust\abt008.tgd
Operator ID: cmc
Sample ID: Sample#2 1/2 wall
Sample Weight: 28.269 mg
Comment: UUF Long Beach C01414H
40 to 600 in N2
600 to 950 in air

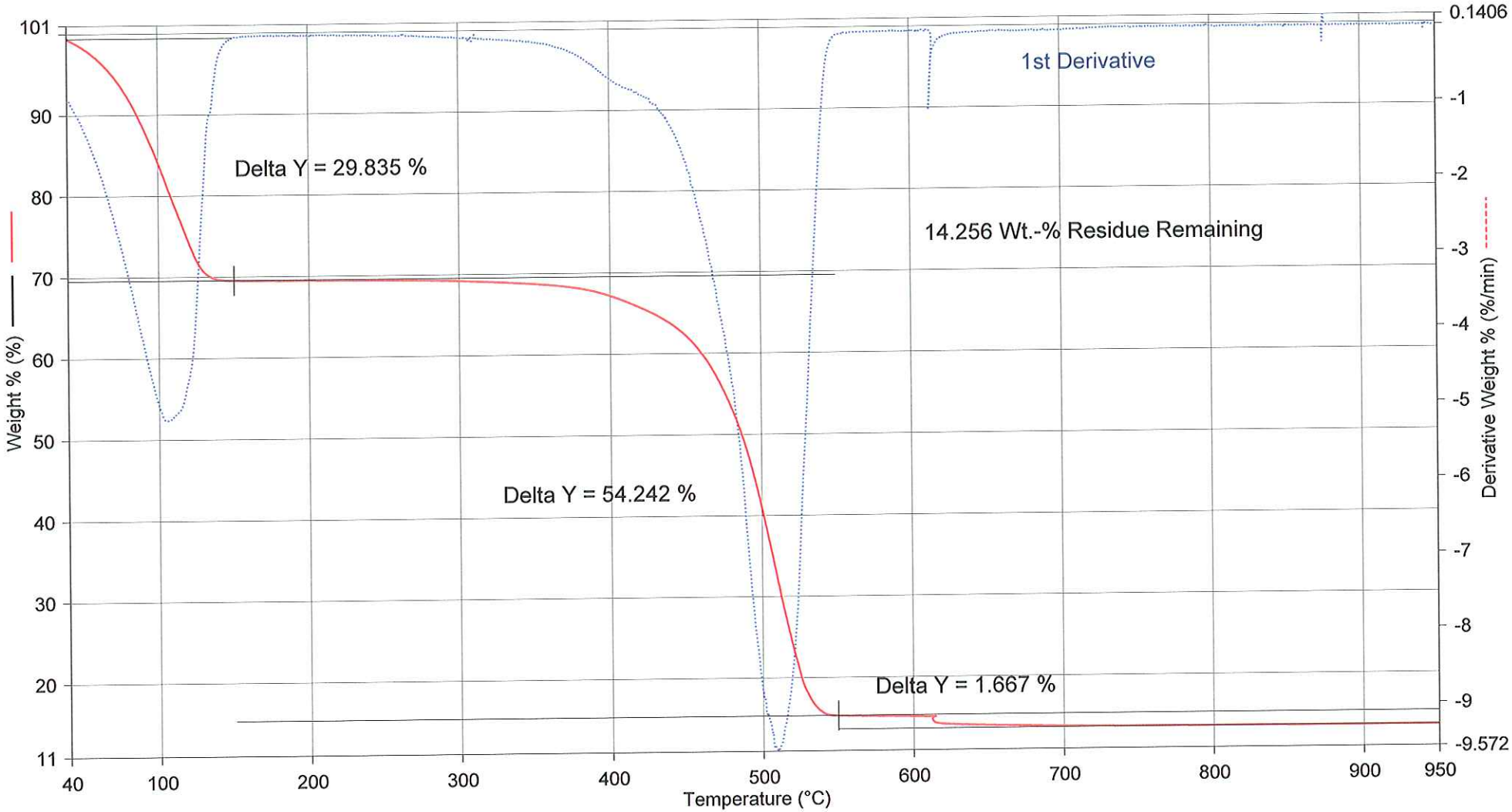


8/16/2007 2:38:17 PM

1) Heat from 40.00°C to 600.00°C at 10.00°C/min

2) Heat from 600.00°C to 950.00°C at 10.00°C/min

Filename: C:\Pyris\Data\Abtech Indust\abt009.tgd
Operator ID: cmc
Sample ID: Sample#2 bottom
Sample Weight: 35.356 mg
Comment: UUF Long Beach C01414H
40 to 600 in N2
600 to 950 in air



8/16/2007 5:04:40 PM

1) Heat from 40.00°C to 600.00°C at 10.00°C/min

2) Heat from 600.00°C to 950.00°C at 10.00°C/min

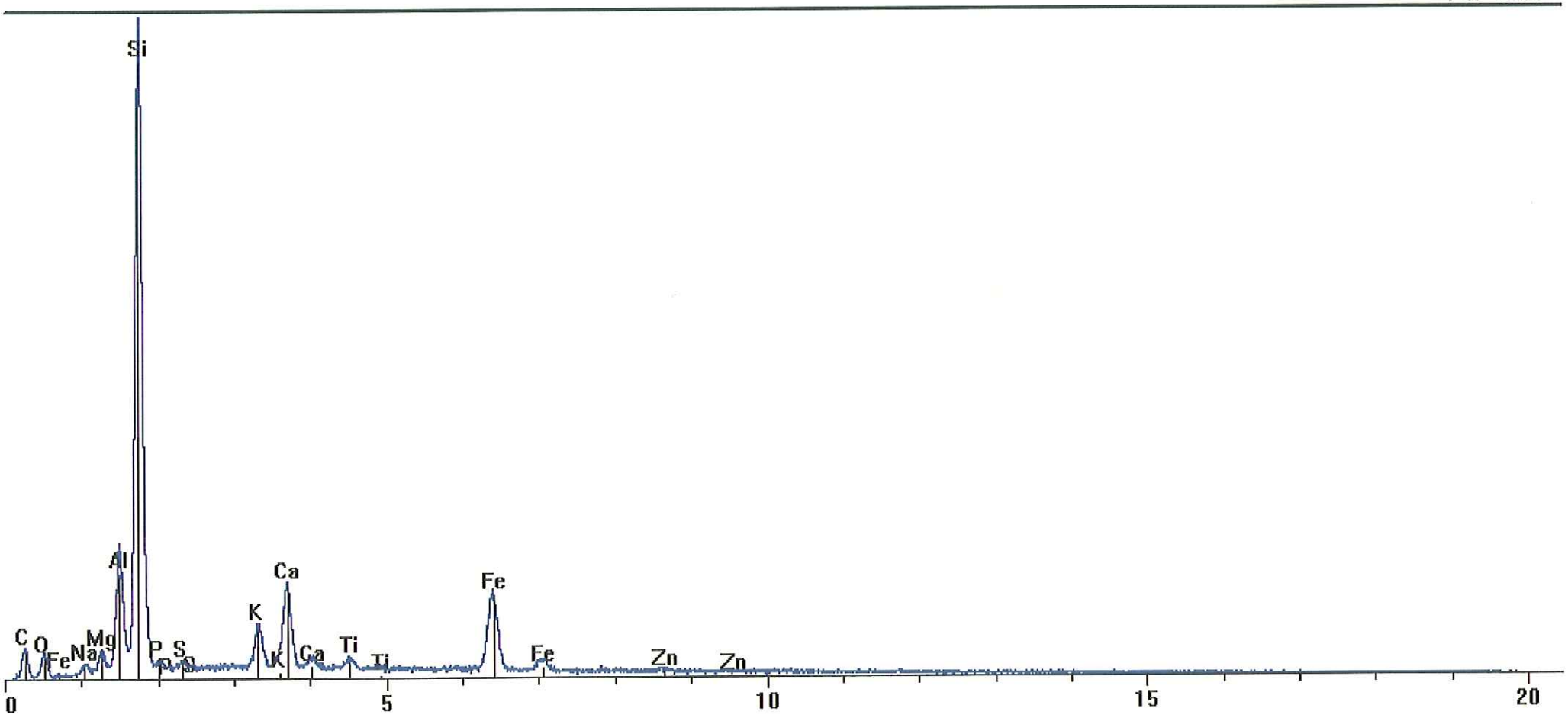
Long Beach Samples		
Sample 2 P/N C01414H	**Colored areas denote entered experimental data**	
Wt. "as received" used device	29.42	pounds
Wt. "as received" minus Non-Popcorn	25.42	pounds
Wt. of Popcorn in New Device	12.00	pounds
Wt. of Non-Popcorn in Device New	4.00	pounds
Wt. Gained	13.42	pounds

Losses in TGA Expts.	Sample Analysis wt-% TGA data as decimal fraction	Sample Device Mass **Collected** in Pounds	Wt-% Contribution from from New Popcorn as decimal fraction	Mass Contributed from New Popcorn Pounds
Wall Sample				
Volatiles	0.2645	6.72	0.000	0.00
Semi-volatiles (minus Popcorn)	0.48317	0.47	0.984	11.808
Aromatics-Char	0.02288	0.49	0.008	0.096
Inorganic Residue	0.22945	5.74	0.008	0.096
Total	1.00000	13.42		12.00
Bottom Sample				
Volatiles	0.29835	7.58	0.000	0.00
Semi-volatiles (minus Popcorn)	0.54242	1.98	0.984	11.808
Aromatics-Char	0.01667	0.33	0.008	0.096
Inorganic Residue	0.14256	3.53	0.008	0.096
Total	1.00000	13.42		12.00

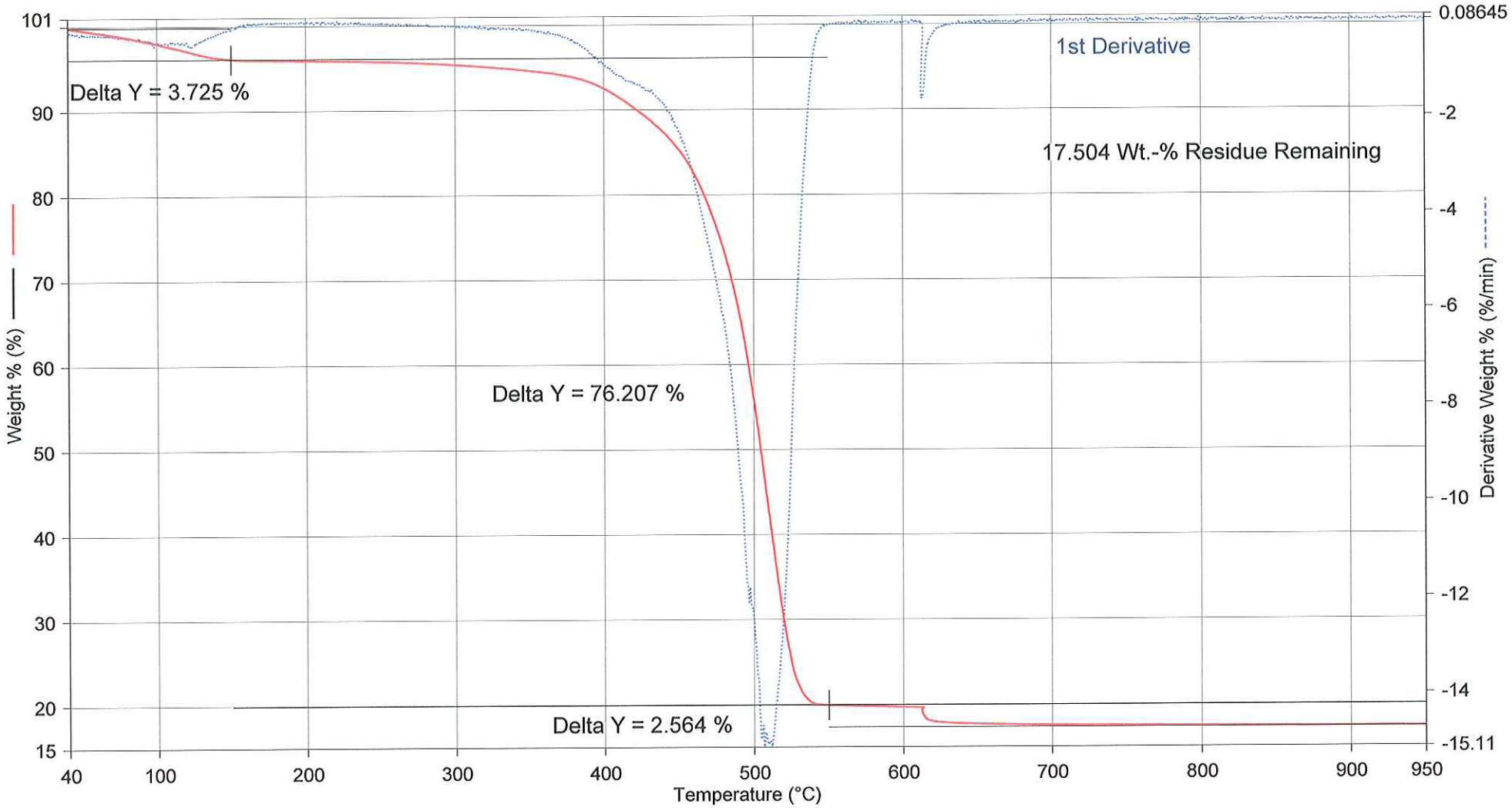
Averaged TGA Values	Sample Analysis wt-% TGA data as decimal fraction	Sample Device Mass Collected in Pounds	Wt-% Contribution from from New Popcorn as decimal fraction	Mass Contributed from New Popcorn Pounds
Averaged				
Volatiles	0.281425	7.15	0.000	0.00
Semi-volatiles (minus Popcorn)	0.512795	1.23	0.984	11.808
Aromatics-Char	0.01978	0.41	0.008	0.096
Inorganic Residue	0.18601	4.63	0.008	0.096
Total	1.00000	13.42		12.00

Job 4987_Sample 2_EDS.jpg

FS: 3600



Filename: C:\Pyris\Data\Abtech Indust\abt010.tgd
Operator ID: cmc
Sample ID: Sample#3 1/2 wall
Sample Weight: 23.290 mg
Comment: UUF Long Beach C01414H
40 to 600 in N2
600 to 950 in air

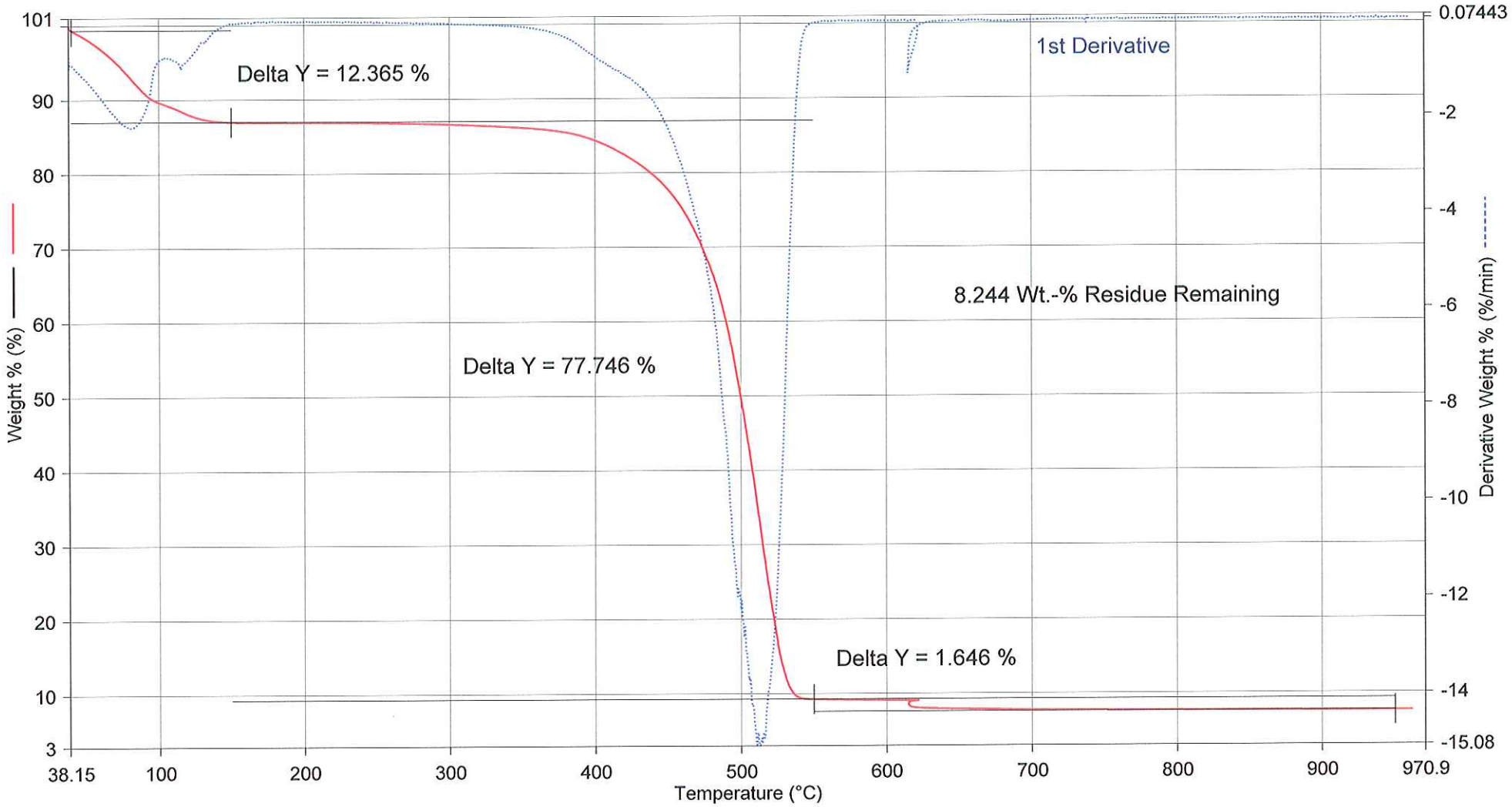


8/17/2007 7:59:37 AM

1) Heat from 40.00°C to 600.00°C at 10.00°C/min

2) Heat from 600.00°C to 950.00°C at 10.00°C/min

Filename:	C:\Pyris\Data\Abtech Indust\abt011.tgd
Operator ID:	cmc
Sample ID:	Sample#3 Bottom
Sample Weight:	30.052 mg
Comment:	UUF Long Beach C01414H 40 to 600 in N2 600 to 950 in air



8/17/2007 10:42:09 AM

1) Heat from 40.00°C to 600.00°C at 10.00°C/min

2) Heat from 600.00°C to 950.00°C at 10.00°C/min

Long Beach Samples
Sample 3 P/N C01414H

Colored areas denote entered experimental data

Wt. "as received" used device	29.71	pounds
Wt. "as received" minus Non-Popcorn	25.71	pounds
Wt. of Popcorn in New Device	12.00	pounds
Wt. of Non-Popcorn in Device New	4.00	pounds
Wt. Gained	13.71	pounds

Losses in TGA Expts.	Sample Analysis wt-% TGA data as decimal fraction	Sample Device Mass Collected in Pounds	Wt-% Contribution from from New Popcorn as decimal fraction	Mass Contributed from New Popcorn Pounds
Wall Sample				
Volatiles	0.03725	0.96	0.000	0.00
Semi-volatiles (minus Popcorn)	0.76207	7.78	0.984	11.808
Aromatics-Char	0.02564	0.56	0.008	0.096
Inorganic Residue	0.17504	4.40	0.008	0.096
Total	1.00000	13.71		12.00
Bottom Sample				
Volatiles	0.12365	3.18	0.000	0.00
Semi-volatiles (minus Popcorn)	0.77746	8.18	0.984	11.808
Aromatics-Char	0.01646	0.33	0.008	0.096
Inorganic Residue	0.08244	2.02	0.008	0.096
Total	1.00001	13.71		12.00

Averaged TGA Values	Sample Analysis wt-% TGA data as decimal fraction	Sample Device Mass Collected in Pounds	Wt-% Contribution from from New Popcorn as decimal fraction	Mass Contributed from New Popcorn Pounds
Averaged				
Volatiles	0.08045	2.07	0.000	0.00
Semi-volatiles (minus Popcorn)	0.769765	7.98	0.984	11.808
Aromatics-Char	0.02105	0.45	0.008	0.096
Inorganic Residue	0.12874	3.21	0.008	0.096
Total	1.00001	13.71		12.00

Job 4987_Sample 3_EDS.jpg

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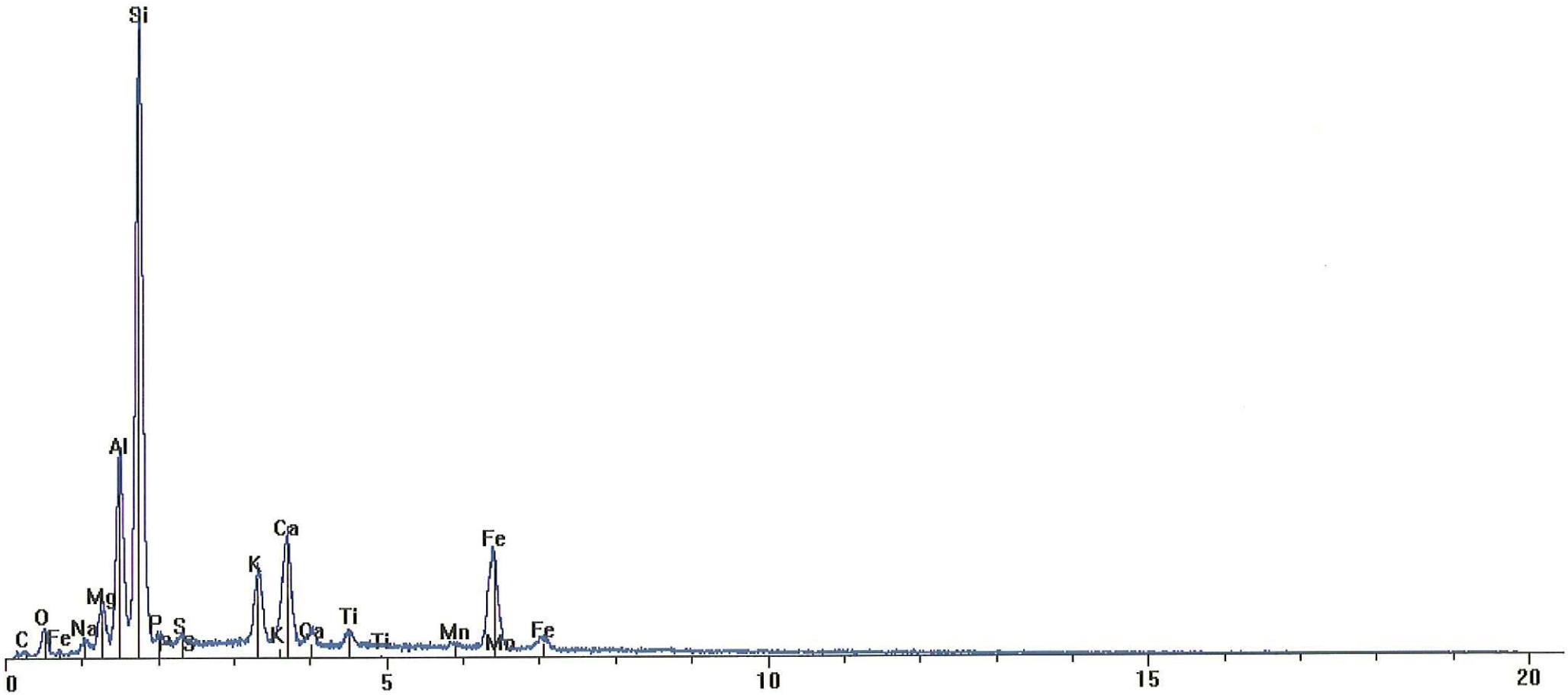
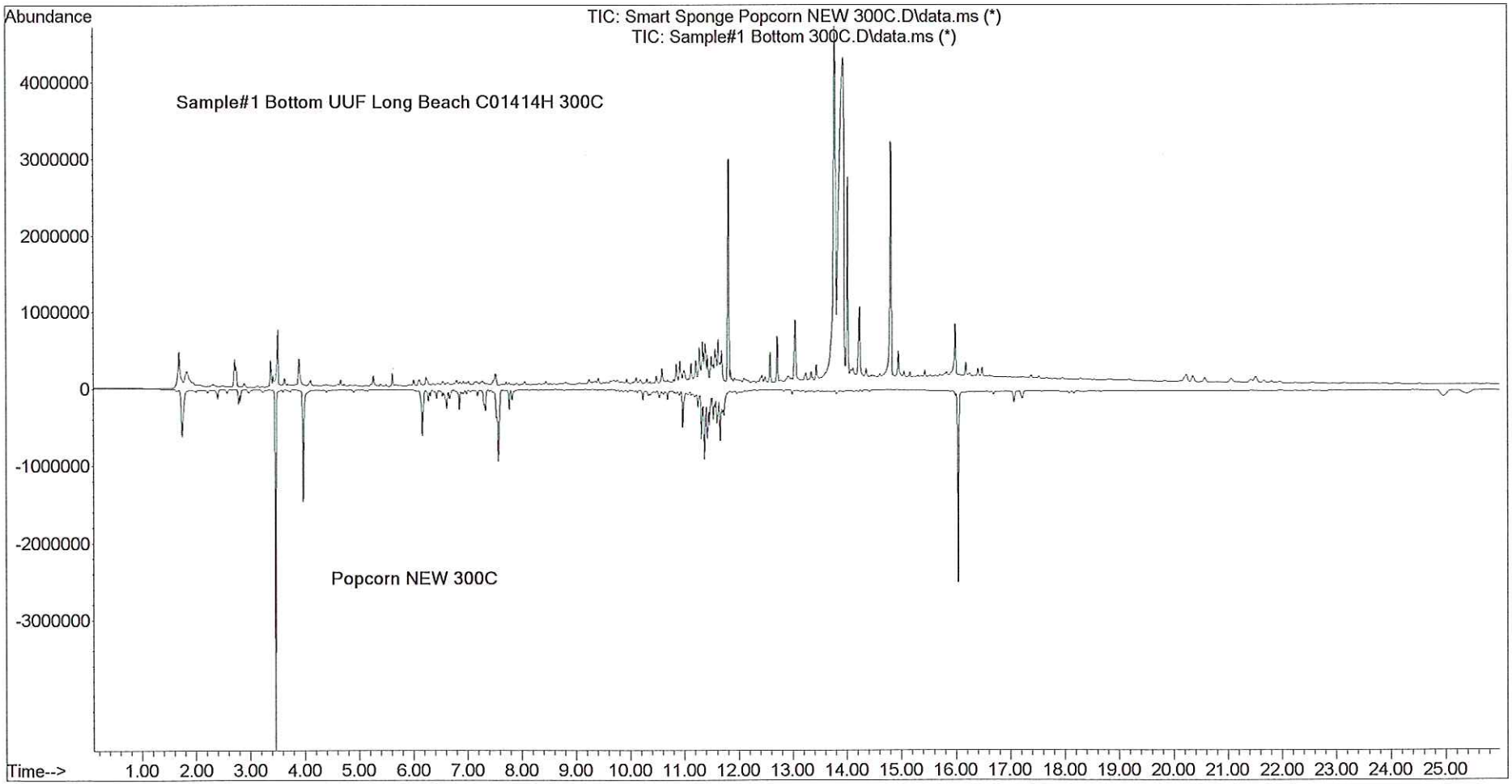
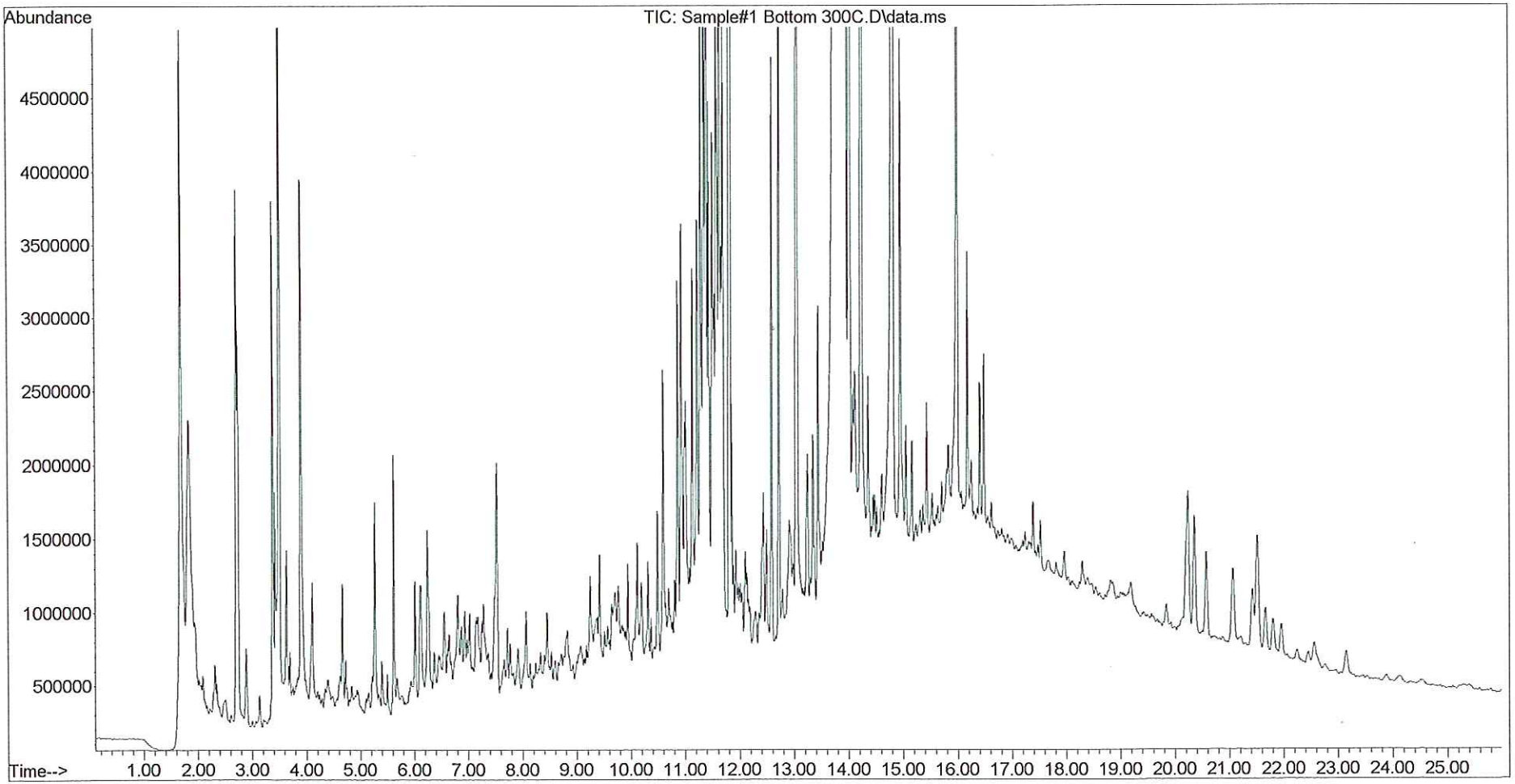


File :D:\DATA\ABTECH\Job 4900\Smart Sponge Popcorn NEW 300C.D
Operator : cmc
Acquired : 17 May 2007 10:11 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info :
Vial Number: 1



File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



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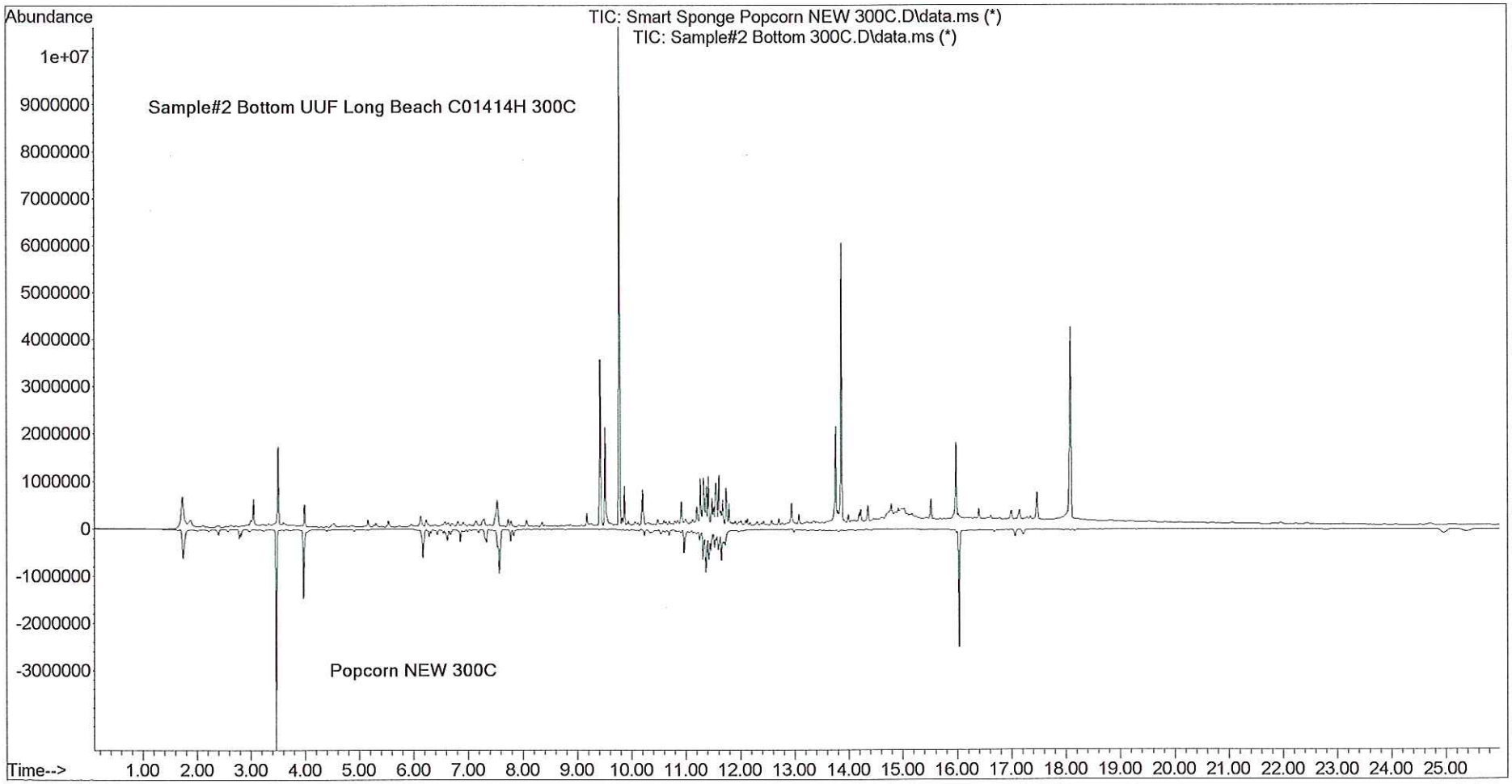
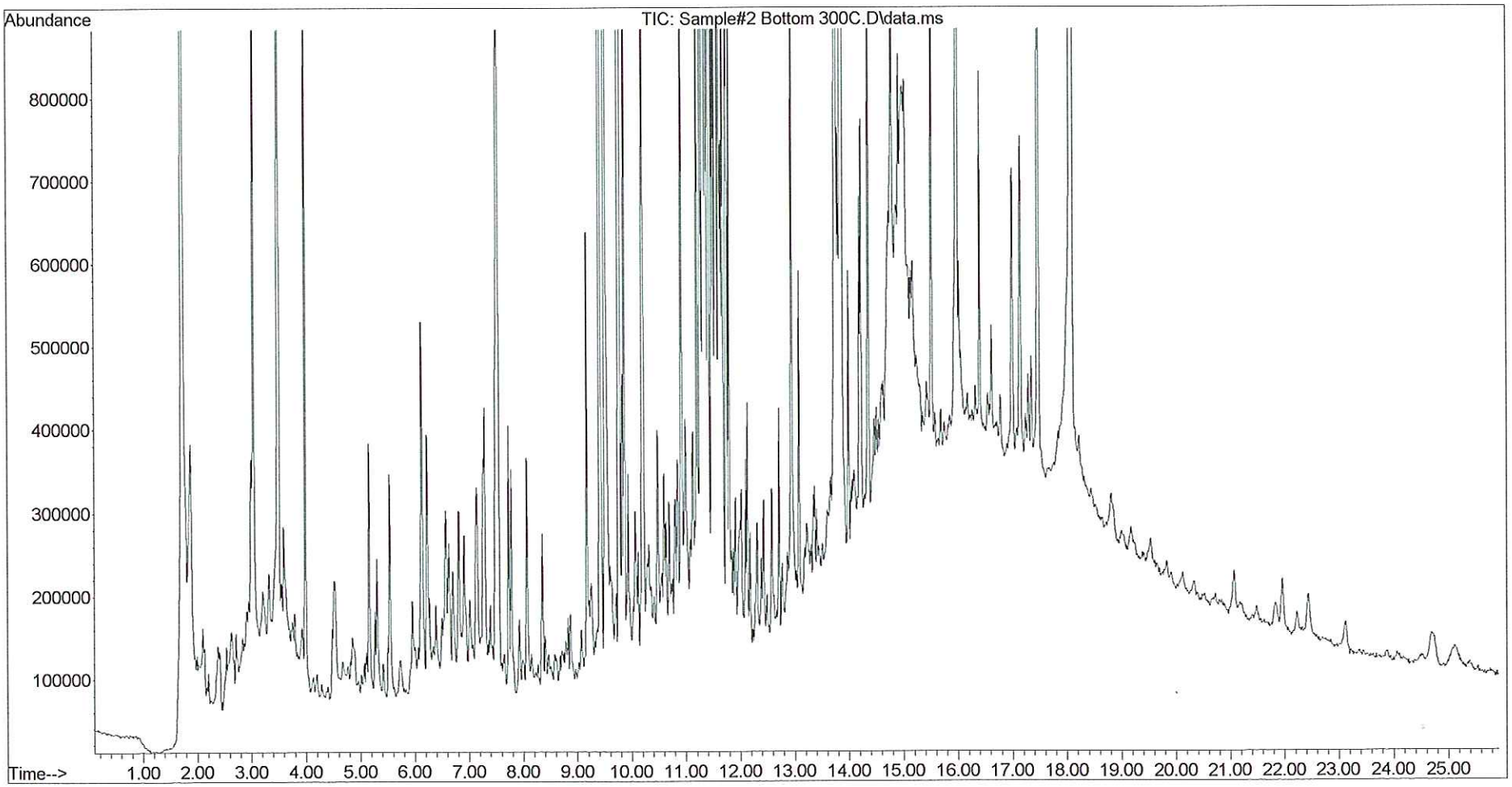
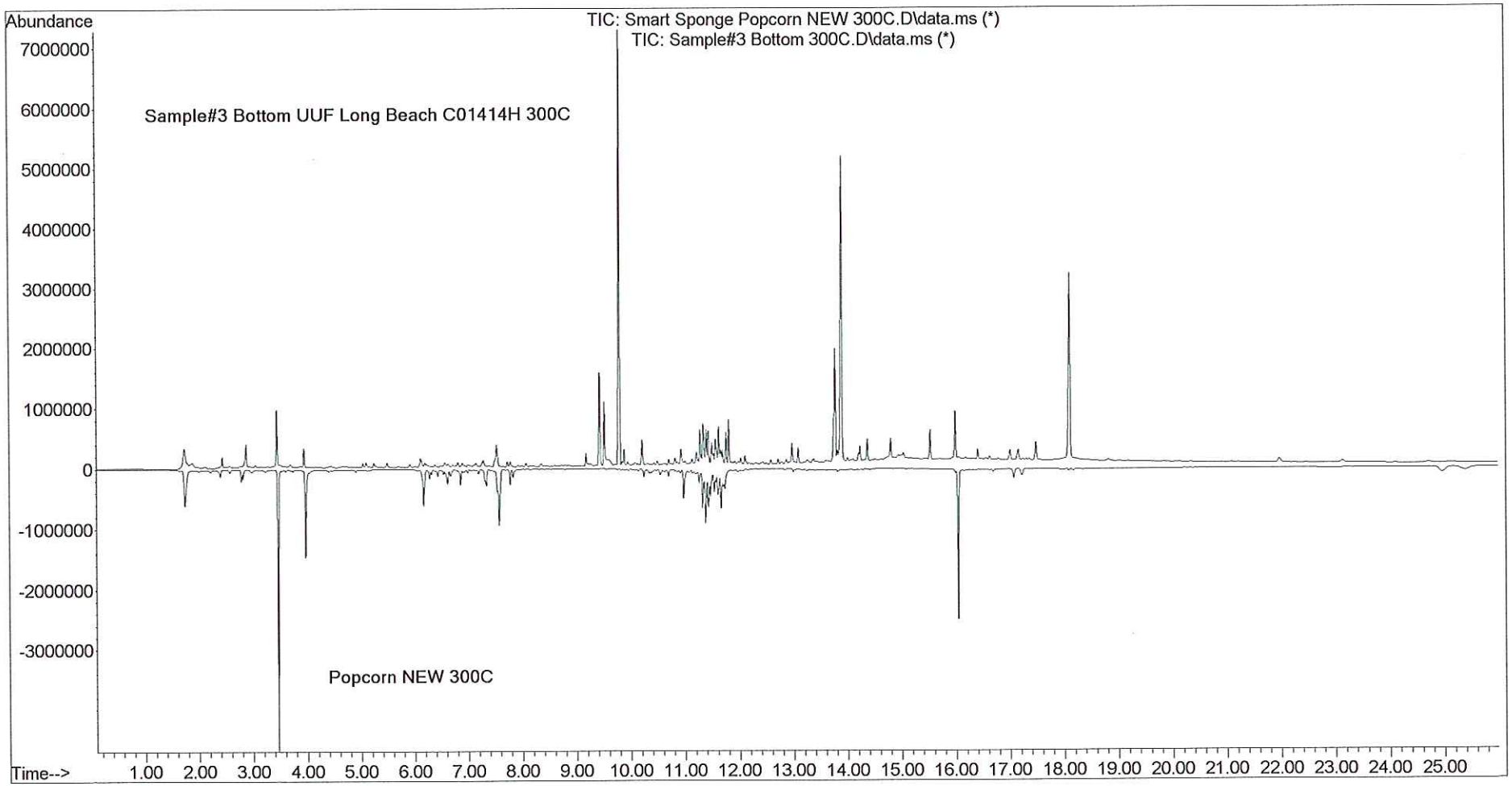
Operator : cmc
Acquired : 17 May 2007 10:11 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info :
Vial Number: 1



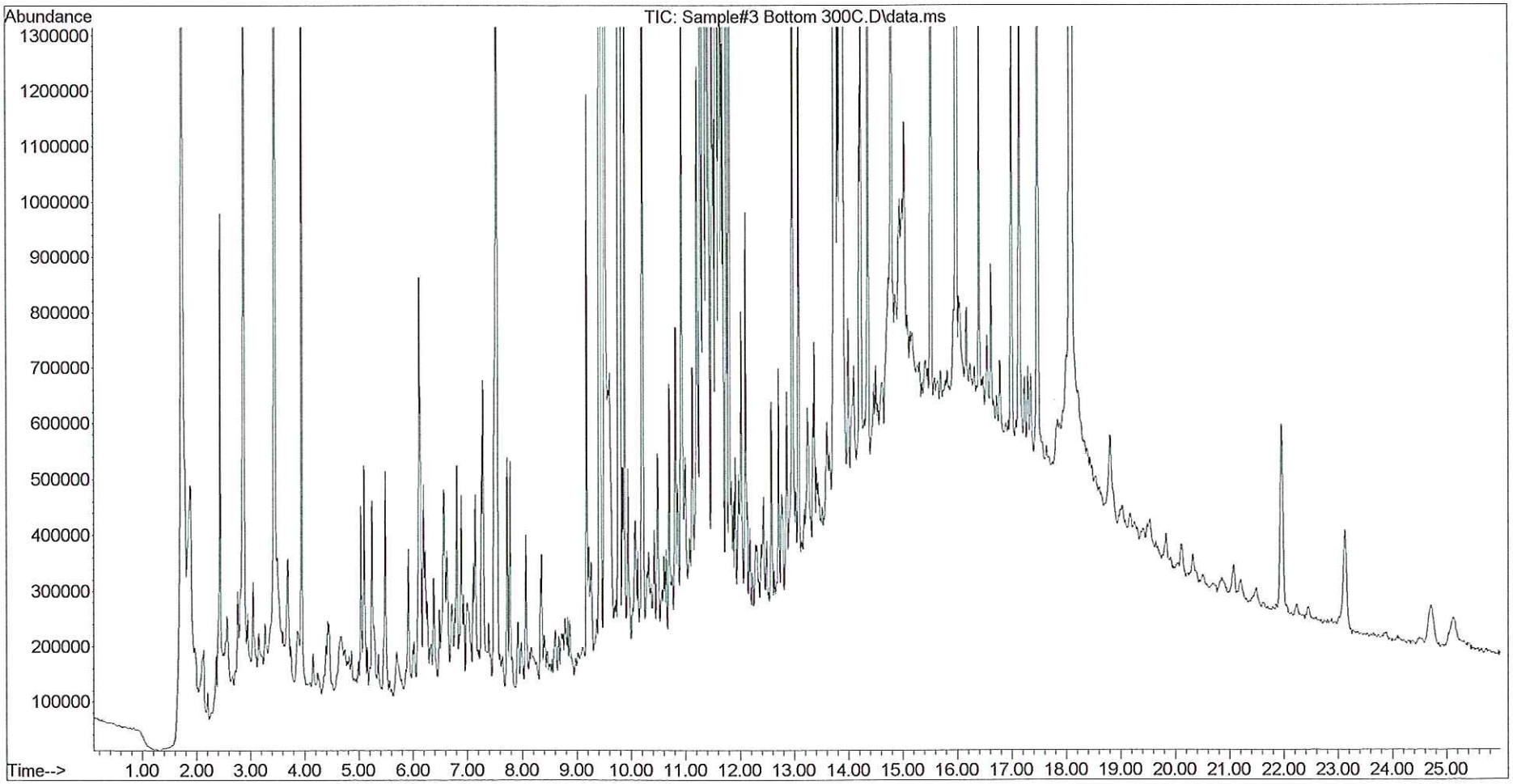
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



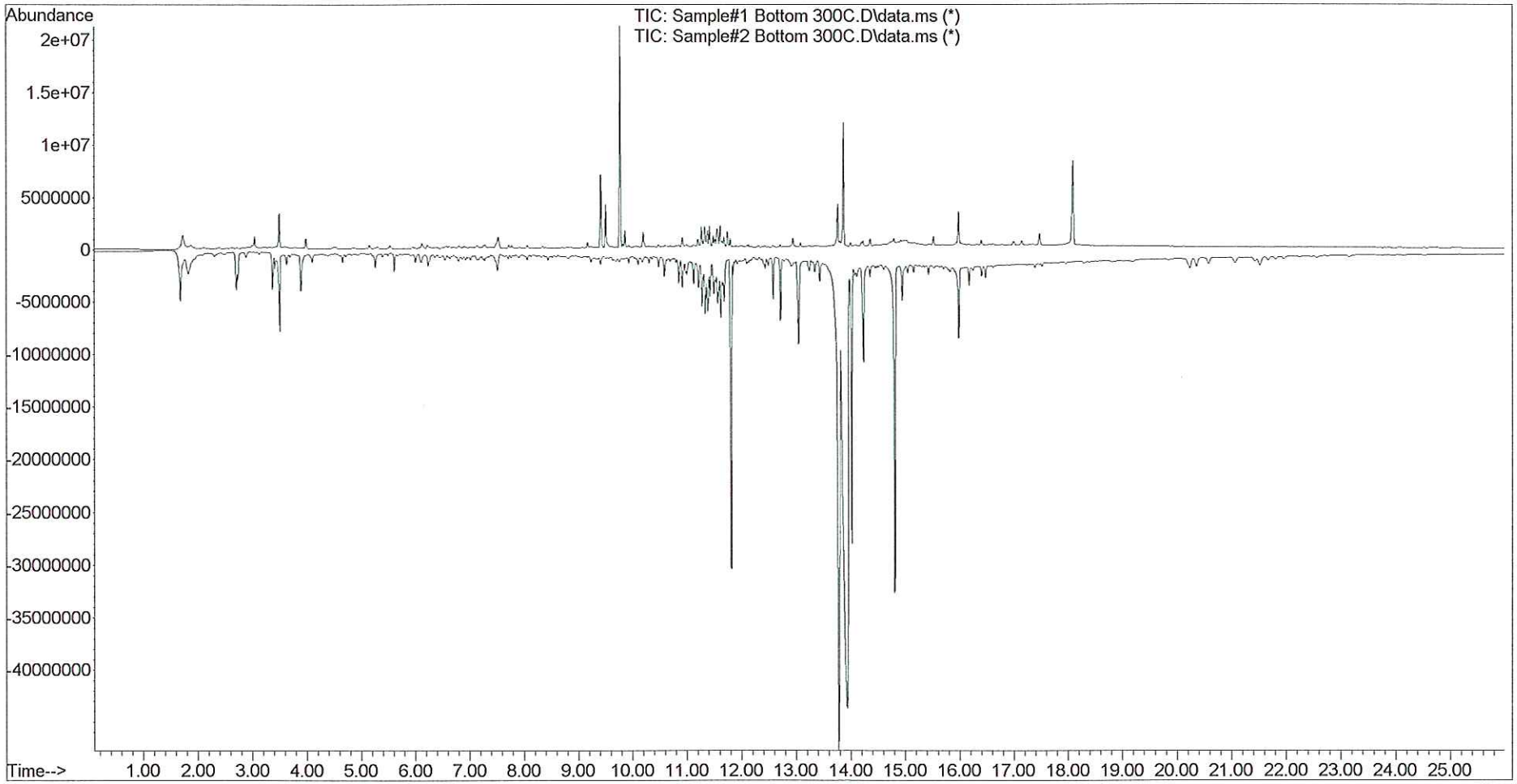
File :D:\DATA\ABTECH\Job 4900\Smart Sponge Popcorn NEW 300C.D
Operator : cmc
Acquired : 17 May 2007 10:11 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info :
Vial Number: 1



File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



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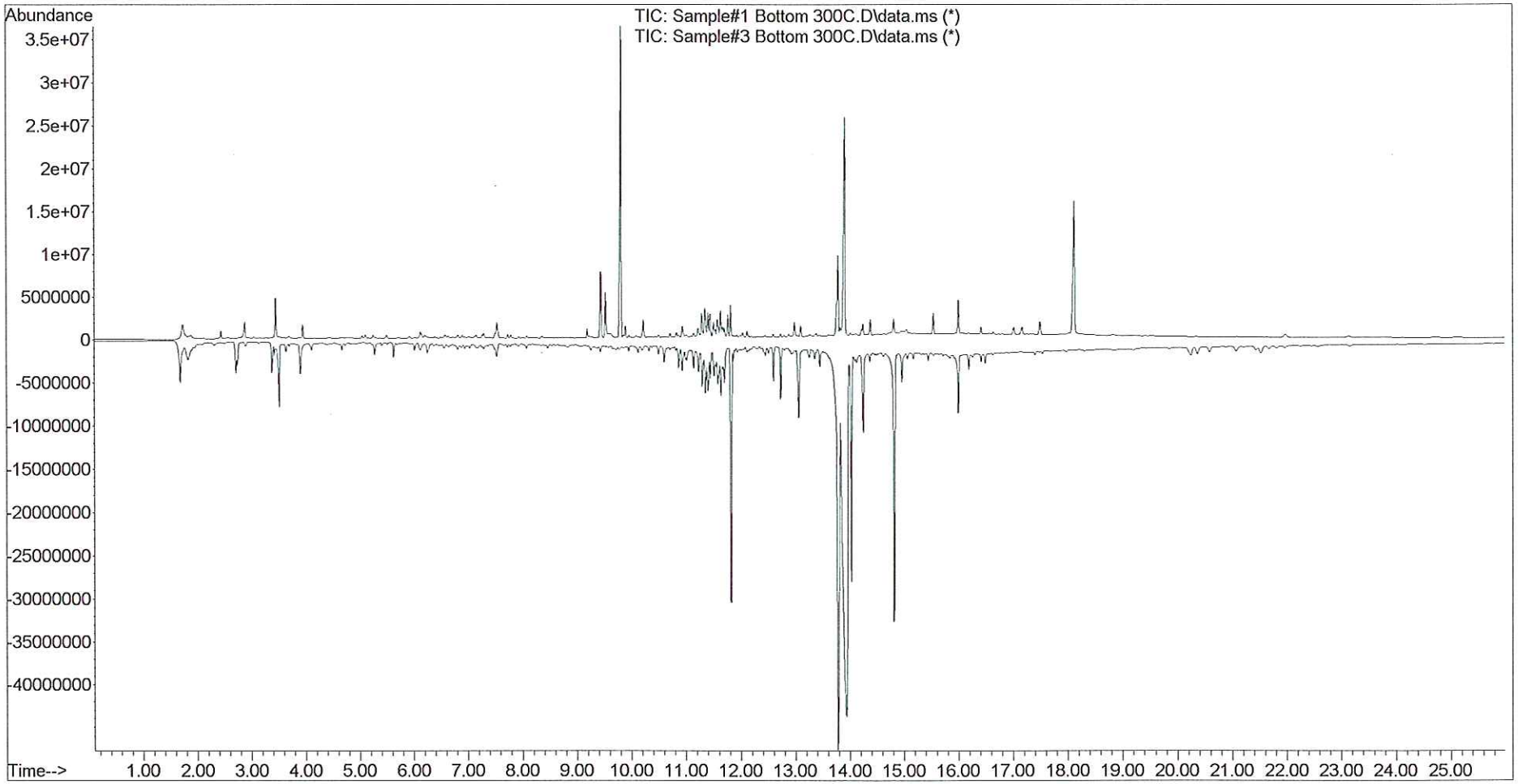
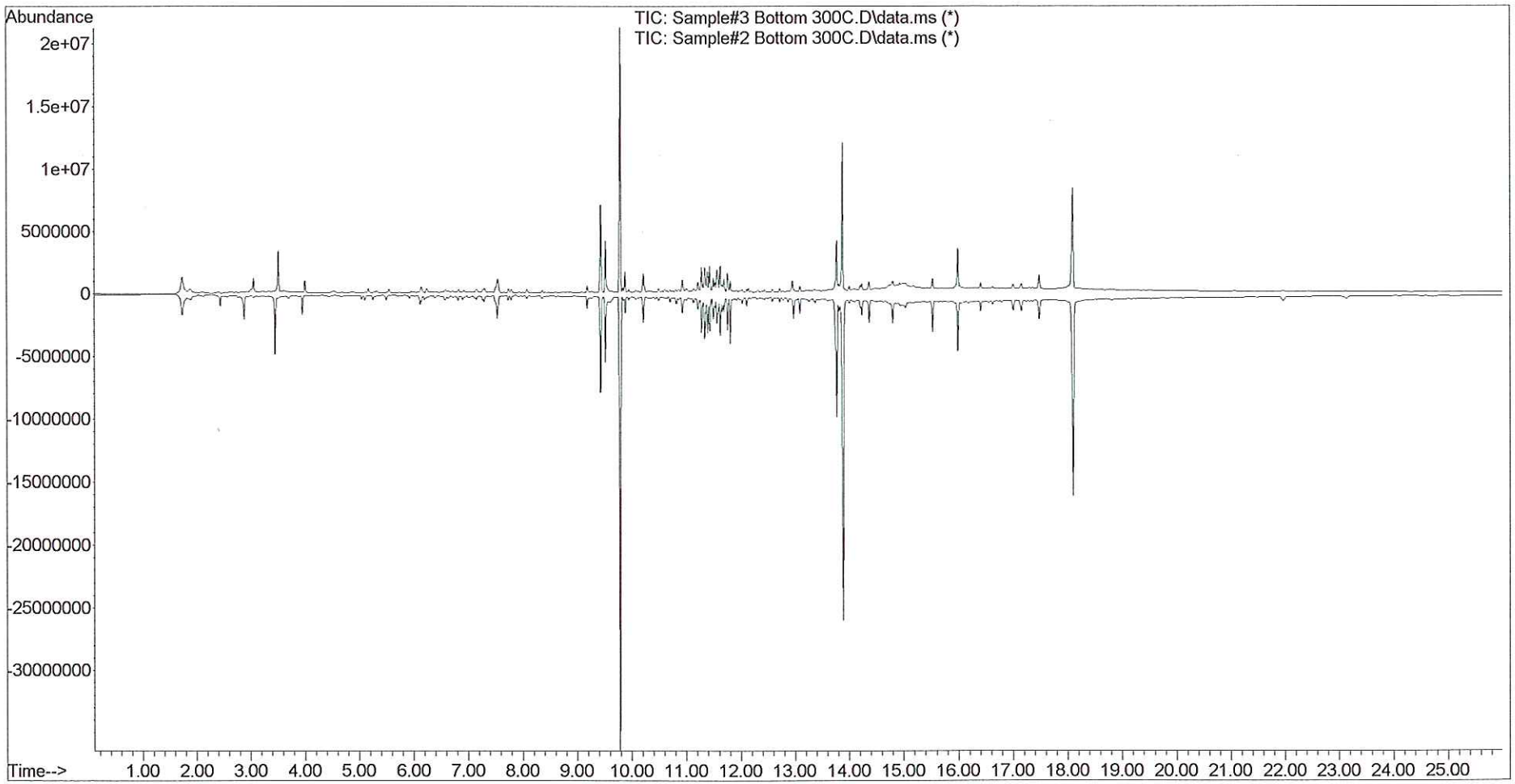
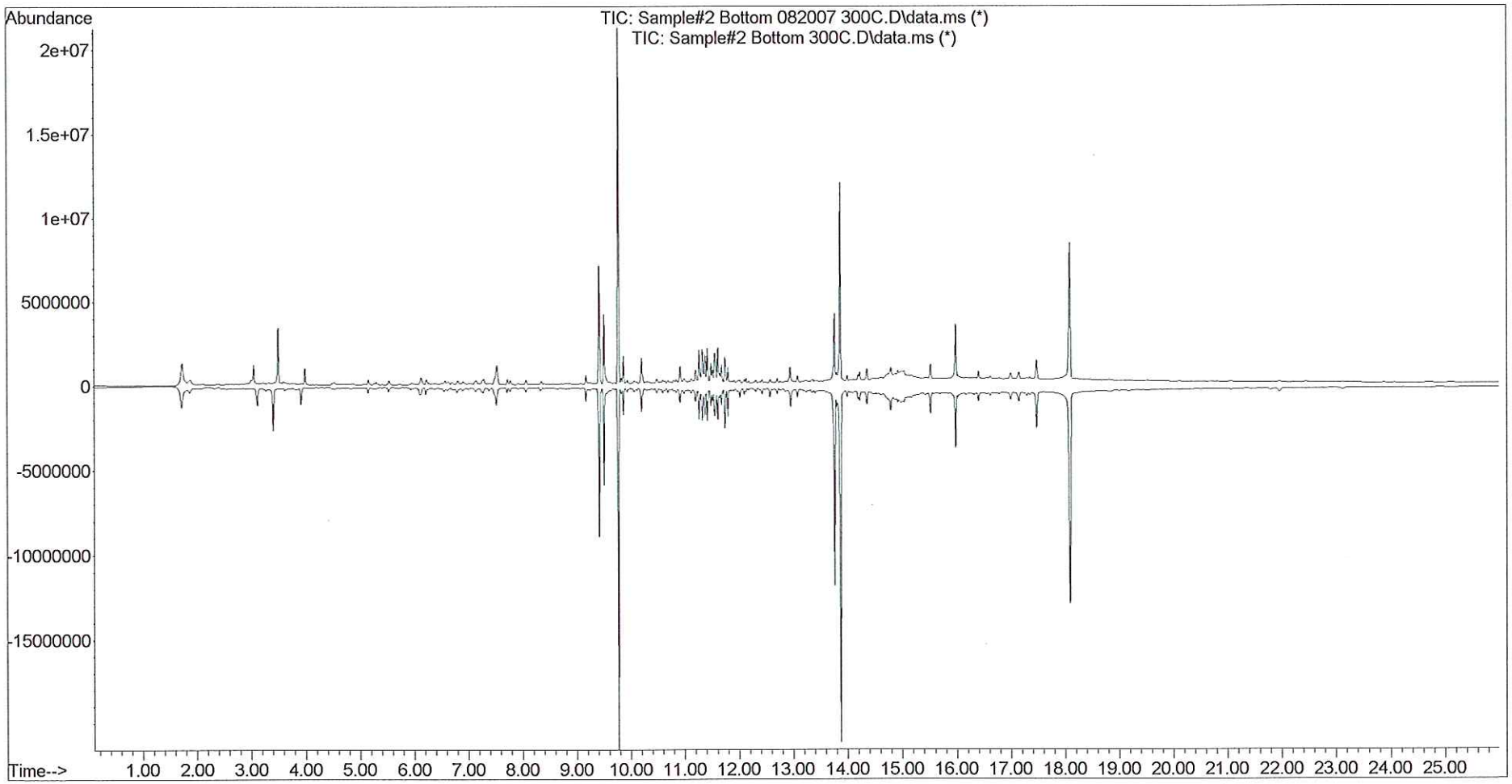
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



File :D:\DATA\ABTECH\Job 4987\Sample#2 RR\Sample#2 Bottom 082007 3
... 00C.D
Operator :
Instrument : Instrument #1
Acquired : 20 Aug 2007 8:13 using AcqMethod TDS 300 splitless cis 30_1 split.M
Sample Name:
Misc Info : UUF Long Beach C01414H

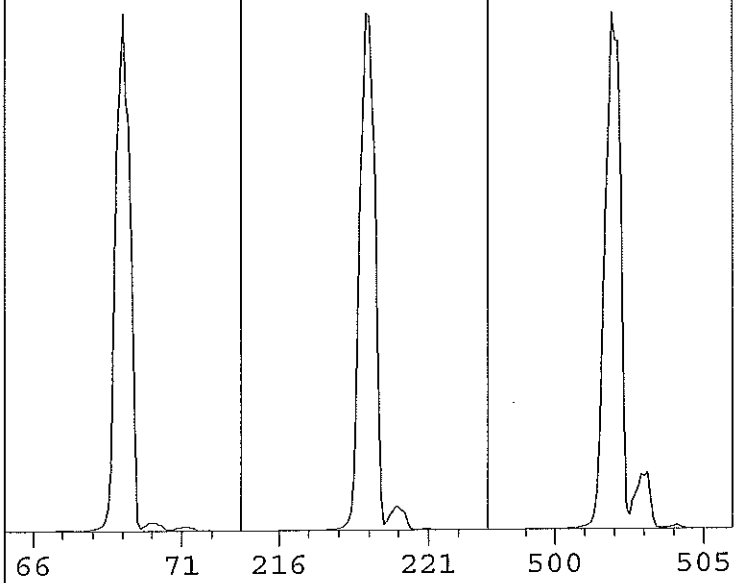


5975 Autotune

Wed Aug 15 08:22:57 2007 Instrument: Instrument #1

C:\MSDCHEM\1\5975\atune.u

Mass	69.00	Mass	218.90	Mass	501.90
Ab	486901	Ab	465707	Ab	49624
Pw50	0.60	Pw50	0.60	Pw50	0.61



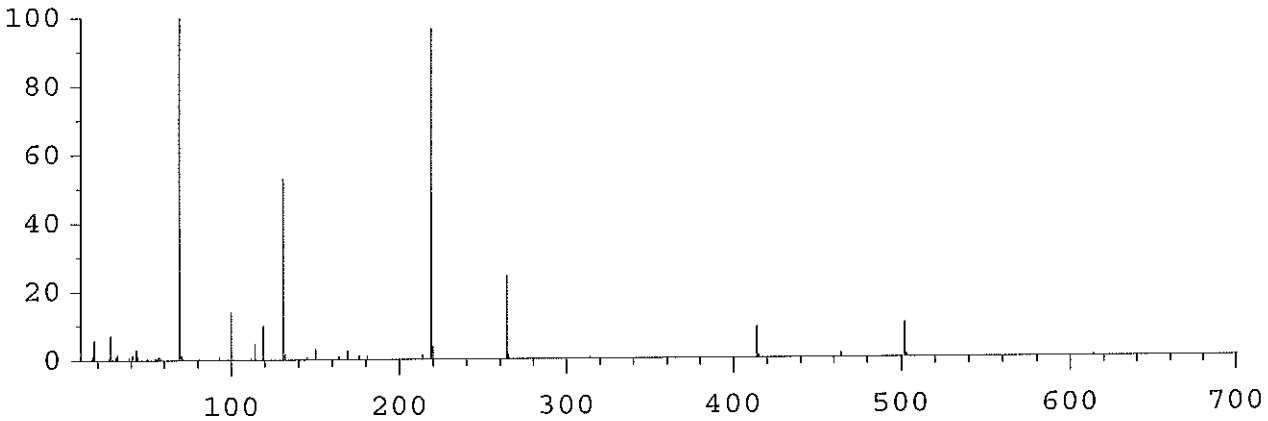
Ion Pol	POS	MassGain	-820
		MassOffs	-38
Emission	34.6	AmuGain	1621
EIEnrgy	69.9	AmuOffs	118.750
Filament	1	Wid219	-0.018
		DC Pol	POS
Repeller	26.44		
IonFcus	90.2	HEDEnab	ON
EntLens	28.5	EMVolts	1376
EntOffs	18.57		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10

Zones:

MS Source	230	TurboSpd	100
MS Quad	150	HiVac	0.00e+00

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10

171 peaks Base: 69.00 Abundance: 446464



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	446464	100.00	70.10	6574	1.47
219.00	431040	96.55	220.00	17488	4.06
502.00	45544	10.20	503.00	5144	11.29

Air/Water Check: H20~5.99% N2~7.24% O2~1.63% CO2~1.23% N2/H2O~120.86%

Column Flow: Front: 0 Back: 0.967 ml/min. Interface Temp: 300

Ramp Criteria:

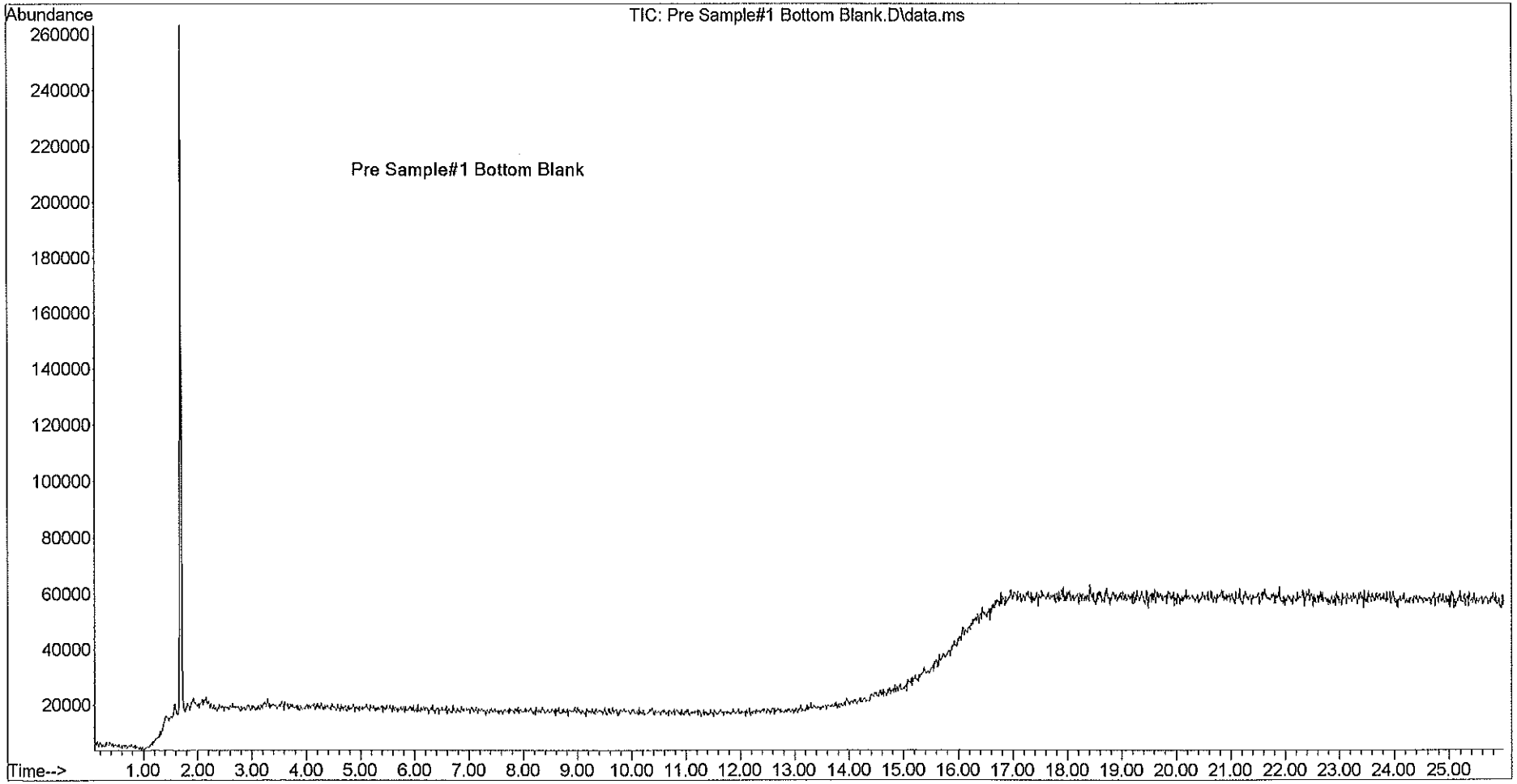
Ion Focus Maximum 90 volts using ion 502; EM Gain 254005

Repeller Maximum 35 volts using ion 219;

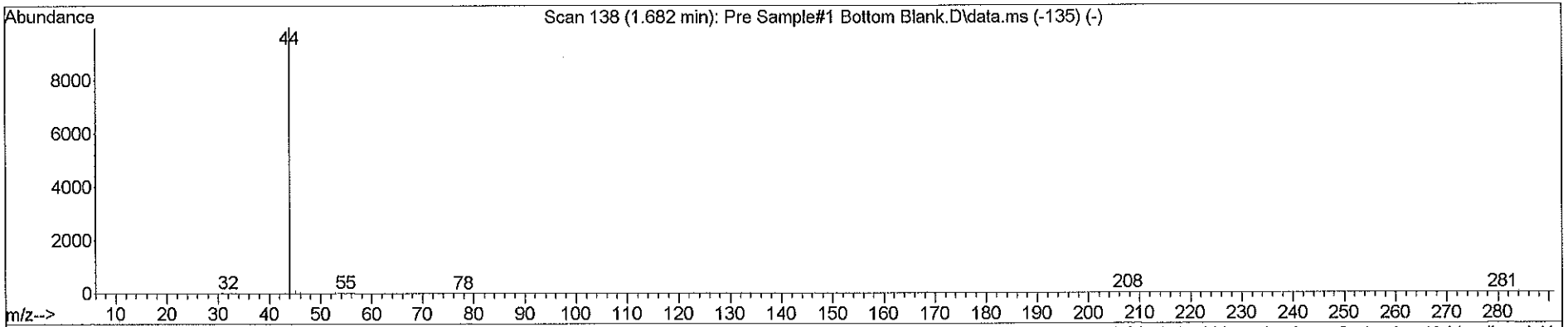
MassGain Values @Samples: -809@3 -805@2 -793@1 -763@0 -685@FS

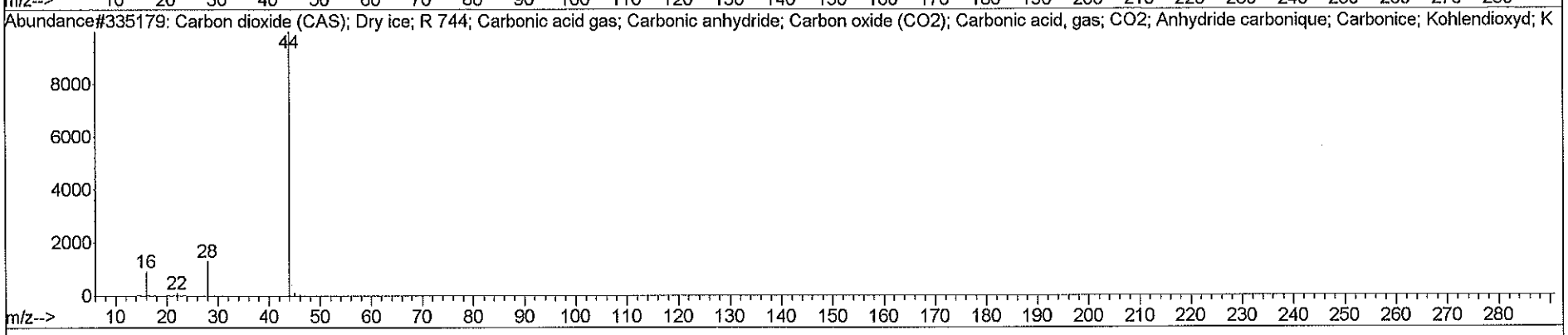
TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	118.8	118.8	118.8	118.8	118.8	118.8	118.8
Entrance Lens Offset:	18.6	18.6	18.6	18.6	18.6	18.6	18.6

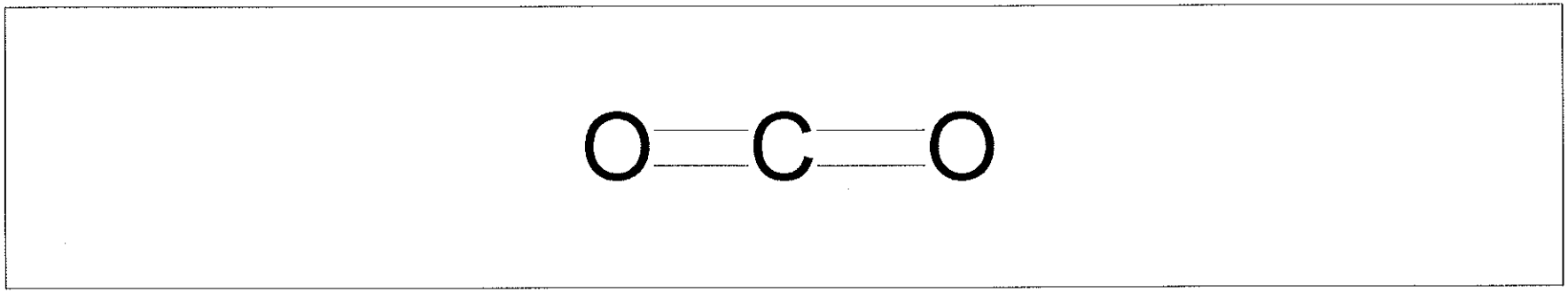
File :D:\DATA\ABTECH\Job 4987\Pre Sample#1 Bottom Blank.D
Operator : cmc
Acquired : 16 Aug 2007 13:11 using AcqMethod STANDALONE RUN.M
Instrument : Instrument #1
Sample Name: post bakeout blank6
Misc Info :
Vial Number: 1



Library Searched : C:\Database\Wiley7Nist05.L
Quality : 4
ID : Carbon dioxide (CAS); Dry ice; R 744; Carbonic acid gas; Carbonic anhydride; C arbon oxide (CO2); Carbonic acid, gas; CO2; Anhydride carbonique; Carbonice; K ohlendioxyd; Kohlensaure; UN 1013; UN 1845; UN 2187; Cardice; Dricold; Drikold ; Dioxomethane #; Dio







Area Percent Report

Data Path : D:\DATA\ABTECH\Job 4987\
Data File : Sample#1 Bottom 300C.D
Acq On : 16 Aug 2007 14:09
Operator :
Sample :
Misc : UUF Long Beach C01414H
ALS Vial : 1 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

Method : C:\msdchem\1\METHODS\PYR 1000 Bake 100 750 split.M
Title :

Signal : TIC: Sample#1 Bottom 300C.D\data.ms

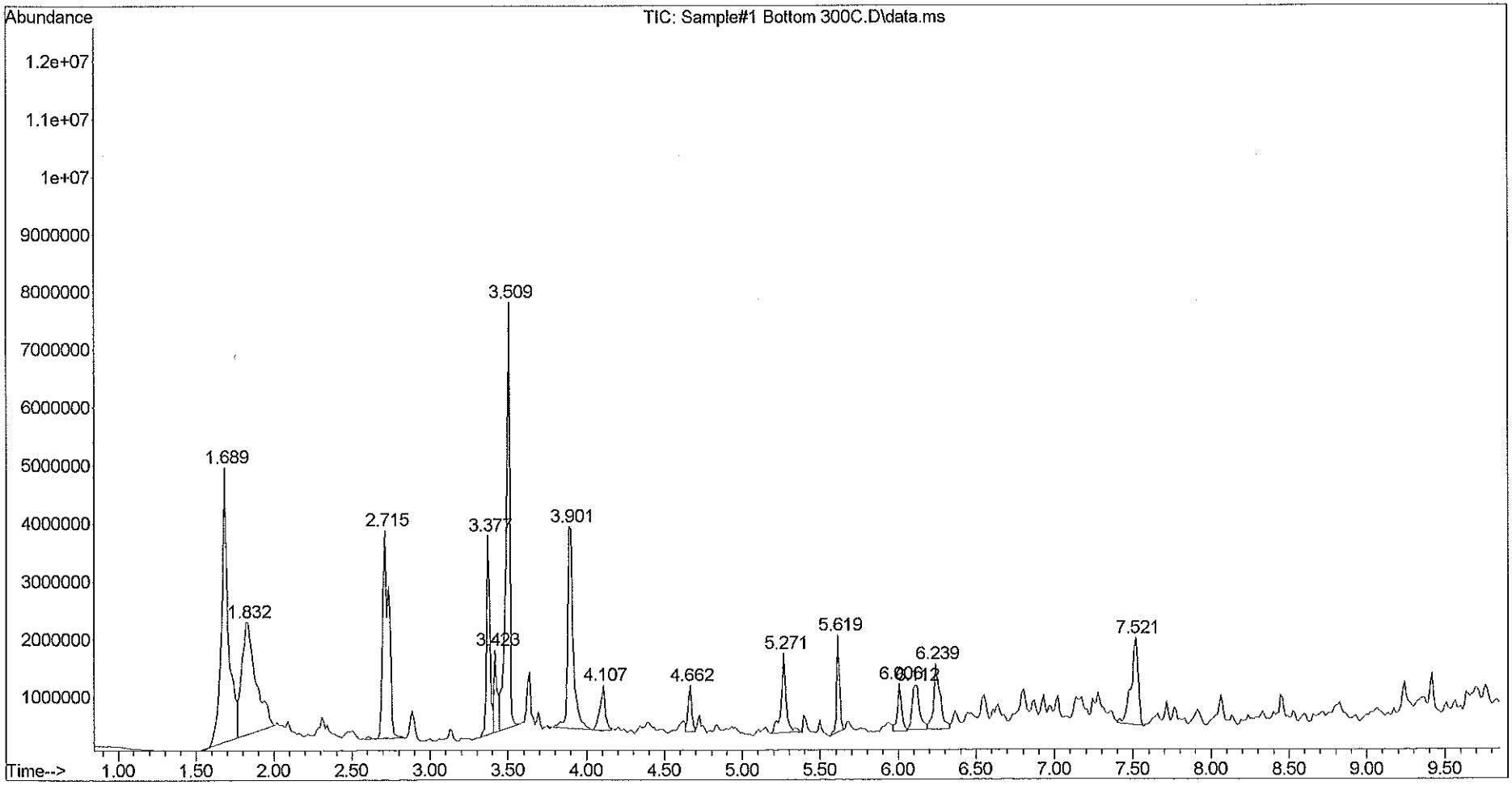
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.689	124	139	145	BV	4456672	143397201	5.55%	1.688%
2	1.832	145	151	166	VV 6	1958578	125594320	4.86%	1.479%
3	2.715	216	227	238	PB	3258157	99372997	3.85%	1.170%
4	3.377	275	285	287	BV	3229050	50656843	1.96%	0.596%
5	3.423	287	289	291	VV	1298323	20016414	0.77%	0.236%
6	3.509	291	296	302	VV	6595645	125286096	4.85%	1.475%
7	3.901	317	330	342	BV 2	3560182	86455485	3.35%	1.018%
8	4.107	343	348	352	M2	818646	18583682	0.72%	0.219%
9	4.662	393	396	399	M2	823035	13123761	0.51%	0.154%
10	5.271	441	448	458	VV 2	1260668	30271873	1.17%	0.356%
11	5.619	474	479	482	PV	1525957	21105615	0.82%	0.248%
12	6.006	509	512	516	M2	842064	15727385	0.61%	0.185%
13	6.112	517	521	527	M3	785732	26195516	1.01%	0.308%
14	6.239	528	532	540	M2	1180419	32369896	1.25%	0.381%
15	7.521	633	643	648	VV 3	1467696	48905015	1.89%	0.576%
16	10.590	903	909	915	VV	1798713	42416908	1.64%	0.499%
17	10.854	929	932	934	VV	2277898	44666195	1.73%	0.526%
18	10.920	934	937	941	VV 2	2654909	63628805	2.46%	0.749%
19	11.001	941	944	949	VV 2	1635659	57091214	2.21%	0.672%
20	11.126	949	955	958	VV 3	2547926	66318201	2.57%	0.781%
21	11.216	958	963	965	VV 2	2977941	72995034	2.83%	0.859%
22	11.282	965	969	971	VV	4259404	89124341	3.45%	1.049%
23	11.335	971	973	975	M2	5445912	80190624	3.10%	0.944%
24	11.382	975	977	979	M3	5281600	86871168	3.36%	1.023%
25	11.425	979	981	984	M2	3719102	61795721	2.39%	0.727%
26	11.494	984	987	990	M	3513540	75790409	2.93%	0.892%
27	11.564	990	993	996	M2	4434391	115270206	4.46%	1.357%
28	11.620	996	998	1000	M	5814119	120196322	4.65%	1.415%
29	11.688	1002	1004	1010	VV 2	4063010	93073711	3.60%	1.096%
30	11.817	1010	1015	1022	VV	29978142	561737592	21.75%	6.613%
31	12.581	1077	1081	1085	VB	4133752	33728259	1.31%	0.397%
32	12.718	1088	1093	1096	BV	5807190	89289804	3.46%	1.051%
33	13.048	1117	1121	1134	VV	7604388	178787678	6.92%	2.105%
34	13.437	1152	1155	1160	PV	1955859	38376312	1.49%	0.452%
35	13.780	1160	1185	1188	VV 2	46052553	1561939957	60.47%	18.387%
36	13.933	1188	1198	1202	VV 3	42184746	2583105902	100.00%	30.409%
37	14.018	1202	1205	1208	VV	23992395	345590889	13.38%	4.068%
38	14.234	1218	1224	1231	VV	8457461	184944346	7.16%	2.177%
39	14.810	1259	1274	1280	VV	31143352	622720463	24.11%	7.331%

40	14.946	1280	1286	1292	VV	3102638	58064837	2.25%	0.684%
41	15.987	1366	1376	1388	VV	6593454	142877446	5.53%	1.682%
42	16.178	1388	1392	1395	PV	1493994	21762836	0.84%	0.256%
43	20.230	1727	1743	1748	M	961618	42989398	1.66%	0.506%
44	20.350	1749	1753	1763	M	804385	24824505	0.96%	0.292%
45	20.570	1768	1772	1780	M	579310	16564369	0.64%	0.195%
46	21.058	1804	1814	1828	M3	497862	18522153	0.72%	0.218%
47	21.419	1840	1846	1849	M2	397883	13000102	0.50%	0.153%
48	21.510	1849	1853	1861	M2	765199	29317578	1.13%	0.345%

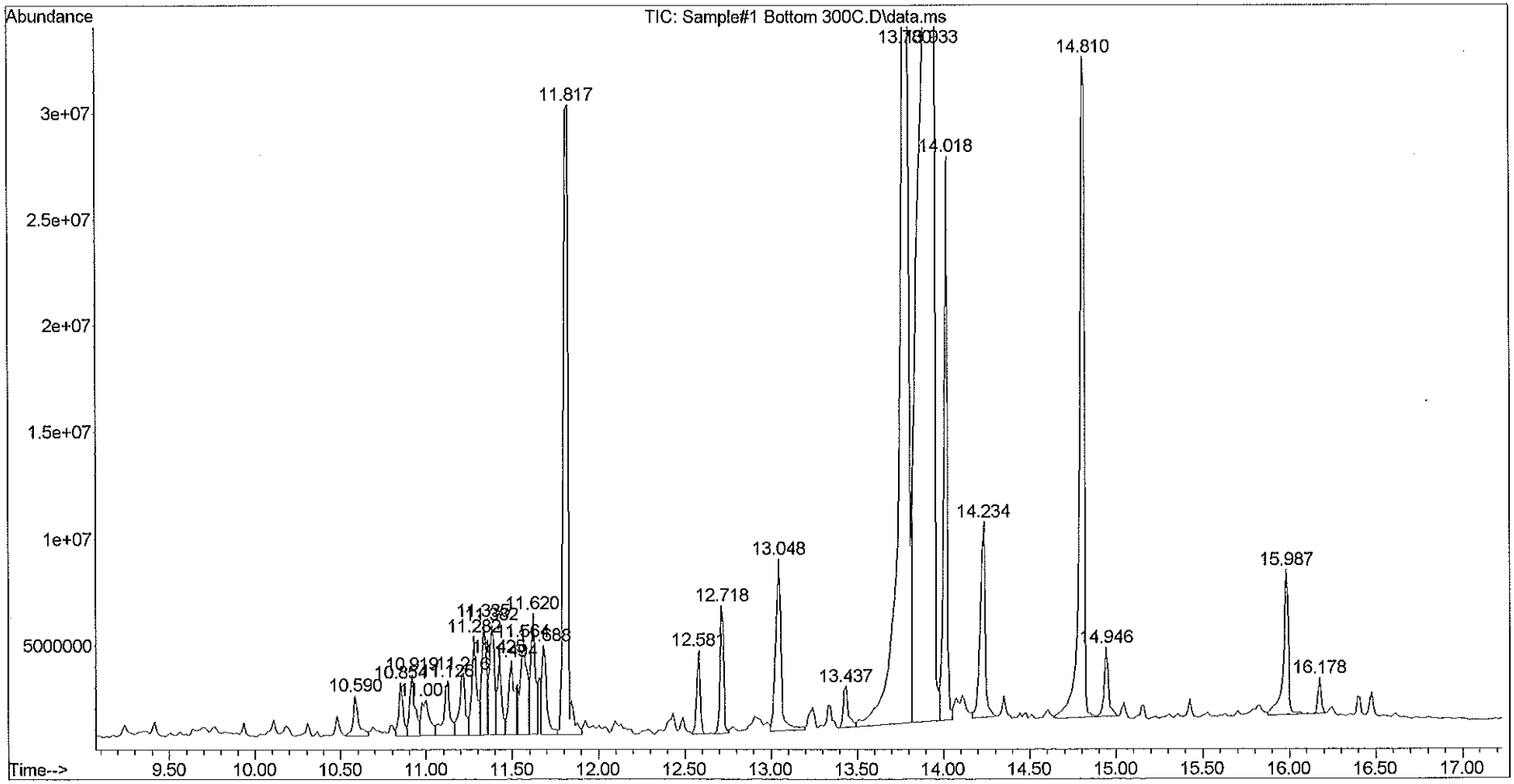
Sum of corrected areas:˚ 8494635382

PYR 1000 Ba... 750 split.M Thu Aug 16 15:36:39 2007

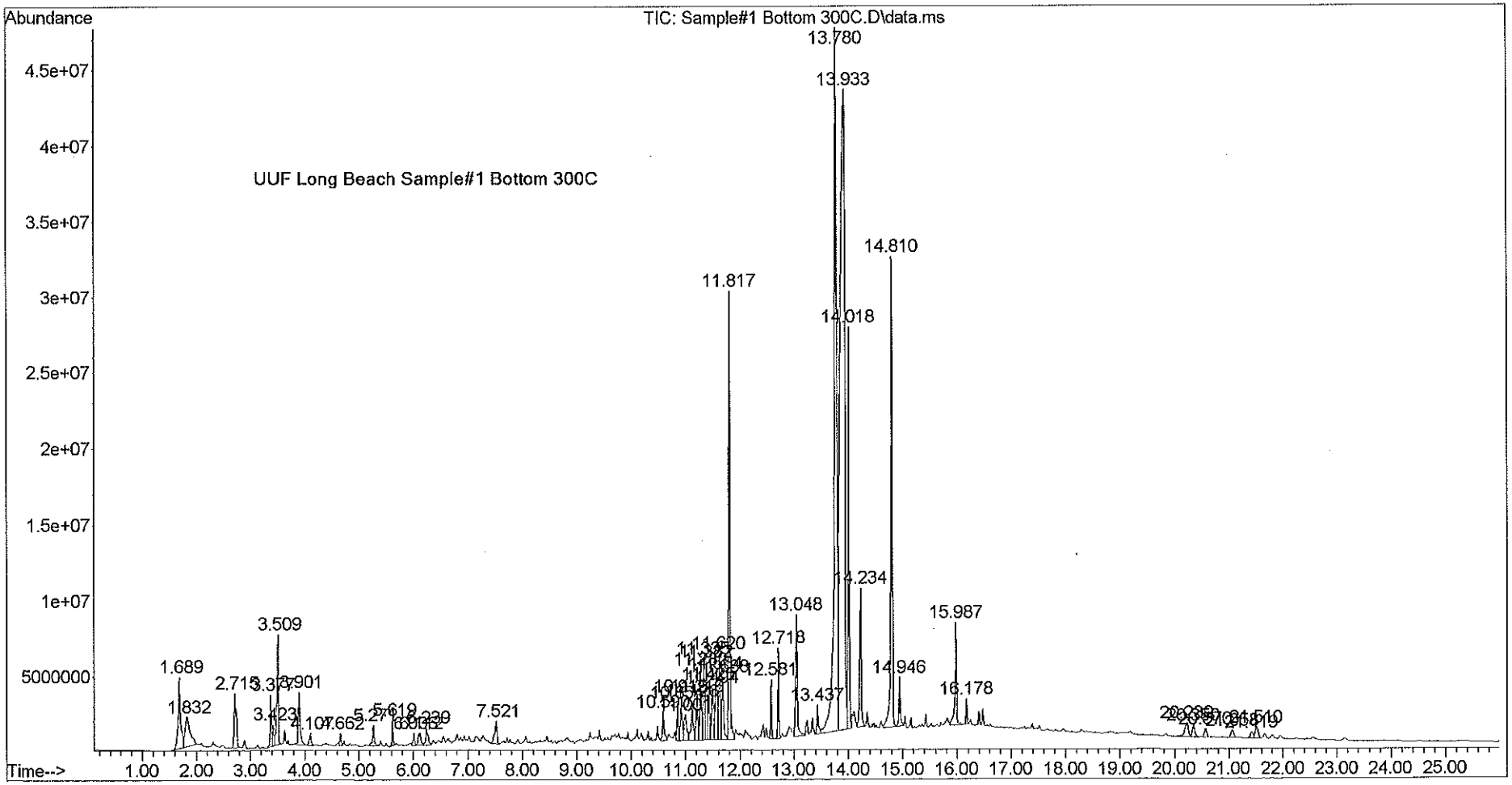
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



