

United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

***Building 616
Main Post***

**NJDEP UST Registration No. 081533-90
NJDEP Closure Approval Letter Dated October 7, 1994
Spill Case No. 94-12-8-1040-10**

**VOLUME 1 OF 3
TEXT, TABLES, APPENDICES A THROUGH F**

February 1997

SMITH
TECHNOLOGY CORPORATION

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**UNDERGROUND STORAGE TANK
CLOSURE AND SITE INVESTIGATION REPORT**

BUILDING 616

MAIN POST

**NJDEP UST REGISTRATION NO. 081533-90
NJDEP CLOSURE APPROVAL LETTER DATED OCTOBER 7, 1994
SPILL CASE NO. 94-12-8-1040-10**

FEBRUARY 1997

**PROJECT NO.: 09-5004-08
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PREPARED FOR:

**UNITED STATES ARMY, FORT MONMOUTH, NEW JERSEY
DIRECTORATE OF PUBLIC WORKS
BUILDING 167
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EXECUTIVE SUMMARY

UST Closure

On December 7, 1994, a steel underground storage tank (UST) was closed by removal in accordance with the New Jersey Department of Environmental Protection (NJDEP) at U S Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No 081533-90, was located immediately adjacent to Building 616 in the Main Post area of U S Army, Fort Monmouth. UST No 081533-90 was a 1,000-gallon No 2 fuel oil UST. The UST fill port was located directly above the tank. The tank closure was performed by Cleaning Up The Environment Inc (CUTE).

Site Assessment - Soil

The site assessment was performed by U S Army personnel in accordance with the NJDEP *Technical Requirements for Site Remediation* (N J A C 7 26E) and the NJDEP *Field Sampling Procedures Manual*. Soils surrounding the tank were screened visually and with air monitoring equipment for evidence of contamination. Following removal, the UST was inspected for corrosion holes. Several holes were noted in the UST, and evidence of potentially contaminated soils were observed surrounding the former tank.

On December 9, 1994, approximately 18 cubic yards of potentially contaminated soil were removed from the excavation. An additional 180 cubic yards of potentially contaminated soils were removed on December 28, 1994.

On December 29, 1994, following removal of approximately 198 cubic yards of potentially contaminated soil, post-excavation soil samples A, B, C, D, and DUP D were collected from a total of four (4) locations along the sidewalls of the UST excavation, immediately above groundwater. The samples were collected at a depth of 7.5 feet below ground surface (bgs). Groundwater was present at approximately 8.0 feet bgs. Sample F was collected along the former piping length of the excavation, which was approximately 2 feet in length. The piping sample was collected at a depth of 1.0 foot bgs. All samples were analyzed for total petroleum hydrocarbons (TPHC).

On January 27, 1995, one (1) post-excavation soil sample (sample D) was collected from the west sidewall, in the vicinity of sample D, and was analyzed for volatile organic compounds plus 15 tentatively identified compounds (VOCs). The sample was collected at a depth of 7.0 feet bgs. Because the excavation was left open for more than two weeks, the sample was collected by backhoe at approximately 2 feet into the sidewall.



Findings - Soil

All post-excavation soil samples collected from the UST excavation and from below piping associated with the former UST at Building 616 contained TPHC concentrations below the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 milligrams per kilogram (mg/kg) (N J A C 7 26D and revisions dated February 3, 1994). Samples A, B, C, and F contained levels of TPHC ranging in concentration from 76.8 mg/kg to 244.0 mg/kg. Samples D and DUP D contained TPHC concentrations of 8,680.0 mg/kg and 6,700.0 mg/kg, respectively.

Due to excessive TPHC results from the west sidewall of the UST excavation, the area surrounding sample location D was resampled on January 27, 1995. The sample was analyzed for volatile organic compounds plus 15 tentatively identified compounds (VOCs). The sample contained methylene chloride at 0.10 mg/kg, acetone at 0.27 mg/kg (both known laboratory contaminants), 2-butanone at 0.54 mg/kg, ethylbenzene at 3.2 mg/kg, and total xylenes at 5.2 mg/kg. All of the detected VOCs were below the most stringent NJDEP soil cleanup criteria.

Site Restoration

Following receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with a combination of uncontaminated excavated soil and certified clean fill. The excavation site was then restored to its original condition.

Site Assessment Quality Assurance

The sampling and laboratory analysis conducted during the site assessment were performed in accordance with Section 7.26E-2.1 of the *Technical Requirements for Site Remediation*.

Site Assessment - Groundwater

In response to the observation of potentially contaminated soil near the shallow water table, one shallow overburden monitoring well (MW-1) was installed at the Building 616 area on August 17, 1995. It was installed approximately 27 feet south of Building 616 in the verified downgradient direction. It was screened in the 4- to 14-foot depth interval, across the water table, which is approximately 6 feet below ground surface.

On November 27, 1995 and December 18, 1995, MW-1 was sampled for volatile organic compounds calibrated for xylene plus 15 tentatively identified compounds (VOCs), and semivolatile organic compounds plus 15 tentatively identified compounds (SVOCs). Sampling and analysis were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements For Site Remediation*.



Findings - Groundwater

All groundwater analytical results were either below the detection limit or in compliance with the New Jersey Ground Water Quality Criteria (GWQC). No product or sheen was observed in MW-1 on either of the sampling dates.

The depth to the water table was 4.82 feet below grade on November 27, 1995, and 4.27 feet below grade on December 18, 1995.

Conclusions and Recommendations

Based on the post-excavation soil sampling results, soils with TPHC concentrations exceeding the NJDEP soil cleanup criteria for total organic contaminants of 10,000 mg/kg, do not exist in the former location of the UST or associated piping.

Based on the analytical results of the groundwater samples collected on November 27, 1995 and December 18, 1995, groundwater quality at the Building 616 UST closure site complies with the New Jersey Groundwater Quality Criteria for VOCs and SVOCs.

No further action is proposed in regard to the closure and site assessment of UST No. 081533-90 at Building 616.



1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No 081533-90, was closed at Building 616 at U S Army Fort Monmouth, Fort Monmouth, New Jersey on December 7, 1994. Refer to site location map on Figure 1. This report presents the results of the DPW's implementation of the UST Decommissioning/Closure Plan submitted to the NJDEP on September 2, 1994. The plan was approved on October 7, 1994. The UST was a steel 1,000-gallon tank containing No. 2 fuel oil.

Decommissioning activities for UST No 081533-90 complied with all applicable Federal, State and Local laws and ordinances in effect at the date of decommissioning. These laws included but were not limited to N J A C 7 14B-1 et seq, N J A C 5 23-1 et seq, and Occupational Safety and Health Administration (OSHA) 1910 146 & 1910 120. All permits including but not limited to the NJDEP-approved Decommissioning/Closure Plan were posted onsite for inspection. CUTE Inc, the contractor that conducted the decommissioning activities, is registered and certified by the NJDEP for performing UST closure activities. Closure of UST No 081533-90 proceeded under the approval of the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST). The NJDEP-BUST closure approval and signed certifications for UST No 081533-90 are included in Appendices A and B, respectively.

Based on an inspection of the UST, field screening of subsurface soils and analytical results of collected soil samples, the DPW has concluded that an historical discharge was associated with the UST and associated piping. On December 8, 1994, a spill was reported to the NJDEP "Hotline" for UST No 081533-90 and was assigned Spill Case No 94-12-8-1040-10. This spill case number was also assigned to building 686.

This UST Closure and Site Investigation Report has been prepared by Smith Technology Corporation. The applicable NJDEP-BUST regulations at the date of closure were the *Interim Closure Requirements for Underground Storage Tank Systems* (N J A C 7 14B-1 et seq September 1990 and revisions dated November 1, 1991).

This report was prepared using information required at the time of closure. Section 1 of this UST Closure and Site Investigation Report provides a summary of the UST decommissioning activities. Section 2 of this report describes the site investigation activities. Conclusions and recommendations, including the results of the soil sampling investigation, are presented in the final section of this report.

**U.S. Army
Department of Public Works
Fort Monmouth, New Jersey**



Figure 1
Site Location Map
Building 616

1.2 SITE DESCRIPTION

Building 616 is located in the central portion of the Main Post area of Fort Monmouth, as shown on Figure 1. UST No. 081533-90 was located south of Building 616 and appurtenant piping ran approximately 2 feet north from the excavation to Building 616. The fill port area was located directly above the tank. A site map is provided on Figure 2.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Building 616. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Main Post area.

Regional Geology

Monmouth County lies within the New Jersey Section of the Atlantic Coastal Plain physiographic province. The Main Post, Charles Wood, and the Evans areas are located in what may be referred to as the Outer Coastal Plain subprovince, or the Outer Lowlands.

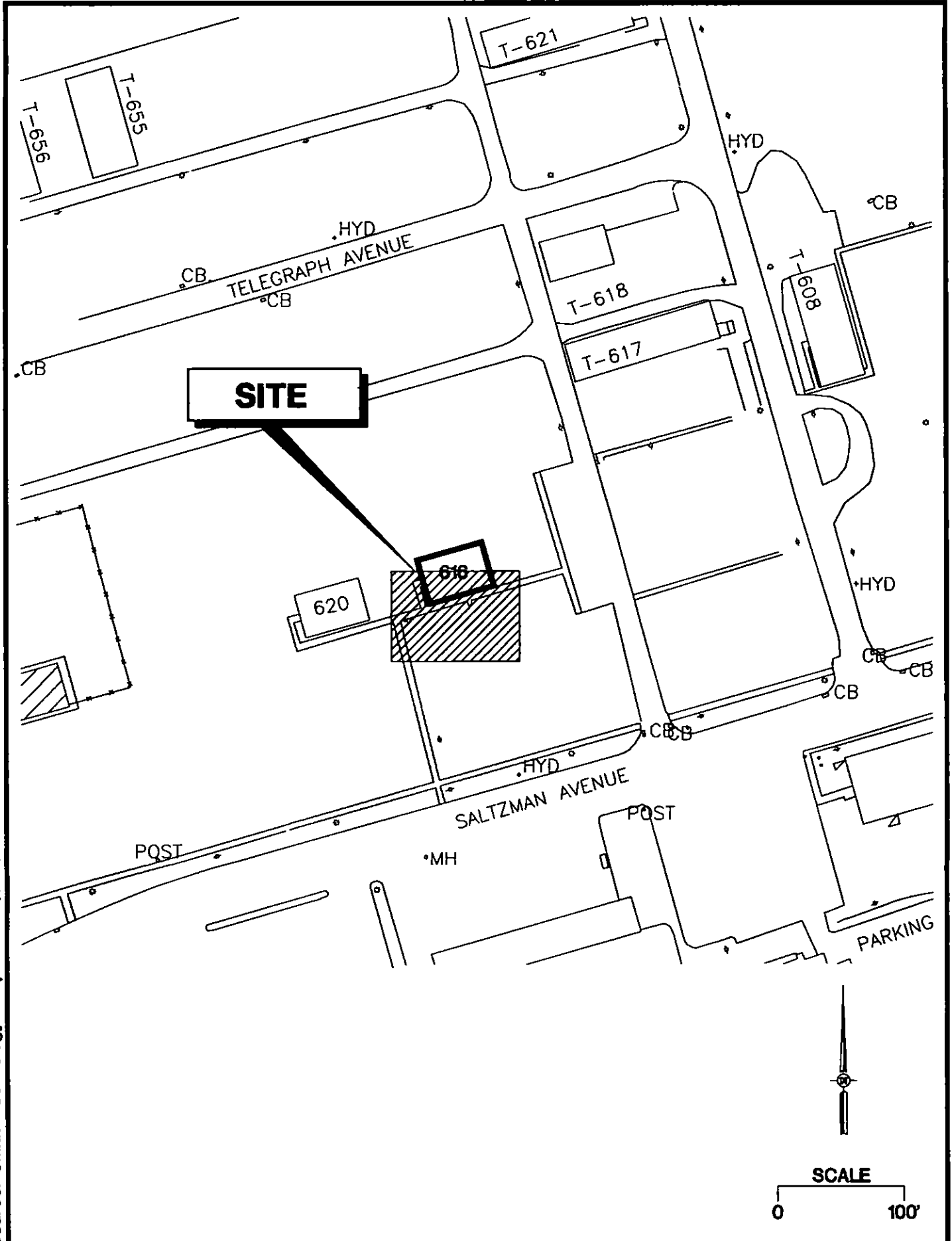
In general, New Jersey Coastal Plain formations consist of a seaward-dipping wedge of unconsolidated deposits of clay, silt, and gravel. These formations typically strike northeast-southwest with a dip ranging from 10 to 60 feet per mile and were deposited on Precambrian and lower Paleozoic rocks (Zapczka, 1989). These sediments, predominantly derived from deltaic, shallow marine, and continental shelf environments, date from Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.

The formations record several major transgressive/regressive cycles and contain units which are generally thicker to the southeast and reflect a deeper water environment. Over 20 regional geologic units are present within the sediments of the Coastal Plain. Regressive, upward coarsening deposits are usually aquifers (e.g., Englishtown and Kirkwood Formations, and the Cohansey Sand) while the transgressive deposits act as confining units (e.g., the Merchantville, Marshalltown, and Navesink Formations). The individual thicknesses for these units vary greatly (i.e., from several feet to several hundred feet). The Coastal Plain deposits thicken to the southeast from the Fall Line to greater than 6,500 feet in Cape May County (Brown and Zapczka, 1990).

Local Geology

Based on the regional geologic map (Jablonski, 1968), the Cretaceous age Red Bank and Tinton Sands outcrop at the Main Post area. The Red Bank sand conformably overlies the Navesink Formation and dips to the southeast at 35 feet per mile. The upper member

Source: Smith Technology Corporation (098)



Project No. 09-5004-08

Figure 2
**Building 616
Site Map**

(Shrewsbury) of the Red Bank sand is a yellowish-gray to reddish brown clayey, medium-to-coarse-grained sand that contains abundant rock fragments, minor mica and glauconite (Jablonski). The lower member (Sandy Hook) is a dark gray to black, medium-to-fine grained sand with abundant clay, mica, and glauconite.

The Tinton sand conformably overlies the Red Bank Sand and ranges from a clayey medium to very coarse grained feldspathic quartz and glauconite sand to a glauconitic coarse sand. The color varies from dark yellowish orange or light brown to moderate brown and from light olive to grayish olive. Glauconite may constitute 60 to 80 percent of the sand fraction in the upper part of the unit (Minard, 1969). The upper part of the Tinton is often highly oxidized and iron oxide encrusted (Minard).

Hydrogeology

The water table aquifer in the Main Post area is identified as part of the "composite confining units," or minor aquifers. The minor aquifers include the Navesink formation, Red Bank Sand, Tinton Sand, Hornerstown Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation, and the basal clay of the Kirkwood Formation.

Based on records of wells drilled in the Main Post area, water is typically encountered at depths of 2 to 9 feet below ground surface (bgs). According to Jablonski, wells drilled in the Red Bank and Tinton Sands may produce 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

Due to the proximity of the Atlantic Ocean to Fort Monmouth, shallow groundwater may be tidally influenced and may flow toward creeks and brooks as the tide goes out, and away from creeks and brooks as the tide comes in. However, an abundance of clay lenses and sand deposits were noted in borings installed throughout Fort Monmouth. Therefore the direction of shallow groundwater should be determined on a case by case basis.

1.3 HEALTH AND SAFETY

Before, during, and after all decommissioning activities, hazards at the work site which may have posed a threat to the Health and Safety of all personnel who were involved with, or were affected by, the decommissioning of the UST system were minimized. All areas which posed, or may have been suspected to pose a vapor hazard were monitored by a qualified individual utilizing an organic vapor analyzer (OVA). The individual ascertained if the area was properly vented to render the area safe, as defined by OSHA.

1.4 REMOVAL OF UNDERGROUND STORAGE TANK

1.4.1 General Procedures

- All underground obstructions (utilities, etc) were marked out by the contractor performing the closure prior to excavation activities
- All activities were carried out with the greatest regard to safety and health and the safeguarding of the environment
- All excavated soils were visually examined and screened with an OVA for evidence of contamination. Potentially contaminated soils were identified and logged during closure activities
- Surface materials (i.e., asphalt, concrete, etc) were excavated and staged separately from all soil and recycled in accordance with all applicable regulations and laws
- A Sub-Surface Evaluator from the DPW was present during all Site Assessment activities

1.4.2 Underground Storage Tank Excavation and Cleaning

Prior to UST decommissioning activities, surficial soil was removed to expose the UST and associated piping. All free product present in the piping was drained into the UST, and the UST was purged to remove vapors prior to cutting and removal of the piping. After removal of the associated piping, a manway was made in the UST to allow for proper cleaning. The UST was completely emptied of all liquids prior to removal from the ground. Approximately 25 gallons of liquid were transported by Freehold Cartage Inc. to Lionetti Oil Recovery Co. Inc., a NJDEP-approved petroleum recycling and disposal company located in Old Bridge, New Jersey. Refer to Appendix C for the waste manifest (NJA-1907259).

The UST was cleaned prior to removal from the excavation in accordance with the NJDEP-BUST regulations. After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. Several holes were observed during the inspection by the Sub-Surface Evaluator. Soils surrounding the UST were screened visually and with an OVA for evidence of contamination. Potentially contaminated soils were observed within the excavation.

Soil screening was also performed along the piping associated with the UST. No contamination was noted anywhere along the piping length.



1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The tank was transported by CUTE Inc to Mazza and Sons Inc for disposal in compliance with all applicable regulations and laws See Appendix D for UST Disposal Certificate

The removal contractor labeled the UST prior to transport with the following information

- site of origin
- contact person
- NJDEP UST Facility ID number
- name of transporter/contact person
- destination site/contact person

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on visual observations, approximately 396 cubic yards of potentially contaminated soils had been excavated from the excavation Potentially contaminated soils were stockpiled separately from other excavated material and were placed on and covered with polyethylene sheets Potentially contaminated soils were transported to the hazardous storage area on Main Post prior to ultimate disposal at Soil Remediation of Philadelphia Soils that did not exhibit signs of contamination were used as backfill following removal of the UST



2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U S Army DPW personnel. All TPHC analyses were performed and reported by U S Army Fort Monmouth Environmental Laboratory Inc. All VOC analyses were performed and reported by Princeton Testing Laboratory Inc. Both laboratories are NJDEP-certified testing laboratories. All sampling was performed under the direct supervision of a NJDEP Certified Sub-Surface Evaluator according to the methods described in the NJDEP *Field Sampling Procedures Manual* (1992). Sampling frequency and parameters analyzed complied with the NJDEP-BUST document *Interim Closure Requirements for Underground Storage Tank Systems* (September 1990 and revisions dated November 1, 1991) which was the applicable regulation at the date of the closure. All records of the Site Investigation activities are maintained by the Fort Monmouth DPW Environmental Office.

The following Parties participated in Closure and Site Investigation Activities

- Closure Contractor: Cleaning Up The Environment Inc (CUTE)
Closure Supervisor: George Bernotsky
Phone Number: (201) 427-2881
NJDEP Certification No: 3249
- Subsurface Evaluator: Dinkerrai M. Desai
Employer: U S Army, Fort Monmouth
Phone Number: (908) 532-1475
NJDEP Certification No: E0002266
- Analytical Laboratory: U S Army Fort Monmouth Environmental Laboratory
Contact Person: Brian K. McKee
Phone Number: (908) 532-4359
NJDEP Company Certification No: 13461
- Analytical Laboratory: Princeton Testing Laboratory
Contact Person: W. Alan Volk
Phone Number: (609) 452-9050
NJDEP Company Certification No: 11118
- Hazardous Waste Hauler: Freehold Cartage Inc
Contact Person: Barry Olsen
Phone Number: (908) 721-0900
NJDEP Hazardous Waste Hauler No: 2265

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP Certified Sub-Surface Evaluator using an OVA and visual observations to identify potentially contaminated material. Soils were removed from the UST excavation and associated piping area until no evidence of contamination remained.

2.3 SOIL SAMPLING

Due to field screening of subsurface soils, approximately 18 cubic yards of potentially contaminated soil were removed from the excavation on December 9, 1994. An additional 180 cubic yards of potentially contaminated soil were removed from the excavation on December 28, 1994.

On December 29, 1994, following removal of approximately 198 cubic yards of potentially contaminated soil, post-excavation soil samples A, B, C, D, and DUP D were collected from a total of four (4) locations along the sidewalls of the UST excavation, immediately above groundwater. The samples were collected at a depth of 7.5 feet below ground surface (bgs). Groundwater was present at approximately 8.0 feet bgs. Sample F was collected along the former piping length of the excavation, which was approximately 2 feet in length. The piping sample was collected at a depth of 1.0 feet bgs. All samples were analyzed for total petroleum hydrocarbons (TPHC).

On January 27, 1995, post-excavation soil sample D was collected from the expanded portions of the excavation, in the vicinity of sample D, and was analyzed for volatile organic compounds plus 15 tentatively identified compounds (VOCs). The sample was collected at a depth of 7.0 feet bgs. Because the excavation was open for more than 2 weeks, the sample was collected by backhoe at approximately 2 feet into the sidewall.

The site assessment was performed by U.S. Army personnel in accordance with the NJDEP *Technical Requirements* and the NJDEP *Field Sampling Procedures Manual*. A summary of sampling activities including parameters analyzed is provided in Table 1. Following soil sampling activities, the TPHC samples were chilled and delivered to U.S. Army Fort Monmouth Environmental Laboratory located in Fort Monmouth, New Jersey, for analysis. The VOC samples were chilled and delivered to Princeton Testing Laboratory Inc., located in Princeton, New Jersey, for analysis.

2.4 GROUNDWATER SAMPLING

2.4.1 Monitoring Well Installation

In response to the observation of potentially contaminated soil near the shallow water table, one shallow monitoring well (MW-1) was installed at the Building 616 area on August 17, 1995. It was installed approximately 27 feet south of Building 616 in the assumed downgradient direction.

TABLE 1
PAGE 1 OF 1

SUMMARY OF SAMPLING ACTIVITIES
BUILDING 616, MAIN POST
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Matrix	Sample Type	Analytical Parameters (and USEPA Methods) *	Sampling Method
A	12/29/94	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
B	12/29/94	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
C	12/29/94	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
D	12/29/94	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
Dup D	12/29/94	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
F	12/29/94	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
D	01/27/95	Soil	Post-Excavation	VOCs	Stainless Steel Scoop
MW-1	11/27/95	Aqueous	Groundwater	VOCs, SVOCs	Teflon Bottom Bailer
MW-1	12/18/95	Aqueous	Groundwater	VOCs, SVOCs	Teflon Bottom Bailer

* Note

TPHC Total Petroleum Hydrocarbons (Method 418.1 / soil and aqueous)
VOCs Volatile Organic Compounds calibrated for Xylene plus 15 tentatively identified compounds (Method 524.2 / aqueous)
SVOCs Semivolatile Organic Compounds plus 15 tentatively identified compounds (Method 625 / aqueous)

Smith Technology Corporation (Project No. 09-5004-08)

soil616.doc

It was screened in the 4- to 14 foot interval, across the water table, which is approximately 6 feet below grade surface

The well was constructed in accordance with the NJDEP's well construction protocols outlined in its May 1992 *Field Sampling Procedures Manual*. The NJDEP well drilling permit and a well construction log is presented in Appendix E

The well was constructed with 4-inch (ID) PVC riser and 0.020 slotted PVC well screen. A silica sand pack was installed in the annulus between the borehole wall and the screen. The sand pack was extended approximately 2 feet above the top of the screen. The sand pack above the well screen was graded down to a fine sand to minimize grout intrusion.

The borehole was tremie-grouted with bentonite-cement grout from the top of the sand pack to 0.5 inches bgs. The well was secured with a steel protective casing with a stickup that is approximately 2.5 feet above ground surface. The steel protective casing was set in place with concrete, which was placed in the remaining open borehole. The elevation of the well riser was surveyed to the nearest 0.01 feet by a New Jersey-licensed surveyor. The well permit number was marked on the well casing as required.

The monitoring well was developed using a submersible pump. The well was pumped for 1 hour or until silt free. All residual soils and liquids generated during monitoring well installation and development program were collected in New Jersey Department of Transportation-approved 55-gallon drums. The drums were placed in a designated secure location for waste characterization and offsite disposal.

2.4.1 Monitoring Well Sampling

On November 27, 1995 and December 18, 1995, MW-1 was sampled for volatile organic compounds calibrated for xylene plus 15 tentatively identified compounds (VOCs), and semivolatile organic compounds plus 15 tentatively identified compounds (SVOCs). Sampling and analysis were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements For Site Remediation*.