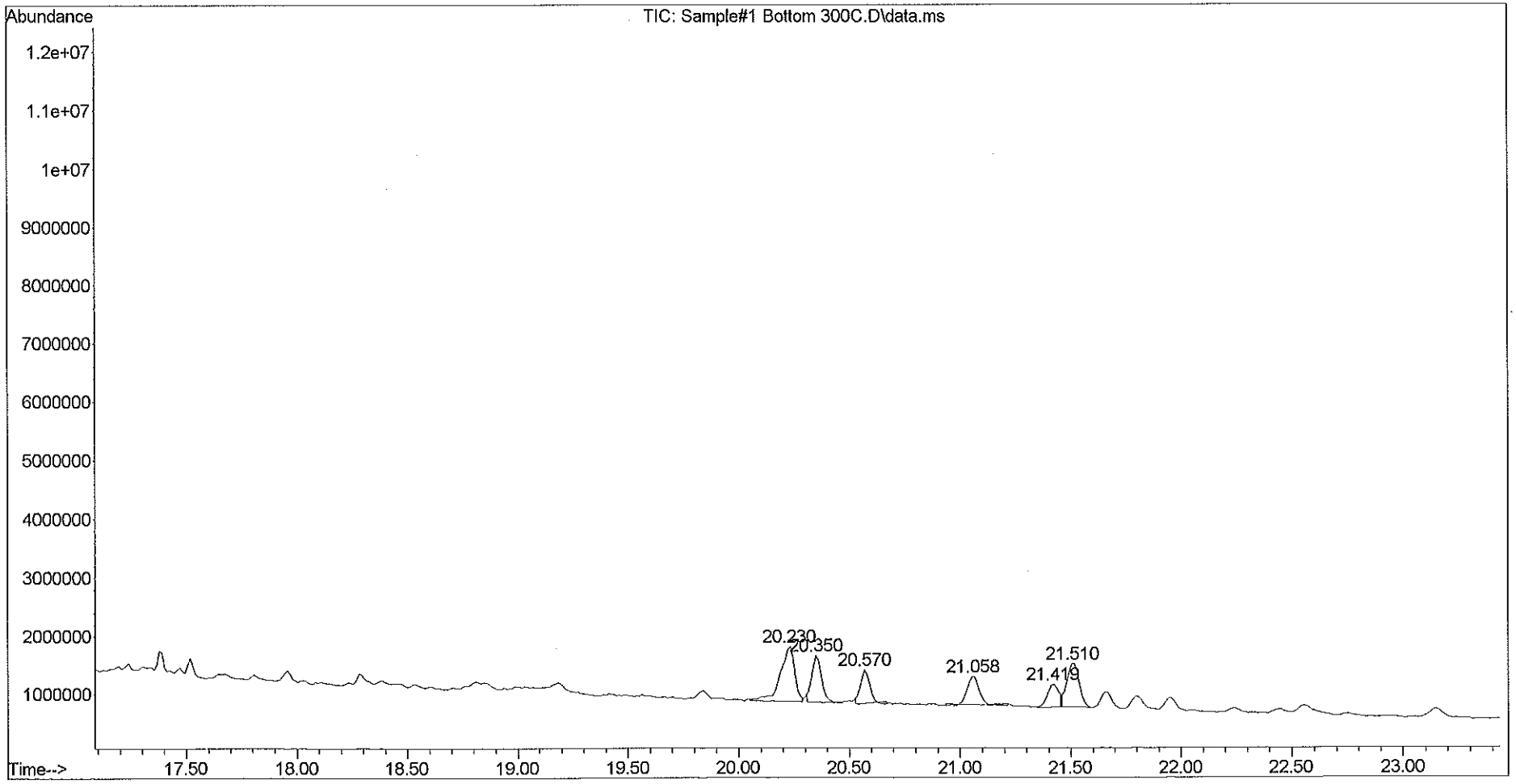
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



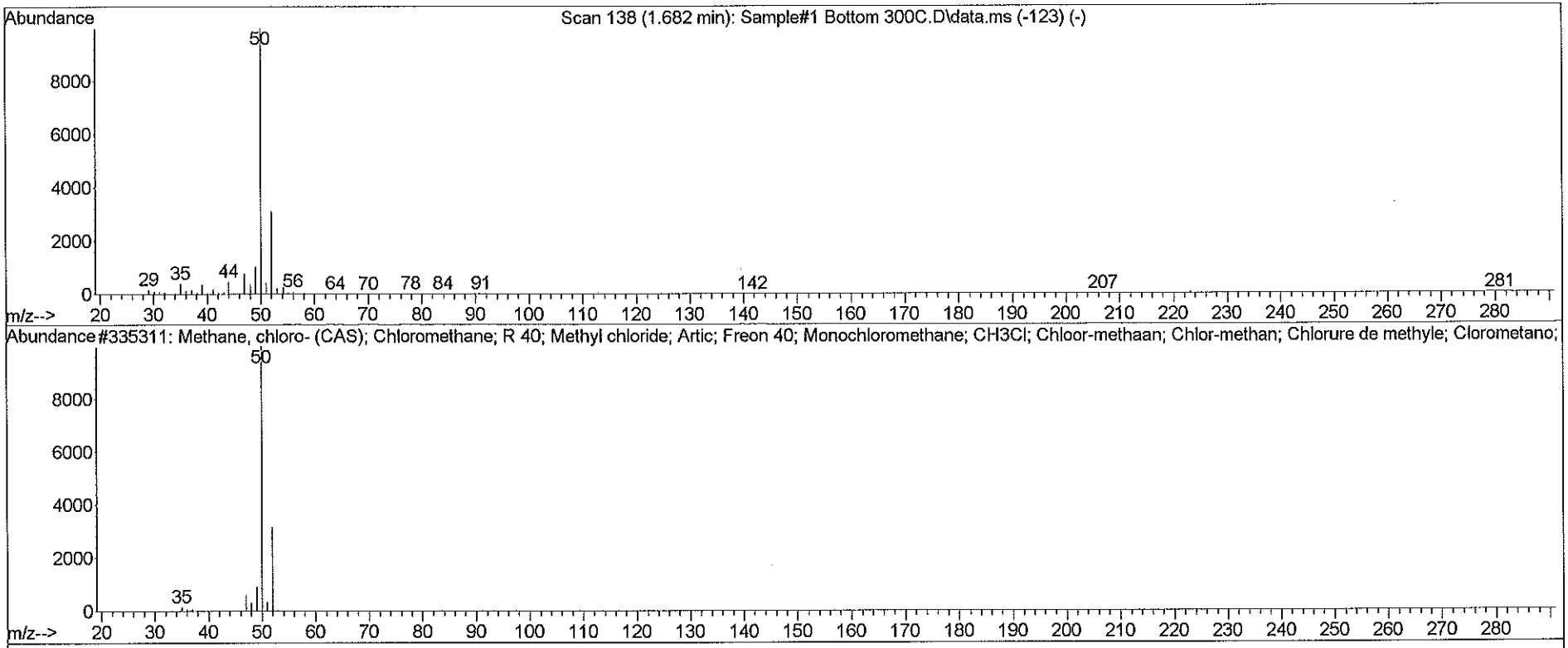
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

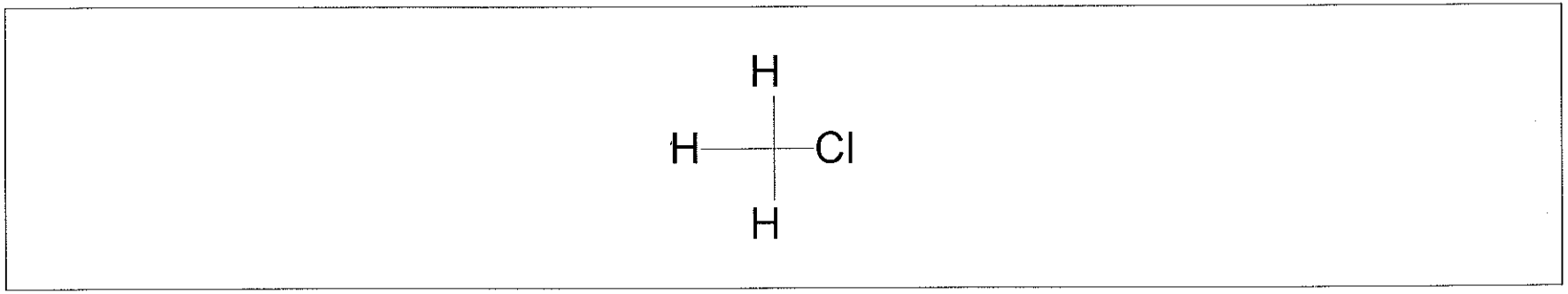


File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

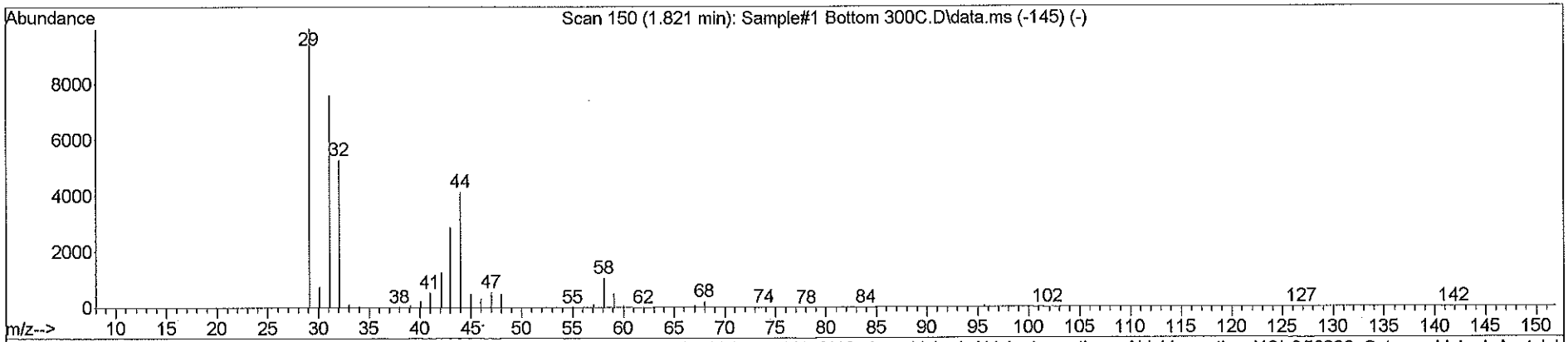


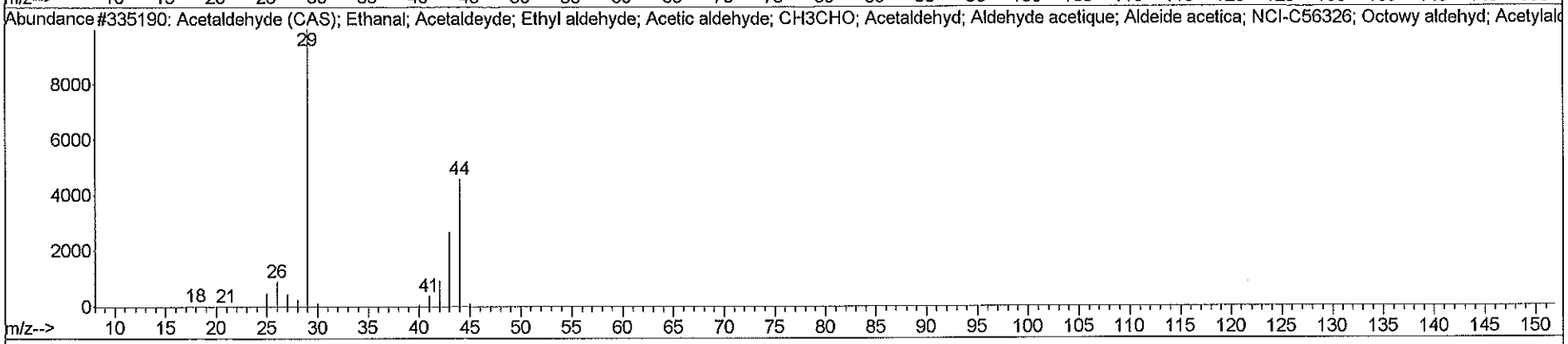
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 90
ID : Methane, chloro- (CAS); Chloromethane; R 40; Methyl chloride; Artic; Freon 40; Monochloromethane; CH3Cl; Chloor-methaan; Chlor-methan; Chlorure de methyle; Clorometano; Cloruro di metile; Methylchlorid; Metylu chlorek; Rcra waste number U045; UN 1063; Ref

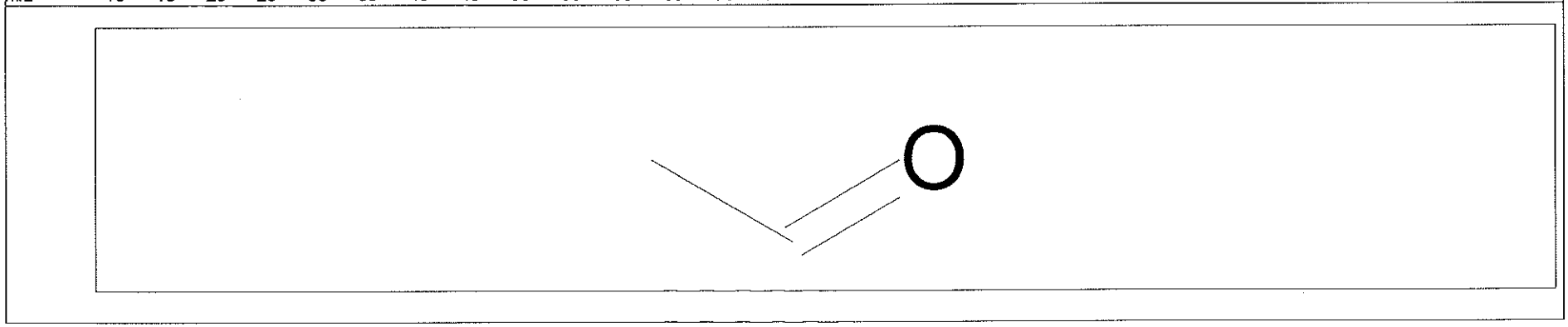




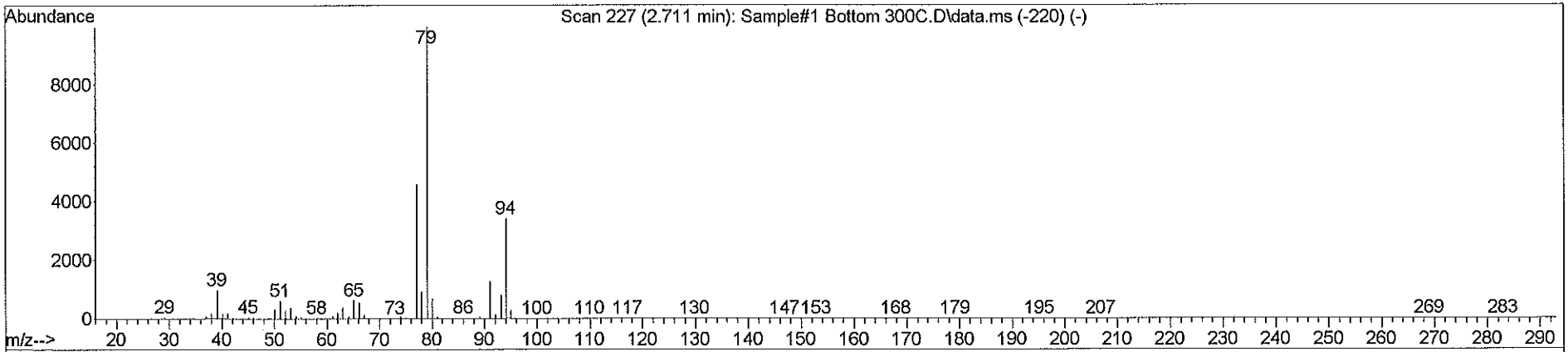
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 38
ID : Acetaldehyde (CAS); Ethanal; Acetaldeyde; Ethyl aldehyde; Acetic aldehyde; CH3CHO; Acetaldehyd; Aldehyde acetique; Aldeide acetica; NCI-C56326; Octowy aldehyd; Acetylaldehyde; Rcra waste number U001; UN 1089

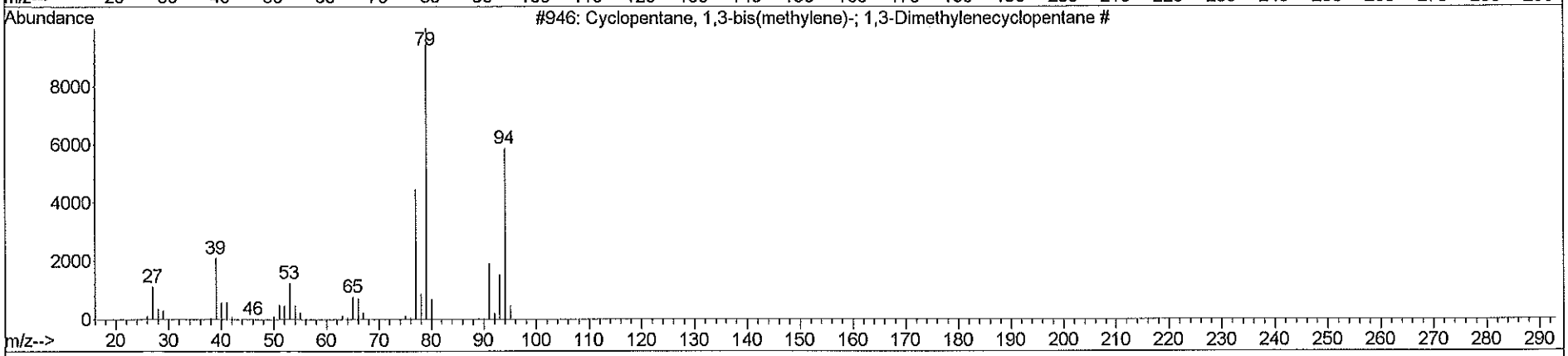


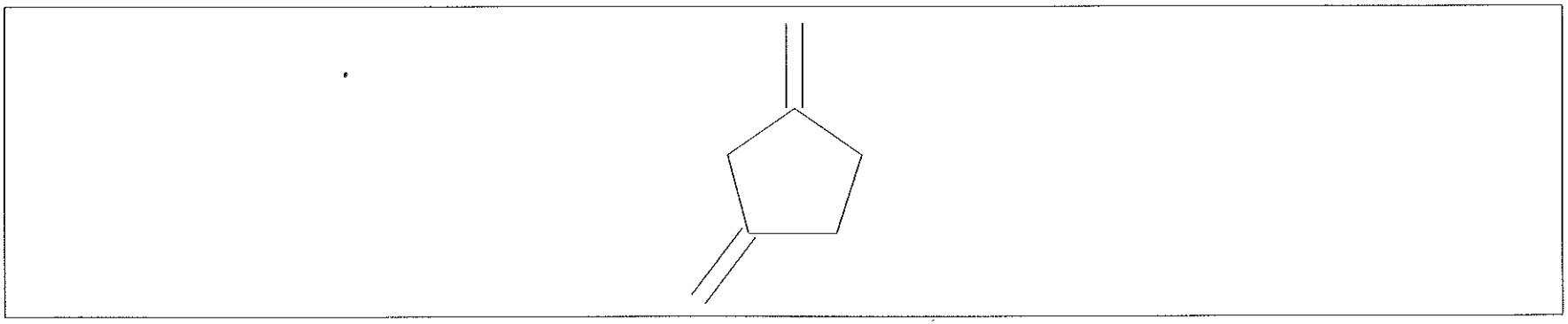




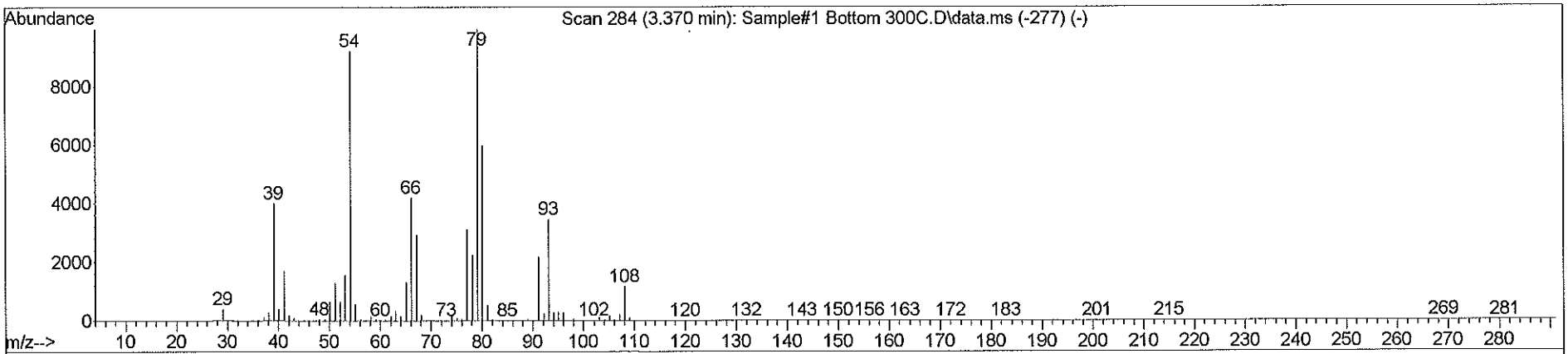
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 91
ID : Cyclopentane, 1,3-bis(methylene)-; 1,3-Dimethylenecyclopentane #

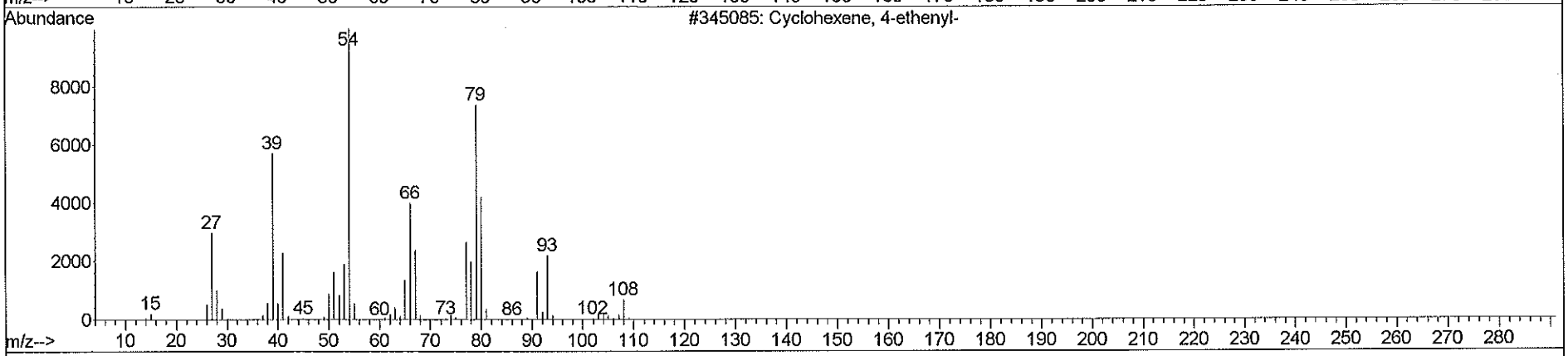


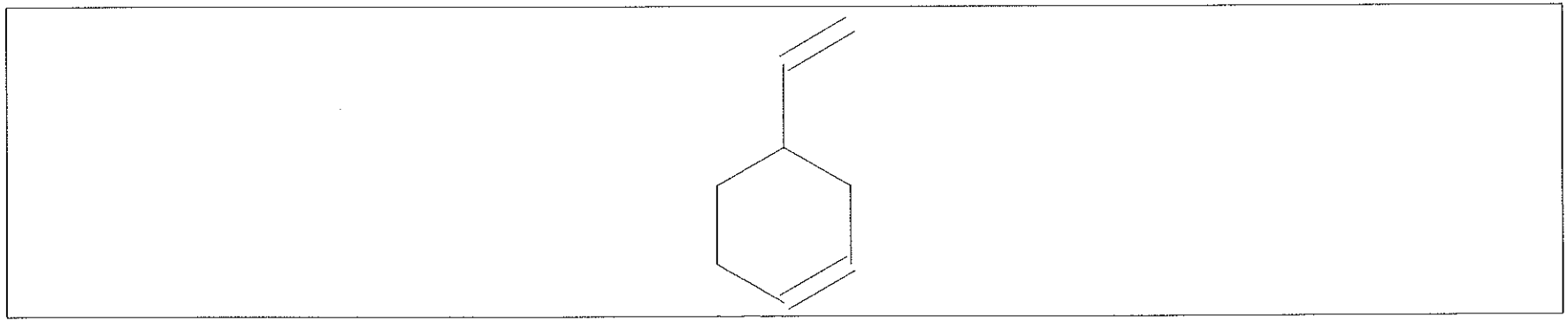




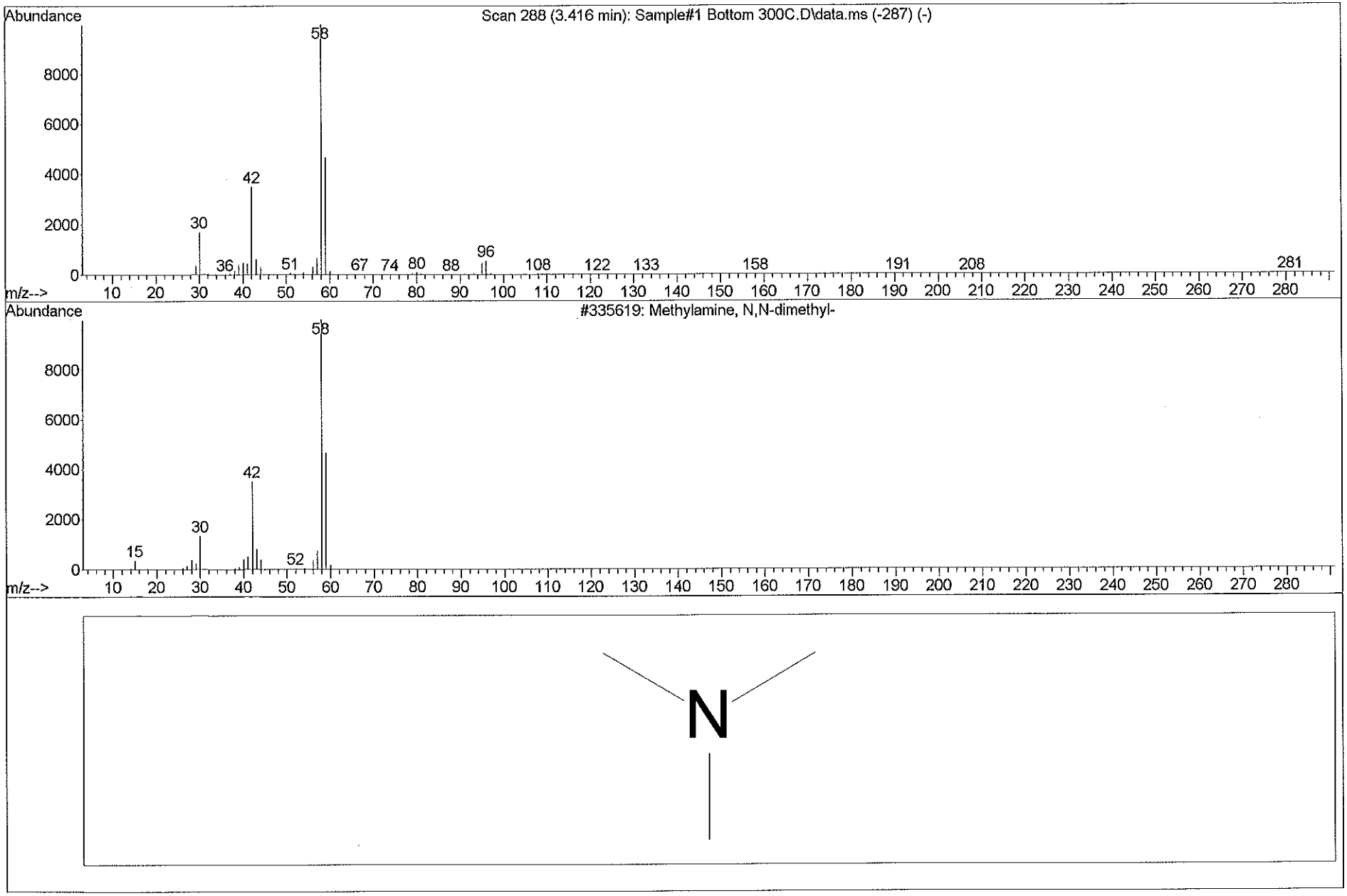
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 97
ID : Cyclohexene, 4-ethenyl-



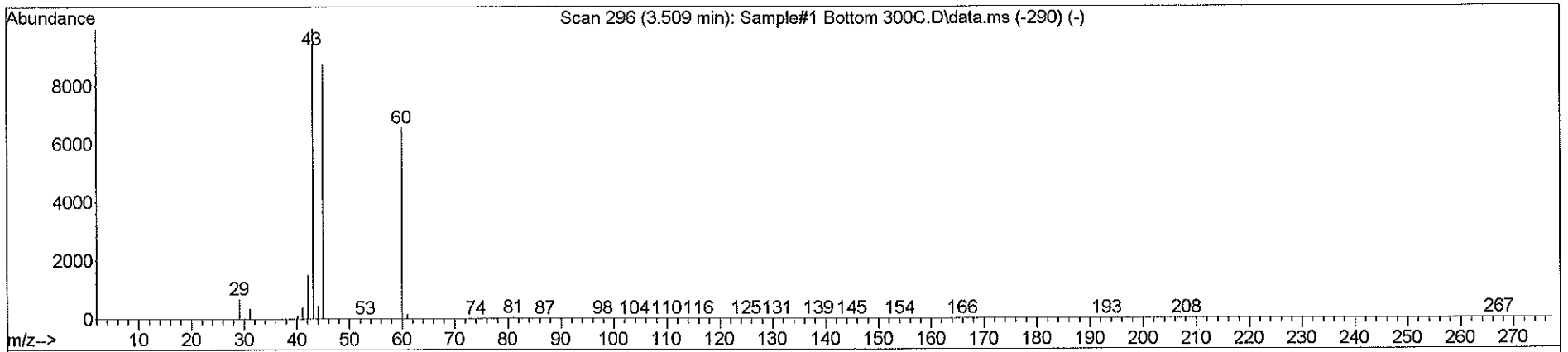


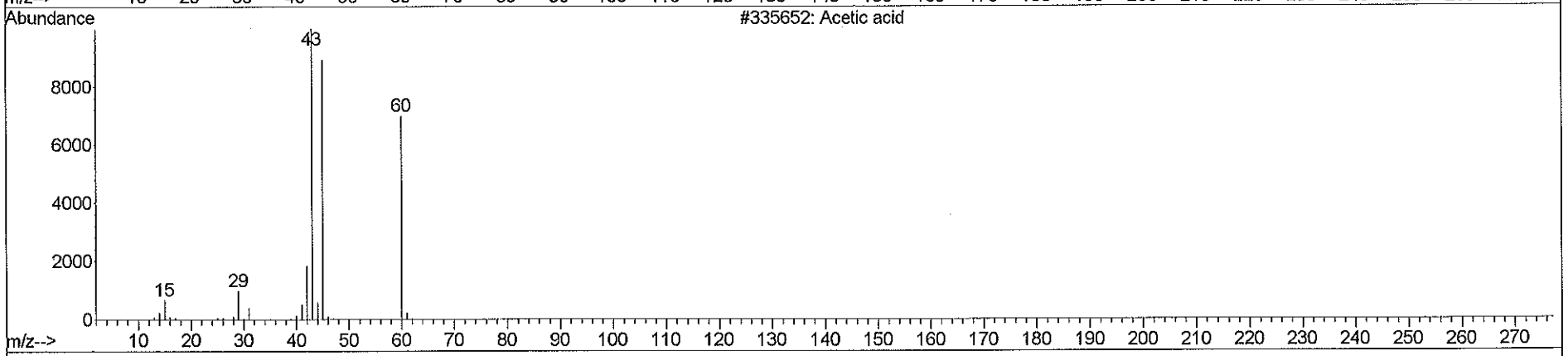


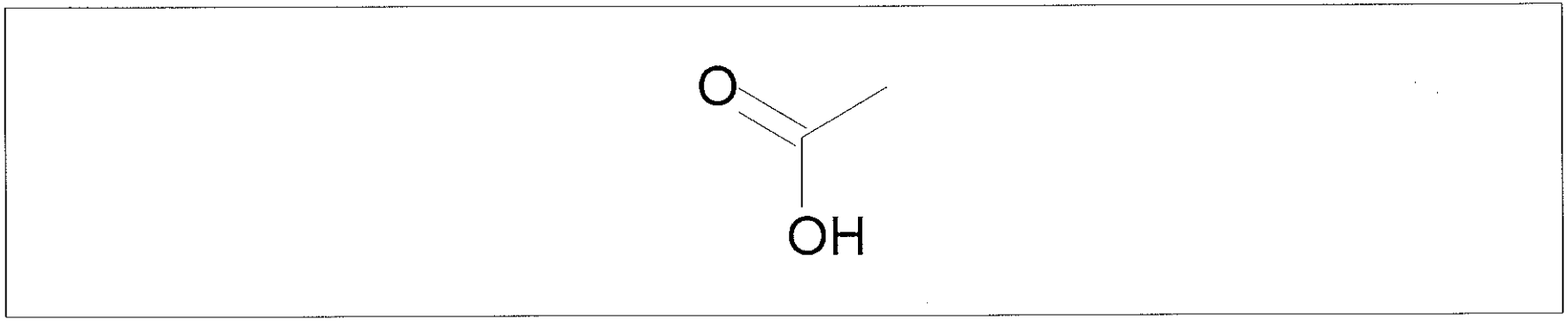
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 86
ID : Methylamine, N,N-dimethyl-



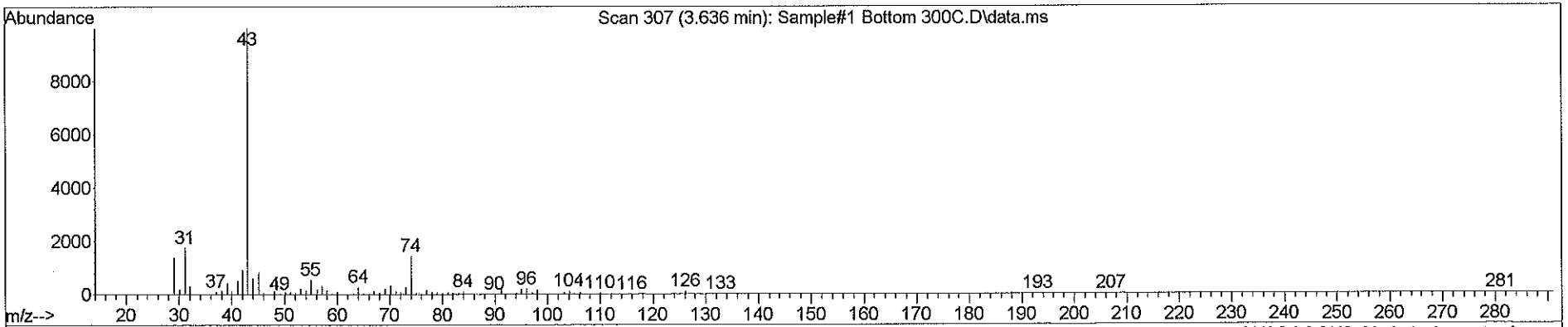
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 91
ID : Acetic acid

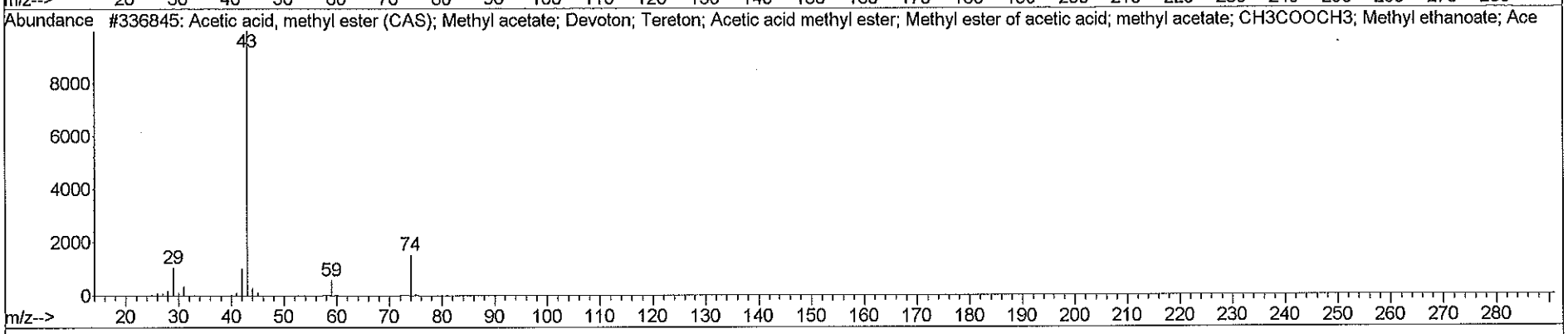


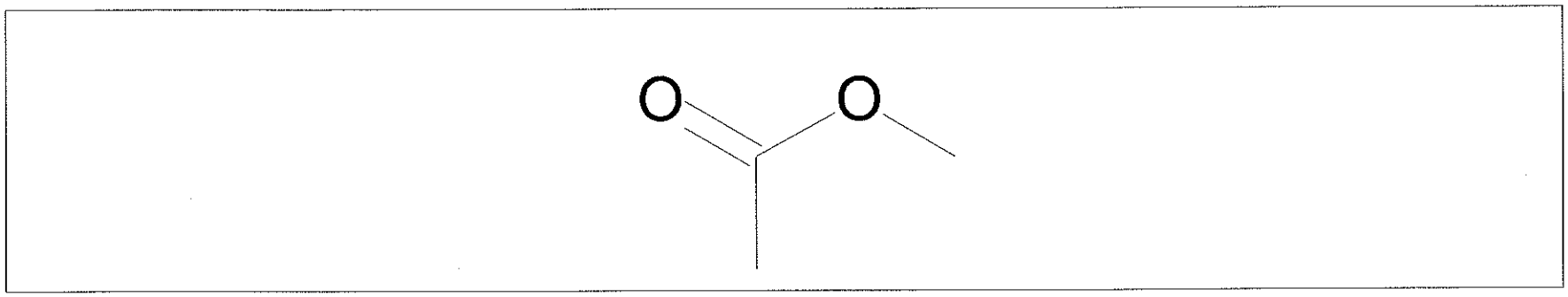




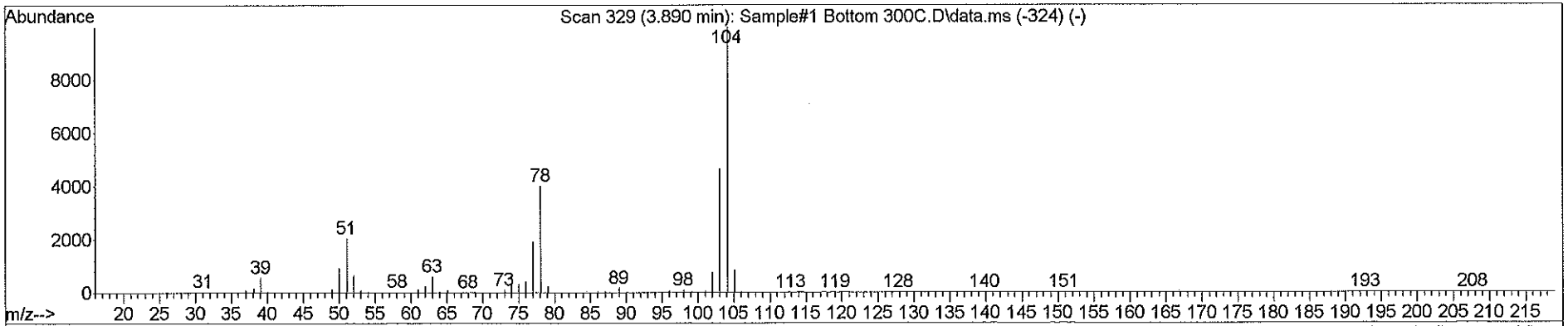
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 53
ID : Acetic acid, methyl ester (CAS); Methyl acetate; Devoton; Tereton; Acetic acid methyl ester; Methyl ester of acetic acid; methyl acetate; CH3COOCH3; Methyl ethanoate; Acetate de methyle; Methyl acetic ester; Methylacetaat; Methylacetat; Methyle (acetate d

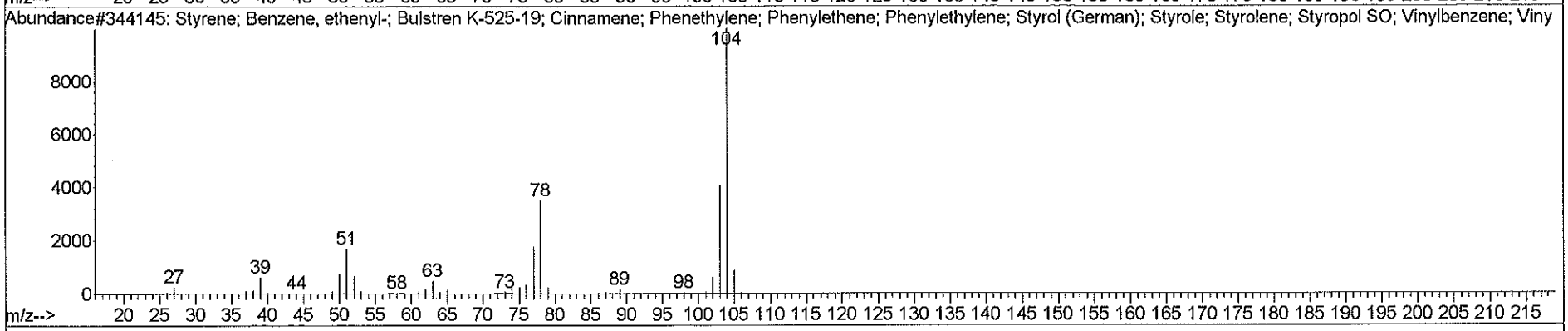


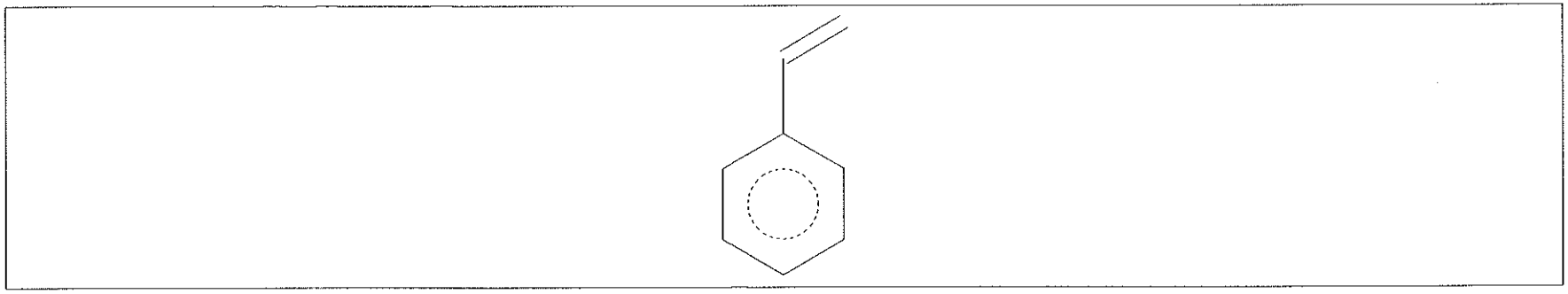




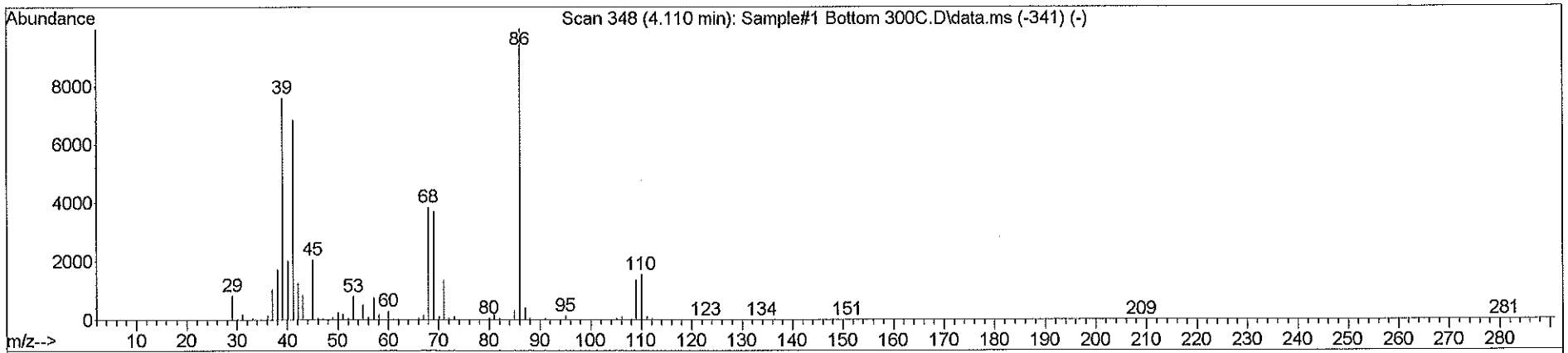
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 97
ID : Styrene; Benzene, ethenyl-; Bulstren K-525-19; Cinnamene; Phenethylene; Phenyl ethene; Phenylethylene; Styrol (German); Styrole; Styrolene; Styropol SO; Viny lbenzene; Vinylbenzol; Ethenylbenzene; Cinnaminol; Cinnamol; Styrol; Benzene, vinyl-; Cinnamenol; D

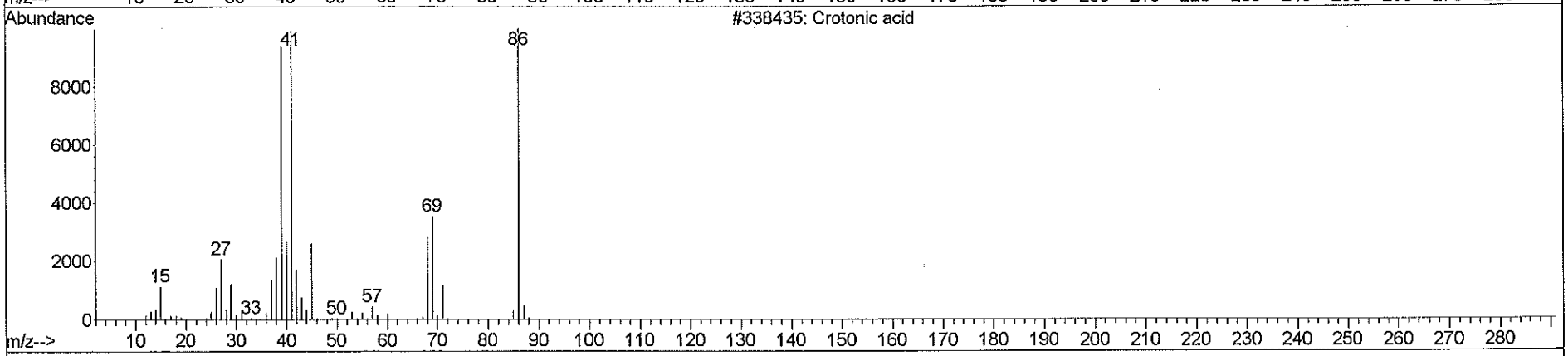


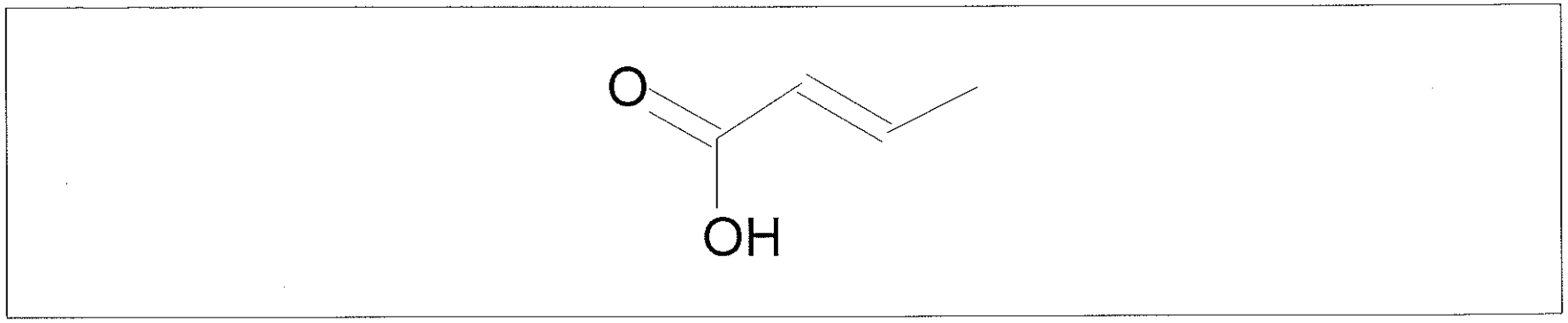




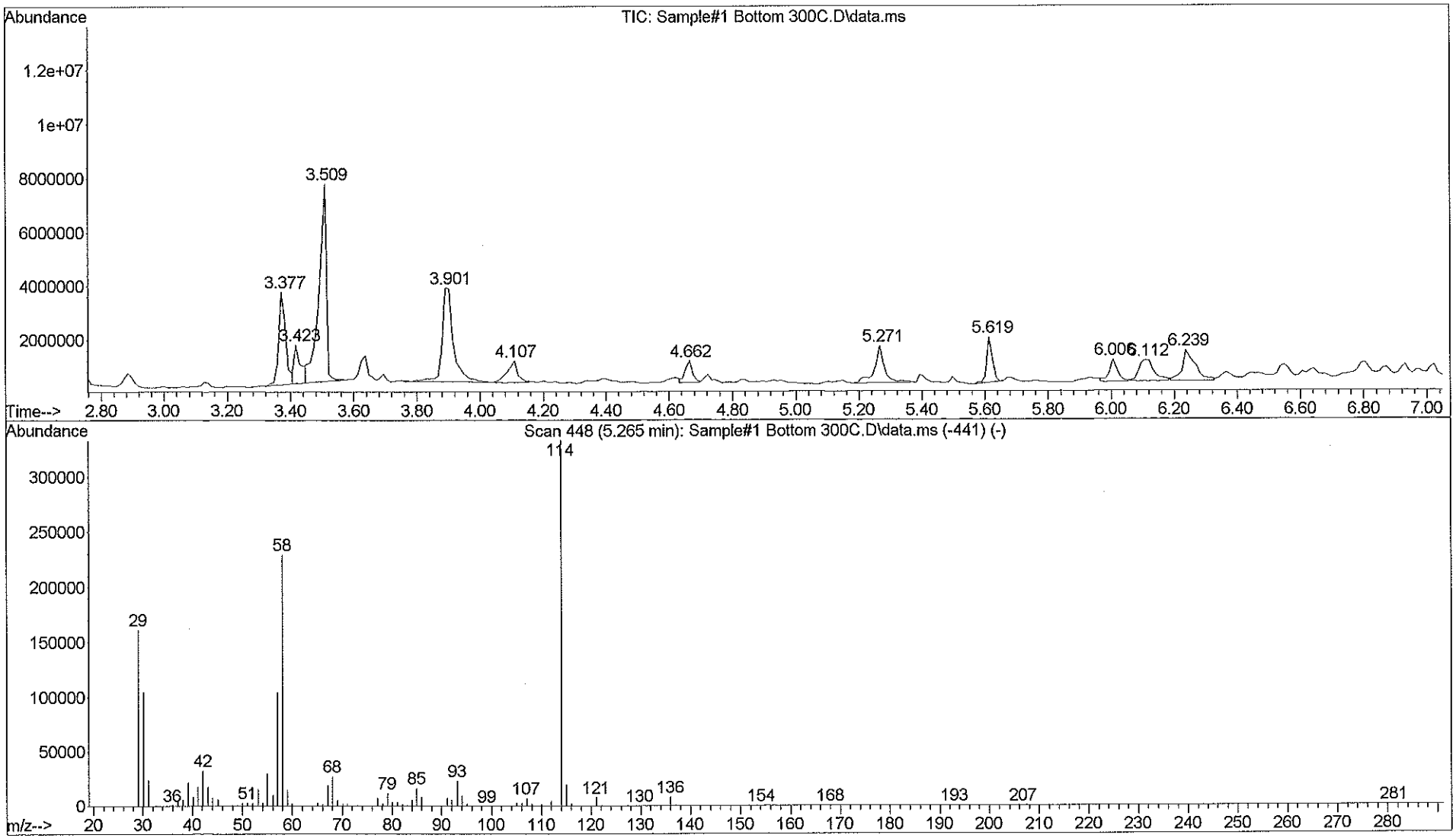
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 95
ID : Crotonic acid



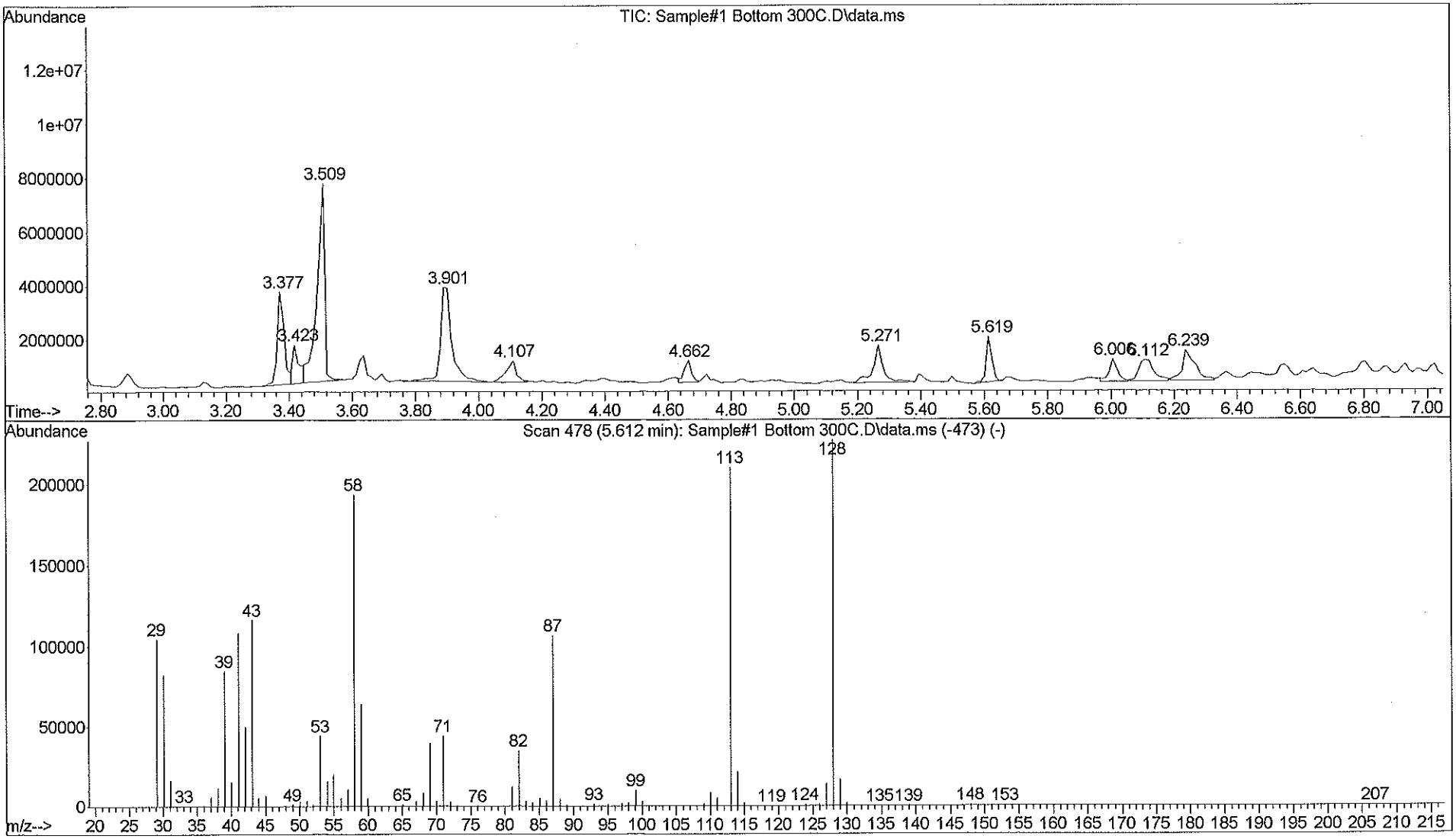




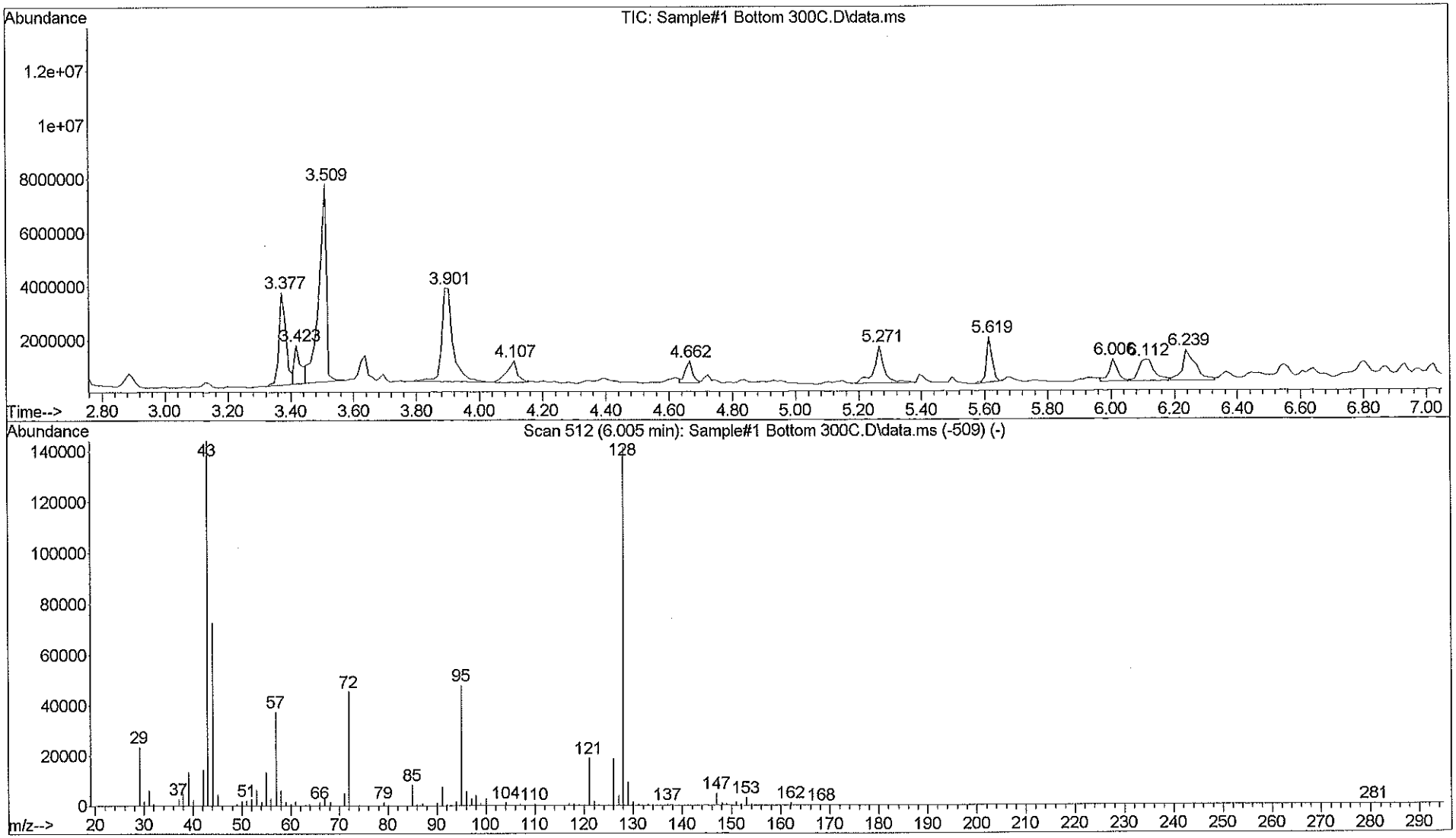
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



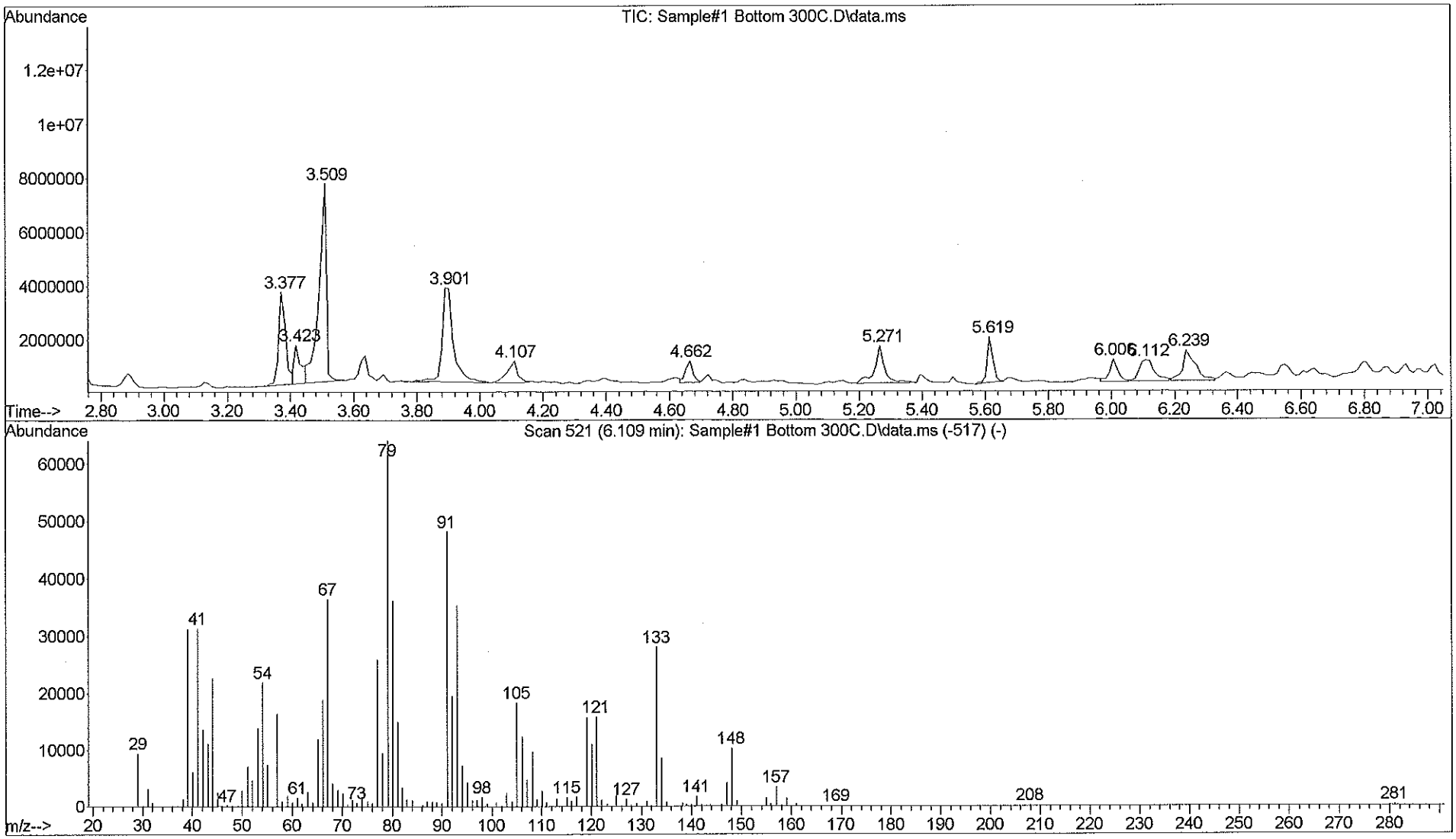
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



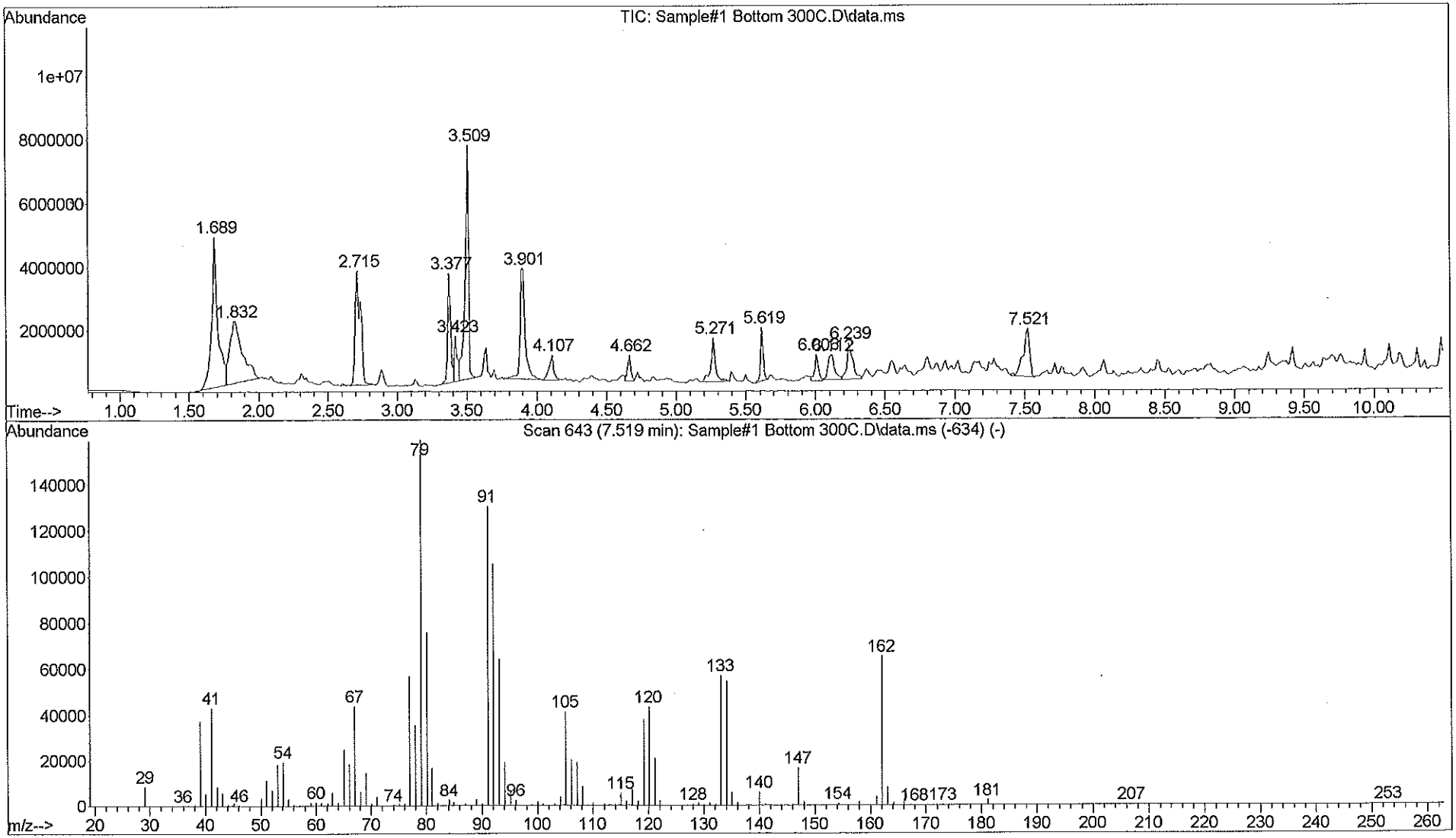
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



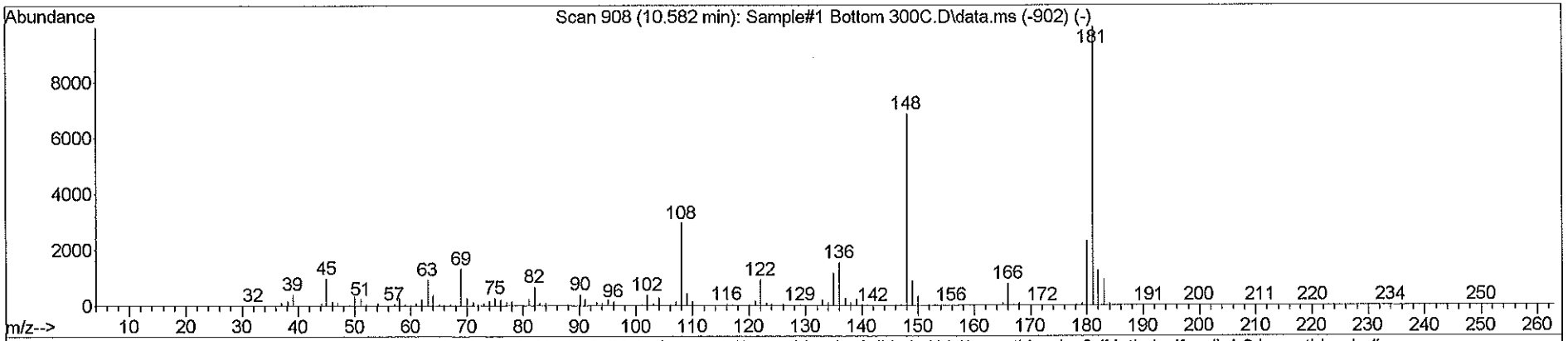
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

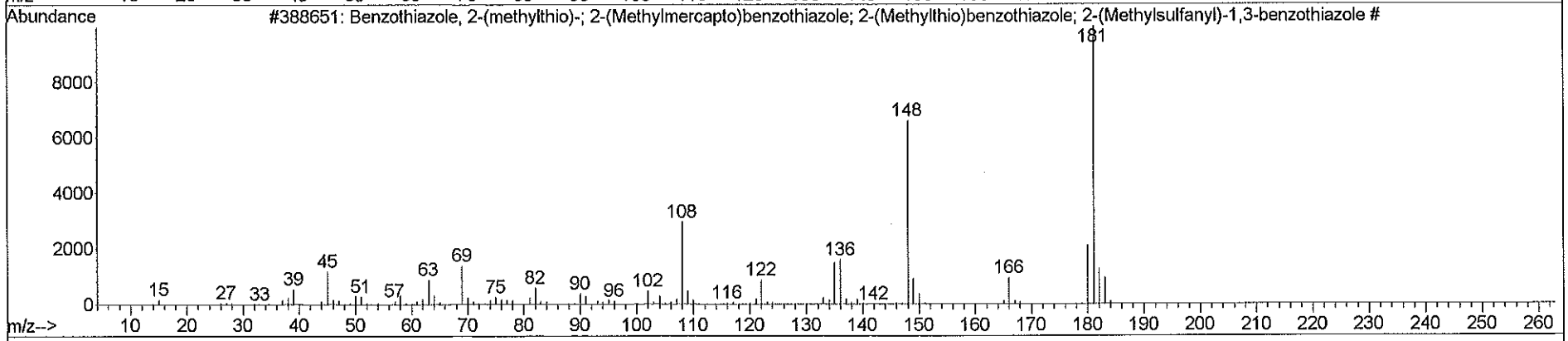


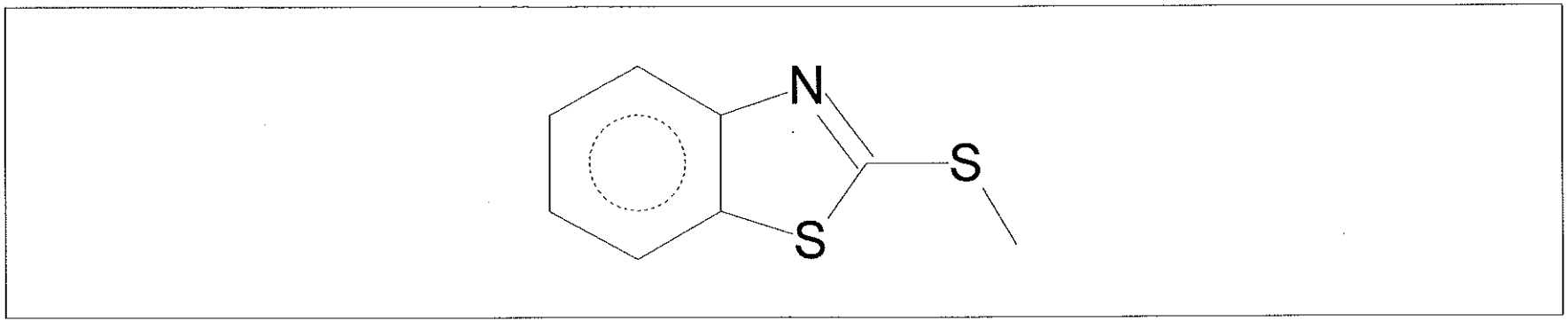
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



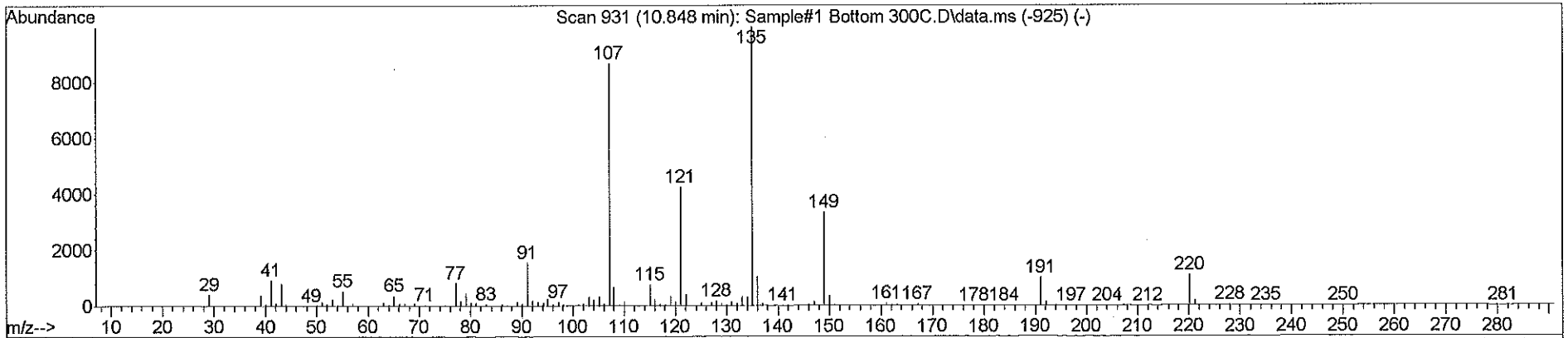
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : Benzothiazole, 2-(methylthio)-; 2-(Methylmercapto)benzothiazole; 2-(Methylthio)benzothiazole; 2-(Methylsulfanyl)-1,3-benzothiazole #

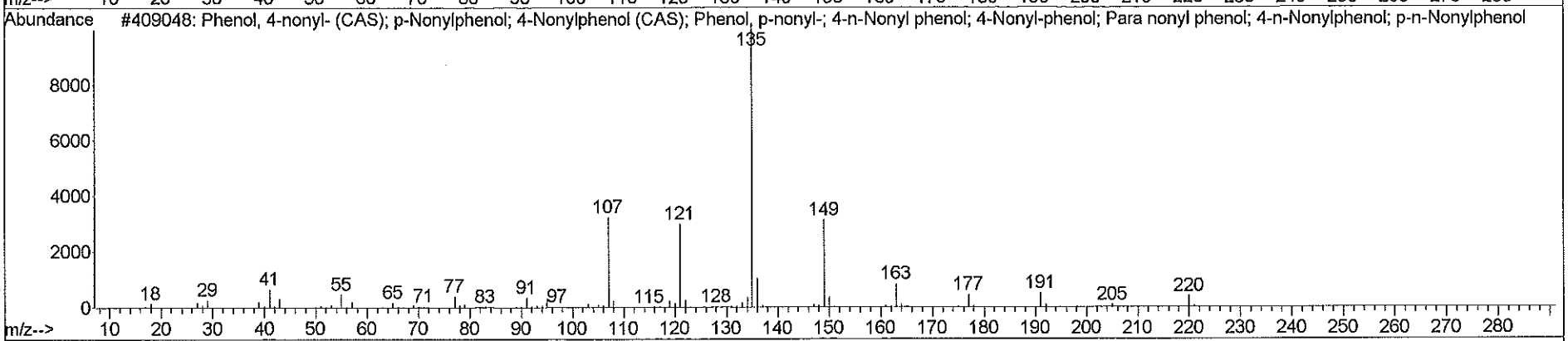


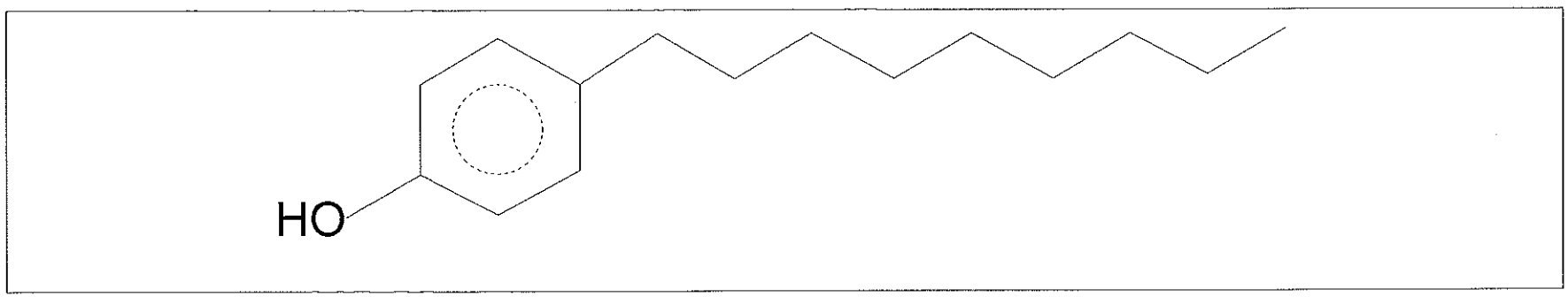




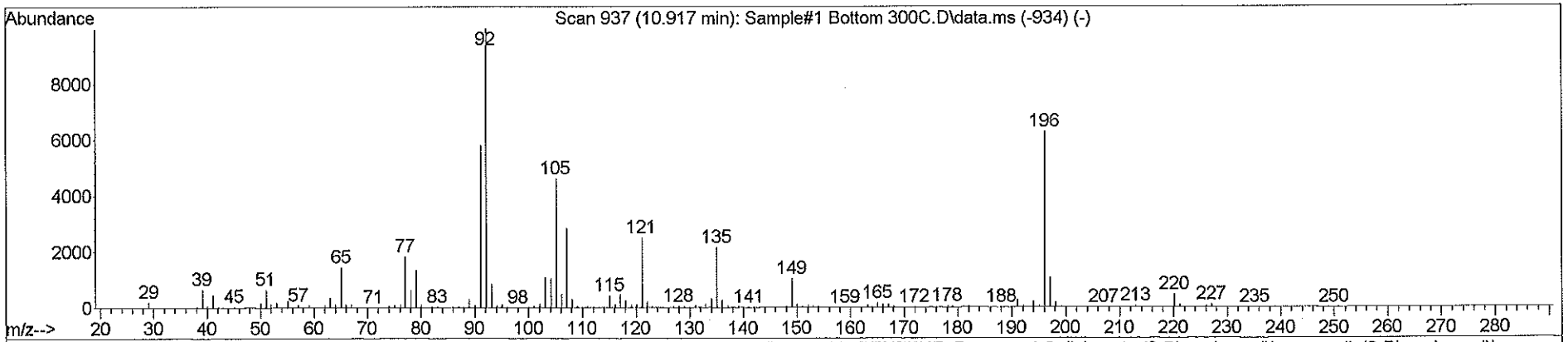
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 94
ID : Phenol, 4-nonyl- (CAS); p-Nonylphenol; 4-Nonylphenol (CAS); Phenol, p-nonyl-; 4-n-Nonyl phenol; 4-Nonyl-phenol; Para nonyl phenol; 4-n-Nonylphenol; p-n-Nonylphenol

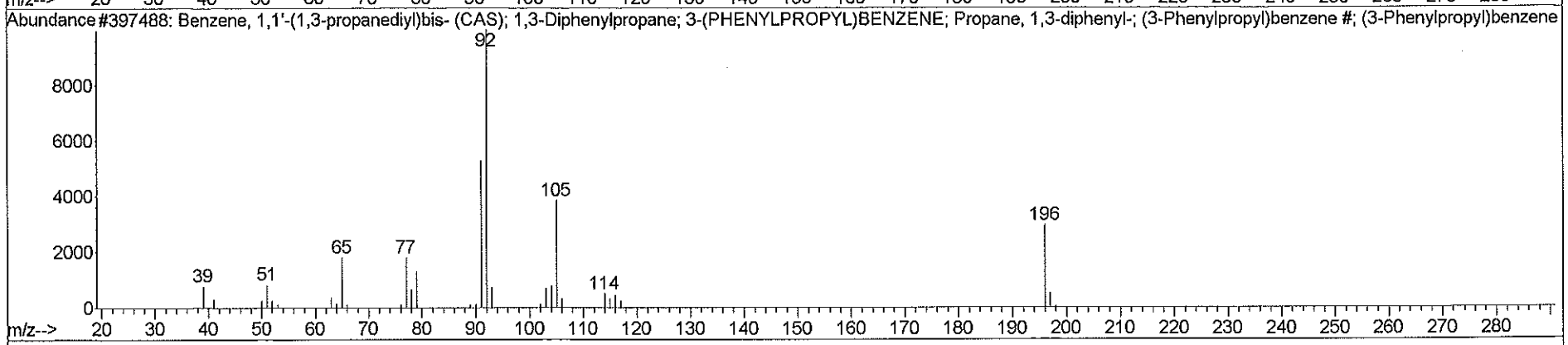


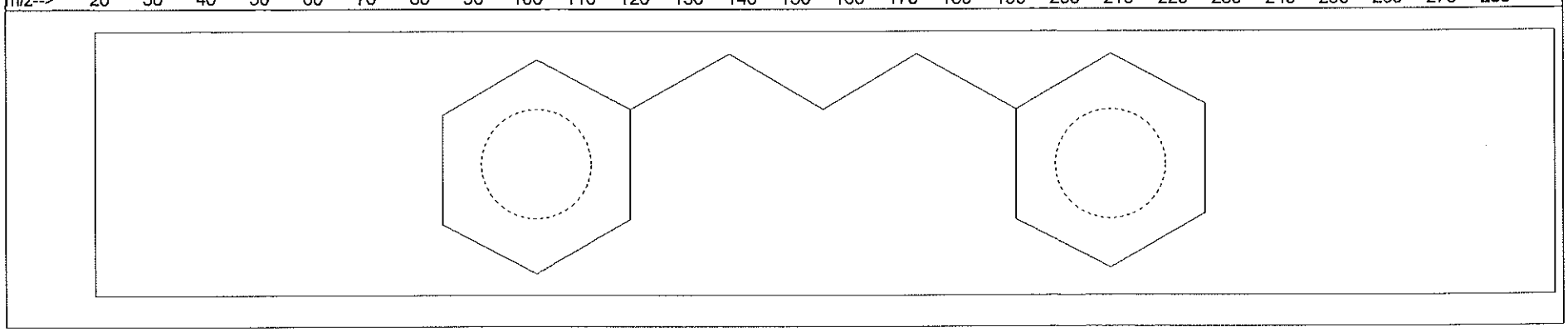




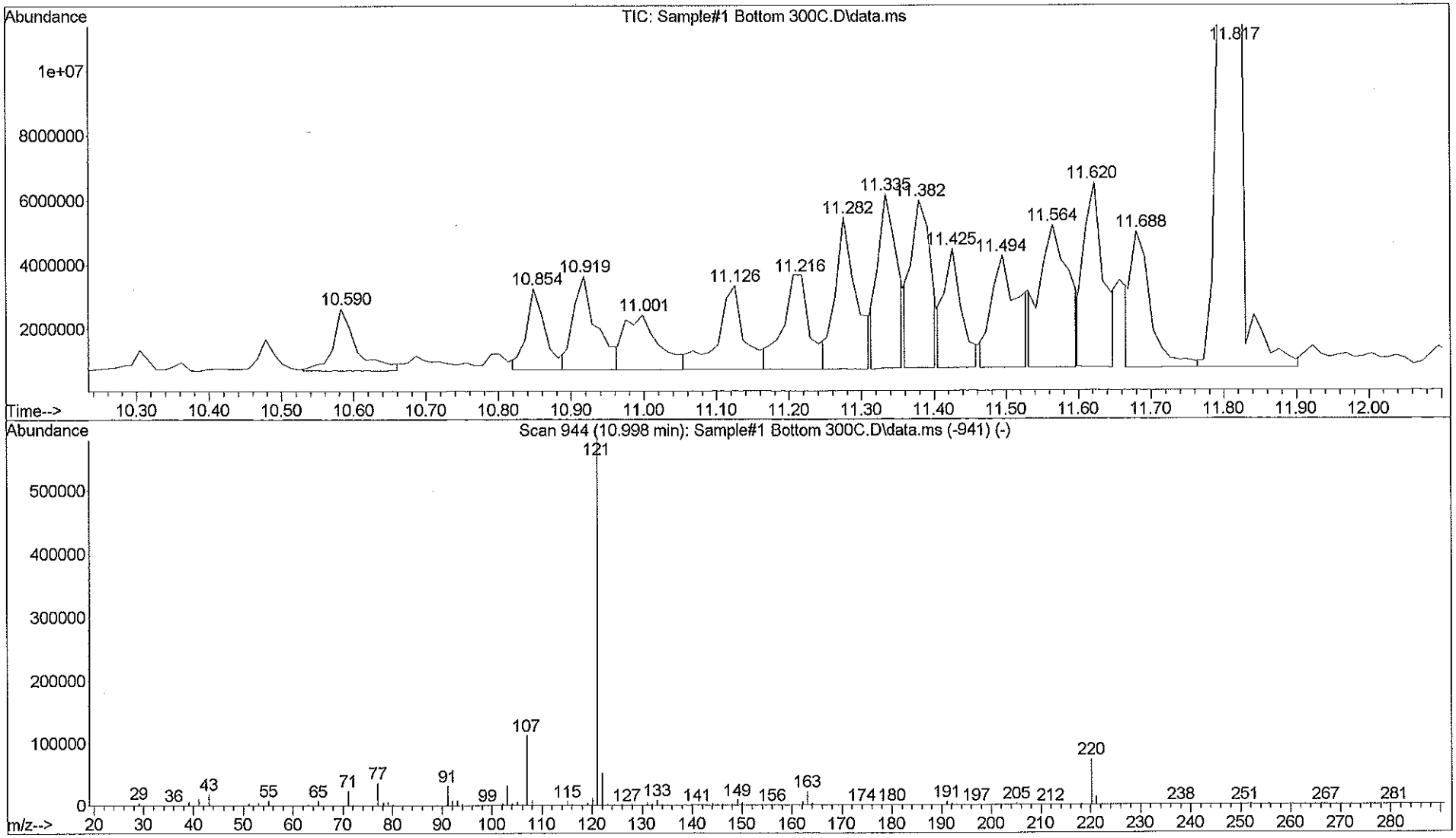
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 93
ID : Benzene, 1,1'-(1,3-propanediyl)bis- (CAS); 1,3-Diphenylpropane; 3-(PHENYLPROPYL)BENZENE; Propane, 1,3-diphenyl-; (3-Phenylpropyl)benzene #; (3-Phenylpropyl)benzene (computer-generated name)