Prior to sampling, the water level was measured to the nearest 0.01 feet, and the distance to the bottom of the well was to be measured to the nearest 0.1 feet. The well was checked for floating product (light non-aqueous phase liquids). The well was purged of three to five well volumes of standing water. Sample volume was then collected using a dedicated decontaminated Teflon bottom-filled bailer attached to PTFE (Teflon)-coated stainless steel.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

To evaluate soil conditions following removal of the UST and associated piping, post-excavation soil samples were collected from a total of five (5) locations on December 29, 1994, and were analyzed for TPHC. Due to excessive TPHC results, one (1) post-excavation soil sample was collected from the west side of the excavation in the vicinity of sample D on January 27, 1995. The sample was analyzed for VOCs. The post-excavation sampling results were compared to the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 mg/kg (NJAC 7:26D and revisions dated February 3, 1994). A summary of the analytical results and comparison to the NJDEP soil cleanup criteria is provided in Table 2 and the soil sampling results are shown on Figure 3. The analytical data package is provided in Appendix E.

All post-excavation soil samples collected from the UST excavation and from below piping associated with the former UST at Building 616 contained TPHC concentrations below the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 milligrams per kilogram (mg/kg) (NJAC 7:26D and revisions dated February 3, 1994). Samples A, B, C, and F contained levels of TPHC ranging in concentration from 76.8 mg/kg to 244.0 mg/kg. Samples D and DUP D contained TPHC concentrations of 8,680.0 mg/kg and 6,700.0 mg/kg, respectively.

Due to excessive TPHC results from samples D and DUP D, soils surrounding the former sample location was resampled on January 27, 1995. The sample was analyzed for VOCs. The sample contained methylene chloride at a concentration of 0.10 mg/kg, acetone at 0.27 mg/kg (both are known laboratory contaminants), 2-butanone at 0.54 mg/kg, ethylbenzene at 3.2 mg/kg, and total xylenes at 5.2 mg/kg. All of the detected VOCs were below the most stringent NJDEP soil cleanup criteria.

3.2 GROUNDWATER SAMPLING RESULTS

All groundwater VOC results were either below the detection limit or in compliance with the New Jersey Groundwater Quality Criteria (GWQC). No product or sheen was observed in MW-1 on either of the sampling dates.

The sample collected from MW-1 on November 27, 1995, contained methylene chloride at 3.2 ug/l. No other compounds were detected.

The sample collected from MW-1 on December 18, 1995, contained methylene chloride at 1.0 ug/l. No other compounds were detected.

TABLE 2
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POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 616, MAIN POST
FORT MONMOUTH, NEW JERSEY

Sample ID/Depth	Sample Laboratory ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (mg/kg)	Compound of Concern	Result (mg/kg)	NJDEP Soil Cleanup Criteria * (mg/kg)	Exceeds Cleanup Criteria
A/7 5-8.0'	1773.1	12/29/94	12/29/94	Total Solid	--	--	80 %	--	--
				TPHC	8.1	yes	244.0	10,000	--
B/7 5-8.0'	1773.2	12/29/94	12/29/94	Total Solid	--	--	89 %	--	--
				TPHC	8.1	yes	85.4	10,000	--
C/7 5-8.0'	1773.3	12/29/94	12/29/94	Total Solid	--	--	81 %	--	--
				TPHC	7.9	yes	91.9	10,000	--
D/7 5-8.0'	1773.4	12/29/94	12/29/94	Total Solid	--	--	83 %	--	--
				TPHC	53.0	yes	8,680.0	10,000	--
Dup D/7.5-8.0'	1773.5	12/29/94	12/29/94	Total Solid	--	--	90 %	--	--
				TPHC	7.6	yes	76.8	10,000	--
F/8 0-8.5'	1773.6	12/29/94	12/29/94	Total Solid	--	--	84 %	--	--
				TPHC	57.0	yes	6,700.0	10,000	--

Notes:

- * Cleanup criteria for total organics
- Not applicable / does not exceed criteria
- TPHC Total Petroleum Hydrocarbons

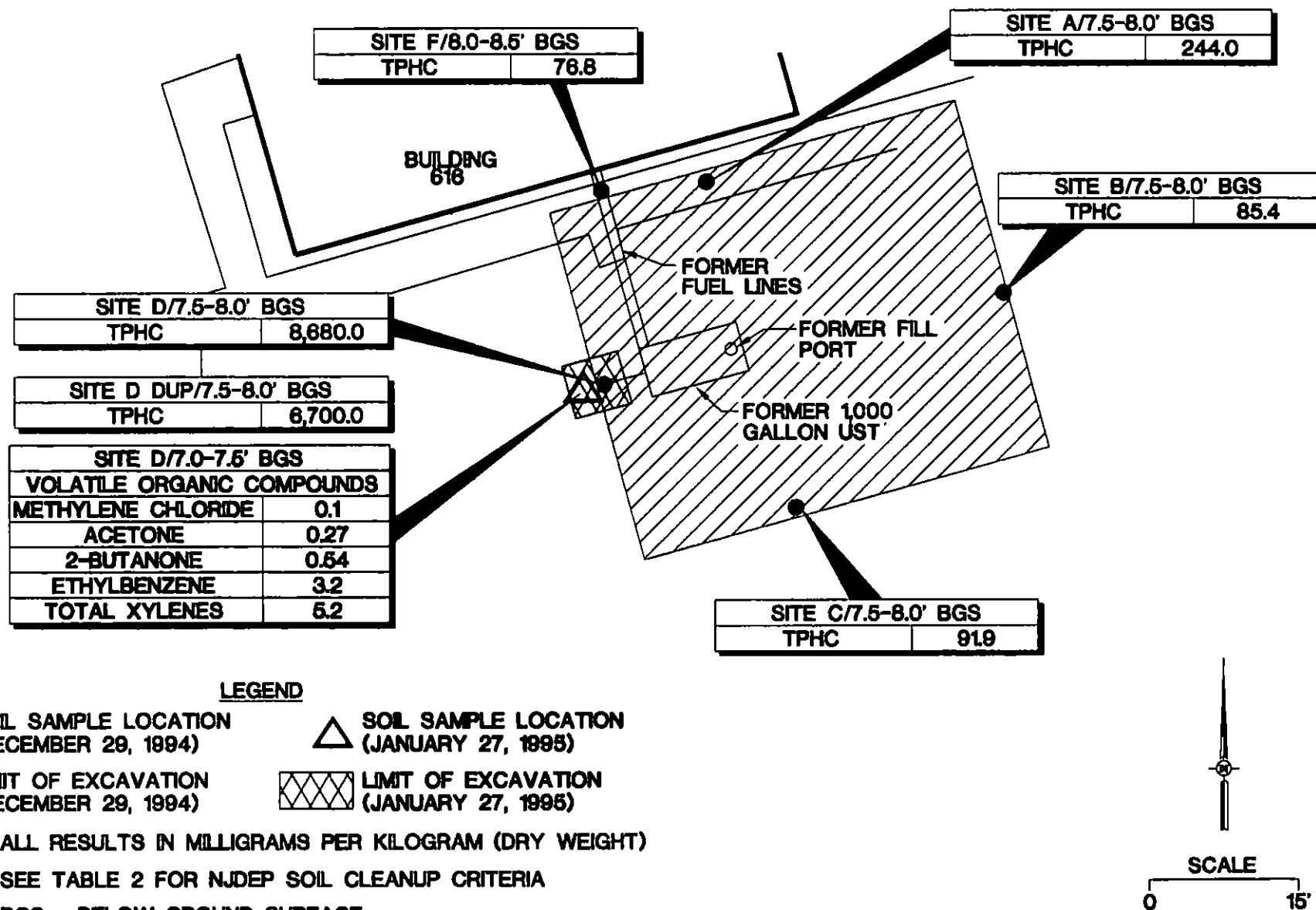
TABLE 2
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POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 616, MAIN POST, SITE D
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID/Depth	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (mg/kg)	Compound of Concern	Result (mg/kg)	NJDEP Soil Cleanup Criteria * (mg/kg)	Exceeds Cleanup Criteria
D/7 0-7 5'	01/27/95	01/30/95	Chloromethane	0.63	--	ND	520/10	--
			Bromomethane	0.63	--	ND	79/1	--
			Vinyl chloride	0.63	--	ND	2/10	--
			Chloroethane	0.63	--	ND	--	--
			Methylene chloride	0.63	--	0.10 JB	49/1	--
			Acetone	0.31	--	0.27 JB	1,000/100	--
			Carbon disulfide	0.31	--	ND	--	--
			1,1-Dichloroethene	0.31	--	ND	8/10	--
			1,1-Dichloroethane	0.31	--	ND	570/10	--
			1,2-Dichloroethene (total)	0.31	--	ND	--	--
			Chloroform	0.31	--	ND	19/1	--
			1,2-Dichloroethane	0.31	--	ND	6/1	--
			2-Butanone	0.31	--	0.54 B	1,000/50	--
			1,1,1-Trichloroethane	0.31	--	ND	210/50	--
			Carbon tetrachloride	0.31	--	ND	2/1	--
			Bromodichloromethane	0.31	--	ND	11/1	--
			1,1,2,2-Tetrachloroethane	0.31	--	ND	34/1	--
			1,2-Dichloropropane	0.31	--	ND	--	--
			trans-1,3-Dichloropropene	0.31	--	ND	4/1	--
			Trichloroethene	0.31	--	ND	--	--
			Dibromochloromethane	0.31	--	ND	110/1	--
			1,1,2-Trichloroethane	0.31	--	ND	22/1	--
			Benzene	0.31	--	ND	3/1	--
			cis-1,3-Dichloropropene	0.31	--	ND	4/1	--
			Bromoform	0.31	--	ND	86/1	--
			2-Hexanone	0.31	--	ND	--	--
			4-Methyl-2-Pentanone	0.31	--	ND	1,000/50	--
			Tetrachloroethene	0.31	--	ND	4/1 **	--
			Toluene	0.31	--	ND	1,000/500	--
			Chlorobenzene	0.31	--	ND	37/1	--
			Ethylbenzene	0.31	--	3.2	1,000/100	--
			Styrene	0.31	--	ND	23/100	--
			Total Xylenes	0.31	--	5.2	410/10	--

NOTES

- * Residential Direct Contact / Impact to Groundwater
- Not applicable / does not exceed criteria
- (J) Indicates detected below sample quantitation limit
- (B) Indicates also present in blank
- (ND) Indicates compound not detected





The depth to the water table was 4.82 feet below grade on November 27, 1995, and 4.27 feet below grade on December 18, 1995.

All groundwater analytical results are presented in Table 3 and shown on Figure 4. The groundwater analytical data package is provided in Appendix G. The full data package, including quality control data, is on file at U.S. Army Fort Monmouth, DPW.

3.3 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for all post-excavation soil samples collected from the UST closure excavation at Building 616 were below the NJDEP soil cleanup criteria for total organic contaminants.

Based on the post-excavation sampling results, soils with TPHC concentrations exceeding the NJDEP soil cleanup criteria for total organic contaminants of 10,000 mg/kg, do not exist in the former location of the UST or associated piping.

Based on the analytical results of the groundwater samples collected on November 27, 1995 and December 18, 1995, groundwater quality at the Building 616 UST closure site complies with the New Jersey Groundwater Quality Criteria for VOCs and SVOCs.

No further action is proposed in regard to the closure and site assessment of UST No. 081533-90 at Building 616.

TABLE 3
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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, MW-1
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	11/27/95	12/11/95	Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	3.2	--	3 2 B	100*	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2*	--
			1,1 Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10*	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1*	--
			Chlorobenzene	0.50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			Bromobenzene	0.50	--	ND	--	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	--	--
			1,2,3-Trichloropropane	0.50	--	ND	--	--
			n-Propylbenzene	0.50	--	ND	--	--
			2-Chlorotoluene	0.50	--	ND	--	--
			4-Chlorotoluene	0.50	--	ND	--	--
			1,3,5-Trimethylbenzene	0.50	--	ND	--	--

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	11/27/95	12/11/95	tert-Butylbenzene	0.50	--	ND	--	--
			1,2,4-Trimethylbenzene	0.50	--	ND	--	--
			sec-Butylbenzene	0.50	--	ND	--	--
			1,3-Dichlorobenzene	0.50	--	ND	600	--
			4-Isopropyltoluene	0.50	--	ND	75	--
			1,4-Dichlorobenzene	0.50	--	ND	--	--
			1,2-Dichlorobenzene	0.50	--	ND	600	--
			N-Butylbenzene	0.50	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.50	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.50	--	ND	9	--
			Hexachlorobutadiene	0.50	--	ND	1	--
			Naphthalene	0.50	--	ND	--	--
			1,2,3-Trichlorobenzene	0.50	--	ND	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
TENTATIVELY IDENTIFIED COMPOUNDS			Column Bleed	--	--	1 J	--	---
			Column Bleed	--	--	2 J	--	--

Notes

- Not applicable / does not exceed criteria
- (B) Indicates also present in blank
- (ND) Indicates compound not detected
- (NA) Not available for this constituent
- (J) Indicates detected below sample quantitation limit
- GWQC Ground Water Quality Criteria

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TABLE 3
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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	11/27/95	12/8/95	N-Nitrosodiethylamine	2	--	ND	20	--
			bis(2 chloroethyl)Ether	1	--	ND	10	--
			1,3-Dichlorobenzene	2	--	ND	600	--
			1,4-Dichlorobenzene	1	--	ND	75	--
			1,2-Dichlorobenzene	2	--	ND	600	--
			bis(2-chloroisopropyl)Ether	5	--	ND	300	--
			N-Nitroso-Di-n-propylamine	2	--	ND	20	--
			Hexachloroethane	1	--	ND	10	--
			Nitrobenzene	2	--	ND	10	--
			Isophorone	1	--	ND	100	--
			bis(2-Chloroethoxy)Methane	3	--	ND	--	--
			1,2,4-Trichlorobenzene	2	--	ND	9	--
			Naphthalene	2	--	ND	--	--
			Hexachlorobutadiene	2	--	ND	1	--
			Hexachlorocyclopentadiene	12	--	ND	50	--
			2-Chloronaphthalene	1	--	ND	--	--
			Dimethyl Phthalate	1	--	ND	--	--
			Acenaphthylene	5	--	ND	NA	--
			2,6-Dinitrotoluene	2	--	ND	NA	--
			Acenaphthene	3	--	ND	400	--
			2,4-Dinitrotoluene	3	--	ND	10	--
			Diethylphthalate	1	--	ND	5,000	--
			Fluorene	3	--	ND	300	--
			4-Chlorophenyl-phenylether	3	--	ND	--	--
			N-Nitrosodiphenylamine	6	--	ND	20	--
			1,2-Diphenylhydrazine	6	--	ND	0.04	--
			4-Bromophenyl-phenylether	2	--	ND	--	--
			Hexachlorobenzene	2	--	ND	10	--
			Phenanthrene	2	--	ND	NA	--
			Anthracene	2	--	ND	2,000	--
			Di-n-butylphthalate	5	--	ND	900	--
			Fluoranthene	1	--	ND	300	--
			Benzidine	1	--	ND	50	--
			Pyrene	2	--	ND	200	--
			Butylbenzylphthalate	9	--	ND	100	--
			Benzo(a)Anthracene	2	--	ND	NA	--
			3,3-Dichlorobenzidine	15	--	ND	60	--
			Chrysene	2	--	ND	NA	--
			bis(2-Ethylhexyl)Phthalate	4	--	ND	30	--
			Di-n-Octyl Phthalate	2	--	ND	100	--
			Benzo(b)Fluoranthene	1	--	ND	NA	--
			Benzo(k)Fluoranthene	2	--	ND	NA	--

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	11/27/95	12/8/95	Benzo(a)Pyrene	2	--	ND	NA	--
			Indeno(1,2,3-cd)pyrene	2	--	ND	NA	--
			Dibenzo(a,h)anthracene	3	--	ND	NA	--
			Benzo(g,h,i)perylene	2	--	ND	NA	--
			TENTATIVELY IDENTIFIED COMPOUNDS:			Unknown Hydrocarbon	--	--

Notes:

- Not applicable / does not exceed criteria
- (B) Indicates also present in blank
- (ND) Indicates compound not detected
- (NA) Not available for this constituent
- (J) Indicates detected below sample quantitation limit
- GWQC Ground Water Quality Criteria

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, TRIP BLANK
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Trip Blank	11/27/95	12/5/95	Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	0.70	--	0.70 B	100*	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2*	--
			1,1-Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10*	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1*	--
			Chlorobenzene	0.50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			Bromobenzene	0.50	--	ND	--	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	--	--
			1,2,3-Trichloropropane	0.50	--	ND	--	--
			n-Propylbenzene	0.50	--	ND	--	--
			2-Chlorotoluene	0.50	--	ND	--	--
			4-Chlorotoluene	0.50	--	ND	--	--

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Trip Blank	11/27/95	12/5/95	1,3,5-Trimethylbenzene	0.50	--	ND	--	--
			tert-Butylbenzene	0.50	--	ND	--	--
			1,2,4-Trimethylbenzene	0.50	--	ND	--	--
			sec-Butylbenzene	0.50	--	ND	--	--
			1,3-Dichlorobenzene	0.50	--	ND	600	--
			4-Isopropyltoluene	0.50	--	ND	75	--
			1,4-Dichlorobenzene	0.50	--	ND	--	--
			1,2-Dichlorobenzene	0.50	--	ND	600	--
			N-Butylbenzene	0.50	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.50	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.50	--	ND	9	--
			Hexachlorobutadiene	0.50	--	ND	1	--
			Naphthalene	0.50	--	ND	--	--
			1,2,3-Trichlorobenzene	0.50	--	ND	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
TENTATIVELY IDENTIFIED COMPOUNDS:			Furan, tetrahydro-	--	--	3 J	--	--
			Column Bleed	--	--	1 J	--	--

Notes:

- Not applicable / does not exceed criteria
- (B) Indicates also present in blank
- (ND) Indicates compound not detected
- (NA) Not available for this constituent
- (J) Indicates detected below sample quantitation limit
- GWQC Ground Water Quality Criteria

Smith Technology Corporation (Project No. 09-5004-08)

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, FIELD BLANK
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/L)	Compound of Concern	Result (ug/L)	GWQC (ug/L)	Exceeds Criteria
Field Blank	11/27/95	12/5/95	Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	0.60 B	--	0.60 B	100*	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2*	--
			1,1-Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10*	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1*	--
			Chlorobenzene	0.50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			Bromobenzene	0.50	--	ND	--	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	--	--
			1,2,3-Trichloropropane	0.50	--	ND	--	--
			n-Propylbenzene	0.50	--	ND	--	--
			2-Chlorotoluene	0.50	--	ND	--	--
			4-Chlorotoluene	0.50	--	ND	--	--

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	11/27/95	12/5/95	1,3,5-Trimethylbenzene	0.50	--	ND	--	--
			tert-Butylbenzene	0.50	--	ND	--	--
			1,2,4-Trimethylbenzene	0.50	--	ND	--	--
			sec-Butylbenzene	0.50	--	ND	--	--
			1,3-Dichlorobenzene	0.50	--	ND	600	--
			4-Isopropyltoluene	0.50	--	ND	75	--
			1,4-Dichlorobenzene	0.50	--	ND	--	--
			1,2-Dichlorobenzene	0.50	--	ND	600	--
			N-Butylbenzene	0.50	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.50	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.50	--	ND	9	--
			Hexachlorobutadiene	0.50	--	ND	1	--
			Naphthalene	0.50	--	ND	--	--
			1,2,3-Trichlorobenzene	0.50	--	ND	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
TENTATIVELY IDENTIFIED COMPOUNDS:			Column Bleed	--	--	1 J	--	--
			Furan, tetrahydro-	--	--	3 J	--	--
			Column Bleed	--	--	1 J	--	--
			Unknown Hydrocarbon	--	--	2 J	--	--

Notes

- Not applicable / does not exceed criteria
- (B) Indicates also present in blank
- (ND) Indicates compound not detected
- (NA) Not available for this constituent
- (J) Indicates detected below sample quantitation limit
- GWQC Ground Water Quality Criteria

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	11/27/95	12/8/95	N-Nitrosodiethylamine	2	--	ND	20	--
			bis(2-chloroethyl)Ether	1	--	ND	10	--
			1,3-Dichlorobenzene	2	--	ND	600	--
			1,4-Dichlorobenzene	1	--	ND	75	--
			1,2-Dichlorobenzene	2	--	ND	600	--
			bis(2-chloroisopropyl)Ether	5	--	ND	300	--
			N-Nitroso-Di-n-propylamine	2	--	ND	20	--
			Hexachloroethane	1	--	ND	10	--
			Nitrobenzene	2	--	ND	10	--
			Isophorone	1	--	ND	100	--
			bis(2-Chloroethoxy)Methane	3	--	ND	--	--
			1,2,4-Trichlorobenzene	2	--	ND	9	--
			Naphthalene	2	--	ND	--	--
			Hexachlorobutadiene	2	--	ND	1	--
			Hexachlorocyclopentadiene	12	--	ND	50	--
			2-Chloronaphthalene	1	--	ND	--	--
			Dimethyl Phthalate	1	--	ND	--	--
			Acenaphthylene	5	--	ND	NA	--
			2,6-Dinitrotoluene	2	--	ND	NA	--
			Acenaphthene	3	--	ND	400	--
			2,4-Dinitrotoluene	3	--	ND	10	--
			Diethylphthalate	1	--	ND	5,000	--
			Fluorene	3	--	ND	300	--
			4-Chlorophenyl-phenylether	3	--	ND	--	--
			N-Nitrosodiphenylamine	6	--	ND	20	--
			1,2-Diphenylhydrazine	6	--	ND	0.04	--
			4-Bromophenyl-phenylether	2	--	ND	--	--
			Hexachlorobenzene	2	--	ND	10	--
			Phenanthrene	2	--	ND	NA	--
			Anthracene	2	--	ND	2,000	--
			Di-n-butylphthalate	5	--	ND	900	--
			Fluoranthene	1	--	ND	300	--
			Benzidine	1	--	ND	50	--
			Pyrene	2	--	ND	200	--
			Butylbenzylphthalate	9	--	ND	100	--
			Benzo(a)Anthracene	2	--	ND	NA	--
			3,3-Dichlorobenzidine	15	--	ND	60	--
			Chrysene	2	--	ND	NA	--
			bis(2-Ethylhexyl)Phthalate	4	--	ND	30	--
			Di-n-Octyl Phthalate	2	--	ND	100	--
			Benzo(b)Fluoranthene	1	--	ND	NA	--
			Benzo(k)Fluoranthene	2	--	ND	NA	--

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	11/27/95	12/8/95	Benzo(a)Pyrene	2	--	ND	NA	--
			Indeno(1,2,3-cd)pyrene	2	--	ND	NA	--
			Dibenzo(a,h)anthracene	3	--	ND	NA	--
			Benzo(g,h,i)perylene	2	--	ND	NA	--
TENTATIVELY IDENTIFIED COMPOUNDS:			Unknown Hydrocarbon	--	--	5 J	--	--
			Hexadecanoic acid	--	--	2 J	--	--

Notes

-- Not applicable / does not exceed criteria
(B) Indicates also present in blank
(ND) Indicates compound not detected
(NA) Not available for this constituent
(J) Indicates detected below sample quantitation limit
GWQC Ground Water Quality Criteria

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, MW-1
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	12/18/95	12/29/95	Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	1.0	--	1.0 B	100*	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2*	--
			1,1-Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10*	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1*	--
			Chlorobenzene	0.50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			Bromobenzene	0.50	--	ND	--	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	--	--
			1,2,3-Trichloropropane	0.50	--	ND	--	--
			n-Propylbenzene	0.50	--	ND	--	--
			2-Chlorotoluene	0.50	--	ND	--	--
			4-Chlorotoluene	0.50	--	ND	--	--

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	12/18/95	12/29/95	1,3,5-Trimethylbenzene	0.50	--	ND	--	--
			tert-Butylbenzene	0.50	--	ND	--	--
			1,2,4-Trimethylbenzene	0.50	--	ND	--	--
			sec-Butylbenzene	0.50	--	ND	--	--
			1,3-Dichlorobenzene	0.50	--	ND	600	--
			4-Isopropyltoluene	0.50	--	ND	75	--
			1,4-Dichlorobenzene	0.50	--	ND	--	--
			1,2-Dichlorobenzene	0.50	--	ND	600	--
			N-Butylbenzene	0.50	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.50	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.50	--	ND	9	--
			Hexachlorobutadiene	0.50	--	ND	1	--
			Naphthalene	0.50	--	ND	--	--
			1,2,3-Trichlorobenzene	0.50	--	ND	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
TENTATIVELY IDENTIFIED COMPOUNDS.			Column Bleed	--	--	1 J	--	--
			Column Bleed	--	--	5 J	--	--