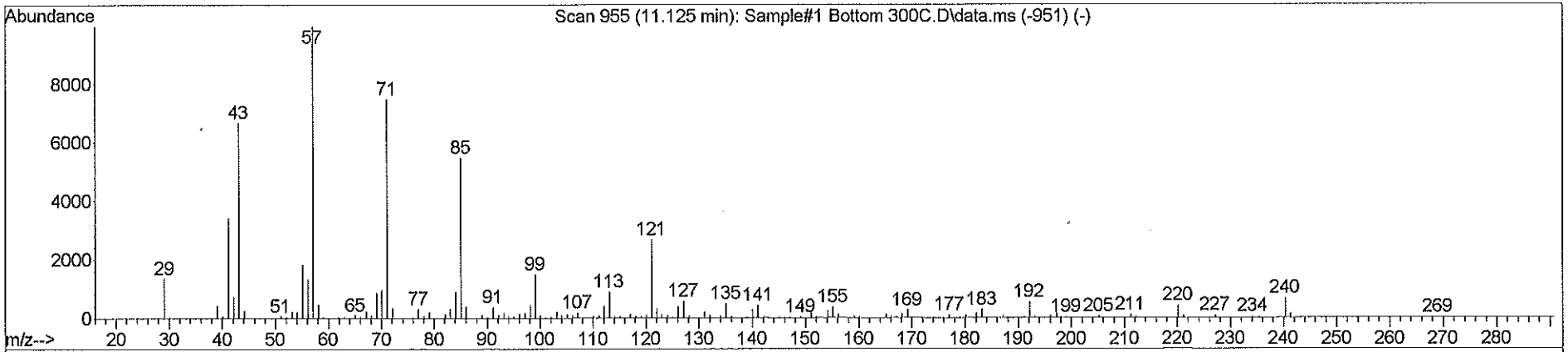


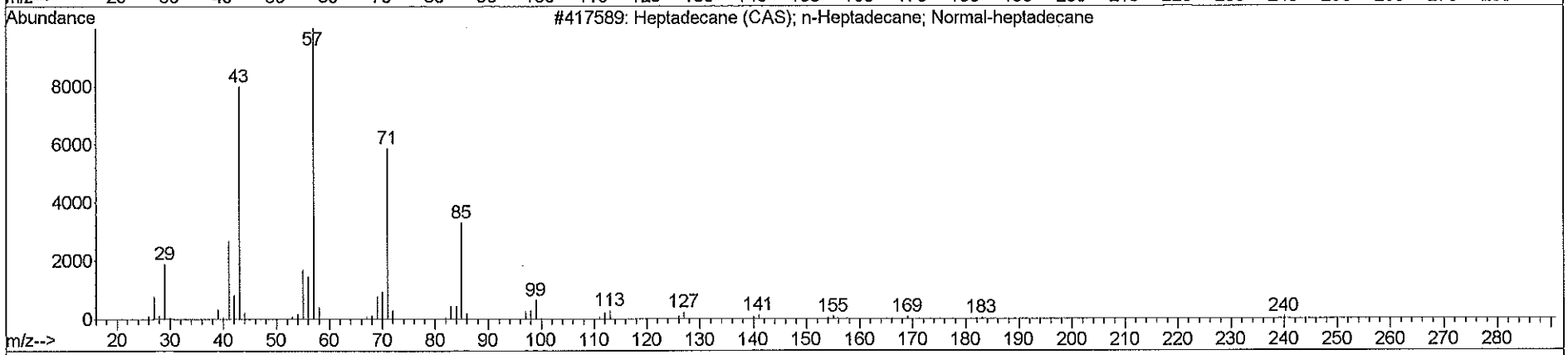


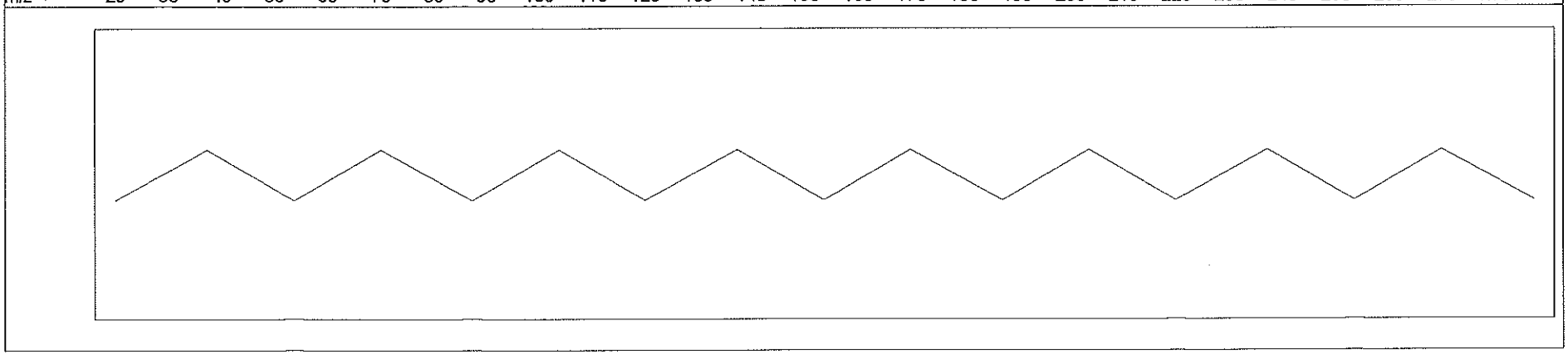
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



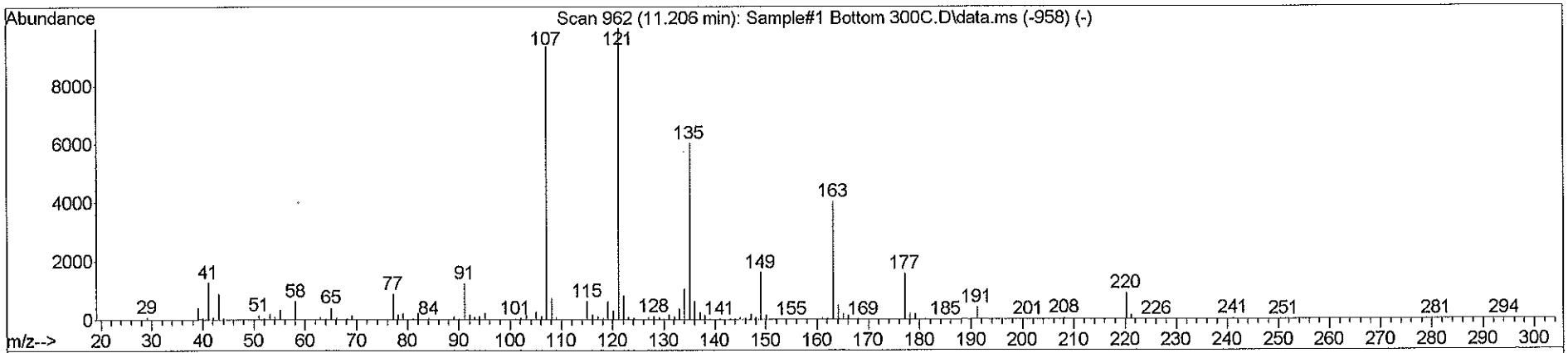
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 95
ID : Heptadecane (CAS); n-Heptadecane; Normal-heptadecane

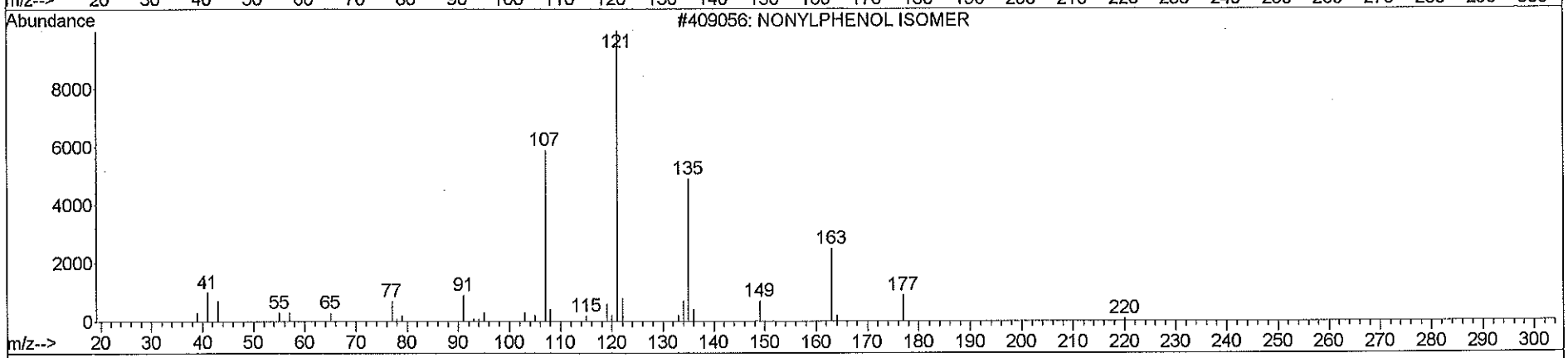


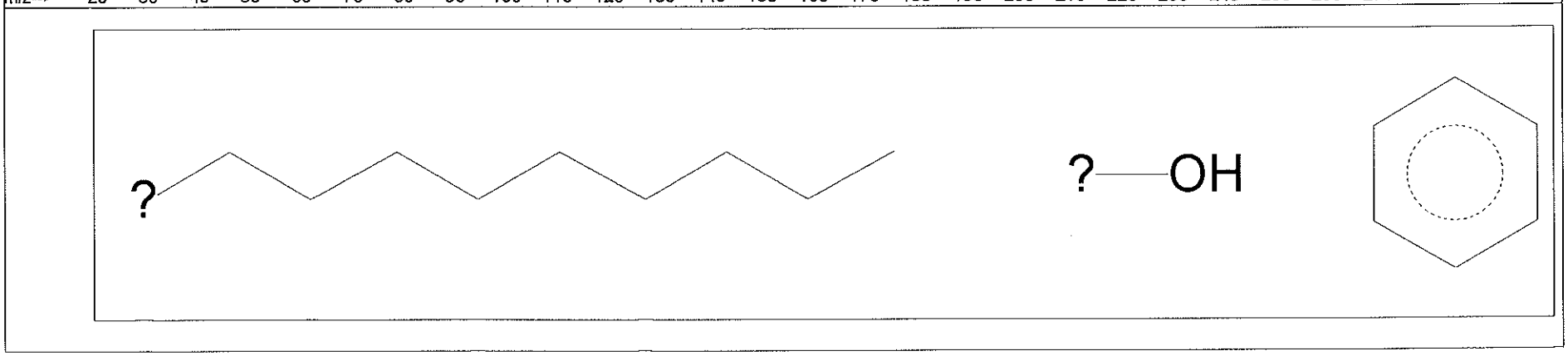




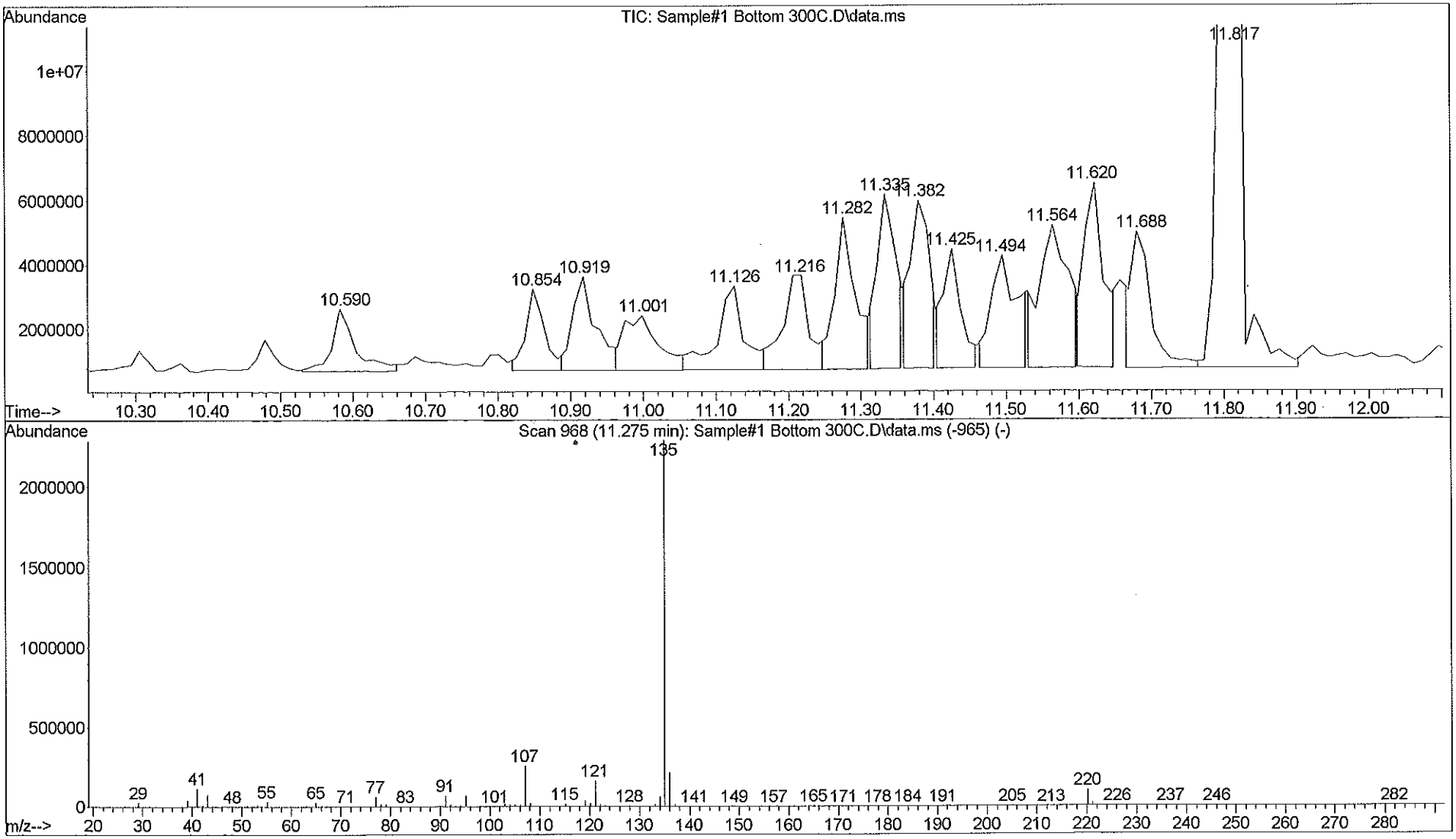
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 94
ID : NONYLPHENOL ISOMER



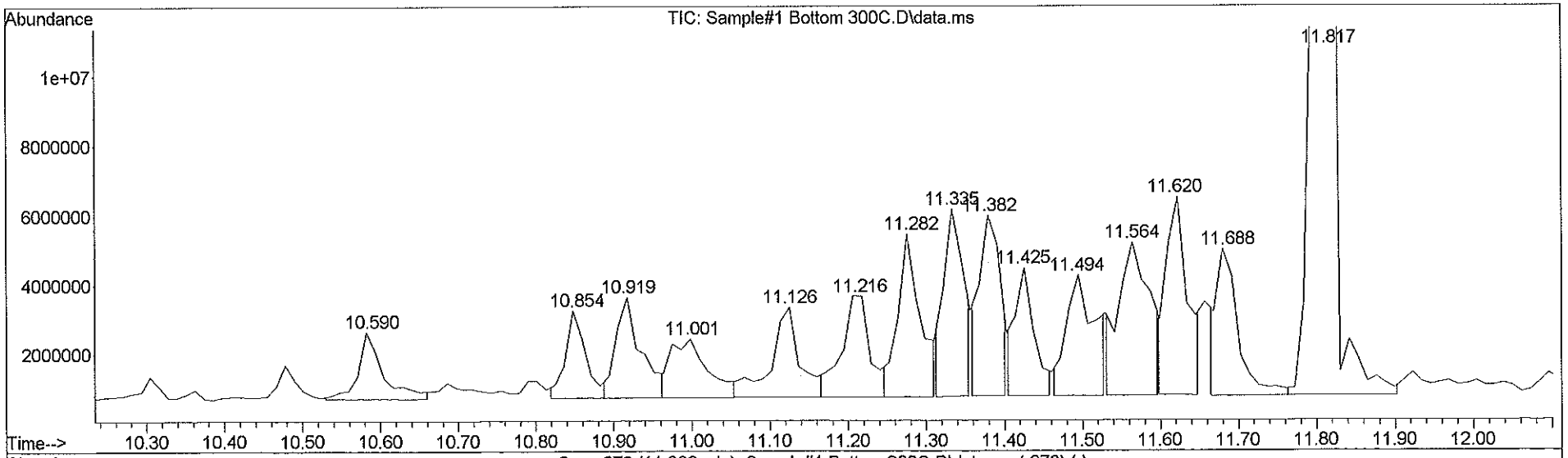


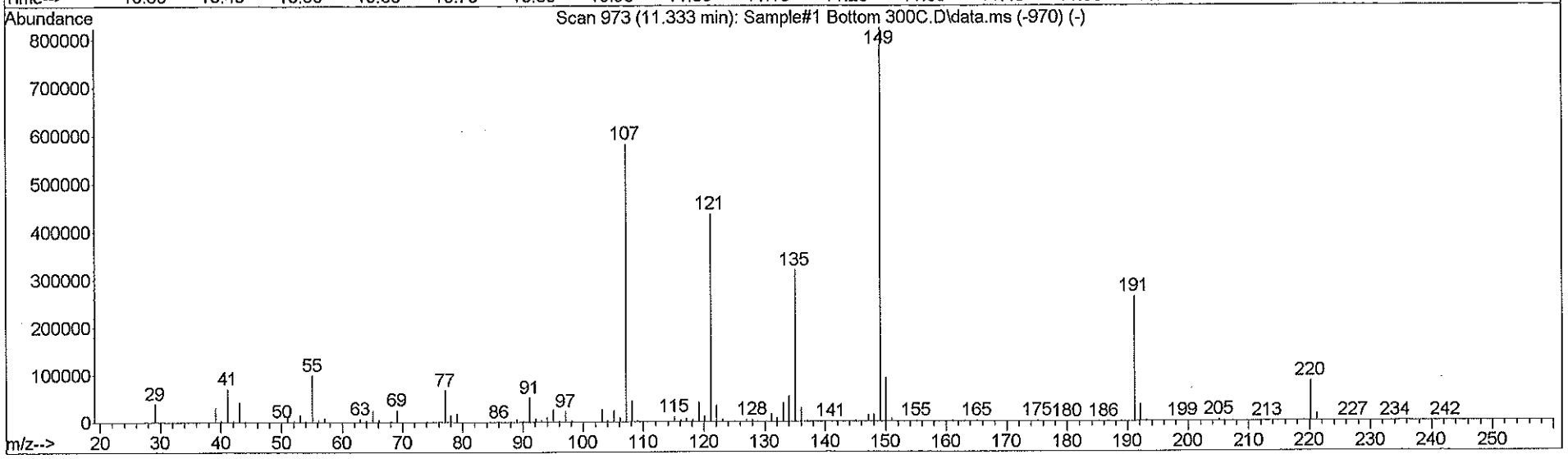


File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

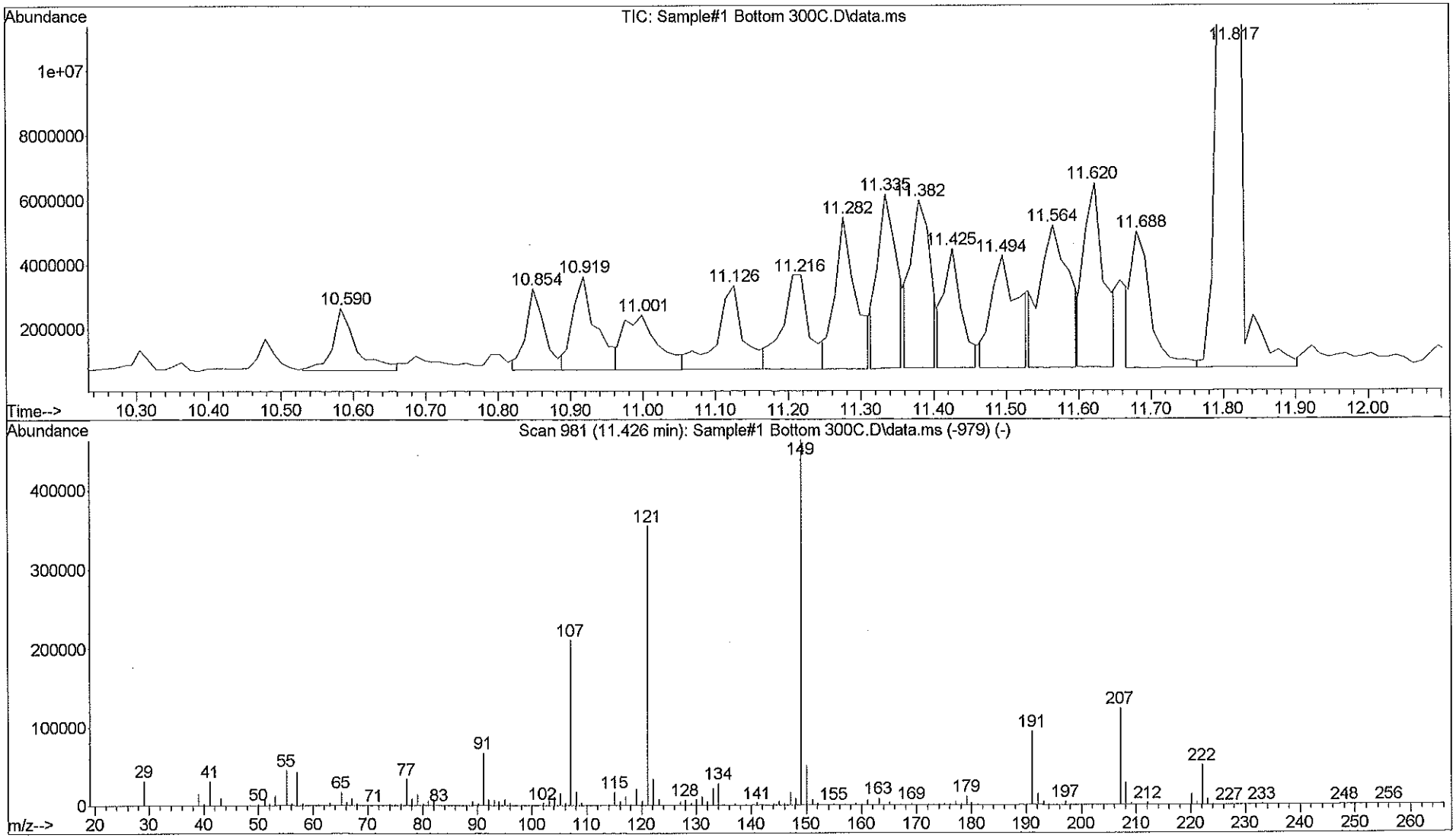


File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

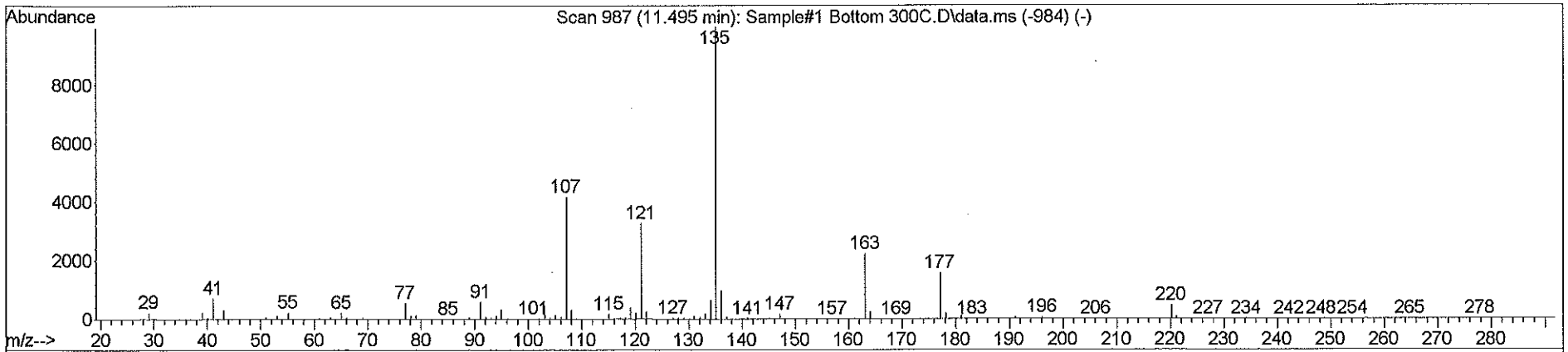


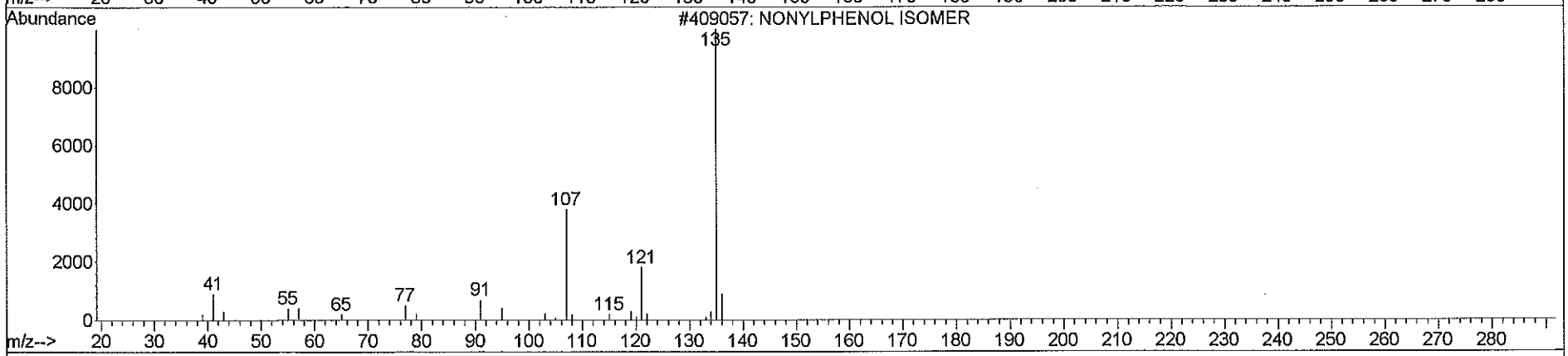


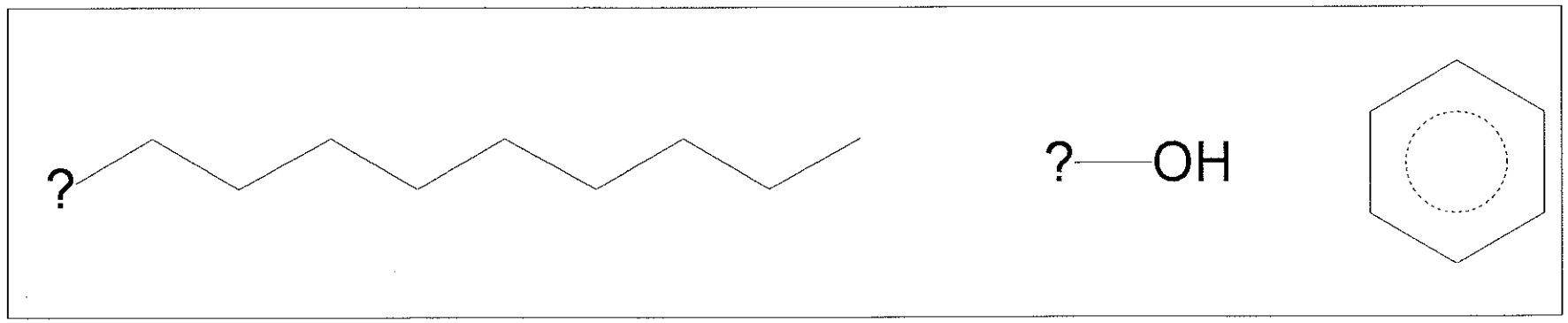
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



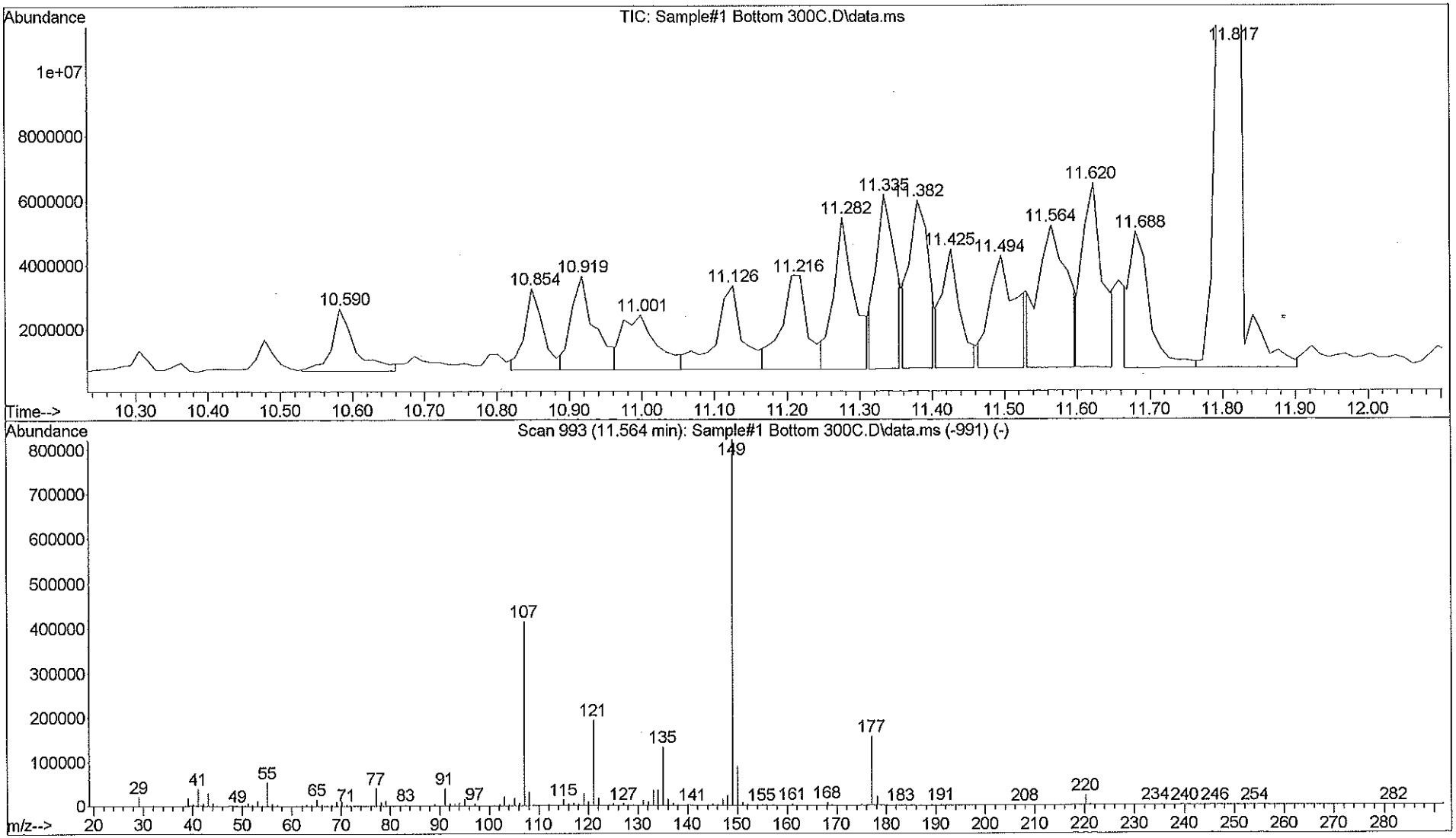
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 64
ID : NONYLPHENOL ISOMER



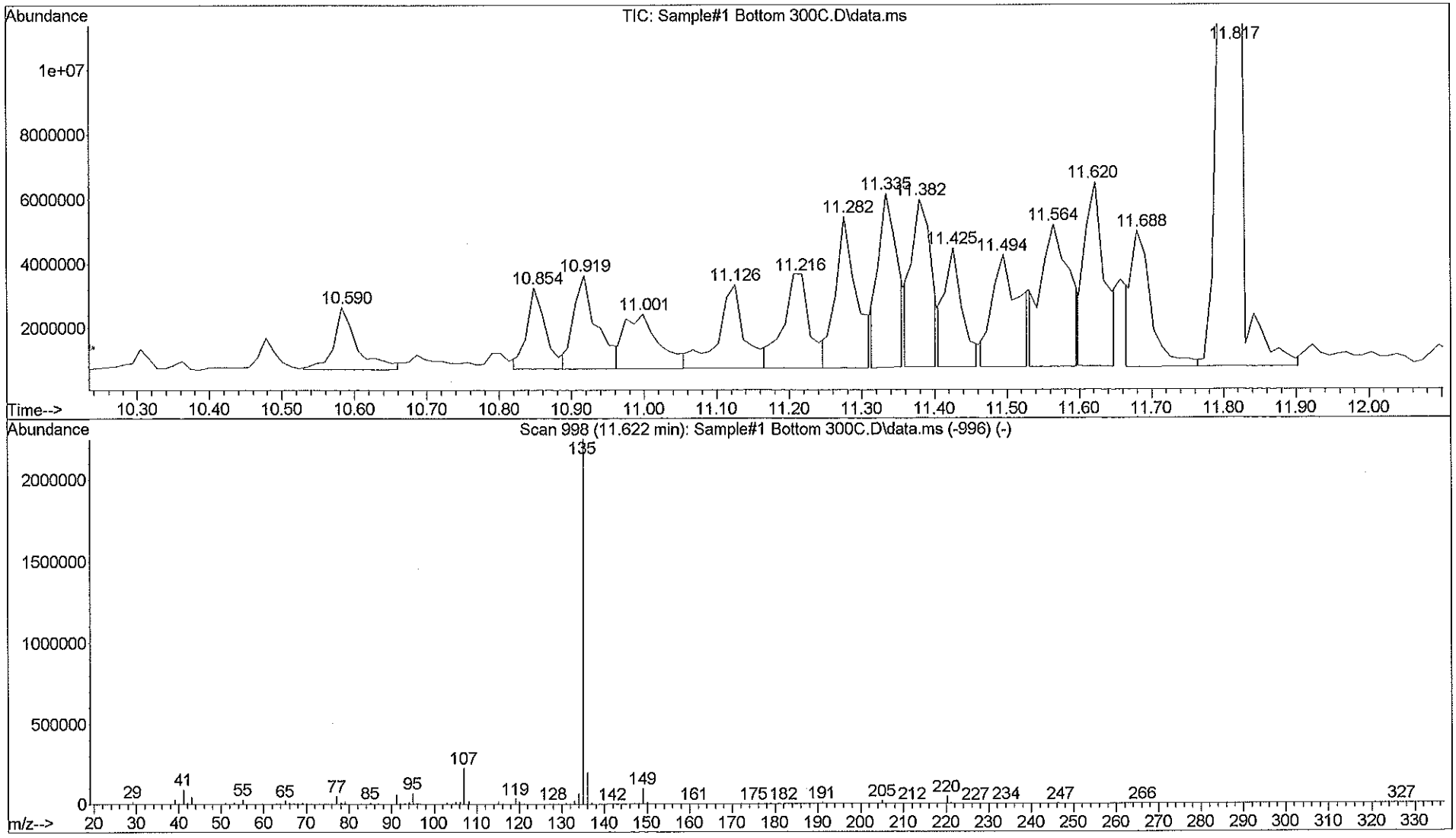




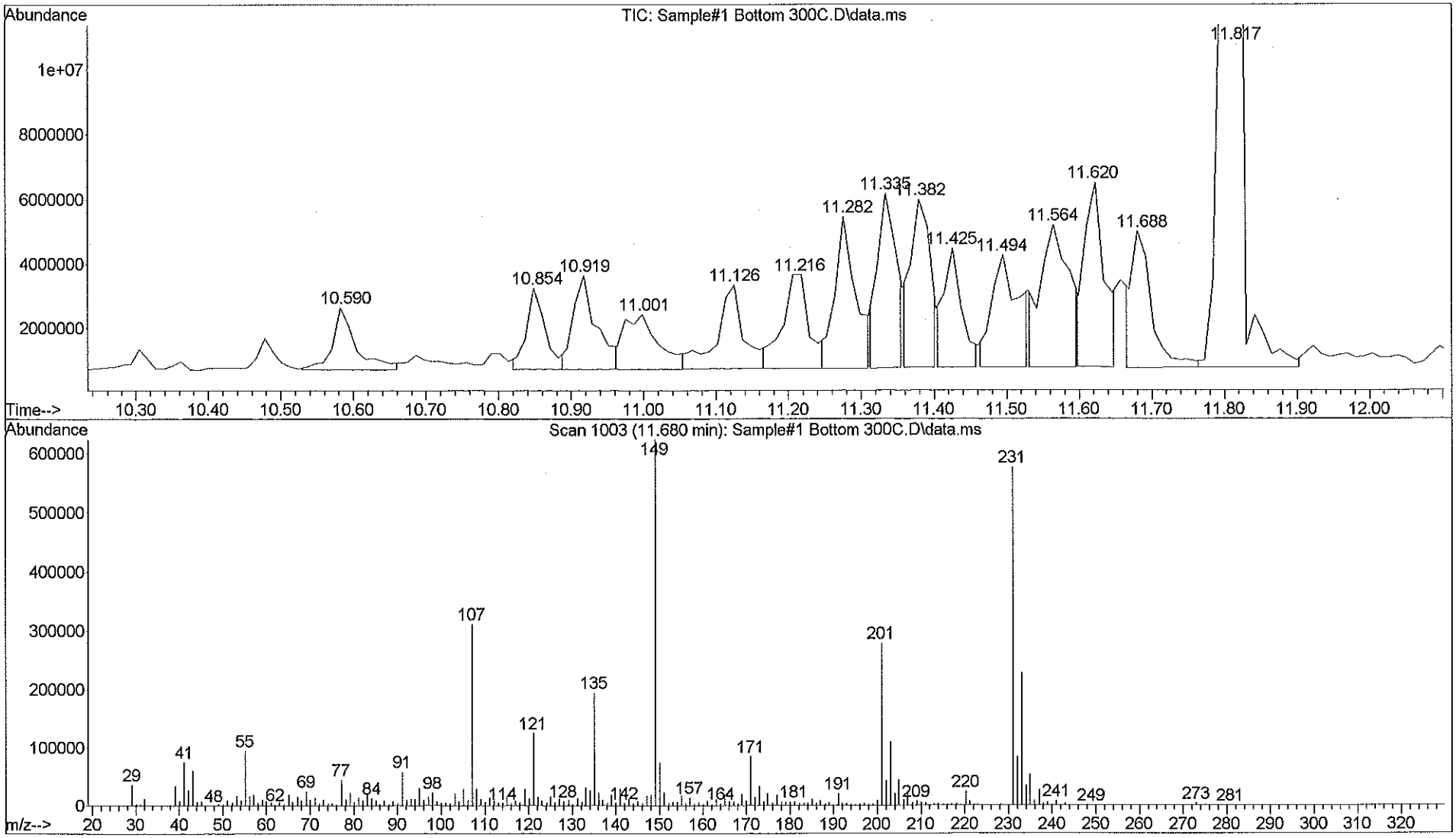
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



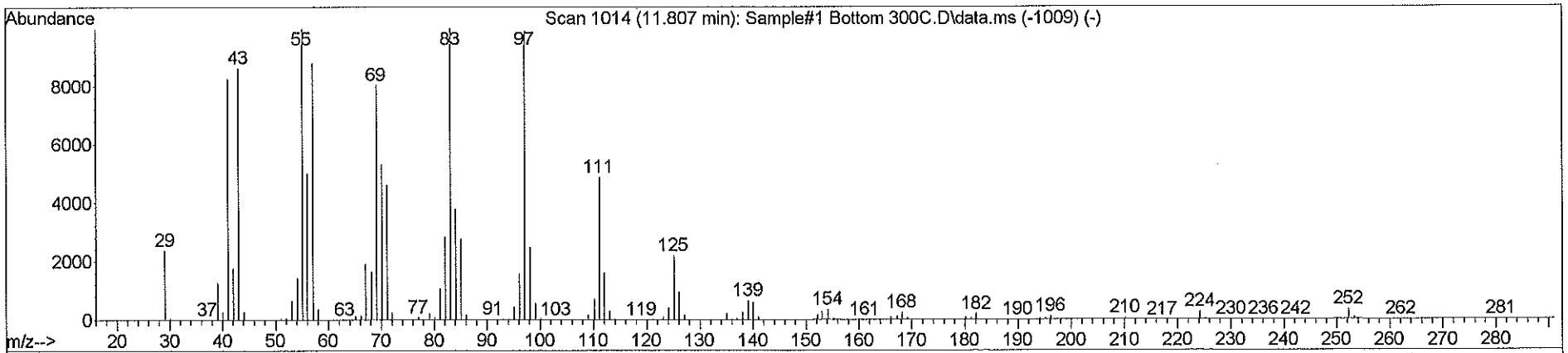
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

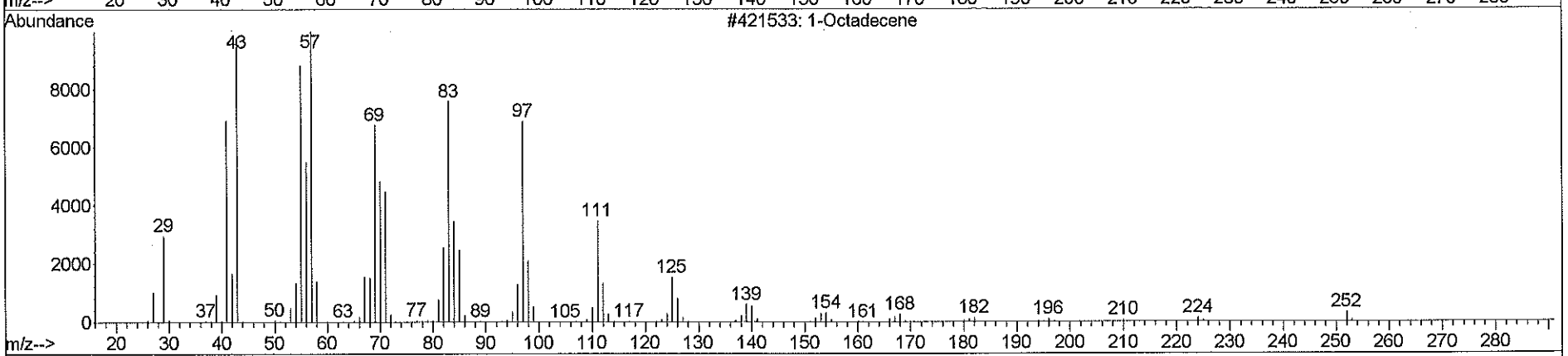


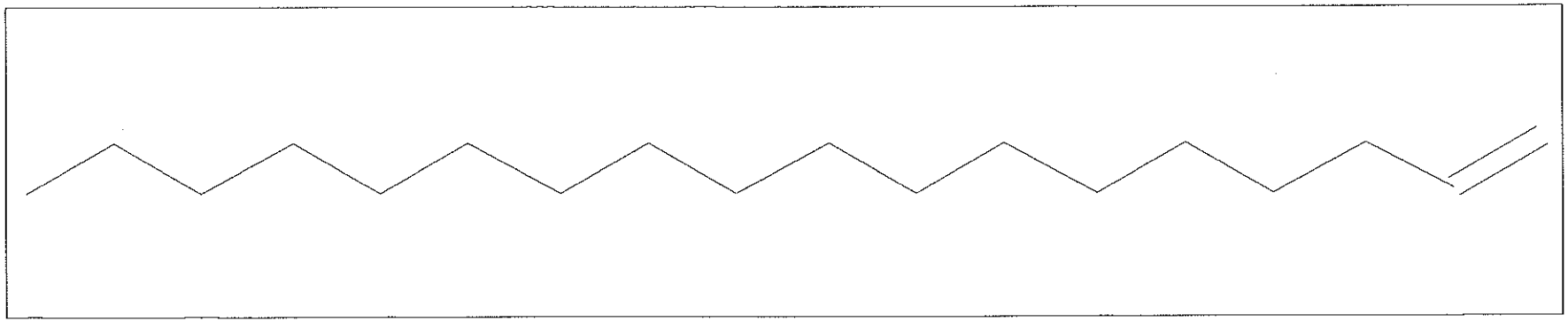
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



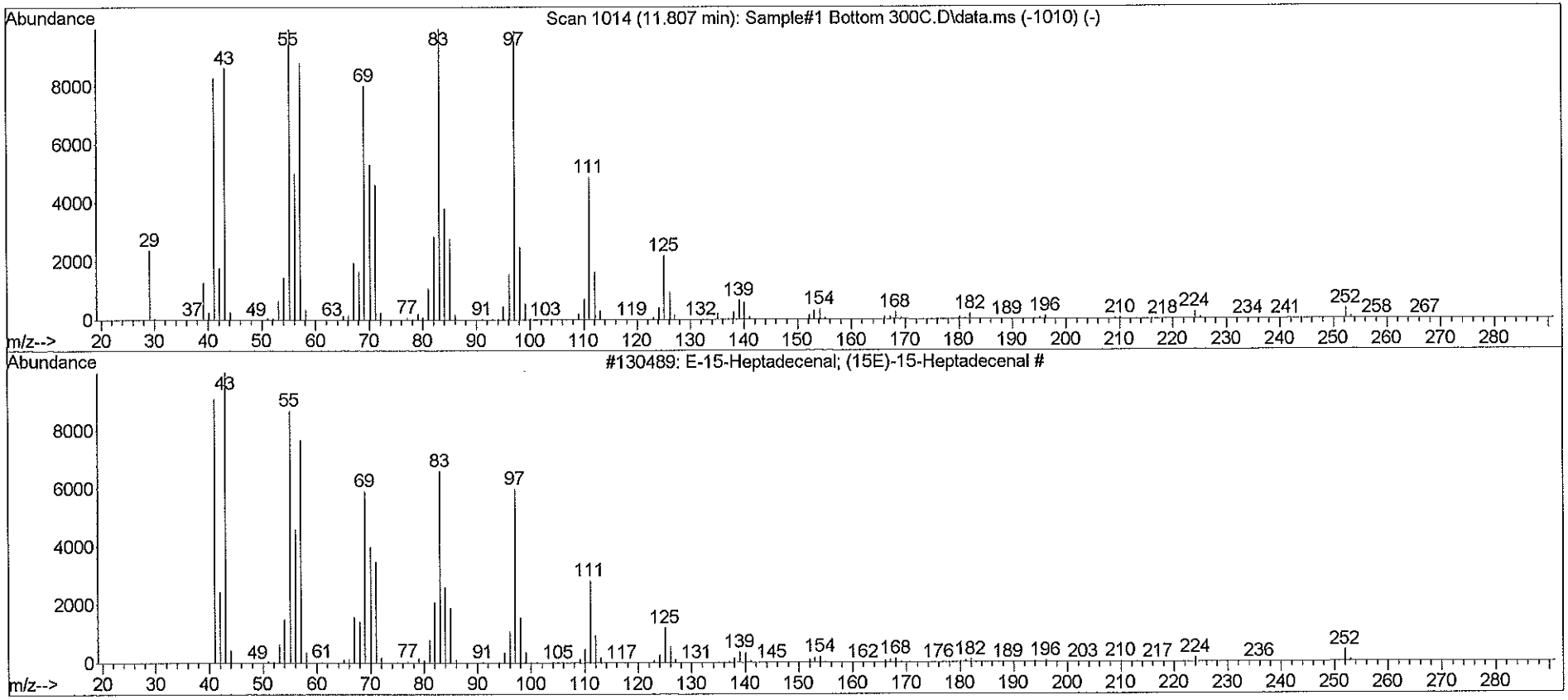
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : 1-Octadecene



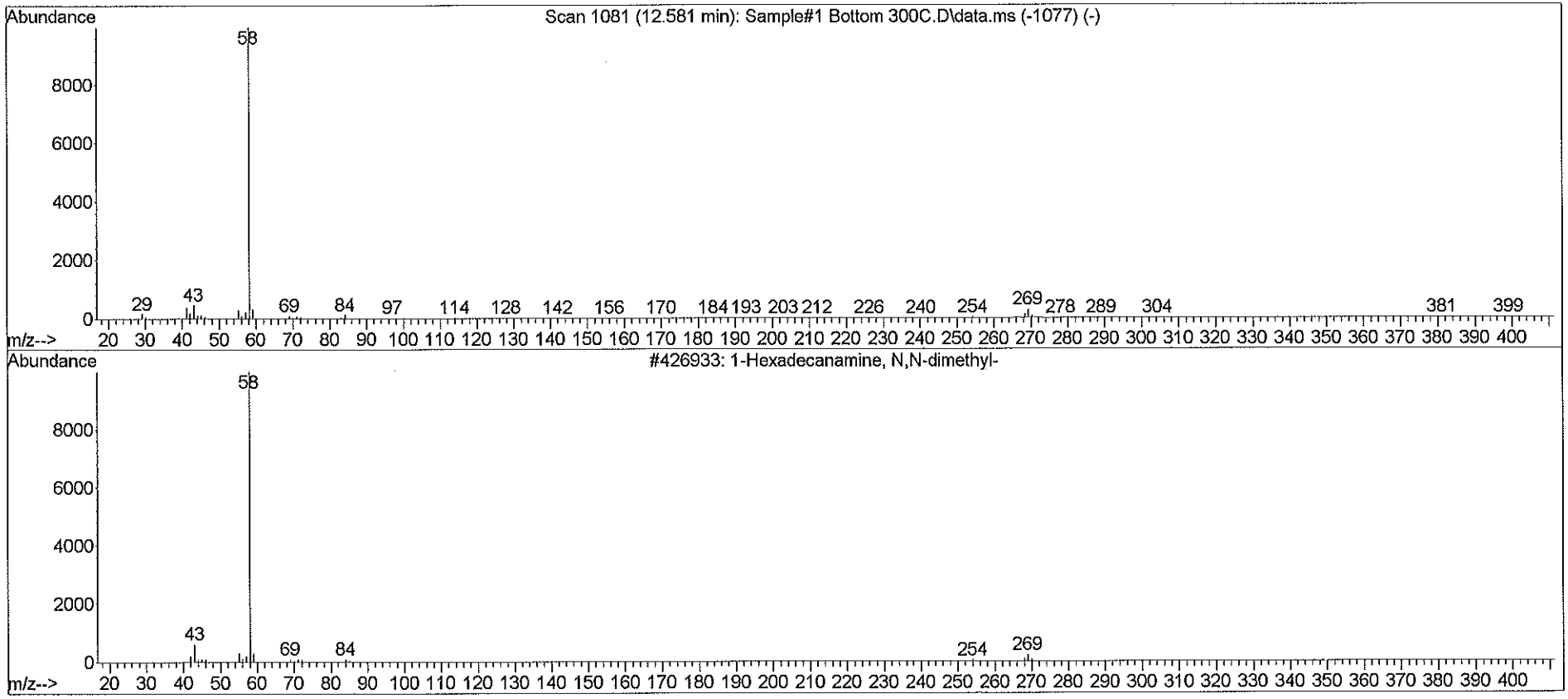




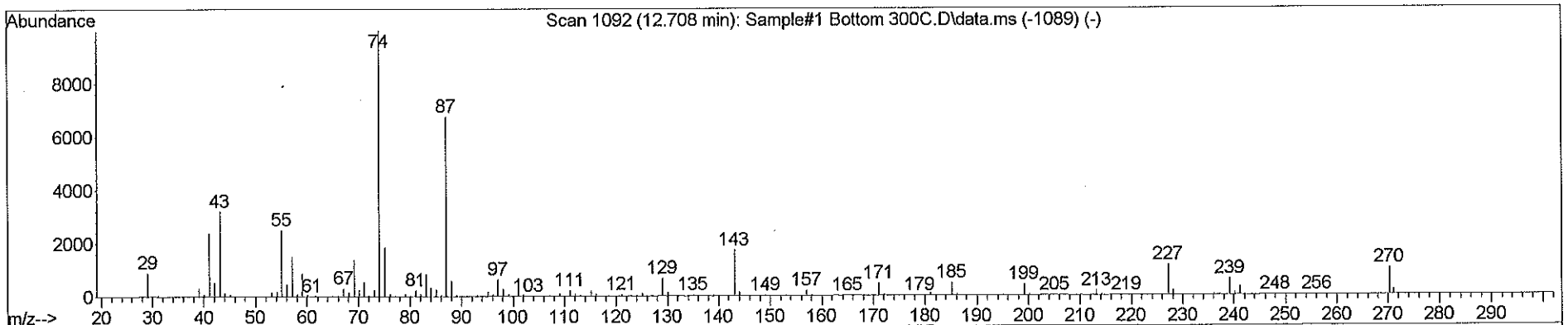
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : E-15-Heptadecenal; (15E)-15-Heptadecenal #

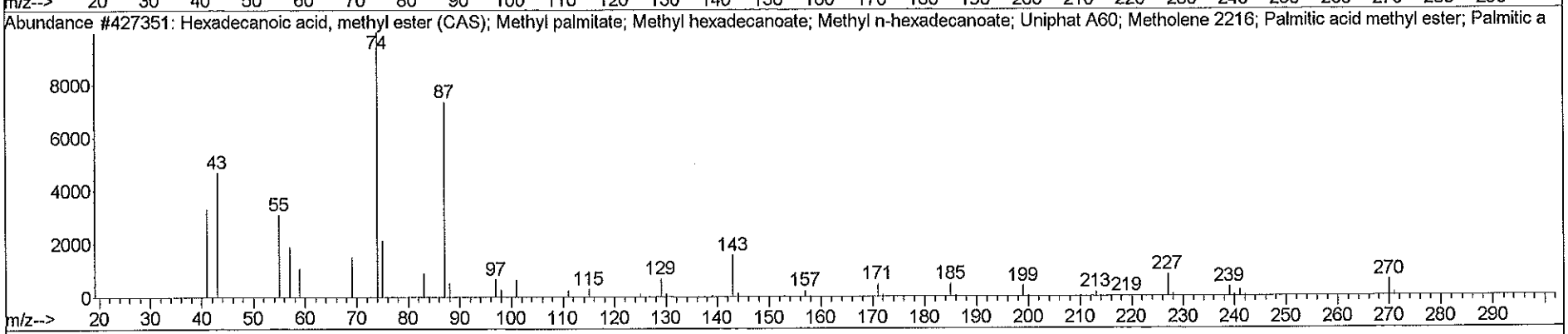


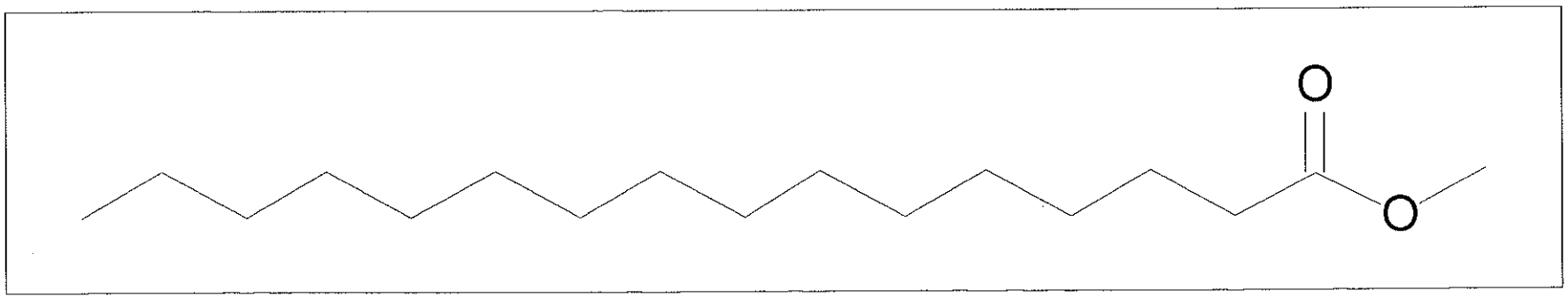
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 91
ID : 1-Hexadecanamine, N,N-dimethyl-



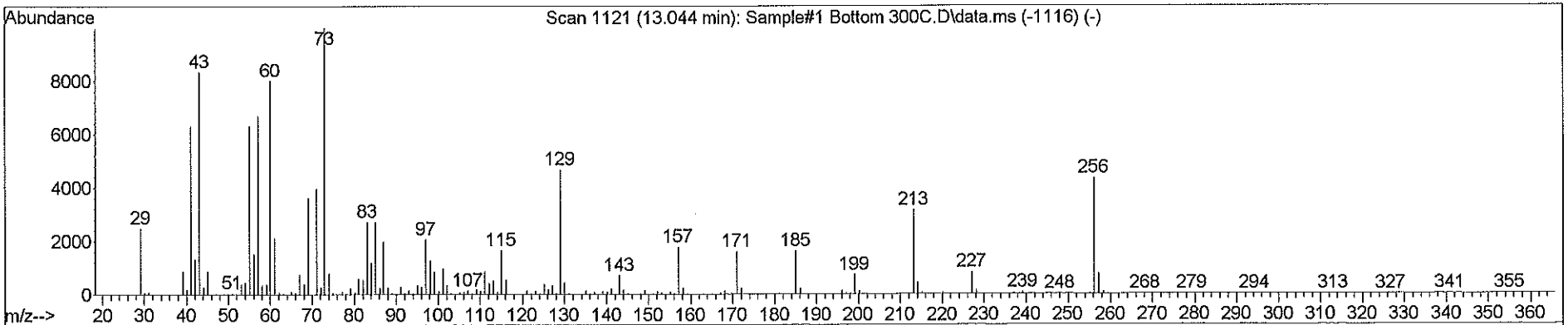
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : Hexadecanoic acid, methyl ester (CAS); Methyl palmitate; Methyl hexadecanoate; Methyl n-hexadecanoate; Uniphat A60; Metholene 2216; Palmitic acid methyl est er; Palmitic acid, methyl ester; n-Hexadecanoic acid methyl ester; PALMITIC AC ID-METHYL ESTER; METH

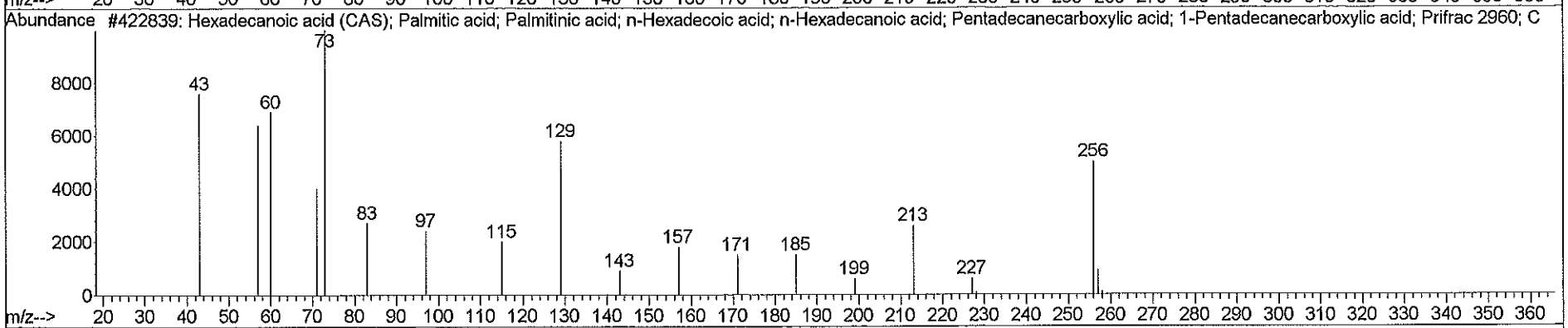


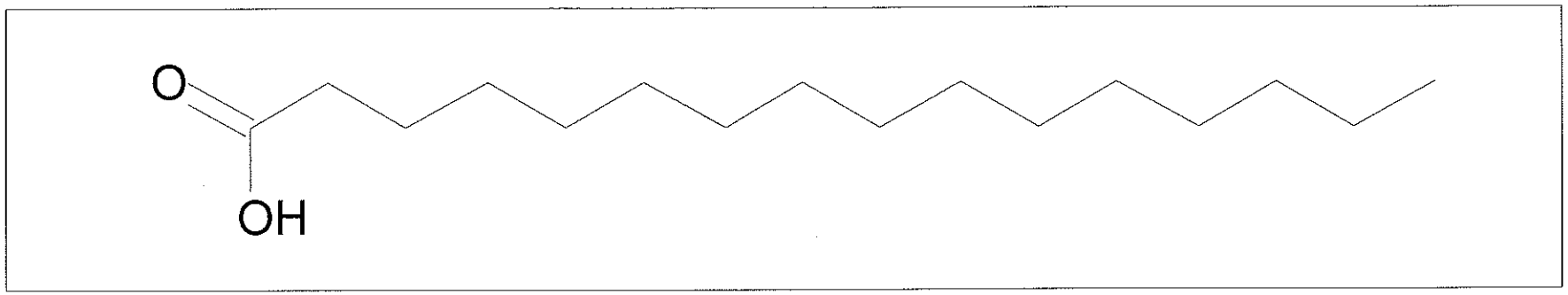




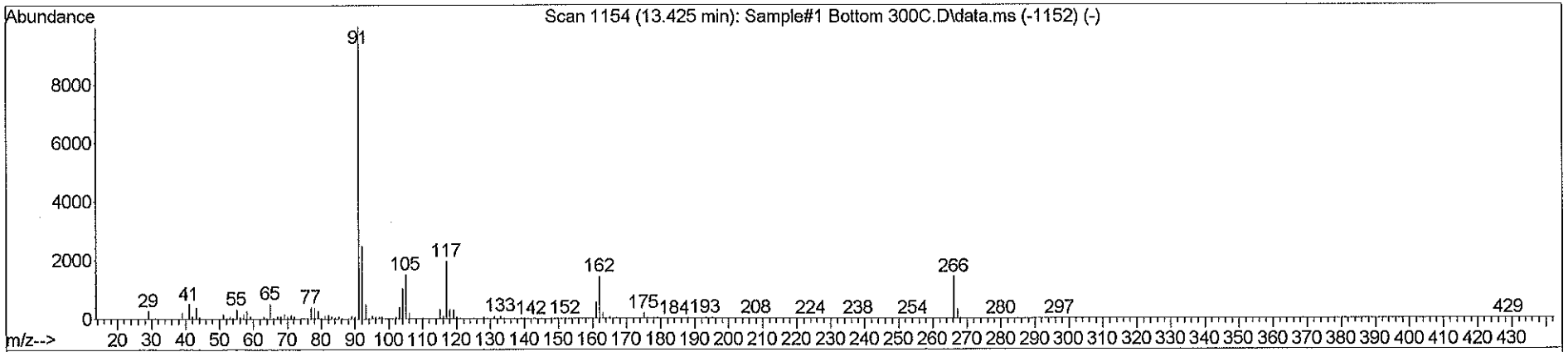
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : Hexadecanoic acid (CAS); Palmitic acid; Palmitinic acid; n-Hexadecoic acid; n-Hexadecanoic acid; Pentadecanecarboxylic acid; 1-Pentadecanecarboxylic acid; P rifrac 2960; Coconut oil fatty acids; Cetylic acid; Emersol 140; Emersol 143; Hexadecylic acid; Hyd

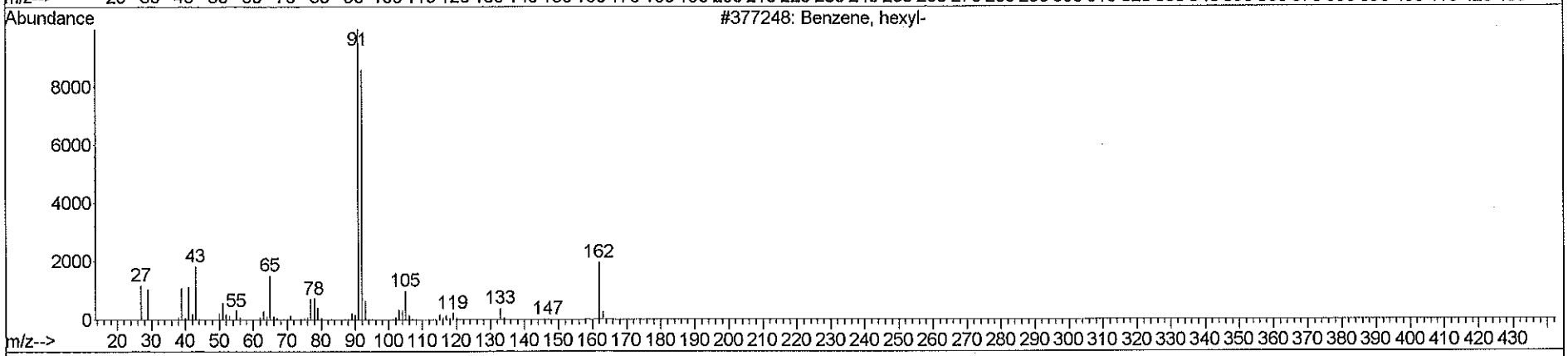


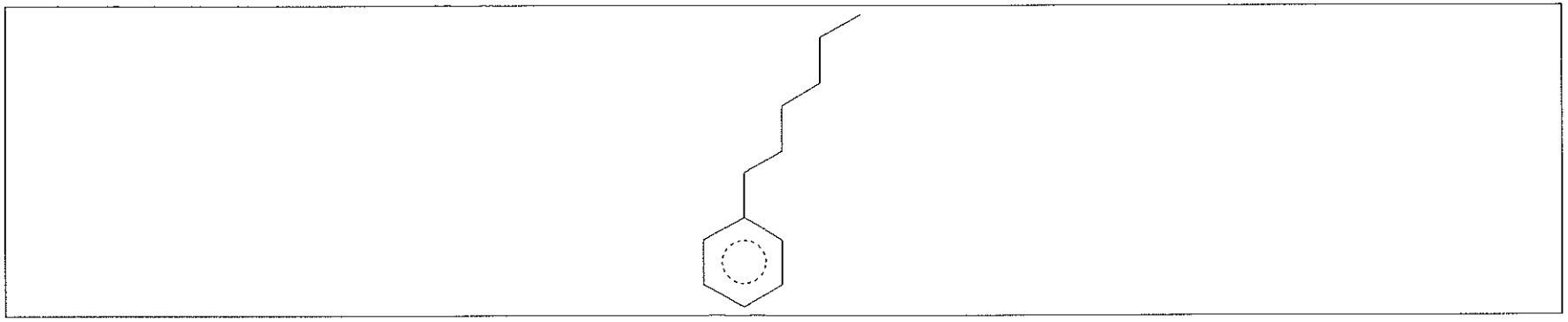




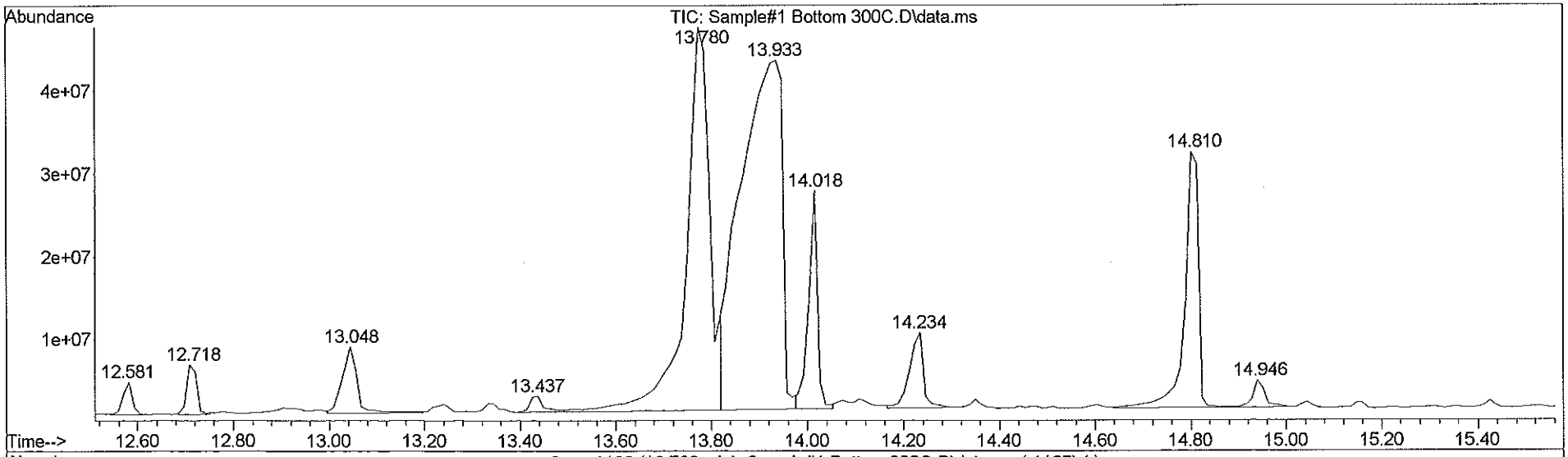
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 38
ID : Benzene, hexyl-

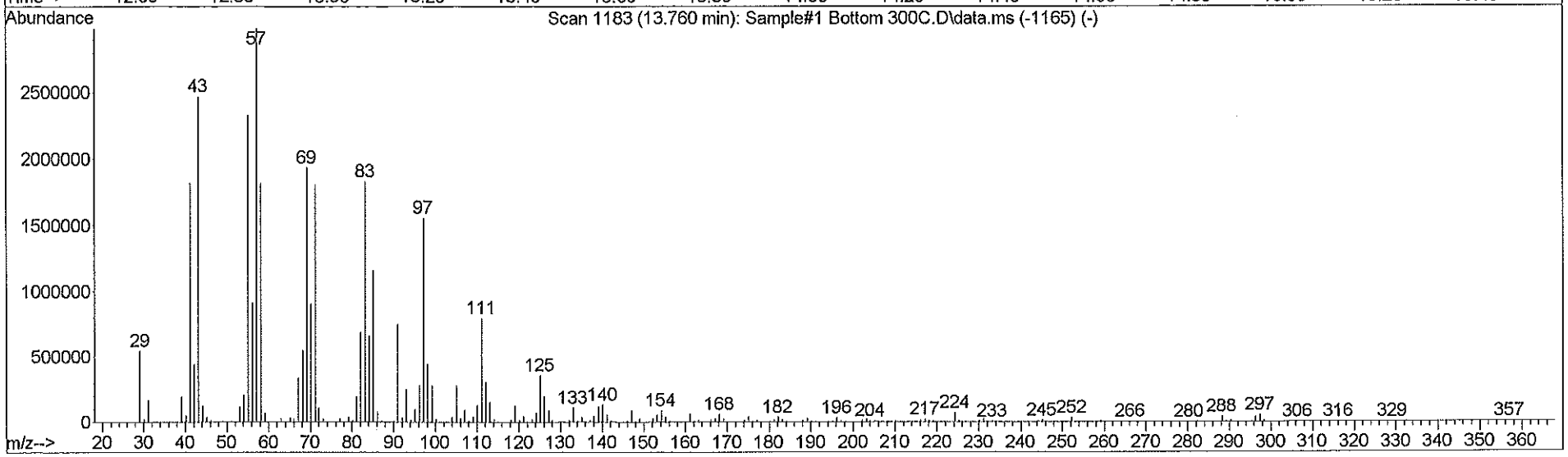




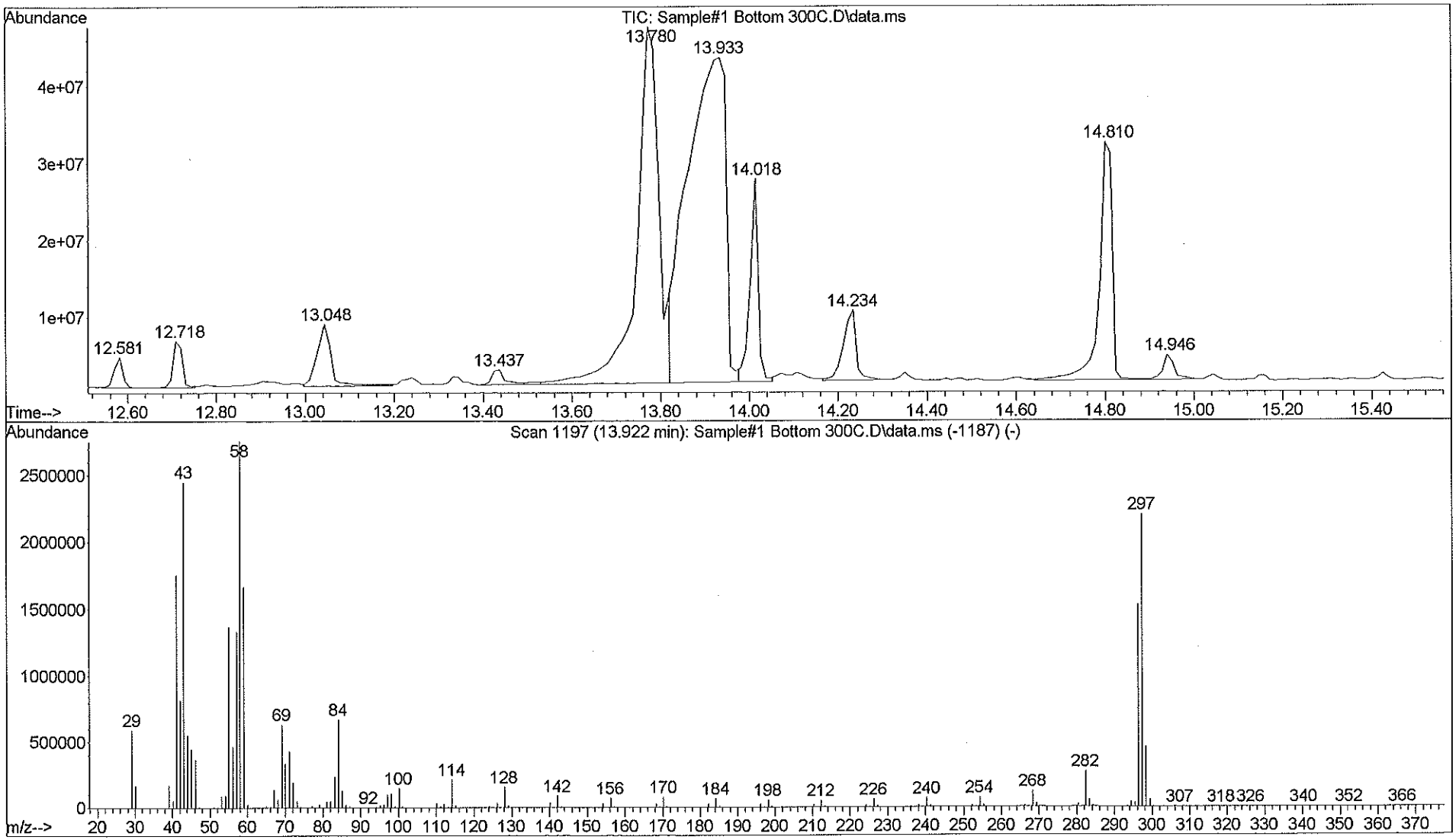


File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

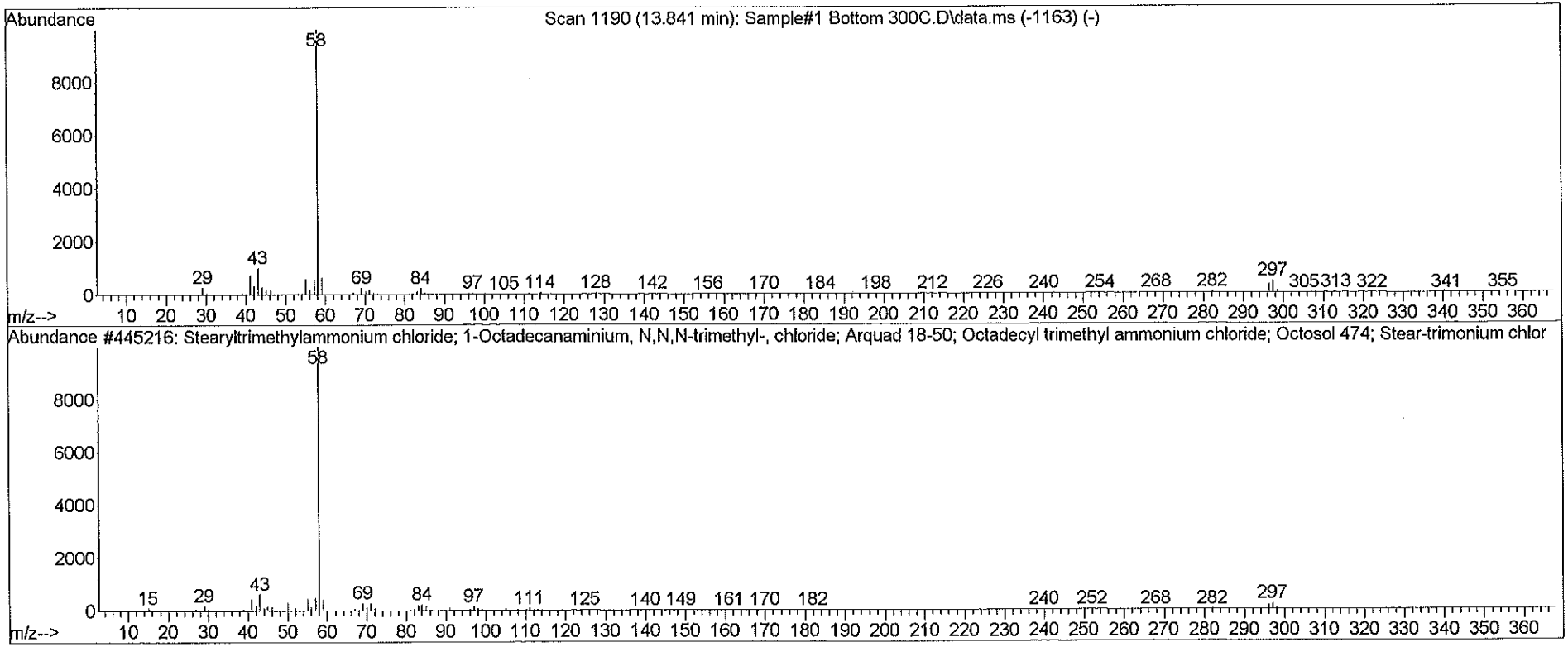




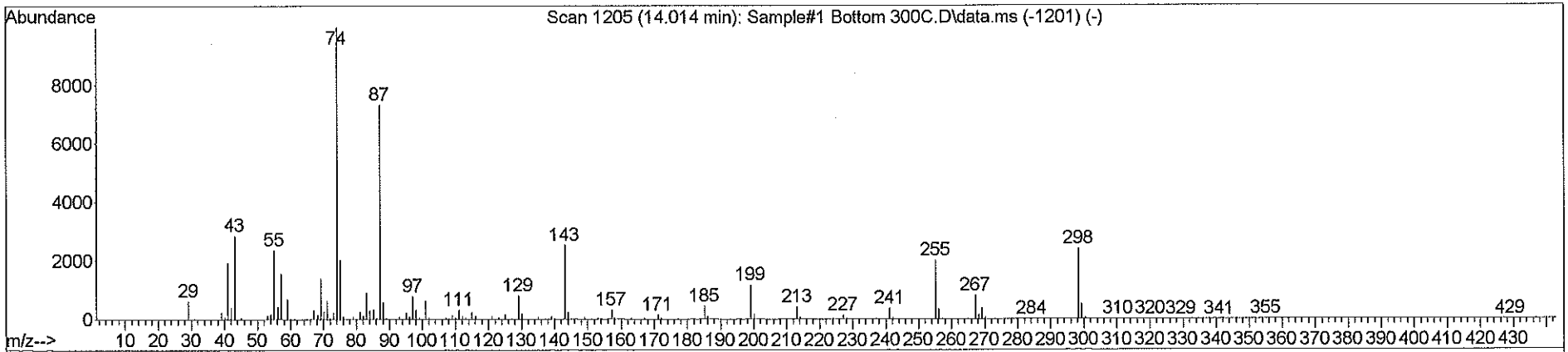
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

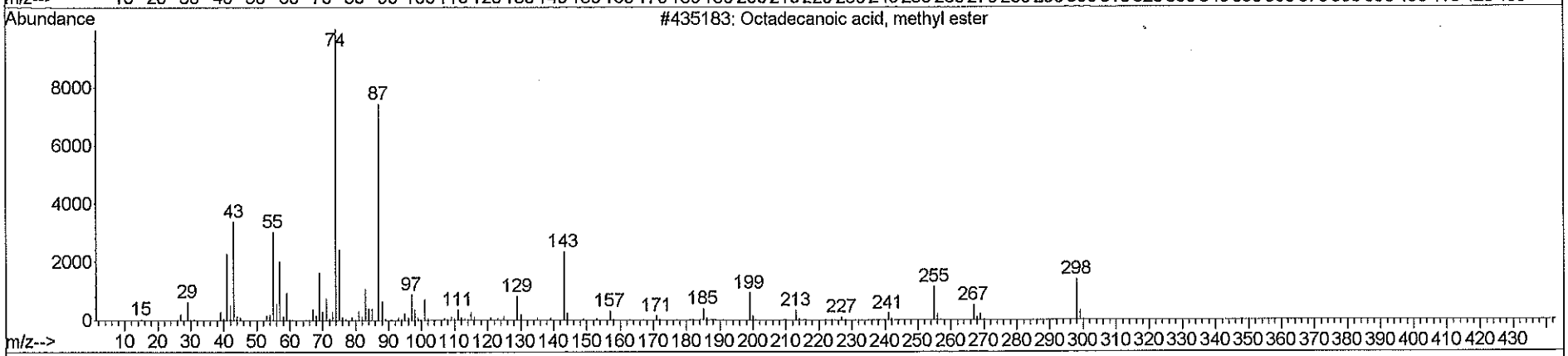


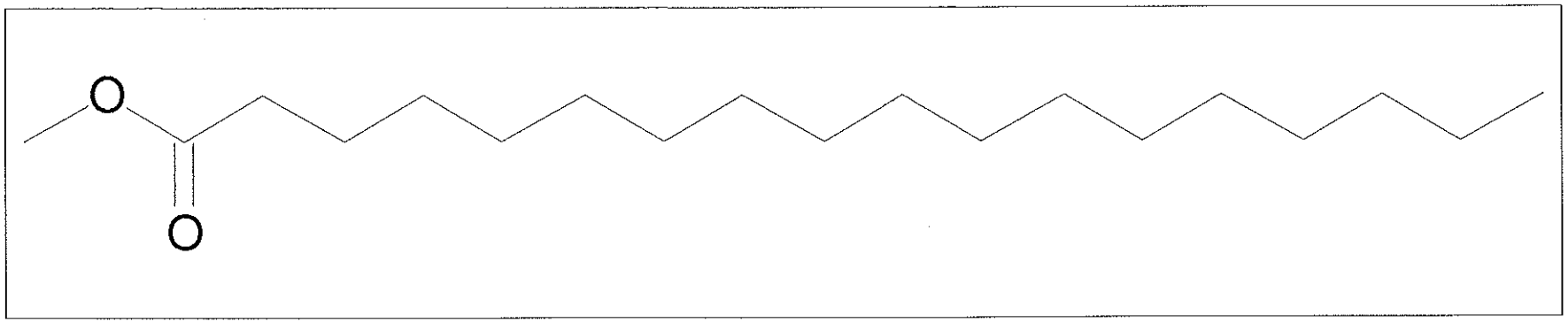
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 72
ID : Stearyltrimethylammonium chloride; 1-Octadecanaminium, N,N,N-trimethyl-, chloride; Arquad 18-50; Octadecyl trimethyl ammonium chloride; Octosol 474; Stear-trimonium chloride; Stearyl trimethyl ammoium chloride; Tomah Q-ST-50; Varisoft ST-50; Varisoft TSC



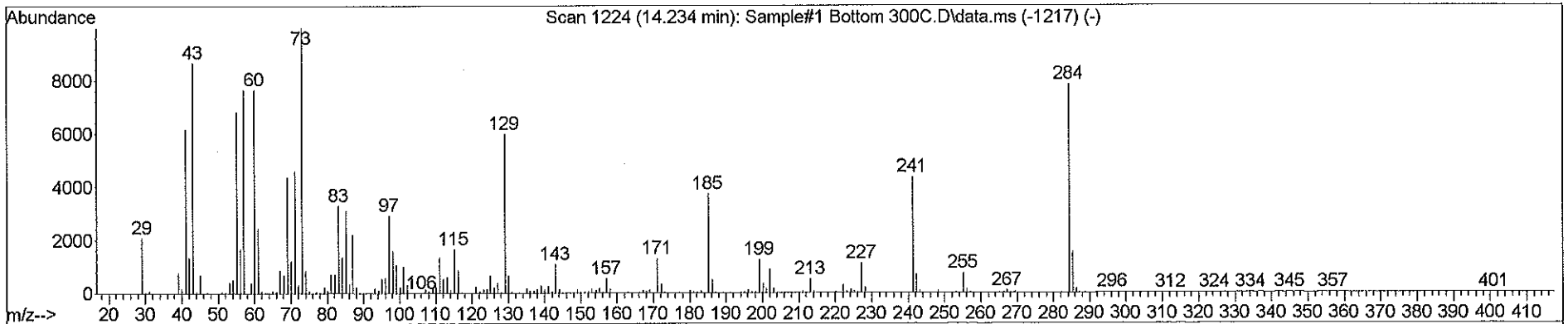
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : Octadecanoic acid, methyl ester

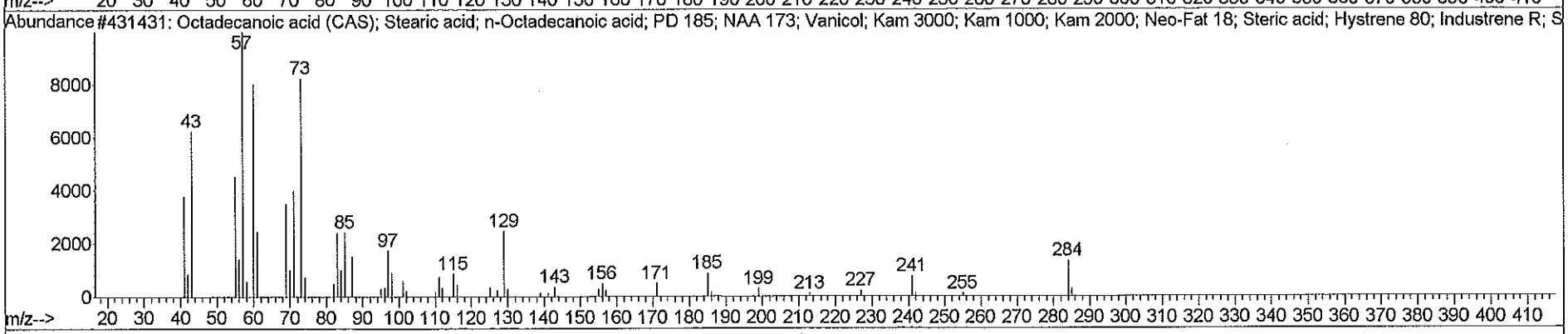


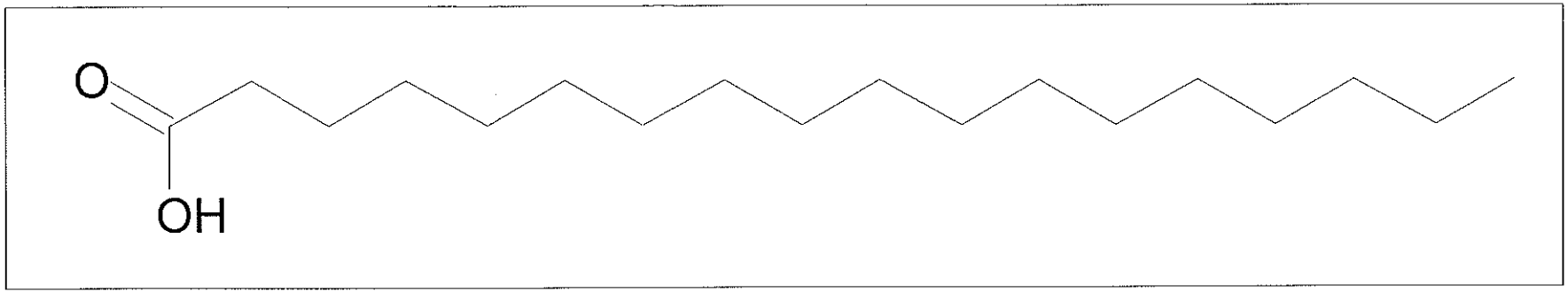




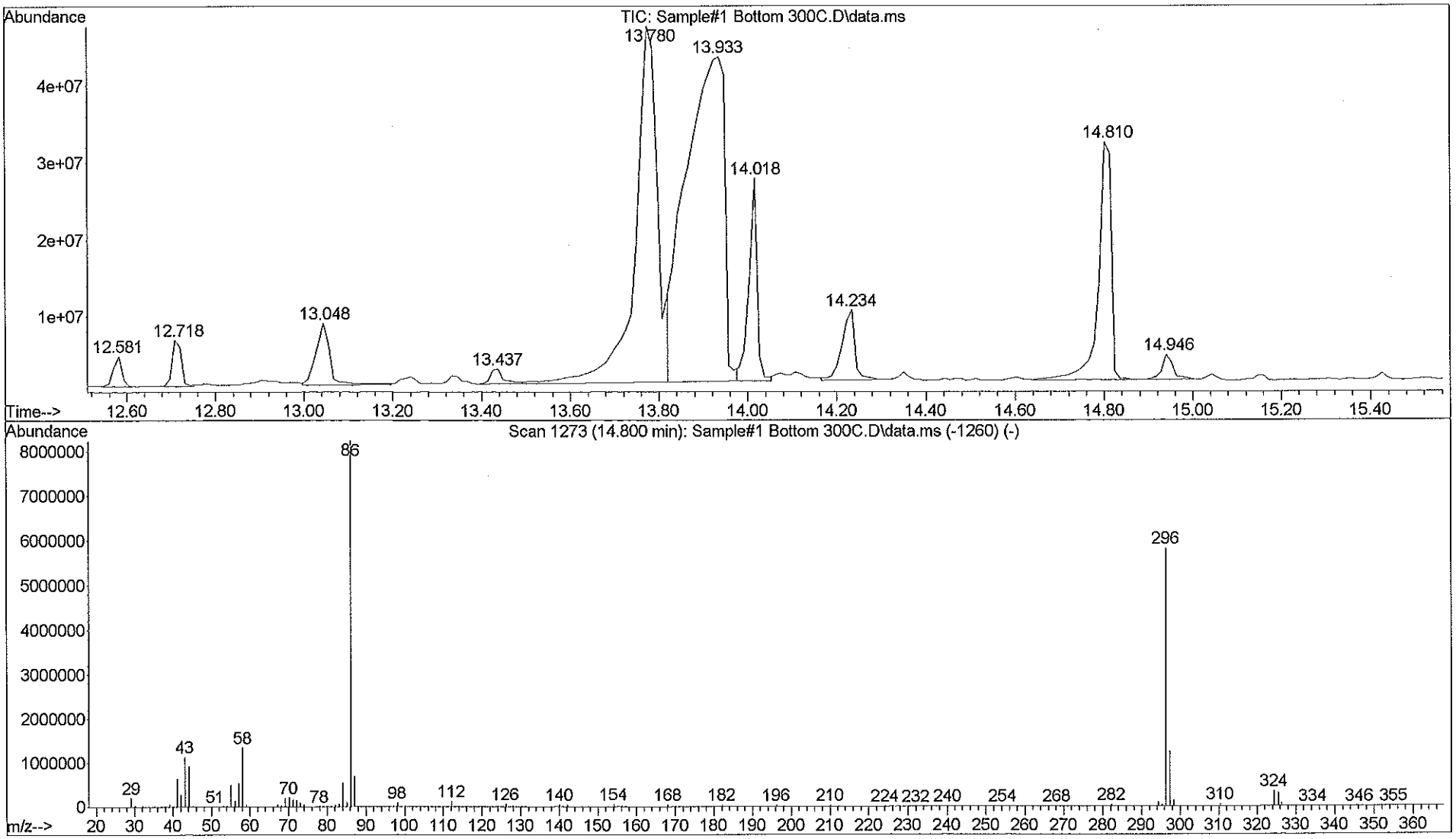
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : Octadecanoic acid (CAS); Stearic acid; n-Octadecanoic acid; PD 185; NAA 173; Vanicol; Kam 3000; Kam 1000; Kam 2000; Neo-Fat 18; Steric acid; Hystrene 80; Industrene R; Stearex Beads; Hystrene S-97; Neo-Fat 18-53; Neo-Fat 18-54; Neo-Fat 18-59; Neo-Fat 18-5