Notes

- Not applicable / does not exceed criteria
- (B) Indicates also present in blank
- (ND) Indicates compound not detected
- (NA) Not available for this constituent
- (J) Indicates detected below sample quantitation limit
- GWQC Ground Water Quality Criteria

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	12/18/95	12/26/95	N-Nitrosodiethylamine	2	--	ND	20	--
			bis(2-chloroethyl)Ether	1	--	ND	10	--
			1,3-Dichlorobenzene	2	--	ND	600	--
			1,4-Dichlorobenzene	1	--	ND	75	--
			1,2-Dichlorobenzene	2	--	ND	600	--
			bis(2-chloroisopropyl)Ether	5	--	ND	300	--
			N-Nitroso-Di-n-propylamine	2	--	ND	20	--
			Hexachloroethane	1	--	ND	10	--
			Nitrobenzene	2	--	ND	10	--
			Isophorone	1	--	ND	100	--
			bis(2-Chloroethoxy)Methane	3	--	ND	--	--
			1,2,4-Trichlorobenzene	2	--	ND	9	--
			Naphthalene	2	--	ND	--	--
			Hexachlorobutadiene	2	--	ND	1	--
			Hexachlorocyclopentadiene	12	--	ND	50	--
			2-Chloronaphthalene	1	--	ND	--	--
			Dimethyl Phthalate	1	--	ND	--	--
			Acenaphthylene	5	--	ND	NA	--
			2,6-Dinitrotoluene	2	--	ND	NA	--
			Acenaphthene	3	--	ND	400	--
			2,4-Dinitrotoluene	3	--	ND	10	--
			Diethylphthalate	1	--	ND	5,000	--
			Fluorene	3	--	ND	300	--
			4-Chlorophenyl-phenylether	3	--	ND	--	--
			N-Nitrosodiphenylamine	6	--	ND	20	--
			1,2-Diphenylhydrazine	6	--	ND	0.04	--
			4-Bromophenyl-phenylether	2	--	ND	--	--
			Hexachlorobenzene	2	--	ND	10	--
			Phenanthrene	2	--	ND	NA	--
			Anthracene	2	--	ND	2,000	--
			Di-n-butylphthalate	5	--	ND	900	--
			Fluoranthene	1	--	ND	300	--
			Benzidine	1	--	ND	50	--
			Pyrene	2	--	ND	200	--
			Butylbenzylphthalate	9	--	ND	100	--
			Benzo(a)Anthracene	2	--	ND	NA	--
			3,3-Dichlorobenzidine	15	--	ND	60	--
			Chrysene	2	--	ND	NA	--
			bis(2-Ethylhexyl)Phthalate	4	--	ND	30	--
			Di-n-Octyl Phthalate	2	--	ND	100	--
			Benzo(b)Fluoranthene	1	--	ND	NA	--
			Benzo(k)Fluoranthene	2	--	ND	NA	--

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	12/18/95	12/26/95	Benzo(a)Pyrene	2	--			
			Indeno(1,2,3-cd)pyrene	2	--	ND	NA	--
			Dibenzo(a,h)anthracene	3	--	ND	NA	--
			Benzo(g,h,i)perylene	2	--	ND	NA	--
TENTATIVELY IDENTIFIED COMPOUNDS			NONE FOUND	--	--	--	--	--

Notes:

- Not applicable / does not exceed criteria
- (B) Indicates also present in blank
- (ND) Indicates compound not detected
- (NA) Not available for this constituent
- (J) Indicates detected below sample quantitation limit
- GWQC Ground Water Quality Criteria

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, TRIP BLANK
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Trip Blank	12/18/95	12/29/95	Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	1.4	--	1 4 B	100*	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2*	--
			1,1 Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10*	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0 50	--	ND	1	--
			Dibromomethane	0 50	--	ND	NA	--
			Bromodichloromethane	0 50	--	ND	--	--
			cis-1,3-Dichloropropene	0 50	--	ND	1	--
			Toluene	0 50	--	ND	10	--
			trans-1,3-Dichloropropene	0 50	--	ND	3	--
			1,1,2-Trichloroethane	0 50	--	ND	1	--
			Tetrachloroethene	0 50	--	ND	NA	--
			1,3-Dichloropropane	0 50	--	ND	4	--
			Dibromochloromethane	0 50	--	ND	10	--
			1,2-Dibromomethane	0 50	--	ND	1*	--
			Chlorobenzene	0 50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0 50	--	ND	1,000	--
			Ethylbenzene	0 50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0 50	--	ND	700	--
			Bromoform	0 50	--	ND	40	--
			Isopropylbenzene	0 50	--	ND	100	--
			Bromobenzene	0 50	--	ND	--	--
			1,1,2,2-Tetrachloroethane	0 50	--	ND	--	--
			1,2,3-Trichloropropane	0 50	--	ND	--	--
			n-Propylbenzene	0.50	--	ND	--	--
			2-Chlorotoluene	0 50	--	ND	--	--
			4-Chlorotoluene	0.50	--	ND	--	--

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Trip Blank	12/18/95	12/29/95	1,3,5-Trimethylbenzene	0.50	--	ND	--	--
			tert-Butylbenzene	0.50	--	ND	--	--
			1,2,4-Trimethylbenzene	0.50	--	ND	--	--
			sec-Butylbenzene	0.50	--	ND	--	--
			1,3-Dichlorobenzene	0.50	--	ND	600	--
			4-Isopropyltoluene	0.50	--	ND	75	--
			1,4-Dichlorobenzene	0.50	--	ND	--	--
			1,2-Dichlorobenzene	0.50	--	ND	600	--
			N-Butylbenzene	0.50	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.50	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.50	--	ND	9	--
			Hexachlorobutadiene	0.50	--	ND	1	--
			Naphthalene	0.50	--	ND	--	--
			1,2,3-Trichlorobenzene	0.50	--	ND	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
TENTATIVELY IDENTIFIED COMPOUNDS.			Furan, tetrahydro-	--	--	2 J	--	--
			Column Bleed	--	--	2 J	--	--
			Column Bleed	--	--	1 J	--	--

Notes:

- Not applicable / does not exceed criteria
- (B) Indicates also present in blank
- (ND) Indicates compound not detected
- (NA) Not available for this constituent
- (J) Indicates detected below sample quantitation limit
- GWQC Ground Water Quality Criteria

Smith Technology Corporation (Project No. 09-5004-08)

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, FIELD BLANK
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/L)	Compound of Concern	Result (ug/L)	GWQC (ug/L)	Exceeds Criteria
Field Blank	12/18/95	12/29/95	Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	1.4	--	1.4 B	100*	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2*	--
			1,1-Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10*	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1*	--
			Chlorobenzene	0.50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			Bromobenzene	0.50	--	ND	--	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	--	--
			1,2,3-Trichloropropane	0.50	--	ND	--	--
			n-Propylbenzene	0.50	--	ND	--	--
			2-Chlorotoluene	0.50	--	ND	--	--
			4-Chlorotoluene	0.50	--	ND	--	--

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	12/18/95	12/29/95	1,3,5-Trimethylbenzene	0.50	--	ND	--	--
			tert-Butylbenzene	0.50	--	ND	--	--
			1,2,4-Trimethylbenzene	0.50	--	ND	--	--
			sec-Butylbenzene	0.50	--	ND	--	--
			1,3-Dichlorobenzene	0.50	--	ND	600	--
			4-Isopropyltoluene	0.50	--	ND	75	--
			1,4-Dichlorobenzene	0.50	--	ND	--	--
			1,2-Dichlorobenzene	0.50	--	ND	600	--
			N-Butylbenzene	0.50	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.50	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.50	--	ND	9	--
			Hexachlorobutadiene	0.50	--	ND	1	--
			Naphthalene	0.50	--	ND	--	--
			1,2,3-Trichlorobenzene	0.50	--	ND	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
TENTATIVELY IDENTIFIED COMPOUNDS:			Column Bleed	--	--	2 J	--	--
			Furan, tetrahydro-	--	--	1 J	--	--

Notes:

- Not applicable / does not exceed criteria
- (B) Indicates also present in blank
- (ND) Indicates compound not detected
- (NA) Not available for this constituent
- (J) Indicates detected below sample quantitation limit
- GWQC Ground Water Quality Criteria

Smith Technology Corporation (Project No. 09-5004-08)

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GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	12/18/95	12/26/95	Phenol	10	--	ND	4000	--
			bis(2-chloroethyl)Ether	10	--	ND	20	--
			2-Chlorophenol	10	--	ND	40	--
			1,3-Dichlorobenzene	10	--	ND	600	--
			1,4-Dichlorobenzene	10	--	ND	75	--
			1,2-Dichlorobenzene	10	--	ND	600	--
			2-Methylphenol	10	--	ND	--	--
			bis(2-chloroisopropyl)Ether	10	--	ND	300	--
			4-Methylphenol	10	--	ND	--	--
			N-Nitroso-Di-n-propylamine	10	--	ND	20	--
			Hexachloroethane	10	--	ND	10	--
			Nitrobenzene	10	--	ND	10	--
			Isophorone	10	--	ND	100	--
			2-Nitrophenol	10	--	ND	--	--
			2,4-Dimethylphenol	10	--	ND	100	--
			bis(2-Chloroethoxy)Methane	10	--	ND	--	--
			2,4-Dichlorophenol	10	--	ND	20	--
			1,2,4-Trichlorobenzene	10	--	ND	9	--
			Naphthalene	10	--	ND	--	--
			4-Chloroaniline	10	--	ND	--	--
			Hexachlorobutadiene	10	--	ND	1	--
			4-Chloro-3-methylphenol	10	--	ND	--	--
			2-methylnaphthalene	10	--	ND	--	--
			Hexachlorocyclopentadiene	10	--	ND	50	--
			2,4,6-Trichlorophenol	10	--	ND	20	--
			2,4,5-Trichlorophenol	25	--	ND	700	--
			2-Chloronaphthalene	10	--	ND	--	--
			2-Nitroaniline	25	--	ND	--	--
			Dimethyl Phthalate	10	--	ND	--	--
			Acenaphthylene	10	--	ND	NA	--
			2,6-Dinitrotoluene	10	--	ND	NA	--
			3-Nitroaniline	25	--	ND	--	--
			Acenaphthene	10	--	ND	400	--
			2,4-Dinitrophenol	25	--	ND	40	--
			4-Nitrophenol	25	--	ND	--	--
			Dibenzofuran	10	--	ND	--	--
			2,4-Dinitrotoluene	10	--	ND	10	--
			Diethylphthalate	10	--	ND	5,000	--
			Fluorene	10	--	ND	300	--
			4-Chlorophenyl-phenylether	10	--	ND	--	--
			4-Nitroaniline	25	--	ND	--	--
			4,6-Dinitro-2-methylphenol	25	--	ND	--	--
			N-Nitrosodiphenylamine	10	--	ND	20	--
			4-Bromophenyl-phenylether	10	--	ND	--	--

TABLE 3
PAGE 20 OF 20

GROUNDWATER SAMPLING RESULTS
BUILDING 616, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

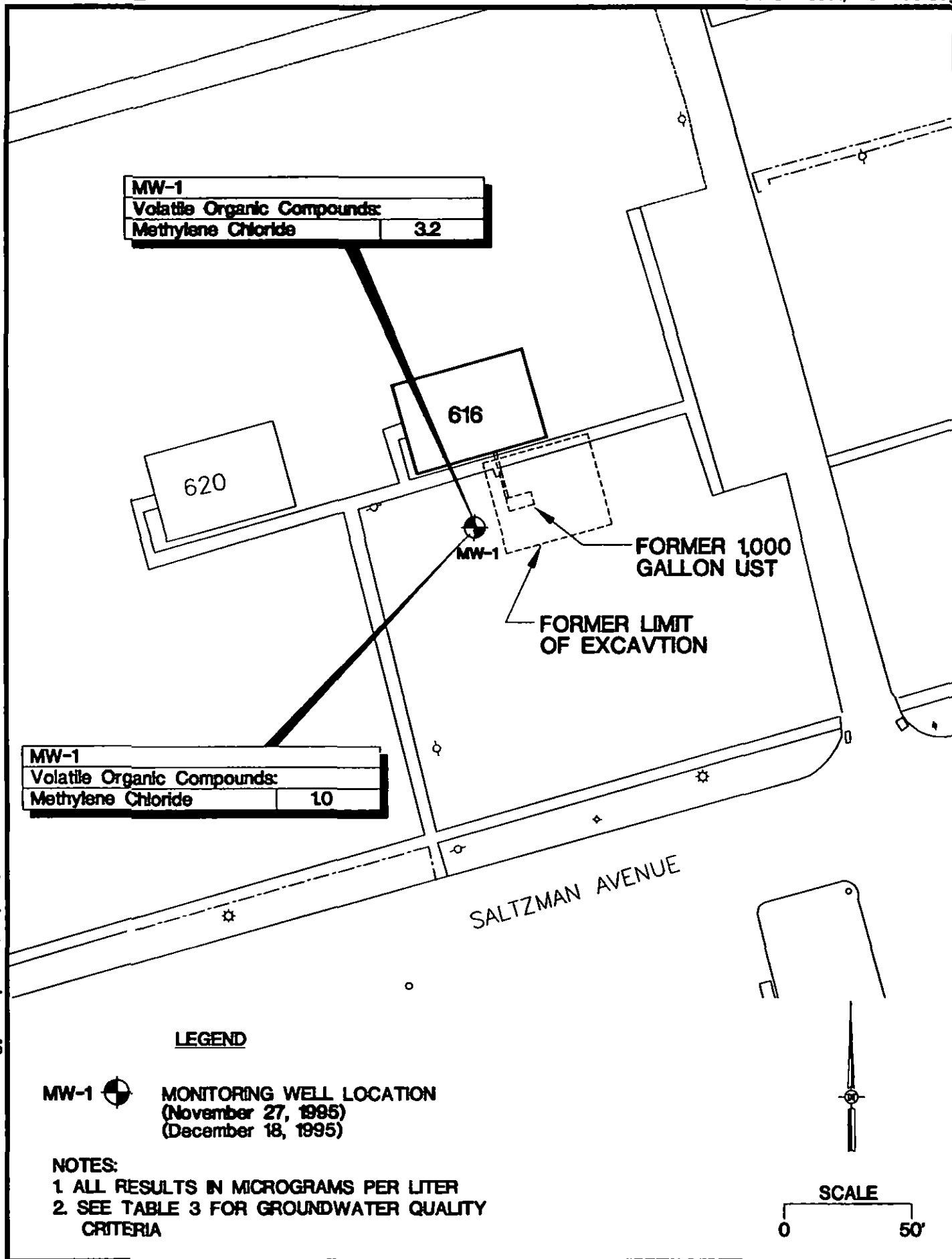
Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	12/18/95	12/26/95	Hexachlorobenzene	10	--	ND	10	--
			Pentachlorophenol	25	--	ND	1	--
			Phenanthrene	10	--	ND	NA	--
			Anthracene	10	--	ND	2,000	--
			Carbazole	10	--	ND	--	--
			Di-n-butylphthalate	10	--	ND	900	--
			Fluoranthene	10	--	ND	300	--
			Pyrene	10	--	ND	200	--
			Butylbenzylphthalate	10	--	ND	100	--
			Benzo(a)Anthracene	10	--	ND	NA	--
			3,3-Dichlorobenzidine	20	--	ND	60	--
			Chrysene	10	--	ND	NA	--
			bis(2-Ethylhexyl)Phthalate	10	--	ND	30	--
			Di-n-Octyl Phthalate	10	--	ND	100	--
			Benzo(b)Fluoranthene	10	--	ND	NA	--
			Benzo(k)Fluoranthene	10	--	ND	NA	--
			Benzo(a)Pyrene	10	--	ND	NA	--
			Indeno(1,2,3-cd)pyrene	10	--	ND	NA	--
			Dibenzo(a,h)anthracene	10	--	ND	NA	--
			Benzo(g,h,i)perylene	10	--	ND	NA	--
TENTATIVELY IDENTIFIED COMPOUNDS.			Unknown Hydrocarbon	--	--	6 J	--	--

Notes

- Not applicable / does not exceed criteria
- (B) Indicates also present in blank
- (ND) Indicates compound not detected
- (NA) Not available for this constituent
- (J) Indicates detected below sample quantitation limit
- GWQC Ground Water Quality Criteria

Smith Technology Corporation (Project No. 09-5004-08)

Source: Smith Technology Corporation (123)



APPENDIX A

NJDEP BUST CLOSURE APPROVAL



State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

Mr. Dinker Desai
SELF-M-EH-EV
Department of the Army
Headquarters CECOM Fort Monmouth
Fort Monmouth, NJ 077703-5000

OCT 7 1994

Dear Mr. Desai:

Re: Underground Storage Tank Closure Approvals
Fort Monmouth Army Facility
Tinton Falls, Monmouth County

The NJDEP has reviewed the Underground Storage Tank (UST) Closure Plan Approval Requests dated September 2, 1994 for the following USTs:

<u>Tank No.</u>	<u>Building No.</u>	<u>Product</u>	<u>Size</u>	<u>Piping Length</u>
86	608	No. 2 Fuel Oil	1000	12'
103	671	No. 2 Fuel Oil	1000	14'
107	686	No. 2 Fuel Oil	2000	18'
93	620	No. 2 Fuel Oil	1000	22'
90	616	No. 2 Fuel Oil	1000	12'
106	682	No. 2 Fuel Oil	1080	22'
78	508	No. 2 Fuel Oil	1500	15'

These closure requests are consistent with the *Technical Requirements for Site Remediation* (N.J.A.C.7:26E) and are therefore acceptable to the NJDEP (with the incorporation of the comment below). A copy of this letter should be immediately accessible at each of these UST removal locations.

The NJDEP has also received a request dated September 9, 1994 from Mr. James Ott, Acting Director, which requests a variance from the Closure Approval Requests for use of polytetrafluoroethylene (PTFE) trowels to polystyrene trowels. Neither of these types of trowels is acceptable to the NJDEP. In accordance with the *Field Sampling Procedures Manual* (May 1992), only appropriately decontaminated stainless steel trowels are acceptable. Please correct the UST closure plans to reflect the requirement to use stainless steel trowels.

If you should have any questions or require additional information, please do not hesitate to contact me at (609) 633-1455.

Sincerely,

Ian R. Curtis, Case Manager
Bureau of Federal Case Management

cc. Mr. James Ott, FTMMTH

S:\RCPCEBFCM\FTMMTH17.JRC

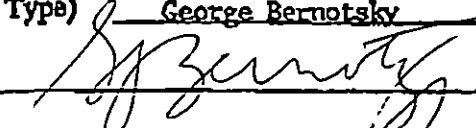
SMITH

APPENDIX B
CERTIFICATIONS

UNDERGROUND STORAGE TANK (UST)
CLOSURE CERTIFICATION

BUILDING NO. 616NJDEP UST REGISTRATION NO. 81533-90DATE TANK REMOVED 12/9/94UO / CONTRACT NUMBER 91-0148

I CERTIFY UNDER PENALTY OF LAW THAT TANK DECOMMISSIONING ACTIVITIES WERE PERFORMED IN COMPLIANCE WITH NJAC 7:14B-9.2(b)3. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE, INACCURATE, OR INCOMPLETE INFORMATION, INCLUDING FINES AND/OR IMPRISONMENT.

NAME (Print or Type) George BernotskySIGNATURE NJDEP UST CLOSURE CERTIFICATE NO. 0003249COMPANY PERFORMING TANK DECOMMISSIONING CUTE IncNJDEP UST CLOSURE CORPORATE CERTIFICATE NO. 0200128DATE OF SUBMITTAL 1/13/95

UST-014
291



State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation

CN 028
Trenton, NJ 08625-0028
Tel # 609-984-3156
Fax # 609-292-5604

Scott A. Weiner
Commissioner

FOR STATE USE ONLY
UST # _____
Date Rec'd _____
TMS # _____
Staff _____

Karl J. Delaney
Director

**UNDERGROUND STORAGE TANK
SITE ASSESSMENT SUMMARY**

*Under the provisions of the Underground Storage
of Hazardous Substances Act
in accordance with N.J.A.C. 7:14B*

This Summary form shall be used by all owners and operators of Underground Storage Tank Systems (USTS) who have either reported a release and are subject to the site assessment requirements of N.J.A.C. 7:14B-8.2 or who have closed USTS pursuant to N.J.A.C. 7:14B-9.1 et seq. and are subject to the site assessment requirements of N.J.A.C. 7:14B-9.2 and 9.3.

INSTRUCTIONS

- Please print legibly or type
- Fill in all applicable blanks. This form will require various attachments in order to complete the Summary. The technical guidance document Interim Closure Requirements for USTs explains the regulatory (and technical) requirements for closure and the Scope of Work, Investigation and Corrective Action Requirements for Discharges from Underground Storage Tanks and Piping Systems explains the regulatory (and technical) requirements for corrective action.
- Return one original of the form and all required attachments to the above address.
- Attach a scaled site diagram of the subject facility which shows the information specified in Item IV B of this form.
- Explain any "No" or "N/A" response on a separate sheet.

Date of Submission _____

081533-90
FACILITY REGISTRATION #

Bldg. 616

I FACILITY NAME AND ADDRESS

US Army Fort Monmouth, New Jersey
Directorate of Public Works, Bldg. 167
Fort Monmouth, NJ 07703 County Monmouth
Telephone No. 908-532-1475

OWNER'S NAME AND ADDRESS, if different from above

Telephone No. _____

II. DISCHARGE REPORTING REQUIREMENTS

- A. Was contamination found? ☒ Yes ☐ No If Yes, Case No. 94-12-8-1040-10
(Note: All discharges must be reported to the Environmental Action Hotline (609) 292-7172)
- B. The substance(s) discharged was(were) #2 Fuel Oil
- C. Have any vapor hazards been mitigated? ☐ Yes ☐ No ☒ N/A

Letter dated October

III. DECOMMISSIONING OF TANK SYSTEMS

Closure Approval No. 7, 1994

The site assessment requirements associated with tank decommissioning are explained in the Technical Guidance Document, Interim Closure Requirements for UST's, Section V, A-D. Attach complete documentation of the methods used and the results obtained for each of the steps of tank decommissioning used. Please include a site map which shows the locations of all samples and borings, the location of all tanks and piping runs at the facility at the beginning of the tank closure operation and annotated to differentiate the status of all tanks and piping (e.g., removed, abandoned, temporarily closed, etc.). The same site map can be used to document other parts of the site assessment requirements, if it is properly and legibly annotated.

IV. SITE ASSESSMENT REQUIREMENTS

A. Excavated Soil

Any evidence of contamination in excavated soil will require that the soil be classified as either Hazardous Waste or Non-Hazardous Waste. Please include all required documentation of compliance with the requirements for handling contaminated excavated soil (if any was present) as explained in the technical guidance documents for closure and corrective action. Describe amount of soil removed, its classification, and disposal location.

B. Scaled Site Diagrams

1. Scaled site diagrams must be attached which include the following information:

- North arrow and scale
- The locations of the ground water monitoring wells
- Location and depth of each soil sample and boring
- All major surface and sub-surface structures and utilities.
- Approximate property boundaries
- All existing or closed underground storage tank systems, including appurtenant piping
- A cross-sectional view indicating depth of tank, stratigraphy and location of water table
- Locations of surface water bodies

C. Soil samples and borings (check appropriate answer)

- Were soil samples taken from the excavation as prescribed? ☒ Yes ☐ No ☐ N/A
- Were soil borings taken at the tank system closure site as prescribed? ☐ Yes ☐ No ☒ N
- Attach the analytical results in tabular form and include the following information about each sample
 - Customer sample number (keyed to the site map)
 - The depth of the soil sample
 - Soil boring logs
 - Method detection limit of the method used
 - QA/QC Information as required

D. Ground Water Monitoring

1. Number of ground water monitoring wells installed 17 Adjacent MW's used to confirm GW flow direction
2. Attach the analytical results of the ground water samples in tabular form. Include the following information for each sample from each well:
 - a. Site diagram number for each well installed
 - b. Depth of ground water surface
 - c. Depth of screened interval
 - d. Method detection limit of the method used
 - e. Well logs
 - f. Well permit numbers
 - g. QA/QC information as required

V. SOIL CONTAMINATION

- A. Was soil contamination found? ☒ Yes ☐ No
If "Yes", please answer Question B-E
If "No", please answer Question B

- B. The highest soil contamination still remaining in the ground has been determined to be:
1. ND ppb total BTEX, 5.2 ppb total non-targeted VOC
 2. N/A ppb total B/N, N/A ppb total non-targeted B/N
 3. 8,680.0 ppm TPHC
 4. N/A ppb (for non-petroleum substance)

C. Remediation of free product contaminated soils

1. All free product contaminated soil on the property boundaries and above the water table are believed to have been removed from the subsurface ☒ Yes ☐ No as pertains to this site
2. Free product contaminated soils are suspected to exist below the water table ☐ Yes ☒ No
3. Free product contaminated soils are suspected to exist off the property boundaries. ☐ Yes ☒ No

D. Was the vertical and horizontal extent of contamination determined? ☐ Yes ☐ No ☒ N/A

E. Does soil contamination intersect ground water? ☐ Yes ☐ No ☒ N/A

VI. GROUND WATER CONTAMINATION

- A. Was ground water contamination found? ☐ Yes ☒ No
If "Yes", please answer Questions B-G.
If "No", please answer only Question B.

- B. The highest ground water contamination at any 1 sampling location and at any 1 sampling event to date has been determined to be:

1. ND ppb total BTEX, 3.2 ppb total non-targeted VOC
2. N/A ppb total B/N, N/A ppb total non-targeted B/N
3. N/A ppb total MTBE, N/A ppb total TBA
4. N/A ppb (for non-petroleum substance)
5. greatest thickness of separate phase product found N/A
6. separate phase product has been delineated ☐ Yes ☐ No ☒ N/A
(Refer to Table 3 for other parameters)

C. Result(s) of well search

1. A well search (including a review of manual well records) indicates that private, municipal or commercial wells do exist within the distances specified in the Scope of Work. ☐ Yes ☒ No ☐ N/A
2. The number of these wells identified is 0

D. Proximity of wells and contaminant plume N/A

1. The shallowest depth of any well noted in the well search which may be in the horizontal or vertical potential path(s) of the contaminant plume(s) is _____ feet below grade (consideration has been given for the effects of pumping, subsurface structures, etc. on the direction(s) of contaminant migration). This well is _____ feet from the source and its screening begins at a depth of _____ feet.
2. The shallowest depth to the top of the well screen for any well in the potential path of the plume(s) (as described in D1 above) is _____ feet below grade. This well is located _____ feet from the source.
3. The closest horizontal distance of a private, commercial or municipal well in the potential path of the plume (as determined in D1) is _____ feet from the source. This well is _____ feet deep and screening begins at a depth of _____ feet.

E. A plan for separate phase product recovery has been included. ☐ Yes ☐ No ☐ N/A

F. A ground water contour map has been submitted which includes the ground water elevations for each well.
☐ Yes ☐ No ☒ N/A

G. Delineation of contamination N/A

1. The ground water contaminants have been delineated to MCLs or lower values at the property boundaries. ☐ Yes ☐ No
2. The plume is suspected to continue off the property at concentrations greater than MCLs.
☐ Yes ☐ No
3. Off property access (circle one): ☐ is being sought ☐ has been approved ☐ has been denied

VII. SITE ASSESSMENT CERTIFICATION [preparer of site assessment plan - N.J.A.C. 7:14B-8.3(b) & 9.5(a)(3)]

The person signing this certification as the "Qualified Ground Water Consultant" (as defined in N.J.A.C. 7:14B-1.6) responsible for the design and implementation of the site assessment plan as specified in N.J.A.C. 7:14B-8.3(a) & 9.2(b)(2), must supply the name of the certifying organization and certification number.

"I certify under penalty of law that the information provided in this document is true, accurate, and complete and was obtained by procedures in compliance with N.J.A.C. 7:14B-8 and 9.1. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) Dinkerrai M Desai SIGNATURE _____

COMPANY NAME US Army Fort Monmouth DATE _____
(Preparer of Site Assessment Plan)

CERTIFYING ORGANIZATION NJDEP CERTIFICATION NUMBER E0002266

VIII. TANK DECOMMISSIONING CERTIFICATION [person performing tank decommissioning: portion of closure plan - N.J.A.C. 7:14B-9.5(a)4] See Appendix B

"I certify under penalty of law that tank decommissioning activities were performed in compliance with N.J.A.C. 7:14B-9.2(b)3. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) _____ SIGNATURE _____
COMPANY NAME _____ DATE _____
(Performer of Tank Decommissioning)

IX. CERTIFICATIONS BY THE RESPONSIBLE PARTY(IES) OF THE FACILITY

A. The following certification shall be signed by the highest ranking individual with overall responsibility for that facility [N.J.A.C. 7:14B-2.3(c)1].

"I certify under penalty of law that the information provided in this document is true, accurate, and complete. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) James Ott _____ SIGNATURE _____
COMPANY NAME US Army Fort Monmouth _____ DATE _____

B. The following certification shall be signed as follows [according to the requirements of N.J.A.C. 7:14B-2.3(C)2]:

1. For a corporation, by a principal executive officer of at least the level of vice president.
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, State, Federal or other public agency by either the principal executive officer or ranking elected official.
4. In cases where the highest ranking corporate partnership, governmental officer or official at the facility as required in A above is the same person as the official required to certify in B, only the certification in A need to be made. In all other cases, the certifications of A and B shall be made.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) _____ SIGNATURE _____
COMPANY NAME _____ DATE _____

SMITH

APPENDIX C
WASTE MANIFEST



State of New Jersey
Department of Environmental Protection and
Hazardous Waste Regulation Program
Manifest Section

CN 421, Trenton, NJ 08625-0421

Please type or print in block letters (Form designed for use on elite (12-pitch) typewriter)

Form Approved OMB No 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1 Generator's US EPA ID No NJ131211010121015191701010102		Manifest Document No 01010102		2 Page 1 of 1		Information in the shaded areas is not required by Federal law			
3 Generator's Name and Mailing Address US Army Communications Electronics Command Main Post, c/o James Shirghio, Bldg 250, ATIN: SELFM-DE-2115 Fort Monmouth, NJ 07703 1737 PW-EV						A State Manifest Document Number NJ1907259					
4 Generator's Phone (908) 532-6223						B State Generator's ID (Generator's Address) Main Post					
5 Transporter 1 Company Name Freehold Cartage Inc.						C State Trans ID NJDEPE 252265					
6 US EPA ID Number NJ1D10151411216111614						D State Decal No 64499					
7 Transporter 2 Company Name						E State Trans ID NJDEPE					
8 US EPA ID Number						F State Decal No					
9 Designated Facility Name and Site Address Lionetti Oil Recovery Co., Inc. Cheesequake & Rumyon Rds. Old Bridge, NJ 08857						G State Facility's ID					
10 US EPA ID Number NJ1D101814101414101614						H Facility's Phone (908) 721-0900					
11 US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) HM						12 Containers No Type		13 Total Quantity		14 Unit Wt/Vol	
a X Petroleum Oil, N.O.S. Class 3 (Petroleum Oil) Combustible Liquid UN 1270 PG III BLDG 671						001 TIT		01021010		G X 17 12 12	
b X Petroleum Oil, N.O.S. Class 3 (Petroleum Oil) Combustible Liquid UN 1270 PG III BLDG 686						001 TIT		0101215		G X 17 12 12	
c X Petroleum Oil, N.O.S. Class 3 (Petroleum Oil) Combustible Liquid UN 1270 PG III BLDG 616						0101 TIT		0101215		G X 17 12 12	
d X Petroleum Oil, N.O.S. Class 3 (Petroleum Oil) Combustible Liquid UN 1270 PG III BLDG 246						0101 TIT		022158		G X 17 12 12	
15 Additional Descriptions for Materials Listed Above Petroleum Oil 56% Water 50% T.L. Petroleum Oil 50% Water 50% T.L.						K Handling Codes for Wastes Listed Above 04= Filtration 04= Filtration					
16 Special Handling Instructions and Additional Information NOT EPA REGULATED. REGULATED AS HAZARDOUS WASTE IN NJ 11a 0081533-103 11b 0081533-107 24 HOUR EMERGENCY PHONE: 201-427-2881 11c 0081533-90 11d Bldg 206 11a, b, c, d ERG# 27											
17 GENERATOR'S CERTIFICATION I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations If I am a large quantity generator I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment, OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford											
Printed/Typed Name Joseph M. Fallon						Signature Joseph M. Fallon		Month Day Year 11/22/94			
17 Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name David Smith						Signature David Smith		Month Day Year 11/22/94			
18 Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name						Signature		Month Day Year			
19 Discrepancy Indication Space											
20 Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19 Printed/Typed Name						Signature		Month Day Year			

CALCULATION SHEET

Building No. 616

NJDEPE Reg. No. 0081533 - 90

Tank Size 1000 gal

Tank Void 7.5 tons

CLEAN FILL

ITEM NO.	DESCRIPTION	QUANTITY	TICKET #
	<i>Fill</i>	6.52	18866
		20.93	18963
		21.63	18961
		21.45	18849
		22.00	18850
		22.23	18983
		22.05	18984

(see continuations) TOTAL 494.44

STONE

ITEM NO.	DESCRIPTION	QUANTITY	TICKET #
	<i>Stone</i>	25.76	1027096

TOTAL

ID#27 soil to stockpile $(494.44 + 25.76) - 7.5 = 512.7$ tons

Chargeable clean fill $494.44 - 7.5 = 486.94$

Chargeable stone 25.76

CALCULATION SHEET. (CONT.)

Building No. 616

NJDEPE Reg. No.

Tank Size gal

Tank Void tons

CLEAN FILL

ITEM NO.	DESCRIPTION	QUANTITY	TICKET #
	<i>Fill</i>	21.00	18985
		21.90	18986
		20.93	18863
		21.30	18864
		21.35	18865
		22.25	18987
		21.25	18877
	TOTAL	22.00	18878
		21.50	18879
		20.63	18880

STONE

ITEM NO.	DESCRIPTION	QUANTITY	TICKET #
----------	-------------	----------	----------

TOTAL

ID#27 soil to stockpile (+) - = tons

Chargeable clean fill

Chargeable stone

CALCULATION SHEET (cont)

Building No. 616

NJDEPE Reg. No.

Tank Size gal

Tank Void tons

CLEAN FILL

ITEM NO.	DESCRIPTION	QUANTITY	TICKET #
	fill	20.75	18881
		21.55	18882
		21.06	18883
		21.25	18884
		22.50	18979
		22.28	18981
		14.13	18982

TOTAL

STONE

ITEM NO.	DESCRIPTION	QUANTITY	TICKET #
----------	-------------	----------	----------

TOTAL

ID#27 soil to stockpile (+) - = tons

Chargeable clean fill

Chargeable stone

S. C. M. I. - BOUND BROOK



CUSTOMER'S COPY

 CONTROL NO.
A-1027096
Stavola Construction Materials, Inc.

PLANT: CHIMNEY ROCK ROAD, BOUND BROOK, N.J. - 908/358-5700

 116
 JOLD

RECEIVED & ACCEPTED BY:

X

CUSTOMER'S SIGNATURE

X

DRIVER'S SIGNATURE

 EXECUTIVE OFFICE
 HAMILTON ROAD
 TINTON FALLS, N.J.
 908/542-2328

 CRUSHED STONE • SAND
 GRAVEL

ADDRESS REPLY TO

 P.O. BOX 482
 RED BANK, N.J. 07701

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY VEHICLES DELIVERING MATERIALS OFF PUBLIC ROADS.

EXPLANATION OF DELIVERY CODES

- 1 - F.O.B.
-
- 2 - DELIVERED
-
- 3 - NET DELIVERED

DATE	01/18/95	CUST. NO.	08888	JOB NO.	10106	TICKET NO.	027096
CUSTOMER				DELIVER TO		GROSS	
CLEANING UP THE ENVIRONMENT 103 GODWIN AVE. P.O. BOX 237 MIDLAND PARK NJ 07432				ZONE 1 FT MON		38.76	
TICKET				METHOD OF PAYMENT		DELIVERY CODE	
S1495				CHARGE		2	
TRUCK NO.		DRIVER NO.		UNIT OF MEASURE		SALES TAX	
1				T		5.00	
QUANTITY		PRODUCT CODE/DESCRIPTION		UNIT PRICE		TOTAL	
25.76		20 3/4 CR-5 GSA					
MENTS				LOADS		WAIT TIME	
				3		GRAND TOTAL	
				ACCU. TONS.			
				75.83			



1453 W. Park Ave. Wayside
Asbury Park, N.J. 07712
908-493-3333

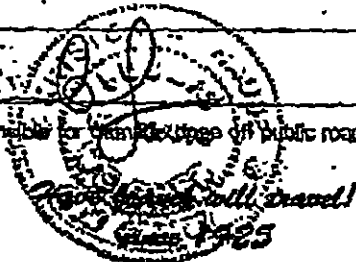
18963

Name Big A
Address Clean Fill

Order Date Feb 18, 1995Deliver Date 1/1/1Delivered ☐ C.O.D. ☐F.O.B./P.U. ☐ Charge ☐

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
C	673.50		
T	255.00	20.93 tons	
N	418.50		

Driver LC
Received LC
Company not responsible for damage to or loss of public roads. Color not guaranteed!



Sub Total	
Delivery	
N.J. Tax	
Total	

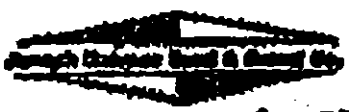
Have gravel will travel!
since 1925

JAN-11-05 WED 15:18

O.U.T.E.

PIN NO. 201 423 8060

P.05/48



1400 W. Park Ave., Maryland
 Ashbury Park, N.J. 07712
 908-798-0388

276

18866

Notes By A Truck Inc

Address Clark Fill

Order Date 1/1/05
 Deliver Date Dec 1, 5, 2K
 Delivered ☐ COD ☐
 FOB/PU ☐ Charge ☒

Item(s)	Quantity / Measure (cont. vol, yds, cu)	Unit Price	Total
	G 71540		
	T 23500		
	N 43040		
		21.52 tons	

Driver Danella

Received Danella

* Company not responsible for damage done off public ways. Callers not guaranteed

These gravel will be used!
 since 1985

Sub Total	
Delivery	
N.J. Tax	
Total	

Bldg 616 6.52 Tons
 Bldg 686 15.00 Tons
21.52



1453 W Park Ave., Wayside
Asbury Park, N.J. 07712
808-483-3333

296

18849

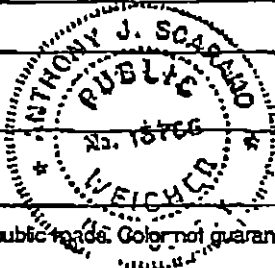
Order Date FEB 8, 95Name B. A.Address FillDeliver Date 1/1/1Delivered ☐C.O.D. ☐F.O.B./P.U. ☐Charge ☒

Item(s)	Quantity / Measure (tons, lbs., yds, ea.)	Unit Price	Total
	G 68400		
	T 25500		
	N 42900		
		21.45 tons	

Driver Cliffreceived Cliff

* Company not responsible for damage done off public roads. Color not guaranteed!

*Have gravel with gravel
since 1925*



Sub Total

Delivery

N.J. Tax

Total



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-493-3333

296

18850

Order Date

FEB 18, 95

Deliver Date

1 / 1

Delivered ☐C.O.D. ☐F.O.B./P.U. ☐Charge ☒

Item(s)

Quantity / Measure
(tons, lbs., yds., ea.)Unit
Price

Total

G 69500

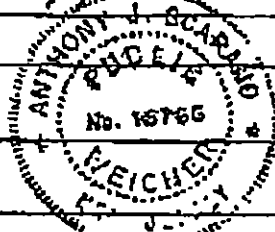
T 25500

N 44000

22 tons

Driver

Served



Sub Total

Delivery

N.J. Tax

Total

* Company not responsible for damage done off public roads/Color Not guaranteed!

Have gravel with travel!
since 1925



1453 W. Park Ave., Wayaida
Asbury Park, N.J. 07712
908-493-3333

18983

Name Big A
Address Clean Fill

Order Date Jan 9, 95

Deliver Date 1 / 1

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☐

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	G 69150		
	T 25000	22.23 tons	
	N 44150		

Driver Barnley
Received Jan 23 1995
* Company not responsible for damage done off public roads. Color not guaranteed!

Have gravel with gravel!
since 1925

Sub Total

Delivery

N.J. Tax

Total



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-493-3333

18984Order Date Jan. 9, 95Deliver Date 1/11/95Delivered ☐ C.O.D. ☐F.O.B./P.U. ☐ Charge ☐

Name

Big A Trucking

Address

Claw Fill

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	G 69100		
	K 20000		
	N 44100		

Sub Total

Delivery

N.J. Tax

Total

Driver

Received

* Company not responsible for damage done off public roads. Color not guaranteed!

Have gravel will travel!
since 1925



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-483-3333

18985

Order Date Jan 19, 95Name Big ADeliver Date 1/1/95Address FillDelivered ☐ C.O.D. ☐F.O.B./P.U. ☐ Charge ☒

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	G 67000		
	T 25000		
	N 42000		

Sub Total

Delivery

N.J. Tax

Total

Driver S. BernellReceived S. Bernell

* Company not responsible for damage done off public roads. Color not guaranteed

Have gravel with gravel
since 1925



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-493-3333

18986

Order Date

JAN, 9, 95

Name

Big A

Deliver Date

/ /

Address

FILL

Delivered ☐C.O.D. ☐F.O.B./P.U. ☐Charge ☒

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	G 68800		
	T 25000	(21.90 tons)	
	N 43800		

Driver

Received

* Company not responsible for damage done off public roads. Color not guaranteed!

Have gravel with gravel!
since 1925

Sub Total

Delivery

N.J. Tax

Total



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-493-3333

18863

Name Big A

Order Date FEB 13 1995

Address Fill

Deliver Date 1/1/1

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☒

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	G 67350		
	T 25500		
	N 41850		
		20.93 tons	

Driver Cliff

Received 15th

* Company not responsible for damage done off public roads. Color Not guaranteed!

Have gravel will travel!
since 1925

Sub Total

Delivery

N.J. Tax

Total



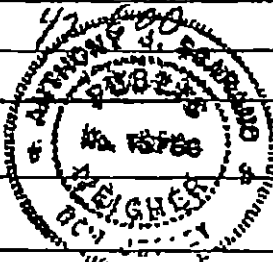
1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-483-3333

256

18864

Order Date FEB, 8, 95Name Buy ADeliver Date 1/1/1Address FillDelivered ☐C.O.D. ☐F.O.B./P.U. ☐Charge ☒

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
G	68100		
T	25500		
N	42600		
		21.30 tons	
Sub Total			
Delivery			
N.J. Tax			
Total			



Received Off - Tond
Company not responsible for damage done off public roads. Color not guaranteed!

Have gravel will travel!
since 1925



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-493-3333

286

18865

Order Date

Feb 8, 95

Deliver Date

1/1/

Delivered ☐

C.O.D. ☐

F.O.B./P.U. ☐

Charge ☒

Item(s)

Quantity / Measure
(tons, lbs., yds., ea.)

Unit
Price

Total

G 68200

T 25500

N 42700

21.35 tons

Sub Total

Delivery

N.J. Tax

Total

Driver

Delivered

* Company not responsible for damage done off public roads. Color not guaranteed!

Have gravel with travel!
since 1925



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
808-493-3333

18987

Order Date FEB 18 1995Deliver Date / / Delivered ☐ C.O.D. ☐F.O.B./P.U. ☐ Charge ☒

Address

Big A

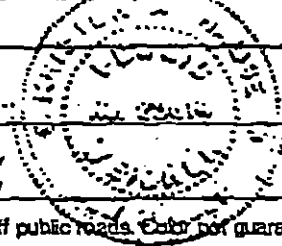
Fill

Item(s)	Quantity / Measure (tons, lbs, yds, ea.)	Unit Price	Total
	G 70 000		
	T 25 500	(22.25 tons)	
	N 44 500		
Sub Total			
Delivery			
N.J. Tax			
Total			

river

Received

Cliff Tondi



Company not responsible for damage done off public roads. Color not guaranteed!

Have gravel will travel!
since 1925



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-493-3333

296

18877

Order Date

FEB, 8, 95

Name

Deliver Date

Address

Delivered ☐C.O.D. ☐F.O.B./P.U. ☐Charge ☒

Fill

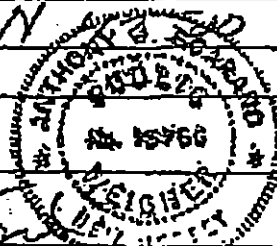
Item(s)	Quantity / Measure (tons, lbs., yds, ea.)	Unit Price	Total
	68000		
	25500	21.25 tons	
	N		
Sub Total			
Delivery			
N.J. Tax			
Total			

Driver

Received

Company not responsible for damage done off public roads. Color not guaranteed

Have gravel with gravel
since 1925





Joseph Sciarano Sand & Gravel Co.

 1453 W. Park Ave., Wayside
 Asbury Park, N.J. 07712
 808-483-3333

Order Date

18878

Feb 18, 85

Deliver Date

Delivered ☐C.O.D. ☐F.O.B./P.U. ☐Charge ☒

ma

Address

Big A

Fill

Item(s)

Quantity / Measure
(tons, lbs., yds., ea.)Unit
Price

Total

G 69500

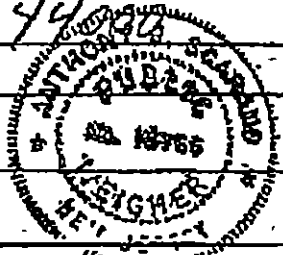
T 25500

N 44000

22 tons

Driver

Received



Sub Total

Delivery

N.J. Tax

Total

* Company not responsible for damage done off public roads. (Cash not guaranteed)

 Have gravel with gravel!
 since 1925



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
808-493-3333

296

18879

Order Date FEB 8, 95

Deliver Date 1 / 1

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☒

me By A
address Fill

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	S 70000		
	T 27000		
	N 43200		
		21.50 tons	

Driver Elff

received Elff

* Company not responsible for damage done off public roads. Color not guaranteed!

*Have gravel with gravel
since 1925*

Sub Total

Delivery

N.J. Tax

Total



256

18880

Order Date

FEB 5 1975

179

Big H

Deliver Date

Adressa:

FBI

Delivered

G.O.D.

F.O.B./P.U.

Charge

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	S 68250		
	T 27000		
	X 41250		
		20.63 tons	
Driver _____		Sub Total	
ceived <u>CAN TO</u>		Delivery	
* Company not responsible for damage done off public roads. Color not guaranteed!		N.J. Tax	
		Total	

Have gravel will travel
since 1925

Have gravel will travel!
since 1925



1453 W Park Ave., Wayside
Asbury Park, N.J. 07712
808-493-3333

296

18881

Order Date 2, 8, 95Deliver Date 1, 1, 1Delivered ☐ C.O.D. ☐F.O.B./P.U. ☐ Charge ☒Name B. G. A

Address

Fill

Item(s)

Quantity / Measure
(tons, lbs., yds., ea.)Unit
Price

Total

G 68500

T 27000

N 47500

20.75 tons

Sub Total

Delivery

N.J. Tax

Total

Driver

Received Colt

* Company not responsible for damage done off public roads. Color not guaranteed.

Has gravel will travel!
since 1925



1453 W. Park Ave., Wayville
Asbury Park, N.J. 07712
908-493-3333

296

18882

Name B. B. AAddress FillOrder Date 2/8/95Deliver Date 1/1/1Delivered ☐ C.O.D. ☐F.O.B./P.U. ☐ Charge ☒

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	G 70100		
	T 27000		
	N	21.55 tons	

Driver COBReceived COB

Company not responsible for damage done off public roads. Color not guaranteed!

Have gravel with gravel!
since 1925

Sub Total

Delivery

N.J. Tax

Total



296

18883

Order Date 2/8/95

Deliver Date / /

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☒

no. B.6 A

Address _____

Fill

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
G 69110			
T 27000			
N 42710			
		Sub Total	
		Delivery	
		N.J. Tax	
		Total	

Driver _____
Received E.P.A. Lewal
* Company not responsible for damage done off public roads - color or not guaranteed!

*Have gravel will travel!
since 1925*

Driver

Received

* Company not responsible for damage done off public roads. Color not guaranteed.