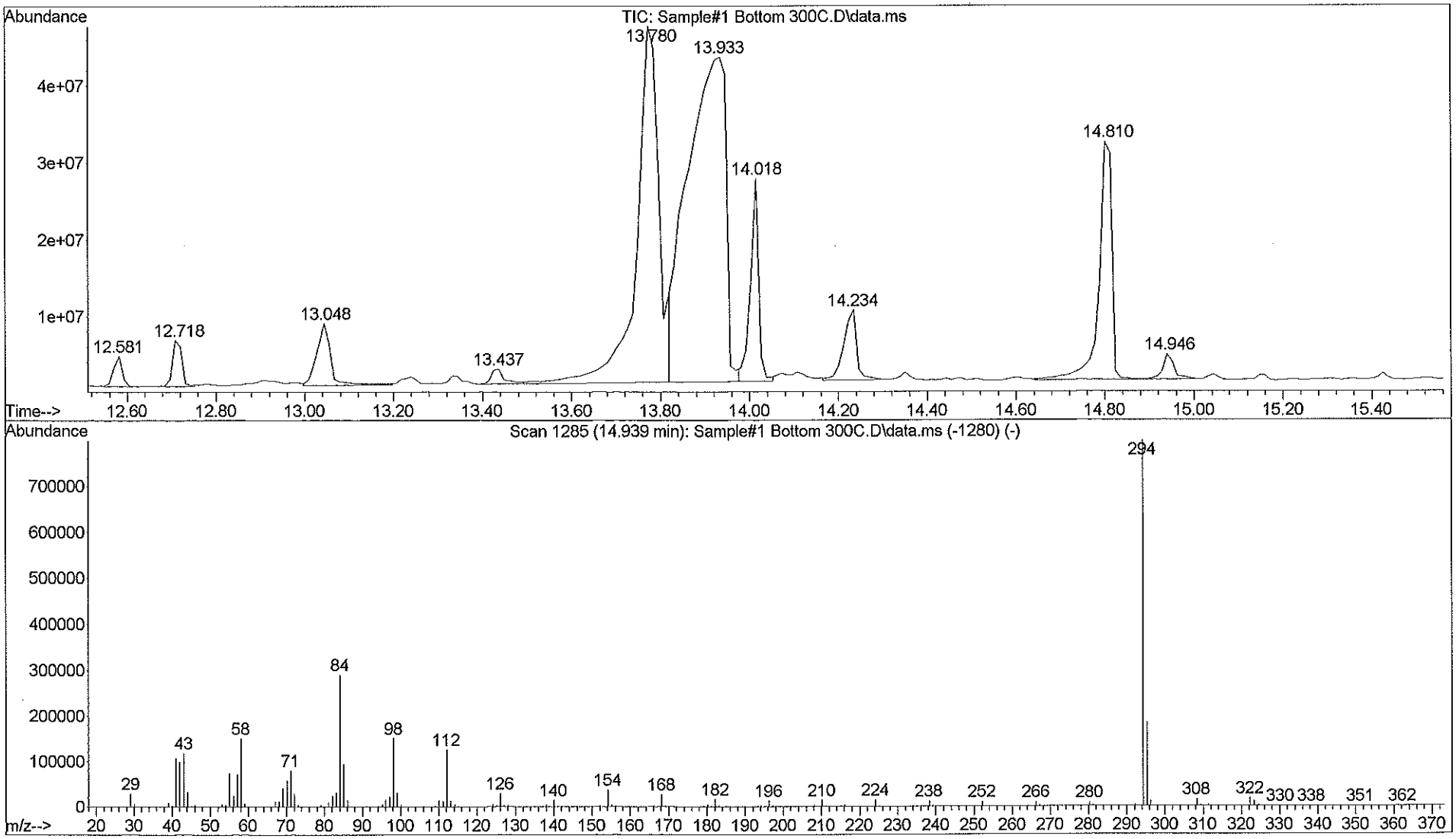




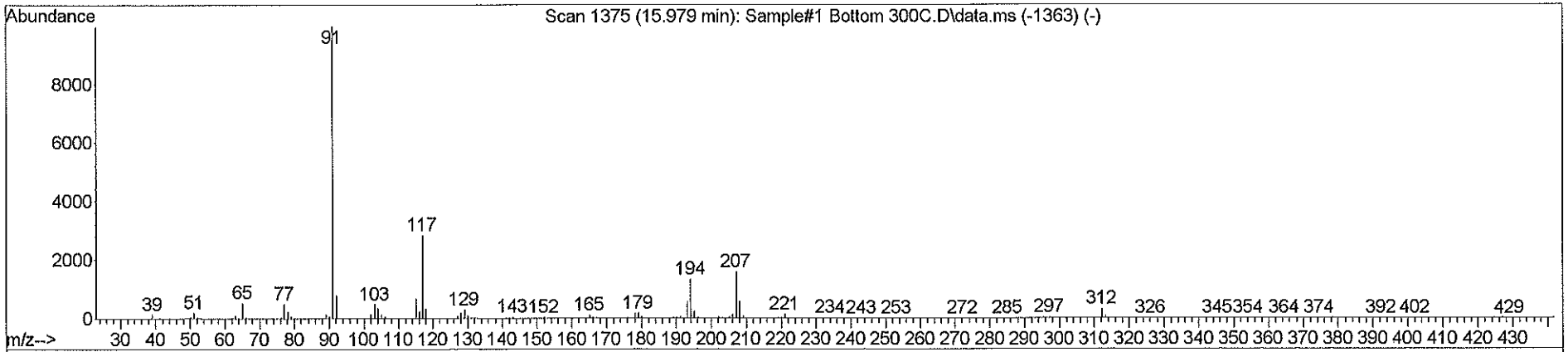
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

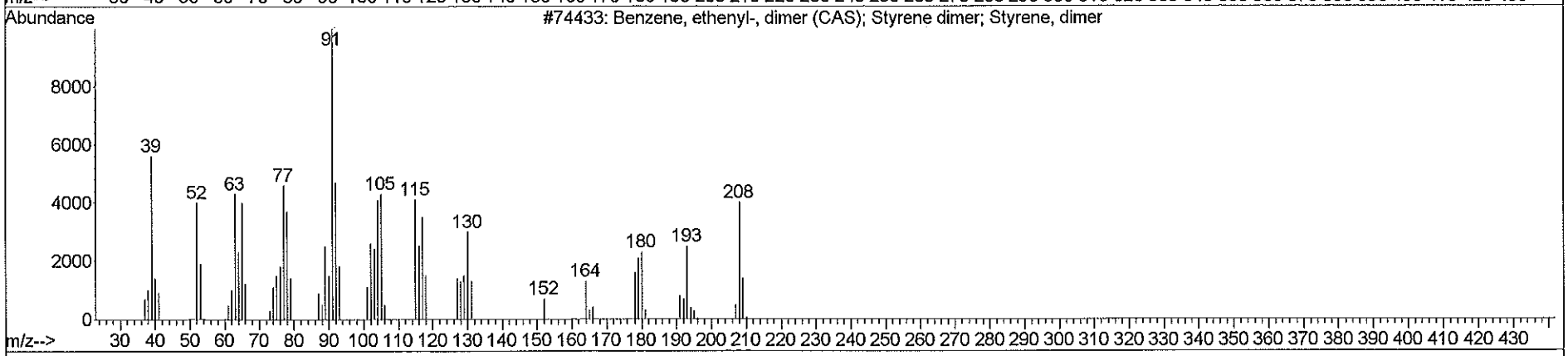


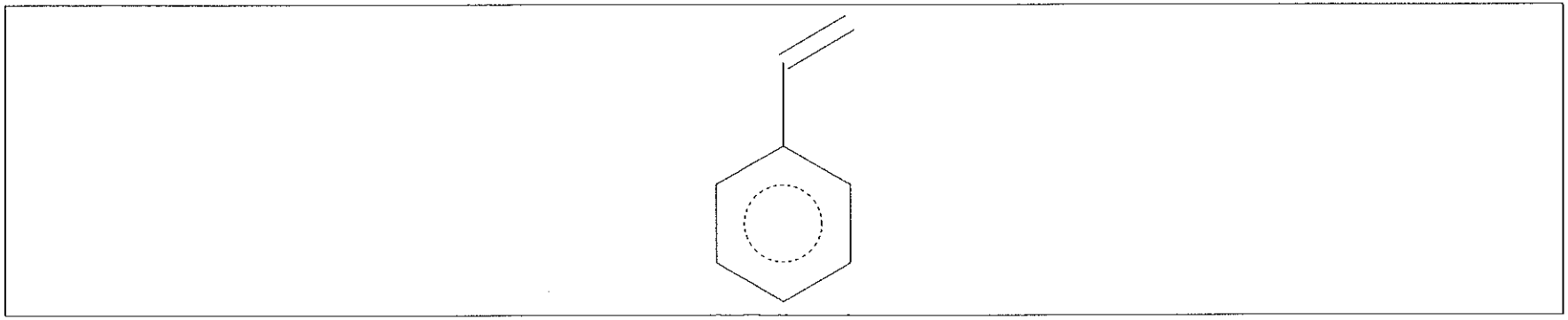
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



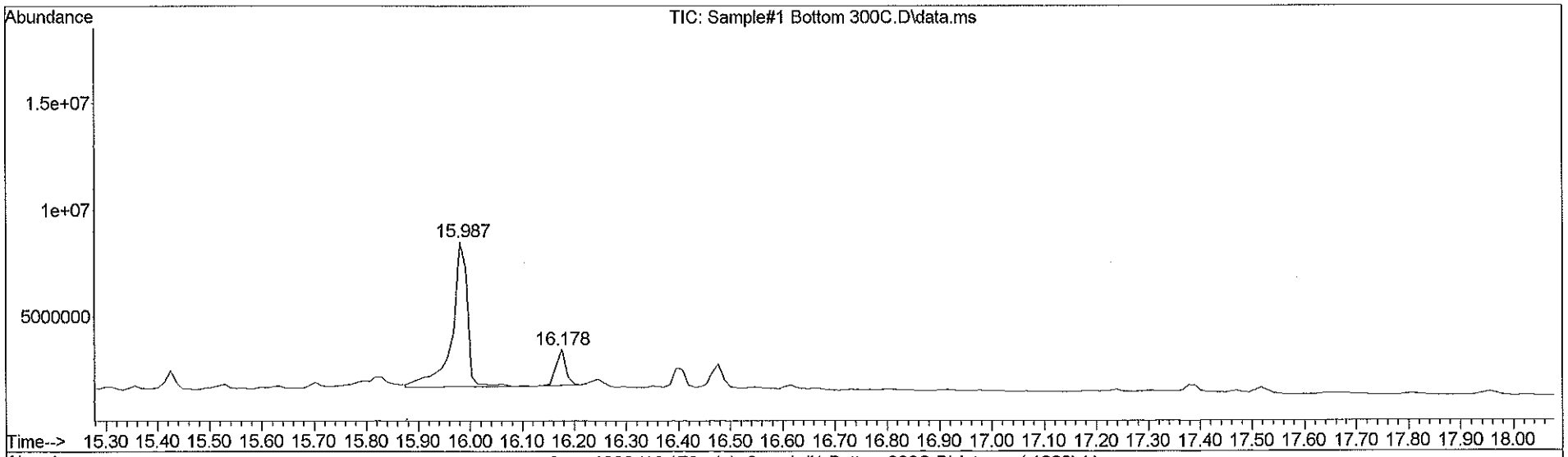
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 8
ID : Benzene, ethenyl-, dimer (CAS); Styrene dimer; Styrene, dimer

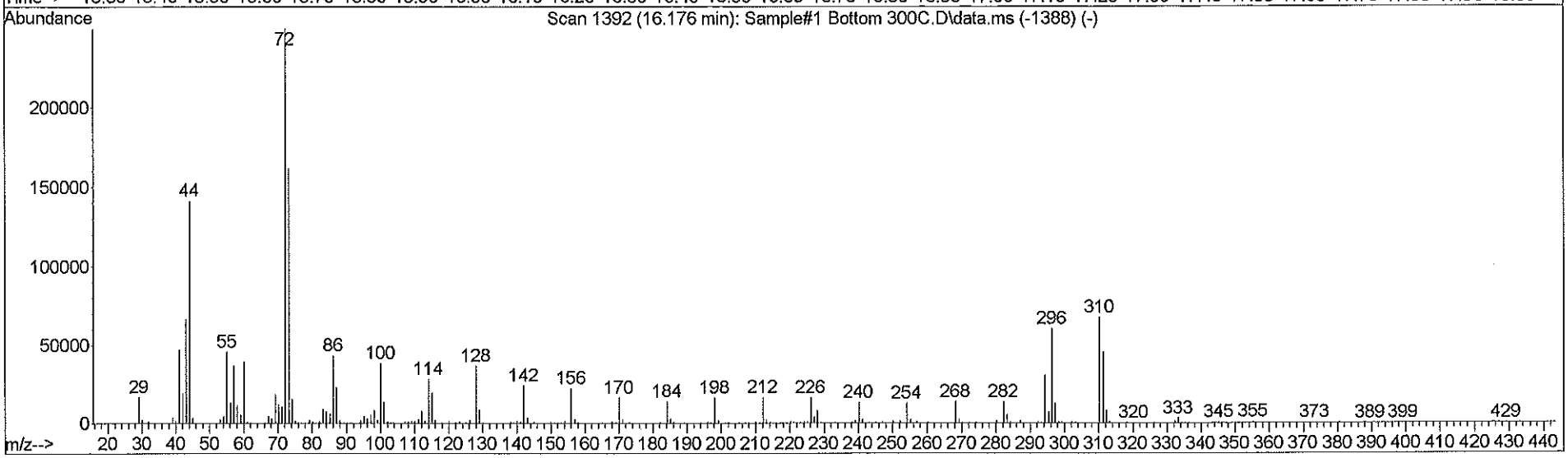




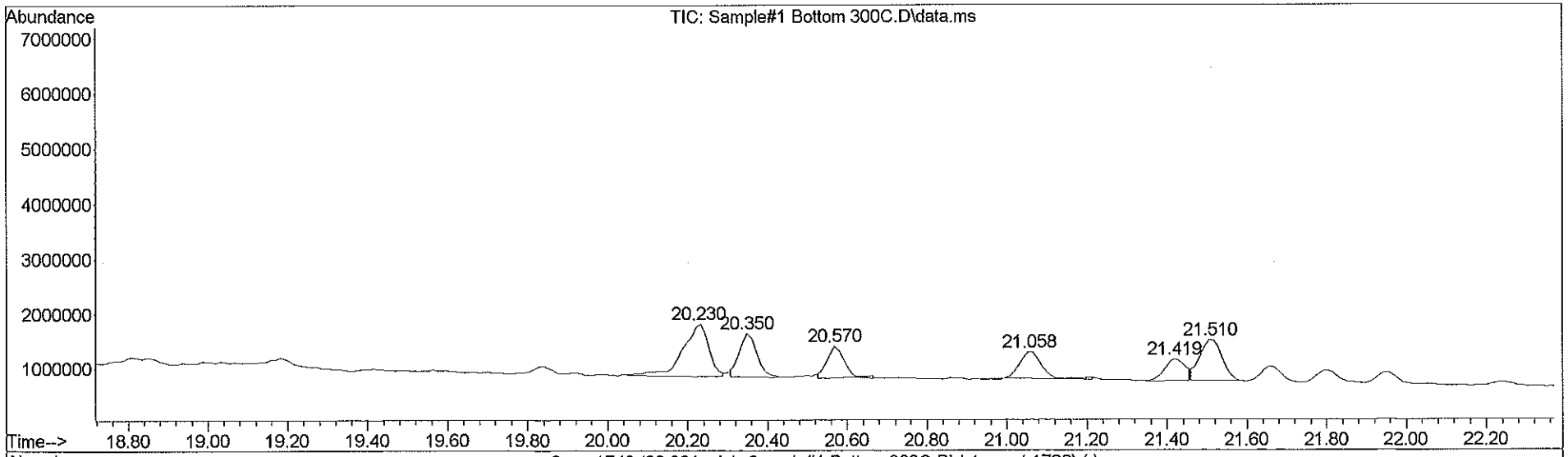


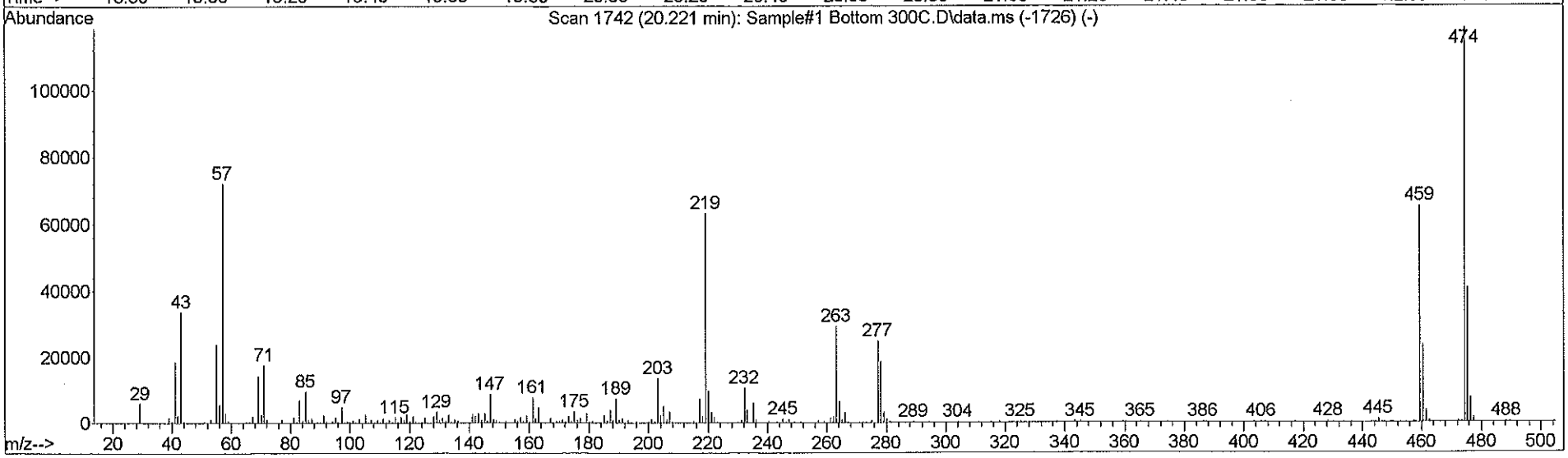
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



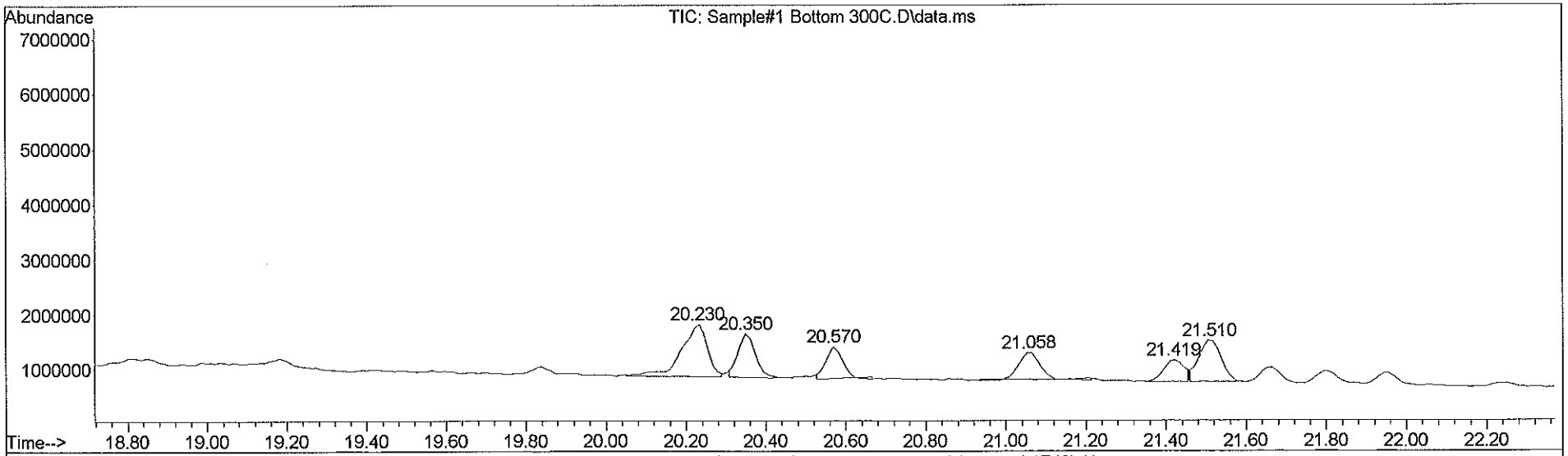


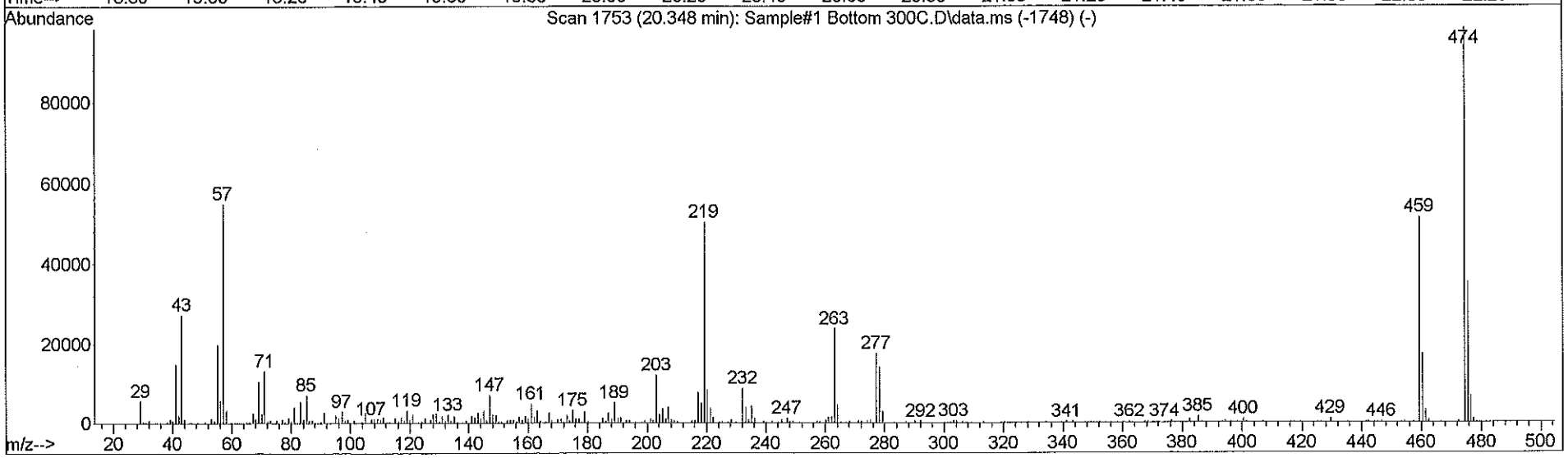
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



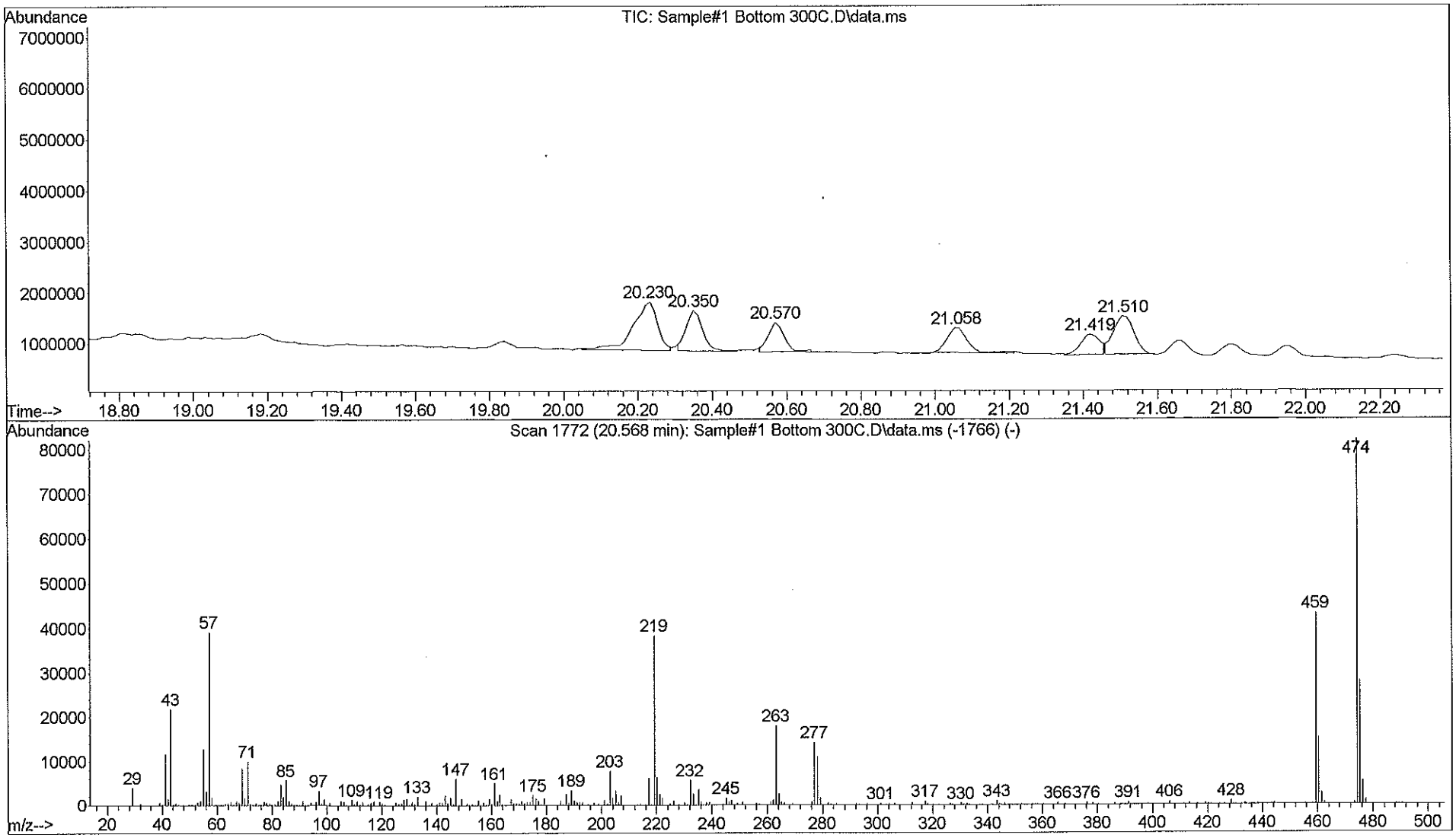


File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

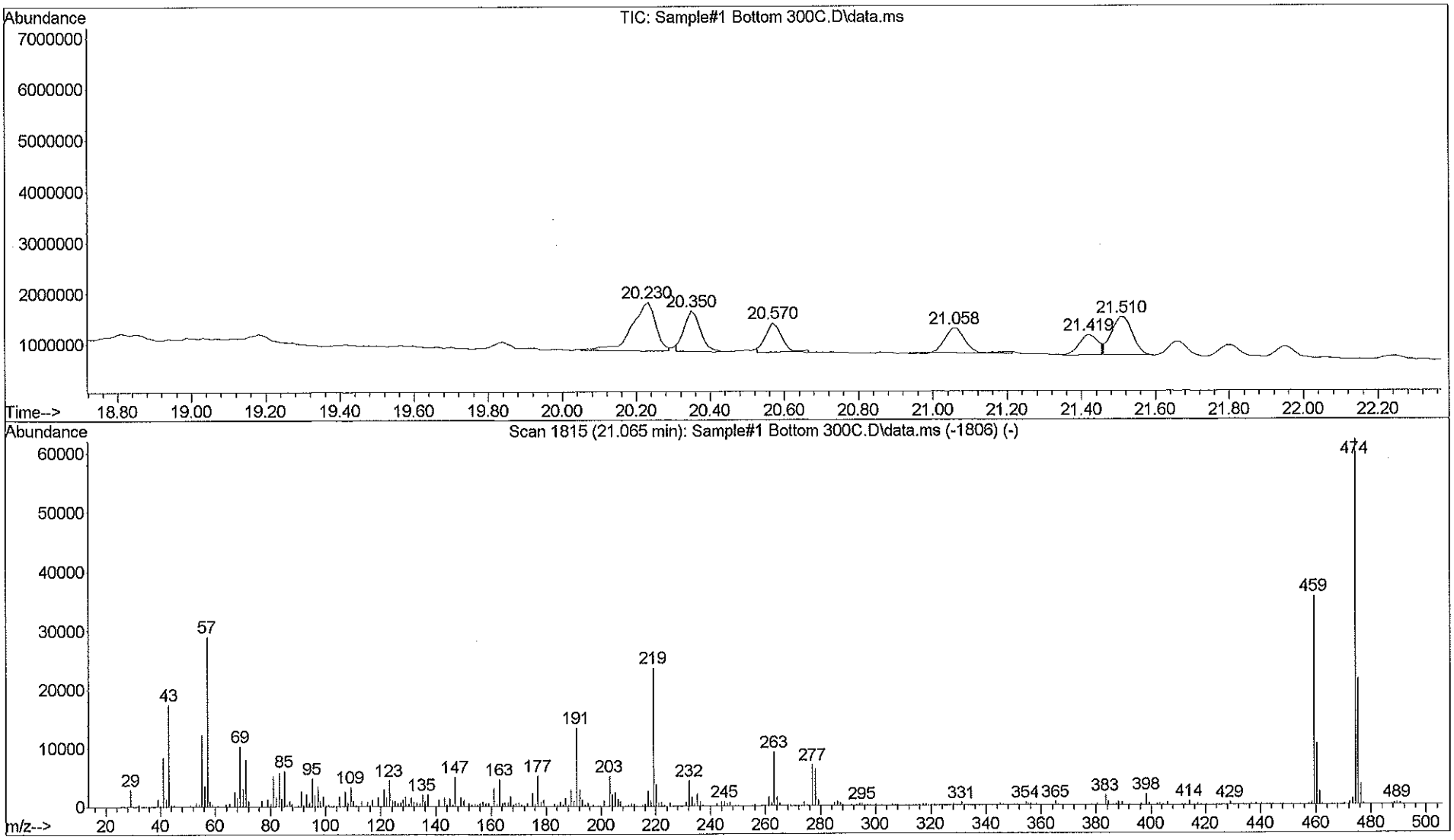




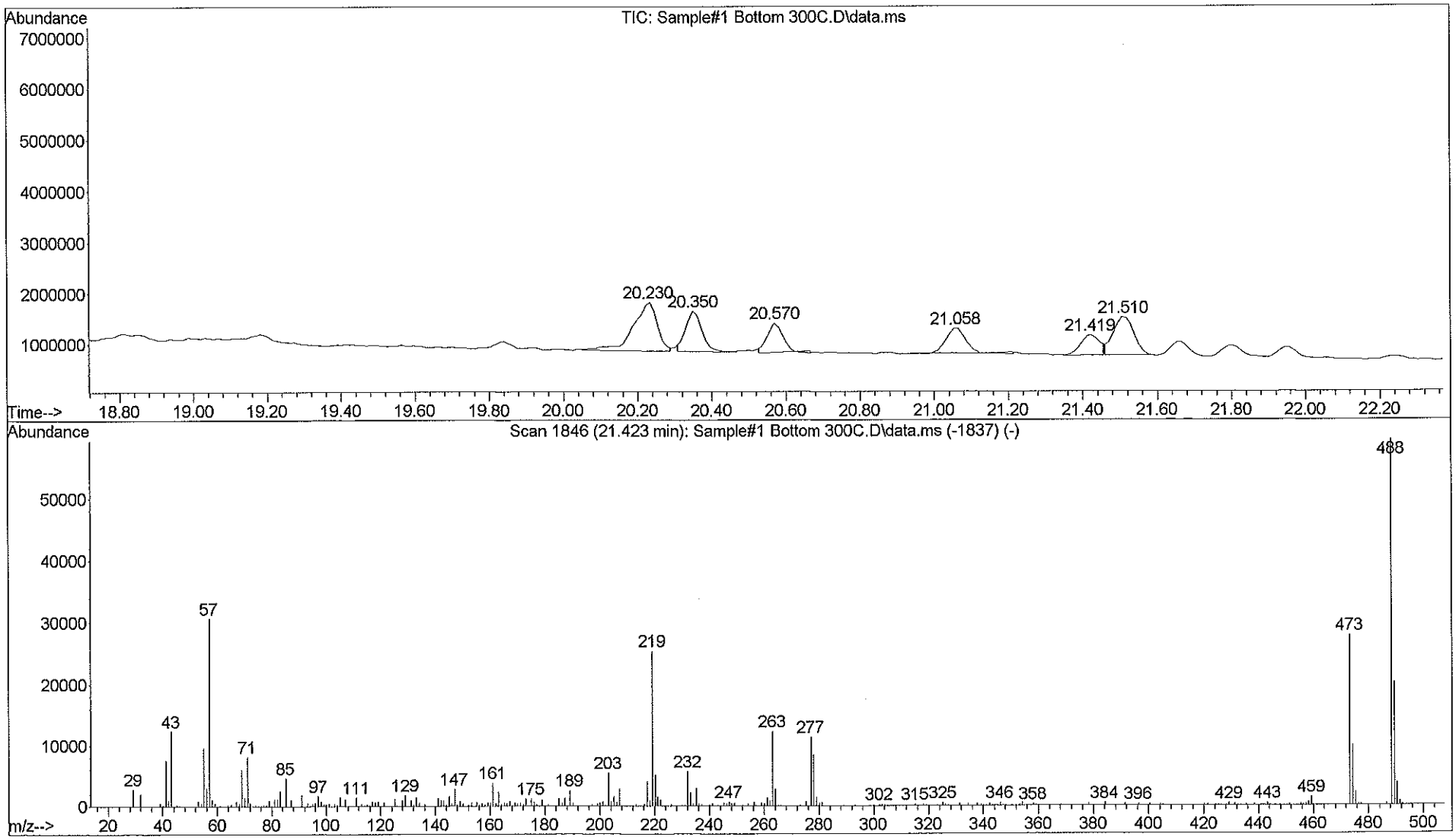
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



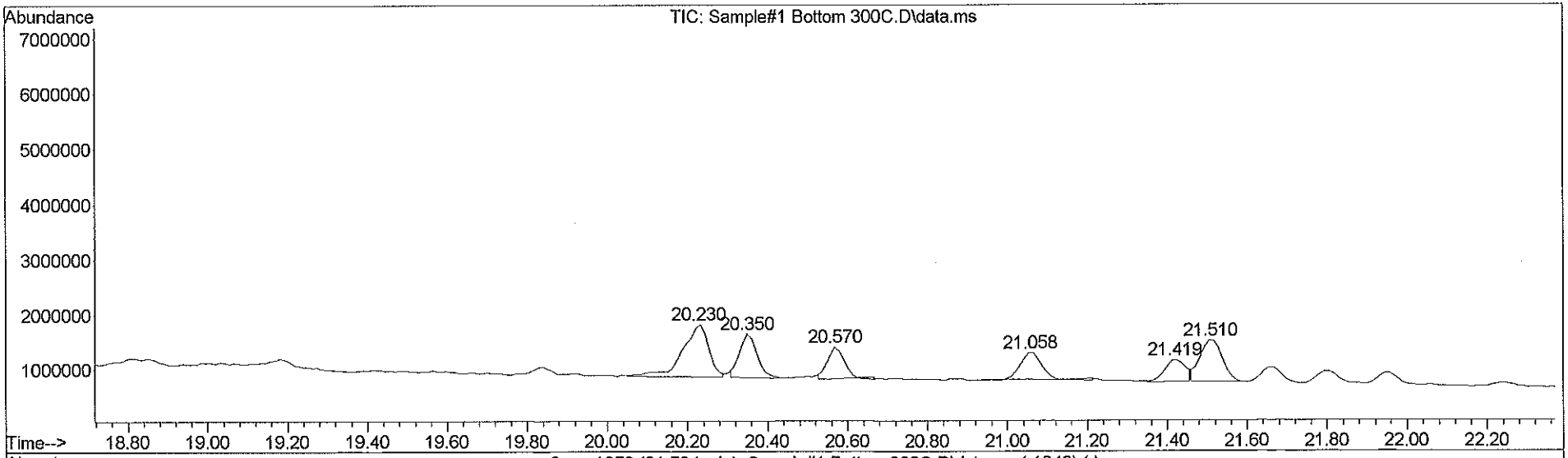
File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

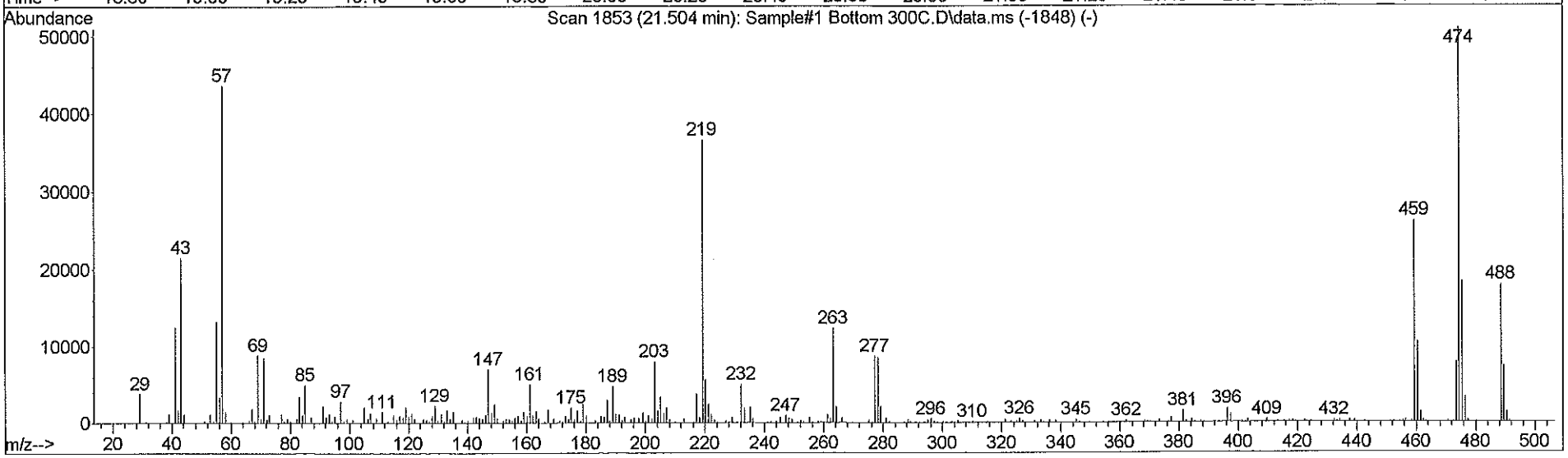


File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



File :D:\DATA\ABTECH\Job 4987\Sample#1 Bottom 300C.D
Operator :
Acquired : 16 Aug 2007 14:09 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



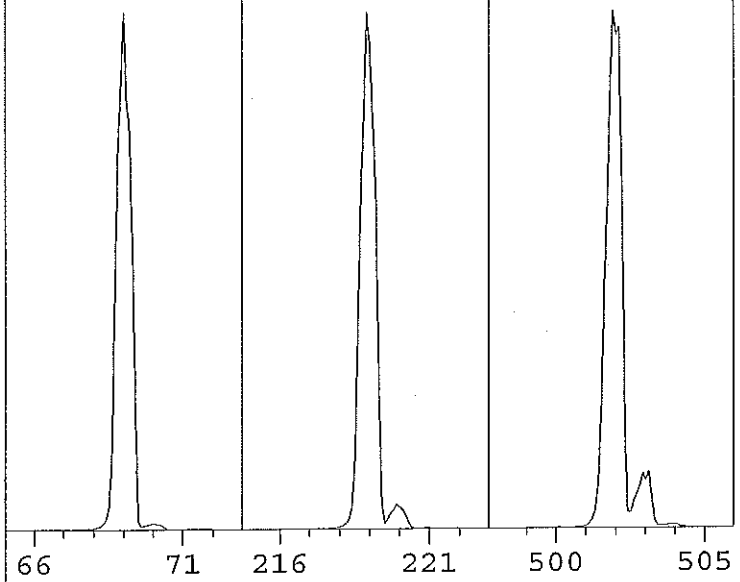


5975 Autotune

Fri Aug 17 08:35:42 2007 Instrument: Instrument #1

C:\MSDCHEM\1\5975\atune.u

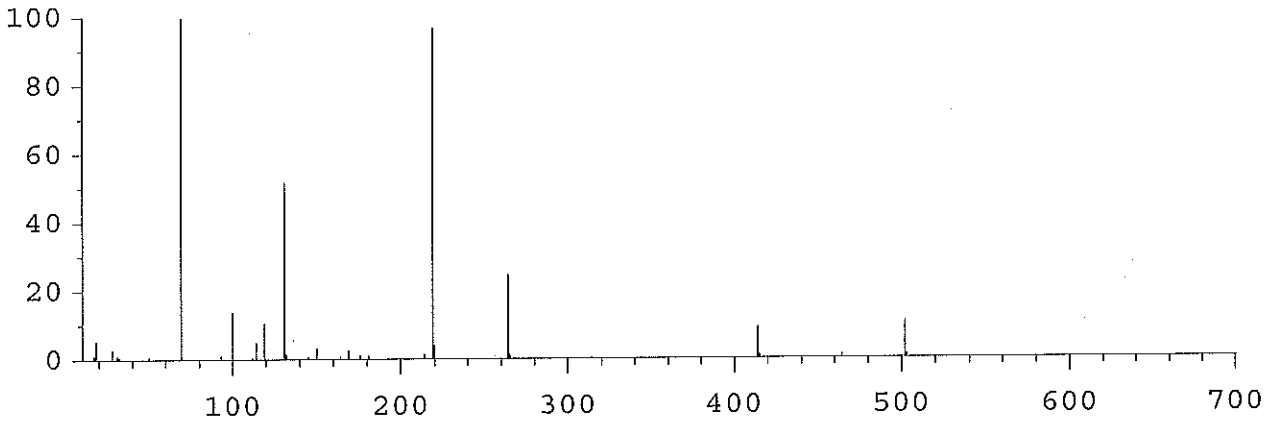
Mass	69.00	Mass	218.90	Mass	501.90
Ab	442763	Ab	419169	Ab	45756
Pw50	0.61	Pw50	0.60	Pw50	0.61



Ion Pol	POS	MassGain	-821
		MassOffs	-38
Emission	34.6	AmuGain	1618
EIEnrgy	69.9	AmuOffs	119.500
Filament	1	Wid219	-0.012
		DC Pol	POS
Repeller	27.27		
IonFcus	90.2	HEDEnab	ON
EntLens	25.5	EMVolts	1282
EntOffs	18.82		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150	HiVac	0.00e+00

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10

115 peaks Base: 69.00 Abundance: 397184



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	397184	100.00	70.00	4485	1.13
219.00	384384	96.78	220.00	16528	4.30
502.00	42864	10.79	503.00	4320	10.08

Air/Water Check: H20~5.36% N2~2.87% O2~0.81% CO2~0.04% N2/H2O~53.64%

Column Flow: Front: 0 Back: 0.964 ml/min. Interface Temp: 300

Ramp Criteria:

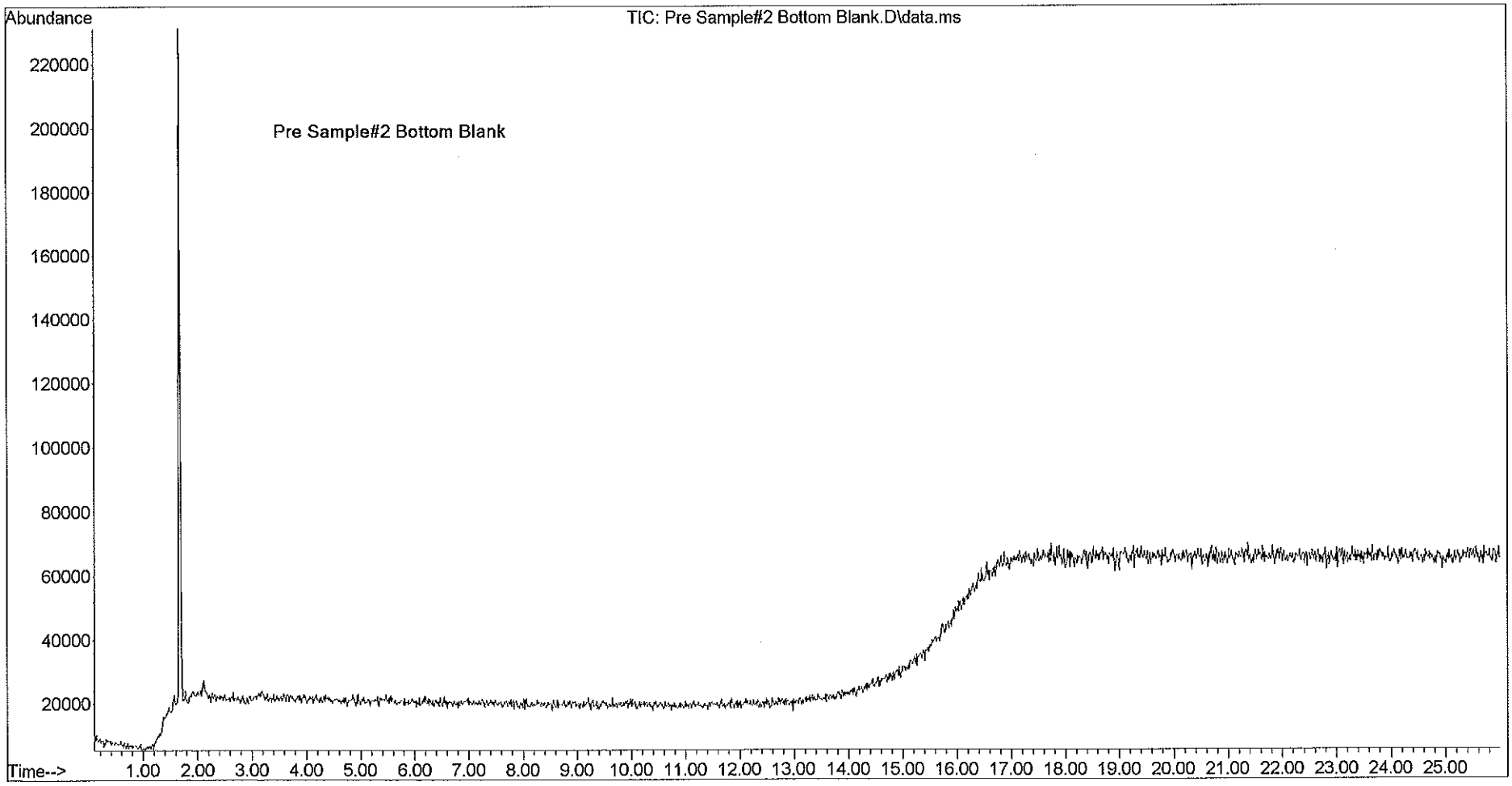
Ion Focus Maximum 90 volts using ion 502; EM Gain 139371

Repeller Maximum 35 volts using ion 219;

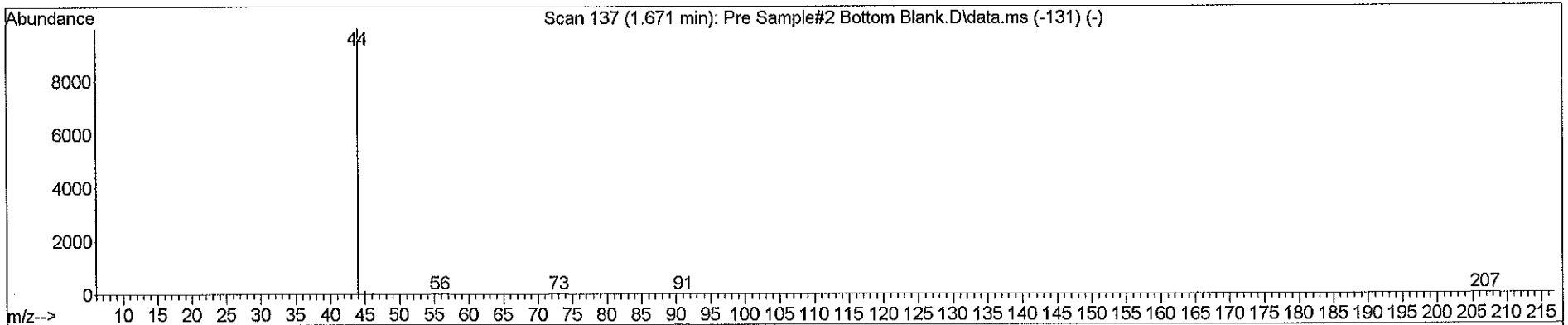
MassGain Values @Samples: -813@3 -809@2 -791@1 -764@0 -677@FS

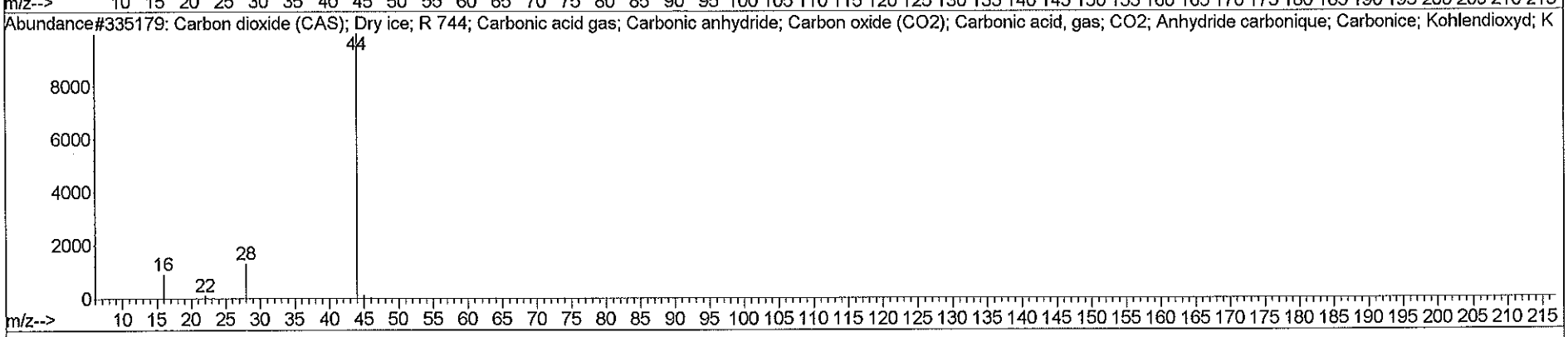
TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	119.5	119.5	119.5	119.5	119.5	119.5	119.5
Entrance Lens Offset:	18.8	18.8	18.8	18.8	18.8	18.8	18.8

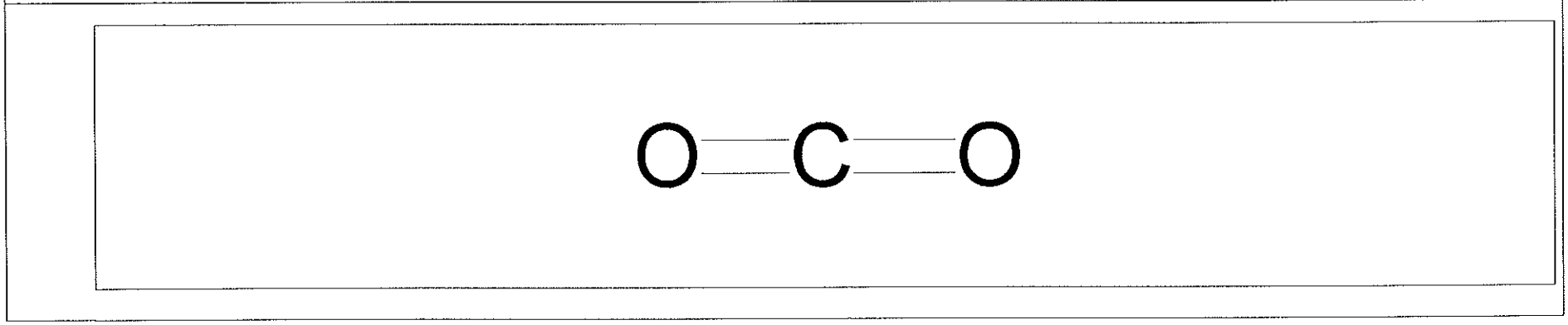
File :D:\DATA\ABTECH\Job 4987\Pre Sample#2 Bottom Blank.D
Operator : cmc
Acquired : 16 Aug 2007 17:05 using AcqMethod STANDALONE RUN.M
Instrument : Instrument #1
Sample Name: post bakeout blank
Misc Info :
Vial Number: 1



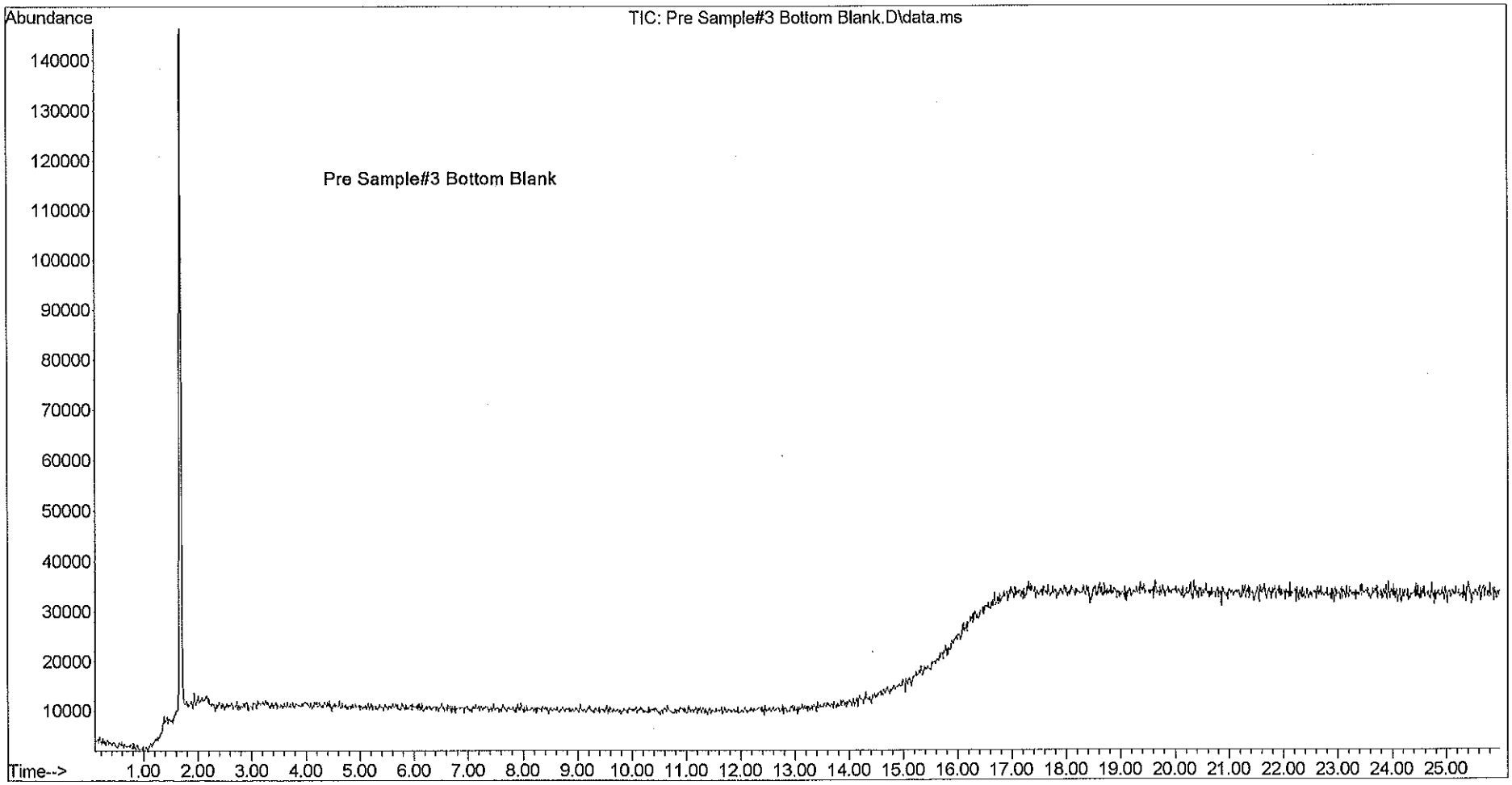
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 4
ID : Carbon dioxide (CAS); Dry ice; R 744; Carbonic acid gas; Carbonic anhydride; Carbon oxide (CO2); Carbonic acid, gas; CO2; Anhydride carbonique; Carbonice; Kohlendioxyd; Kohlensaure; UN 1013; UN 1845; UN 2187; Cardice; Dricold; Drikold; Dioxomethane #; Dio



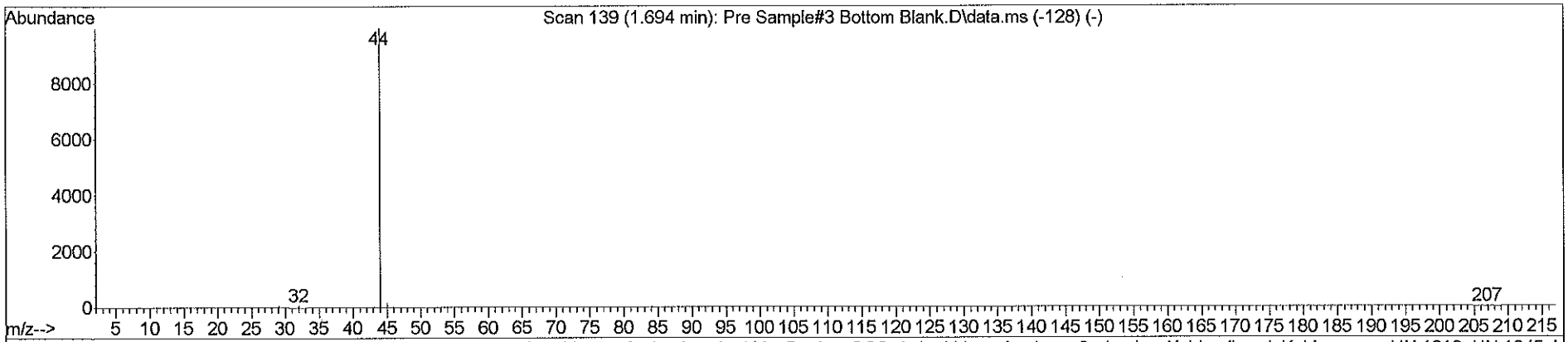


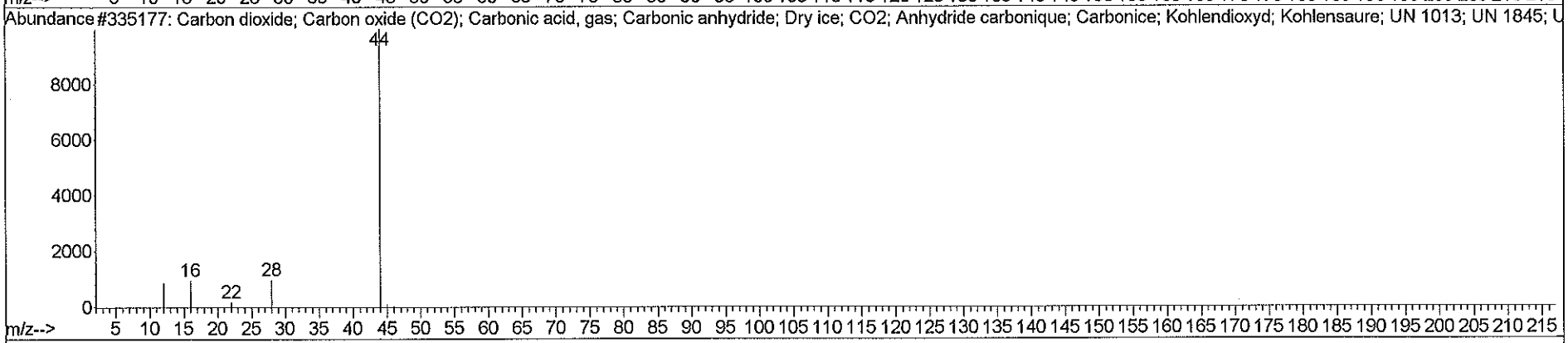


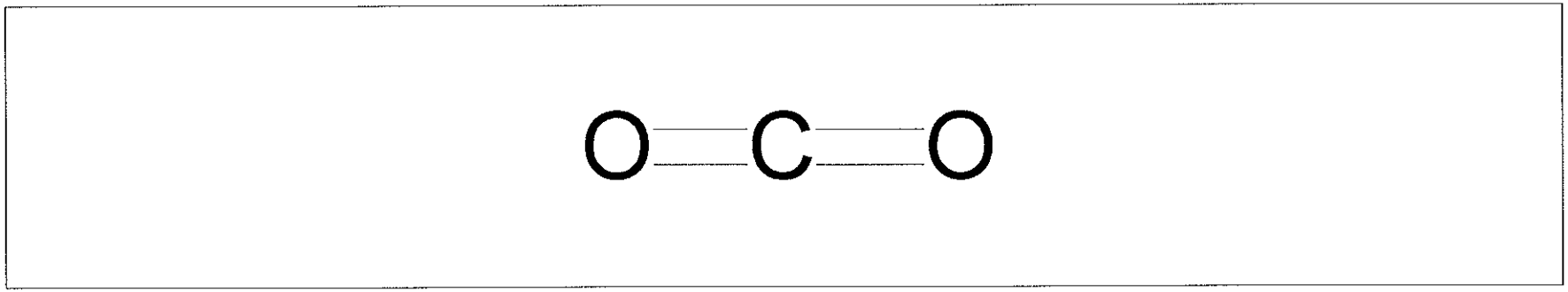
File :D:\DATA\ABTECH\Job 4987\Pre Sample#3 Bottom Blank.D
Operator : cmc
Acquired : 17 Aug 2007 12:08 using AcqMethod STANDALONE RUN.M
Instrument : Instrument #1
Sample Name: post bakeout blank2
Misc Info :
Vial Number: 1



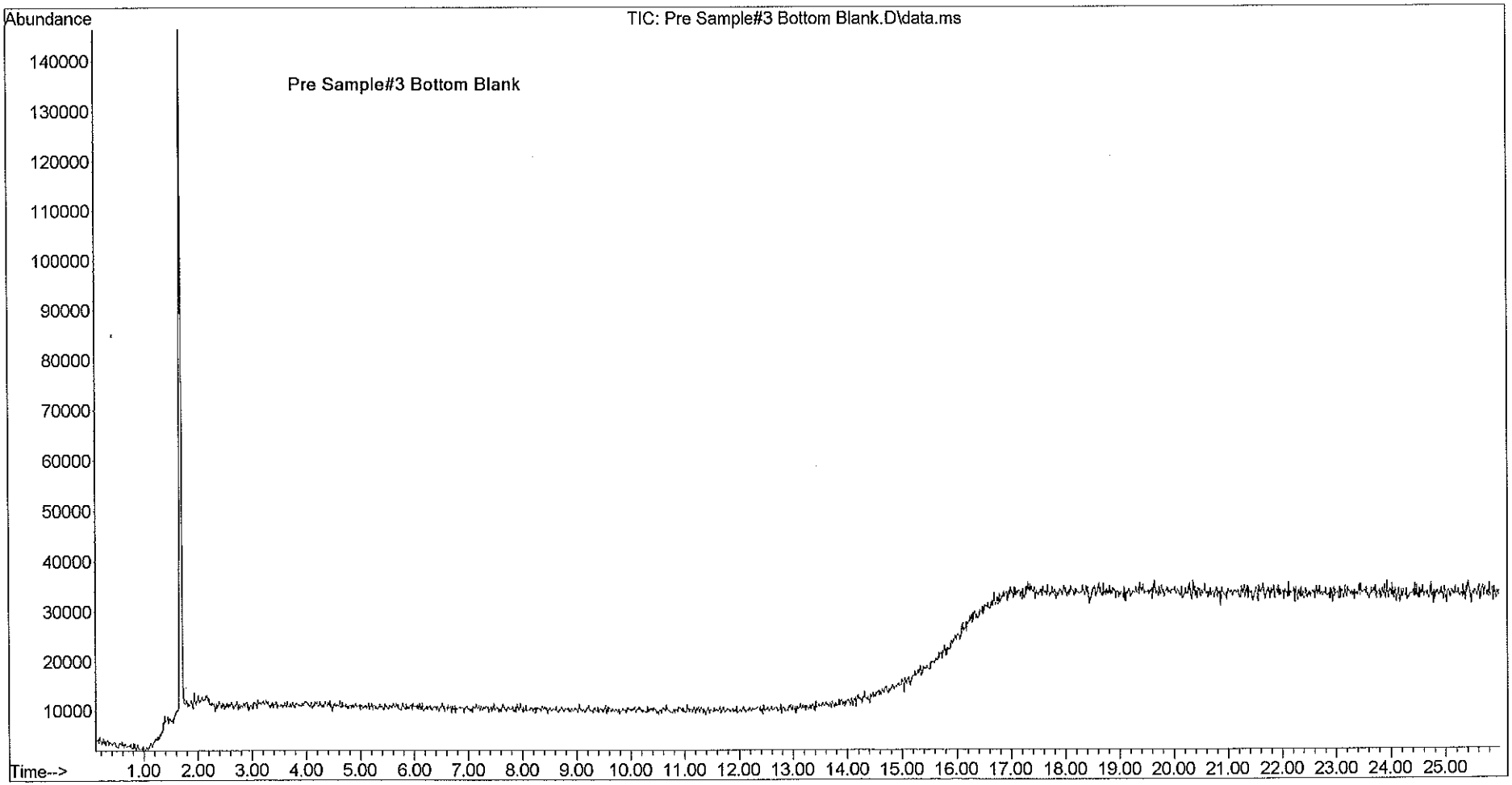
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 4
ID : Carbon dioxide; Carbon oxide (CO2); Carbonic acid, gas; Carbonic anhydride; Dry ice; CO2; Anhydride carbonique; Carbonice; Kohlendioxyd; Kohlensaure; UN 1013; UN 1845; UN 2187; Cardice; Dricold; Drikold; Dioxomethane #



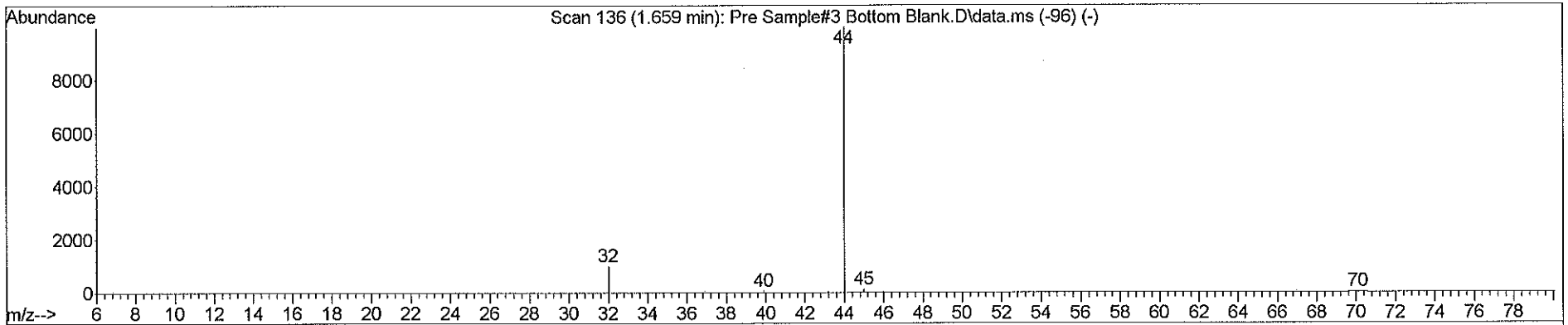


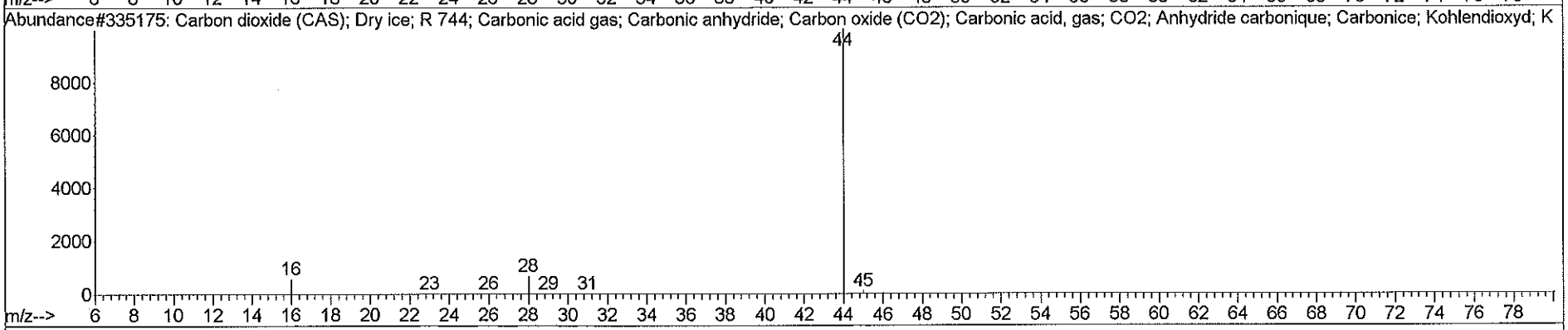


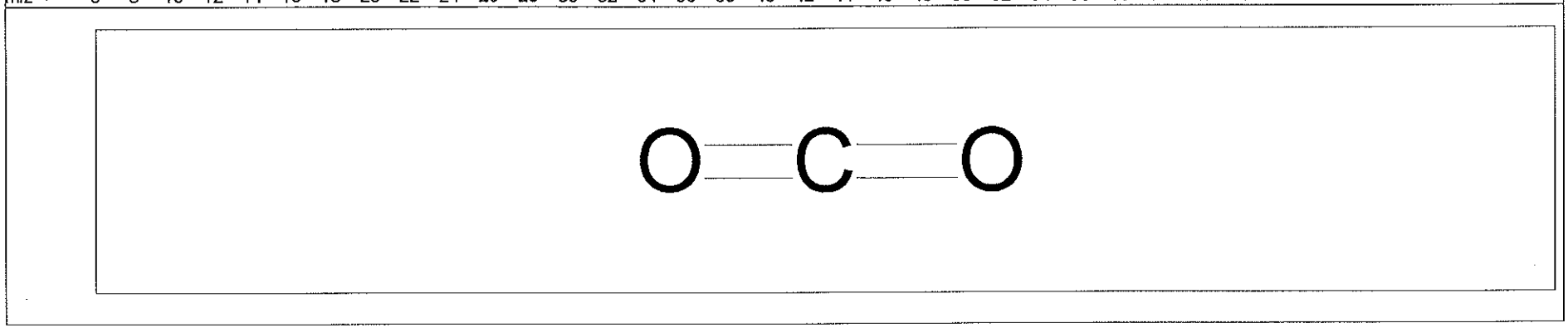
File :D:\DATA\ABTECH\Job 4987\Pre Sample#3 Bottom Blank.D
Operator : cmc
Acquired : 17 Aug 2007 12:08 using AcqMethod STANDALONE RUN.M
Instrument : Instrument #1
Sample Name: post bakeout blank2
Misc Info :
Vial Number: 1



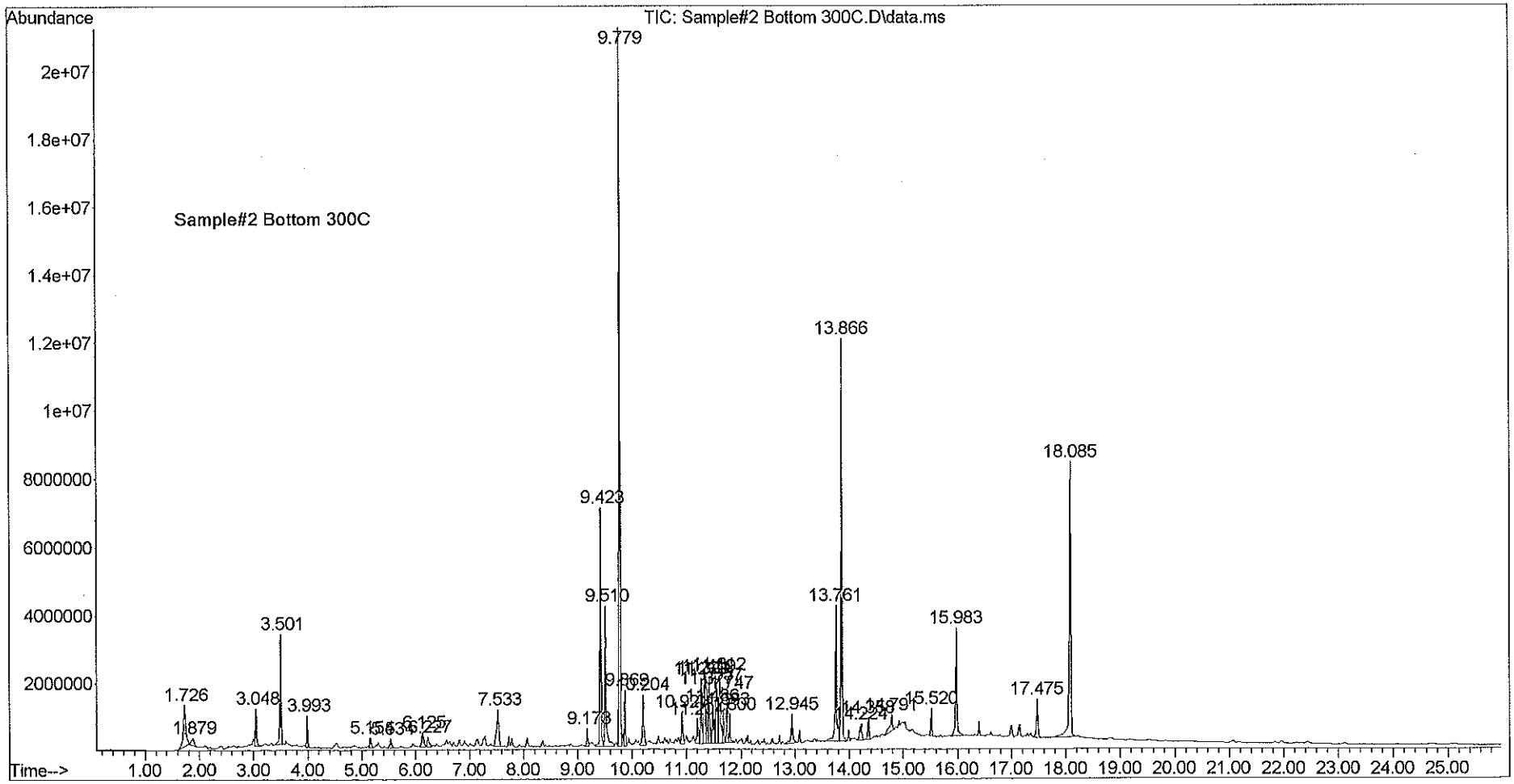
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 4
ID : Carbon dioxide (CAS); Dry ice; R 744; Carbonic acid gas; Carbonic anhydride; C arbon oxide (CO2); Carbonic acid, gas; CO2; Anhydride carbonique; Carbonice; K ohlendioxyd; Kohlensaure; UN 1013; UN 1845; UN 2187; Cardice; Dricold; Drikold ; Dioxomethane #; Dio







File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



Area Percent Report

Data Path : D:\DATA\ABTECH\Job 4987\
Data File : Sample#2 Bottom 300C.D
Acq On : 17 Aug 2007 9:34
Operator :
Sample :
Misc : UUF Long Beach C01414H
ALS Vial : 1 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

Method : C:\msdchem\1\METHODS\PYR 1000 Bake 100 750 split.M
Title :

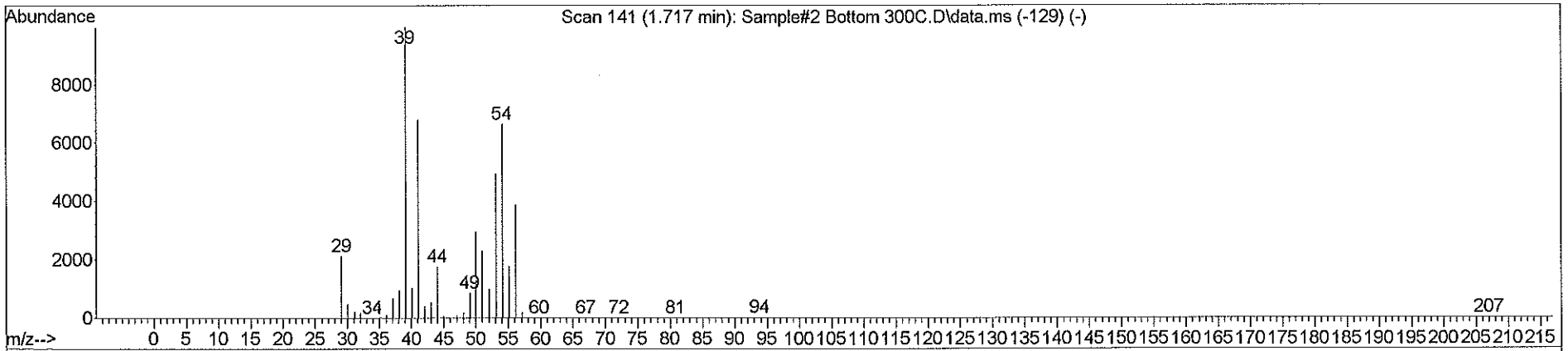
Signal : TIC: Sample#2 Bottom 300C.D\data.ms

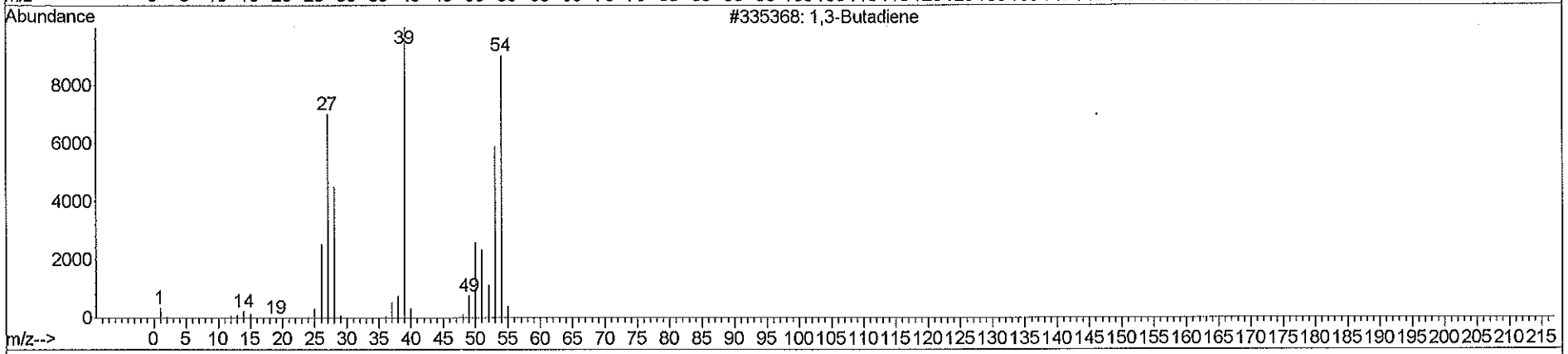
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.726	130	142	149	M3	1238320	40714629	14.32%	2.647%
2	1.879	149	155	161	M6	220594	7517776	2.64%	0.489%
3	3.048	253	256	265	VB	976909	18098897	6.37%	1.177%
4	3.501	284	295	299	PV	2824301	41168913	14.48%	2.677%
5	3.993	335	338	346	VV	958481	14880024	5.23%	0.968%
6	5.154	436	438	445	M	313393	5653438	1.99%	0.368%
7	5.534	465	471	479	M3	273546	6098732	2.15%	0.397%
8	6.125	518	522	527	M2	448310	10689094	3.76%	0.695%
9	6.227	529	531	537	M2	292925	6851303	2.41%	0.445%
10	7.533	637	644	651	VV 2	1068491	32694157	11.50%	2.126%
11	9.173	783	786	789	M	532852	7153458	2.52%	0.465%
12	9.423	798	808	812	VV	6406099	103713544	36.48%	6.744%
13	9.510	812	815	830	VV	3759351	66239480	23.30%	4.307%
14	9.779	834	839	842	VV	18630811	284307219	100.00%	18.487%
15	9.869	844	846	849	VV	1427583	19975759	7.03%	1.299%
16	10.204	870	875	880	VV 2	1387431	26811353	9.43%	1.743%
17	10.921	934	937	941	VV 2	854963	16973344	5.97%	1.104%
18	11.204	958	962	964	VV	738153	14785444	5.20%	0.961%
19	11.270	964	968	970	VV	1576282	27622680	9.72%	1.796%
20	11.329	970	973	975	VV 2	1718641	33335756	11.73%	2.168%
21	11.377	975	977	979	VV 2	1582587	26931365	9.47%	1.751%
22	11.419	979	980	983	VV	1818205	27330505	9.61%	1.777%
23	11.486	983	986	990	VV 2	1026047	26418735	9.29%	1.718%
24	11.557	990	992	995	VV 2	1611699	36505101	12.84%	2.374%
25	11.612	995	997	1001	VV	1845210	36573957	12.86%	2.378%
26	11.683	1001	1003	1006	VV	866905	15002564	5.28%	0.976%
27	11.747	1006	1009	1011	VV	1420866	22176365	7.80%	1.442%
28	11.800	1011	1013	1021	VV 3	693573	10696094	3.76%	0.695%
29	12.945	1101	1112	1122	PV 3	736603	17547863	6.17%	1.141%
30	13.761	1156	1183	1188	BV 2	3616411	76351230	26.86%	4.965%
31	13.866	1188	1192	1200	VV	10230986	157989681	55.57%	10.273%
32	14.224	1216	1223	1227	VV 2	410008	12252833	4.31%	0.797%
33	14.358	1227	1235	1238	VV 2	643049	12084623	4.25%	0.786%
34	14.791	1260	1272	1276	PV 3	430064	15622204	5.49%	1.016%
35	15.520	1332	1335	1339	PV 2	767982	11264927	3.96%	0.732%
36	15.983	1366	1375	1388	VV	2926727	53352657	18.77%	3.469%
37	17.475	1497	1504	1513	VB 2	1065472	22208924	7.81%	1.444%
38	18.085	1528	1557	1567	BV	7580971	172313087	60.61%	11.204%

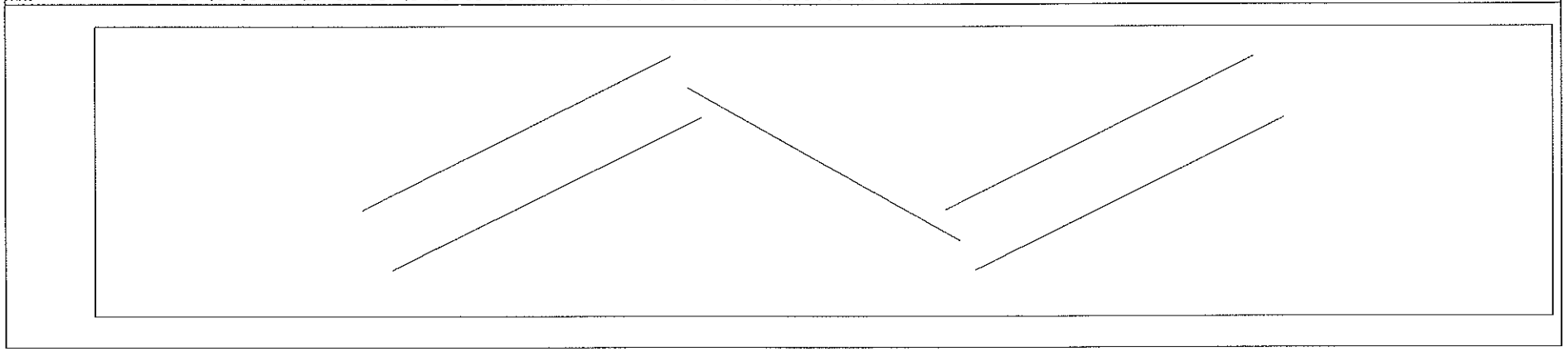
Sum of corrected areas: 1537907717

PYR 1000 Ba... 750 split.M Mon Aug 20 08:53:21 2007

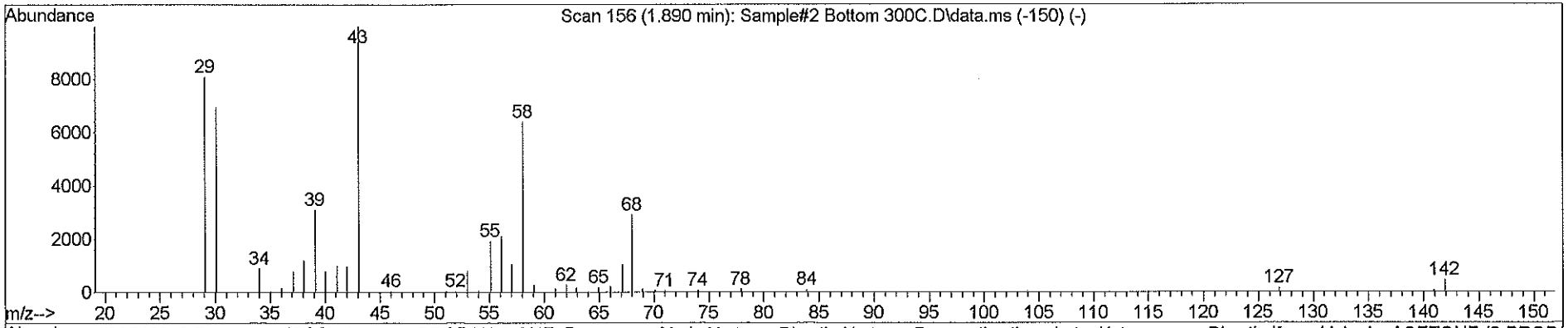
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 80
ID : 1,3-Butadiene

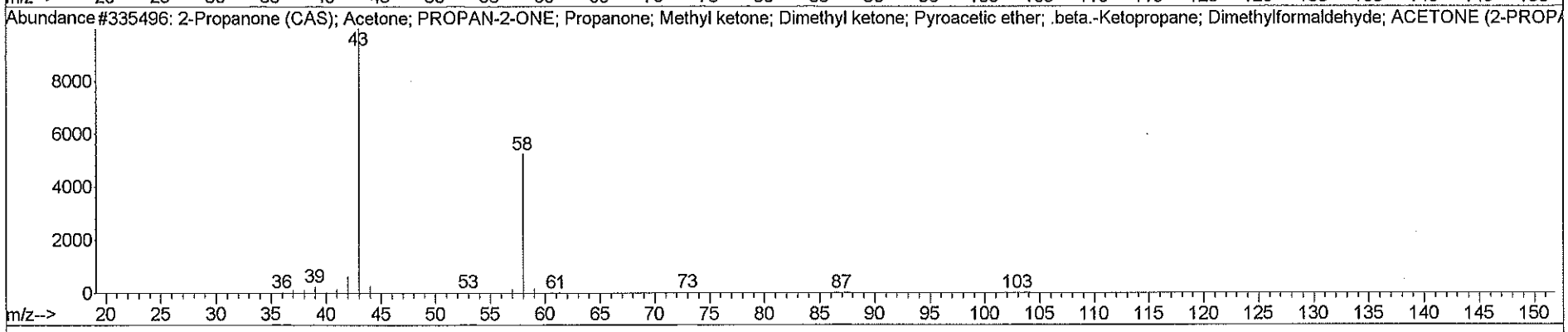


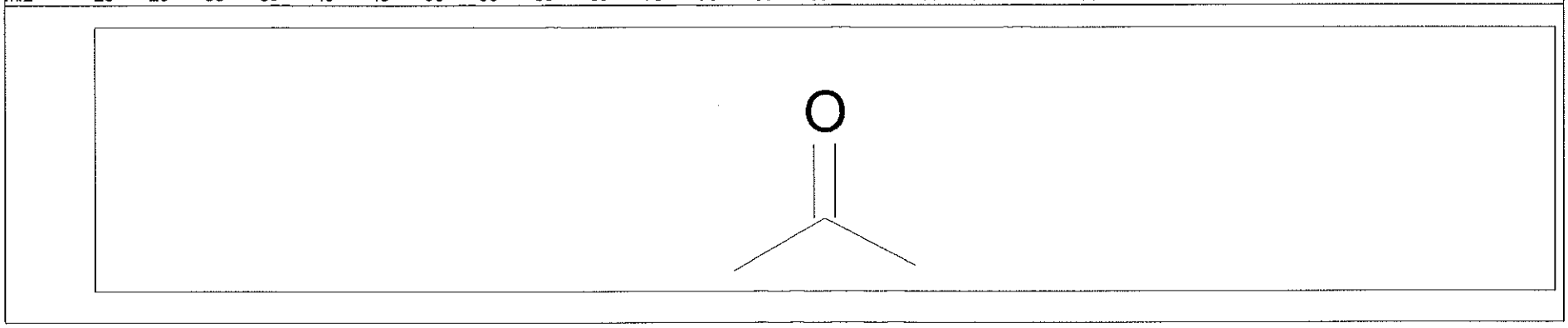




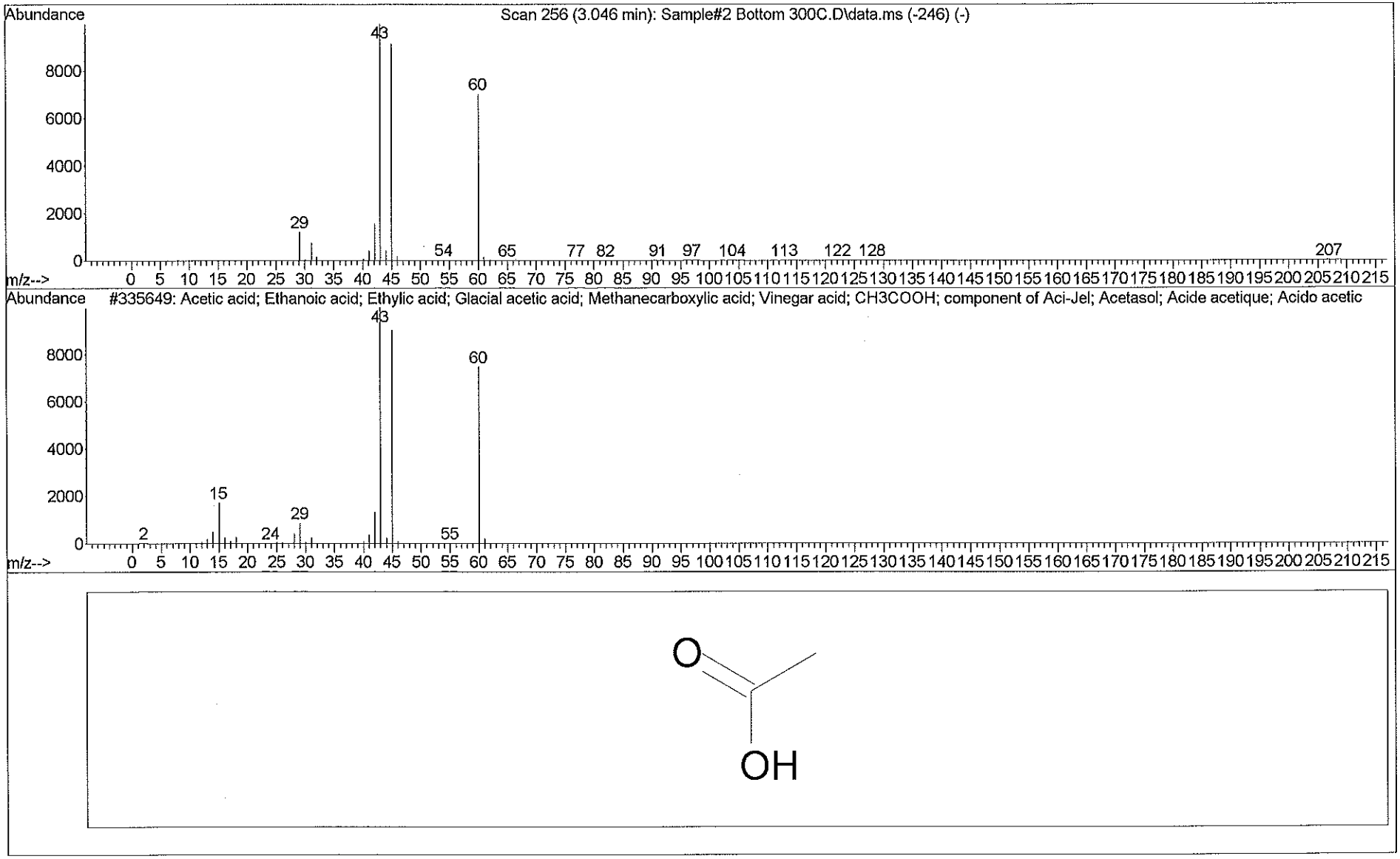
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 9
ID : 2-Propanone (CAS); Acetone; PROPAN-2-ONE; Propanone; Methyl ketone; Dimethyl k etone; Pyroacetic ether; .beta.-Ketopropane; Dimethylformaldehyde; ACETONE (2-PROPANONE); (CH3)2CO; Allylic alcohol; Dimethylketal; Ketone propane; Ketone, dimethyl-; Acetone oi



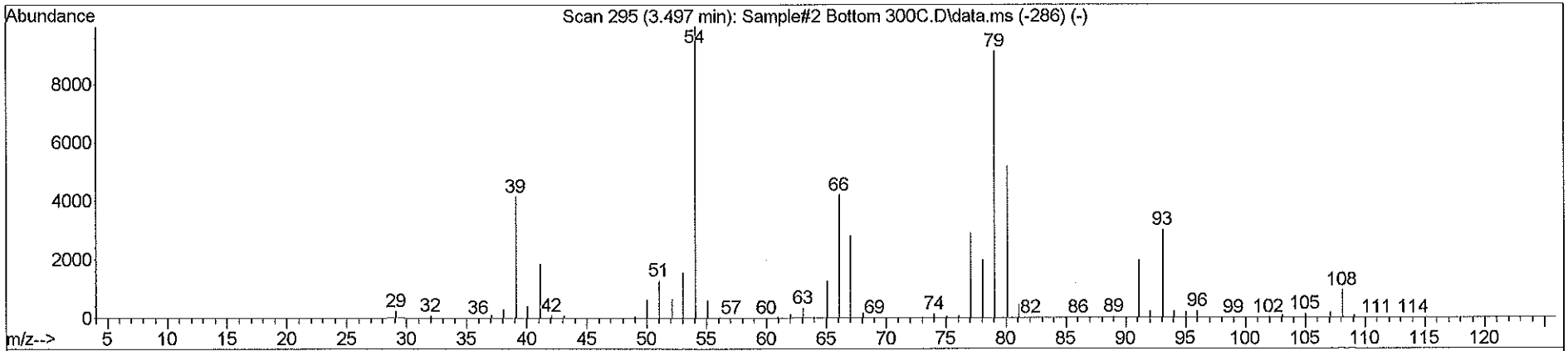


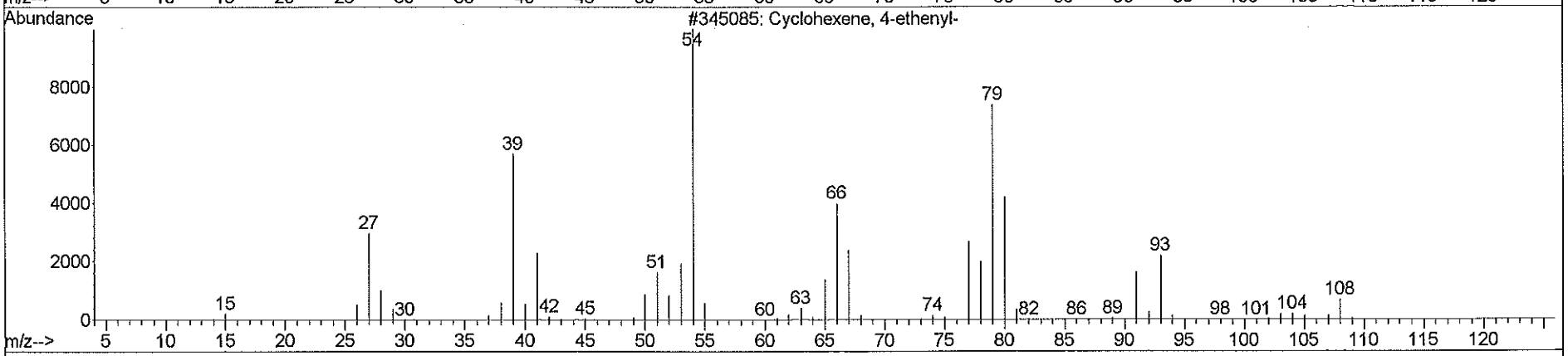


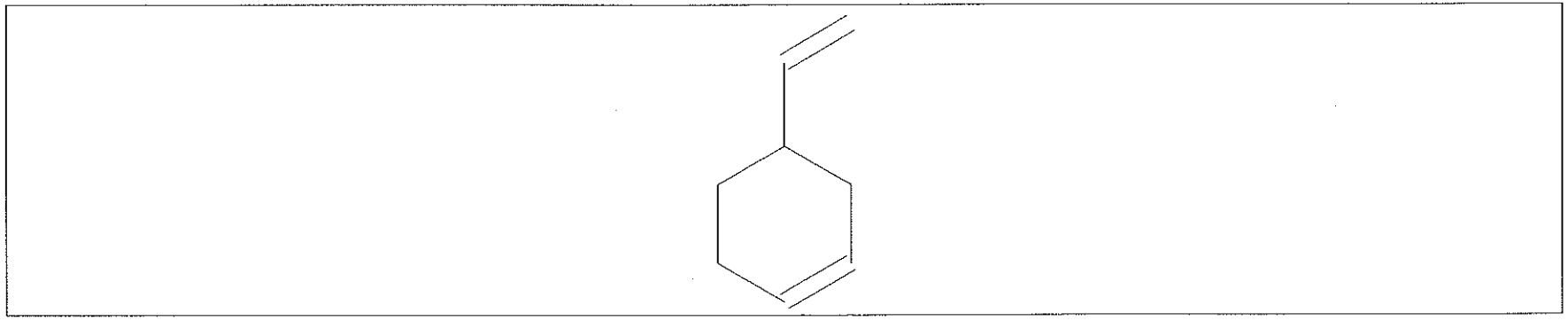
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 91
ID : Acetic acid; Ethanoic acid; Ethylic acid; Glacial acetic acid; Methanecarboxylic acid; Vinegar acid; CH3COOH; component of Aci-Jel; Acetasol; Acide acetique; Acido acetico; Azijnzuur; Essigsaeure; Octowy kwas; Acetic acid, glacial; Kyselina octova; UN 278



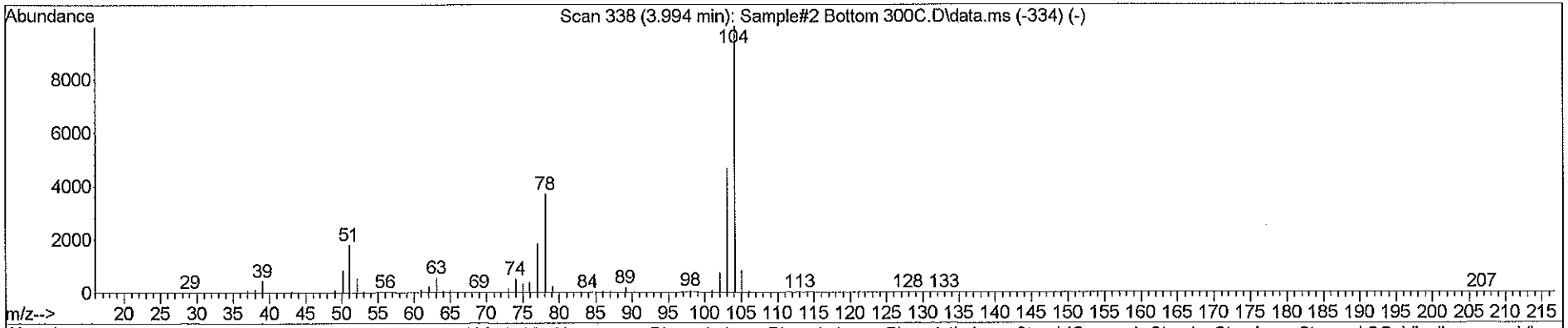
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 97
ID : Cyclohexene, 4-ethenyl-

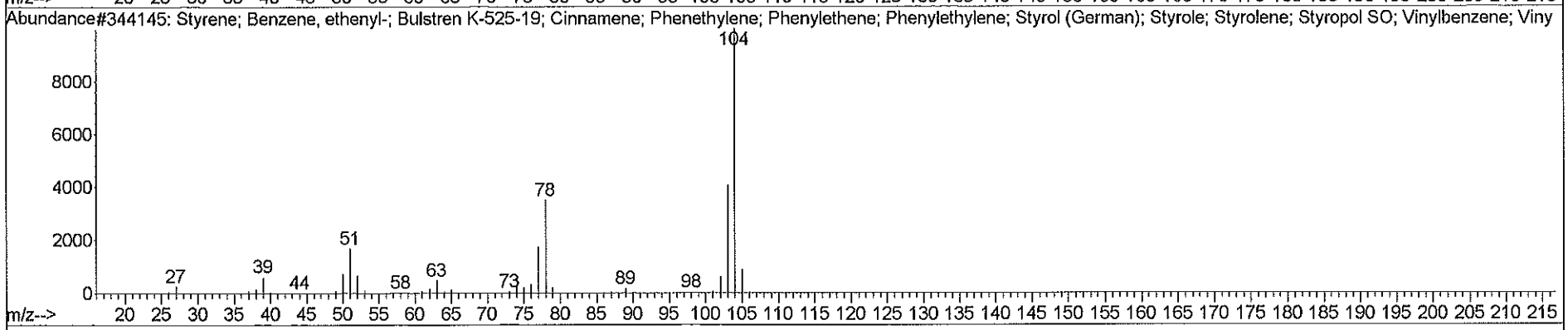


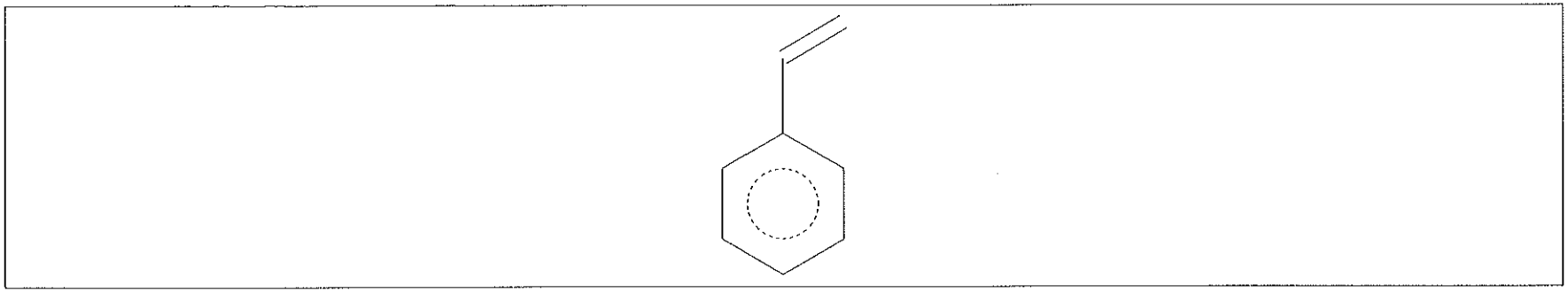




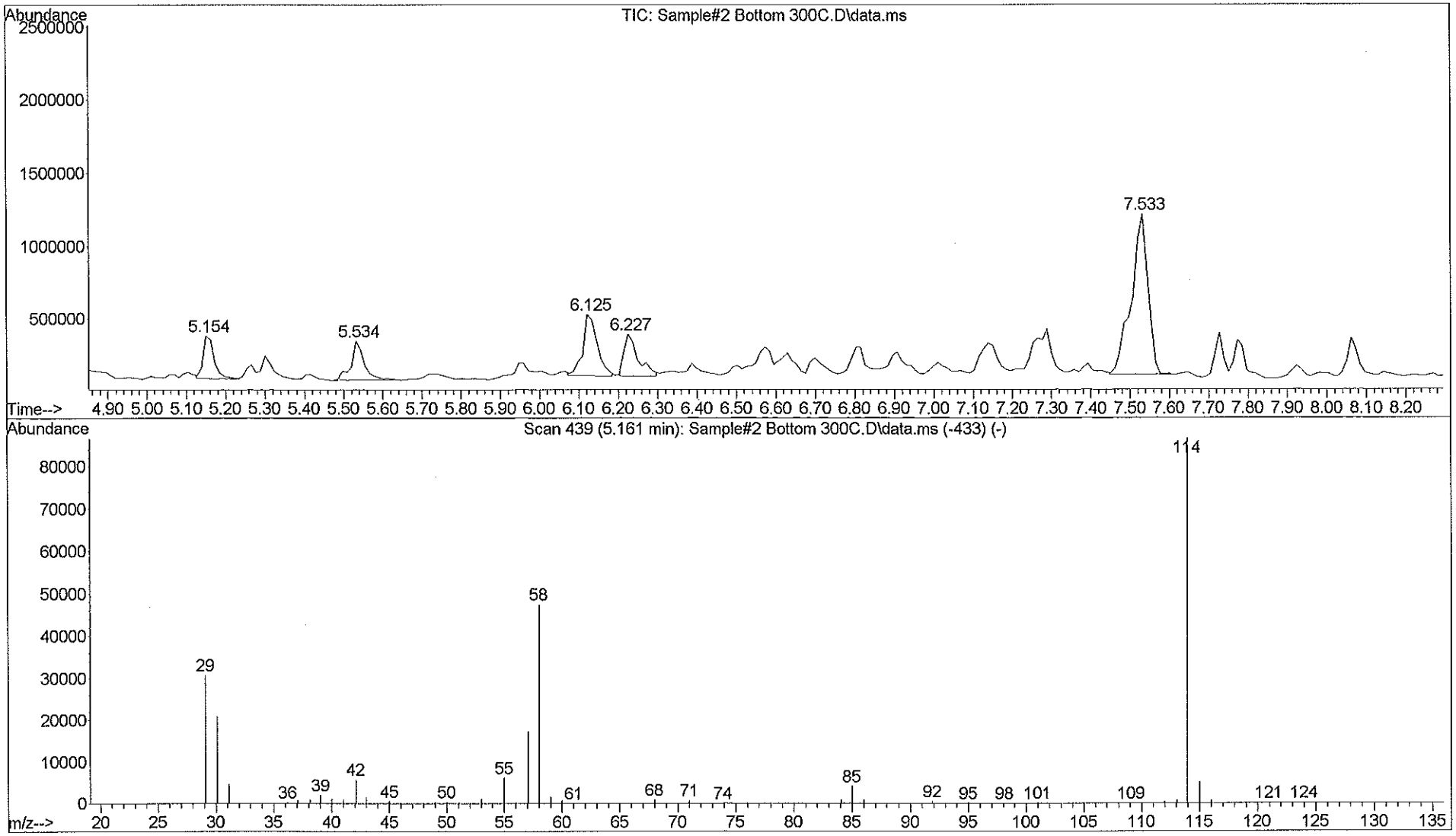
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 97
ID : Styrene; Benzene, ethenyl-; Bulstren K-525-19; Cinnamene; Phenethylene; Phenyl ethene; Phenylethylene; Styrol (German); Styrole; Styrolene; Styropol SO; Viny lbenzene; Vinylbenzol; Ethenylbenzene; Cinnaminol; Cinnamol; Styrol; Benzene, vinyl-; Cinnamenol; D



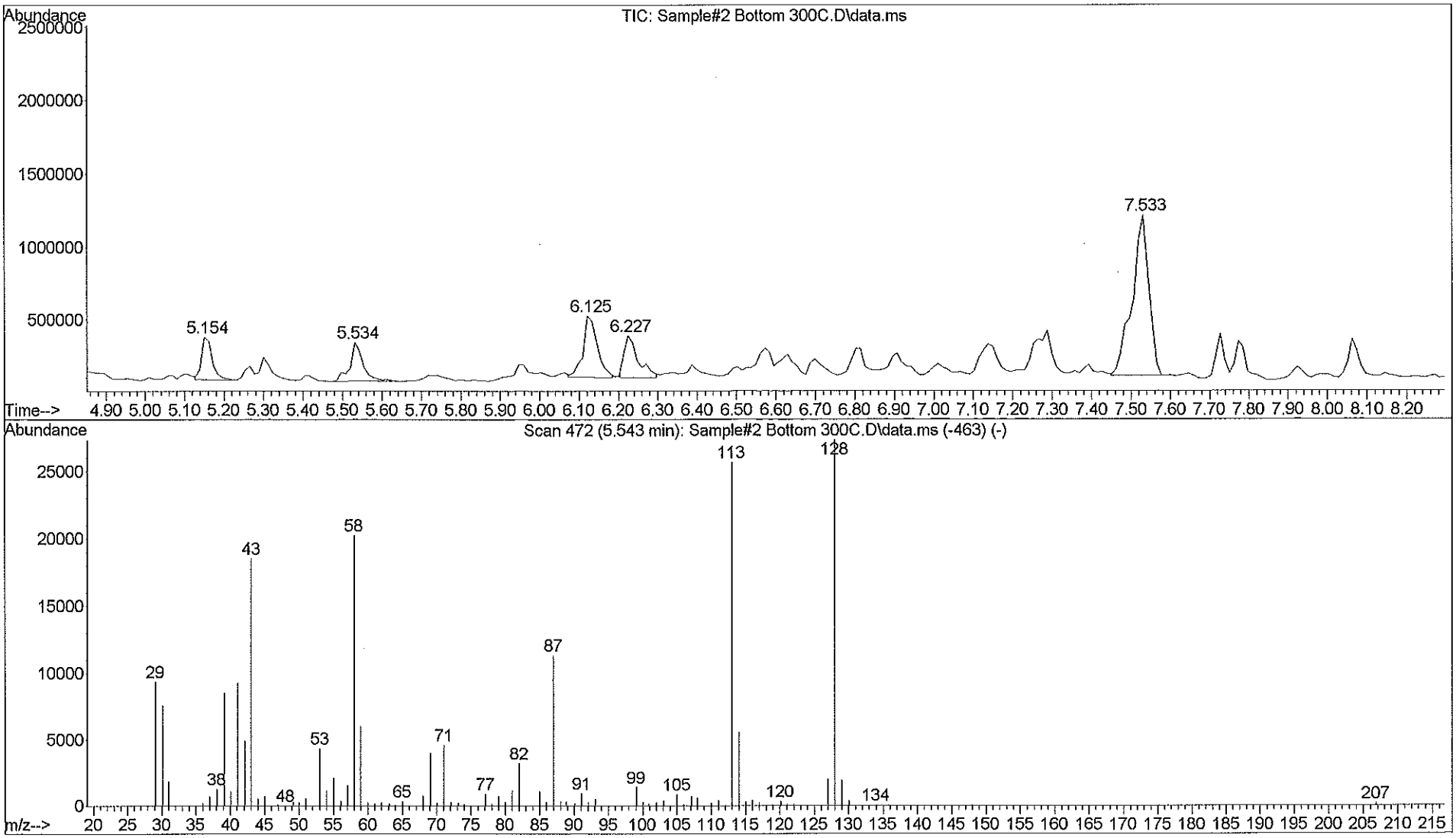




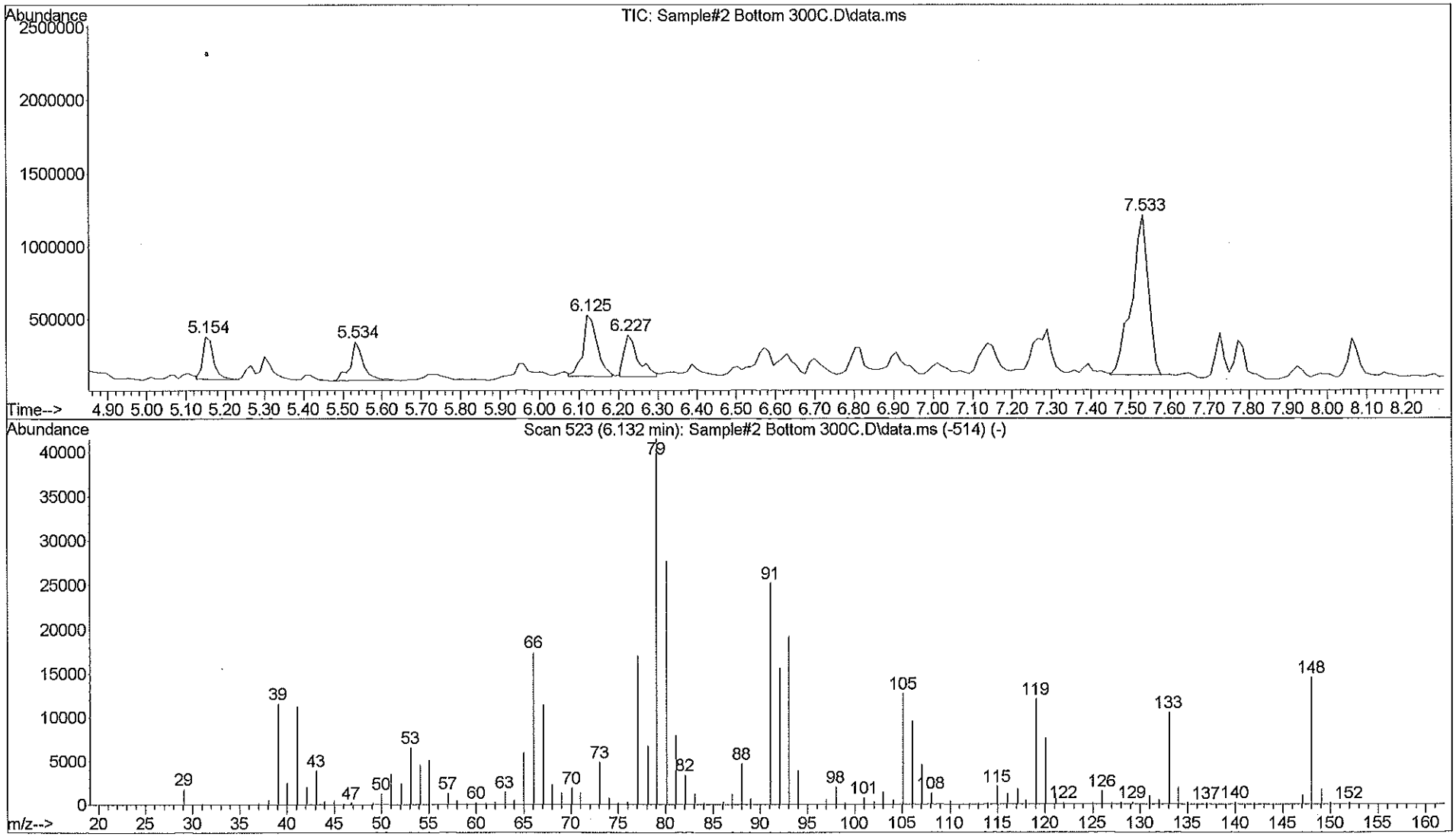
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



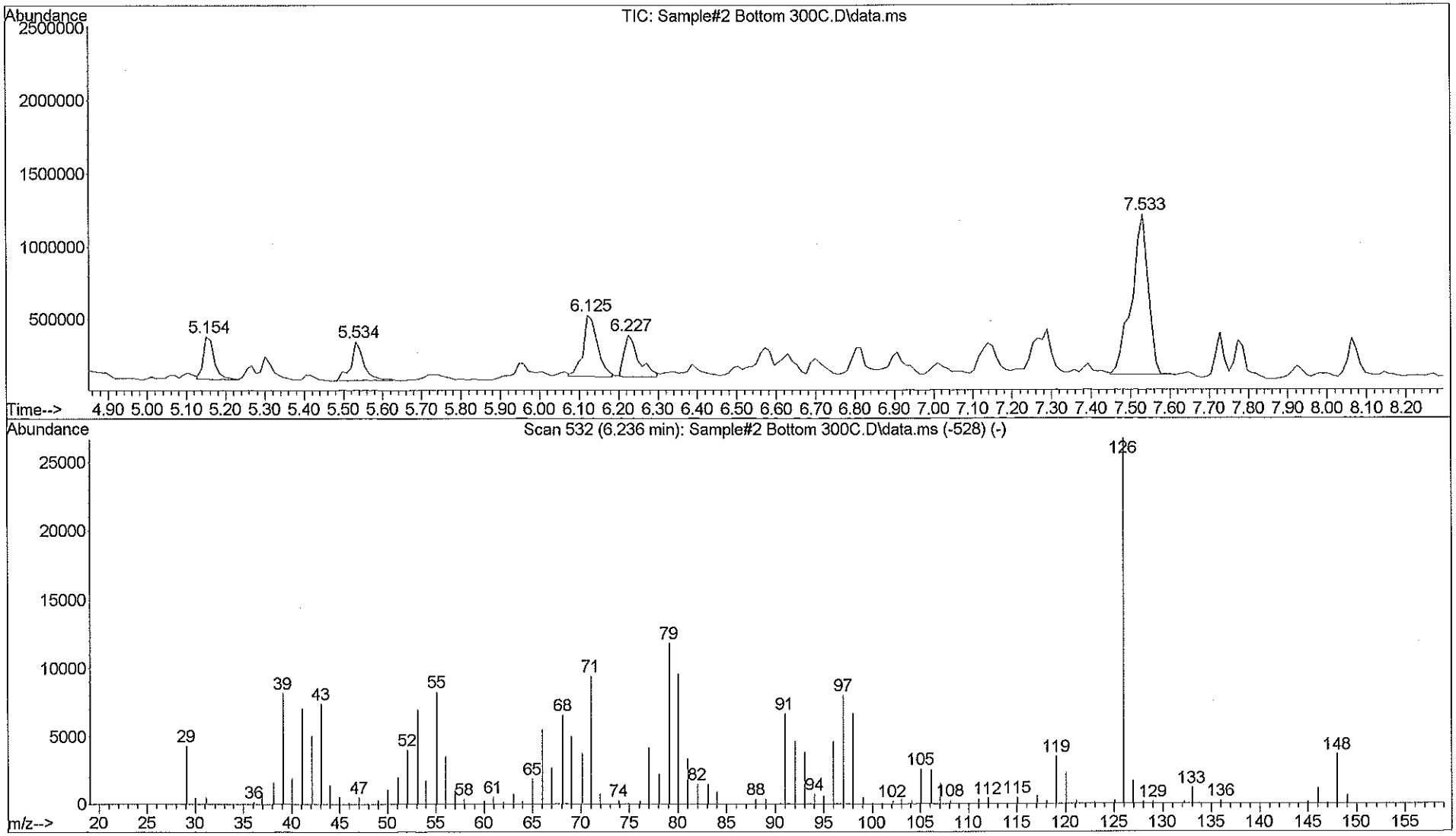
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



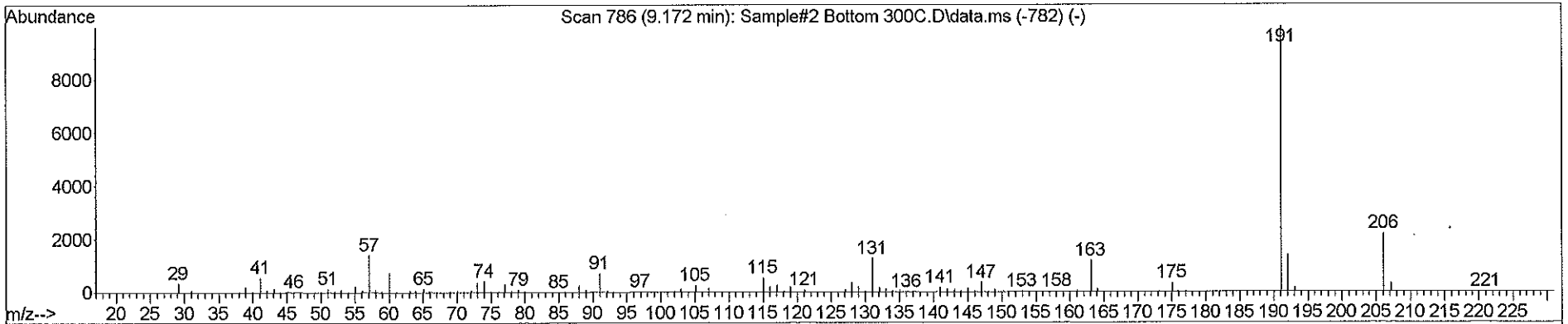
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

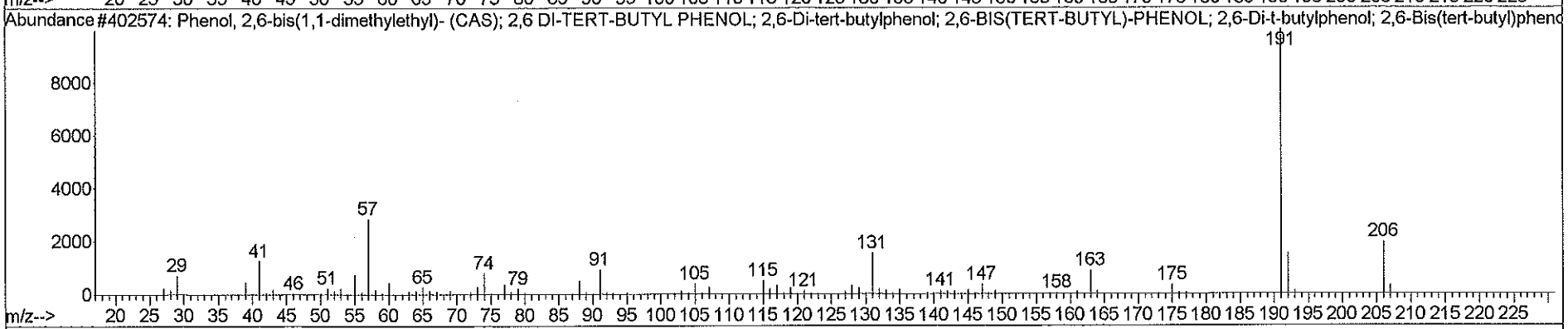


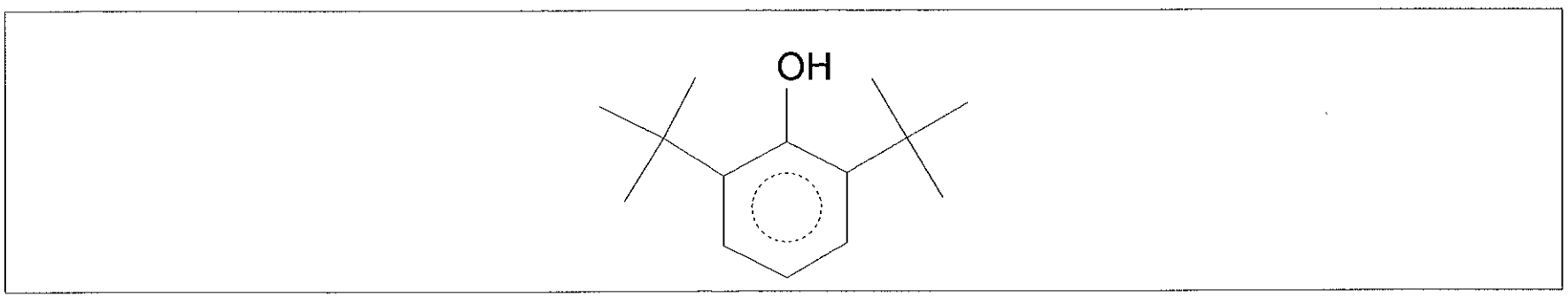
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



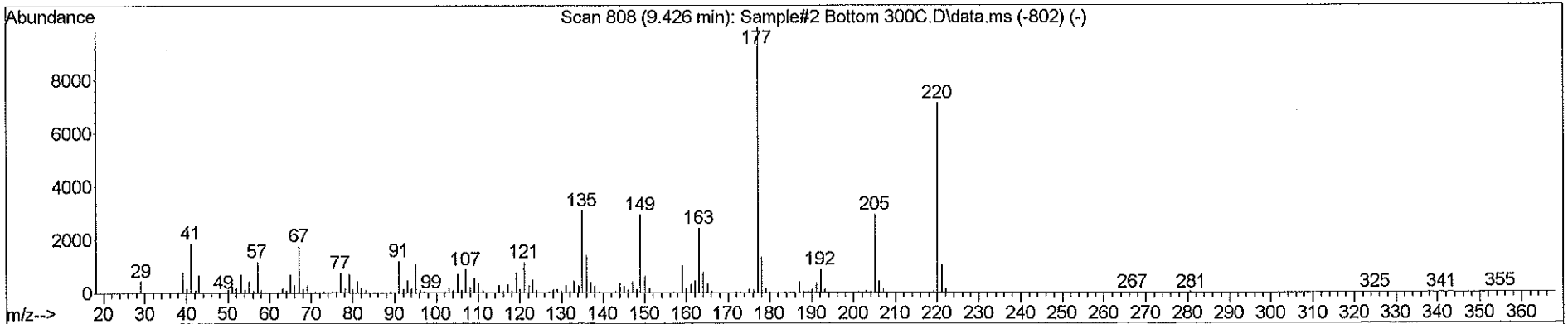
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 93
ID : Phenol, 2,6-bis(1,1-dimethylethyl)- (CAS); 2,6 DI-TERT-BUTYL PHENOL; 2,6-Di-tert-butylphenol; 2,6-BIS(TERT-BUTYL)-PHENOL; 2,6-Di-t-butylphenol; 2,6-Bis(tert-butyl)phenol; Phenol, 2,6-di-tert-butyl-; 2,6-Bis(1,1-dimethylethyl)phenol; Ethyl 701; 2,6-Di-tert

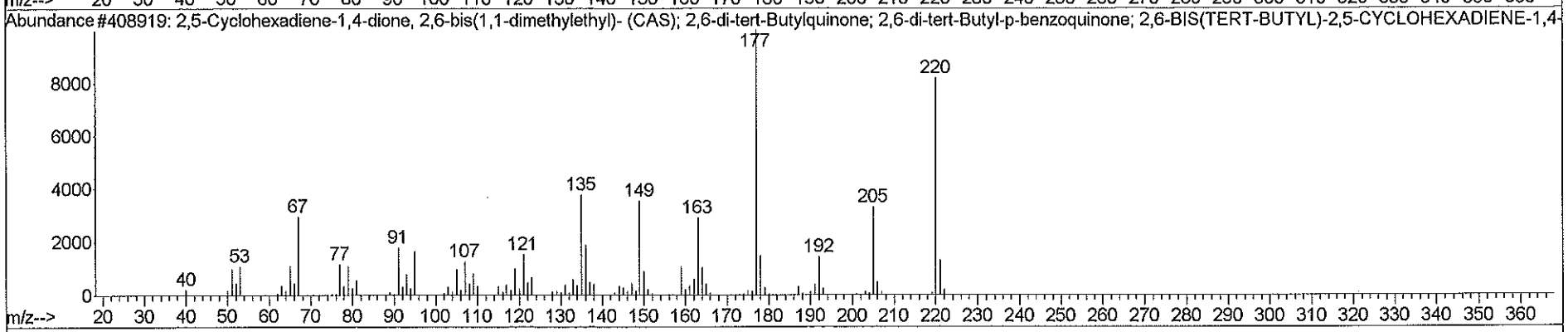


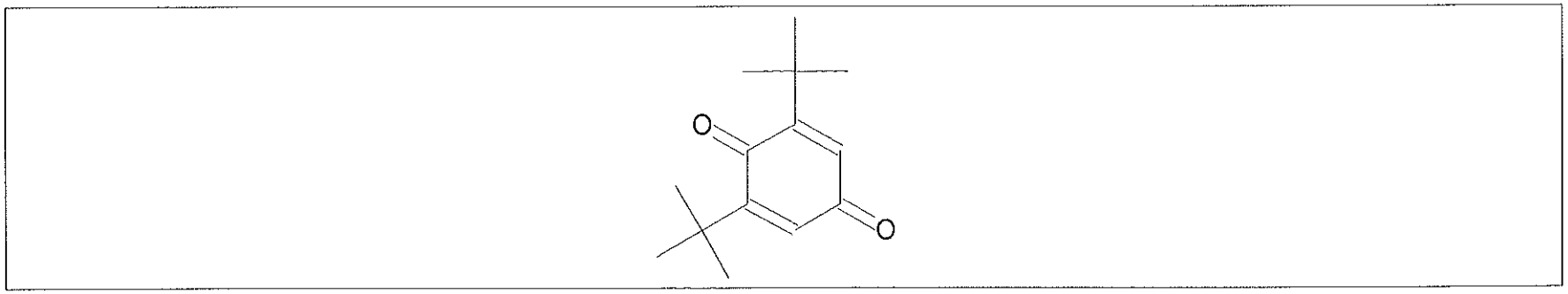




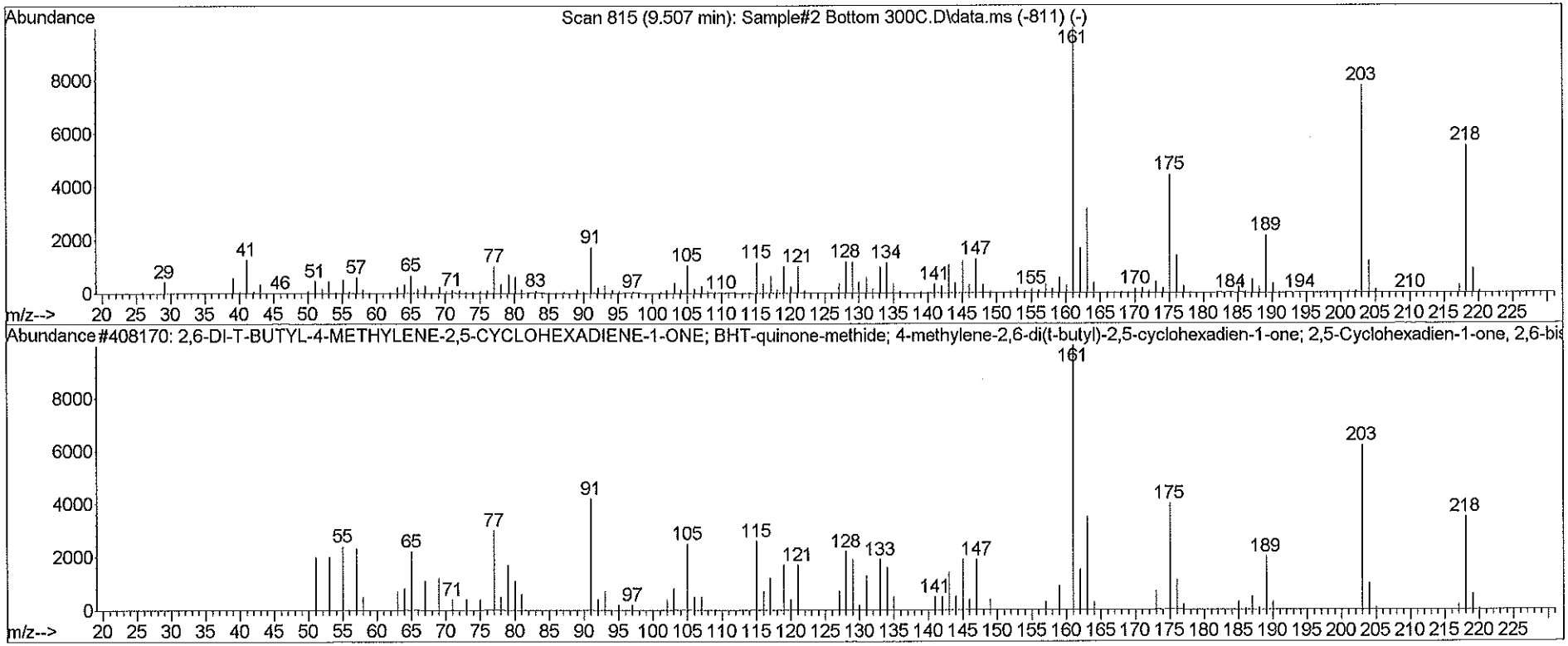
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : 2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,1-dimethylethyl)- (CAS); 2,6-di-tert-Butylquinone; 2,6-di-tert-Butyl-p-benzoquinone; 2,6-BIS(TERT-BUTYL)-2,5-CYCLOHEXADIENE-1,4-DIONE; 2,6-Di-tert-butylbenzoquinone; p-Benzoquinone, 2,6-di-tert-butyl-; 2,6-Di-tert-b



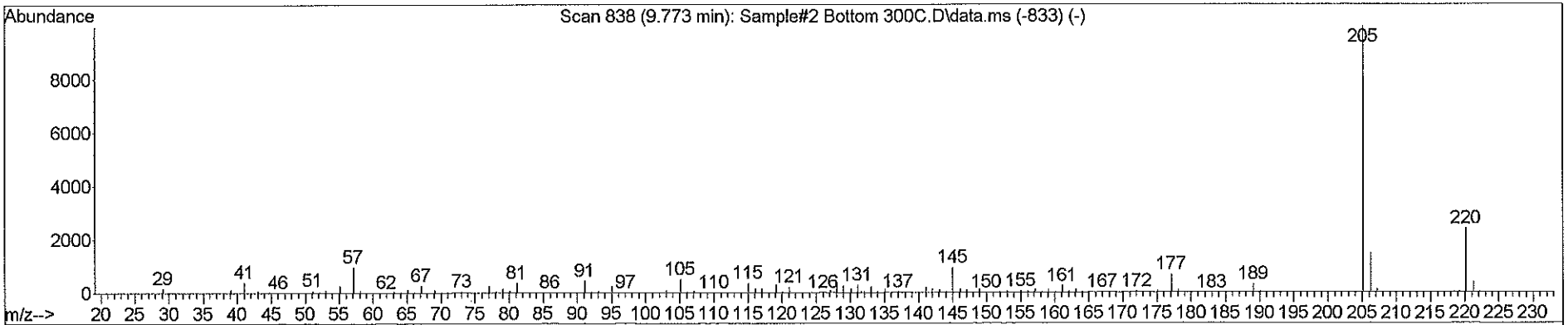


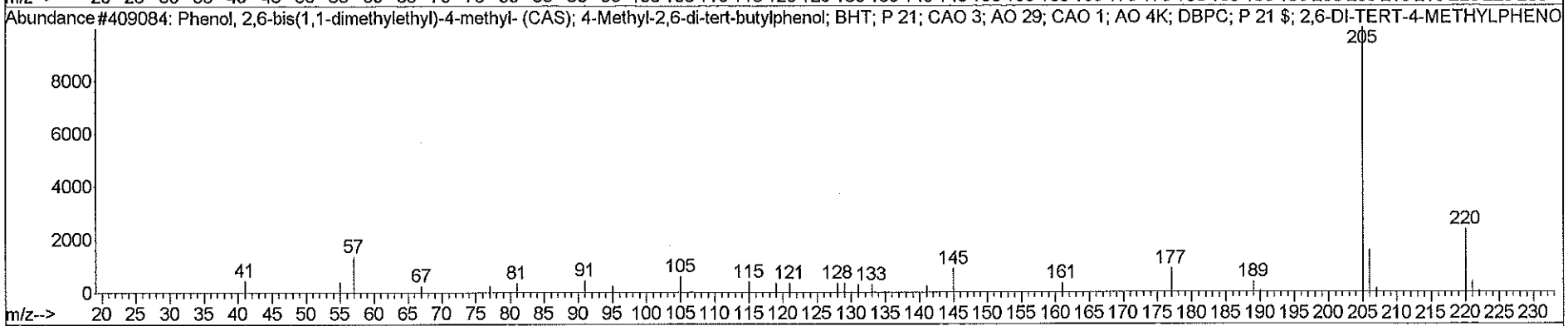


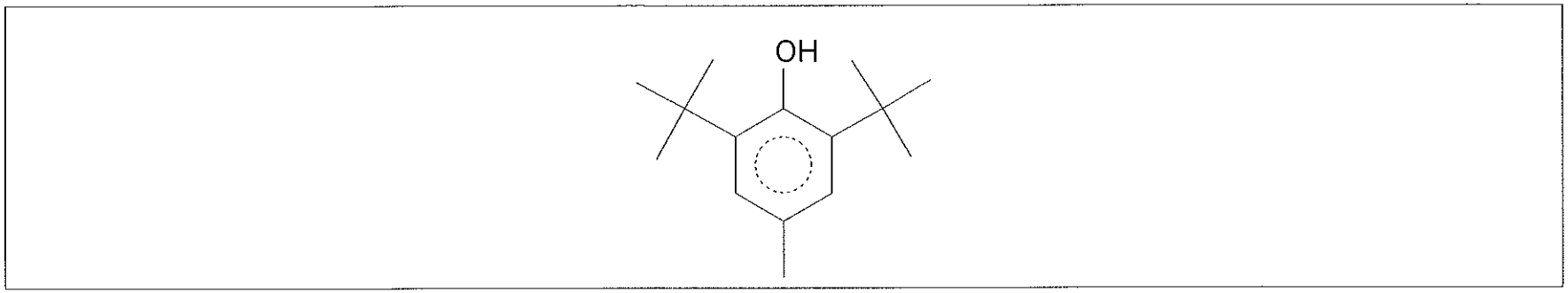
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 94
ID : 2,6-DI-T-BUTYL-4-METHYLENE-2,5-CYCLOHEXADIENE-1-ONE; BHT-quinone-methide; 4-methylene-2,6-di(t-butyl)-2,5-cyclohexadien-1-one; 2,5-Cyclohexadien-1-one, 2,6-bis(1,1-dimethylethyl)-4-methylene- (CAS); 2,5-Cyclohexadien-1-one, 2,6-di-tert-butyl-4-methylene-



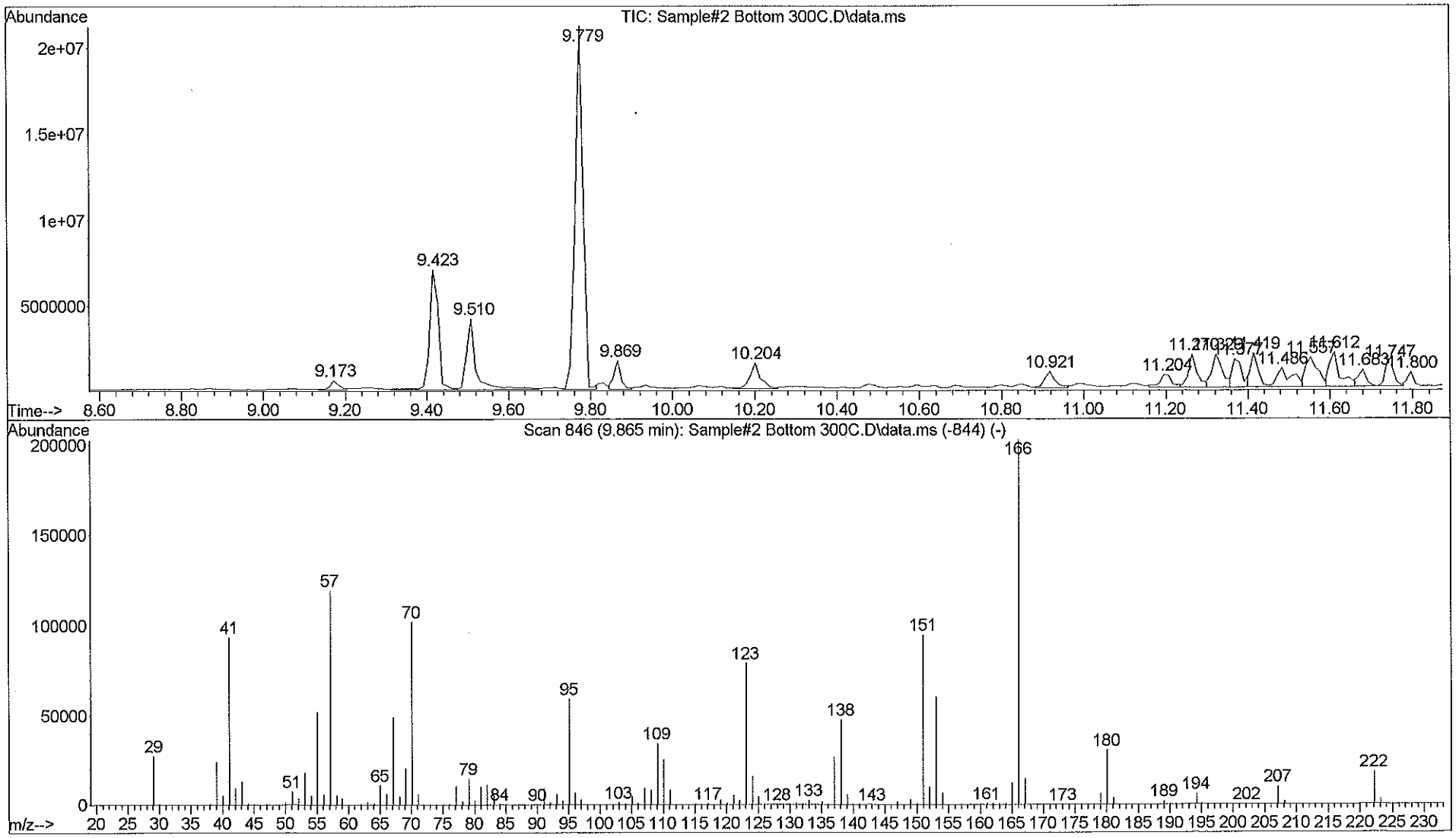
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 98
ID : Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- (CAS); 4-Methyl-2,6-di-tert-butyl phenol; BHT; P 21; CAO 3; AO 29; CAO 1; AO 4K; DBPC; P 21 $; 2,6-DI-TERT-4-MET HYLPHENOL; Buks; Ional; Ionole; Deenax; Dalpac; Stavox; Vianol; Topanol; Ionol 1; Dibunol; Ionol CP



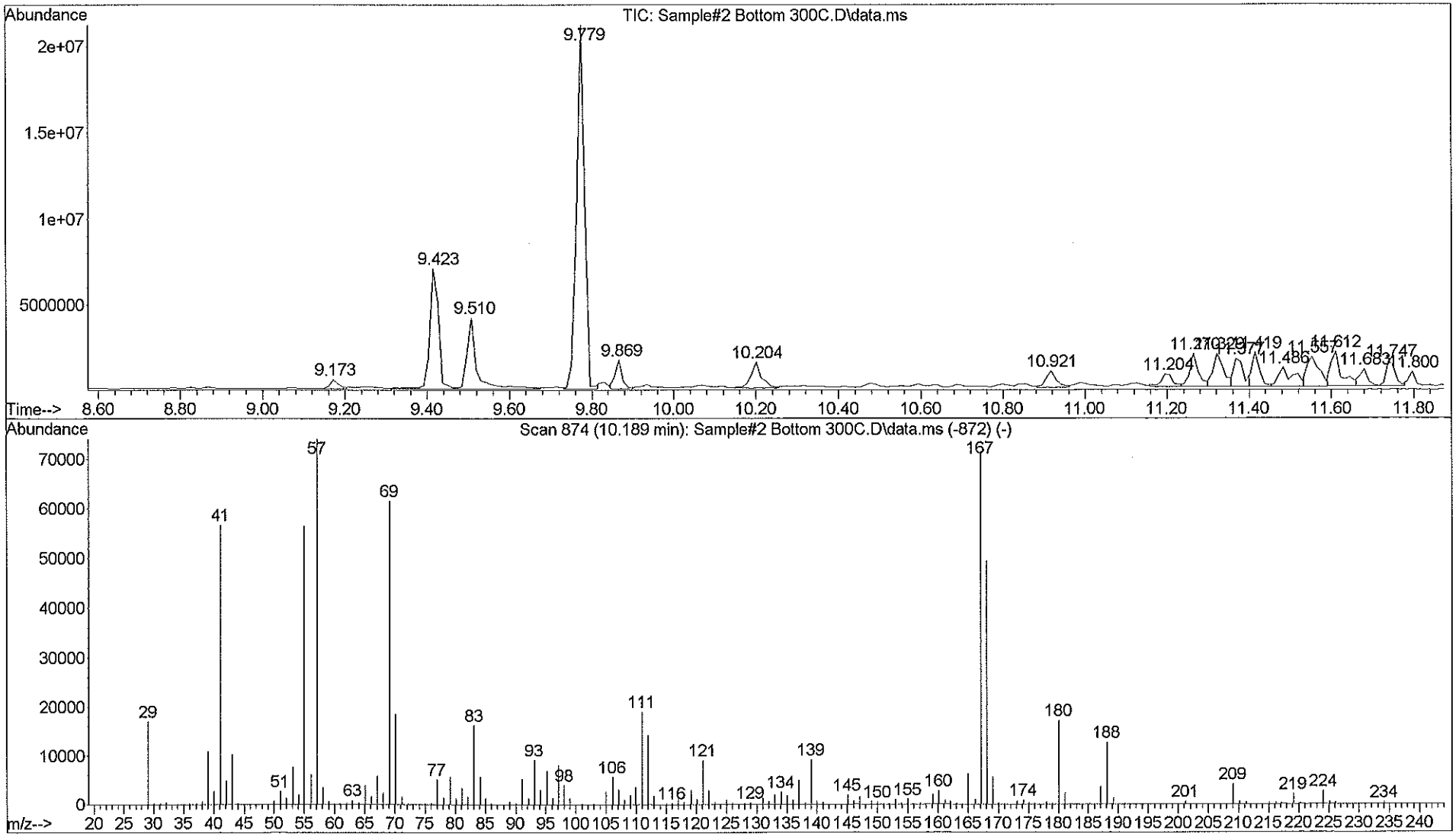




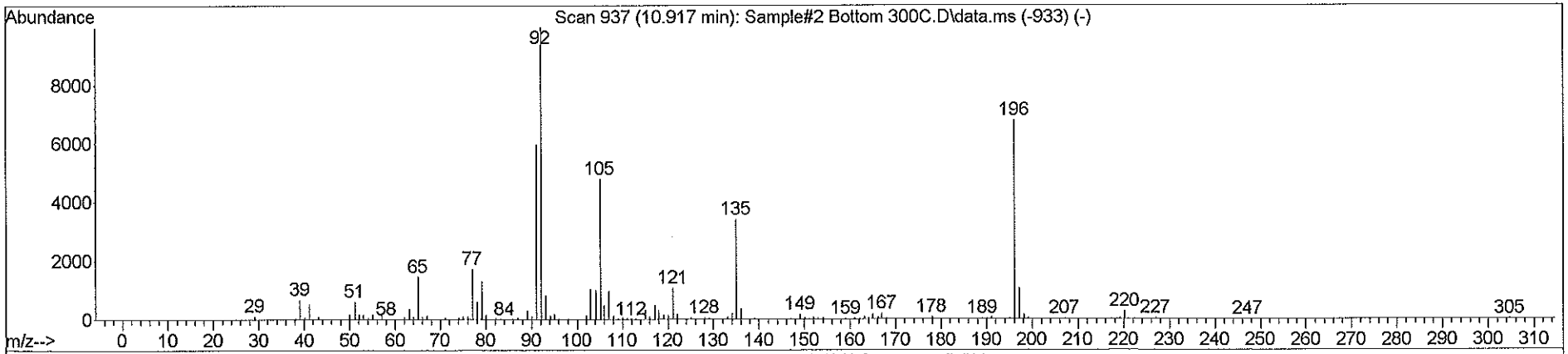
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

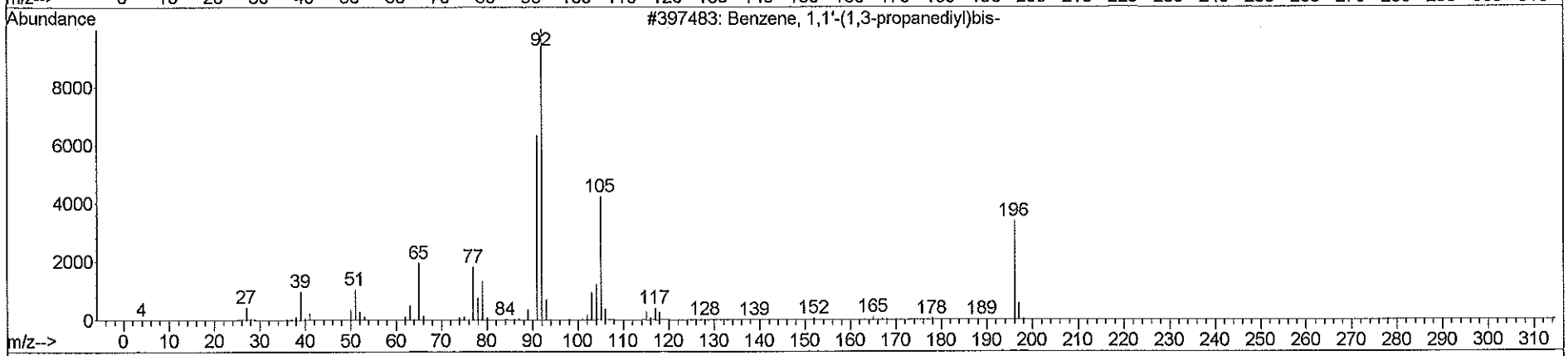


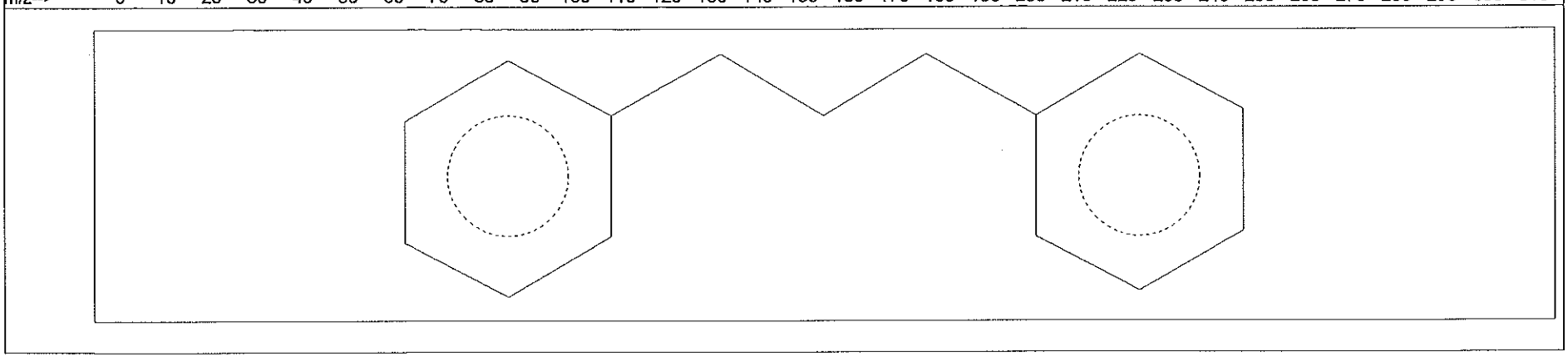
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



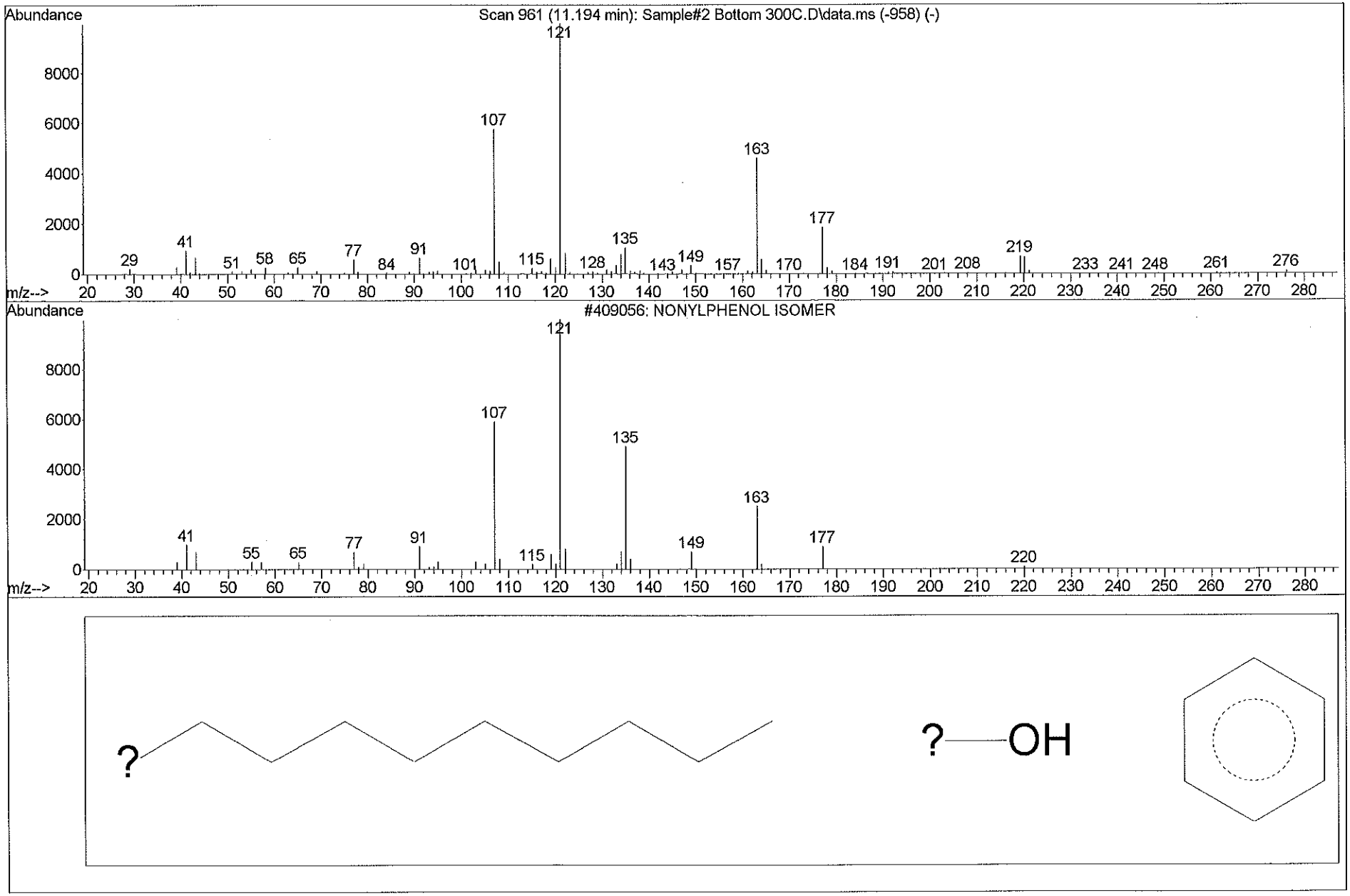
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 96
ID : Benzene, 1,1'-(1,3-propanediyl)bis-



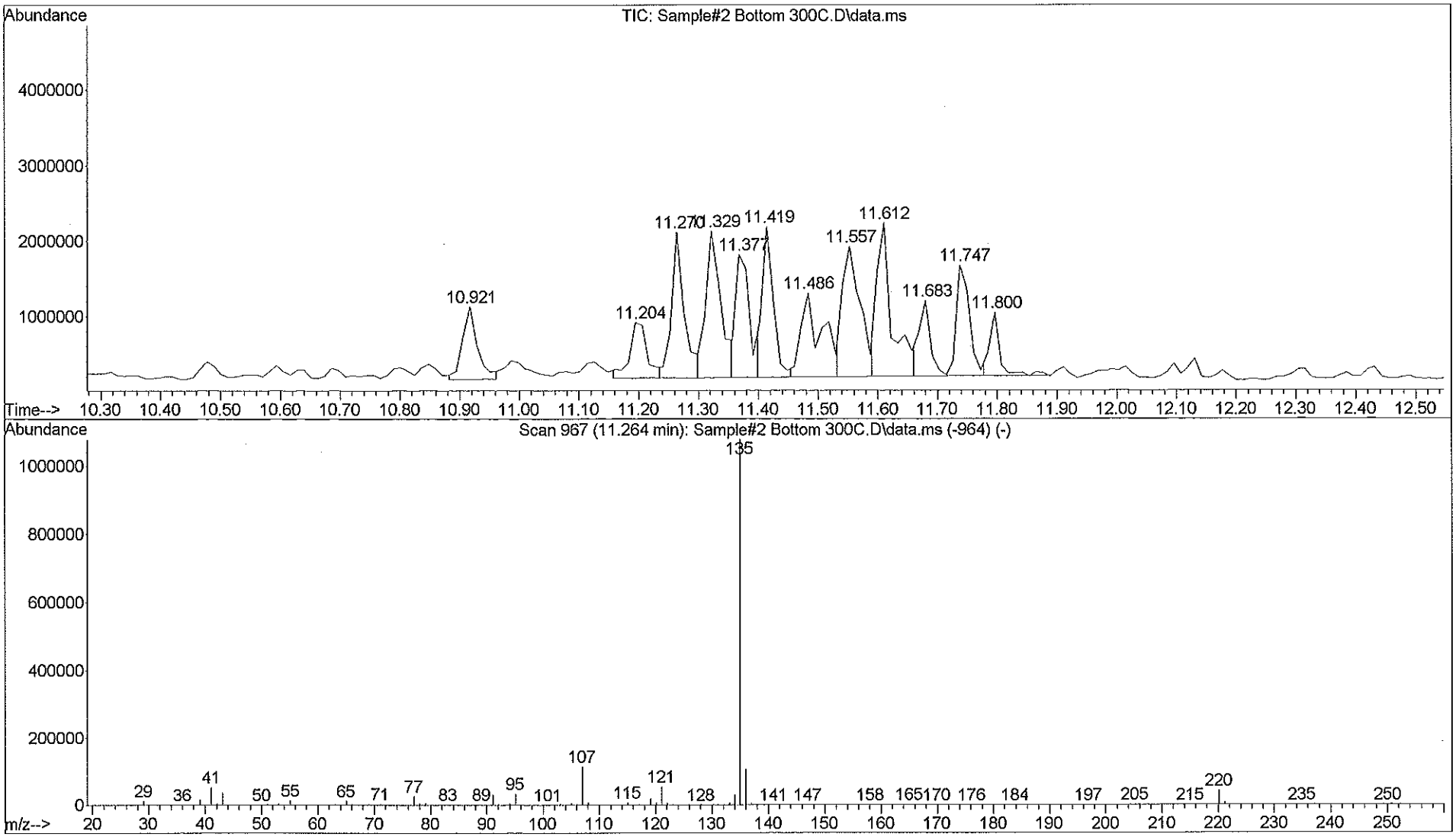




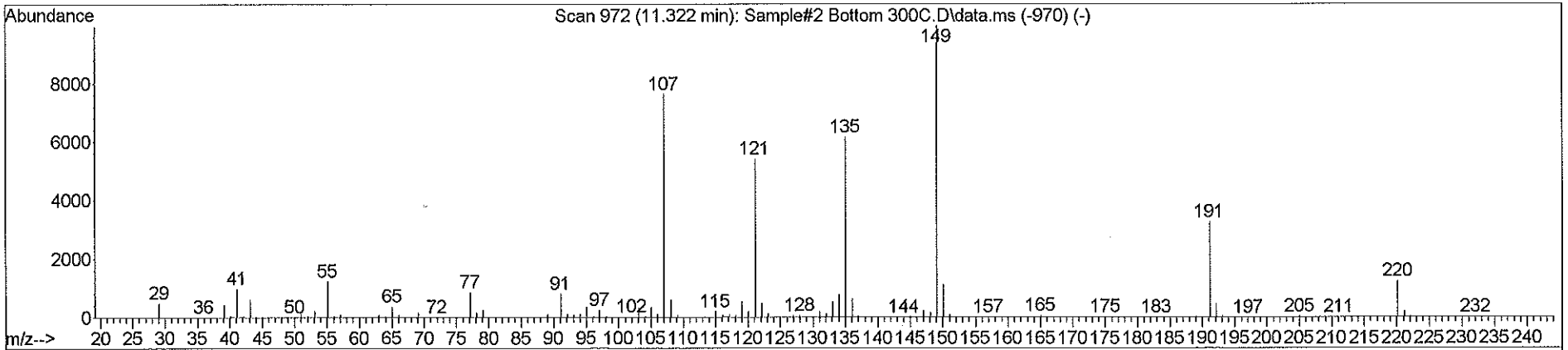
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 90
ID : NONYLPHENOL ISOMER

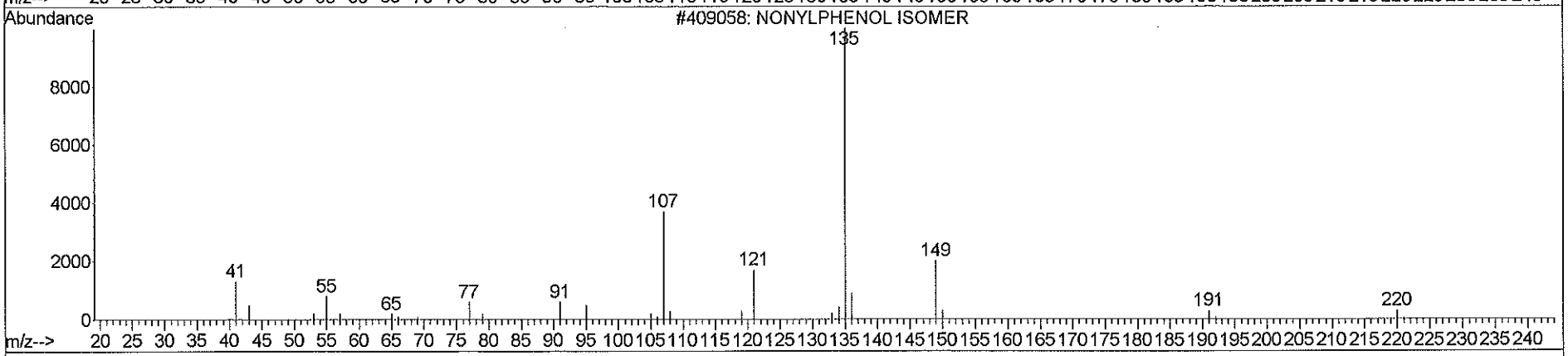


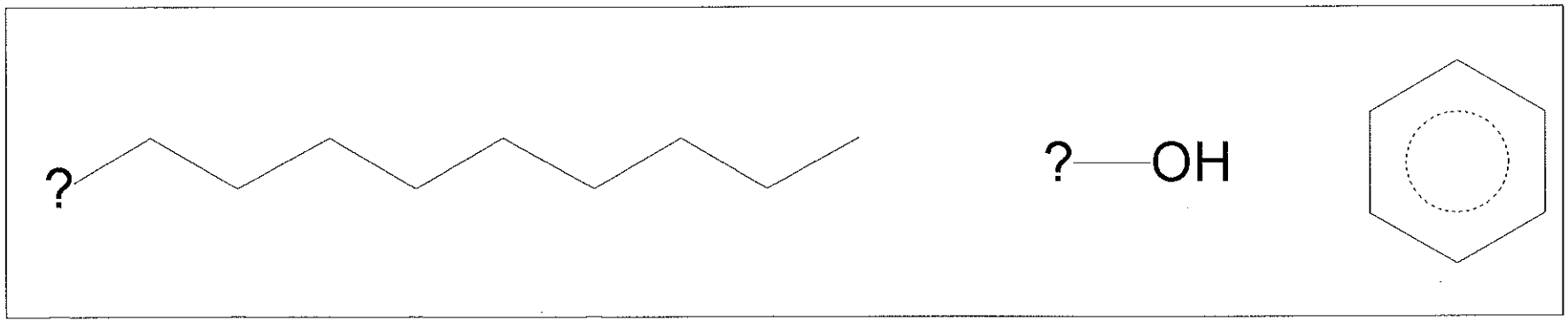
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



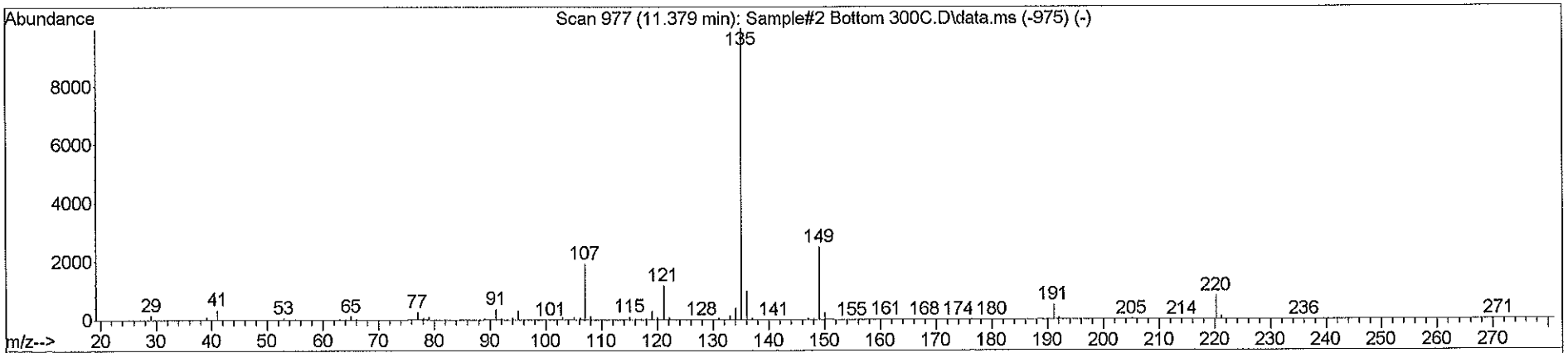
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 53
ID : NONYLPHENOL ISOMER

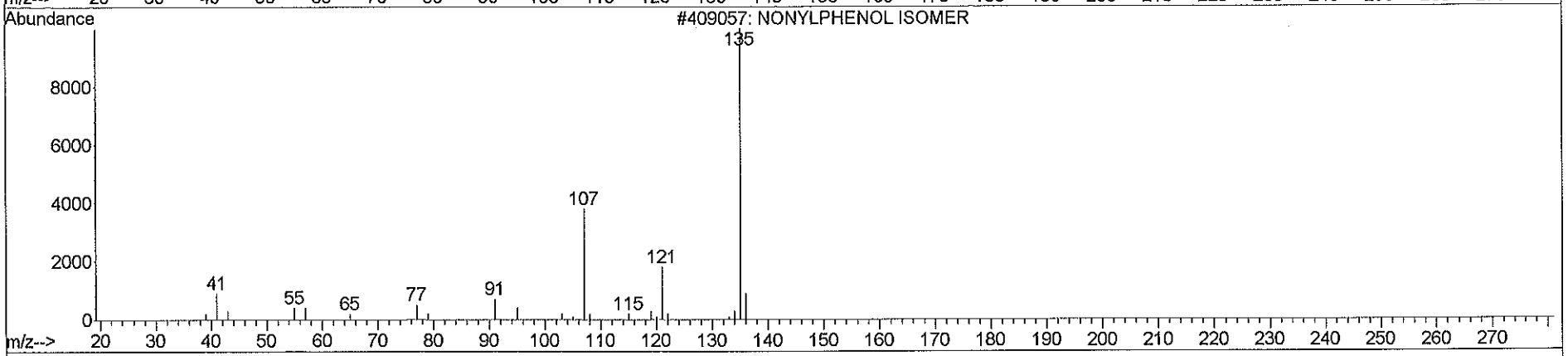


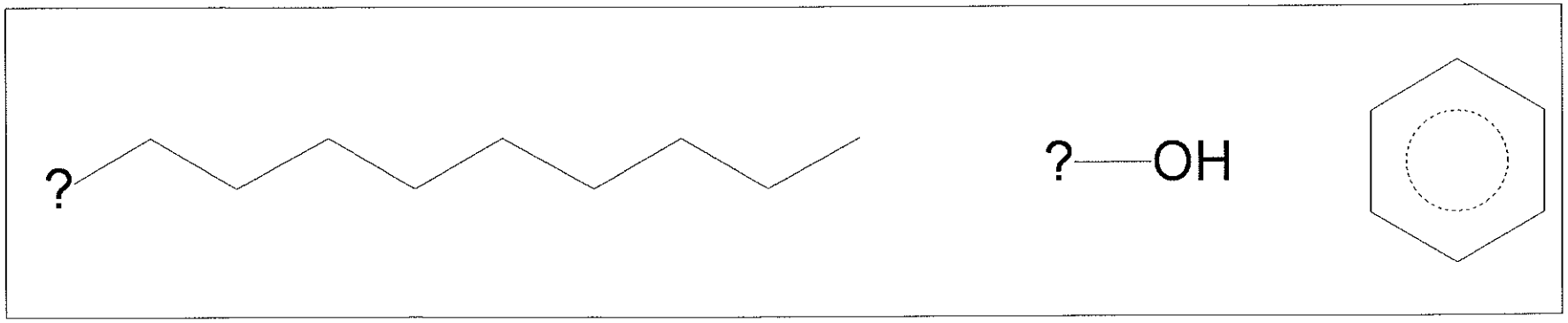




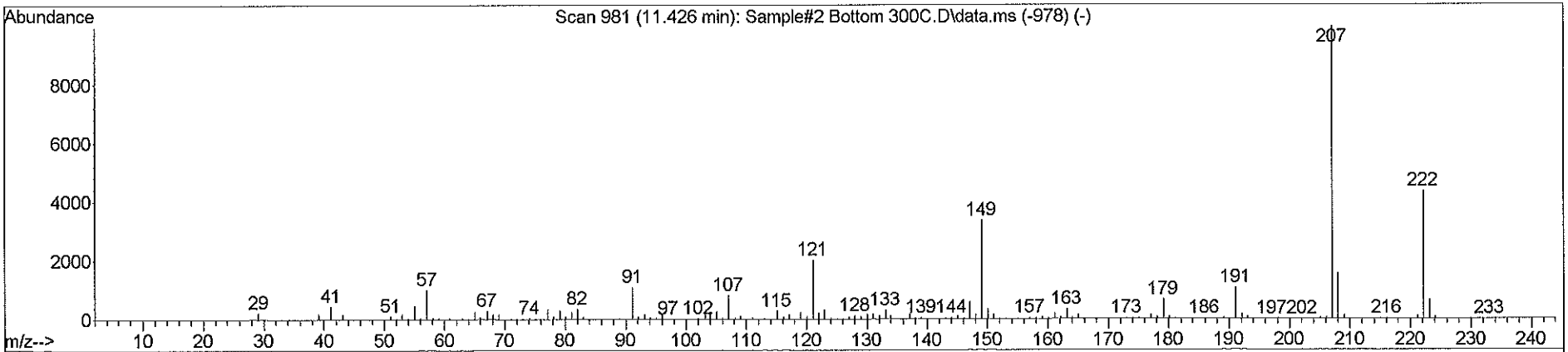
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 59
ID : NONYLPHENOL ISOMER

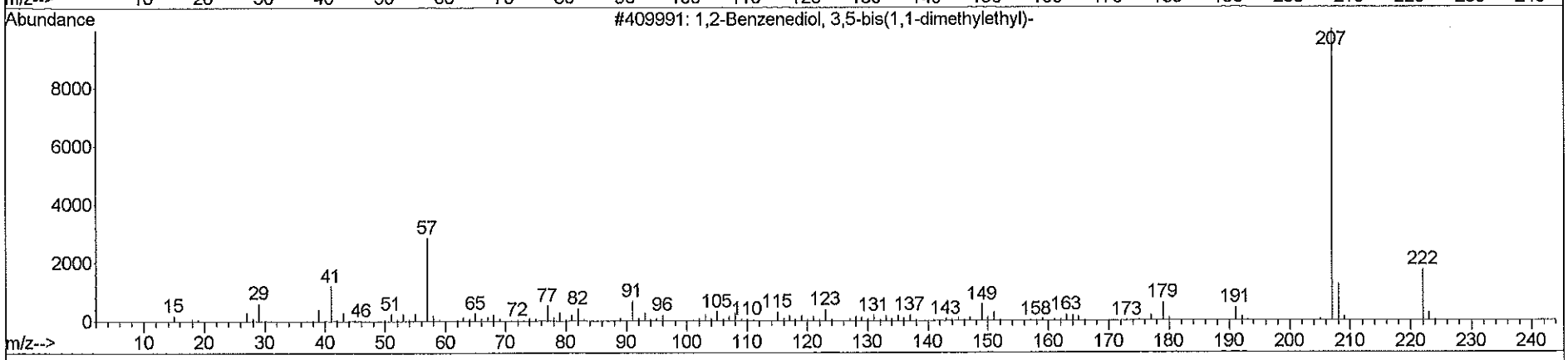


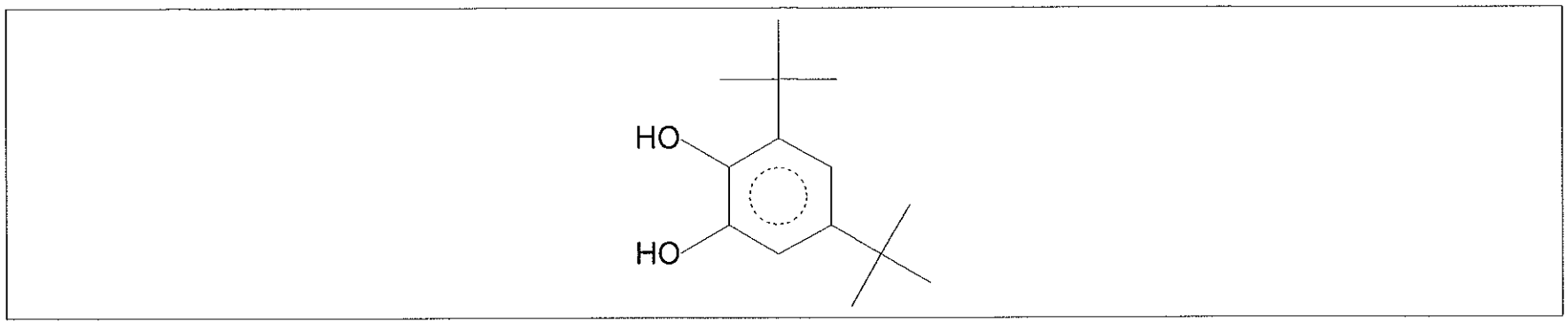




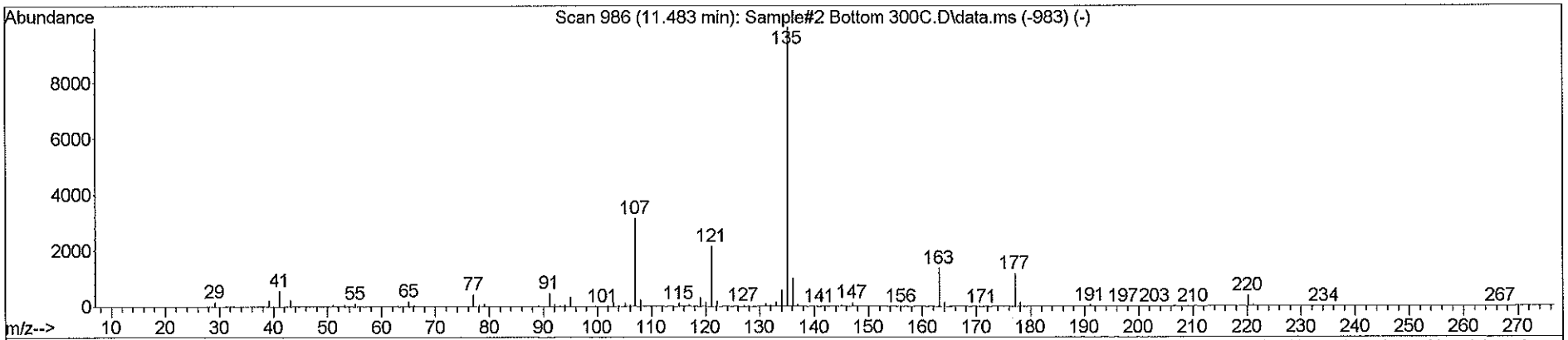
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 90
ID : 1,2-Benzenediol, 3,5-bis(1,1-dimethylethyl)-