Have gravel well travel!
since 1925



1453 W. Park Ave., Wayland
Asbury Park, N.J. 07712
908-493-3333

296

18884

Order Date 2/8/95Deliver Date 1/1/Delivered ☐ C.O.D. ☐F.O.B./P.U. ☐ Charge ☒

une B.G.A.
Address Fill

Item(s)

Quantity / Measure
(tons, lbs., yds., ea.)Unit
Price

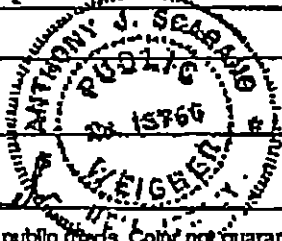
Total

G 65500

T 27000

N 42500

21.25 tons



Sub Total

Delivery

N.J. Tax

Total

Driver

Received

Company not responsible for damage done off public roads. Color not guaranteed!

Have gravel with travel!
since 1925



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
808-493-3333

18982

Order Date Feb 18, 1995Name Big ADelivery Date 1/1/1Address fillDelivered ☐ C.O.D. ☐F.O.B./P.U. ☐ Charge ☐

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	G 68250		
	T 25000		
	N 43250		

21.63 tons

Driver B. B. B.Received B. B. B.

* Company not responsible for damage done on public roads. Color not guaranteed!

Have gravel with gravel
since 1925

Sub Total

Delivery

N.J. Tax

Total

Bldg 1106 7.5 tons

Bldg 616 14.13 tons



1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
808-493-3333

276

18979

Order Date

F 12, 95

Name

B. A.

Deliver Date

1/1/95

Address

F-11

Delivered ☐

C.O.D. ☐

F.O.B./P.U. ☐

Charge ☒

Item(s)

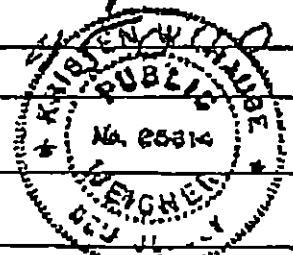
Quantity / Measure
(tons, lbs., yds., ea.)

Unit
Price

Total

6 7000
7 7000
N

22.50 tons



Driver

2014-12-12

Received

Company not responsible for damage done off public roads. Colder not guaranteed!

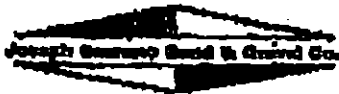
Have gravel with gravel!
since 1925

Sub Total

Delivery

N.J. Tax

Total



1459 W. Park Ave. Vineland
Asbury Park, N.J. 07712
800-423-3999

18981

Order Date

Jan, 18, 95

Delivery Date

1

Delivered ☐C.O.D. ☐F.O.B./P.U. ☐Charge ☐

Item(s)

Quantity / Measure
(tons, lbs., yds., cu.)Unit
Price

Total

G 69.550
N 25.000
N 94.350

22.28 Tons

Sub Total

Delivery

N.J. Tax

Total

river

received

Company not responsible for damage (cracks, etc.) made. Color not guaranteed

These gravel and sand
since 1925

SMITH

APPENDIX D

UST DISPOSAL CERTIFICATE

Fort Monmouth**MAZZA & SONS, INC.**

NO. _____

Edgewater, NJMetal Recyclers
Auto and Truck
8230 Shafte Rd.
Tinton Falls, NJ
(808) 622-0202DATE 12 Dec 84Tank # UST #620 - 0081533-93682 - 0081533-106646 - 0081533-90

Customer's Name

Cute 106Address 103 Godwin Ave. P.O. 237, Midland Pt., NJ 07432

Make of

Auto

Plate

682 - 0081533-90

616 - 0081533-90

620 - 0081533-93

Type

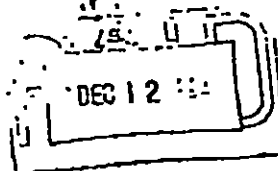
Tank

Price

39820 LB :

39820 LB 6

38.4



Weights Price

Cold Iron	
Steel	76.80
Li. Iron	
Copper #1	
Copper #2	
Li. Copper	
Brass	
Alum Clean	
Lead	
Stainless	
Radiators	
Battery	
TOTAL AMOUNT	

Weight

Customer

Don



APPENDIX E

MONITORING WELL PERMIT AND WELL CONSTRUCTION LOG



U.S. ARMY
FORT MONMOUTH
SELF-M-PW-EV

LOG OF BORING 616-MW1

(Page 1 of 1)

Produced for Charles Appleby

Project Name : BLDG 816
NJDEP Case # : 29-33760
Logged By : Shore Drilling
Start Date : 8/17/95

Completion Date : 8/17/95
Northing : N 539584 356
Easting : E 2172306 050
Driller : R. Barnes

Depth in Feet	29-33760 ELEV. 18.92	DESCRIPTION	GRAPHIC	USCS	Samples	Blows/FT	TPHC	Well Construction Information
0		Topsoil and Roots						Well Construction Date Completed : 8/17/95 Hole Diameter : 8 in Drill Method : HSA Company Rep : R. Barnes
1		Brown clayey, dry moist		CL	1	15		Well Casing Material : PVC Diameter : 4 in Joints : Threaded
2					2	12		Well Screen Material : PVC Diameter : 4 in Joints : Threaded Opening : 20 Slot
3		Green + black silty clay, mottled moist		CL	3	14		Sand Pack : # 2 Mone Sand Annulus Seal : Bentonite/Portland Tremmie
4					4	16		Well Screen Material : PVC Diameter : 4 in
5					5	16		
6					6	15		
7		Iron stained area		CL				NOTES Well #1 is 616 MW1 Sack up 2.5' Water level 6'
8								
9								
10								
11								
12								
13								
14								
15								
16								

SMITH

APPENDIX F
SOIL ANALYTICAL DATA PACKAGE

Report of Analysis
U S Army, Fort Monmouth Environmental Laboratory
NJDEPE Certification # 13461

Client- U S Army
DPW, SELFM-PW-EV
Bldg 167
Ft. Monmouth, NJ 07703

Lab ID # 1773 1- 6
Sample Rec'd 12/29/94
Analysis Start 12/29/94
Analysis Comp 12/30/94

Analysis 418 1 (TPH)
Matrix Soil
Analyst S. Hubbard
Ext Meth 3540A

NJDEPE UST Reg #	81533-90
Closure #	
DICAR #	94-12-8-1040-10
Location #	Bldg. 616

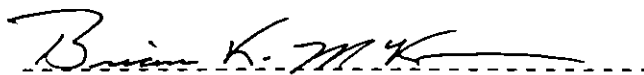
Lab ID	Description	%Solid	Result (mg/Kg)	MDL
1773 1	Site A, NW Sidewall OVA=15	80	244.	8.1
1773 2	Site B, East Sidewall OVA=ND	89	85 4	8 1
1773.3	Site C, SW Sidewall OVA=4	81	91 9	7 9
1773 4	Site D, W Sidewall OVA=26.	83	8680	53
1773 5	Site F. fuel pipe OVA=ND	90	76 8	7 6
1773 6	Site E, dup of D OVA=25	84	6700	57
M B1	Method Blank	100	ND	8 1

Notes: ND = Not Detected, MDL = Method Detection Limit

* = Silica Gel Added, NA = Not Applicable

1773 5S= 96%, 1773 5SD= 94%, RPD= 2.3% 1773 5 Dup=100%

QC Limits: Recovery= 100+/-28%, RPD=19 7%



Brian K. McKee
Laboratory Director

Client U S Army
DPW, SELFM-PW-EV
Bldg 167
Ft Monmouth, NJ 07703

Analysis Munsel

[illegible]



Brian K. McKee
Laboratory Director

U.S. ARMY FORT MONMOUTH

P.O. #: PLS 7

Chain of Custody

Project #:		Sampler: <u>Goose / rule</u>		Date / Time <u>12/29</u> <u>1-10</u>		Analysis Parameters		Start:						
Customer: <u>Desine</u>		Site Name: <u>BLDG G1 G</u> <u>0081533--90</u>						Finish:						
Phone: <u>532-1425</u>		<u>94-12-8-1040-10</u>						Preservation Method						
Lab Sample ID Number	Date/Time	Customer Sample Location/ID Number	Sample Matrix	# of Bottles	Remarks									
<u>1223.1</u>	<u>12/29</u> <u>1-30</u>	<u>Site A Below NW</u>	<u>Soil</u>	<u>11</u>	<u>X</u>	<u>X</u>	<u>X</u>							
<u>.2</u>	<u>"</u> <u>1-34</u>	<u>Site B " (E)</u>	<u>"</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>							
<u>.3</u>	<u>"</u> <u>1-37</u>	<u>Site C " SW</u>	<u>"</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>							
<u>.4</u>	<u>"</u> <u>1-41</u>	<u>Site D " (W)</u>	<u>"</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>							
<u>.5</u>	<u>"</u> <u>1-49</u>	<u>fire pit F</u>	<u>"</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>							
<u>.6</u>	<u>"</u> <u>1-45</u>	<u>E (dup) of D</u>	<u>"</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>							
Relinquished By (signature) <u>[Signature]</u>		Date / Time <u>12/29</u>		Received By (signature) <u>[Signature]</u>		Shipped By:								
Relinquished By (signature) <u>[Signature]</u>		Date / Time <u>1</u>		Received for Lab by (signature): <u>B. McK</u>				Date / Time <u>12/29/94</u> <u>1405</u>						
Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody.														

December 30, 1994 Sarah Hubbard

Bldg 616 0935

Golf Course Puz 142

— Soxlet Extraction —

2CM/M 500 MV=CAL-0

40.75 Std 45.4V

81.5 Std 114 MV

163 Std 243 MV

1773.1 27 MV

1773.2 5 MV

1773.3 5 MV

1773.4 $\text{d}(\text{F})$ 193 MV

1773.5 4 MV

1773.5 44V dup?

1773.5 48 MV Spk

1773.5 47.4V Dup Spk

1773.6 $\text{d}(\text{F})$ 150 MV

1772.3 21.4V $\text{d}(\text{F})$

1772.4 9 MV

81.5 Cal CK 102 MV

PHC Conformance/Non-conformance Summary Report

No Yes

1. Blank Contamination - If yes, list the sample and the corresponding concentrations in each blank

☒ ☐

2 Matrix Spike/Matrix Sp Dup Recoveries Meet Criteria
(If not met, list the sample and corresponding recovery which falls outside the acceptable range)

☐ ☒

3 IR Spectra submitted for standards, blanks, & samples

☐ ☒

4 Chromatograms submitted for standards, blanks, and samples if GC fingerprinting was conducted

☐ ☒

5 Extraction holding time met.
(If not met, list number of days exceeded for each sample)

☐ ☒

6 Analysis holding time met
(If not met, list number of days exceeded for each sample)

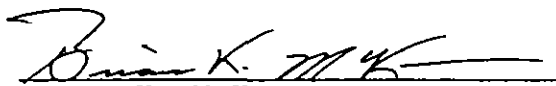
☐ ☒

Comments

Laboratory Authentication Statement

I certify under penalty of law, where applicable, that this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N J.A.C. 7 18 and 40 CFR Part 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analysis. I have personally examined the information contained in this report, and to the best of my knowledge, I believe that the submitted information is true, accurate, complete, and meets the above referenced standards where applicable. I am aware that there are significant penalties for purposefully submitting falsified information, including the possibility of a fine and imprisonment.

Project #1773


Brian K McKee
Laboratory Manager

UST - Vac analysis - Bldg. 616

princeton testing
laboratory inc.

P O Box 3108
3490 U S Route 1
Princeton, NJ 08543 3108
(609) 452 9050
FAX (609) 452-0347

U.S. ARMY, FORT MONMOUTH
ATTN: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108

Attn: Charles Appleby

Project # 94-12-8-1040-10
Building 616

JOB # 9500366-001M

Laboratory Certification # 11118

Reviewed by:

W. Alan Volk
W. Alan Volk

3/19/95

UST 1-14 copy.

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BFB	
Blank Data	
Matrix Spike/Matrix Spike Duplicate Data	

LABORATORY DELIVERABLES

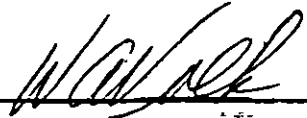
THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS

The following laboratory deliverables shall be included in the data submission. All deviations from the accepted methodology and procedures, or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report.

Check if
Complete

1. Cover Page, Title Page listing Lab Certification #, facility name & address, & date of report ☒
2. Table of Contents ☒
3. Summary Sheets listing analytical results for all targeted and non-targeted compounds ☒
4. Summary Table cross-referencing field ID #'s vs. Lab ID #'s ☒
5. Document bound, paginated and legible ☒
6. Chain of Custody ☒
7. Methodology Summary ☒
8. Laboratory Chronicle and Holding Time Check ☒
9. Results submitted on a dry weight basis (if applicable) ☒
10. Method Detection Limits ☒
11. Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEPA CLP ☒
12. Non-Conformance Summary ☒


Laboratory Manager or Environmental
Consultant's Signature

3/9/95
Date

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME	<u>PRINCETON TESTING LABS</u>		
CITY/STATE	<u>PRINCETON, NJ</u>		
CASE NO.	<u>2366</u>	SDG NO.	SDG NOS. TO FOLLOW
		SAS NO.	
CONTRACT NO.	<u>US ARMY FORT MONMOUTH</u>		
SOW NO.	<u>ILMD20</u>		

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II and SECTION III.)

	PAGE NOS		CHECK	
	FROM	TO	LAB	EPA
1. <u>Inventory Sheet</u> (Form DC-2) (Do not number)	—	—	✓	—
2. <u>SDG Case Narrative</u>	—	—	✓	—
3. <u>SDG Cover Sheet/Traffic Report</u>	—	—	✓	—
4. <u>Volatiles Data</u>	—	—	—	—
a. QC Summary	—	—	—	—
System Monitoring Compound Summary (Form II VOA)	—	—	✓	—
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	—	—	✓	—
Method Blank Summary (Form IV VOA)	—	—	✓	—
GC/MS Instrument Performance Check (Form V VOA)	—	—	✓	—
Internal Standard Area and RT Summary (Form VIII VOA)	—	—	✓	—
b. Sample Data	—	—	—	—
TCL Results - (Form I VOA)	—	—	✓	—
Tentatively Identified Compounds (Form I VOA-TIC)	—	—	✓	—
Reconstructed total ion chromatograms (RIC) for each sample	—	—	✓	—
For each sample:	—	—	—	—
Raw spectra and background-subtracted mass spectra of target compounds identified	—	—	✓	—
Quantitation reports	—	—	✓	—
Mass spectra of all reported TICs with three best library matches	—	—	✓	—
c. Standards Data (All Instruments)	—	—	—	—
Initial Calibration Data (Form VI VOA)	—	—	✓	—
RICs and Quan Reports for all Standards	—	—	✓	—
Continuing Calibration Data (Form VII VOA)	—	—	✓	—
RICs and Quantitation Reports for all Standards	—	—	✓	—
d. Raw QC Data	—	—	—	—
BFB	—	—	✓	—
Blank Data	—	—	✓	—
Matrix Spike/Matrix Spike Duplicate Data	—	—	✓	—

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CAS NO	SDG NO	SDG NOS TO FOLLOW
	SAS NO.	

PAGE NOS		CHECK	
FROM	TO	LAB	EPA

Miscellaneous Data

Original preparation and analysis forms or copies of
 preparation and analysis logbook pages
 Internal sample and sample extract transfer
 chain-of-custody records
 Screening records
 All instrument output, including strip charts
 from screening activities (describe or list)

EPA Shipping/Receiving Documents

Airbills (No. of shipments)
 Chain-of-Custody Records
 Sample Tags
 Sample Log-In Sheet (Lab & DCI)
 Miscellaneous Shipping/Receiving Records
 (describe or list)

Internal Lab Sample Transfer Records and Tracking Sheets
 (describe or list)

3. Other Records (describe or list)

Telephone Communication Log

11. Comments:

Completed by:
 (GLC Lab)

[Signature]
 (Signature)

KLA VOLK GARCIA
 (Printed Name/Title)

3-9-95
 (Date)

Edited by:
 (EPA)

[Signature]
 (Signature)

[Signature]
 (Printed Name/Title)

[Signature]
 (Date)

APPROVED SAMPLE ANALYSIS REQUEST

U.S. Army, Fort Monmouth N.J.
 Attn: SELFM-PW
 Building 167
 Fort Monmouth, New Jersey 07703-5108
 Attention: Charles Appleby
 Phone:(908) 532-6224 FAX:(908) 532-2367

Project No.: 9500366-001M

Client Job#: 94-12-8-1040-10

Date Received: 01/30/95

Analysis Due : 02/01/95

Number Of Samples : 2

Number Of Containers: 2

Customer Number: 1636-000
 P.O. Number: D01-95U
 Standard Tests
 Project Name: Bldg. 616 UST# 0081533-90

Approved By: Steven Burns

Reports: Custom Report Format

Sample I.D.'s	Code	Requested Analytical Services	Sampled
001 1785.1 Field Blank 01/27/95	VMW01 VMW0A	Volatile Organics Library Search Volatile Organics, WW, SW-846 8240	01/27/95
002 1786.1 Site D West Sidewall 01/27/95	VMS0B VMS0A	Volatile Organics Library Search Volatile Organics, SW, SW-846 8240	01/27/95

Project Notes:

48 Hr. Verbal TAT. Hard Copy 3 week TAT

Customer Notes:

Three copies of packages. See Data Mgmt. for details.

Initials/Date

Received By Lab: _____
 Reviewed By: _____
 Q.A. Approved: _____

Printed By: Rose Kovacs
 Date: 03/06/95
 Time: 18:08:12

1

U.S. ARMY FORT MONMOUTH

P.O. #: PRINCETON LABS- 94-0551

Chain of Custody

Project #: 94-12-8-1040-10		Sampler: J. LONERGAN - CUTE-TAC		Date / Time: 1-27-95 / 1030		Analysis Parameters		Start:				
Customer: C. APPLESBY SELFH-AW-EN		Site Name: BLDG 616 UST # 0081533-90						Finish:				
Phone: 908-532-6224								Preservation Method				
Lab Sample ID Number	Date / Time	Customer Sample Location / ID Number	Sample Matrix	# of Bottles	VOA-TIS				Remarks			
1785.1	1-27-95 1045	FIELD BLANK	AIR	2								Sample kept < 4°C
1786.1	1-27-95 1040	SITE D - SIDEWALL 7' DEPTH WEST	SOIL	1								NO OVA Used - Temp < 30°F
												Stainless Steel
												Lab-Decon
												Spoon used
												Sample taken 24"
												into sidewalk by
												backhoe
Relinquished By (signature): <i>[Signature]</i>		Date / Time: 1-27-95 / 1103		Received By (signature): <i>[Signature]</i>		Shipped By:						
Relinquished By (signature): <i>[Signature]</i>		Date / Time: 1-30-95 / 1100		Received for Lab by (signature): <i>[Signature]</i>		Date / Time: 1/30/95 / 1100						

Note; A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody.

NO SITE DIAGRAM COMPLETED

CHAIN OF CUSTODY

U.S. Army, Fort Monmouth N.J.
Attn: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108
Phone:(908) 532-6224 FAX:(908) 532-2367

Project Number: 9500366-001M
Date Received : 01/30/95
Time Received : 16:45
Number of Containers: 2
Number of Samples : 2

Attention: Charles Appleby

Page#: 1 of 1

Sample I.D.'s

001 1785 1
Field Blank
01/27/95

002 1786 1 Site D
West Sidewall
01/27/95

Relinquished By

A Richards

Received By

S Burns

Date

01/30/95

Time

10:25

VOLATILES

METHODOLOGY SUMMARY

VOLATILE ORGANICS:

A.) SOIL: US EPA SW-846 METHOD 8240.

B.) WATER: US EPA SW-846 METHOD 8240.

LABORATORY CHRONICLE
ORGANIC ANALYSIS

Company: US Army Job #: 95000366

Date Received & Refrigerated: 01/30/95

EXTRACTION INFORMATION

Base-Neutral Extractables

___ / ___ / ___
___ / ___ / ___
___ / ___ / ___
___ / ___ / ___
___ / ___ / ___

Acid Extractables

___ / ___ / ___
___ / ___ / ___
___ / ___ / ___

Pesticides/ PCBs

___ / ___ / ___
___ / ___ / ___

PCBs only

___ / ___ / ___
___ / ___ / ___

Herbicides

___ / ___ / ___
___ / ___ / ___

Pesticides (EPTOX)

___ / ___ / ___

Other: _____

___ / ___ / ___

ANALYSIS INFORMATION

Base-Neutral Extractables

___ / ___ / ___
___ / ___ / ___
___ / ___ / ___
___ / ___ / ___
___ / ___ / ___

Acid Extractables

___ / ___ / ___
___ / ___ / ___
___ / ___ / ___

Pesticides/ PCBs

___ / ___ / ___
___ / ___ / ___

PCBs only

___ / ___ / ___
___ / ___ / ___

Herbicides

___ / ___ / ___
___ / ___ / ___

Pesticides (EPTOX)

___ / ___ / ___

Volatiles - 601/602

___ / ___ / ___
___ / ___ / ___

Volatiles - 624/8240

NC 02 / 02 / 95

___ / ___ / ___
___ / ___ / ___

Other: _____

___ / ___ / ___

Dept. Manager Review and Approval: _____

QC Supervisor Review and Approval: _____

2/10/95

3/7/95

GCMS ANALYSIS NON CONFORMANCE SUMMARY

	NO	YES
1. <u>GCMS TUNE SPECIFICATION.</u>		
a. BFB Passed	___	___✓
b. DFTPP Passed	___	___
2. <u>GCMS TUNING FREQUENCY.</u>		
a. Performed every 12 hours.	___	___✓
b. Performed every 24 hours.	___	___
3. <u>GCMS Calibration.</u>		
a. Initial calibration performed w/i 30 days of sample analysis.	___	___✓
b. Continuing calibration w/i 12 hours.	___	___
c. Continuing calibration w/i 24 hours.	___	___
4. <u>GCMS Calibration requirements.</u>		
a. Calibration check compounds.	___	___✓
b. System performance check compounds.	___	___
5. <u>Blank Contamination.</u>		
a. VOA Fraction <u>Methylene chloride, Acetone & 2-Butanone below MDLs</u>	___	___
b. B/N Fraction	___	___
c. Acid Fraction	___	___
6. <u>Surrogate Recoveries Within Limits.</u>		
a. VOA Fraction	___	___✓
b. B/N Fraction	___	___
c. Acid Fraction	___	___
7. Extraction Holding Time Met.	___	___✓
8. Analysis Holding Time Met.		
a. VOA Fraction	___	___✓
b. BNA Fraction	___	___

Comments:

Laboratory Manager

[Signature]

Date

2/10/95

APPROVED SAMPLE ANALYSIS REQUEST

U.S. Army, Fort Monmouth N.J.
 Attn: SELFM-PW
 Building 167
 Fort Monmouth, New Jersey 07703-5108
 Attention: Charles Appleby
 Phone:(908) 532-6224 FAX:(908) 532-2367

Project No.: 9500366-001M
 Client Job#: 94-12-8-1040-10
 Date Received: 01/30/95
 Analysis Due : 02/01/95

Number Of Samples : 2
 Number Of Containers: 2

Customer Number: 1636-000
 P.O. Number: D01-95U
 Standard Tests
 Project Name: Bldg. 616 UST# 0081533-90

Approved By: Steven Burns

Reports: Custom Report Format

Sample I.D.'s	Code	Requested Analytical Services	Sampled
001 1785.1 Field Blank 01/27/95	VMW01 VMW0A	Volatile Organics Library Search Volatile Organics, WW, SW-846 8240	01/27/95
002 1786.1 Site D West Sidewall 01/27/95	VMS0B VMS0A	Volatile Organics Library Search Volatile Organics, SW, SW-846 8240	01/27/95

Project Notes:

48 Hr. Verbal TAT Hard Copy 3 week TAT

Customer Notes:

Three copies of packages. See Data Mgmt. for details.

Initials/Date

Received By Lab: _____
 Reviewed By: _____
 Q.A. Approved: _____

Printed By: Rose Kovacs
 Date 03/06/95
 Time 18:08:12

1

U.S. ARMY FORT MONMOUTH

P.O. #: PRINCETON LABS- 94-0551

Chain of Custody

Project #: 94-12-8-1040-70		Sampler: J. LONERGAN - CUTE-1		Date / Time: 1-27-95 1030		Analysis Parameters		Start:			
Customer: C. APPLESBY SELFH-AW-EN		Site Name: BLDG 616 UST# 0081533-90						Finish:			
Phone: 908-532-6224								Preservation Method			
Lab Sample ID Number	Date / Time	Customer Sample Location / ID Number	Sample Matrix	# of Bottles	VOA-TIS				Remarks		
1785.1	1-27-95 1045	FIELD BLANK	AIR	2					X	X	Sample kept < 4°C
1786.1	1-27-95 1040	SITE D - SIDEWALL 7' DEPTH WEST	SOIL	1							
Relinquished By (signature)		Date / Time		Received By (signature)		Shipped By:					
[Signature]		1-27-95 1103		Sarah J. Hubbard							
Relinquished By (signature)		Date / Time		Received for Lab by (signature):		Date / Time					
[Signature]		1-30-95 11:00		Dunworth Richard		1/30/95 11:00					
Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody. NO SITE DIAGRAM COMPLETED											

CHAIN OF CUSTODY

U.S. Army, Fort Monmouth N.J.
Attn: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108
Phone (908) 532-6224 FAX:(908) 532-2367

Project Number: 9500366-001M
Date Received 01/30/95
Time Received : 16 45
Number of Containers: 2
Number of Samples : 2

Attention: Charles Appleby

Page# 1 of 1

Sample I.D.'s

001 1785 1
Field Blank
01/27/95

002 1786 1 Site D
West Sidewall
01/27/95

Relinquished By

A Richards

Received By

S Burns

Date

01/30/95

Time

10:25

VOLATILES

METHODOLOGY SUMMARY

VOLATILE ORGANICS:

A.) SOIL: US EPA SW-846 METHOD 8240.

B.) WATER: US EPA SW-846 METHOD 8240.

LABORATORY CHRONICLE
ORGANIC ANALYSIS

Company: US Army Job #: 95000366

Date Received & Refrigerated: 01/10/95

EXTRACTION INFORMATION

Base-Neutral Extractables

___ / ___ / ___
___ / ___ / ___
___ / ___ / ___
___ / ___ / ___
___ / ___ / ___

Acid Extractables

___ / ___ / ___
___ / ___ / ___
___ / ___ / ___

Pesticides/ PCBs

___ / ___ / ___
___ / ___ / ___

PCBs only

___ / ___ / ___
___ / ___ / ___

Herbicides

___ / ___ / ___
___ / ___ / ___

Pesticides (EPTOX)

___ / ___ / ___

Other: _____

___ / ___ / ___

ANALYSIS INFORMATION

Base-Neutral Extractables

___ / ___ / ___
___ / ___ / ___
___ / ___ / ___
___ / ___ / ___
___ / ___ / ___

Acid Extractables

___ / ___ / ___
___ / ___ / ___
___ / ___ / ___

Pesticides/ PCBs

___ / ___ / ___
___ / ___ / ___

PCBs only

___ / ___ / ___
___ / ___ / ___

Herbicides

___ / ___ / ___
___ / ___ / ___

Pesticides (EPTOX)

___ / ___ / ___

Volatiles - 601/602

___ / ___ / ___

Volatiles - 624/8240

NC 02 / 02 / 95

___ / ___ / ___
___ / ___ / ___

Other: _____

___ / ___ / ___

Dept. Manager Review and Approval:

2/10/95

QC Supervisor Review and Approval:

3/7/95

GCMS ANALYSIS NON CONFORMANCE SUMMARY

	NO	YES
1. <u>GCMS TUNE SPECIFICATION.</u>		
a. BFB Passed	_____	_____/_____ ✓
b. DFTPP Passed	_____	_____
2. <u>GCMS TUNING FREQUENCY.</u>		
a. Performed every 12 hours.	_____	_____/_____ ✓
b. Performed every 24 hours.	_____	_____
3. <u>GCMS Calibration.</u>		
a. Initial calibration performed w/i 30 days of sample analysis.	_____	_____/_____ ✓
b. Continuing calibration w/i 12 hours.	_____	_____
c. Continuing calibration w/i 24 hours.	_____	_____
4. <u>GCMS Calibration requirements.</u>		
a. Calibration check compounds.	_____	_____/_____ ✓
b. System performance check compounds.	_____	_____
5. <u>Blank Contamination.</u>		
a. VOA Fraction <u>Methylene chloride, Acetone + 2-Butanone below MDLs</u>	_____	_____
b. B/N Fraction	_____	_____
c. Acid Fraction	_____	_____
6. <u>Surrogate Recoveries Within Limits.</u>		
a. VOA Fraction	_____	_____/_____ ✓
b. B/N Fraction	_____	_____
c. Acid Fraction	_____	_____
7. Extraction Holding Time Met.	_____	_____/_____ ✓
8. Analysis Holding Time Met.		
a. VOA Fraction	_____	_____/_____ ✓
b. BNA Fraction	_____	_____

Comments:

Laboratory Manager *[Signature]*

Date 2/10/95



princeton testing
laboratory inc.

P O Box 3108
3490 U S Route 1
Princeton, NJ 08543-3108
(609) 452 9050
FAX (609) 452-0347

Feb 9, 1995.

U.S.Army, Fort Monmouth N.J
ATTN:SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108

Attention: Charles Appleby

Job Number: 9500366

CASE NARRATIVE

The following package contains analytical data pertaining to samples received by Princeton Testing Laboratory on 01/30/95. The samples were analyzed for volatile organics by GC/MS.

VOLATILE ORGANICS

BLANKS: Blank from 02/02/95 had acetone, methylene chloride and 2-butanone below MDLs.

SAMPLES: The sample was run at 50Xdilution due to the smelly nature of it.

SURROGATES: All surrogate recoveries are within QC limits.

MS/MSD: Sample 1785.2 from the same job was used for matrix spike and duplicate. All recoveries were within the QC limits.

If you have any further questions please do not hesitate to call me.

Khaja Eazazuddin.
GC/MS Supervisor.

23
VOLATILE SURROGATE SUMMARY

Lab Name: Princeton Testing Lab. Contract: US Army, Fort
Monmouth.
Lab Code: PTL Case No. 0366 SAS No.: XXX SDG No.: XXX
Instrument ID: INCOS-500

SAMPLE NO.	(1,2-DCE)	(TOL-D8)	(4-BFB)
M. BLANK 02/02/95	108	97	88
1786.1 Site L	86	90	90
1785.2 Site 3 MS	10	96	88
1785.2 Site 3 MSD	109	100	89

(1,2-DCE) = 1,2-DICHLOROETHANE-d4 (76-114)
(TOL-d8) = TOLUENE-d8 (84-110)
(4-BFB) = 4-BROMOFLUOROENZENE (86-115)

COMMENTS.

page 1 of 1

FORM II VOA-2

25
VOLATILE SURROGATE SUMMARY

Lab Name: Princeton Testing Lab. Contract: US Army, Fort
Monmouth.
Lab Code: PTL Case No.: 8368 GAS No.: AXX SDG No.: AXX
Instrument ID: INCOS-500

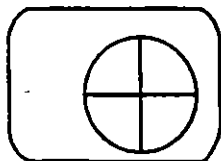
SAMPLE NO.	(1,2-DCE)	(TOL-DB)	(4-BFB)
M. BLANK 02/02/95	106	102	CC
1755. FIELD 35X	107	98	35

(1,2-DCE) = 1,2-DICHLOROETHANE-d4 (76-114)
(TOL-d8) = TOLUENE-d8 (84-110)
(4-BFB) = 4-BROMOFLUOROBENZENE (86-115)

COMMENTS:

page 1 of 1

FORM II VOA-2



Princeton Testing Laboratory Inc.

P O Box 3108
3490 U S Route 1
Princeton, NJ 08543-3108
(609) 452-9050
(FAX) (609) 452-0347

Matrix Spike/Matrix Spike Duplicate Recovery Data Test: Volatile Organics, Method 8240

Client: U.S. Army, Fort Monmouth N.J.

Project No.: 9500365-001

Lab Sample I.D.: 002

Client Sample I.D.: 1785.2 Site B
North Sidewall
01/27/95

Analyst: Uma Chaudhary
Instrument: Incos 500 Volatiles
Units: ug/kg

QC Batch Number: 020295SV

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	MATRIX SPIKE CONCENTRATION	MS % REC	QC LIMITS REC
1,1-Dichloroethene	50	0	41.9	83.80	58-172
Trichloroethene	50	0	50.7	101.40	62-137
Benzene	50	0	48.4	96.80	68-142
Toluene	50	0	46.4	92.80	59-139
Chlorobenzene	50	0	52.9	105.80	60-133

COMPOUND	SPIKE ADDED	MSD CONCENTRATION	RPD	MSD % REC	QC LIMITS RPD
1,1-Dichloroethene	50	42.0	.24	84.00	0-22
Trichloroethene	50	55.8	9.58	111.60	0-24
Benzene	50	53.6	8.16	107.20	0-21
Toluene	50	50.5	8.46	101.00	0-21
Chlorobenzene	50	54.8	3.53	109.60	0-21

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: PTL, INC. Contract: US Army, Fort Monmouth
 Lab Code: PTL Case No.: 0365-001SAS No.: xxxx EDG. No xxxx
 Lab File ID: CBLK202A Lab Sample ID: LAB BLANK
 Date Analyzed: 02/02/95 Time Analyzed: 10:57
 Matrix (soil/water) SOIL Level (low/med) LOW
 Instrument ID: FLIN

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	<u>1785.2 MS</u>	<u>0365-001-02</u>	<u>C9995</u>	<u>02/02/95</u>
02	<u>1785.2 MSD</u>	<u>0365-001-02</u>	<u>C9995</u>	<u>02/02/95</u>
03	<u> </u>	<u> </u>	<u> </u>	<u> </u>
04	<u> </u>	<u> </u>	<u> </u>	<u> </u>

COMMENTS.

FORM IV V

1/87 Rev.

-1A

VOLATILE METHOD BLANK SUMMARY

Lab Name: PTL INC. Contract: US Army Fort Monmouth
Lab Code: PTL Case No.: 0366-001SAS No.: XXXX SDG. No. XXXX
Lab File ID: 0BLK2023 Lab Sample ID: LAB BLANK
Date Analyzed: 02/02/95 Time Analyzed: 5:07
Matrix (Soil/Water): WATER Level: (low/med) LO
Instrument ID: TINN

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	<u>1785.1</u>	<u>0365-001-01</u>	<u>C9999</u>	<u>02/02/95</u>
02	<u>.....</u>	<u>.....</u>	<u>.....</u>	<u>.....</u>
03	<u>.....</u>	<u>.....</u>	<u>.....</u>	<u>.....</u>
04	<u>.....</u>	<u>.....</u>	<u>.....</u>	<u>.....</u>

COMMENTS.

FORM IV V

1/87 Rev.

SA

VOLATILE METHOD BLANK SUMMARY

Lab Name: PTL INC. Contract: US Army, Fort Monmouth
 Lab Code: PTL Case No.: 0365-001 SAS No.: XXXX SDG. No. XXXX
 Lab File ID: 0BLK2027 Lab Sample ID: LAB BLANK
 Date Analyzed: 02/02/95 Time Analyzed: 5:07
 Matrix (soil/water): SOIL Level (low/med) LOW
 Instrument ID: FINA

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	<u>1786.1.SITED</u>	<u>0365-001-02</u>	<u>C1001</u>	<u>02/02/95</u>
02	<u>.....</u>	<u>.....</u>	<u>.....</u>	<u>.....</u>
03	<u>.....</u>	<u>.....</u>	<u>.....</u>	<u>.....</u>
04	<u>.....</u>	<u>.....</u>	<u>.....</u>	<u>.....</u>

COMMENTS:

VOLATILE ORGANIC COMPOUND TUNING AND MASS
 CALIBRATION BROMOTRIFLUOROBENZENE (BTFB)

no other Princeton testing lab. (Contract: US_ARMY, _FORT_MONMOUTH_NJ_)

INFO FILE FILE Case No.: J5C0086 AS No.: XXXX JDC No.: XXXX

Lab File ID: 97B127 3FB inspection date 11/27/95

Instrument ID: FINN500V 75B Injection Time: 094'

Matrix: (soil/water) WATER Level: (low/mod) low Column: (pack/cap) Cap

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
56	3.6 - 40.0% of mass 95	15.6
75	30.0 - 36.0% of mass 95	40.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
172	Less than 2.5% of mass 174	1.2
174	50 - 120.0% of mass 95	30.3
175	5.0 - 9.0% of mass 174	6.9
176	Greater than 53.0%, but less than 101.0% of mass 174	37.1
177	5.0 - 9.0% of mass 176	6.4

1-Value is % mass 174

2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, ASD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
50 PPB STD	50 PPB STD	CV12750	1/27/95	1002
10 PPB STD	10 PPB STD	CV12710	1/27/95	1050
20 PPB STD	20 PPB STD	CV12720	1/27/95	1135
100 PPB STD	100 PPB STD	CV127100	1/27/95	1222
200 PPB STD	200 PPB STD	CV127200	1/27/95	1310

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLEUOBENZENE (BFB)

Lab Name: Indecor Testing Lab. Contract U.S. Army, Fort Monmouth
 Lab No: 00306 Lab File ID: BFB0202 BFB Injection Date: 02/02/95
 Instrument ID: FINN500V BFB Injection Time: 09 55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.5
75	30.0 - 60.0% of mass 95	41.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	91.4
175	5.0 - 2.0% of mass 174	6.6
176	Greater than 35.0%, but less than 101.0% of mass 174	59.0
177	5.0 - 9.0% of mass 176	6.3

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
50 PPB STD	50 PPB STD	CVO202A	02/02/95	10:04
LAB BLANK	LAB BLANK	CBK202A	02/02/95	10:57
1785 2_SiteB	365-001-02	C9995 MS	02/02/95	12:31
1785 2_SiteB	365-001-02	C9996 MSD	02/02/95	13:23

FORM V VOA

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Princeton Testing Lab. Contract: J.S. Army, Fort Monmouth

Case No.: 0365 Lab File ID: 35B0202B BFB Injection Date: 02/02/95

Instrument ID: FINN50CV BFB Injection Time: 14:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
93	15.0 - 40.0% of mass 95	15.9
95	30.0 - 60.0% of mass 95	40.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.1
173	Less than 2.0% of mass 174	0.1
174	Greater than 50.0% of mass 95	88.0
175	5.0 - 9.0% of mass 174	6.8
176	Greater than 95.0%, but less than 101.0% of mass 174	98.1
177	5.0 - 9.0% of mass 176	6.4

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
50 PPB STD	50 PPB STD	CVO202B	02/02/95	14:15
LAB BLANK	LAB BLANK	CBLK202B	02/02/95	15:07
1785.1	365-001-01	C9999	02/02/95	17:36
1786.1 SiteD	366-001-02	C1001	02/02/95	19:13

FORM V VOA

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Princeton Testing Lab. Contract: US Army, Fort Monmouth.
 Case No: 9366 Lab File ID (standard): CV02028 Instrument ID: FINN
 Date Analyzed: 02/02/95 Time Analyzed: 14:15

	IS1(ECM)	RT	IS2(DFB)	RT	IS3(CB)	RT
12hr. STD	176998	08:32	693200	11:23	614200	24:19
Upper Limit	353996	08:32	1386400	11:23	1228400	24:69
Lower Limit	88499	07:32	346600	10:23	307100	23:69
EPA Sample						
1 BLANK	177645	08:33	606116	11:23	675718	24:19
2 1785.1	167790	08:34	668900	11:25	576408	24:20
3 1786.1 Site D	251339	08:32	1001980	11:22	947134	24:19
4						
5						

IS1=BROMOCHLOROMETHANE
 IS2=1,4-DIFLUOROBENZENE
 IS3=CHLOROBENZENE-D5

Area Upper Limit = +100% of Internal Standard area.
 Area Lower Limit = - 50% of Internal Standard area.
 RT Upper Limit = +0.50 minutes of Internal Standard RT.
 RT Lower Limit = -0.50 minutes of Internal Standard RT.

* Values outside of QC limits. FORM VIII V-1

PAGE 1 of 1.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Princeton Testing Lab. Contract: JS Army, Fort Monmouth.
 Case No.: 066 Lab File ID (standard): CVO202A Instrument ID: FINN
 Date Analyzed: 02/02/95 Time Analyzed: 10:04

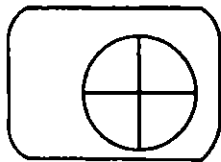
	IS1(BCM)	RT	IS2(DFB)	RT	IS3(CB)	RT
12hr. STD	181319	08:34	713174	11:24	623212	24:20
Upper Limit	362638	08:34	1426348	11:24	1246424	24:20
Lower Limit	90659	07:34	356587	10:24	311806	23:20
EPA Sample						
M. BLANK	171457	08:35	675312	11:25	573032	24:20
C 1765.1 MSD	158627	08:34	661019	11:24	553688	24:20
C 1785.1 MSD	158985	08:35	644052	11:25	549448	24:20

IS1= BROMOCHLOROMETHANE
 IS2=1,1-DIFLUOROBENZENE
 IS3= CHLOROBENZENE-D5

Area Upper Limit = +100% of Internal Standard area.
 Area Lower Limit = - 50% of Internal Standard area.
 RT Upper Limit = +0.50 minutes of Internal Standard RT.
 RT Lower Limit = -0.50 minutes of Internal Standard RT.

* Values outside of QC limits. FORM VIII V-1

PAGE 1 of 1.



Princeton Testing Laboratory Inc.

P O Box 3108
3490 U S Route 1
Princeton, NJ 08543-3108
(609) 452-9050
(FAX) (609) 452-1959

U.S. Army, Fort Monmouth N J
Attn: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108
Attention: Charles Appleby
Project Name: Bldg. 616 UST# 0081533-90

Report Date: 02/09/95
Job Number: 9500366-001
Date Received: 01/30/95
Client Job No 94-12-8-1040-10
Page: 1

Analysis: Volatile Organics, WW, SW-846 8240
Units: ug/liter

Parameters	Sample I D	1785 1 Field Blank 01/27/95
Chloromethane		<10
Bromomethane		<10
Vinyl chloride		<10
Chloroethane		<10
Methylene chloride		<5.0
Acetone		5.8 B
Carbon disulfide		<5.0
1,1-Dichloroethene		<5.0
1,1-Dichloroethane		<5.0
1,2-Dichloroethene (Total)		<5.0
Chloroform		<5.0
1,2-Dichloroethane		<5.0
2-Butanone		1.2 JB
1,1,1-Trichloroethane		<5.0
Carbon tetrachloride		<5.0
Bromodichloromethane		<5.0
1,1,2,2-Tetrachloroethane		<5.0
1,2-Dichloropropane		<5.0
trans-1,3-Dichloropropene		<5.0
Trichloroethene		<5.0
Dibromochloromethane		<5.0
1,1,2-Trichloroethane		<5.0
Benzene		<5.0
cis-1,3-Dichloropropene		<5.0
Bromoform		<5.0
2-Hexanone		<5.0
4-Methyl-2-Pentanone		<5.0
Tetrachloroethene		<5.0
Toluene		<5.0
Chlorobenzene		<5.0
Ethylbenzene		<5.0
Styrene		<5.0
Total Xylenes		<5.0

RECOVERY DATA

QC LIMITS

1,2-Dichloroethane-d4 (Surrogate)	76-114%	107
Toluene-d8 (Surrogate)	88-110%	98
4-Bromofluorobenzene (Surrogate)	86-115%	95

J - Estimated Value Detected Below MDL

B - Compound Found In Blank

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
1785.1 FLD BLK

Laboratory: Princeton Testing Lab ARMY PORT MONMOUTH

Laboratory Code: PTL Case No: 105116 CAS No.: XXX SDG No.: XX

Matrix: Soil/Water WATER Lab Sample ID: 11

Sample Weight: 5.0 (g, mL or L) Lab File ID: 9999

Level: Low/med LOW Date Received: 11/30/85

Moisture: not dec Date Analyzed: 02/02/86

Field ID: 105116 ID: 53 Dilution Factor:

Soil Extract Vol: Soil Aliquot Vol:

Concentration Units:
(ug/L or ug/kg)

CAS NO.	COMPOUND NAME	RT	EST CONC	SCAN
104-19-6	NONANAL	39.35	4.5	1111

RIC

02/02/95 17:36:00

SAMPLE: 356-01 1785.1 FIELD BLANK

CONDS.: EPA METHOD 8240

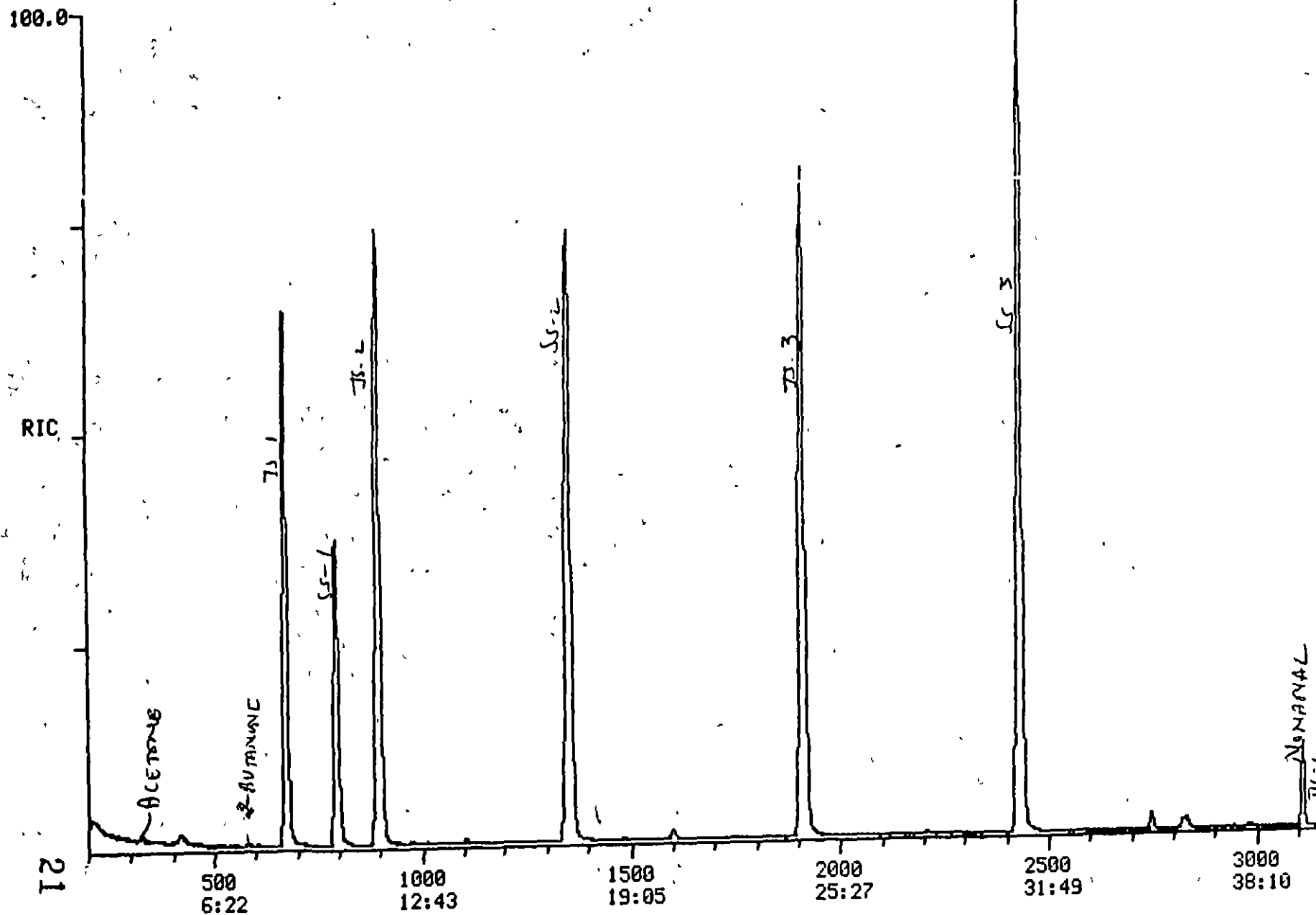
RANGE: G 1.3151 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: C9999 #1

CALI: C9999 #3

SCANS 200 TO 3151

174080.