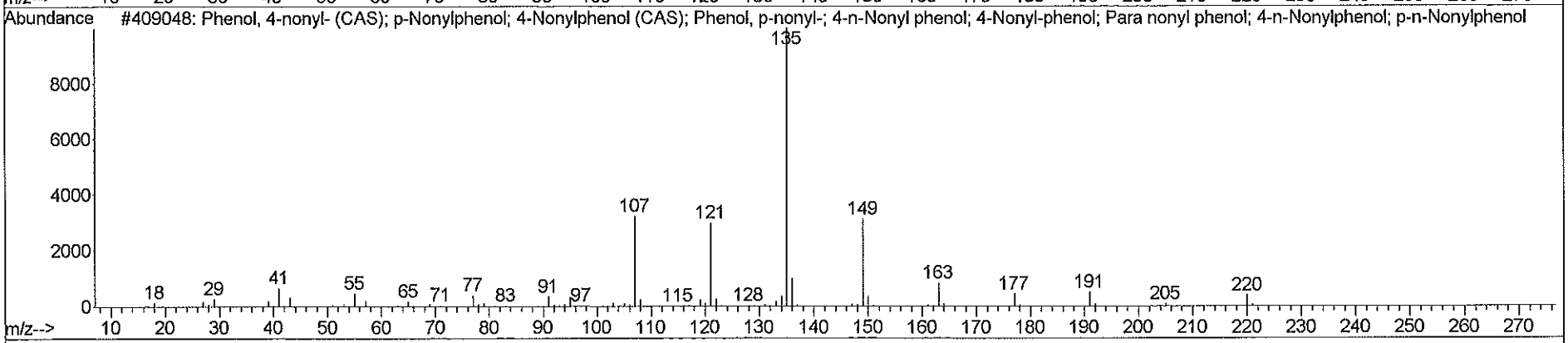


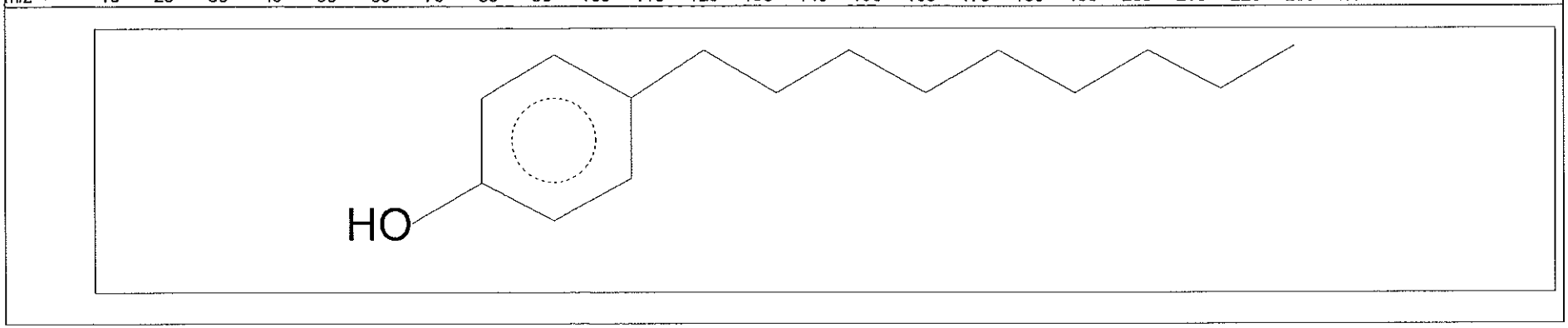




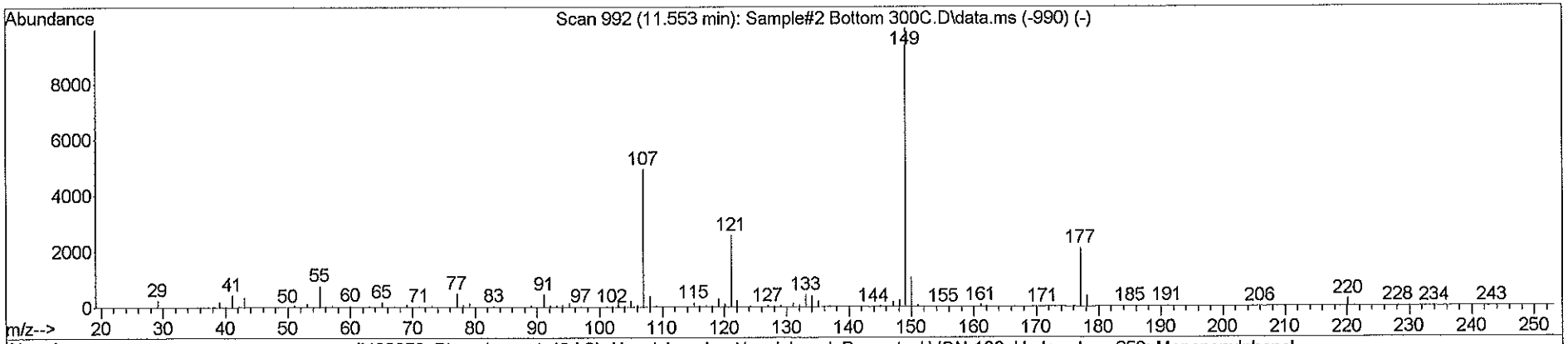
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 90
ID : Phenol, 4-nonyl- (CAS); p-Nonylphenol; 4-Nonylphenol (CAS); Phenol, p-nonyl-; 4-n-Nonyl phenol; 4-Nonyl-phenol; Para nonyl phenol; 4-n-Nonylphenol; p-n-Nonylphenol

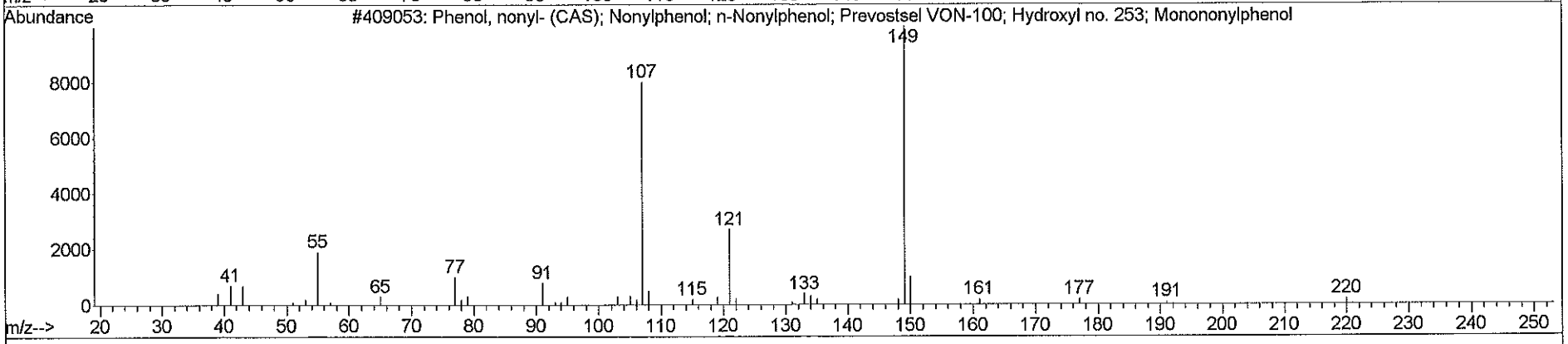


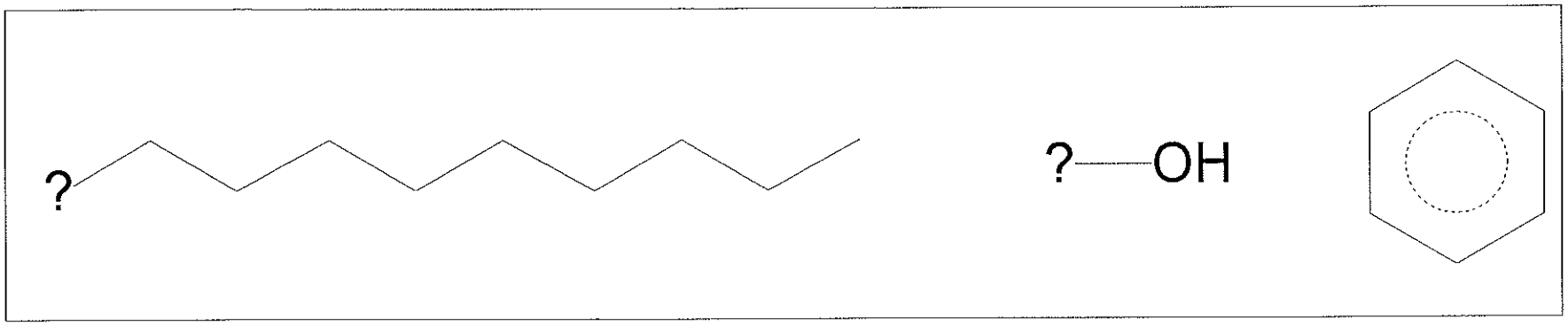




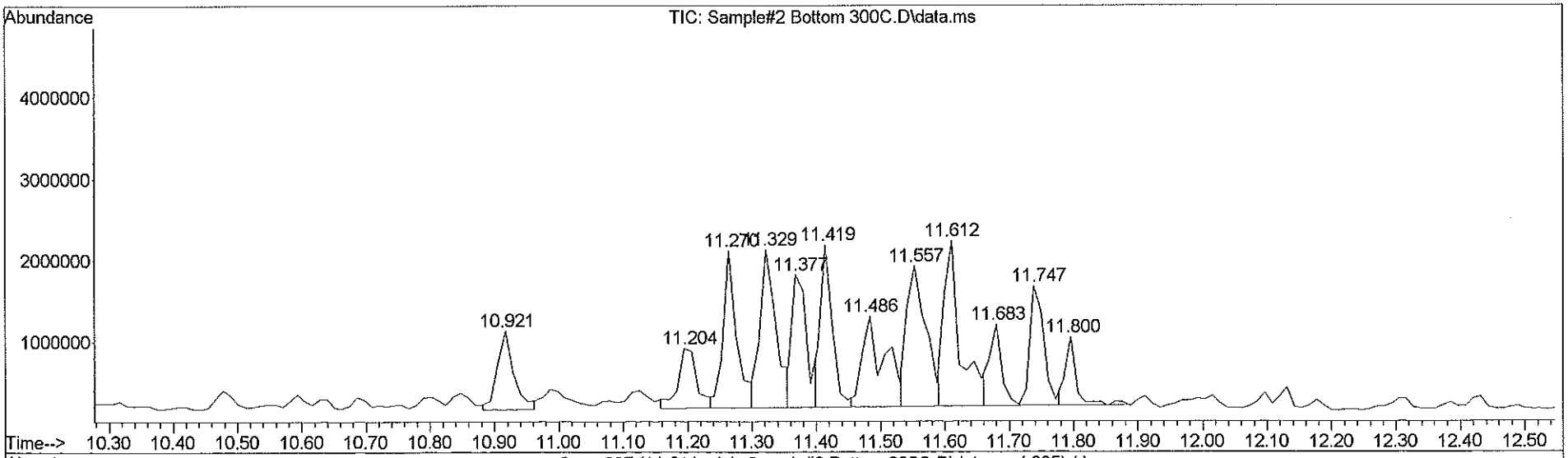
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 91
ID : Phenol, nonyl- (CAS); Nonylphenol; n-Nonylphenol; Prevostsel VON-100; Hydroxyl no. 253; Mononylphenol

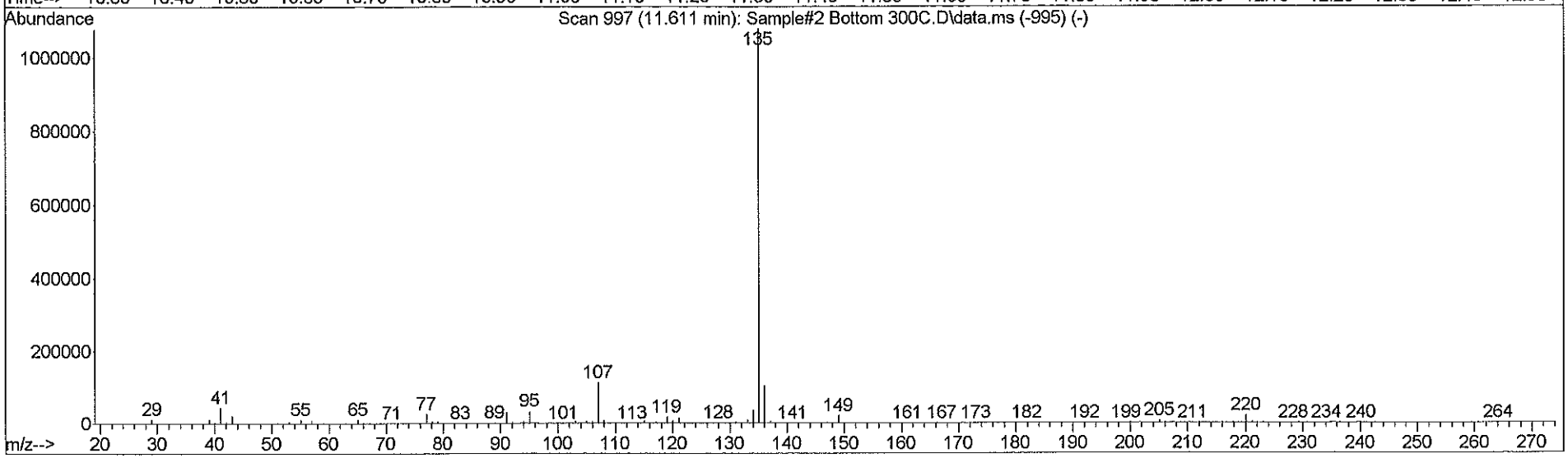




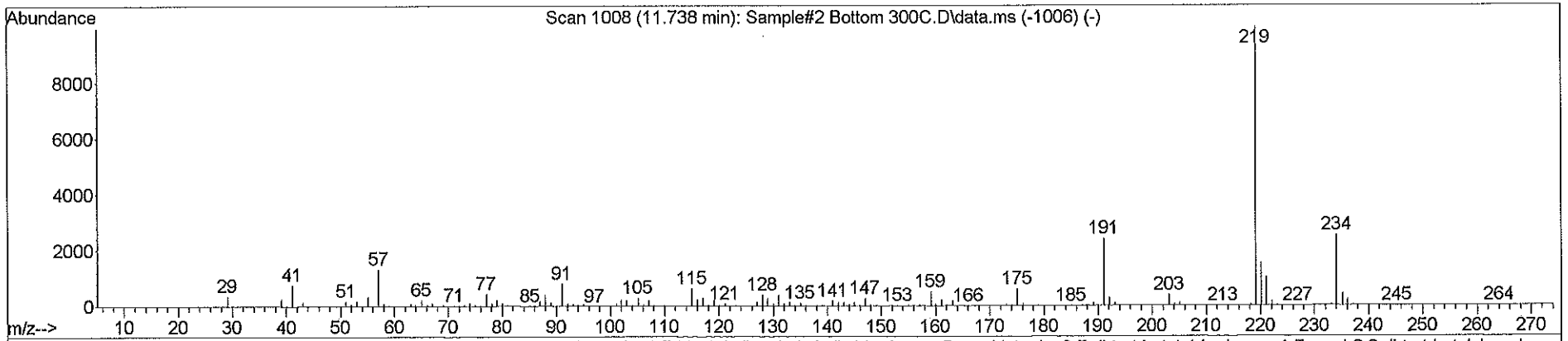


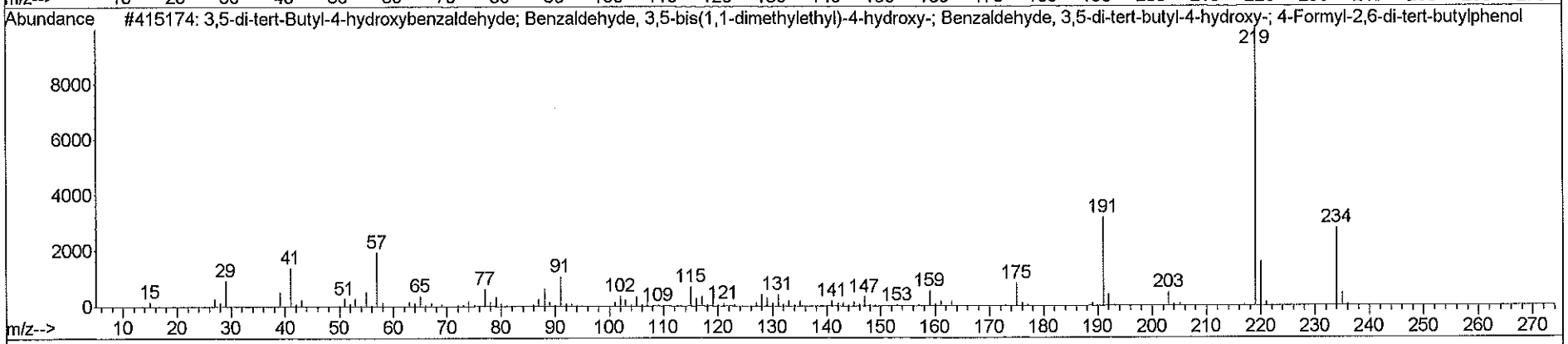
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

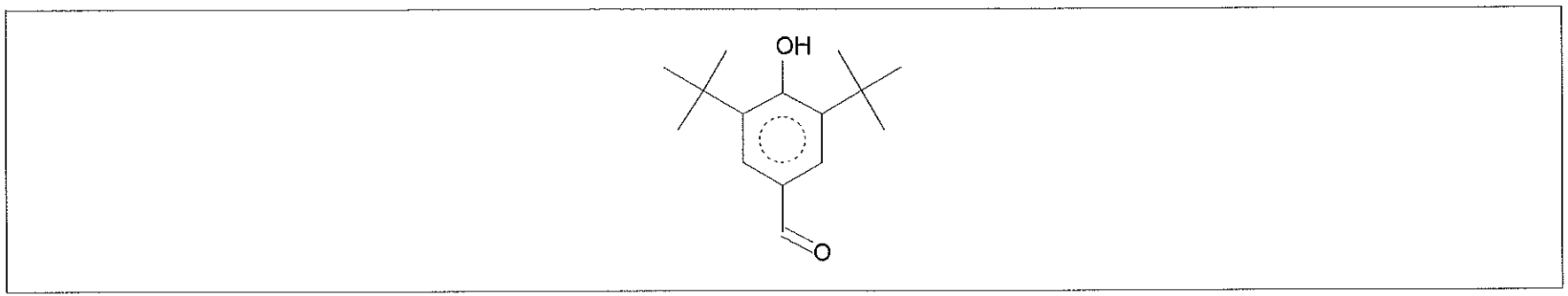




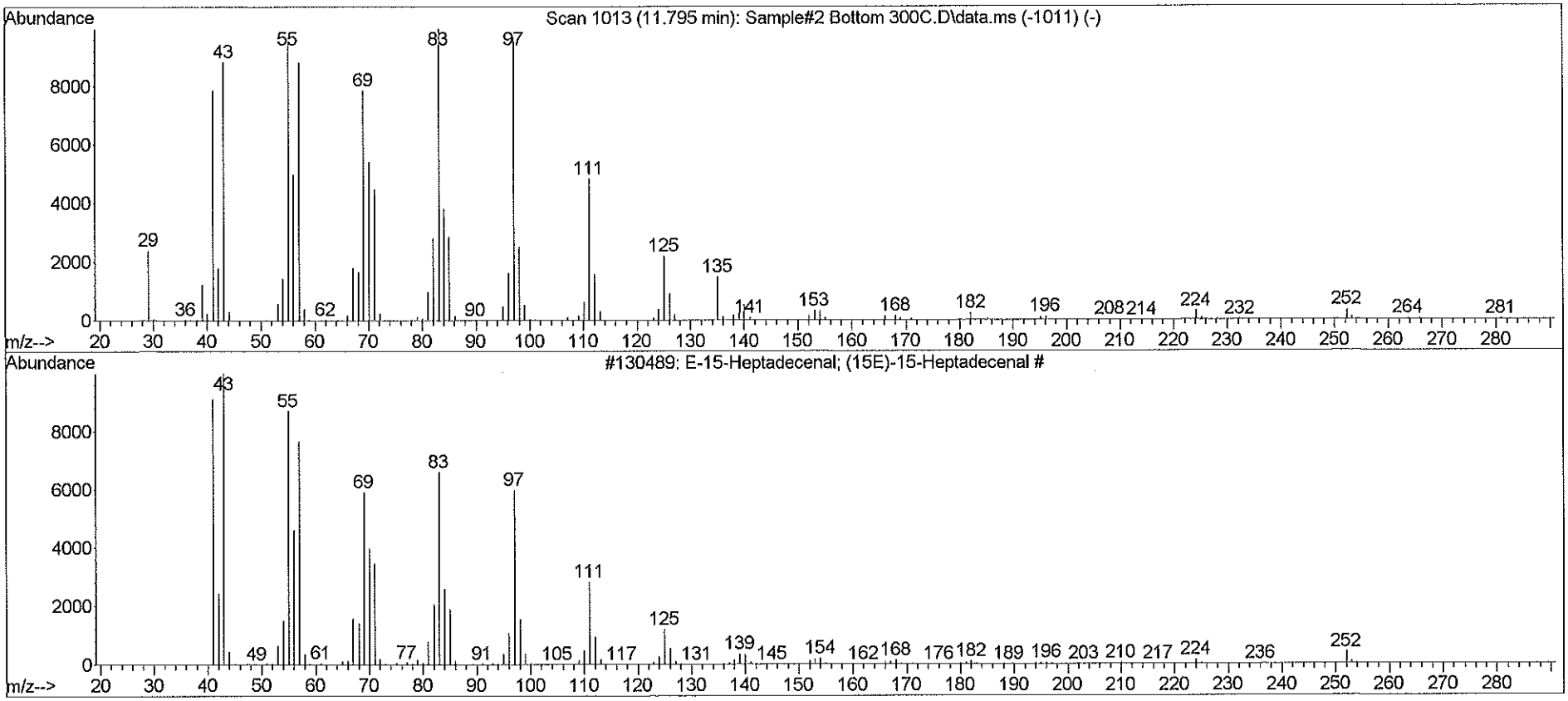
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : 3,5-di-tert-Butyl-4-hydroxybenzaldehyde; Benzaldehyde, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-; Benzaldehyde, 3,5-di-tert-butyl-4-hydroxy-; 4-Formyl-2,6-di-tert-butylphenol; Benzoic aldehyde, 3,5-di-t-butyl-4-hydroxy-



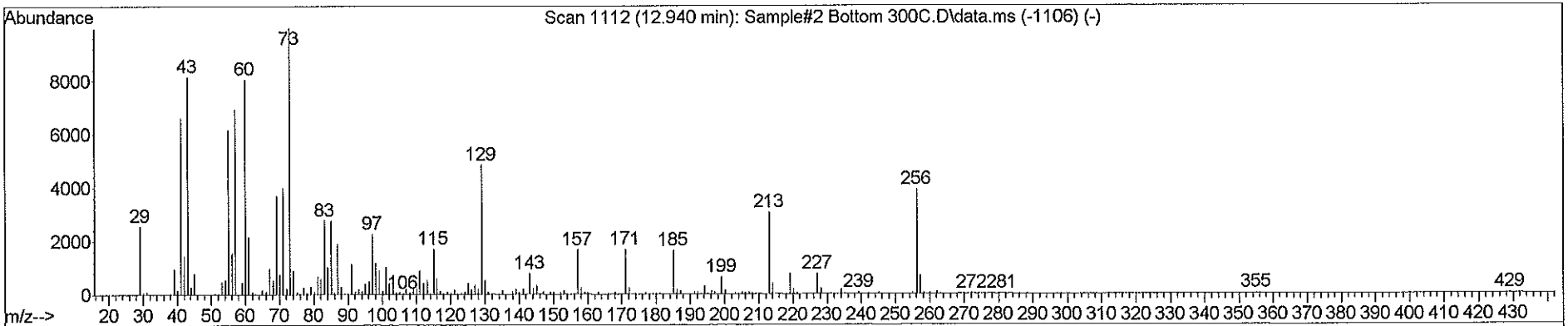


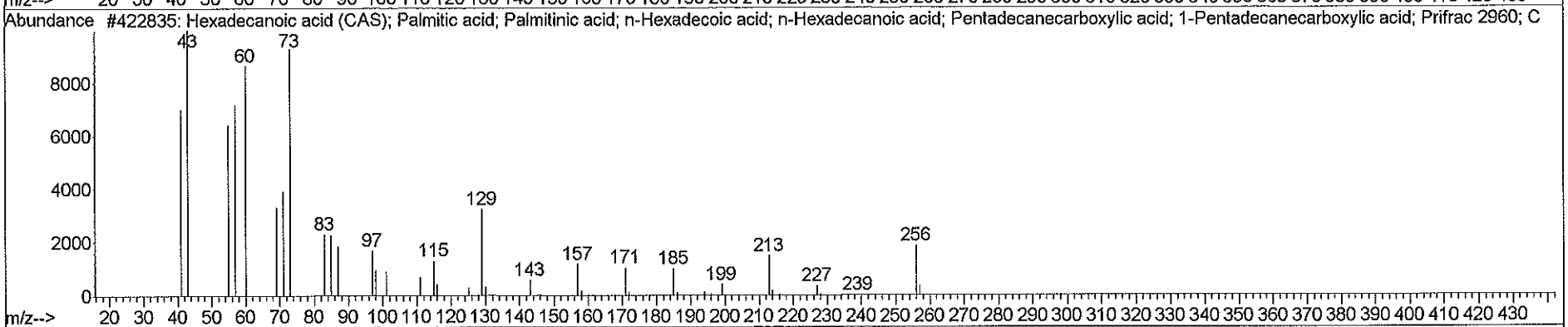


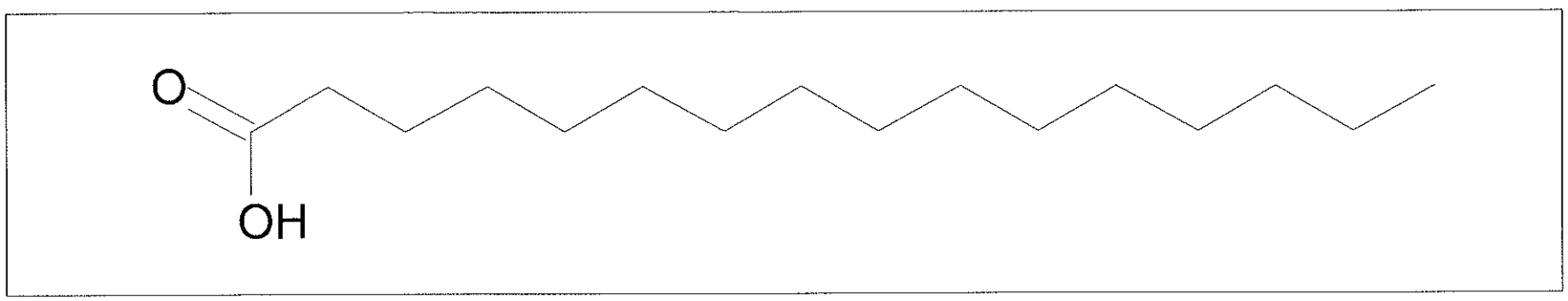
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : E-15-Heptadecenal; (15E)-15-Heptadecenal #



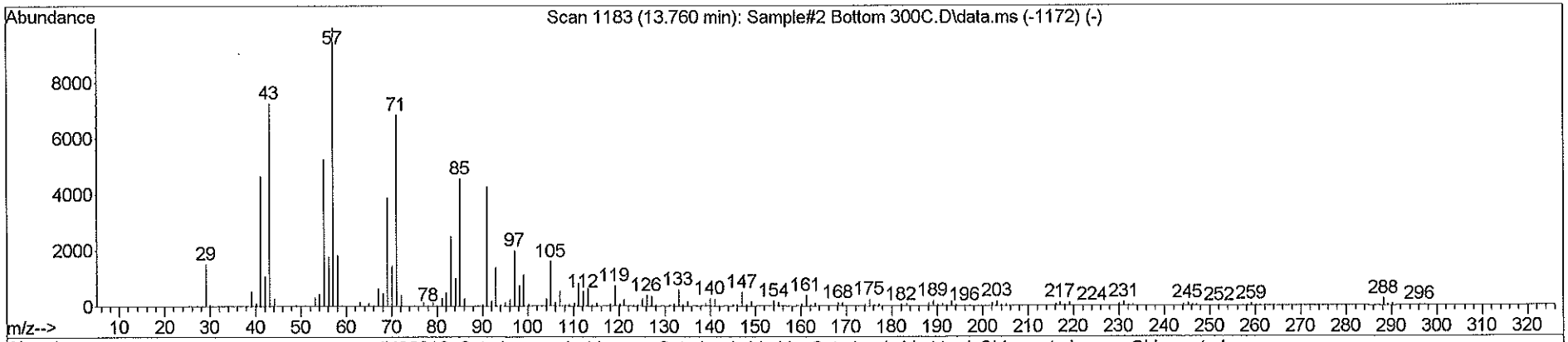
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : Hexadecanoic acid (CAS); Palmitic acid; Palmitinic acid; n-Hexadecoic acid; n-Hexadecanoic acid; Pentadecanecarboxylic acid; 1-Pentadecanecarboxylic acid; P rifrac 2960; Coconut oil fatty acids; Cetylic acid; Emersol 140; Emersol 143; Hexadecylic acid; Hyd

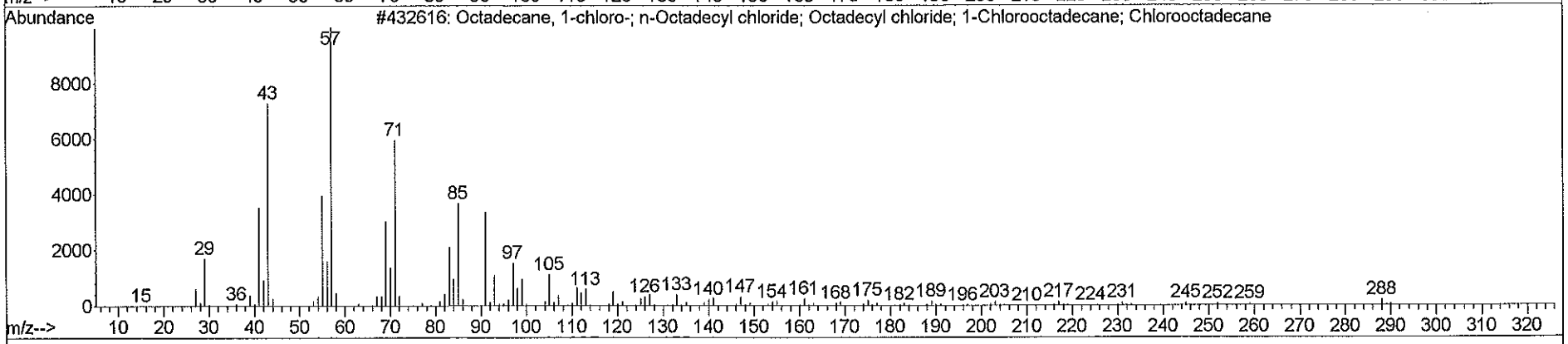


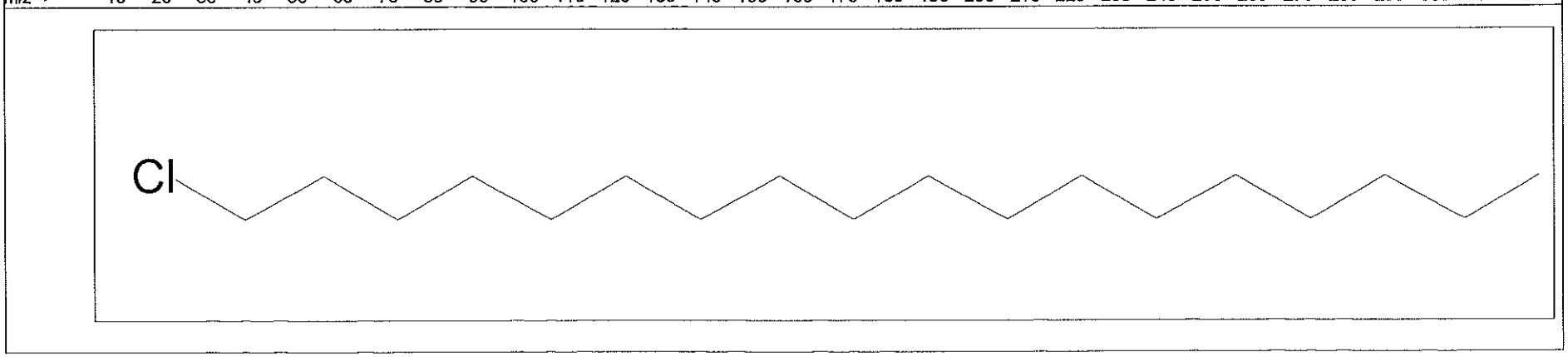




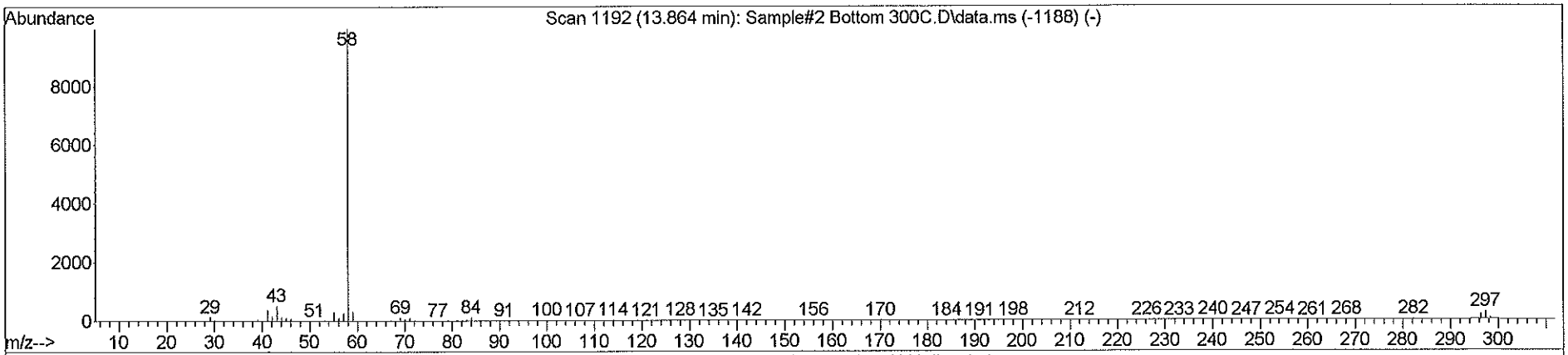
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : Octadecane, 1-chloro-; n-Octadecyl chloride; Octadecyl chloride; 1-Chlorooctadecane; Chlorooctadecane

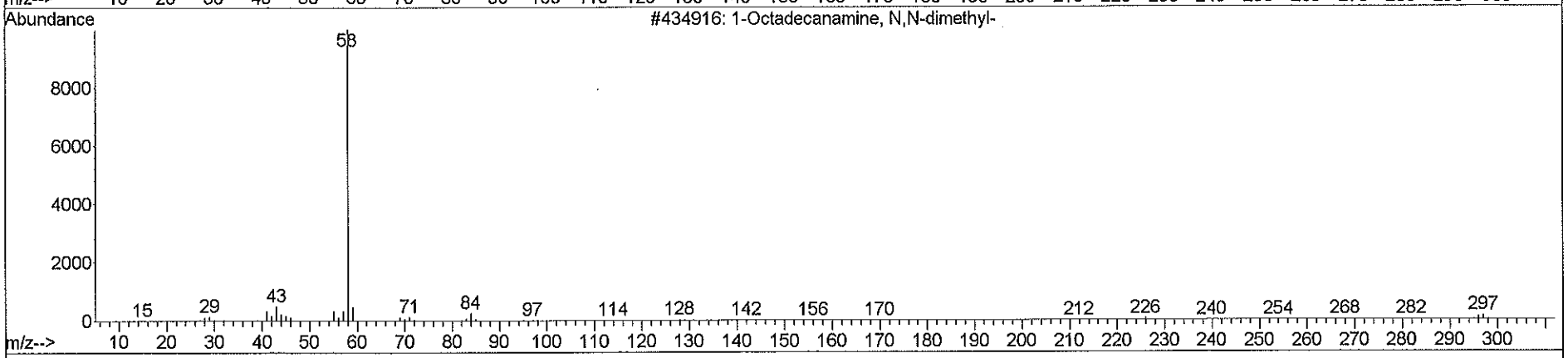


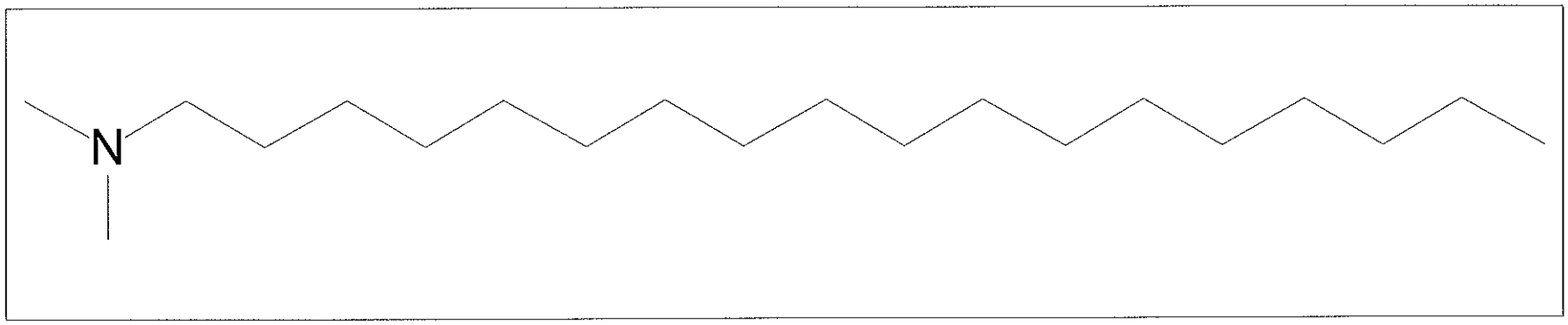




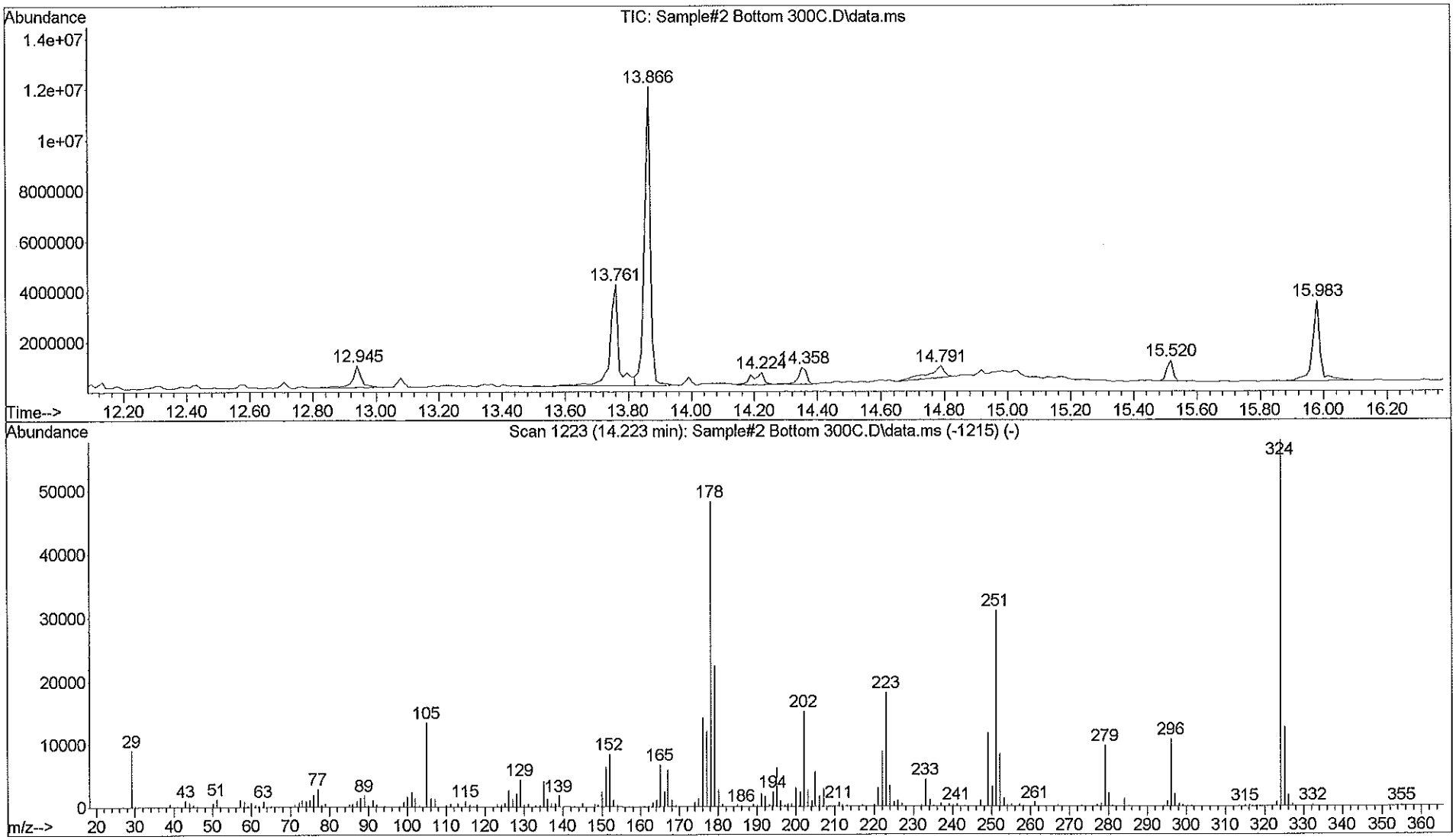
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 87
ID : 1-Octadecanamine, N,N-dimethyl-



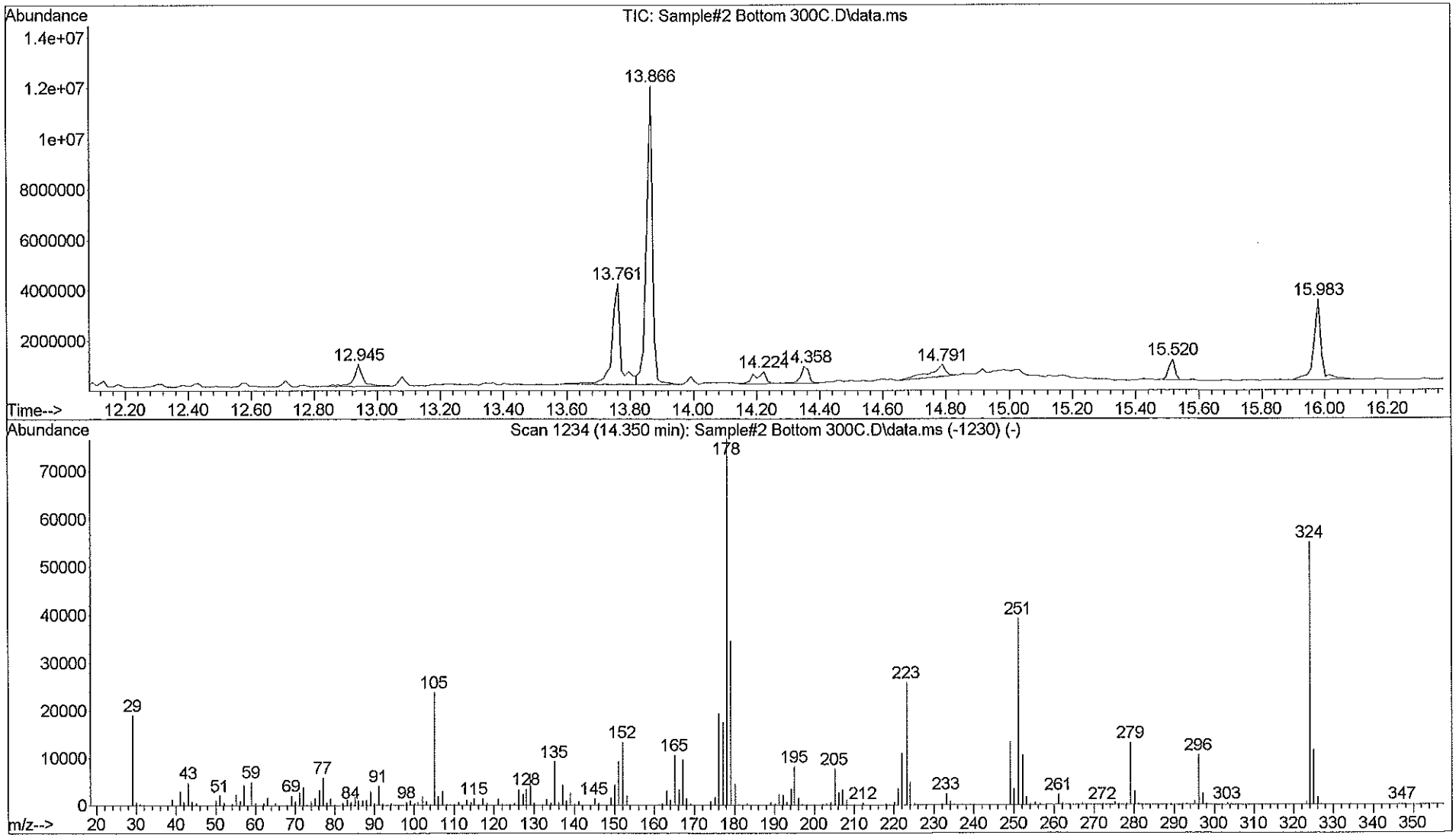




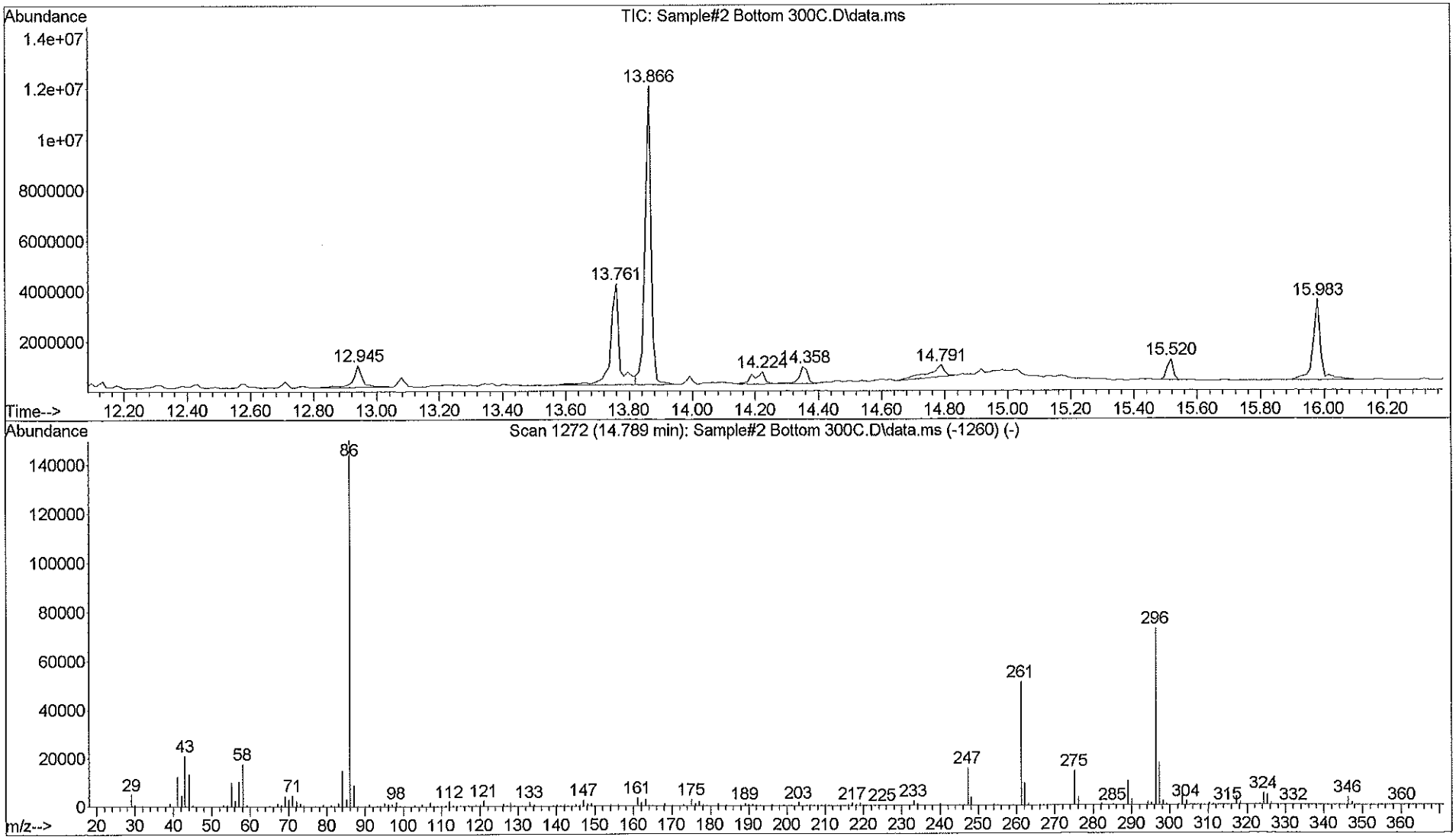
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



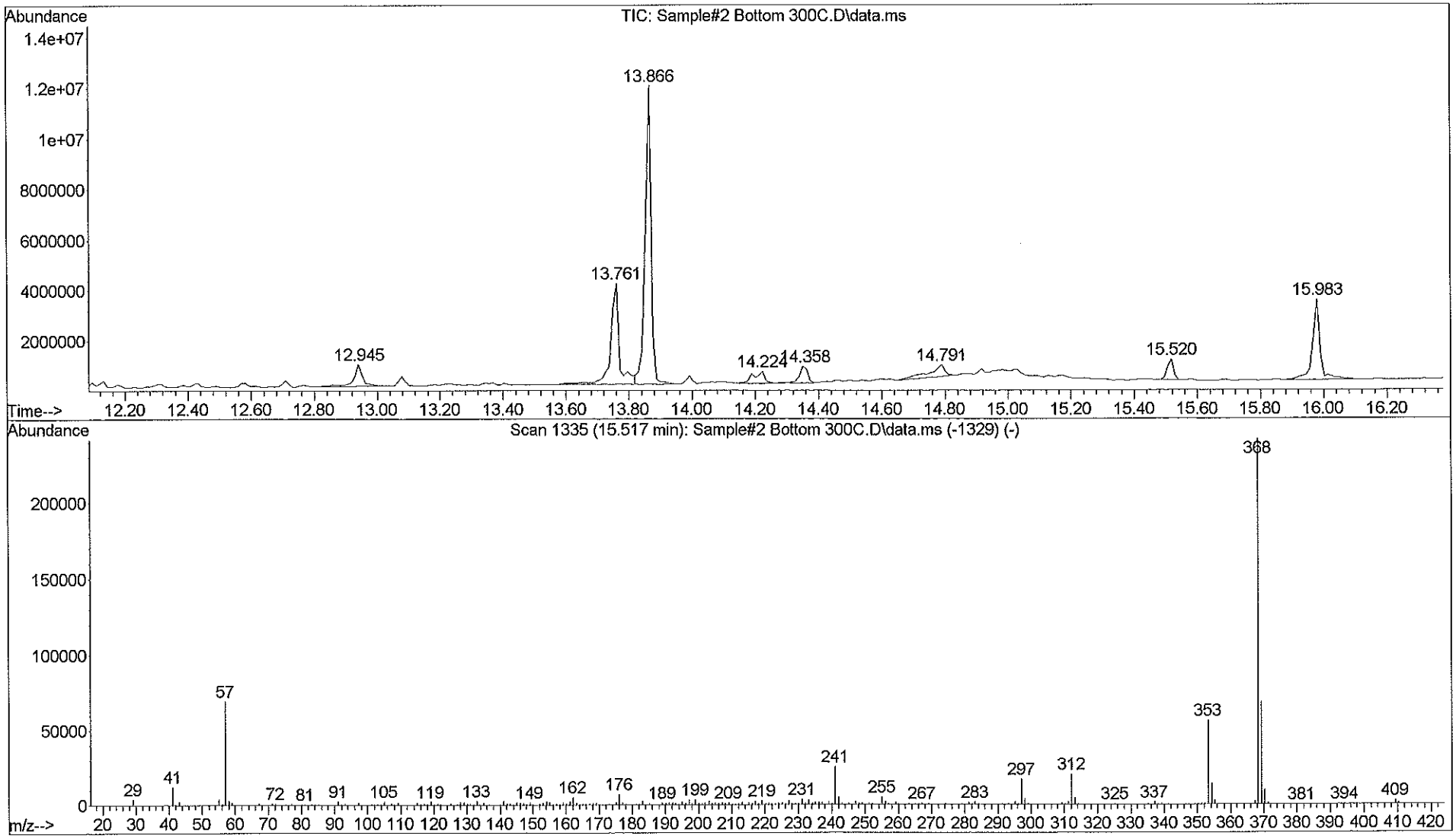
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



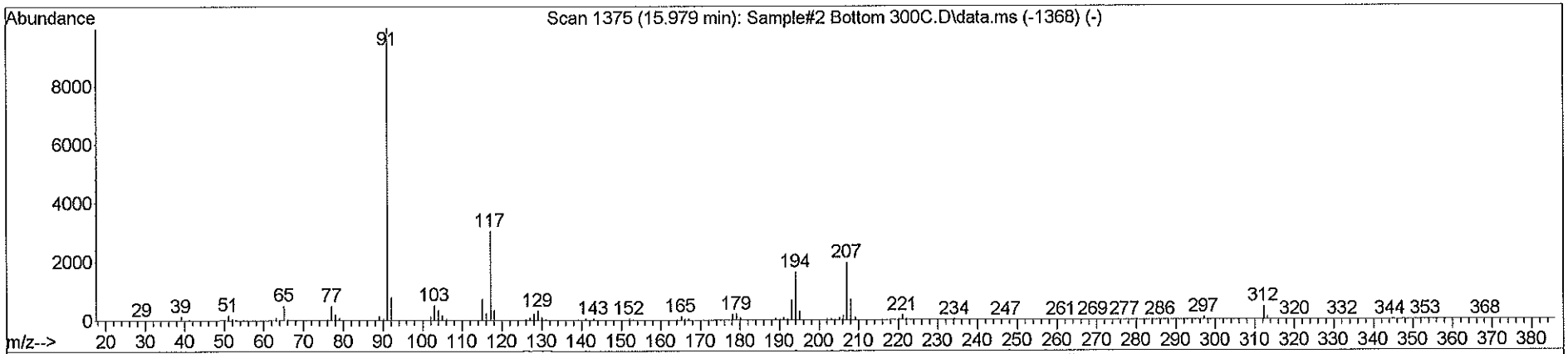
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

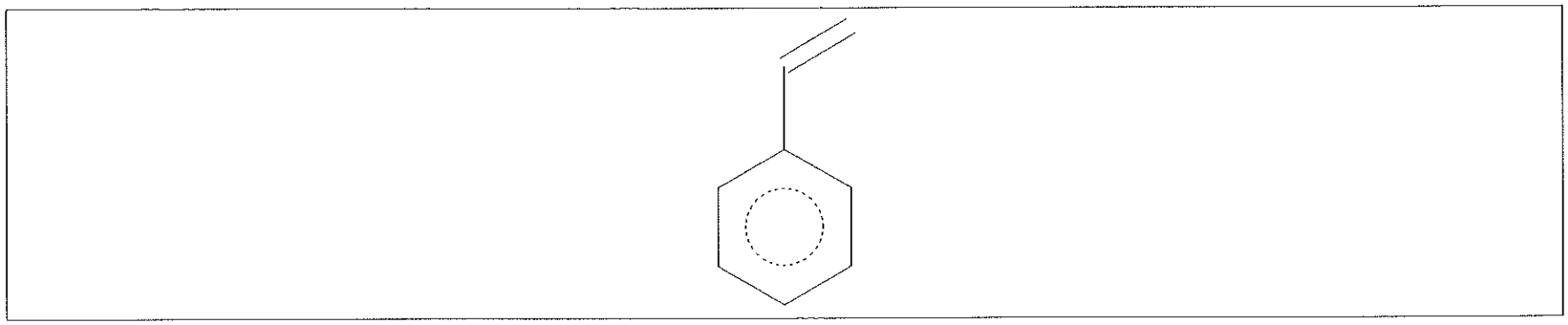


File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

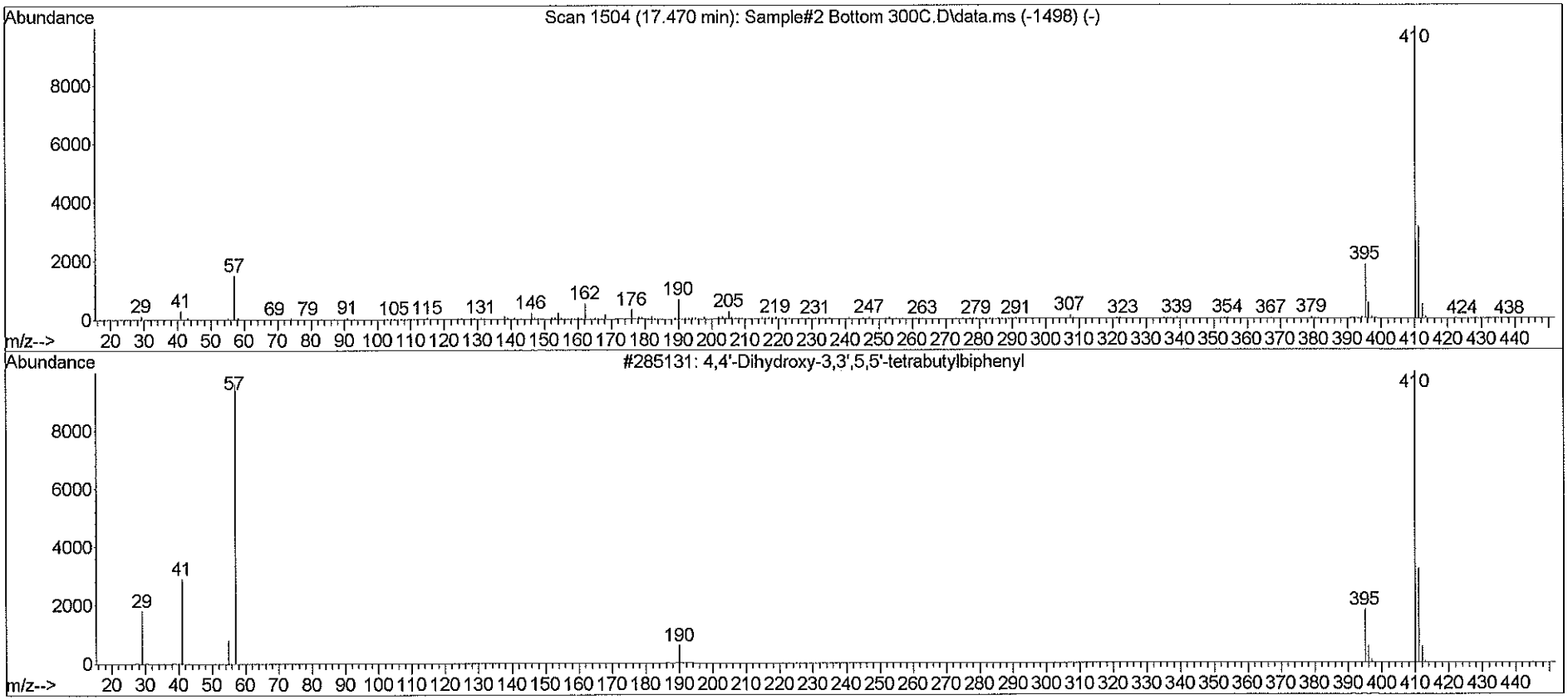


Library Searched : C:\Database\Wiley7Nist05.L
Quality : 10
ID : Benzene, ethenyl-, dimer (CAS); Styrene dimer; Styrene, dimer

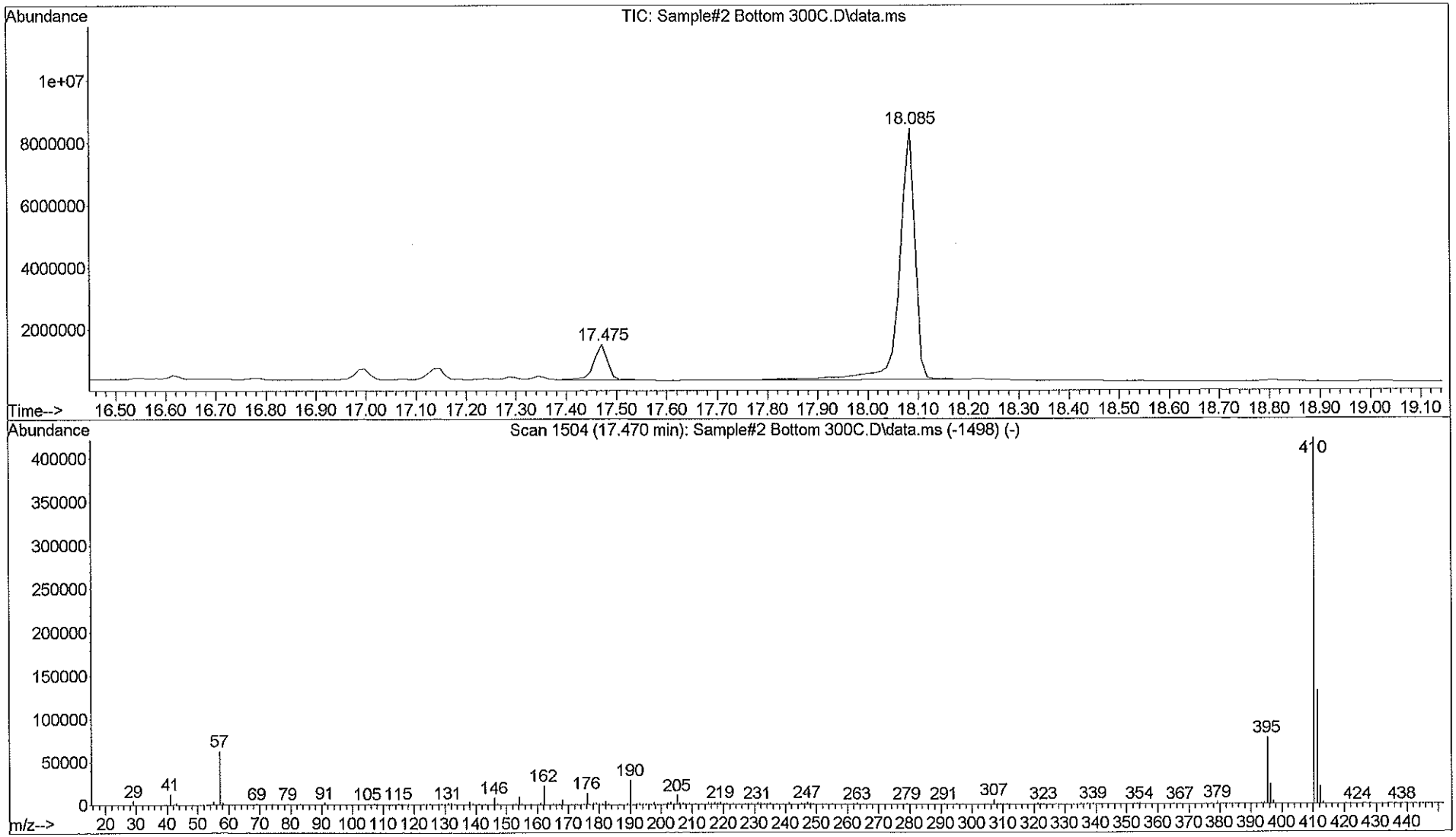




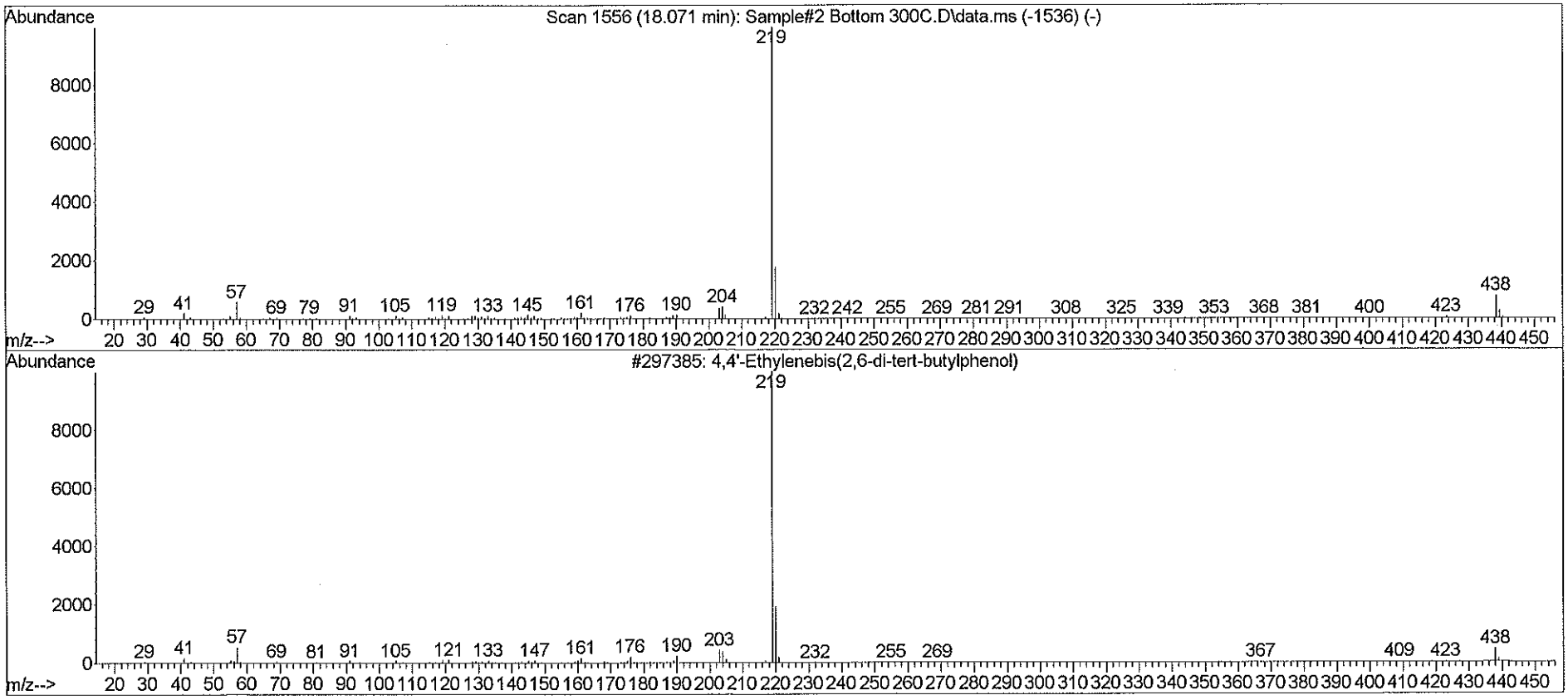
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 87
ID : 4,4'-Dihydroxy-3,3',5,5'-tetrabutylbiphenyl



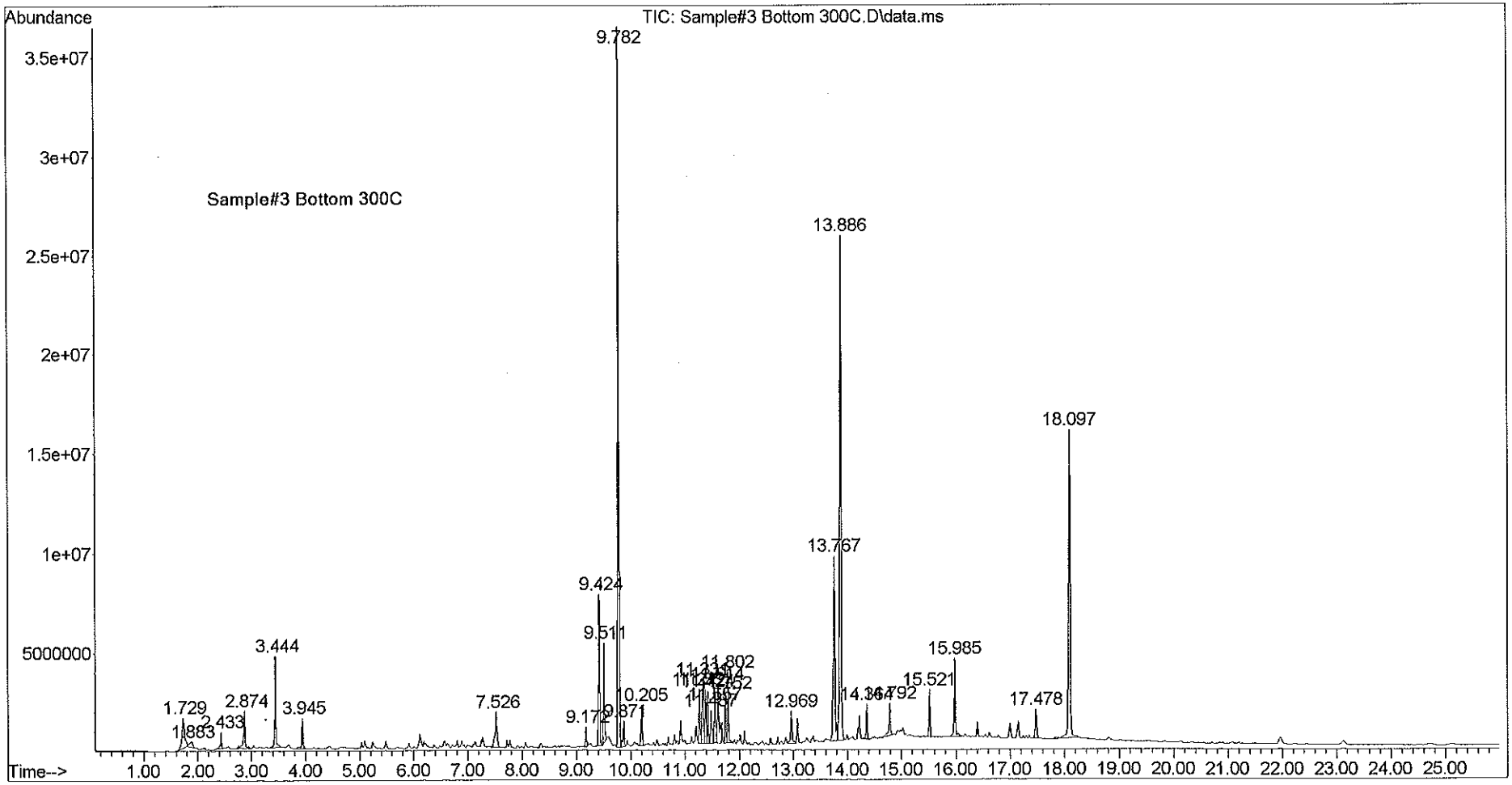
File :D:\DATA\ABTECH\Job 4987\Sample#2 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 9:34 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



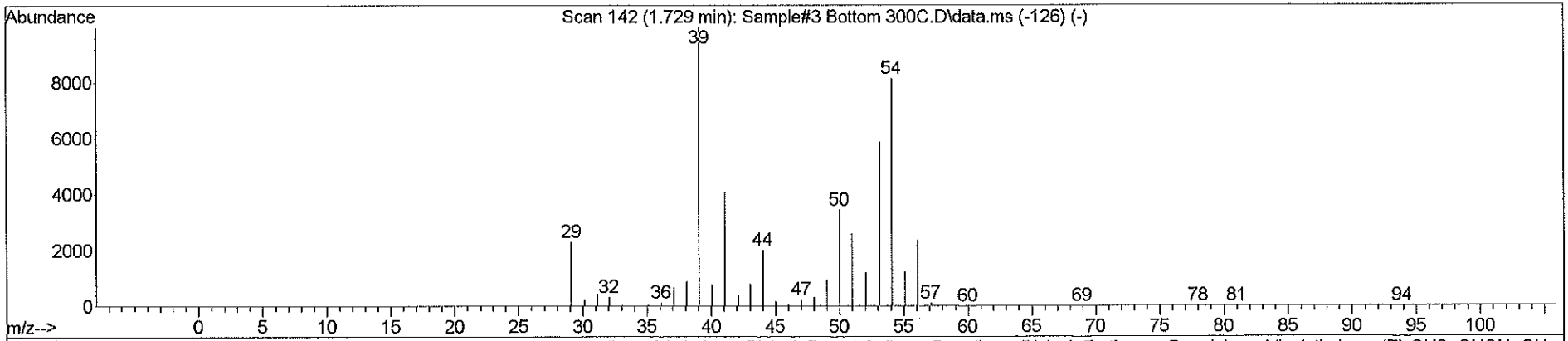
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 90
ID : 4,4'-Ethylenebis(2,6-di-tert-butylphenol)

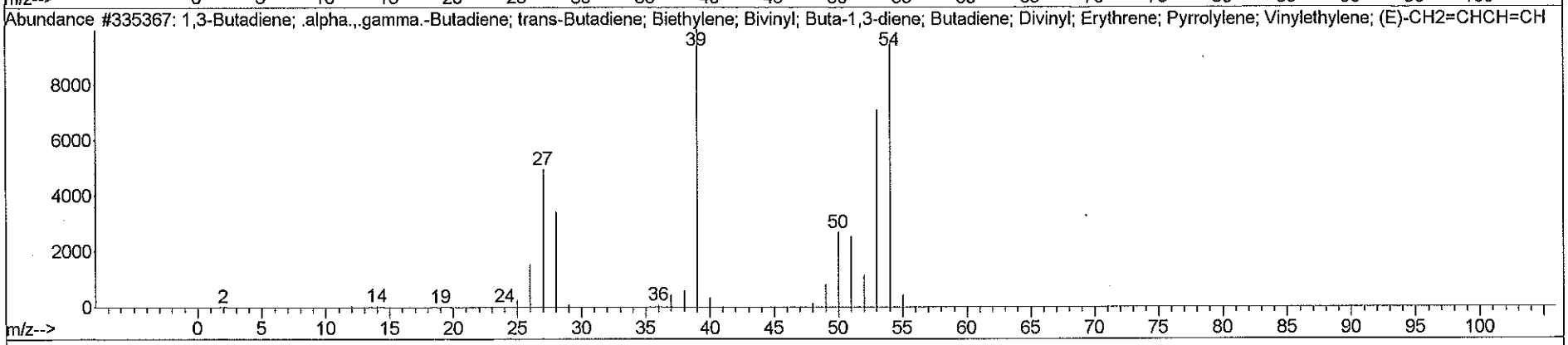


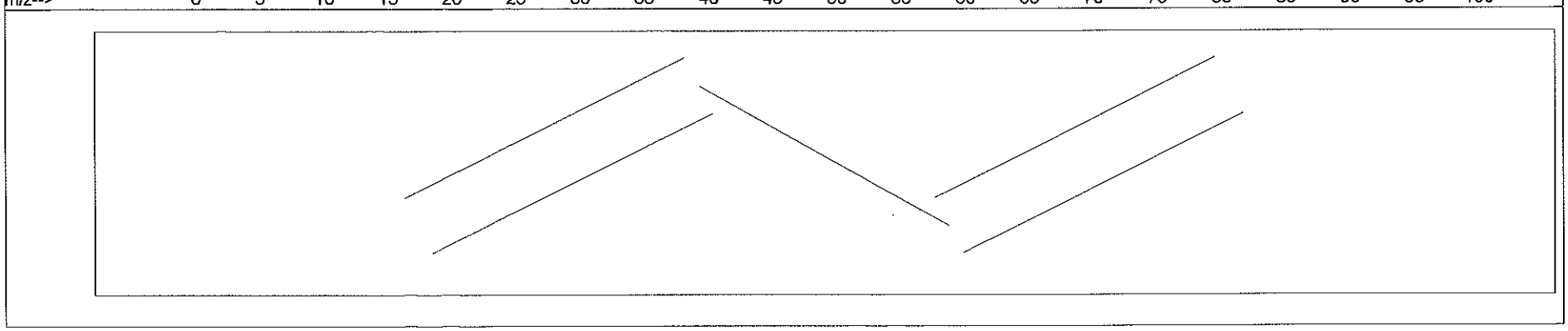
File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



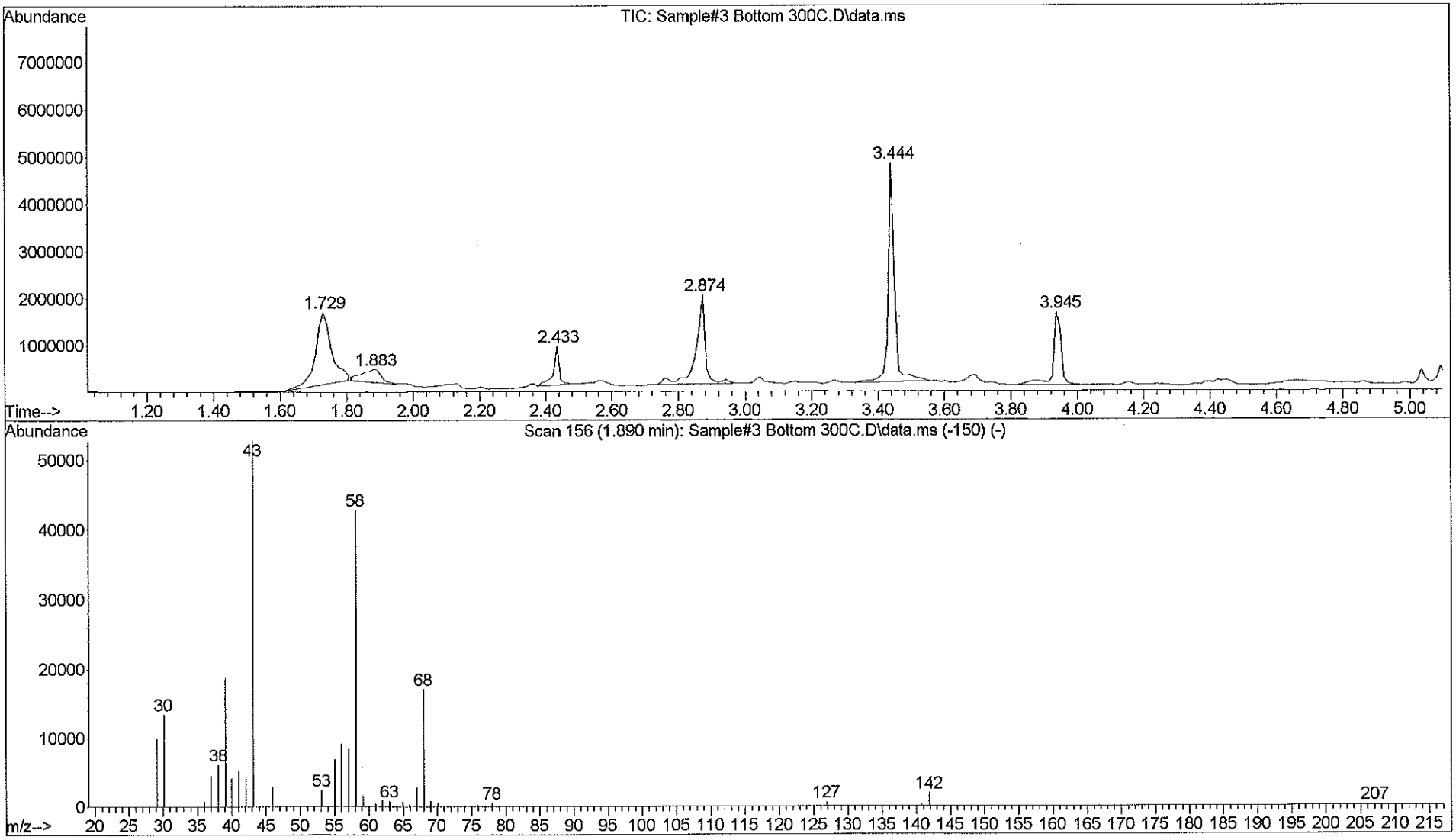
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 86
ID : 1,3-Butadiene; .alpha.,.gamma.-Butadiene; trans-Butadiene; Biethylene; Bivinyl ; Buta-1,3-diene; Butadiene; Divinyl; Erythrene; Pyrrolylene; Vinylethylene; (E)-CH2=CHCH=CH2; Butadieen; Buta-1,3-dieen; Butadien; Buta-1,3-dien; NCI-C5060



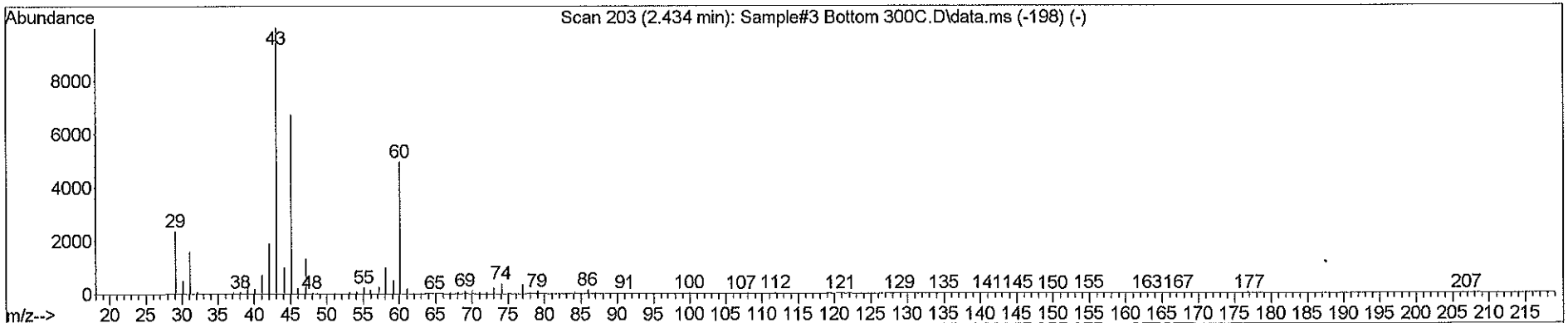


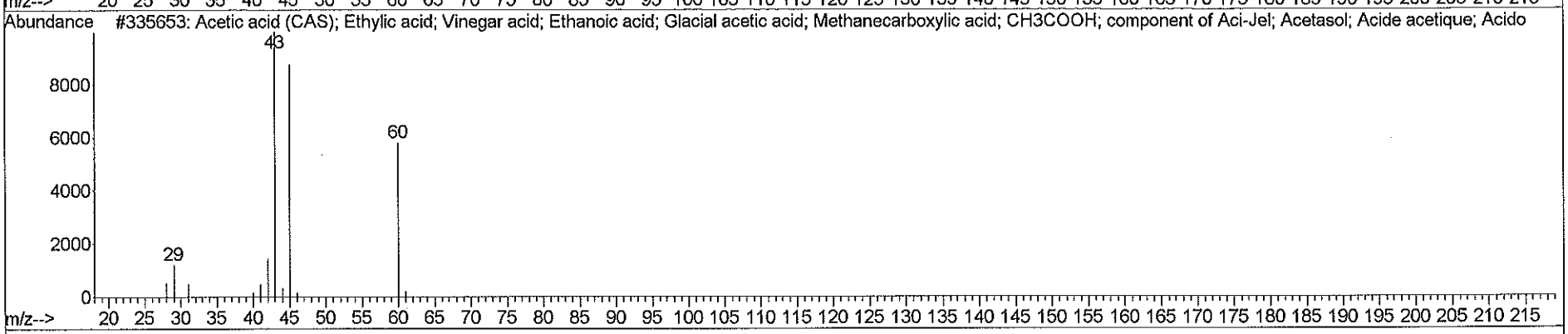


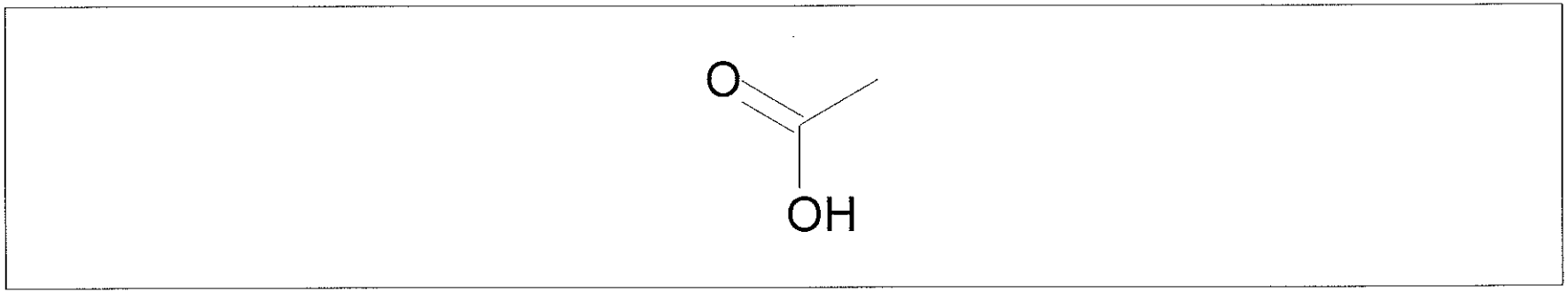
File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



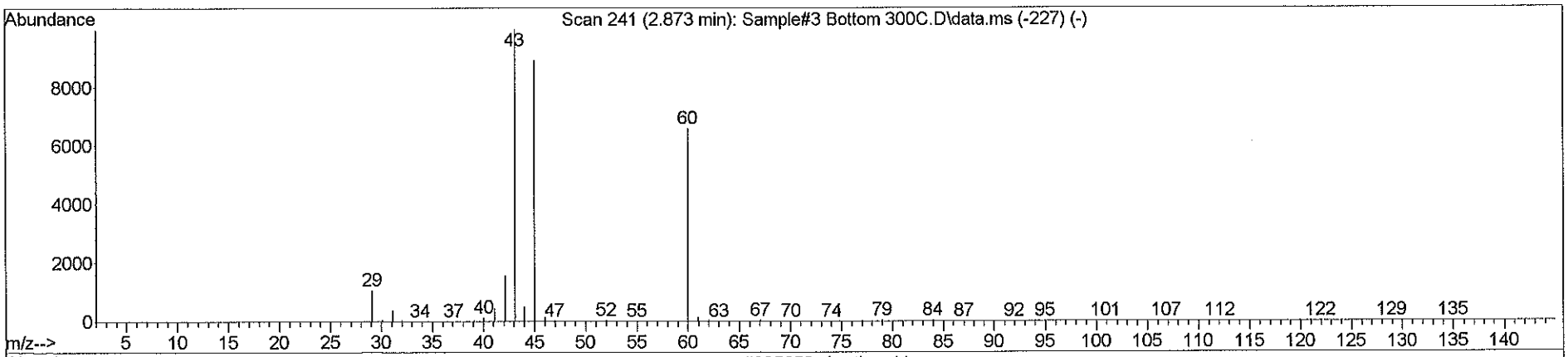
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 72
ID : Acetic acid (CAS); Ethylic acid; Vinegar acid; Ethanoic acid; Glacial acetic acid; Methanecarboxylic acid; CH3COOH; component of Aci-Jel; Acetasol; Acide acetique; Acido acetico; Azijnzuur; Essigsaeure; Octowy kwas; Acetic acid, glacial; Kyselina octova;

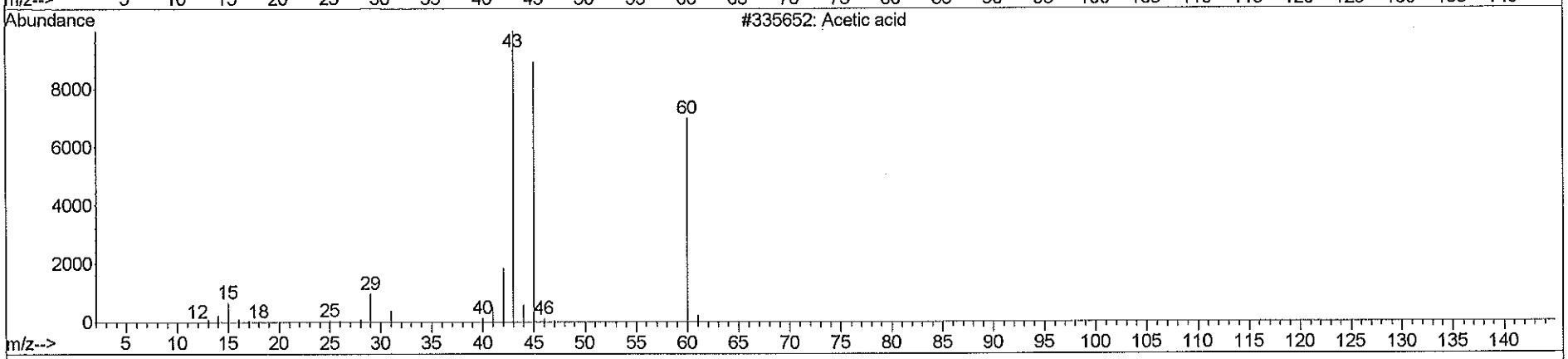


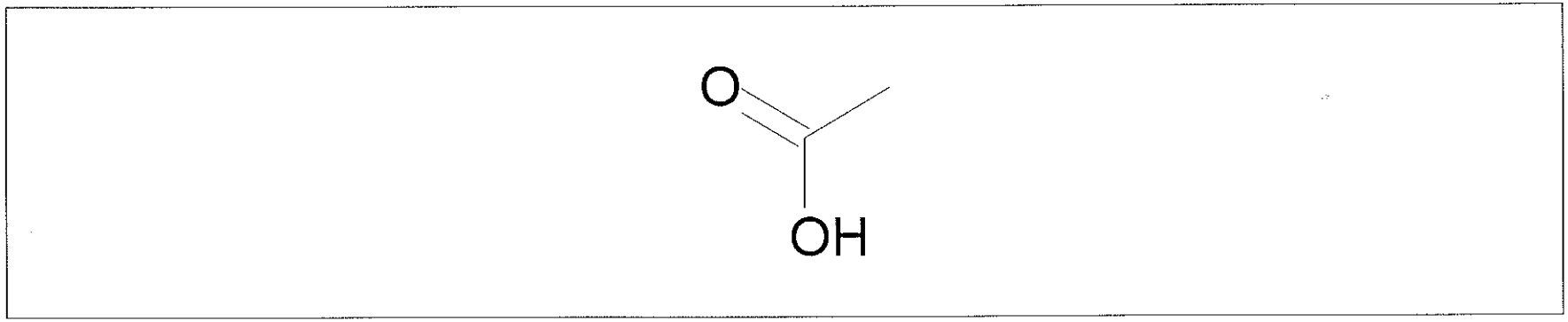




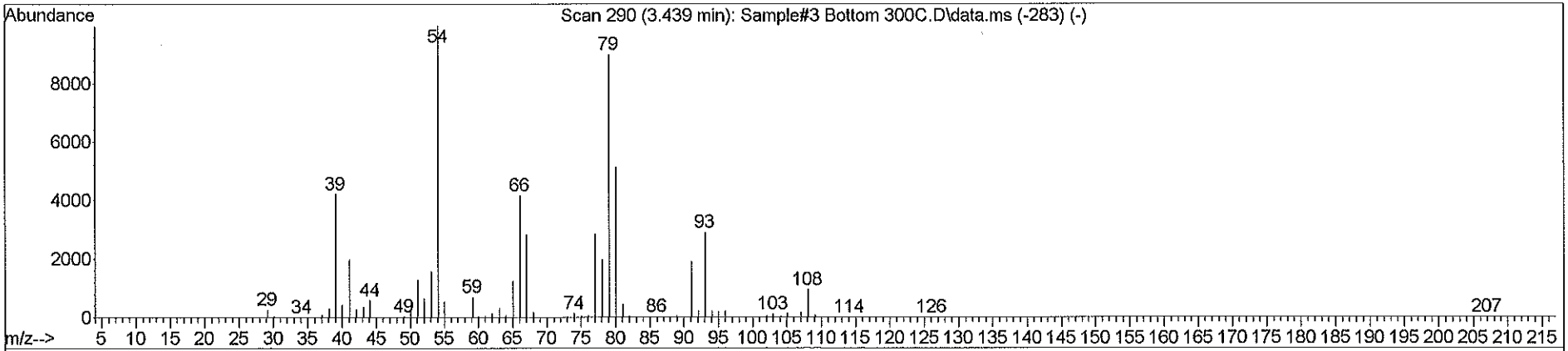
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 91
ID : Acetic acid