Quantitation Report File C9999

data C9999 TI

02/02/95 17 36 00

Sample 366-01 1785 1 FIELD BLANK

Conditions EPA METHOD 8240

Formula 5ML

Submitted by US ARMY

Instrument FINN

Analyst UC

Weight 0.000

Acct No 0366-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD **
2	CI10 1,4-DIFLUOROBENZENE **INT STD **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-D8 **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

No Name
 48 C250 O-XYLENE
 49 BENZENE-D6 ***S STD**

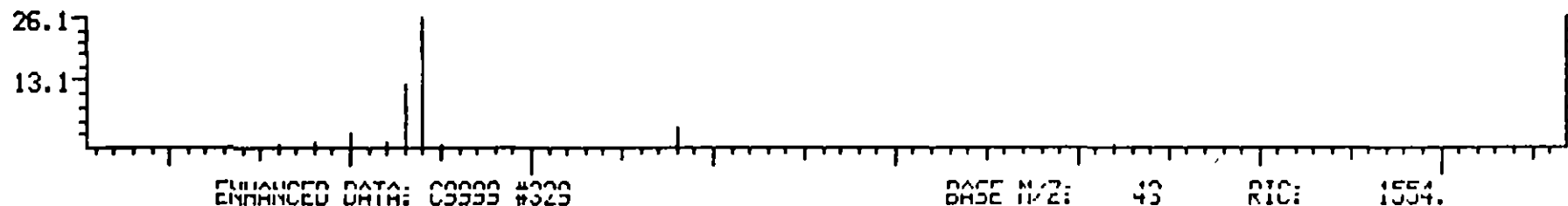
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	673	8 34	1	1 000	A BB	167790	50 000 NG	16 31
2	114	897	11 25	2	1 000	A BB	668900	50 000 NG	16 31
3	117	1912	24 20	3	1 000	A BB	576408	50 000 NG	16 31
4	65	795	10 07	1	1 181	A BB	252474	53 401 NG	17 42
5	98	1354	17 14	3	0 708	A BB	617656	48 935 NG	15 96
6	174	2432	30 57	3	1 272	A BB	396172	47 344 NG	15 44
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	43	328	4 10	1	0 487	A BB	9882	5 759 NG	1.88
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	43	584	7 26	2	0 651	A BB	2086	1.168 NG	0 38
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
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36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								

DATA FILE: C9999 #329
TARGET COMPOUND COMPARISON
COMPOUND: C035 ACETONE

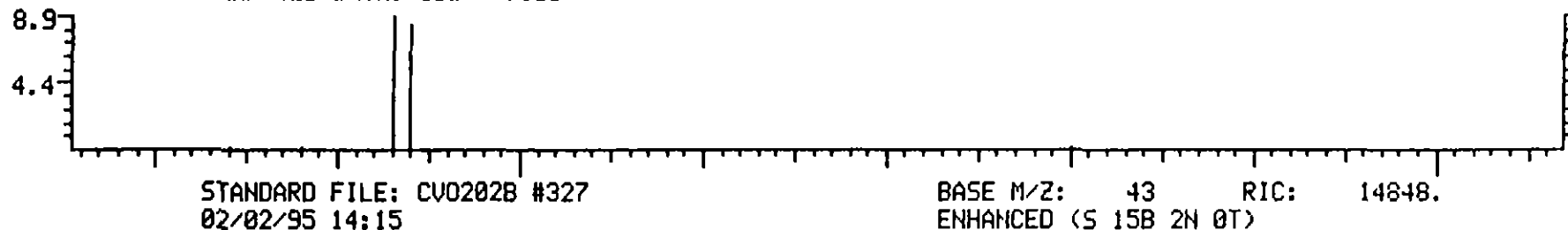
STANDARD FILE: CV0202B #327
CALI: C9999 #3

RAW DATA: C9999 #329
02/02/95 17:36

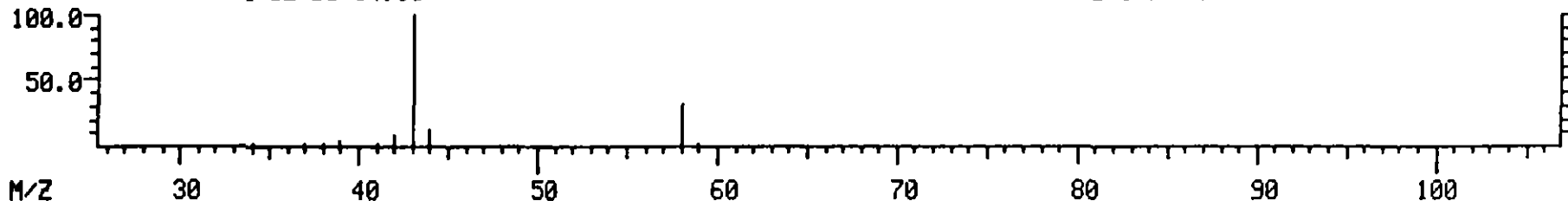
BASE M/Z: 44 RIC: 4280.



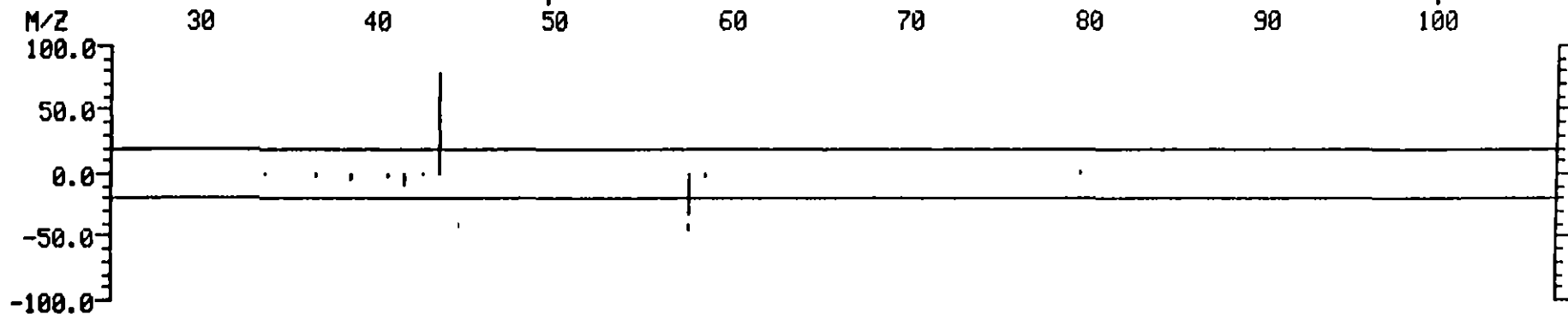
2280.



772.



8720.

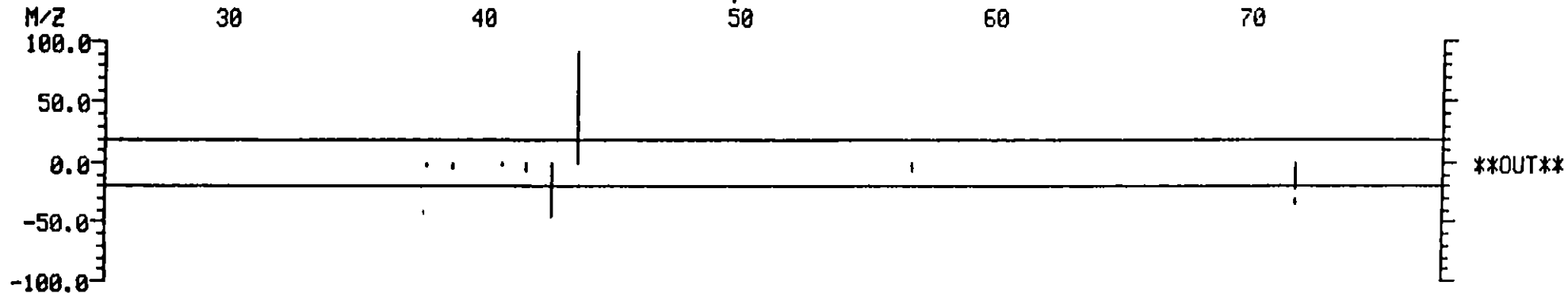
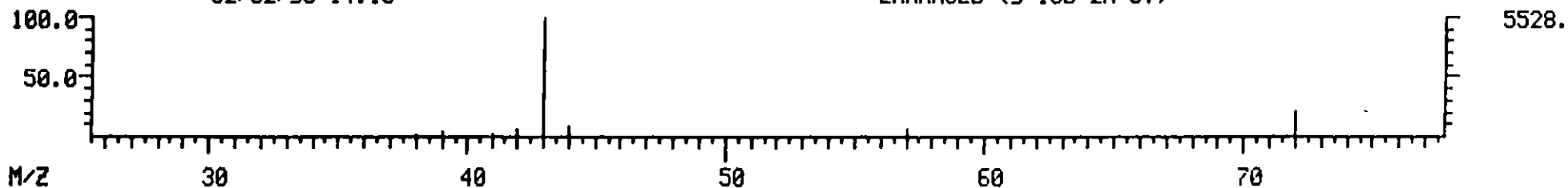
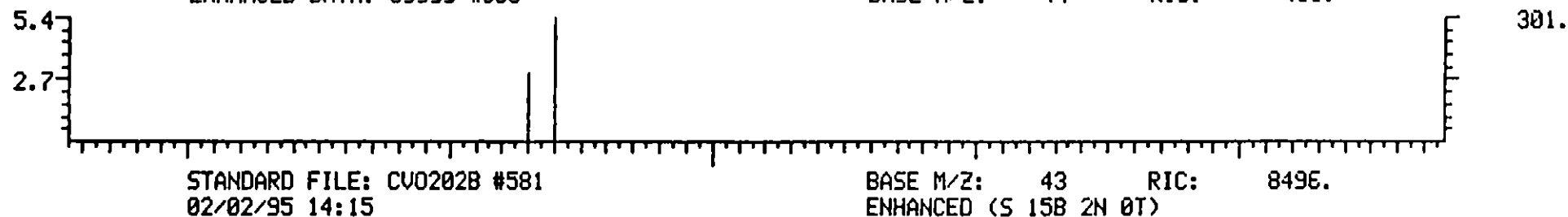
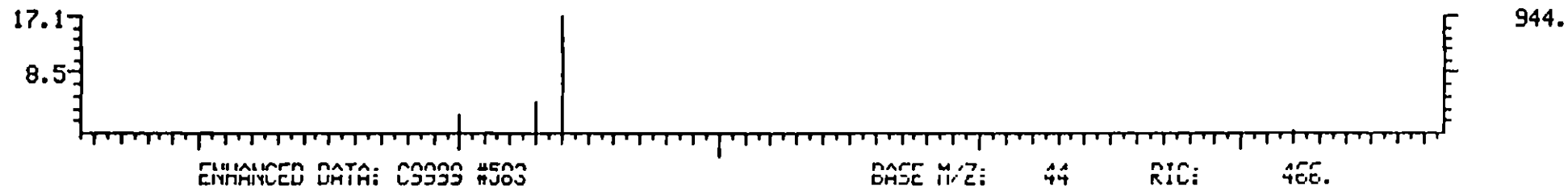


DATA FILE: C9999 #583
TARGET COMPOUND COMPARISON
COMPOUND: C110 2-BUTANONE

STANDARD FILE: CU0202B #581
CALI: C9999 #3

RAW DATA: C9999 #583
02/02/95 17:35

BASE M/Z: 44 RIC: 1340.



Quantitation Report File: C9999

Data C9999 TI
02/02/95 17 36.00

Sample 366-01 1785.1 FIELD BLANK

Conds EPA METHOD 8240

Formula SML

Instrument FINN

Weight 0.000

Submitted by US ARMY

Analyst UC

Acct No. 0366-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE **INT STD.**
2	0-00-0	CI10 1,4-DIFLUOROBENZENE **INT. STD **
3	0-00-0	CI20 CHLOROBENZENE-D5 **INT STD **
4	124-19-6	NONANAL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	TOT	673	8:34	0	ISINV	A BB	916846	***** UG/L	00.00
2	TOT	897	11:25	0	ISINV	A BB	1327020	***** UG/L	00.00
3	TOT	1912	24:20	0	ISINV	A BB	1333620	***** UG/L	00.00
4	TOT	3111	39:35	3	1.627	A BB	127125	4 766	*100.

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R Fac	R Fac(L)	Ratio
1	9.13	0.93	1.000						
2	19.21	0.59	1.000						
3	23.54	1.02	1.000						
4					4 77	1.00	4 766	1.000	4.77

PROCEDURE FILTER/TIC

DIAGNOSTIC REPORT

2/03/95 8 33.21

DATA FILE C9999

FILTER SCAN PARAMETERS

MAX NUMBER TICS 15
11-TABLE ENTRIES 539
SCAN TOLERANCE 1
MIN RIC HT [%] 10
FIRST SCAN 350
LAST SCAN 3168
TIC THRESHOLD 600

METHOD LIBRARY & LISTS

TIC I S LIBRARY LIBRARYLS
NBS SEARCH PROC SERLIB
PEAK FINDER PROC VOME
TCA I S LL LS
FILE NAME LIST TCAREF2

TARGET COMPOUND ANALYSIS

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
5	3	8

FILTER PROCESSING

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
7	0	0	0	6	0	6	1

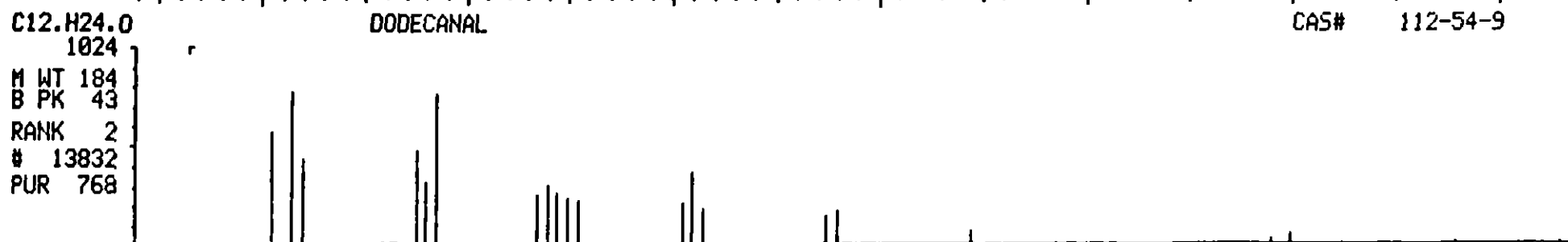
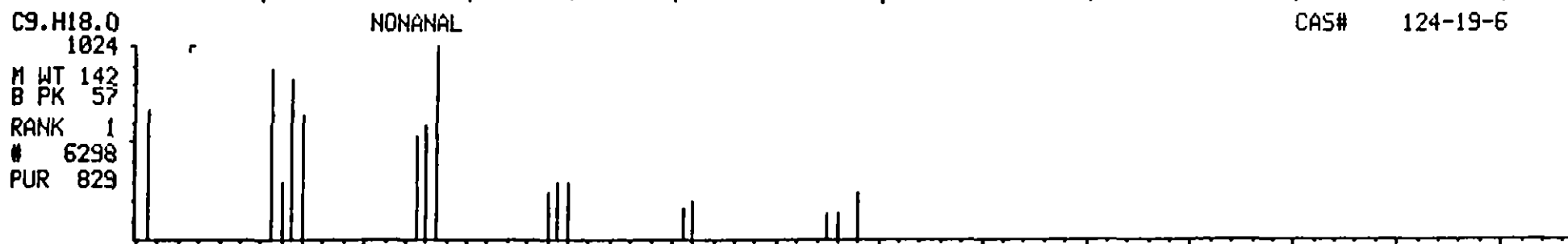
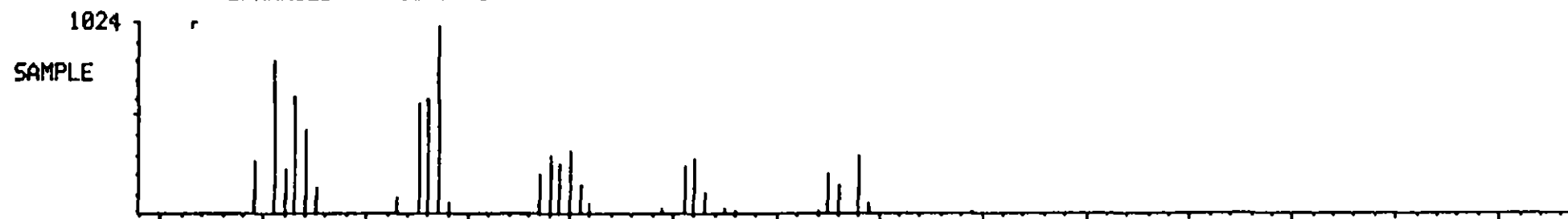
TIC PROCESSING

NO	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	3111	829	989	142	NONANAL

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 17:36:00 + 39:35
SAMPLE: 366-01 1785.1 FIELD BLANK
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

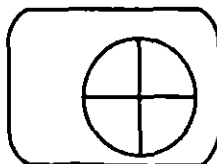
DATA: C9999 #3111
CALI: C9999 # 3

BASE M/Z: 57
RIC: 14352.



M/Z 40 50 60 70 80 90 100 110 120 130 140 150 160

200



Princeton Testing Laboratory Inc.

P O Box 3108
3490 U S Route 1
Princeton, NJ 08543-3108
(609) 452-9050
(FAX) (609) 452-1959

U S Army, Fort Monmouth N.J.
Attn: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108
Attention Charles Appleby
Project Name: Bldg. 616 UST# 0081533-90

Report Date: 02/09/95
Job Number: 9500366-001
Date Received: 01/30/95
Client Job No.: 94-12-8-1040-10
Page: 1

Analysis: Volatile Organics, SW, SW-846 8240
Units: ug/kg

Parameters

Sample I D.: 1786.1 Site D
West Sidewall
01/27/95

Chloromethane	<630
Bromomethane	<630
Vinyl chloride	<630
Chloroethane	<630
Methylene chloride	100 JB
Acetone	270 JB
Carbon disulfide	<310
1,1-Dichloroethene	<310
1,1-Dichloroethane	<310
1,2-Dichloroethene (Total)	<310
Chloroform	<310
1,2-Dichloroethane	<310
2-Butanone	540 B
1,1,1-Trichloroethane	<310
Carbon tetrachloride	<310
Bromodichloromethane	<310
1,1,2,2-Tetrachloroethane	<310
1,2-Dichloropropane	<310
trans-1,3-Dichloropropene	<310
Trichloroethene	<310
Dibromochloromethane	<310
1,1,2-Trichloroethane	<310
Benzene	<310
cis-1,3-Dichloropropene	<310
Bromoform	<310
2-Hexanone	<310
4-Methyl-2-Pentanone	<310
Tetrachloroethene	<310
Toluene	<310
Chlorobenzene	<310
Ethylbenzene	3200
Styrene	<310
Total Xylenes	5200

RECOVERY DATA

QC LIMITS

1,2-Dichloroethane-d4 (Surrogate)	70-121%	86
Toluene-d8 (Surrogate)	84-138%	90
4-Bromofluorobenzene (Surrogate)	59-113%	90

J - Estimated Value Detected Below MDL

B - Compound Found In Blank

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
1786.1 SITE D

Lab Name: Princeton Testing Lab US ARMY, FORT MONMOUTH N.J.

Lab Code: PTL Case No.: 9500366 SAS No.: XXX SDG No.: XXX

Matrix: (Soil/Water) soil Lab Sample ID: 02

Sample wt/vol: 5.0 (g, mL) 2 Lab File ID: C100

Level (low/med) LOW Date Received 01/30/95

%Moisture, not dec. 50 Date Analyzed: 02/02/95

GC Column: WOCOL ID: 0.53 mm Dilution Factor: 50

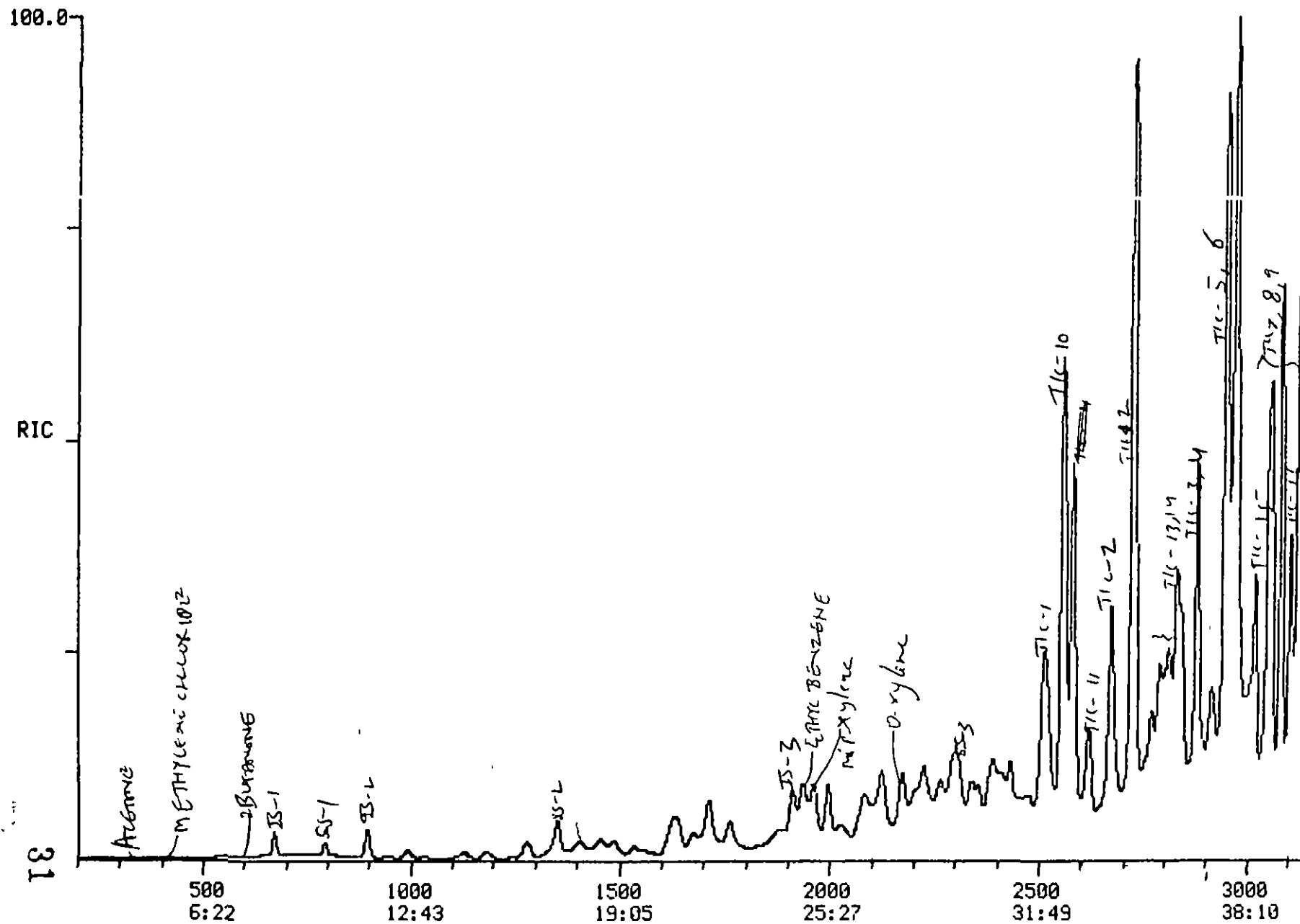
Soil Extract Vol: ul Soil Aliquot Vol: ul

Number TICs found: 16 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

#3	CAS NUMB	COMPOUND NAME	RT	EST CONC.	SCAN
1	526-73-8	BENZENE, 1,2,3-TRIMETHYL-	32.31	41000	2555
2	95-63-6	BENZENE, 1,2,4-TRIMETHYL-	34.37	80000	2721
3	91-17-8	NAPHTHALENE, DECAHYDRO	37.25	10000	2940
4	1074-43-7	UNKNOWN HYDROCARBON	37.27	36000	2943
5	611-15-4	UNKNOWN HYDROCARBON	37.44	52000	2966
6	1758-88-9	UNKNOWN HYDROCARBON	37.46	61000	2968
7	0-00-0	UNKNOWN HYDROCARBON	39.10	39000	3078
8	0-00-0	UNKNOWN	39.40	12000	3117
9	0-00-0	UNKNOWN	39.44	27000	3123
10	0-00-0	UNKNOWN HYDROCARBON	32.48	33000	2578
11	0-00-0	UNKNOWN HYDROCARBON	33.17	10000	2616
12	0-00-0	UNKNOWN HYDROCARBON	33.57	23000	2668
13	0-00-0	UNKNOWN HYDROCARBON	35.58	16000	2827
14	0-00-0	UNKNOWN HYDROCARBON	36.34	31000	2874
15	0-00-0	UNKNOWN HYDROCARBON	38.51	57000	3053
16	0-00-0	UNKNOWN HYDROCARBON	36.26	13000	3099

RANGE: G 1,3151 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

SCANS 200 TO 3151



5472260.