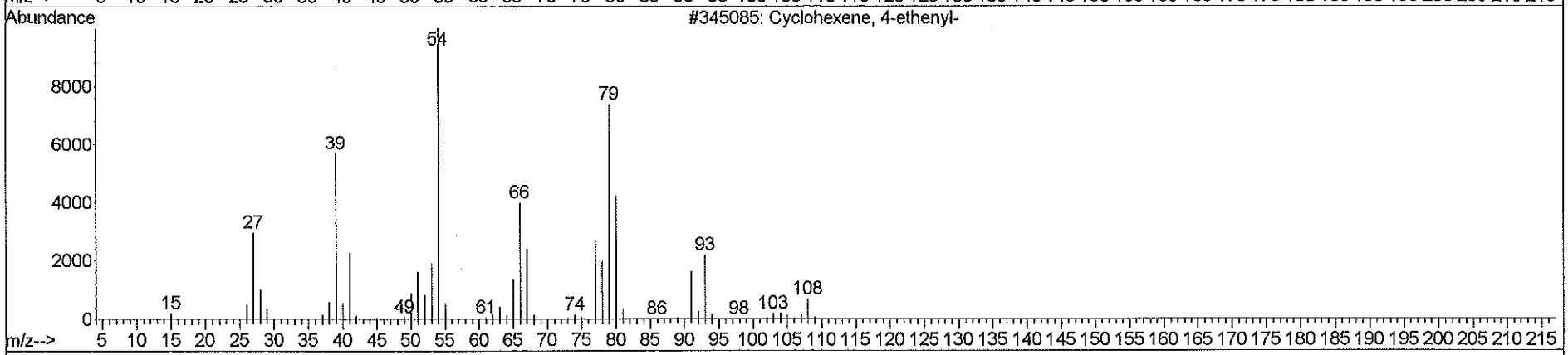


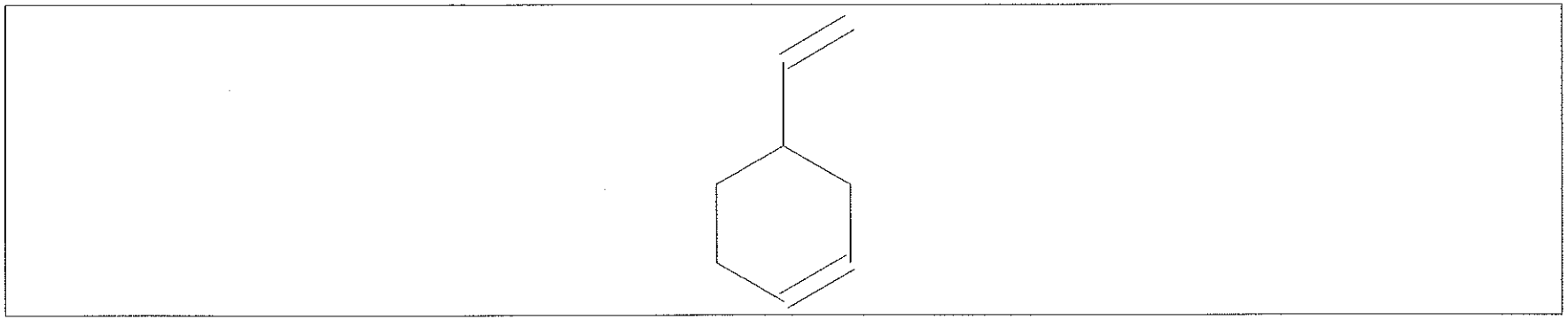




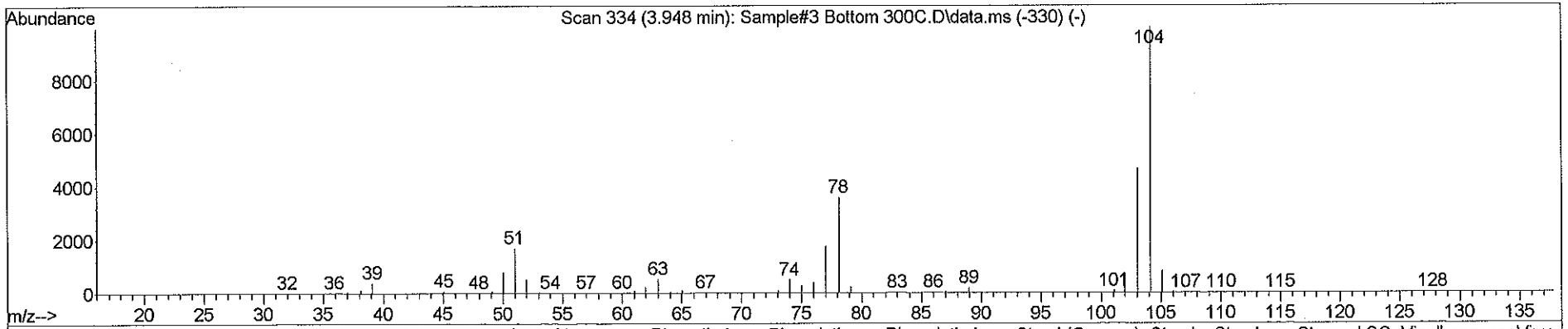
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 97
ID : Cyclohexene, 4-ethenyl-

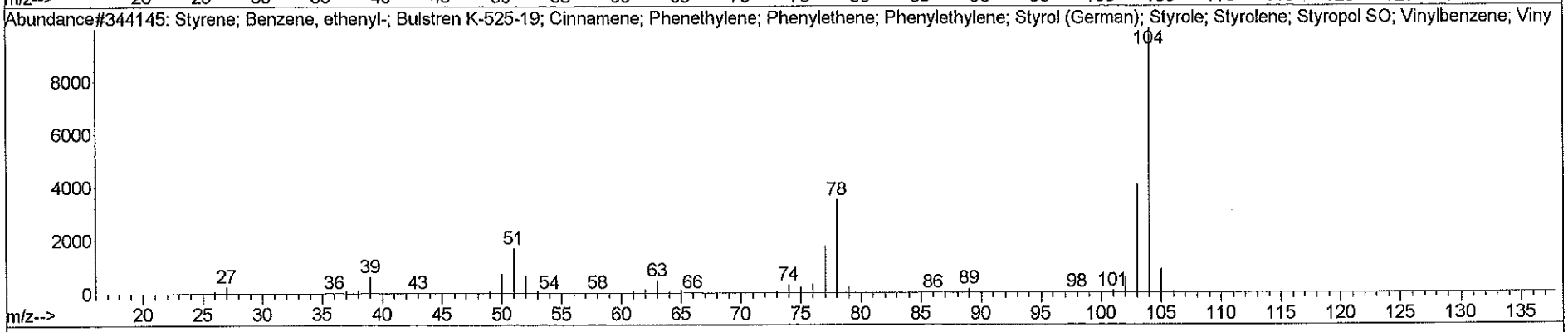


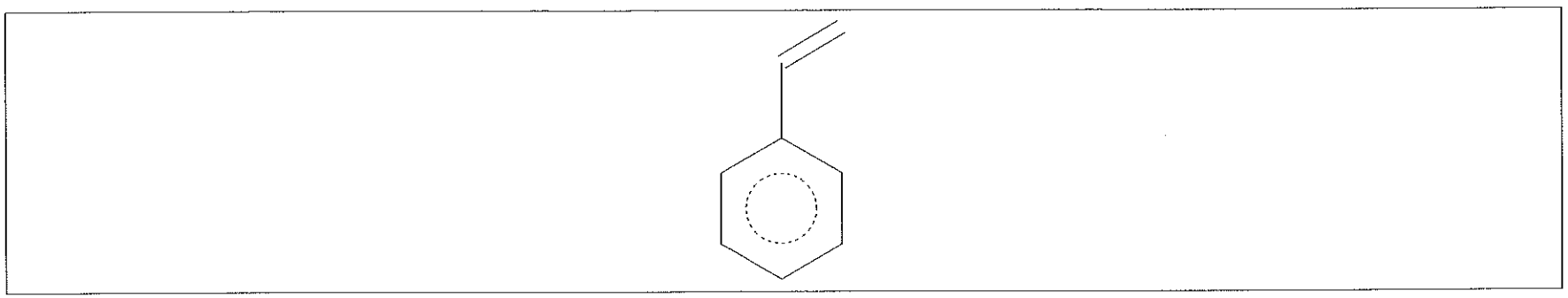




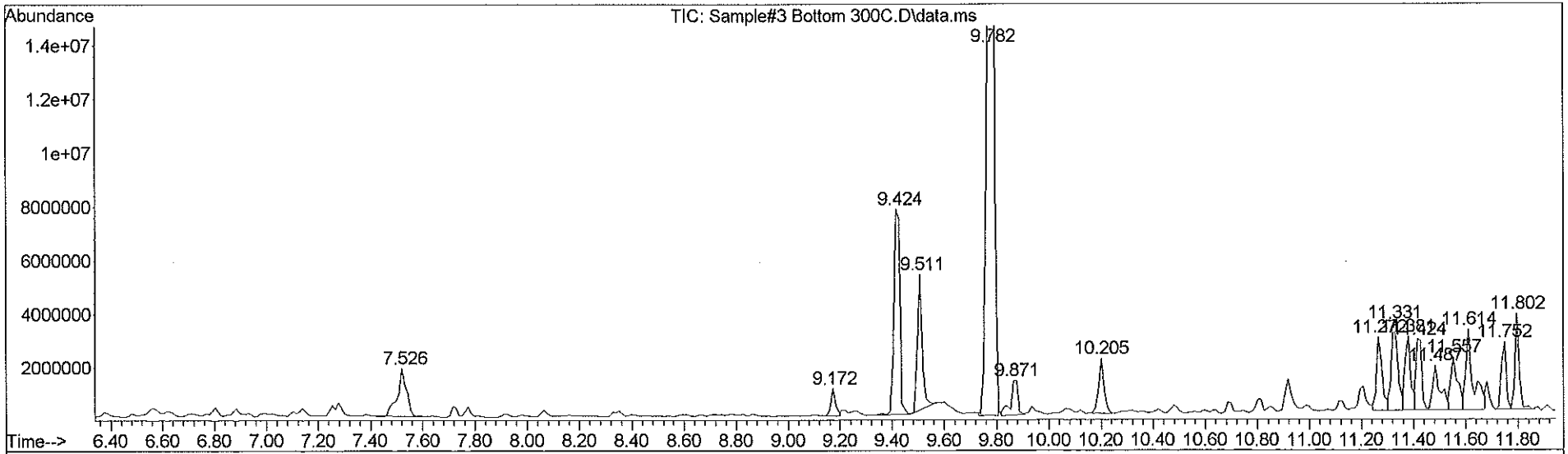
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 97
ID : Styrene; Benzene, ethenyl-; Bulstren K-525-19; Cinnamene; Phenethylene; Phenyl ethene; Phenylethylene; Styrol (German); Styrole; Styrolene; Styropol SO; Vinylbenzene; Vinylbenzol; Ethenylbenzene; Cinnaminol; Cinnamol; Styrol; Benzene, vinyl-; Cinnamenol; D

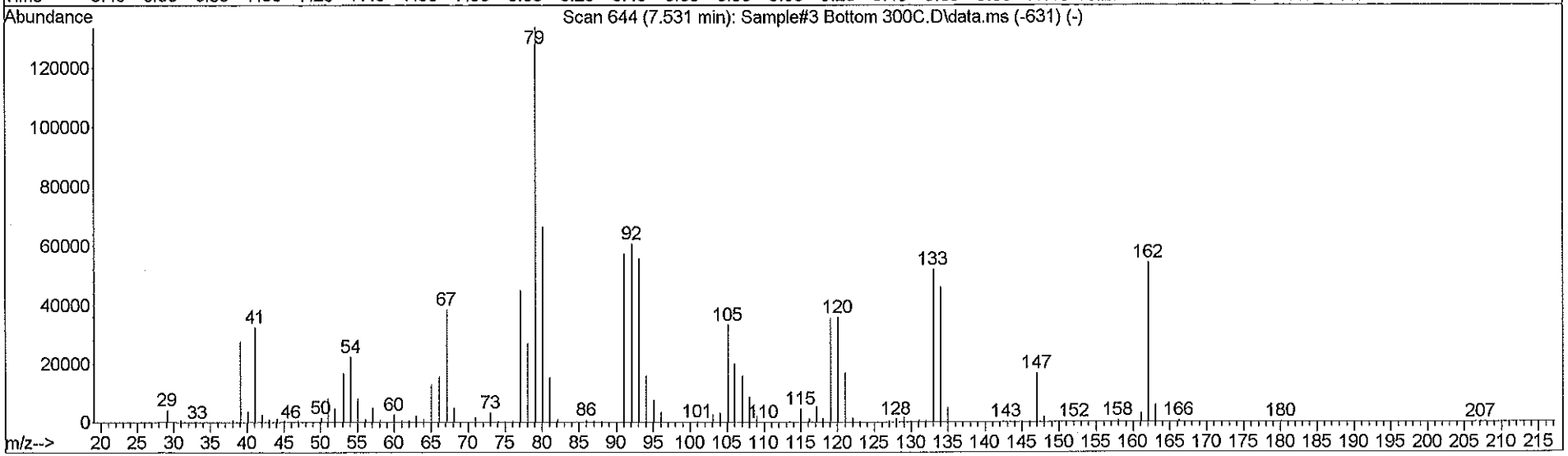




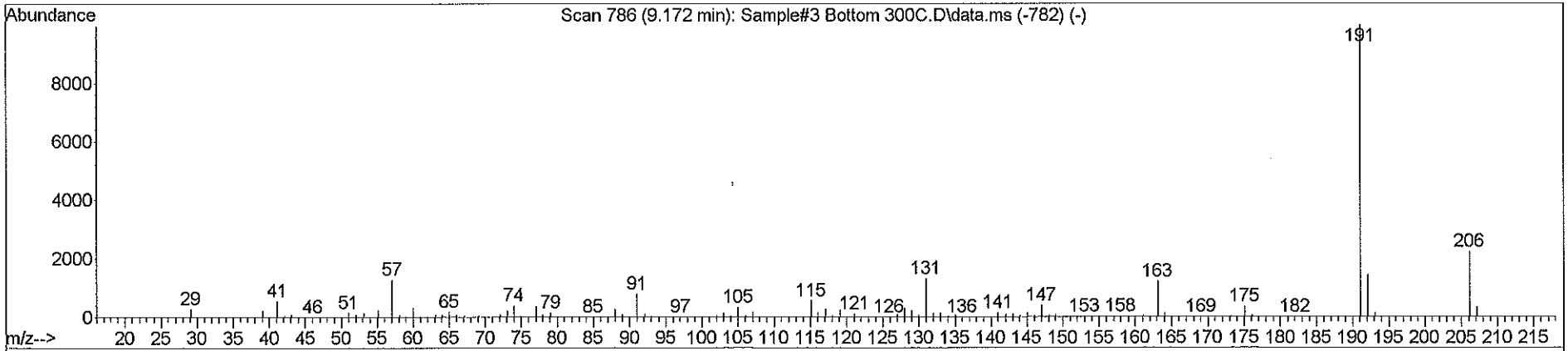


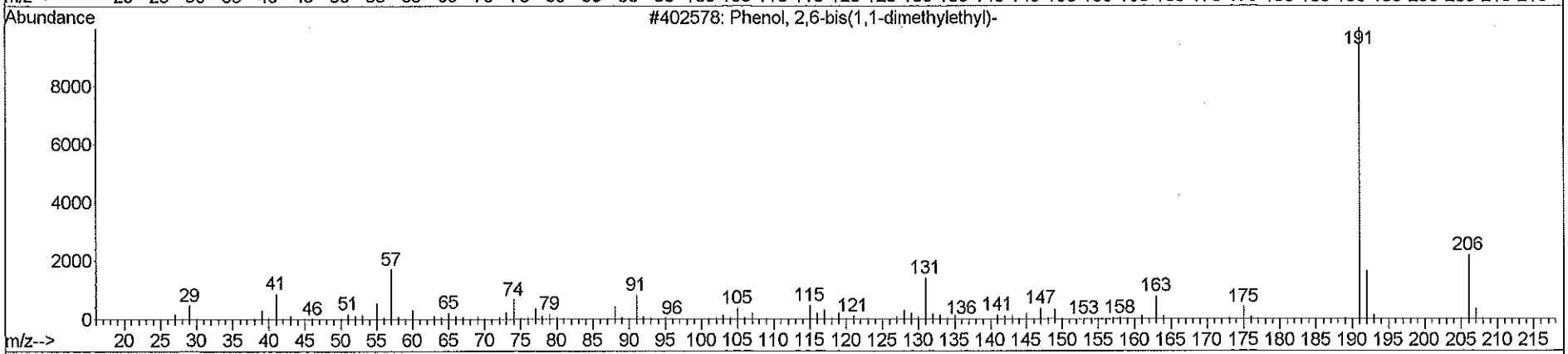
File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

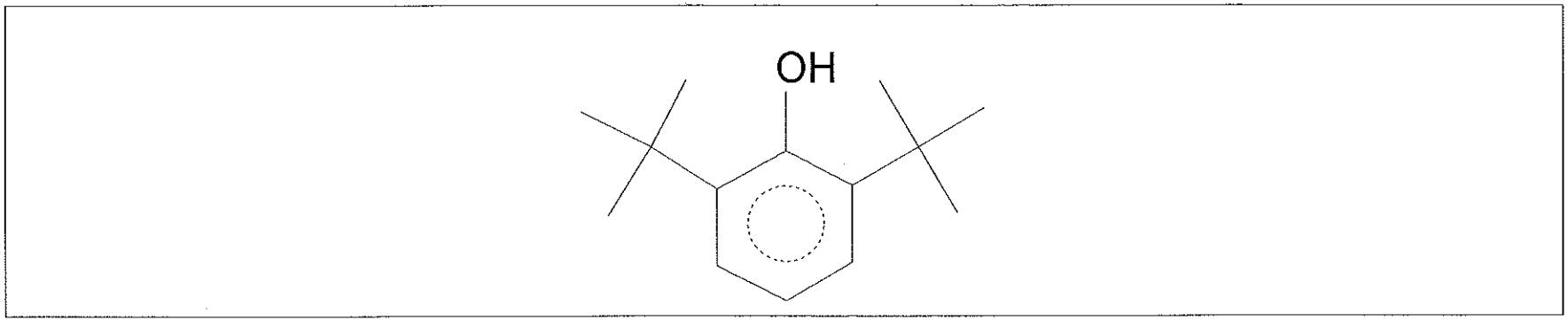




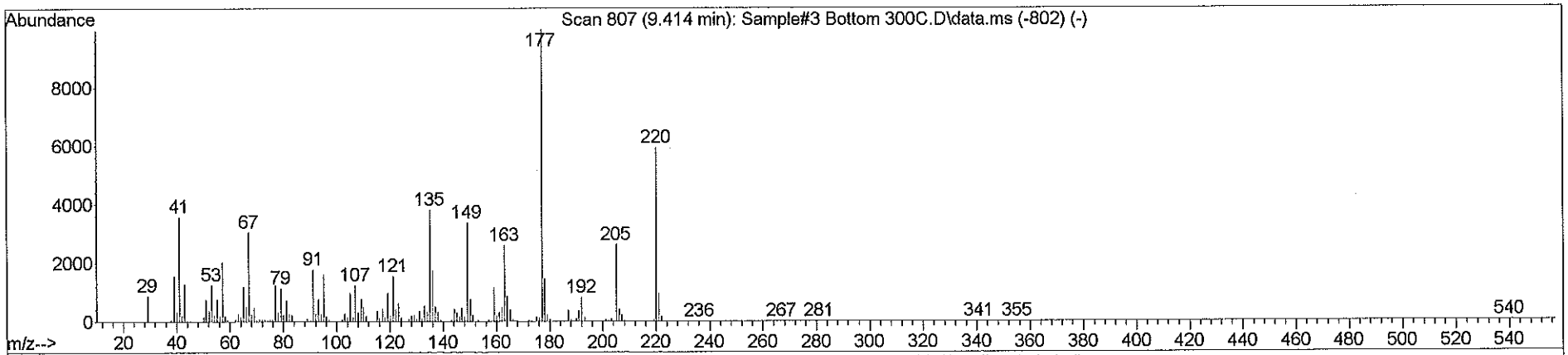
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 94
ID : Phenol, 2,6-bis(1,1-dimethylethyl)-

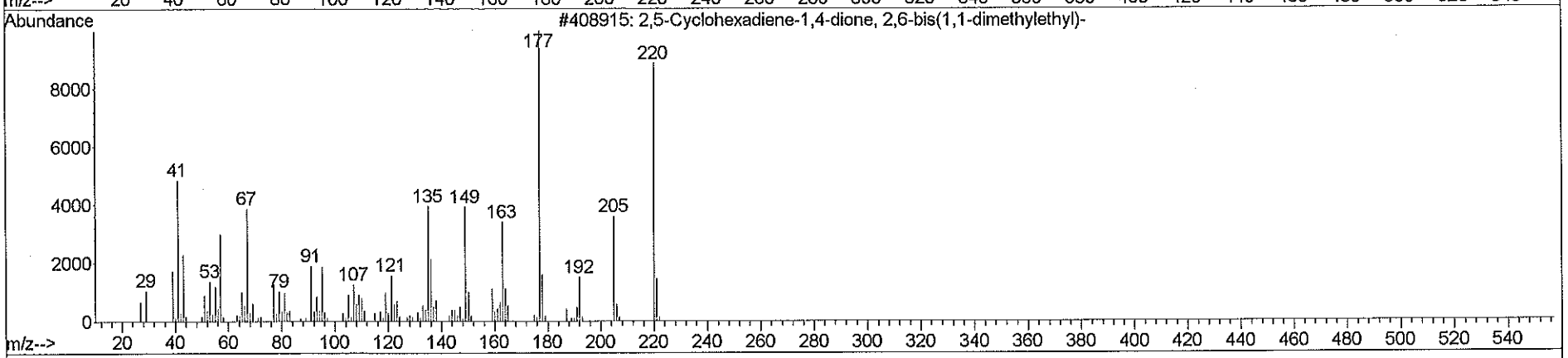


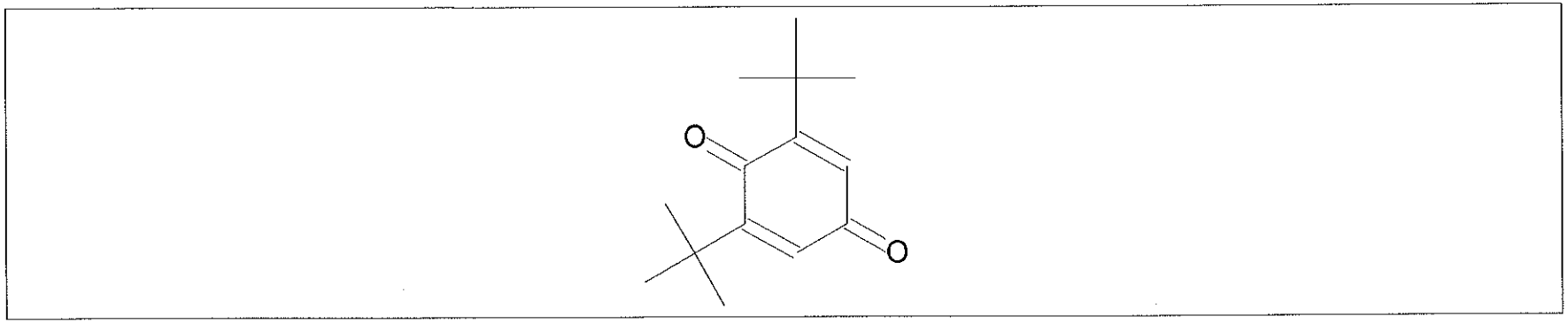




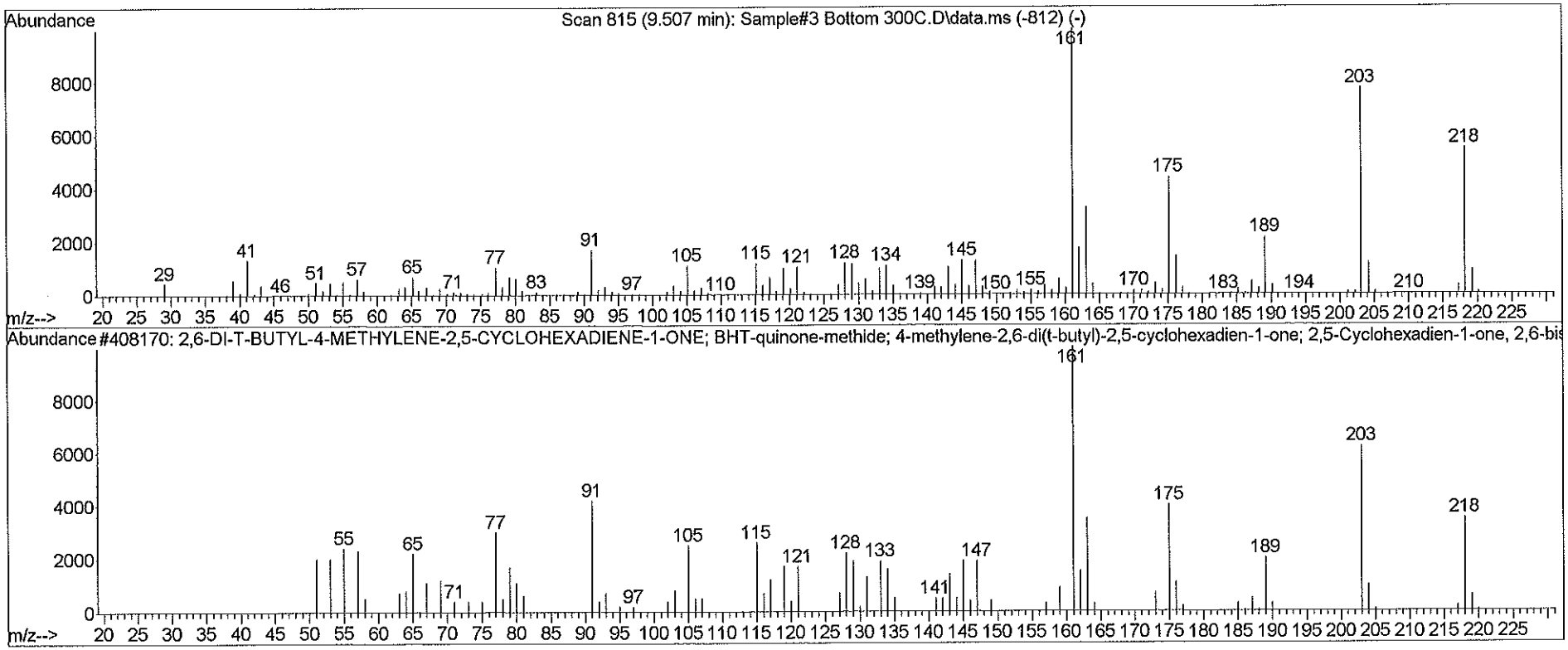
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 98
ID : 2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,1-dimethylethyl)-



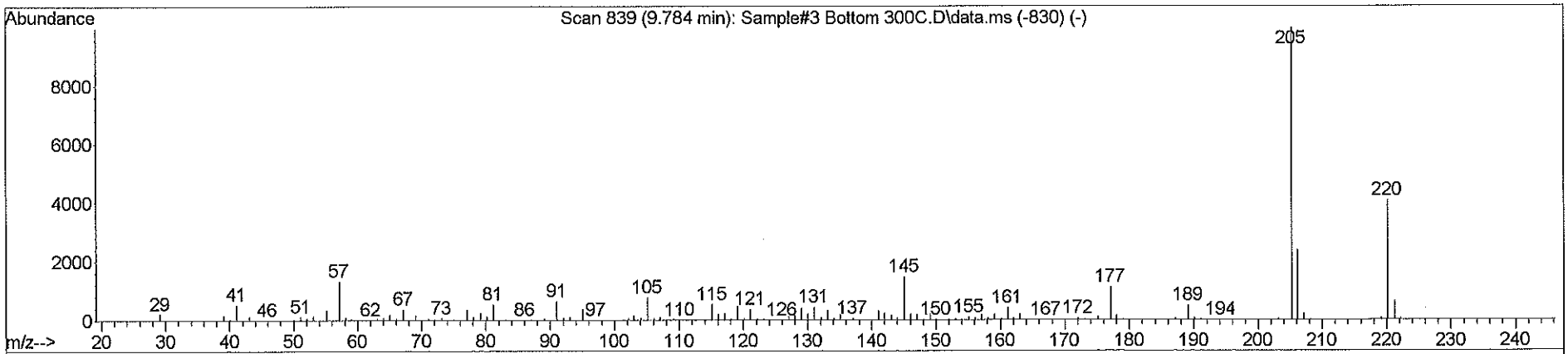


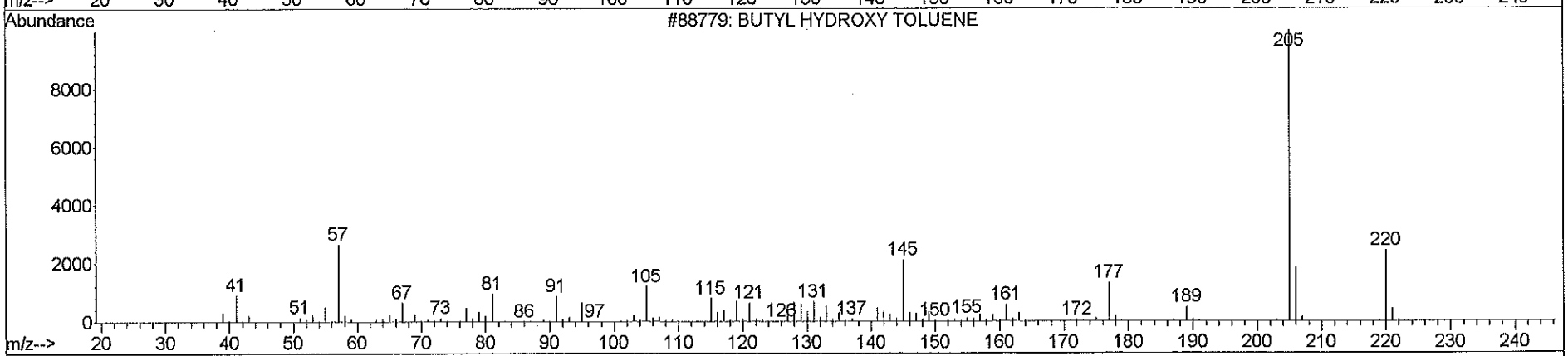


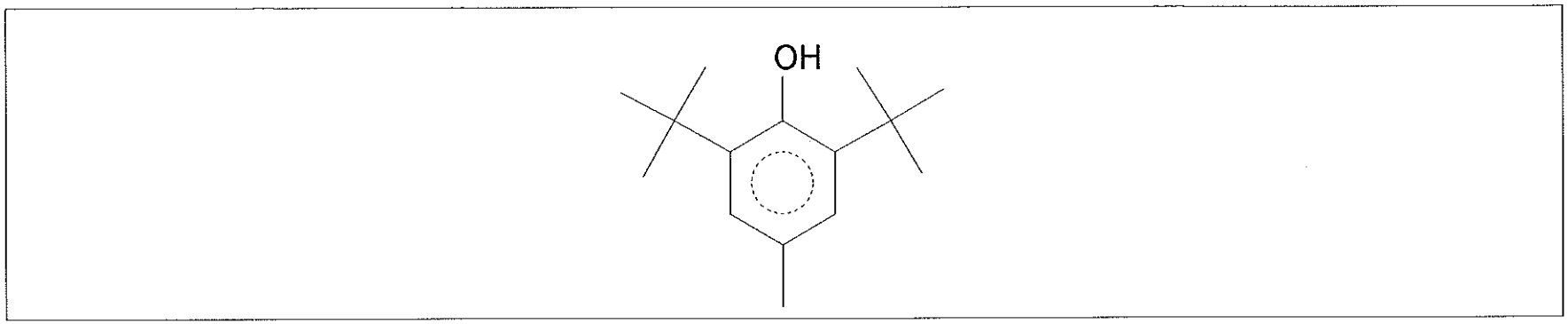
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 94
ID : 2,6-DI-T-BUTYL-4-METHYLENE-2,5-CYCLOHEXADIENE-1-ONE; BHT-quinone-methide; 4-methylene-2,6-di(t-butyl)-2,5-cyclohexadien-1-one; 2,5-Cyclohexadien-1-one, 2,6-bis(1,1-dimethylethyl)-4-methylene- (CAS); 2,5-Cyclohexadien-1-one, 2,6-di-tert-butyl-4-methylene-



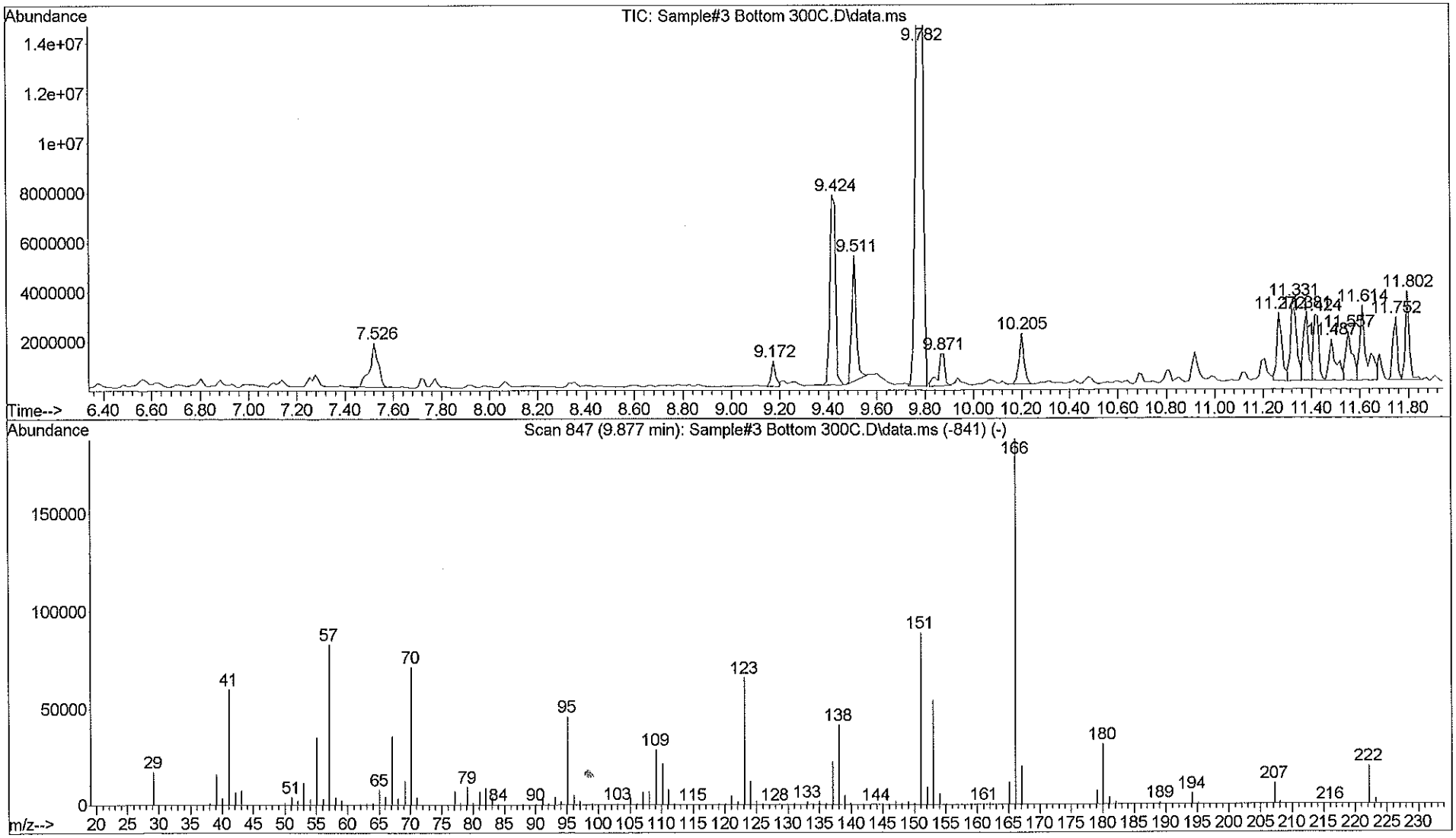
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 97
ID : BUTYL HYDROXY TOLUENE



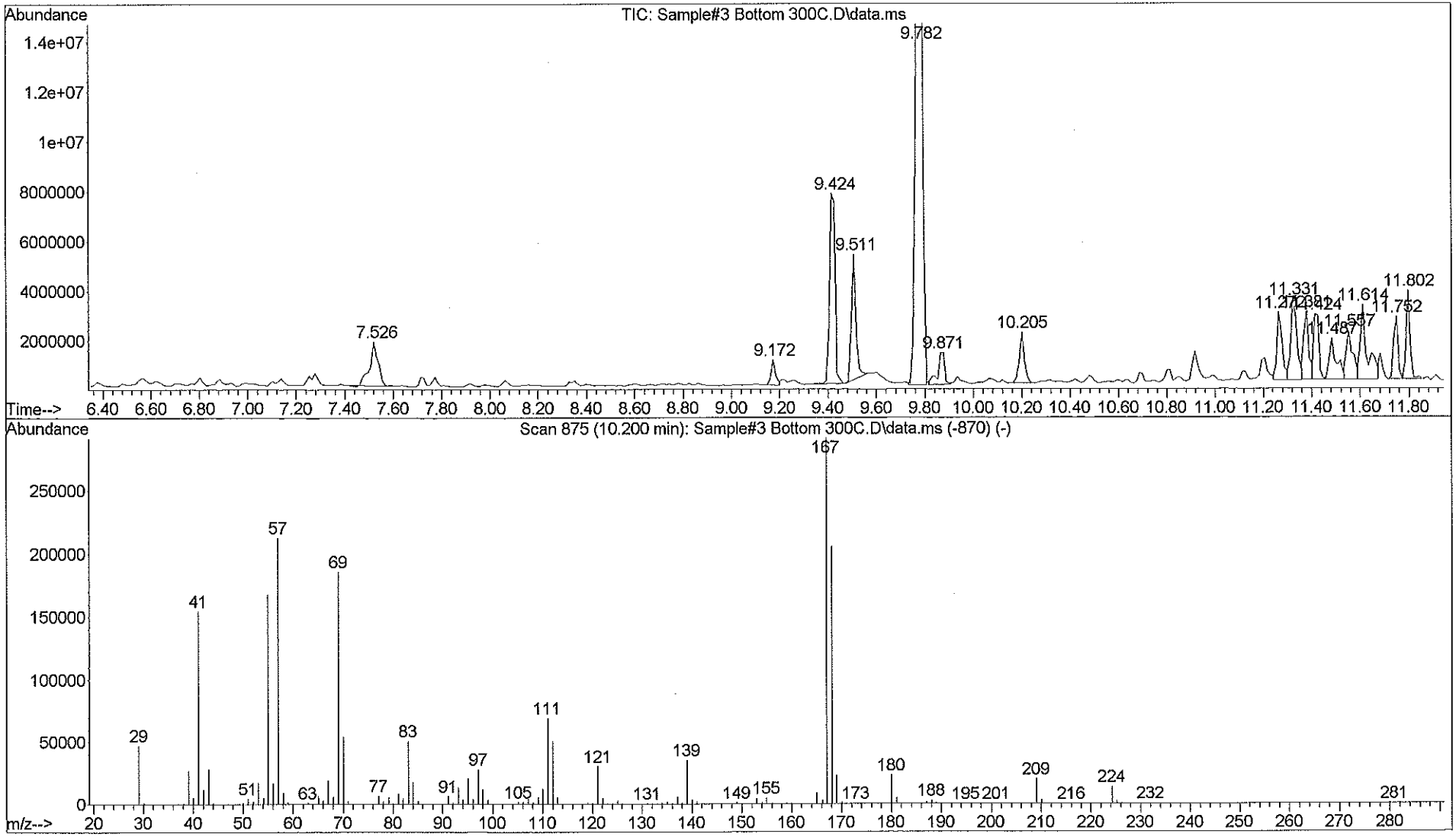




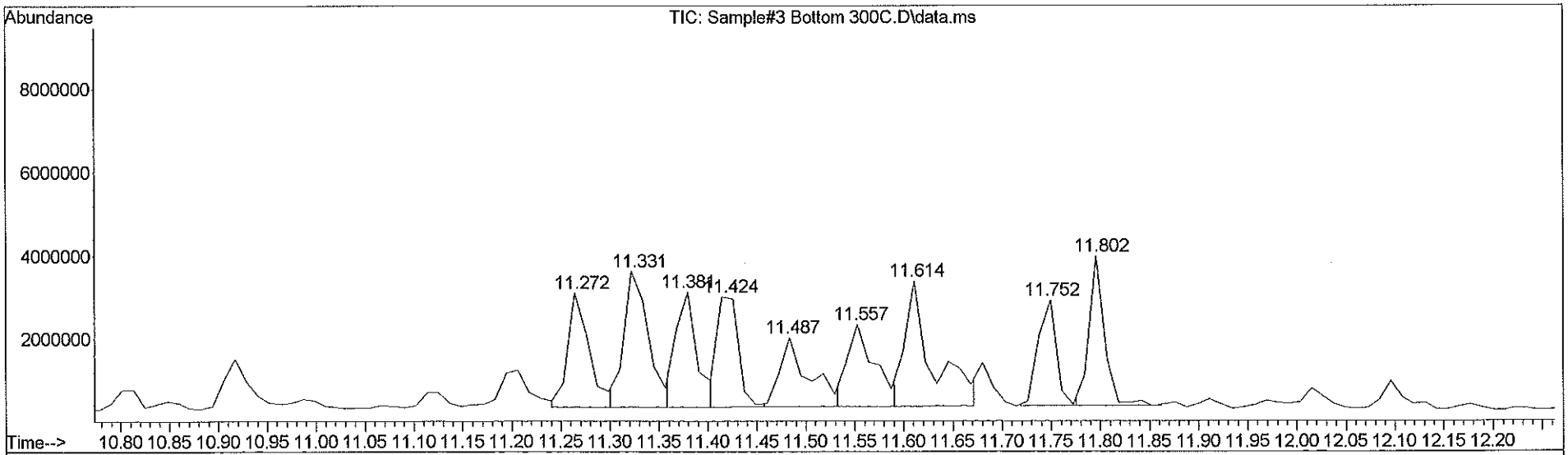
File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

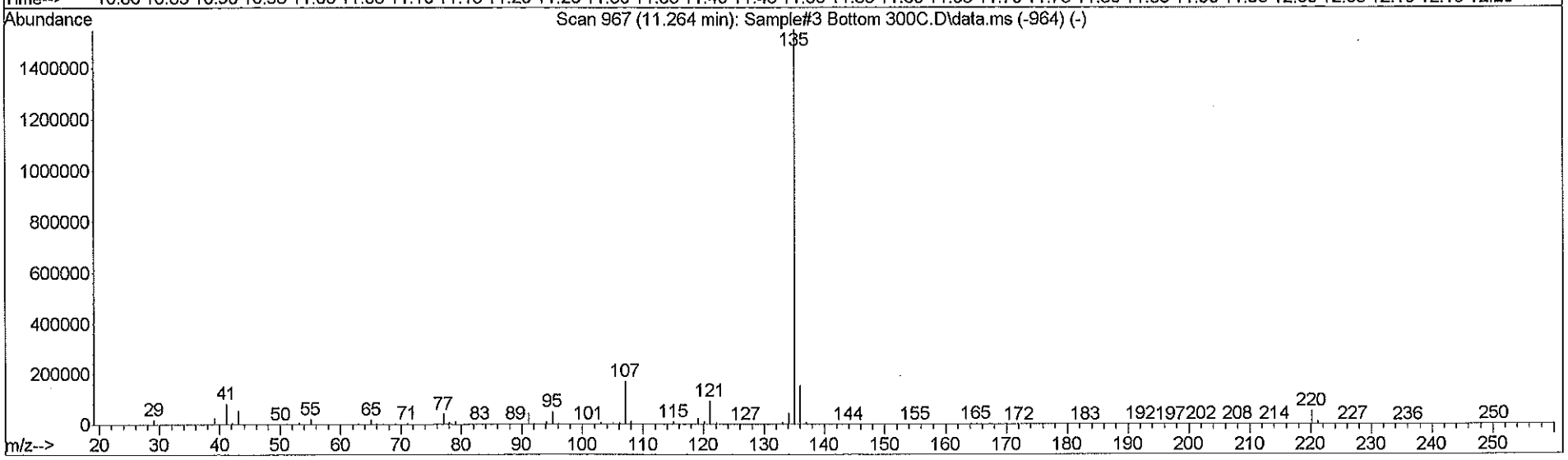


File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

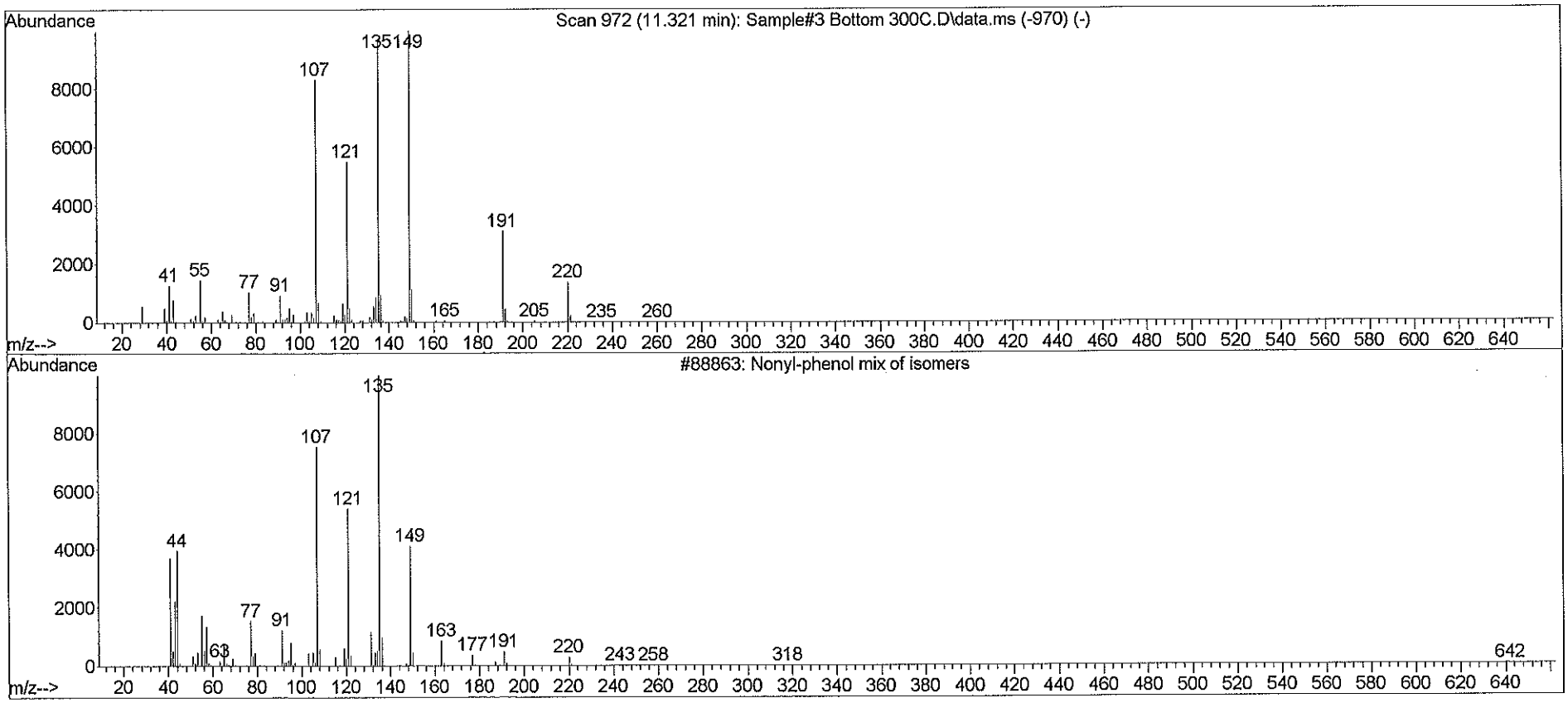


File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

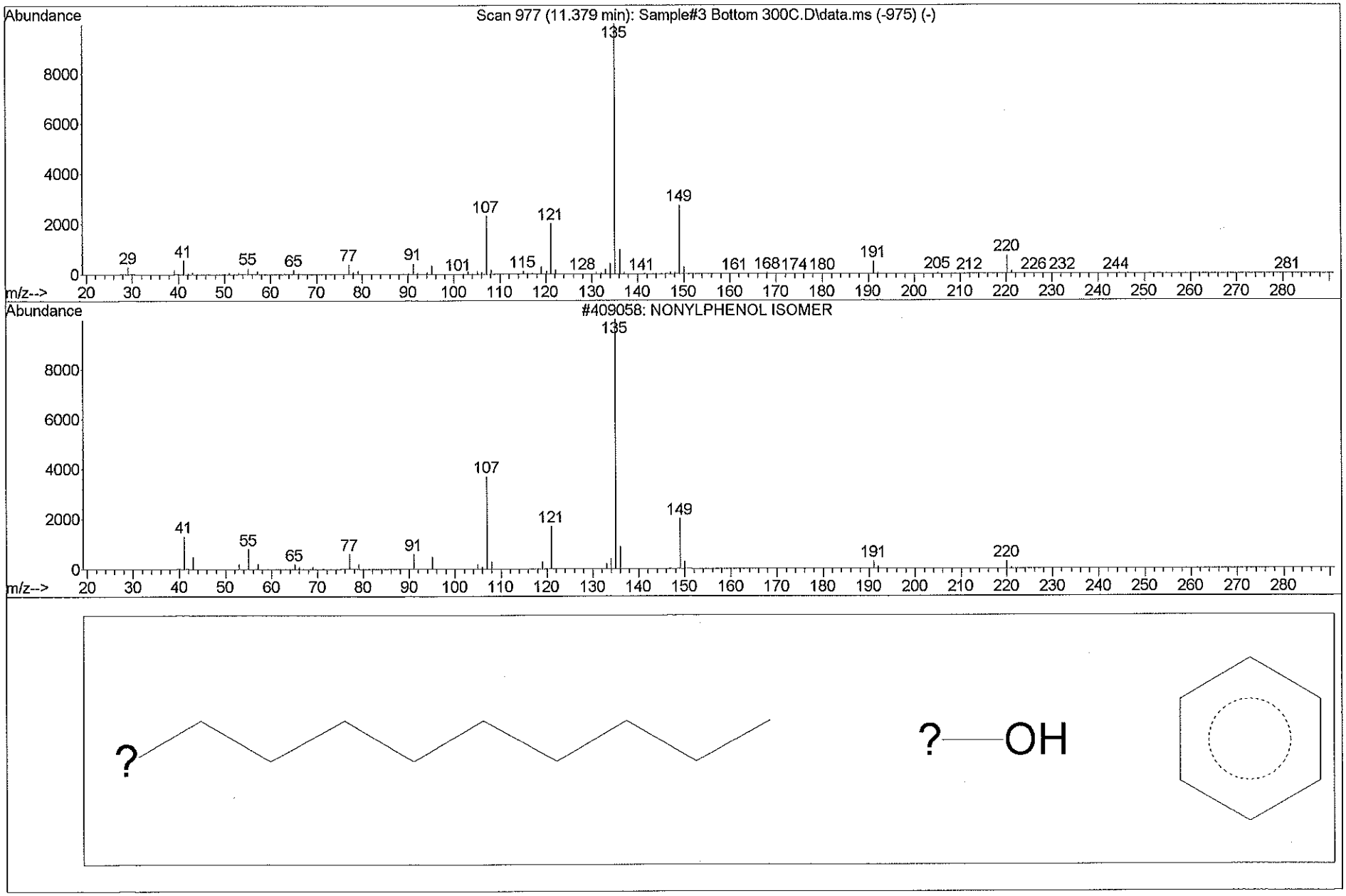




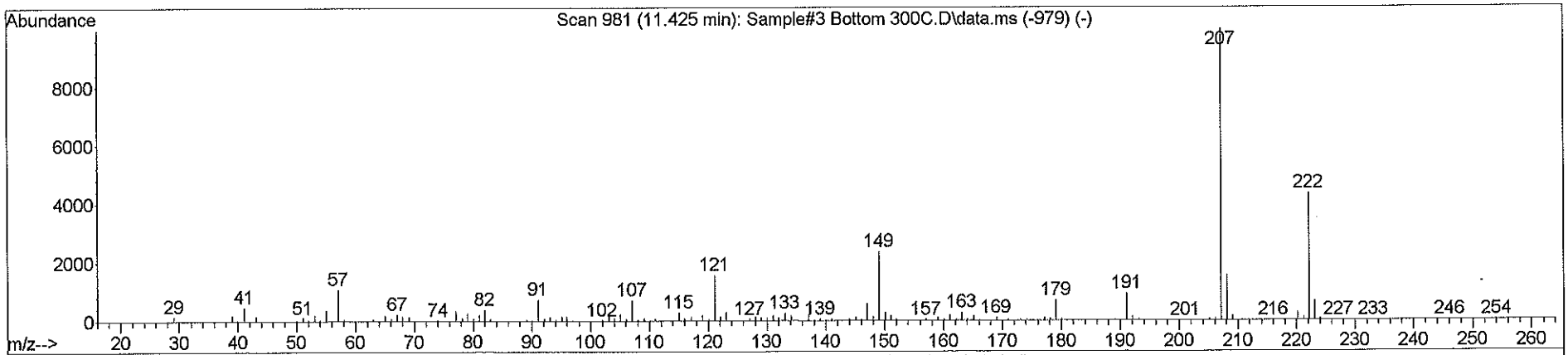
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 58
ID : Nonyl-phenol mix of isomers

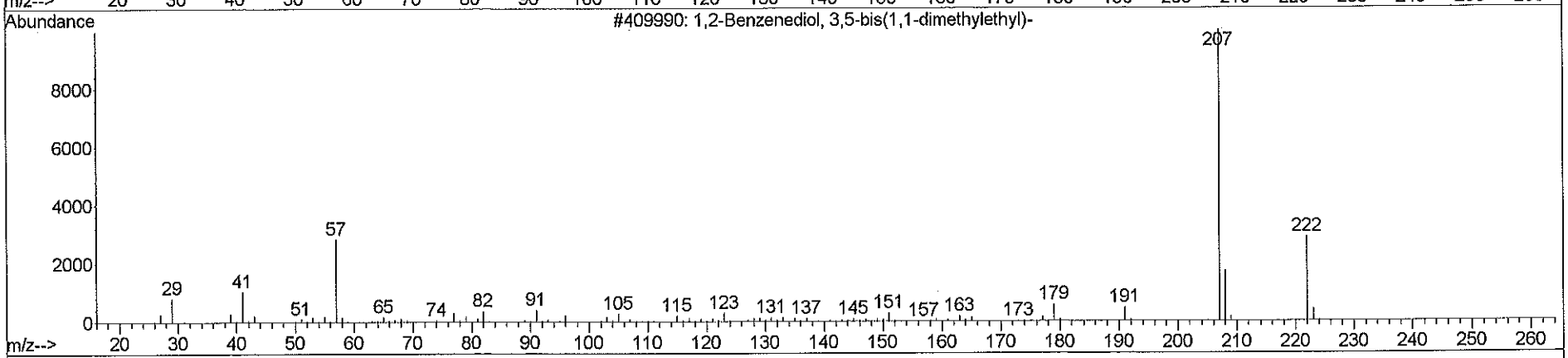


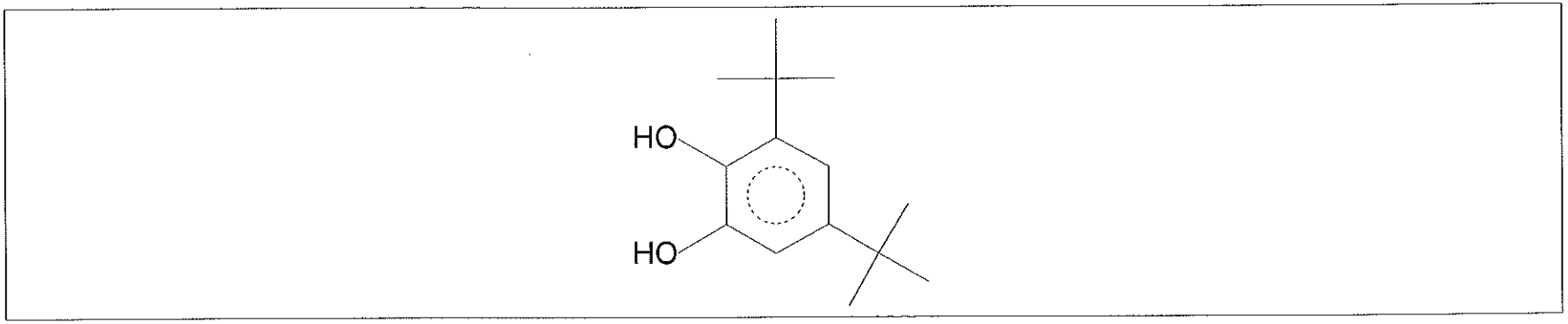
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 94
ID : NONYLPHENOL ISOMER



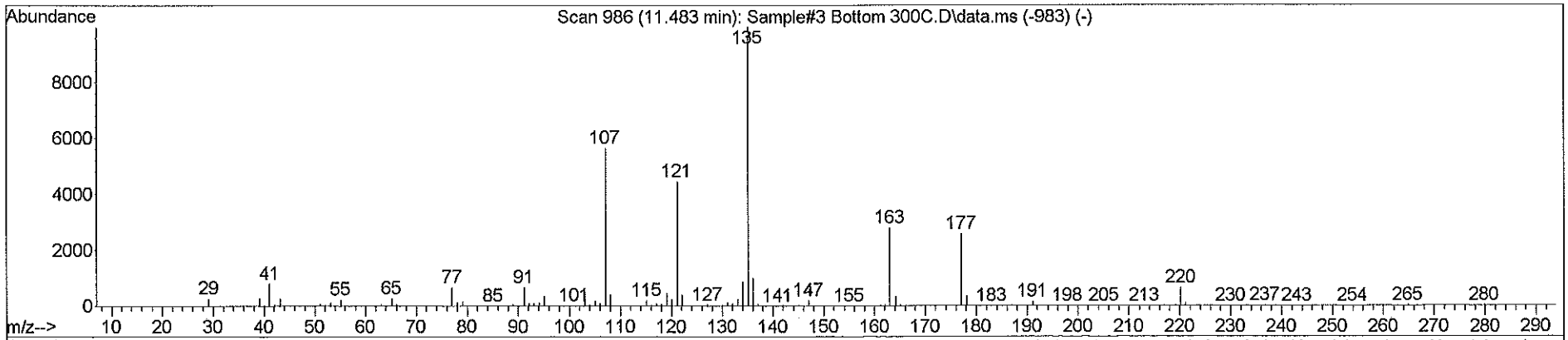
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 68
ID : 1,2-Benzenediol, 3,5-bis(1,1-dimethylethyl)-

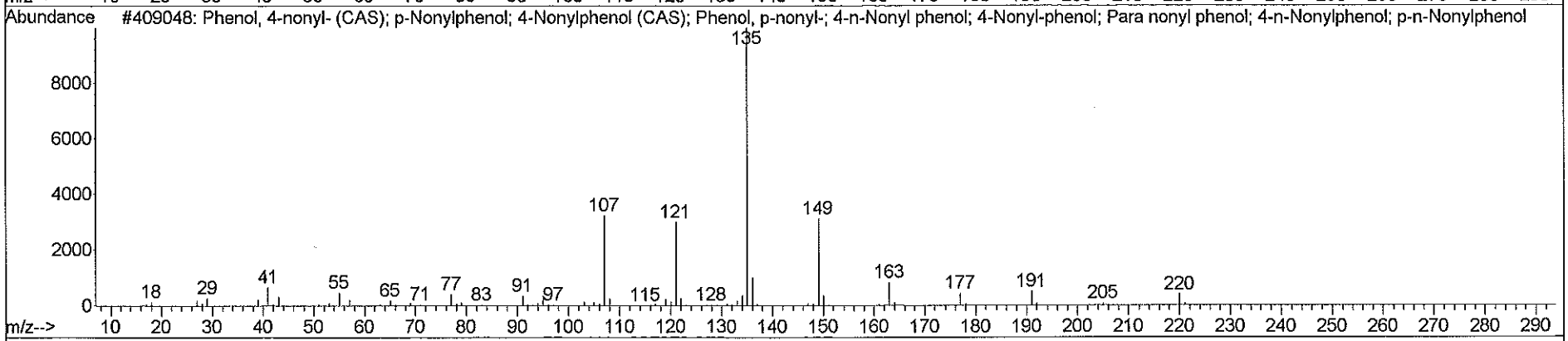


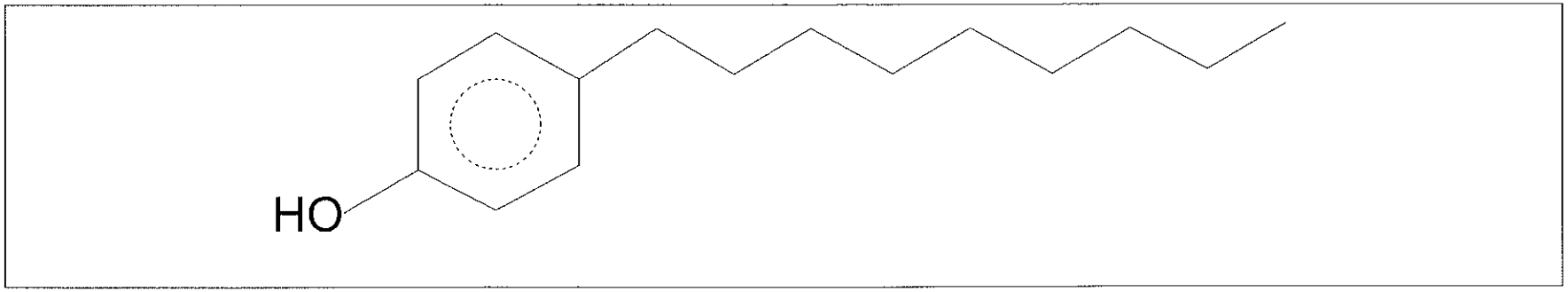




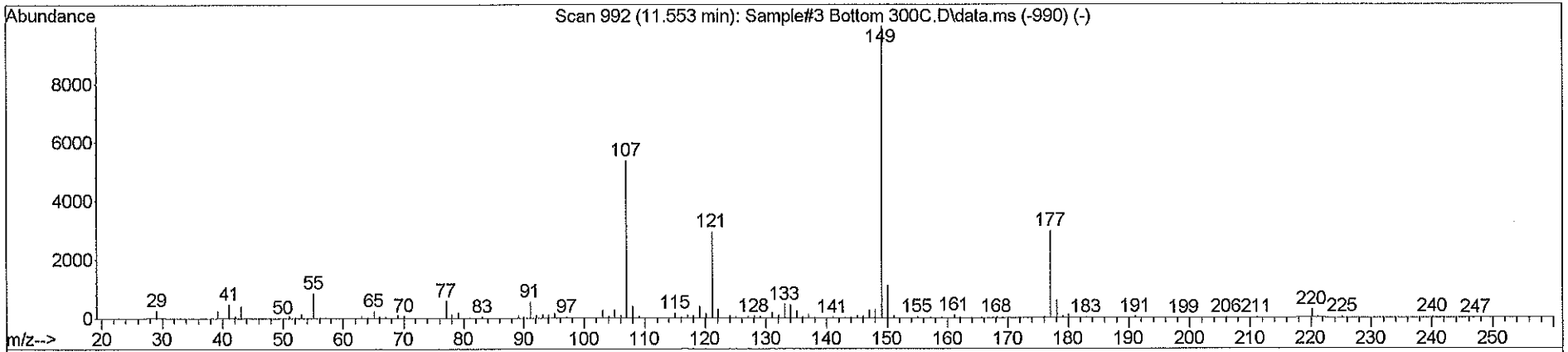
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 76
ID : Phenol, 4-nonyl- (CAS); p-Nonylphenol; 4-Nonylphenol (CAS); Phenol, p-nonyl-; 4-n-Nonyl phenol; 4-Nonyl-phenol; Para nonyl phenol; 4-n-Nonylphenol; p-n-Nonylphenol

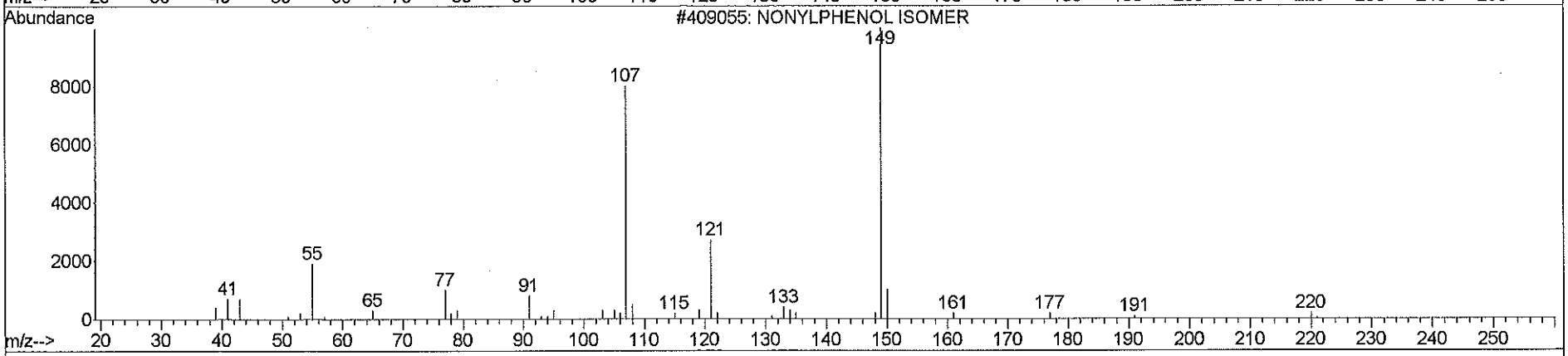


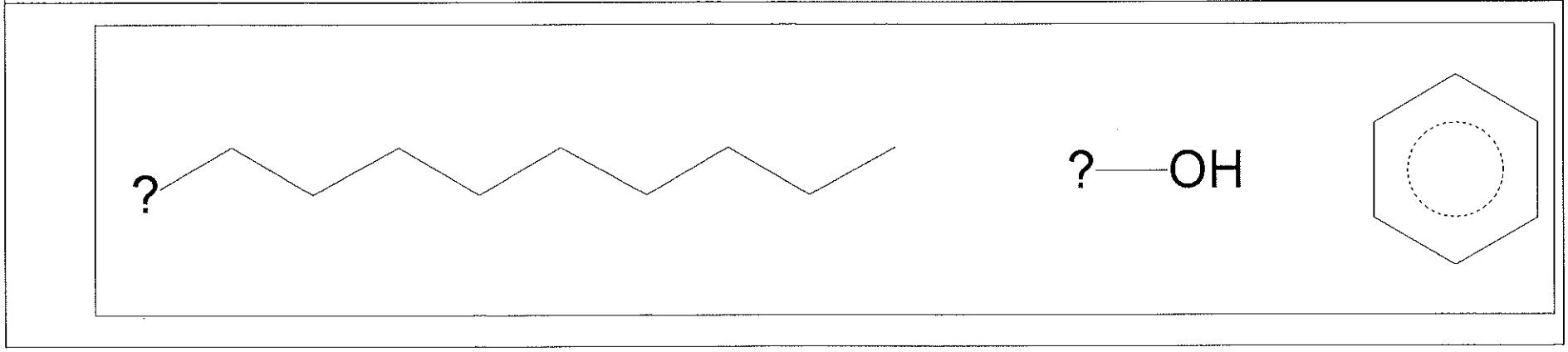




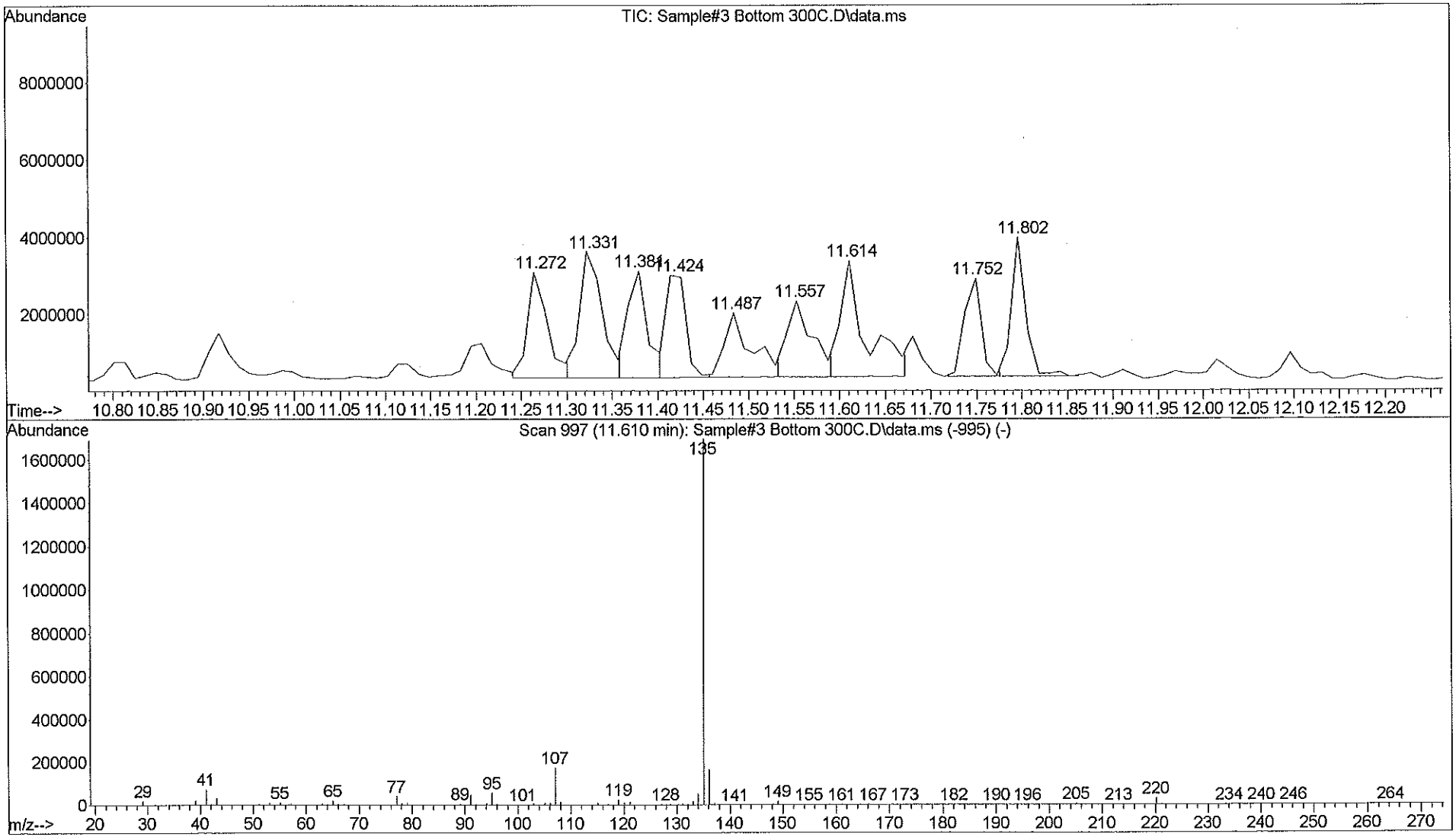
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 87
ID : NONYLPHENOL ISOMER



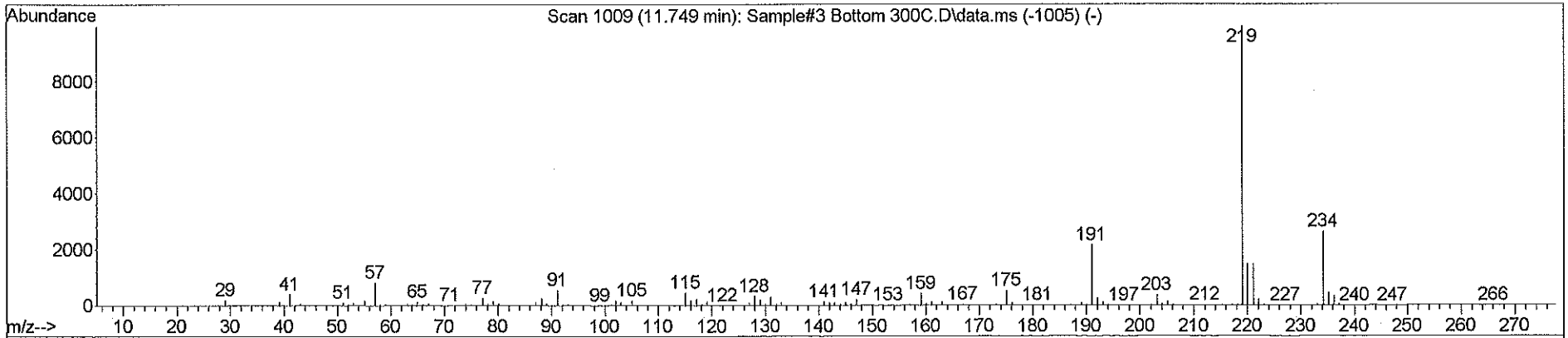


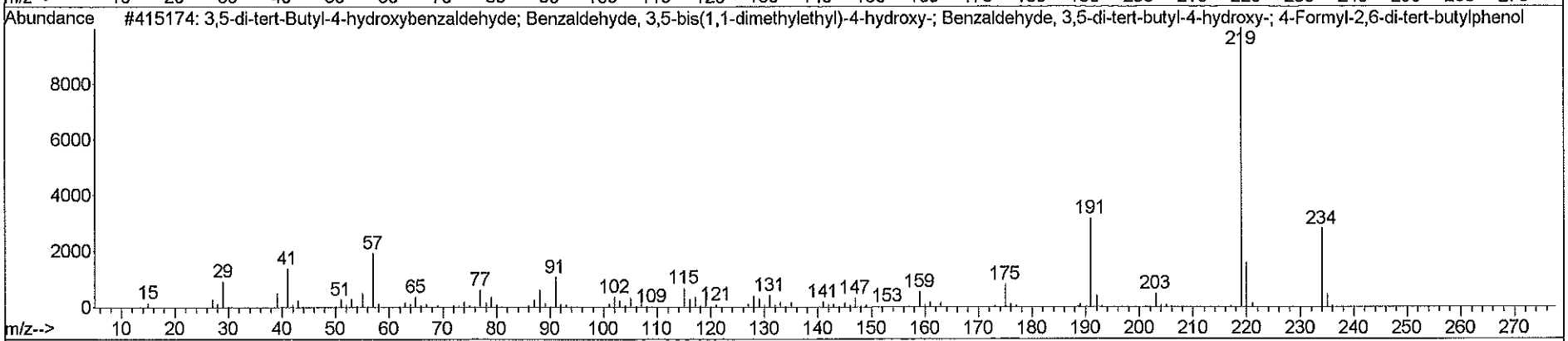


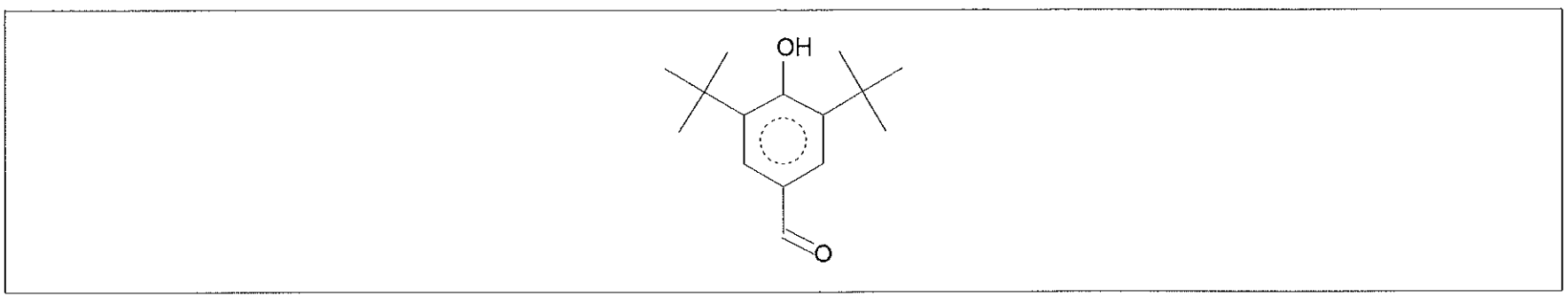
File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



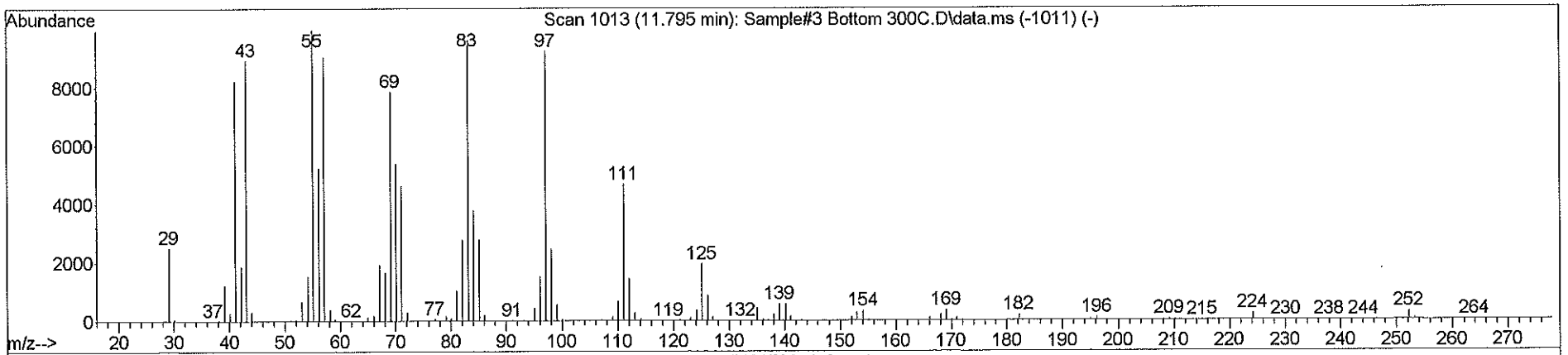
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 96
ID : 3,5-di-tert-Butyl-4-hydroxybenzaldehyde; Benzaldehyde, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-; Benzaldehyde, 3,5-di-tert-butyl-4-hydroxy-; 4-Formyl-2,6-di-tert-butylphenol; Benzoic aldehyde, 3,5-di-t-butyl-4-hydroxy-

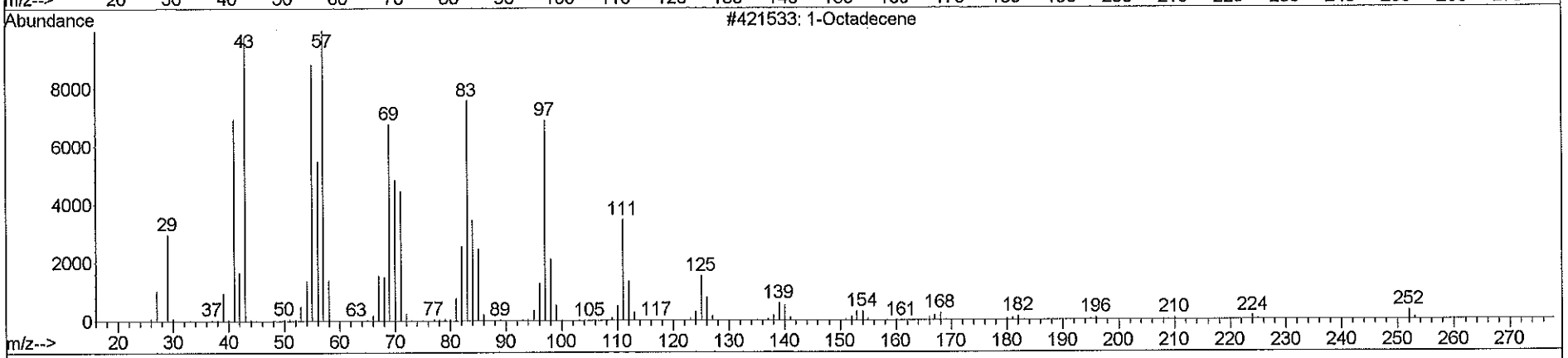


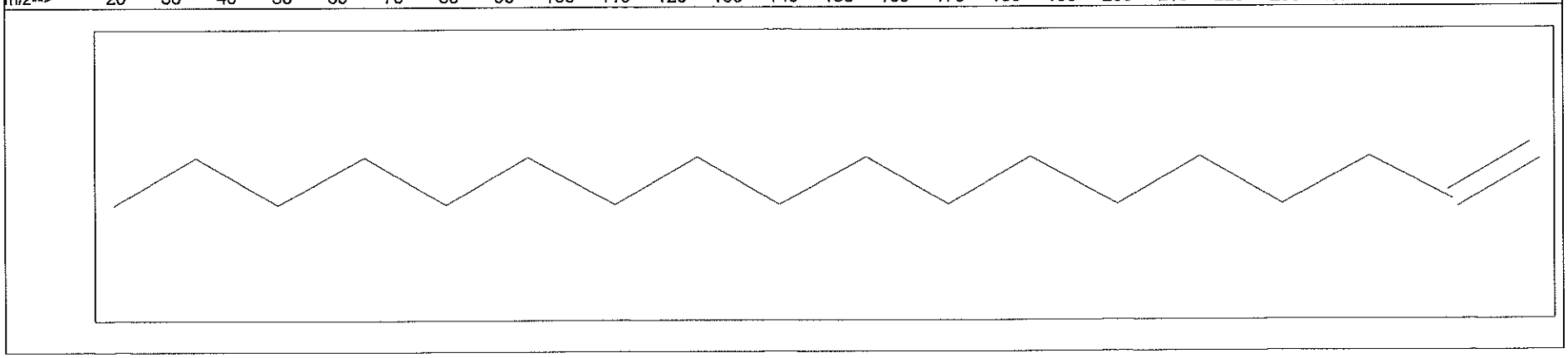




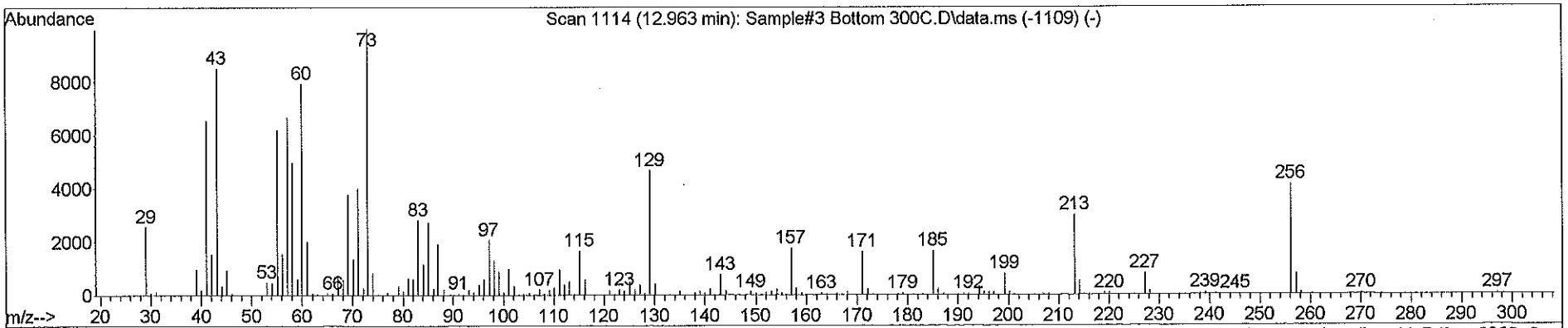
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 97
ID : 1-Octadecene

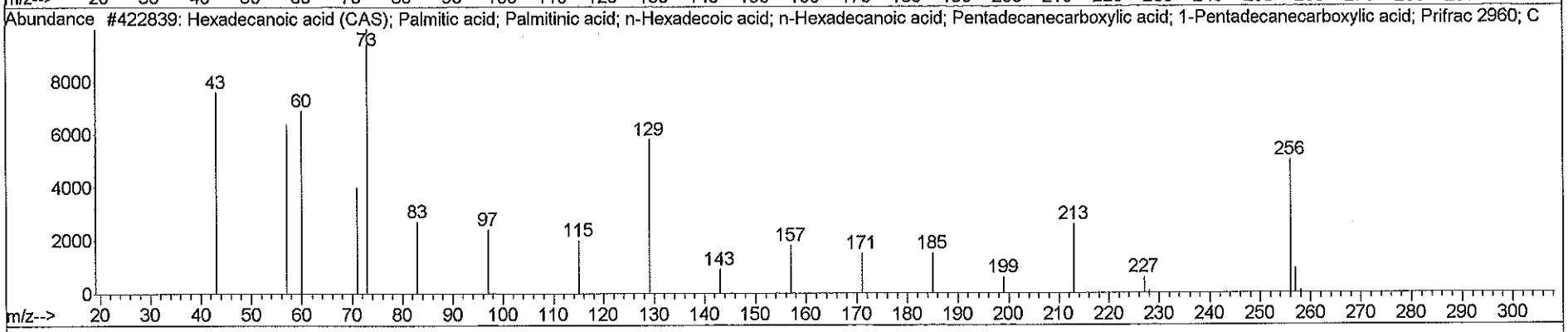


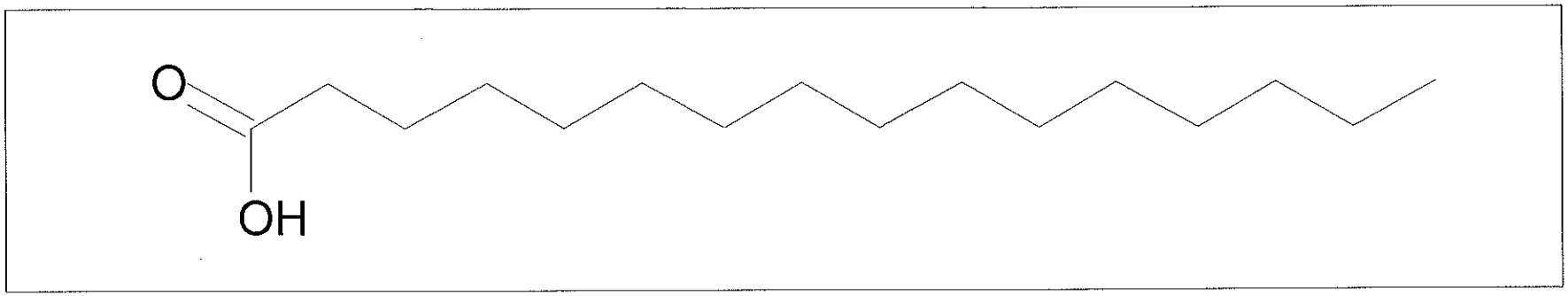




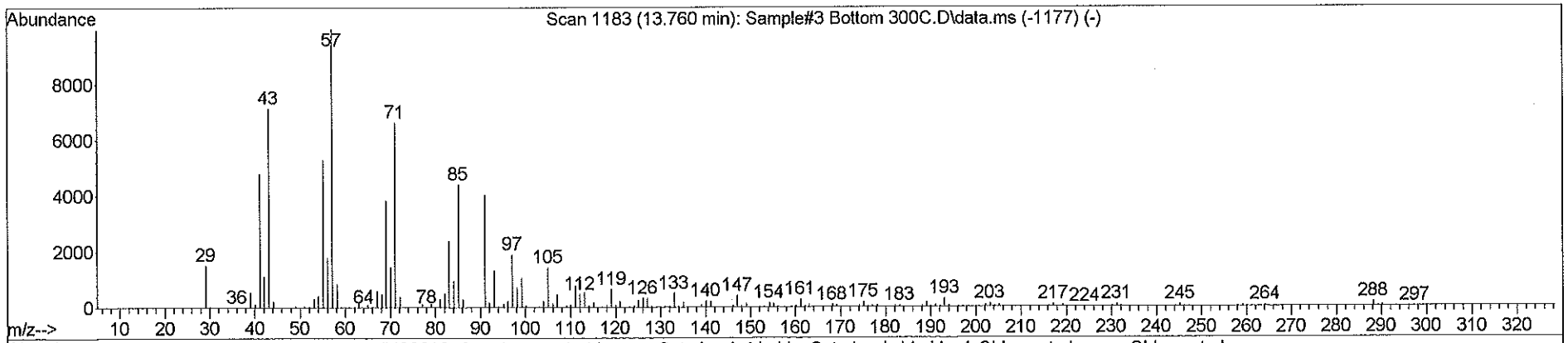
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : Hexadecanoic acid (CAS); Palmitic acid; Palmitinic acid; n-Hexadecoic acid; n-Hexadecanoic acid; Pentadecanecarboxylic acid; 1-Pentadecanecarboxylic acid; P rifrac 2960; Coconut oil fatty acids; Cetylic acid; Emersol 140; Emersol 143; Hexadecylic acid; Hyd

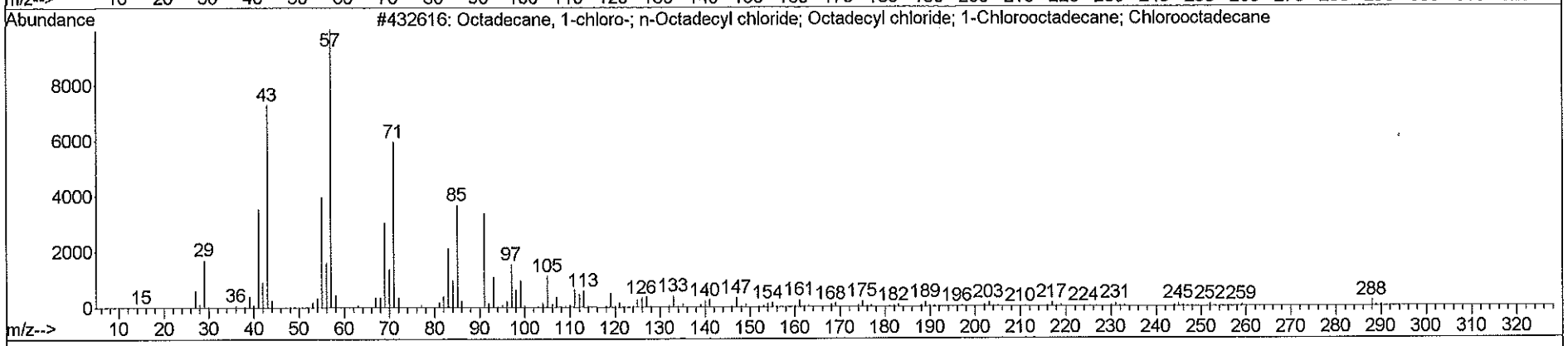


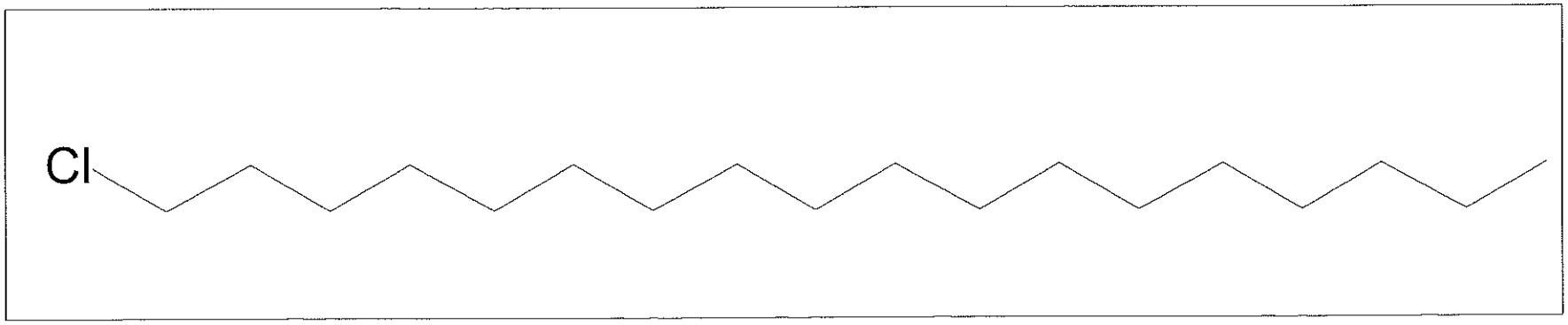




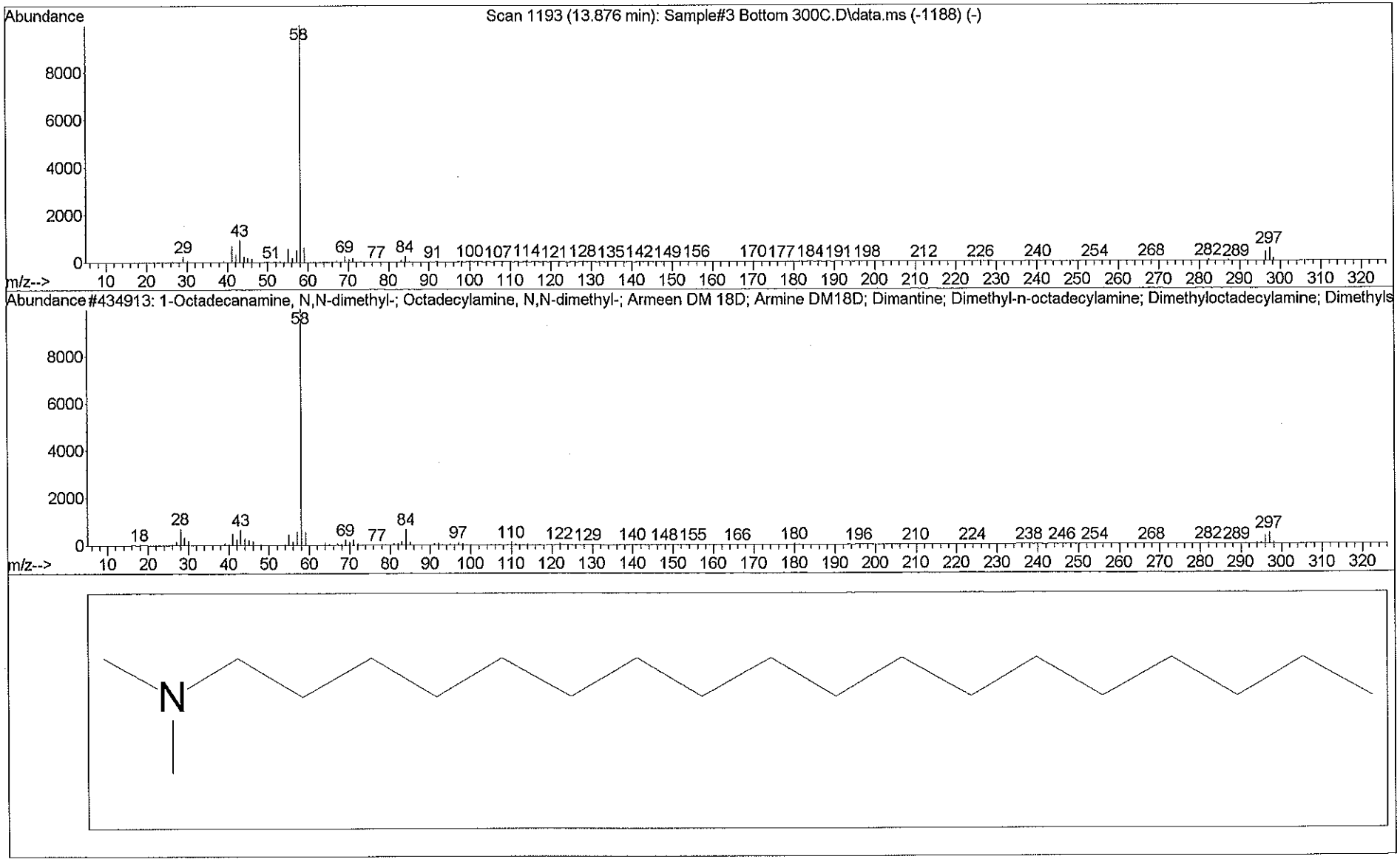
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 99
ID : Octadecane, 1-chloro-; n-Octadecyl chloride; Octadecyl chloride; 1-Chlorooctadecane; Chlorooctadecane



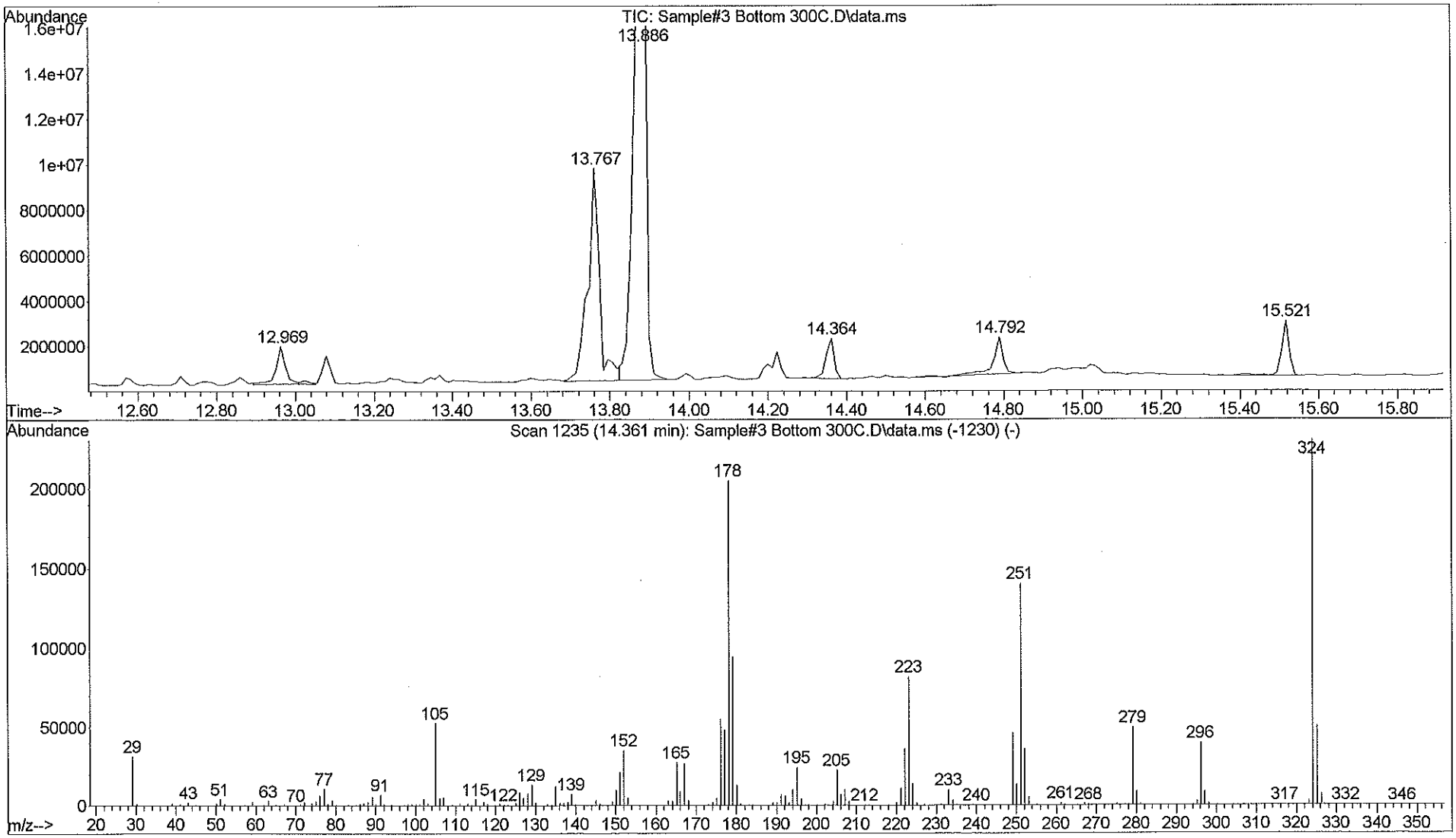




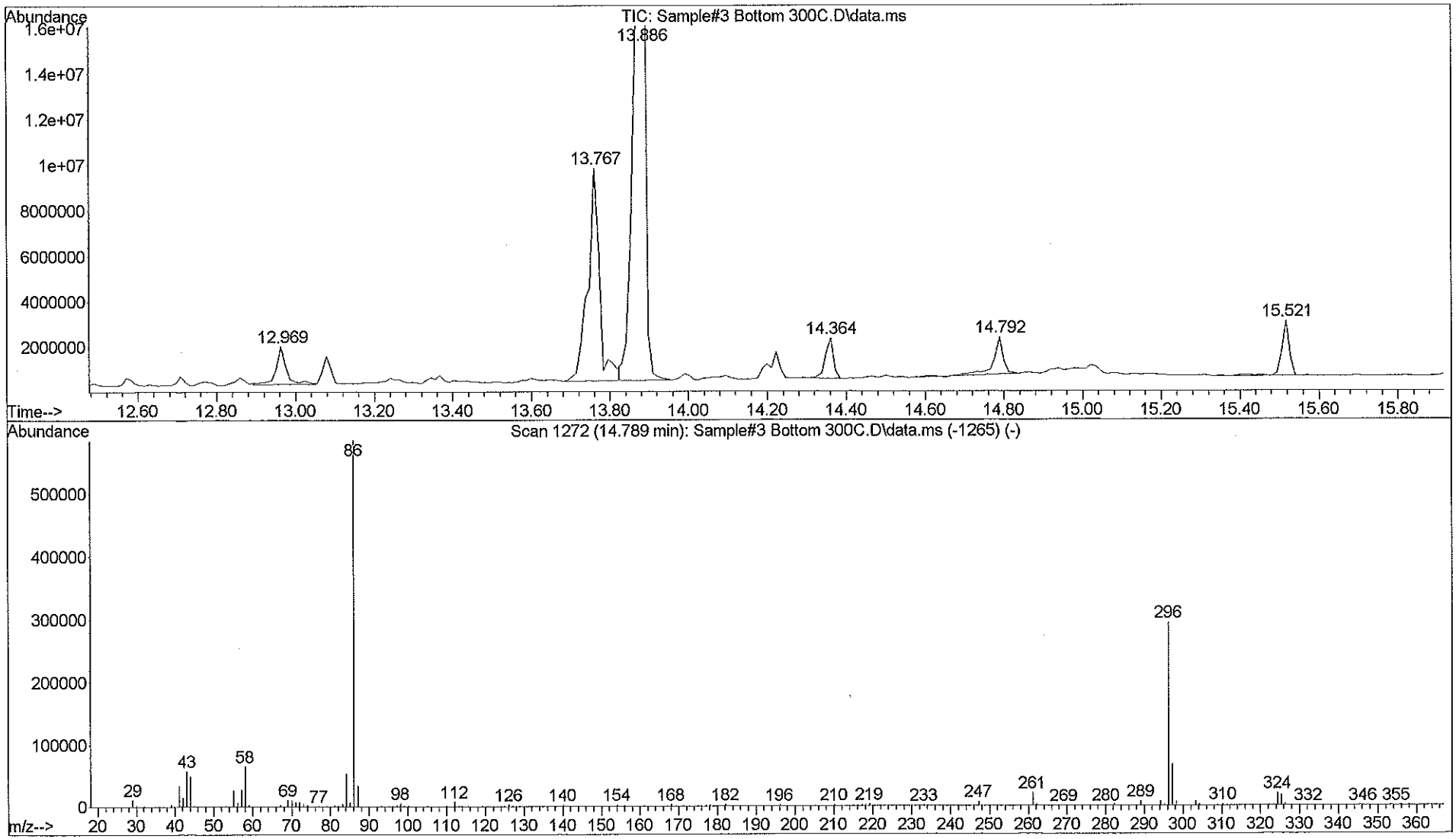
Library Searched : C:\Database\Wiley7Nist05.L
Quality : 91
ID : 1-Octadecanamine, N,N-dimethyl-; Octadecylamine, N,N-dimethyl-; Armeen DM 18D; Armine DM18D; Dimantine; Dimethyl-n-octadecylamine; Dimethyloctadecylamine; Dimethylstearylamine; Dymanthine; N,N-Dimethyl-n-octadecylamine; N,N-Dimethyloctadecylamine; N,N-Dim



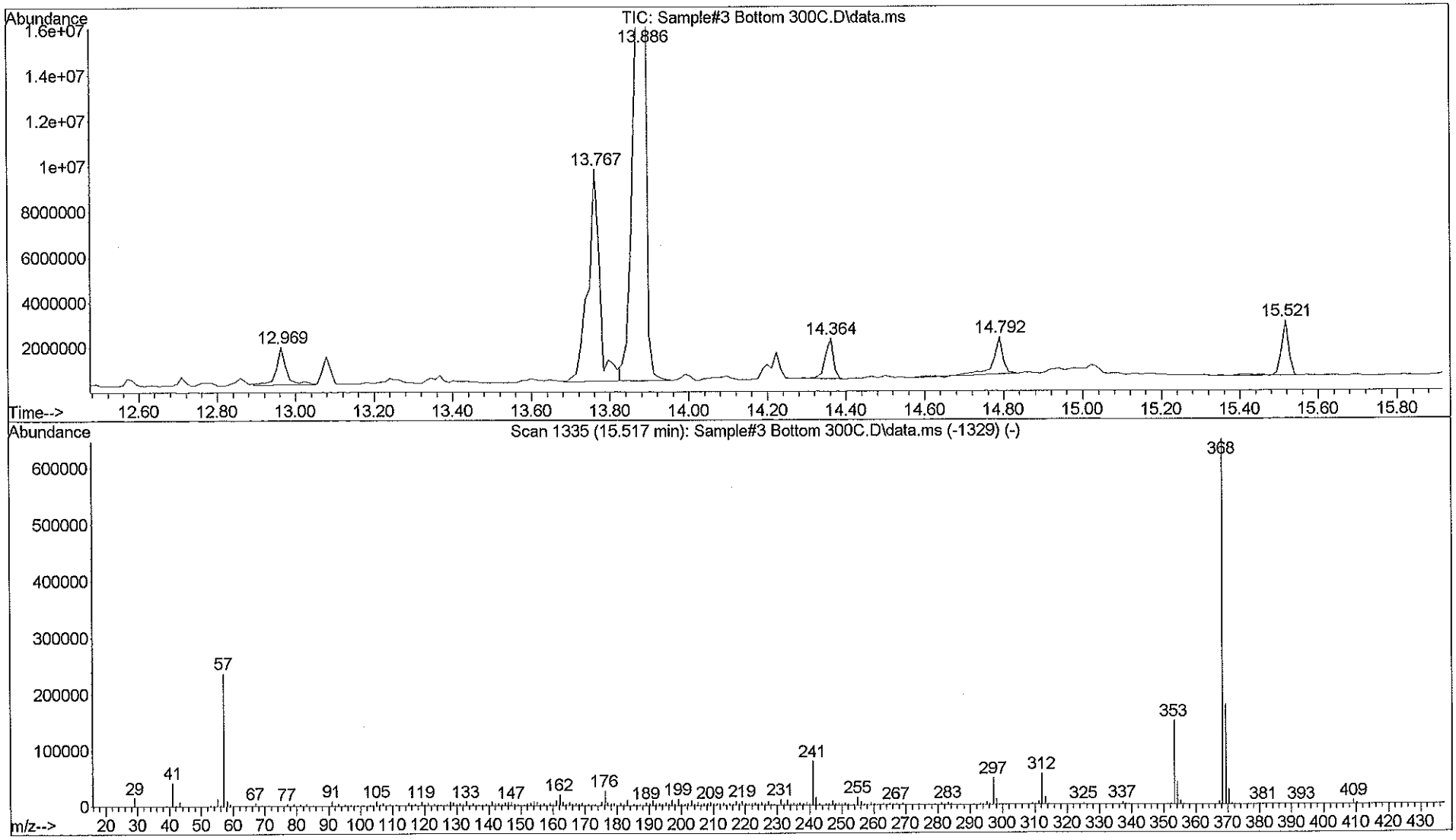
File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



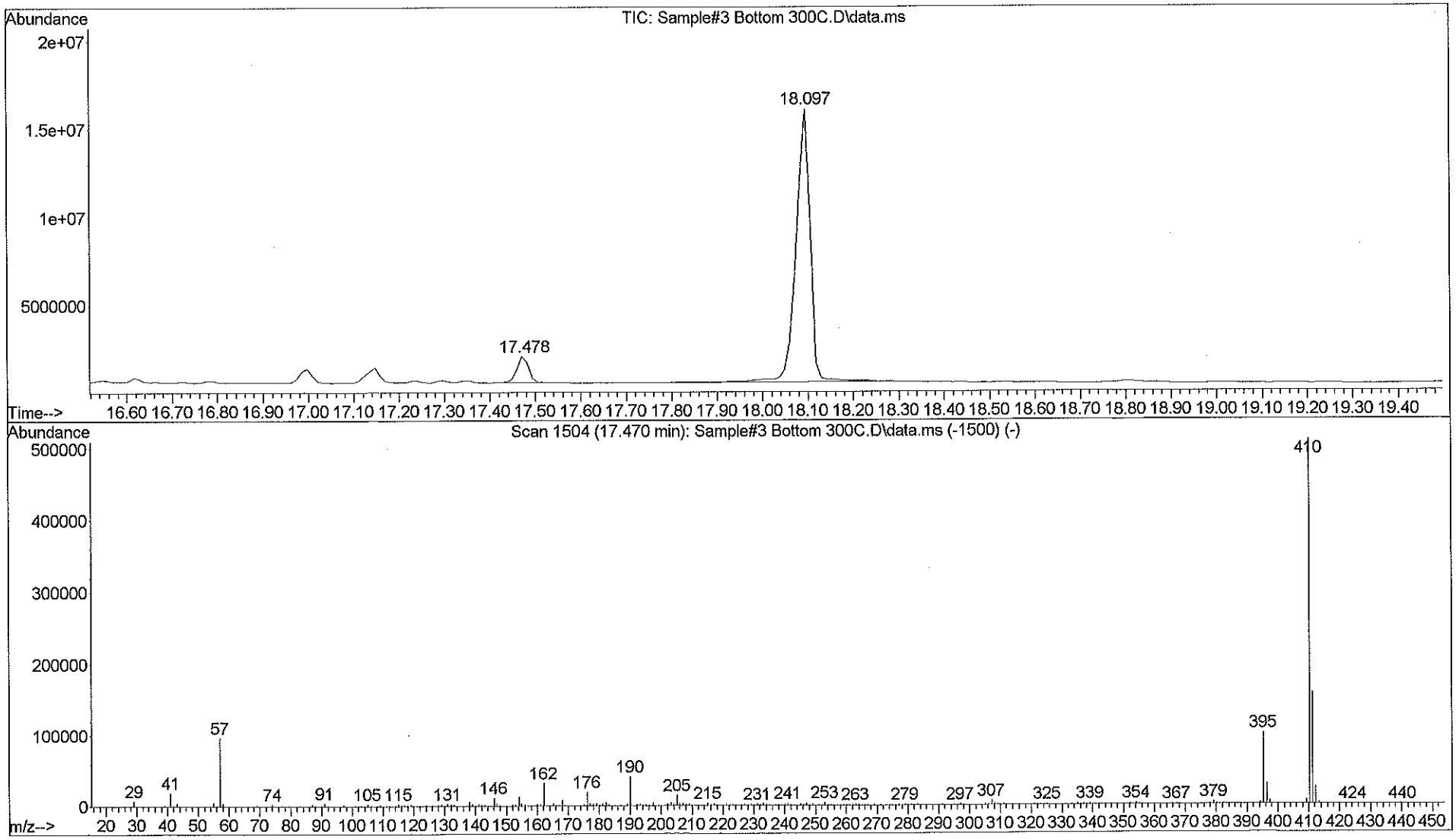
File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1



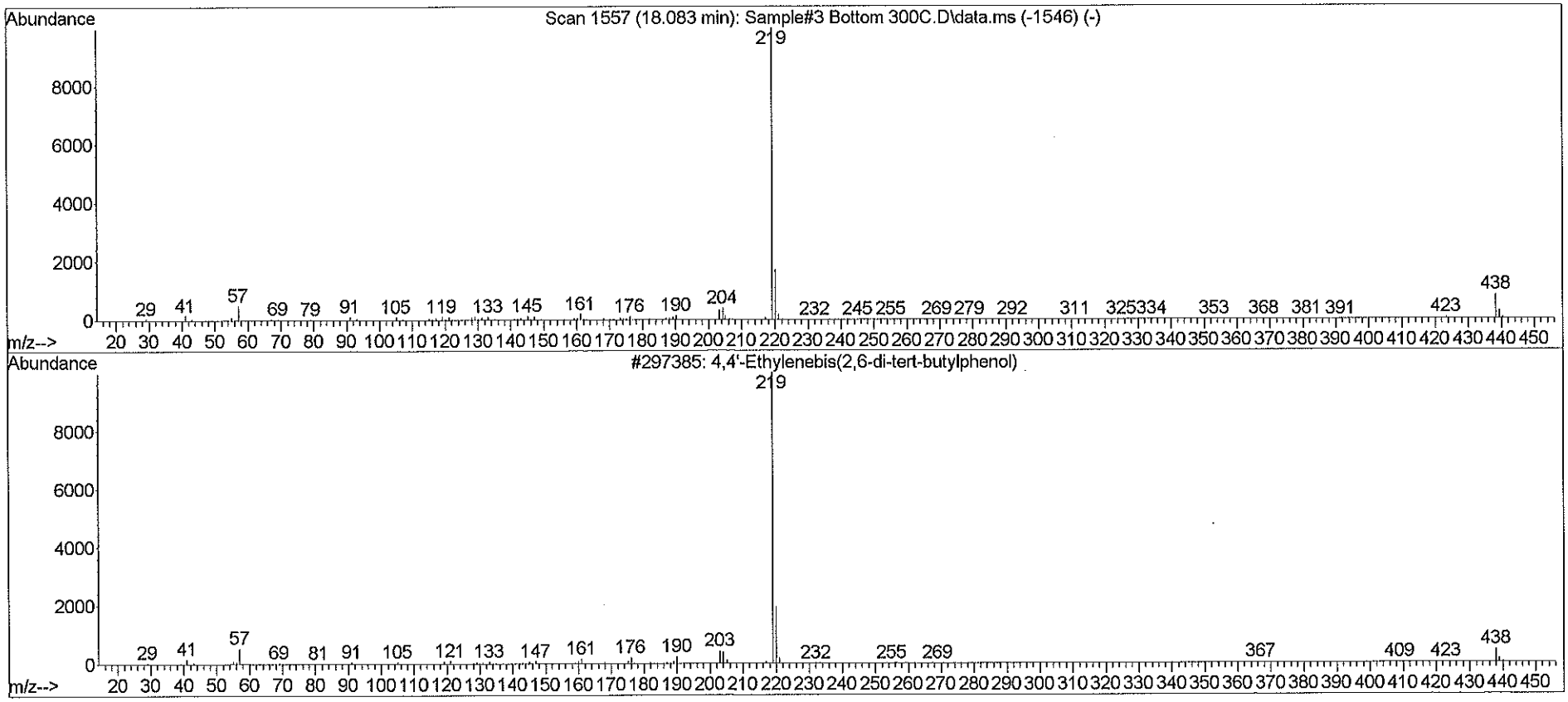
File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

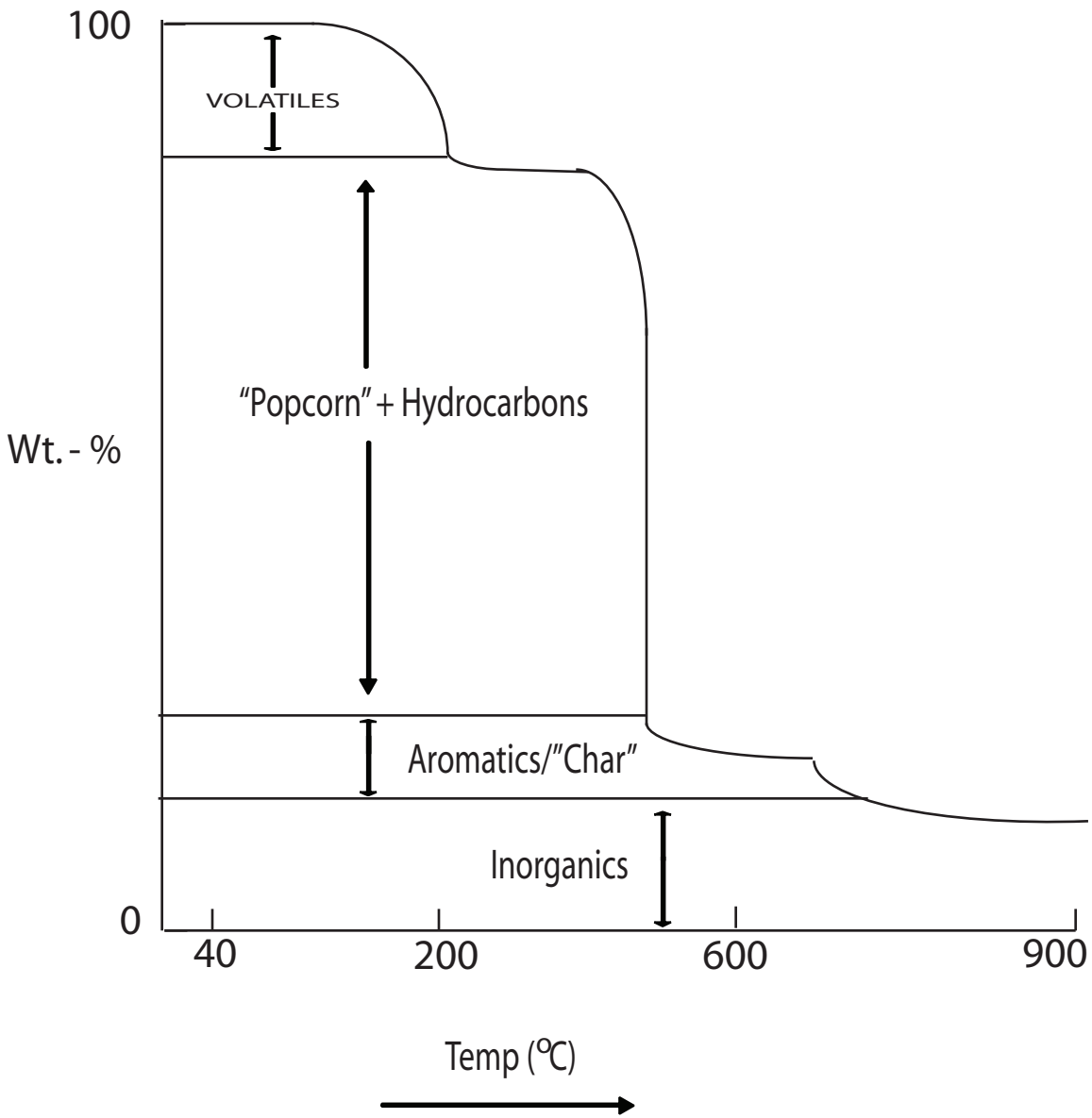


File :D:\DATA\ABTECH\Job 4987\Sample#3 Bottom 300C.D
Operator :
Acquired : 17 Aug 2007 14:04 using AcqMethod TDS 300 splitless cis 30_1 split.M
Instrument : Instrument #1
Sample Name:
Misc Info : UUF Long Beach C01414H
Vial Number: 1

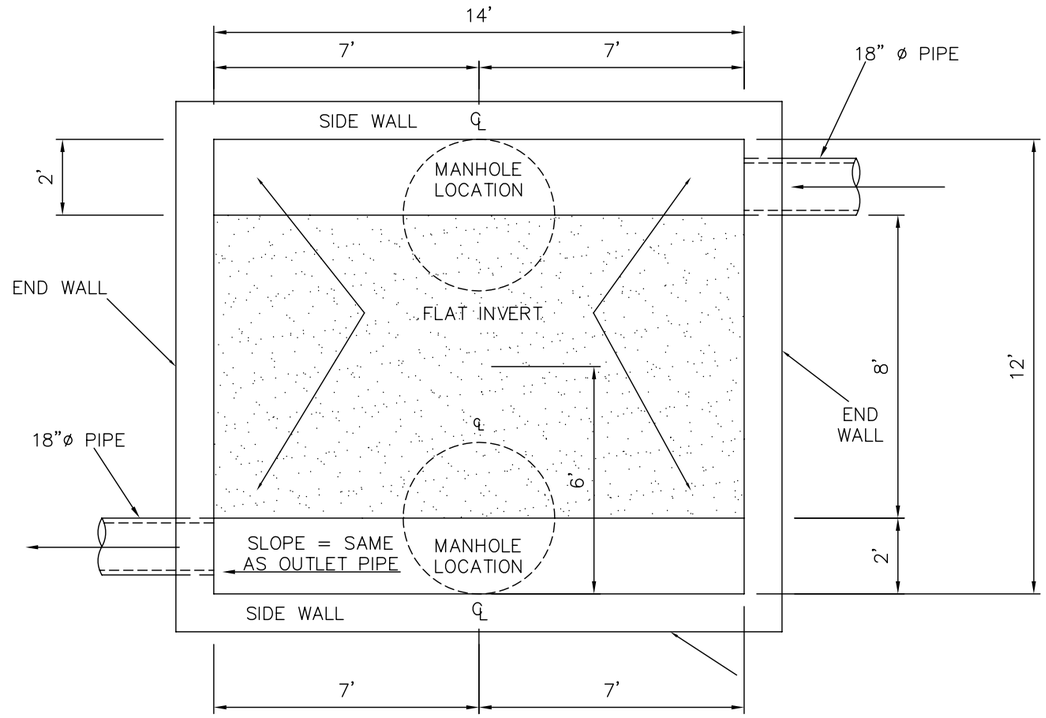


Library Searched : C:\Database\Wiley7Nist05.L
Quality : 90
ID : 4,4'-Ethylenebis(2,6-di-tert-butylphenol)



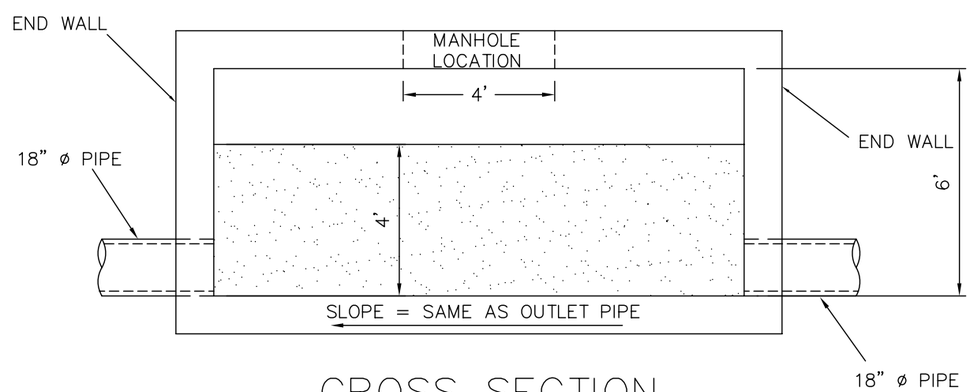

100
VOLATILES
"Popcorn" + Hydrocarbons
Wt. - %
Aromatics/"Char"
Inorganics
0
40
200
600
900
Temp (°C)

ATTACHMENT IV
(Stormwater Antimicrobial Treatment© (SWAT Diagram - SAMPLE)

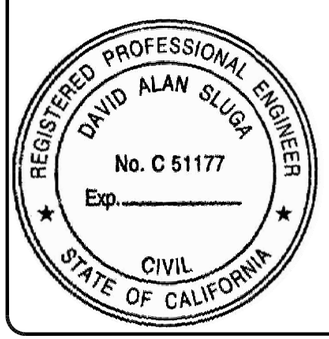


PLAN VIEW

FOR DETAILS NOT SHOWN
SEE SHEET 2



CROSS SECTION



PROJECT NAME: AQUARIUS
LOCATION: RIVERSIDE
LEFT TRANSVERSE FLOW SWAT

HYDROPHIX
Innovative Solutions for Clean Water

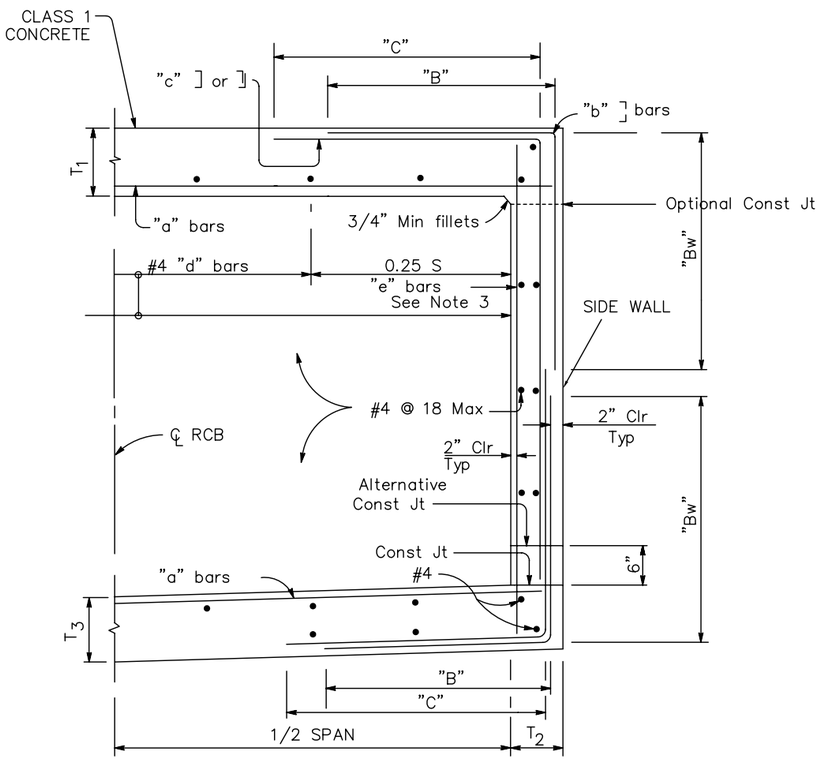
NO.	DATE	DESCRIPTION

REVISIONS

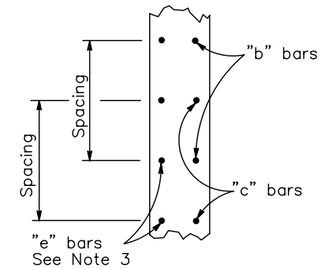
SCALE (FULL SIZE):	AS INDICATED
PROJECT ENGINEER:	DAVE SLUGA
DRAWN BY:	DURRAN FEWKES
DESIGNED BY:	DAVE SLUGA
CHECKED BY:	DUANE COOK
ISSUE DATE:	JUNE 1, 2007
PROJECT NO.:	

SHEET TITLE:

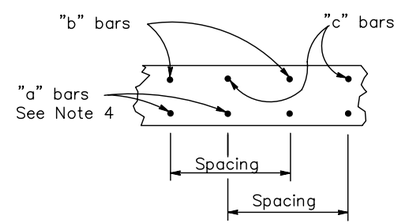
SHEET NUMBER:
1



TYPICAL SECTION

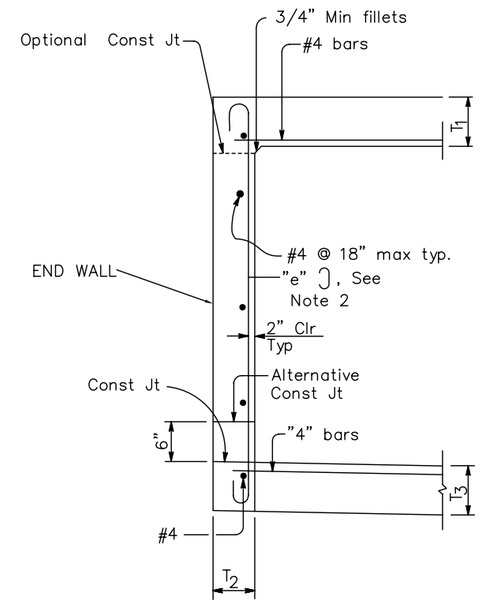


SIDE WALL



ROOF SECTION

INVERT SIMILAR

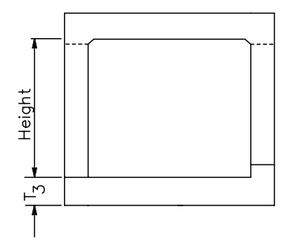


END WALL SECTION

SPAN			12'
HEIGHT			6'
Maximum Earth Cover			10'
Conc	Roof	T_1	8 1/2"
	Walls	T_2	8"
	Invert	T_3	8 1/2"
Reinforcement	Spacing		9"
	**"a"	Size Bar	#6
	"b"	Size Bar	#6
		Dimension "B" Feet-inches	3-1
		Dimension "B"w Feet-inches	6-6
	"c"	Size Bar #	#7
		Dimension "C" Feet-inches	4-4
	*"e"	Size Bar	#4
Quan-tities	Concrete	CF/LF	26.8
	Reinforcement	LB/LF	295

* See Note 3
** See Note 4

"d" bars, for earth covers up to and including 10'-0"	
Span	12'
Number	15

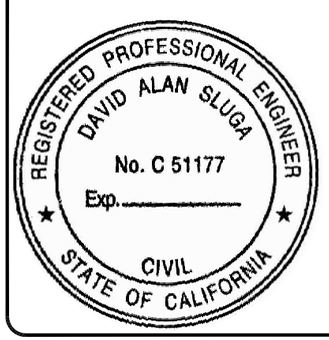


INVERT ELEV

FLAT INVERT

NOTES:

1. Quantities are approximate and for design purposes only.
2. It is permissible to eliminate the 180° hooks on every other bar.
3. "e" bars are at half spacing.
4. "a" bars are at half spacing.
5. For details not shown see sheet 3.
6. Class 1 concrete shall meet the specifications of Section 90, Portland Cement Concrete, of the Standard Specifications for the State of California, May 2006 edition.



PROJECT NAME: AQUARIUS
LOCATION: RIVERSIDE
LEFT TRANSVERSE FLOW SWAT

HYDROPHIX
Innovative Solutions for Clean Water

NO.	DATE	DESCRIPTION

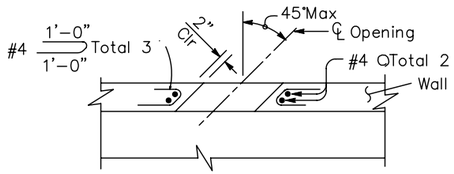
REVISIONS

SCALE (FULL SIZE):	AS INDICATED
PROJECT ENGINEER:	DAVE SLUGA
DRAWN BY:	DURRAN FEWKES
DESIGNED BY:	DAVE SLUGA
CHECKED BY:	DUANE COOK
ISSUE DATE:	JUNE 1, 2007
PROJECT NO.:	

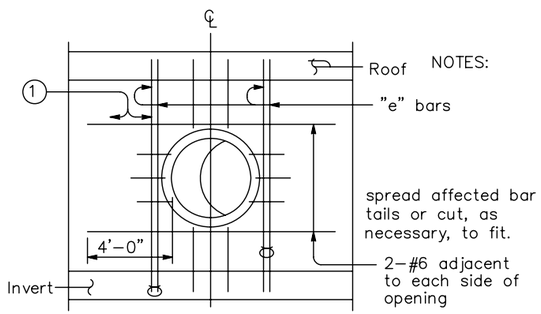
SHEET TITLE:

SHEET NUMBER:

2



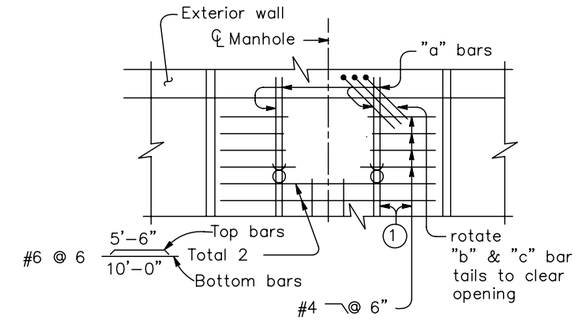
PART PLAN-SECTION



NOTES:

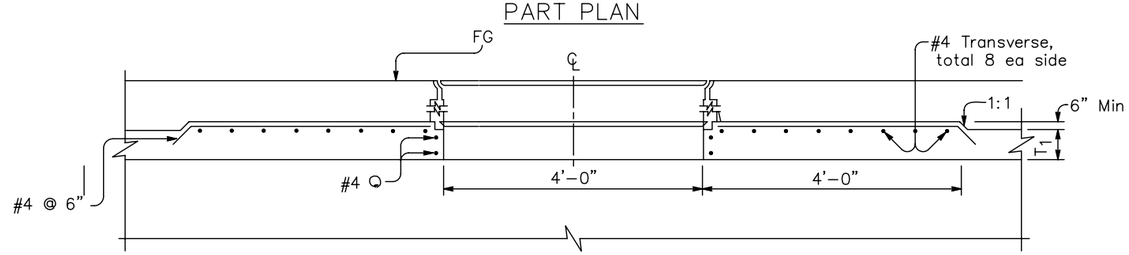
LONGITUDINAL SECTION

UTILITY OPENING-WALL



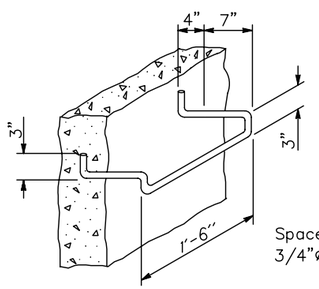
1. Adjacent to each side of the opening, place additional bars equilavent to half the interrupted main reinforcement.

PART PLAN



PART LONGITUDINAL SECTION

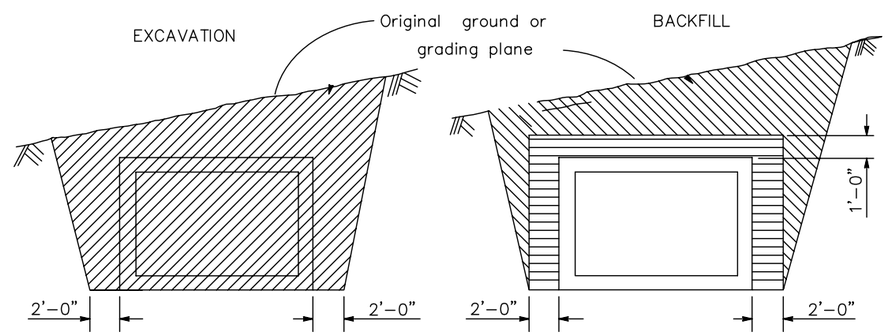
MANHOLE



Space ladder rung @ 12" O.C.
3/4"ø Galvanize after fabrication

BAR STEP

LADDER RUNG DETAILS



IN TRENCH

NOTES:

Slope or shore excavation sides as necessary.
Dimensions shown are minimum.
Structural backfill shall meet the specifications of Section 19, Earthwork, of the Standard Specifications for the State of California, May 2006 edition.
The difference in level of backfill (against outside walls) shall not exceed 2'-0".

LEGEND

- Structure Excavation (Culvert)
- Structure Backfill (Culvert) 95% relative compaction
- Roadway Embankment
- Original Ground

REGISTERED PROFESSIONAL ENGINEER
DAVID ALAN SLUGA
No. C 51177
Exp.
CIVIL
STATE OF CALIFORNIA

PROJECT NAME: AQUARIUS
LOCATION: RIVERSIDE
LEFT TRANSVERSE FLOW SWAT

HYDROPHIX
Innovative Solutions for Clean Water

NO.	DATE	DESCRIPTION

REVISIONS

SCALE (FULL SIZE):	AS INDICATED
PROJECT ENGINEER:	DAVE SLUGA
DRAWN BY:	DURRAN FEWKES
DESIGNED BY:	DAVE SLUGA
CHECKED BY:	DUANE COOK
ISSUE DATE:	JUNE 1, 2007
PROJECT NO.:	

SHEET TITLE:

SHEET NUMBER: 3

ATTACHMENT V
(Trash & Debris Guard© Diagram - SAMPLE)

ATTACHMENT VI
(City of Long Beach Contract)

ORIGINAL FILE COPY

CITY OF LONG BEACH

DEPARTMENT OF PUBLIC WORKS

333 West Ocean Boulevard • Long Beach, CA 90802

February 10, 2006

Mr. Glenn R. Rink, President, CEO
Abtech Industries, Inc.
4110 N. Scottsdale Rd, Suite 235
Scottsdale, AZ 85251

Subject: Notice to Proceed (NTP) to Furnish, Install and Monitor Smart Sponge and Ultra Urban Filter Technology catch basin inserts

Dear Mr. Rink:

Pursuant to a minute order of the City Council (Council) at its meeting held on May 4, 2004, the Council authorized the City Manager to enter a contract with Asbury Environmental Services (AES) for furnishing, installing and monitoring Smart Sponge and Ultra Urban Filter Technology catch basin inserts. On November 16, 2005 the contract was amended allowing assignment of contract rights and obligations to Abtech Industries, Incorporated.

Abtech Industries shall furnish specialized services set forth in the "Scope of Work", Exhibit A. Additionally, Abtech Industries will provide monitoring and data collection services as set forth in Exhibit B. The City shall pay for these services, at the cost-per-task detailed in Exhibit A, in an amount not to exceed $1,000,000. All invoices shall be addressed and submitted to Thomas F. Leary, Stormwater Program Officer, referencing Agreement 28831. Abtech Industries shall certify on the invoices that it has performed the services in full conformance with the Agreement and is entitled to receive payment.

This NTP authorizes Abtech outfit sites with Smart Sponge and Ultra Urban Filters technology and one year of monitoring (Exhibit A). **The total amount authorized by this NTP is not too exceed $241,100.**

Today I will meet with Duane Cooke, Project Manager to discuss this notice to proceed and to finalize site selection of the new units.

Sincerely,

Thomas F. Leary

Thomas F. Leary
Stormwater Program Officer

cc: Mark Christoffels, City Engineer
Lisa Peskay Malmsten, Deputy City Attorney
Scott Lines, Administrative Analyst

ORIGINAL

AGREEMENT

THIS AGREEMENT is made and entered, in duplicate, as of June 23, 2004 for reference purposes only, pursuant to a minute order of the City Council at its meeting held on May 4, 2004, by and between ASBURY ENVIRONMENTAL SERVICES, a California corporation, ("Contractor") with its principal place of business at 2100 N. Alameda, Compton, California 90222, and THE CITY OF LONG BEACH, a municipal corporation ("City.")

WHEREAS, pursuant to minute order the City Council authorized the City Manager to enter a contract with Contractor for furnishing, installing and monitoring Smart Sponge and Ultra Urban Filter Technology catch basin inserts ("the Work").

Robert E. Shannon
City Attorney of Long Beach
333 West Ocean Boulevard
Long Beach, California 90802-4664
Telephone (562) 570-2200

NOW, THEREFORE, in consideration of the mutual terms and conditions herein contained, the parties agree as follows:

1. Scope of Work.

A. Purchase and Installation. Contractor shall sell to the City and install as requested, and at the locations directed by, the City Engineer, Smart Sponge and Ultra Urban Filter Technology catch basin inserts ("the Units"). Such Units are described in a letter from Contractor dated April 2, 2004 and shown on five pages of drawings, all attached hereto as Exhibit "A." The installation of the Units is a Public Work and Contractor agrees to comply with all of the laws and regulations pertaining thereto, including but not limited to prevailing wage rates.

B. Monitoring and Data Collection. Contractor shall also: (a) provide monitoring at such times and locations as directed by the City Engineer ("Monitoring Event" or "Monitoring Events"), to the standards set forth on Exhibit "B" and (b) document data collection in a format approved by the City Engineer.

C. Maintenance. Contractor shall maintain the Units in good working condition without additional cost to City during the life of the contract. This obligation is

separate from the warranty provisions of Section 3, below.

D. Contractor acknowledges and agrees that no subcontractors will perform installation or maintenance of the units but that the units will be installed and maintained by Contractor's employees.

2. Payment. City shall pay to Contractor the sum of four hundred and fifty dollars ($455.00) per Unit, which includes tax, installation and all tasks identified in Section 1 above, not to exceed one million dollars. ($1,000,000) including applicable taxes. The foregoing price does not include federal excise tax from which municipalities are exempt, and none shall be charged to the City. Payment for the purchase and installation of the Units shall be made in due course of payments of the City after installation and receipt of invoices from Contractor. Invoices for monitoring may be submitted monthly or at less frequent intervals as the Contractor chooses, so long as the invoice for each event of monitoring is submitted within forty-five days of date of the monitoring event.

max 2,197 units

Robert E. Shannon
City Attorney of Long Beach
333 West Ocean Boulevard
Long Beach, California 90802-4664
Telephone (562) 570-2200

3. Warranty. Contractor guarantees for a period of six (6) months beginning on the date of installation of each unit that such unit is and shall be free from defects, and Contractor shall replace or repair it to the satisfaction of the City Engineer. Any repair or parts replaced during the guarantee period shall have the benefit of a full one (1) year warranty starting on the date of completion of the repair or replacement.

4. The term of this Agreement shall begin on the date it is fully executed and shall end at midnight on September 30, 2005.

5. Termination. This agreement may be terminated by City by giving notice to Contractor in the manner described below. Termination or expiration of this Agreement shall not terminate rights or liabilities which accrued or existed prior to termination or expiration.

6. Assignment. No portion of this Agreement nor any of the monies which may become due to Contractor hereunder may be assigned by Contractor without the prior written consent of the City.

7. Waiver. The acceptance of any item by the City or the payment of any

money by the City shall not operate as a waiver of any provision of this Agreement, or of any power of the City, or of any right to damages. The waiver of any breach or default hereunder shall not be held to be a waiver of any other or subsequent breach or default.

8. Audit. Because payment of a part of the consideration for this Agreement is made with State funds, the City and the State of California shall have the right at all reasonable times to examine, audit, inspect, review, extract information from, and copy all books, records, accounts, and other information relating to this Agreement.

9. Insurance. As a condition precedent to the effectiveness of this Agreement, Contractor shall obtain and maintain at its cost for the duration of this Agreement from insurance companies that are admitted to write insurance in California or from authorized non-admitted insurance companies that have ratings of or equivalent to A:VIII by A.M. Best Company:

(a) Commercial general liability insurance (equivalent in scope to ISO form CG 00 01 11 85 or CG 00 01 11 88) in an amount not less than One Million Dollars ($1,000,000) per occurrence and Two Million Dollars ($2,000,000) general aggregate. Such coverage shall include but not be limited to broad form contractual liability, cross liability, independent contractors liability, and products and completed operations liability. The City, its officials, employees and agents shall be named as additional insureds by endorsement (on the City's endorsement form or on an endorsement equivalent in scope to ISO form CG 20 10 11 85 or CG 20 26 11 85), and this insurance shall contain no special limitations on the scope of protection given to the City, its officials, employees and agents

(b) Workers' compensation insurance as required by the California Labor Code and employer's liability insurance in an amount not less than One Million Dollars ($1,000,000)

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City Attorney of Long Beach
333 West Ocean Boulevard
Long Beach, California 90802-4664
Telephone (562) 570-2200

per accident.

(c) Commercial automobile liability insurance (equivalent in scope to ISO form CA 00 01 06 92), covering Auto Symbol 1 (Any Auto), in an amount not less than Five Hundred Thousand Dollars ($500,000) combined single limit per accident.

Any self-insurance program, self-insured retention, or deductible must be separately approved in writing by City's Risk Manager or designee and shall protect the City, its officials, employees and agents in the same manner and to the same extent as they would have been protected had the policy or policies not contained retention or deductible provisions. Each insurance policy shall be endorsed to state that coverage shall not be reduced in coverage, nonrenewed, or canceled except after thirty (30) days prior written notice to City, and shall be primary and not contributing to any other insurance or self-insurance maintained by the City, the City, and their officials, employees and agents. Contractor shall notify the City within five (5) days after any insurance required herein has been voided by the insurer or cancelled by the insured. If this coverage is written on a "claims-made" basis, it must provide for an extended reporting period of not less than one year, commencing on the date this Agreement expires or is terminated, unless Contractor guarantees that Contractor will provide to the City evidence of uninterrupted, continuing coverage for a period of not less than three years, commencing on the date this Agreement expires or is terminated.

Contractor shall require that all subcontractors, consultants and sub-consultants which Contractor uses in the performance of services under the Agreement maintain insurance in compliance with this Section unless otherwise agreed in writing by City's Risk Manager or designee.

Prior to the start of performance under the Agreement, Contractor shall deliver to City certificates of insurance and required endorsements, including any insurance required of Contractor's subcontractors, consultants and sub-consultants for approval as

Robert E. Shannon
City Attorney of Long Beach
333 West Ocean Boulevard
Long Beach, California 90802-4664
Telephone (562) 570-2100

to sufficiency and form. The certificates and endorsements shall contain the original signature of a person authorized by that insurer to bind coverage on its behalf. In addition, Contractor shall, at least thirty (30) days prior to expiration of the insurance required hereunder, furnish to the City certificates of insurance and endorsements evidencing renewal of such insurance. City reserves the right to require complete certified copies of all policies of Contractor and Contractor's subcontractors, consultants and sub-consultants at any time. Contractor and Contractor's subcontractors, consultants and sub-consultants shall make available to the City all books, records and other information relating to the insurance coverage required herein during normal business hours.

Any modification or waiver of the insurance requirements herein shall only be made at the request of City and with the written approval of the City's Risk Manager or designee. Not more frequently than once a year, the City's Risk Manager or designee may require that Contractor, Contractor's subcontractors, consultants and sub-consultants change the amount, scope or types of coverages required herein if, in his or her sole opinion, the amount, scope, or types of coverages herein are not adequate.

The procuring or existence of insurance shall not be construed or deemed as a limitation on liability relating to Contractor's performance of services or as full performance of or compliance with the indemnification provisions herein.

10. Benefit. This Agreement is intended by the parties to benefit themselves only and is not in any way intended or entered for the purpose of creating any benefit or right of any kind for any person or entity that is not a party to this Agreement.

11. Non-Discrimination. In connection with performance of this Contract and subject to applicable rules and regulations, Contractor shall not discriminate against any employee or applicant for employment on the basis of race, religion, national origin, color, age, sex, sexual orientation, AIDS, AIDS related condition, handicap, disability, or veteran status. Contractor shall ensure that applicants are employed, and that employees are treated during their employment without regard to these bases. Such actions shall include but not be limited to employment, upgrading, demotion, transfer, recruitment, layoff,

Robert E. Shannon
City Attorney of Long Beach
333 West Ocean Boulevard
Long Beach, California 90802-4664
Telephone (562) 570-2200

termination, rates of pay and selection for training. It is the policy of the Board to encourage the participation of Disadvantaged, Minority and Women-owned Business Enterprises and the Board encourages Contractor to use its best efforts to carry out this policy in the award of all subcontracts.

12. This Agreement shall be governed by and construed in accordance with the laws of the State of California except those provisions relating to conflicts of laws.

13. Attorneys Fees. If there is any legal proceeding between the parties to enforce or interpret this Agreement or to protect or establish any rights or remedies hereunder, the prevailing party shall be entitled to its costs and expenses, including reasonable attorney's fees.

14. Prevailing Wage Rates. Contractor is directed to the prevailing wage rates which must be paid for the installation of Units.

15. Permits; Construction Bond. Contractor understands that it may be required to obtain a permit from the City of Long Beach to perform its obligation under this agreement , and that it is responsible for fulfilling the terms and conditions of such permit separate from its obligations under this agreement, at its own expense. Contractor agrees to obtain a construction bond in the amount of $100.000.00 for the benefit of the City as a condition of the issuance of such permit.

16. Compliance With All Laws and Regulations. Contractor is responsible for knowing, understanding and complying with all applicable laws and regulations related to its performance under this Agreement, including but not limited to the Clean Water Act and related state and local laws and regulations.

17. Indemnification. To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold the City harmless from all claims for bodily injury and property damage, including resulting loss of use that may arise from the performance of the Work, arising from or attributable to the negligence or willful misconduct of the Contractor or anyone employed directly or indirectly Contractor or by anyone for whose acts any of them may be liable. The Contractor shall not be required to defend, indemnify

Robert E. Shannon
City Attorney of Long Beach
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or hold harmless the City for any acts, omissions or negligence of the City or its employees, agents or separate contractors.

18. Notice. Any notice desired or required shall be in writing and personally delivered or deposited in the U.S. Postal Service, first class, postage prepaid, addressed to the Contractor at the address first stated herein, and to the City at 333 W. Ocean Blvd., 13th Floor, Long Beach CA 90802 attention: City Manager. Change of address shall be given as provided herein for notices. Notice shall be effective on the date of mailing or on the date personal service is obtained, whichever first occurs.

19. Entire Agreement. This Agreement, including all exhibits, constitutes the entire understanding between the parties and supersedes all other agreements, oral or written, with respect to the subject matter herein.

20. Governing Law. This agreement shall be subject to and interpreted under the laws of the State of California.

THE PARTIES have executed this Agreement as of the date first provided above.

Robert E. Shannon
City Attorney of Long Beach
333 West Ocean Boulevard
Long Beach, California 90802-4664
Telephone (562) 570-2200

ASBURY ENVIRONMENTAL SERVICES
a California corporation

7-9-04, 2004 By [signature]
Title: President

7-9-04, 2004 By [signature]
Title: Vice President

"Contractor"

CITY OF LONG BEACH, a municipal corporation

7.16.04, 2004 By [signature]
City Manager

"City"

The foregoing Agreement is hereby approved as to form this

13th day of July, 2004.

ROBERT E. SHANNON, City Attorney

By _____
Deputy

City Attorney of Long Beach
333 West Ocean Boulevard
Long Beach, California 90802-4664
Telephone (562) 570-2200

LPM:et
05-21-04; 6/10/04
04-01908
L:\APPS\CityLaw32\WPDOCS\D021\P003\00060681.WPD

"Exhibit A"

ORIGINAL FILE COPY

ASBURY ENVIRONMENTAL SERVICES

April 2, 2004

Tom Leary, Stormwater Program Officer
City Of Long Beach
Department of Public Works
333 West Ocean Blvd
Long Beach Ca, 90802

RE: COST PROPOSAL FOR PURCHASE, INSTALLATION OF SMART SPONGE AND ULTRA URBAN FILTER TECHNOLOGY AND ONE YEAR OF MONITORING INSERT COSTS.

Dear Mr. Leary

Thank you for the opportunity to submit to the City of Long Beach a cost proposal for the purchase, installation of Smart Sponge and Ultra Urban Filters technology and one year of monitoring. Asbury Environmental Services (AES) is the exclusive marketer of these catch basin inserts in California, is pleased to provide to you a low cost, comprehensive solution to the problems associated with bacteria, trash, sediment, and hydrocarbon pollutant runoff through the storm drain system.

Price below is based on product and service needs provided to AES by the City Of Long Beach.. Pricing is based on outfitting 400 sites that average 4 feet in length and will require 3 inserts per catch basin.

Pricing for Bacteria Media

400 Sites	$400.00 X 1200inserts	$480,000.00

Pricing for One Year of Monitoring

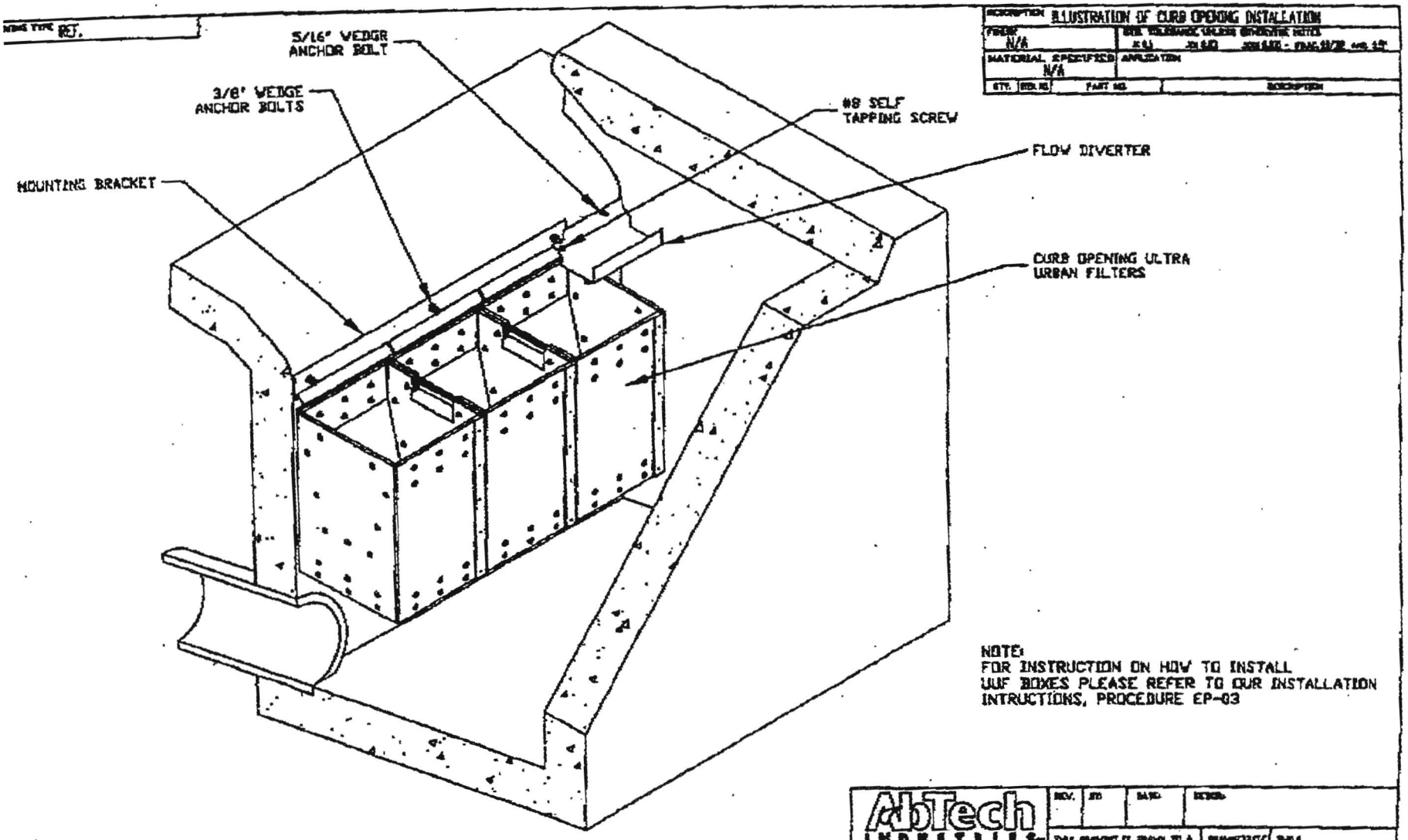
1200 Inserts	$100.00 X1200inserts	$120,000.00 per year

In summary, the average per unit price, over the term of this contract is $455.00each. If you should have any questions please do not hesitate to contact me at 310-678-8897.

Sincerely,

Brian Martello

ULTRA–URBAN® FILTER CURB OPENING SERIES "CO"



DESCRIPTION: ILLUSTRATION OF CURB OPENING INSTALLATION

FINISH: N/A

MATERIAL SPECIFIED: N/A

APPLICATION

QTY.	REV. NO.	PART NO.	DESCRIPTION

NOTE:
FOR INSTRUCTION ON HOW TO INSTALL
UUF BOXES PLEASE REFER TO OUR INSTALLATION
INTRUCTIONS, PROCEDURE EP-03

AbTech INDUSTRIES
SCOTTSDALE ARIZONA

REV.	BY	DATE	REVISION

DATE: 08/01

SCALE: 0050BT01

CO1414N

TYPE PART

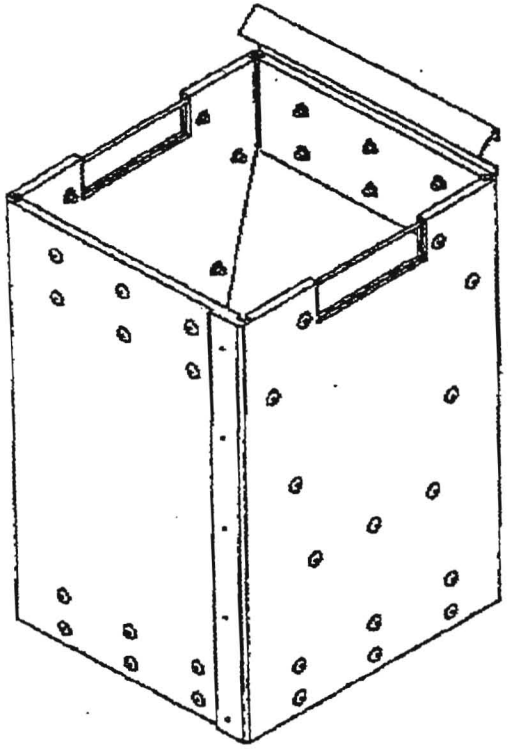
DESCRIPTION 13' X 14' X 22.5' UGF COMPLETE ASSEMBLY

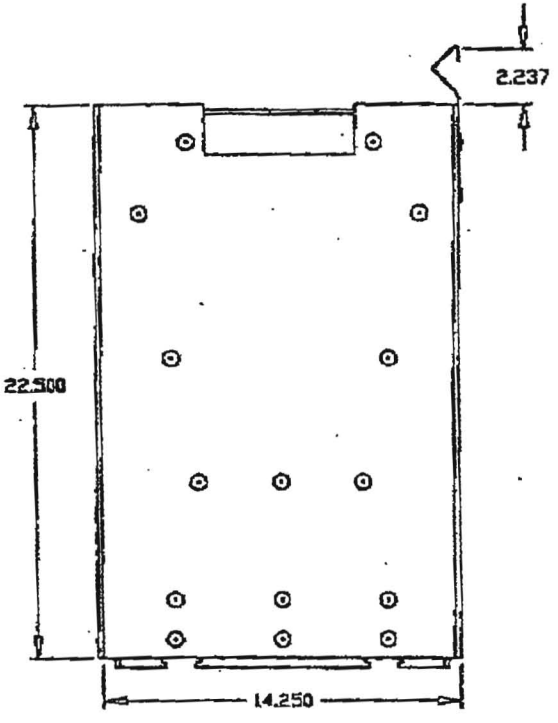
FINISH NONE

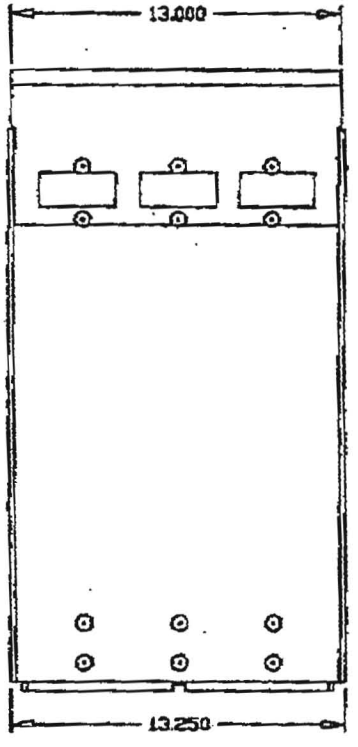
MATERIAL SPECIFICATION

APPLICATION CO1414N

QTY. | PART NO. | DESCRIPTION







AbTech INDUSTRIES
SCOTTSDALE ARIZONA

REV. | BY | DATE | REVISION

THIS DRAWING IS DRAWN TO A SCALE OF 1:4, THE BORDER IS SCALED UP 1 TIMES TO FIT

DRAWN BY DATE 6/18/01

SIZE 00586T01

CO1414H

REF.

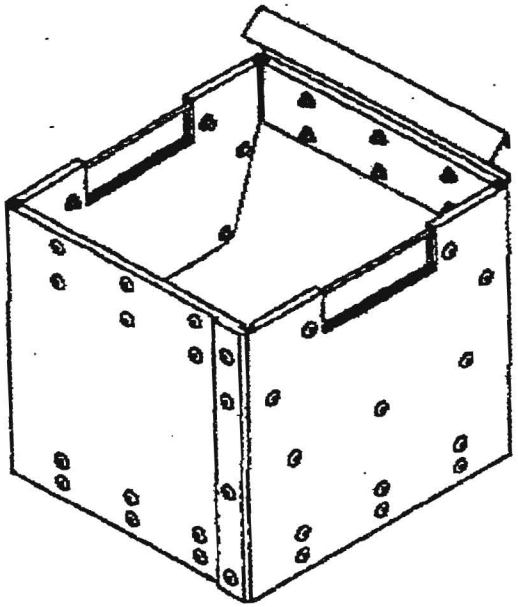
DESCRIPTION 13" X 14" X 13" UNF

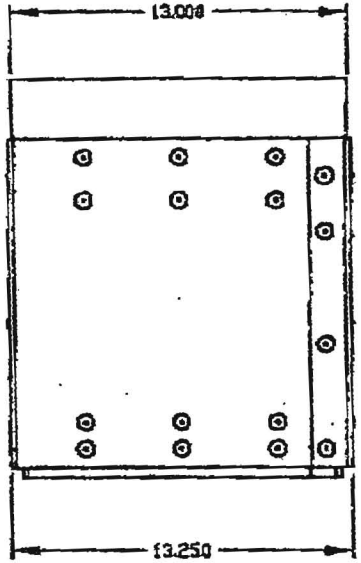
FINISH NONE

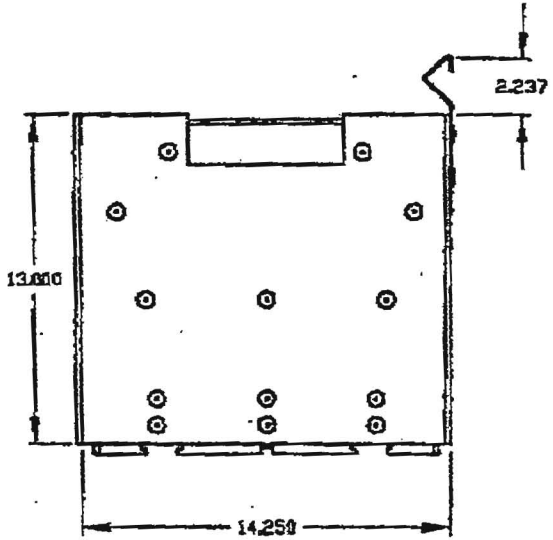
MATERIAL SPECIFIED N/A

APPLICATION CO1414H

QTY. | REV. | PART NO. | DESCRIPTION







AbTech INDUSTRIES Inc.
SCOTTSDALE ARIZONA

REV. | BY | DATE | REVISION

THIS DRAWING IS DRAWN TO A SCALE OF 1:4, THE NUMBER IS SCALED UP 4 TIMES TO FIT

DRAWN BY DATE 7/01

PART 00606701

AbTech CO1414 Ultra Urban Filter Installation Instructions

1. Installation of the Mounting Bracket

The location and number of Ultra Urban Filter (UUF) box(es) in each catch basin should be determined by the and user, based on actual flow rates and characteristics of the drain.

- Measure width of the drain opening and the depth of the drain inlet.
- Determine the number of UUF boxes to be installed.
- Determine the length of the bracket, number and location of the holes. Table 1 is meant to provide suggestions.
- Users should follow their own safety protocols and confined space entry procedures.
- Setup the appropriate barriers and traffic control equipment. Remove the drain inlet cover. Make sure the drain is clean and clear of debris.

SUGGESTED LENGTH OF MOUNTING BRACKET AND LOCATION OF HOLES

Number of Boxes	1 to 2	3 to 5	6 - 7	8 to 10
Length of Bracket	Number of boxes times 12.75"	Number of boxes times 13.00"	Number of boxes times 13.125"	Number of boxes times 13.125"
Anch. with	2	3	4	5
Location of Anch. Bolts	3" from the edges	6" from the edges + one in the middle	6" and 30" from the edges	12" and 36" from the edges + 1 (middle)

Table 1.

- Use gloves when handling or installing mounting bracket, sharp edges can cause injuries.

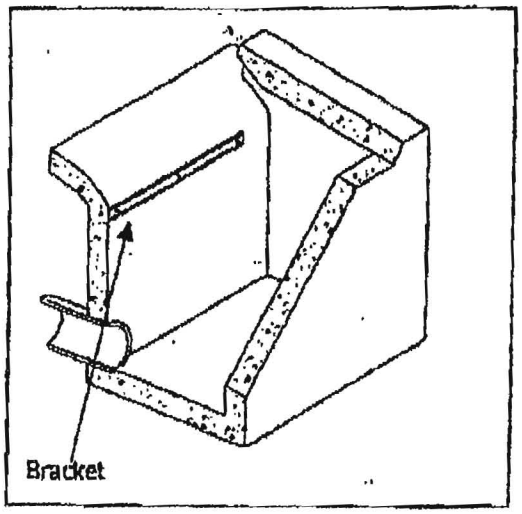


Figure 1.

- Cross-sectional view shown in Figure 2 gives the suggested elevation of anchor bolts and the interference between the bracket's flange and the inlet radius.

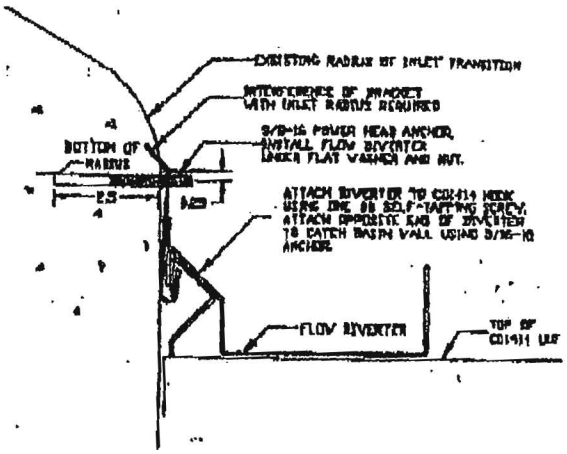


Figure 2.

- UUF Box(es) should be installed so that there is approx. 2"-3" clearance between the bottom of the catch basin and the bottom of the box.
- Use 3/8-16 wedge anchor bolts, 2.25" long, to attach Mounting Bracket to catch basin wall.

2. Installation of the UUF Boxes

- UUF boxes should be installed so that the flow through inlet-outlet pipes is not affected.
- Prior installation, remove necessary Over-Flow Cut-Outs to provide openings for lateral overflow between boxes.

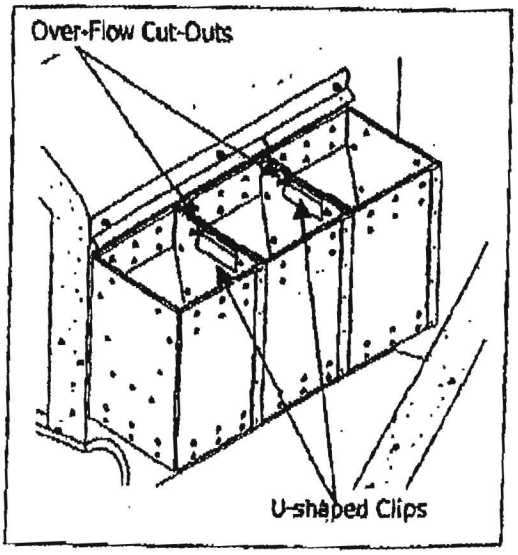


Figure 3.

- Install U-shaped Clips over the Over-Flow Cut-Outs as shown in figure 3.

3. Installation of the Flow Diverter (FD)

- When determining the length of the Flow Diverter, an additional 2" must be added to the length to allow over-flow the UUF box.
- Table 2 is intended to provide suggested number and location for the anchor bolts.
- Users are encouraged to develop and follow their own procedures and safety protocols.
- At approximately 1.5" from the overhanging edge, vertically cut the higher side of the Flow Diverter to approximately 3/16" below the first bend.

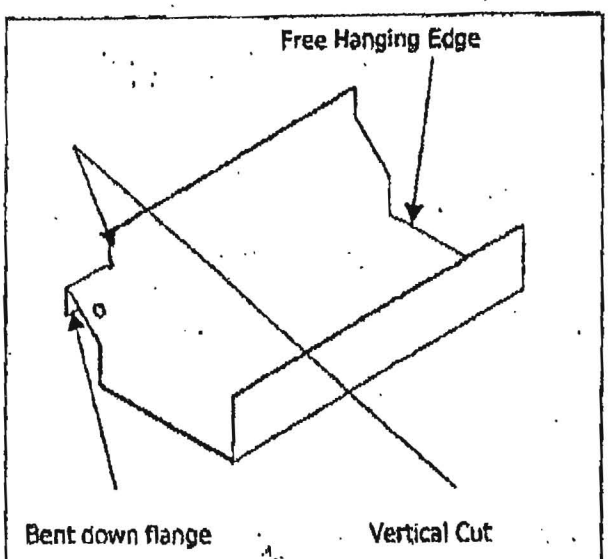


Figure 4.

- Use gloves when handling and installing the Flow Diverter, sharp edges can cause injuries.
- Bend down the cut portion of the flange, as shown in figure 4.
- The bent down flange of the Flow Diverter should engage the bracket and sit on top of the hook of the UUF box as shown in figures 2 and 5.
- Use 1/4-20 Wedge Anchor bolts, 2.25" long to secure the Flow Diverter to the catch basin wall.

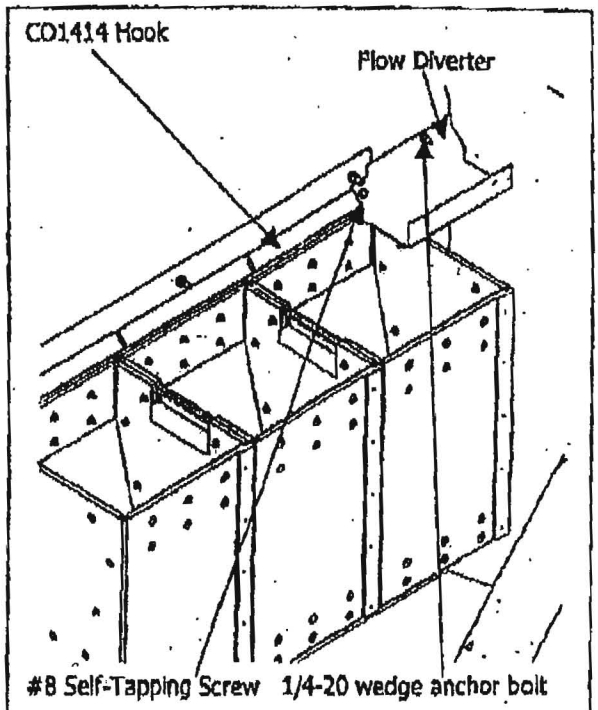


Figure 5.

- Secure Flow Diverter to CO1414 Hook using one #8 Self-Tapping screw as shown in figure 5; drilling 3/16" clearance hole may be required.
- Clean up the area and make sure that tools and debris have been removed from the catch basin. Replace the cover to the drain and secure as needed.

SUGGESTED LOCATION OF THE HOLES FOR FLOW DIVERTERS (FD)

FD Length	Less than 3'	3' to 5'	5' to 7'	7' to 11'
Number of Anch. Bolts	1	2	2 - 3	3 - 4
[illegible]ion of Anch. Bolts	At 3" from the free hanging edge (FH)	At 3" from the (FH) edge and one in the middle	At 3" from the (FH) edge and approx. every 3'	At 3" from the (FH) edge and approx. every 3'

Table 2.

"Exhibit B"

AES ASBURY ENVIRONMENTAL SERVICES

DRAFT

1. Urban Runoff Sampling Procedures

This sampling program is aimed at measuring the effectiveness of this Best Management Practice (BMP) by quantifying the amount of bacterial pollutants removed from urban runoff in the areas of the storm drain system identified in this pilot study. Samples ~~will be collected~~ and tested over a period of twenty-four (24) months beginning in October 2004 for the following pollutant of concern: bacteria.

OCT. 06

Procedure:

1. When a rain event of ~~greater than or~~ equal to 0.25 inches is predicted, the AES Sampling Coordinator will notify personnel assigned to sample collection and inform them to prepare for sampling.
2. The lab will be notified by AES when samples have been taken and that they will be delivered within 8-10 hours for lab analysis.
3. As the storm approaches, personnel will report to the site in preparation for the first flush.
4. Once there is flow, first flush samples will be collected from the inlet and outlet points three times during the first flush (0:00,0:15,0:30). The effluent flow (EF) sample will be collected at one (1) thru three (3) minutes after collecting the inlet flow (IF) Sample. Additionally, after the inlet/outlet sampling has been completed one sample will be taken at the end of each storm drain pipe tributary to the Colorado Lagoon.

Refer to the table below for sampling schedule:

Time	Container Type	Sample Volume	Constituents
Start of runoff 0:00	Plastic	125 ml	Fecal Coliform; E. Coli; Entrococcus

Sampling to be repeated according to the above schedule at, 0:15, 0:30, 1:00, 1:30, 2:00, 2:30 (depending on the actual rain duration).

5. At the inlet point[1], samples are to be scooped off from the gutter runoff. At the outlet point, after the runoff passes through the filter media of the CB insert and filter units, grab samples will be collected by hand within one minute of the influent sampling. Grab sampling will be done at the end-of-pipe locations.
6. Samples to be labeled with date, time, location, and constituents.
7. Samples should be stored in the ice chest, packed with ice, and delivered along with the chain of custody to the Laboratory.

2. Gather Equipment

1. Vehicle
2. Disposable gloves
3. Ice chest
4. Ice (necessary to transport sample at 4°C.)
5. Sampling bottle for indicator bacteria (125-mL, autoclaved)

on 10 locations

[1] Approximately 10% of the pilot study area IF/EF sites will be randomly selected and tested during each qualifying storm event.

10 Locations
20 Samples

6. Sampling labels
7. Field collection sheet
8. Indelible marker
9. Nylon rope (25 ft. of 1/8 in. line)
10. Sampling weight (4-8 oz.)

3. Sampling Location

Manual sampling will be performed for the collection of bacteria samples. Grab samples will be collected from the incoming surface flow prior to contact with Smart Sponge® polymer and effluent flow after contact with treatment unit. The influent flow will be collected with a sterilized plastic bottle. The effluent sample will be collected from the outlet point and at the end-of-pipe at each of the outfall pipes tributary to the Colorado Lagoon with a sampling pole. The laboratory bottle will be attached to the sample pole and lowered into the drain for effluent collection. Traffic controls must be considered and safety measures in place prior to sampling. Follow all safety rules when working in or near the public right of way.

4. Sample Scheduling

The coordination of resources for proper sample receiving and testing will be such that sample arrival times will be arranged to allow enough time for lab personnel to properly begin the Idexx Quanti-tray testing for total coliform, E-Coli, and Enterococcus.

5. Sampling

Sampling will be conducted from the street level or in the drain depending on the drain size. Sampling individuals must handle all sample bottles carefully to avoid cross-contamination. When on-site, the general plan for sampling a drain is:

a) Label the bottles with the waterproof labels using an indelible marker.
b) Collect grab sample bacterial testing:
   - Use the nylon line and sampling weight to make a rope loop around the 125-mL sampling bottle for lowering into the wet well. The weight is necessary to overcome the buoyancy of the empty bottles.
   - Record collection time.
   - Place sample on ice in ice chest.
c) Deliver samples for laboratory testing:
   - Drive to the EMD Microbiology Lab at:
     12000 Vista Del Mar – Pregerson Building, 4th floor.
   - Relinquish samples to lab personnel with the appropriate signatures at the bottom of the field collection sheet.
   - Leave the signed field collection sheet with lab personnel for sample login and tracking.
   - Fill out Chain of Custody (COC) form provided by WPD.
   - For bacterial testing, request that the 125-mL bottle be tested for total coliform, E-Coli, and Enterococcus using the Chromogenic method.

6. Dry weather sampling

UA Clinic Internal Lab

Simulated dry weather sampling may be necessary during this period in order to reach a statistically meaningful number of samples. A flow rate of fifteen gallons (30/gallons per minute) shall be maintained during through out the sampling process.

7. Safety

When sampling, be alert to the potential dangers around you. Pay attention to your footing. Use common sense when determining whether a sampling situation is safe or not. If conditions are not safe, do not sample the site. Record this information on the field collection sheet.

8. Maximum Number of Sampling Events

A maximum of 12 rainfall events over the 24 month trial period may be sampled. The rainfall depth for the event, measured at the site, must be greater than or equal to 0.25 inches. Grab samples will be collected for the influent, effluent and end-of-pipe locations over the duration of the runoff event. There shall be a minimum of 72 hours between qualified sampling events. Rain events that are considered for sampling are: 1) if 0.25 inch of rain or greater is predicted, and 2) if there is a dry period of at least 72 hours preceding the rain event to increase the likelihood that pollutant levels would be detectable.

9. Decontamination

Decontamination of the sampling equipment will be necessary so that no residual concentrations of contaminants exist within sample bottles and other equipment. Use sterilized bottles.

Sh-/revised 01/15/2004

AES Catch Basin Inserts
Monitoring Data Sheets
(City of Long Beach)

Date of Cleaning	Record #	Contr. #	Thomas Guide Pg. & Gr.	City	Attach Installation Location	Volume of Litter to the Quarter Gallon (excluding sediment & vegetation	Weight of Litter to the Ounce (excluding Sediment & vegetation	Volume of Sediment & Vegetation to the Quarter Gallon (excluding litter)	Weight of Sediment & Vegetation to the Ounce (excluding litter)	Land Use
					LAND USE TOTALS	0	0	0	0	

Sample Reporting Form