Quantitation Report File C1001

Data C1001 TI

02/02/95 19 13 00

Sample 366-02 1786 1 SITE D

Conds EPA METHOD 8240

Formula 5G/10M *200 ml / 5 ml* Instrument FINN

Submitted by US ARMY Analyst UC

Weight 0.000

Acct No 0366-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp fac from Library Entry

No	Name
1	C101 BROMOCHLOROMETHANE **INT STD **
2	C110 1,4-DIFLUOROBENZENE **INT STD **
3	C120 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-D8 **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLOROETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

C1501

No Name
 48 C250 O-XYLENE
 49 BENZENE-D6 ***S STD**

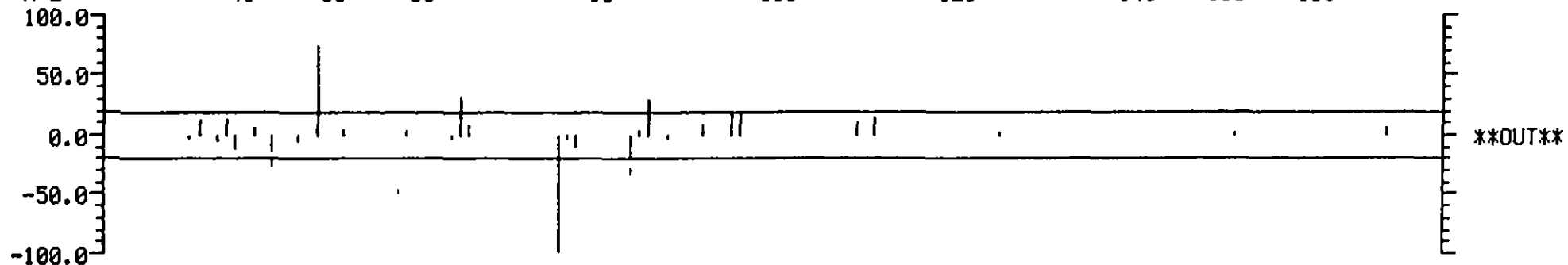
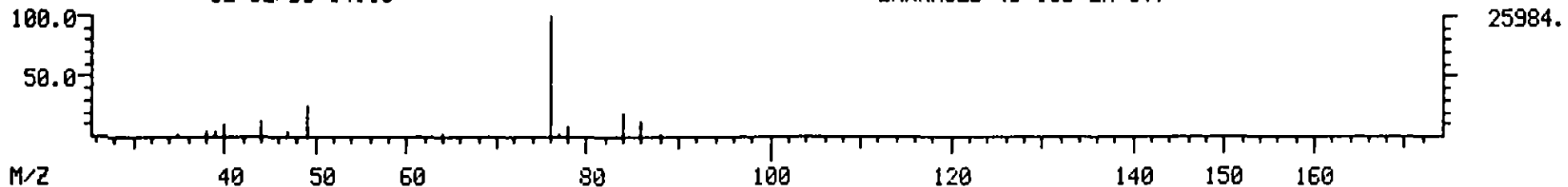
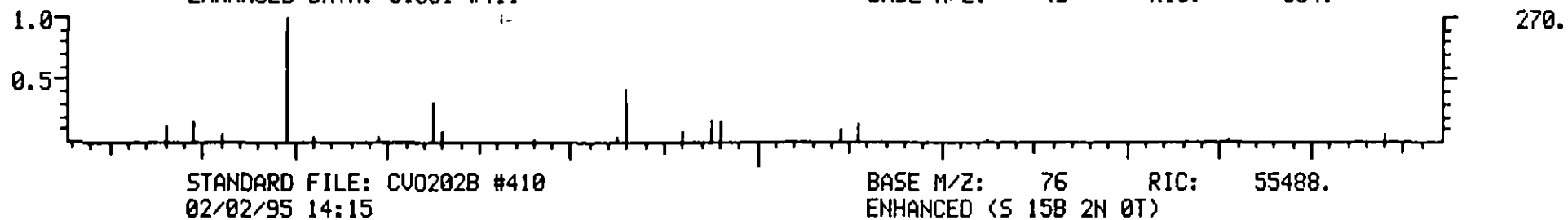
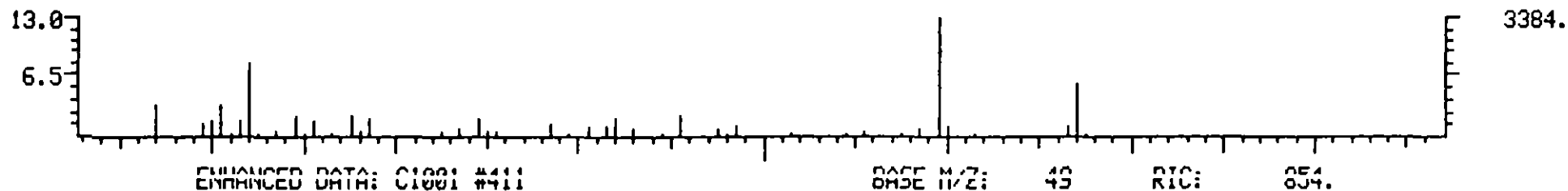
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	671	8 32	1	1 000	A BB	251339	50 000 NG	11 29
2	114	893	11 22	2	1 000	A BB	1001980	50 000 NG	11 29
3	117	1911	24 19	3	1 000	A BB	947184	50 000 NG	11 29
4	65	794	10 06	1	1 183	A BB	303846	42 903 NG	9 69
5	98	1351	17 11	3	0 707	A BB	930352	44 856 NG	10 13
6	174	2430	30 55	3	1 272	A BB	618668	44 992 NG	10 16
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	49	412	5 15	1	0 614	A BB	7669	1 633 NG	0 37
12	NOT FOUND								
13	43	333	4 14	1	0 496	A BB	10971	4 268 NG	0 96
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	43	586	7 27	2	0 656	A BB	23231	8 685 NG	1 96
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	106	1963	24 59	3	1 027	A BB	443063.	51 819 NG	11.70
43	NOT FOUND								
44	106	1994	25 22	3	1.043	A BB	785120	34 994 NG	7 90
45	146	2823	35.55	3	1 477	A BB	276447	10 324 NG	2.33
46	NOT FOUND								
47	NOT FOUND								
48	106	2170	27 37	3	1 136	A BB	506523	48 322 NG	10.91
49	NOT FOUND								

DATA FILE: C1001 #411
TARGET COMPOUND COMPARISON
COMPOUND: C030 METHYLENE CHLORIDE

STANDARD FILE: CU0202B #410
CALI: C1001 #3

RAW DATA: C1001 #411
02/02/95 19:13

BASE M/Z: 119 RIC: 18208.

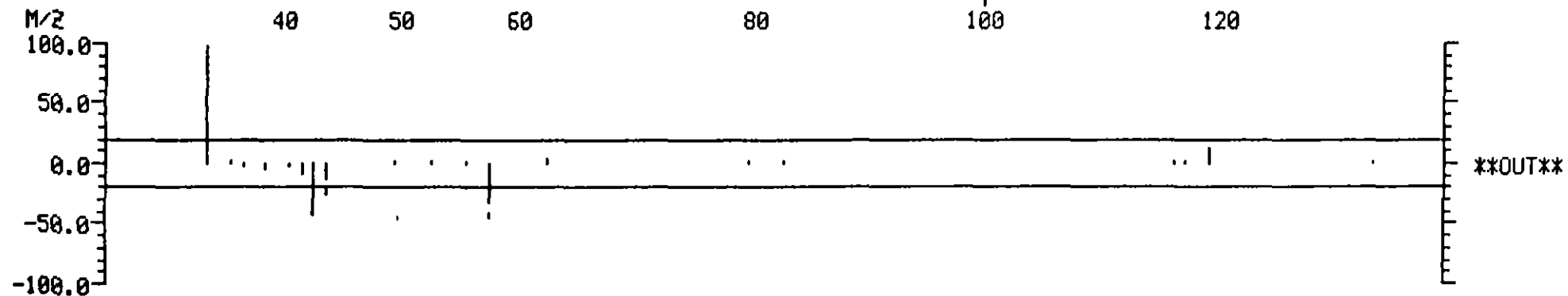
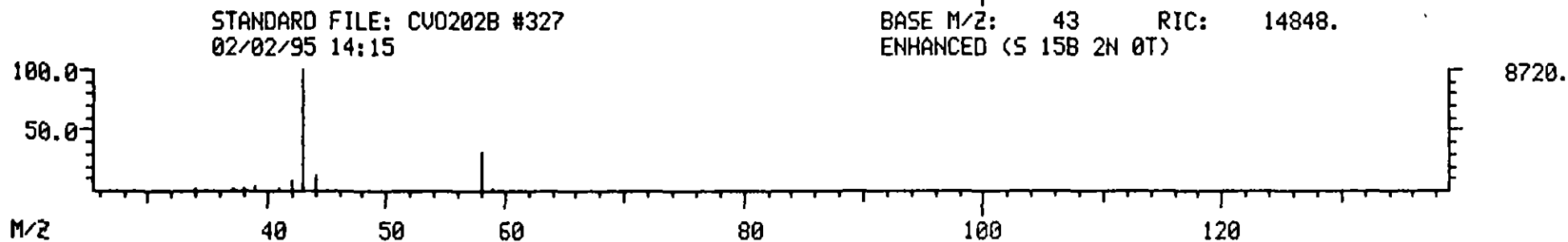
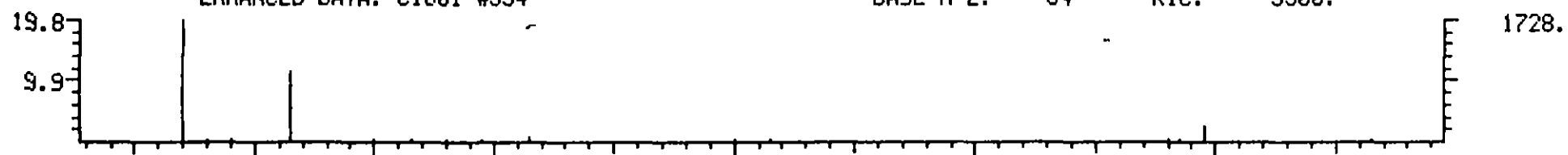
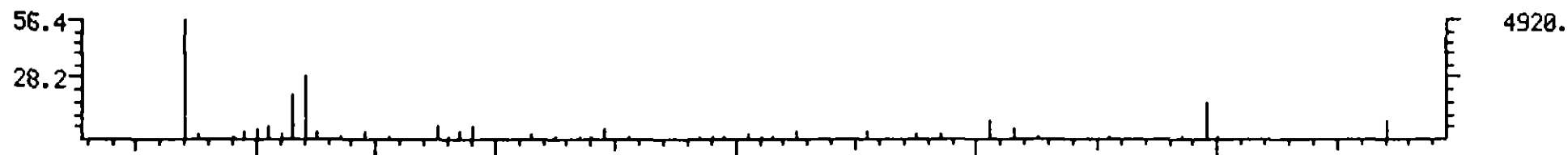


DATA FILE: C1001 #334
TARGET COMPOUND COMPARISON
COMPOUND: C035 ACETONE

STANDARD FILE: CV0202B #327
CALI: C1001 #3

RAW DATA: C1001 #334
02/02/95 19:13

BASE M/Z: 34 RIC: 20864.

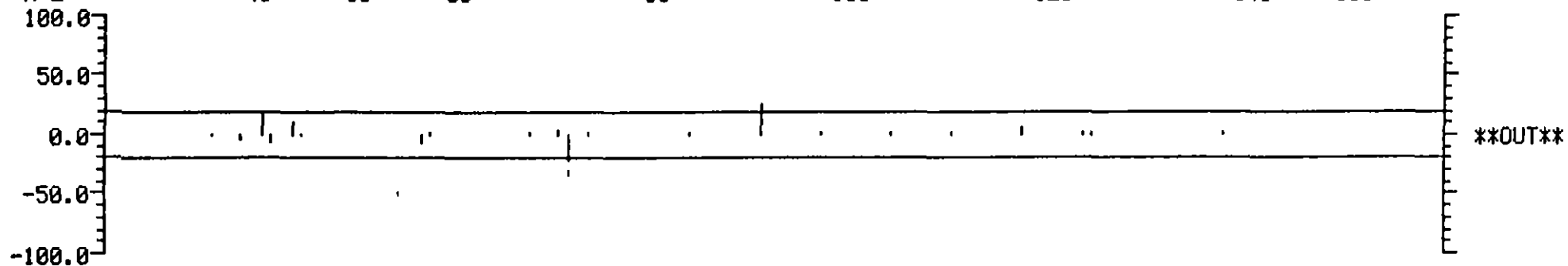
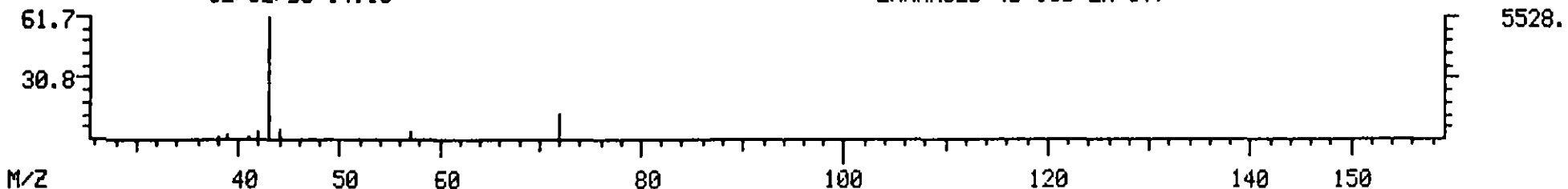
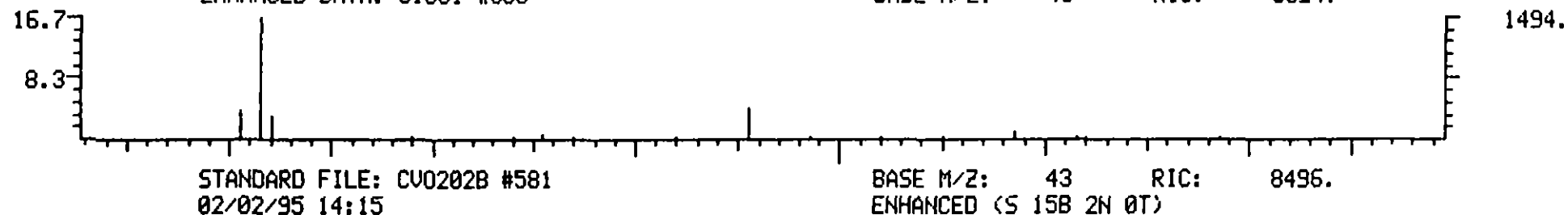
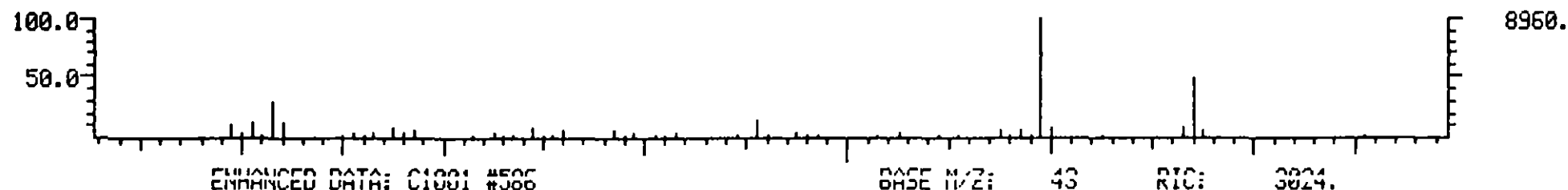


DATA FILE: C1001 #586
TARGET COMPOUND COMPARISON
COMPOUND: C110 2-BUTANONE

STANDARD FILE: CV0202B #581
CALI: C1001 #3

RAW DATA: C1001 #586
02/02/95 19:13

BASE M/Z: 119 RIC: 34048.

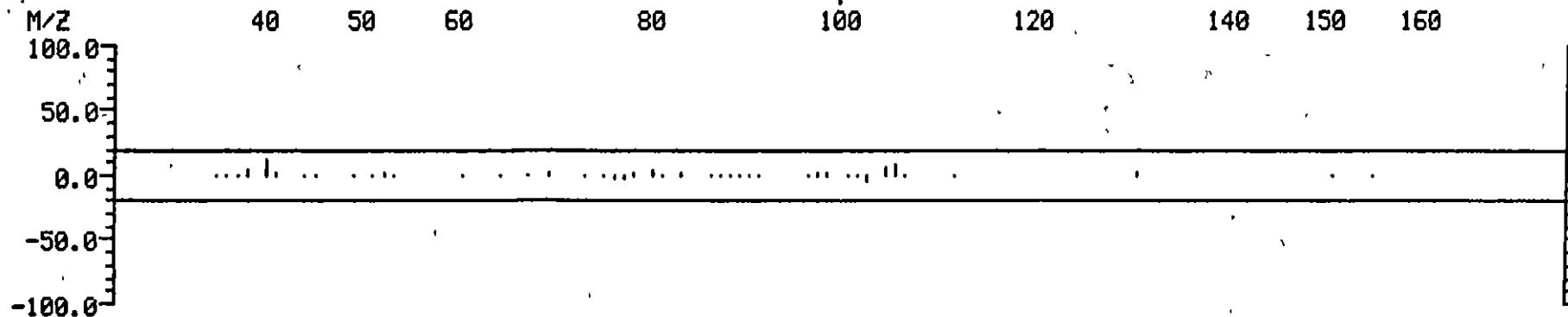
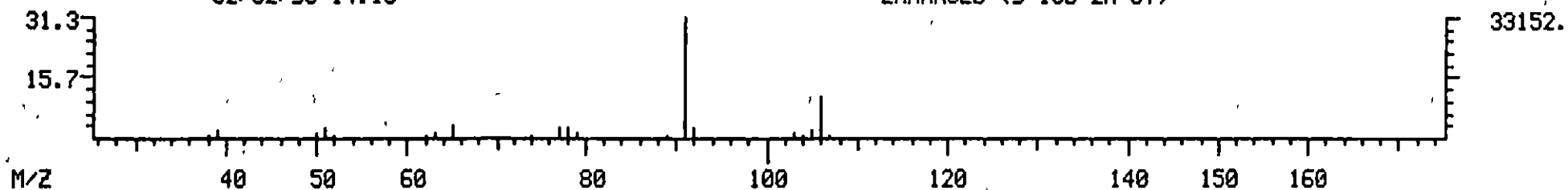
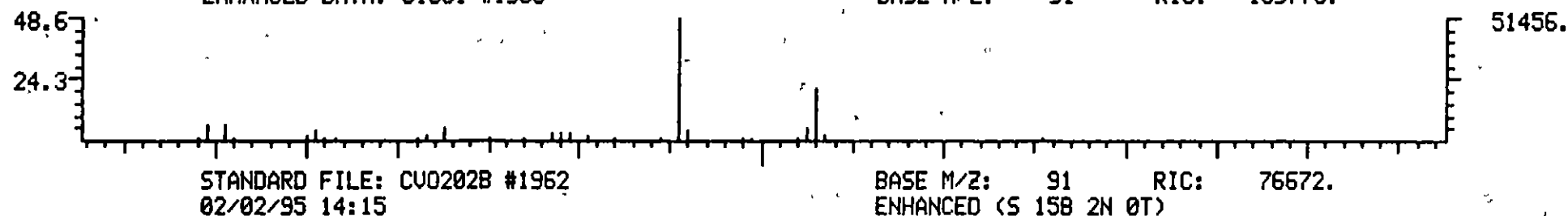
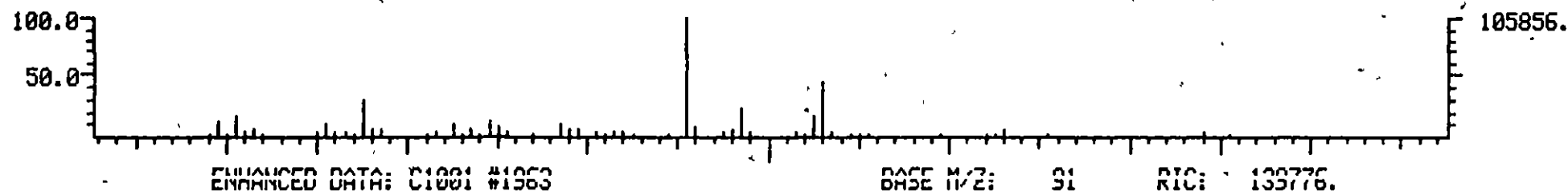


DATA FILE: C1001 #1963
TARGET COMPOUND COMPARISON
COMPOUND: C240 ETHYL BENZENE *

STANDARD FILE: CU0202B #1962
CALI: C1001 #3

RAW DATA: C1001 #1963
02/02/95 19:13

BASE M/Z: 91 RIC: 498688.

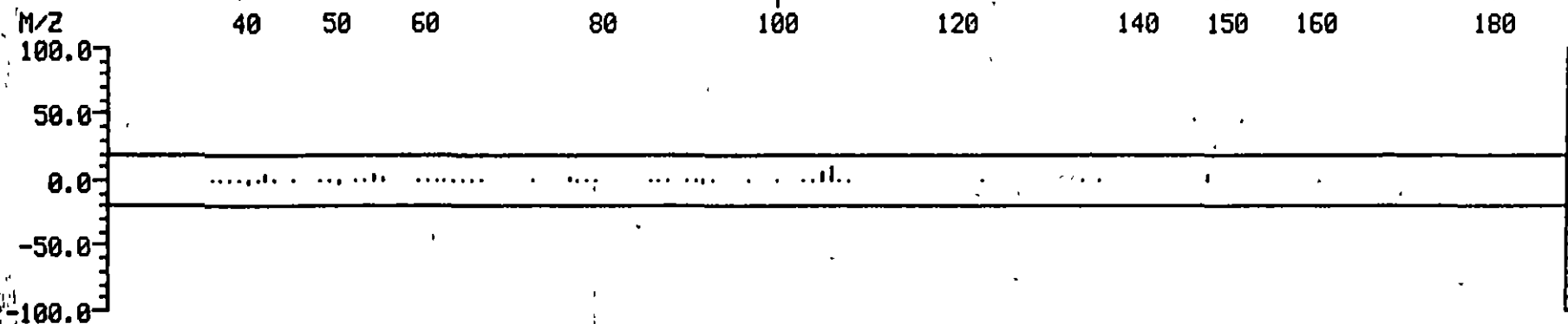
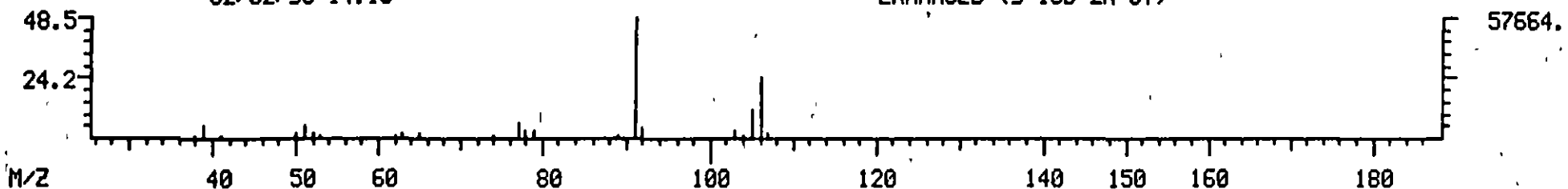
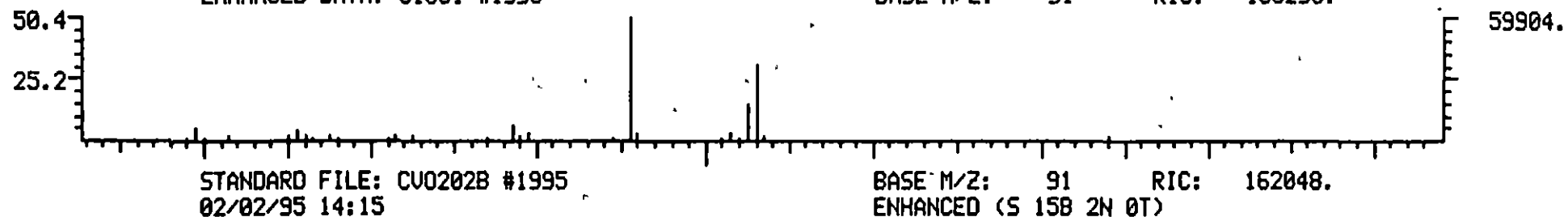
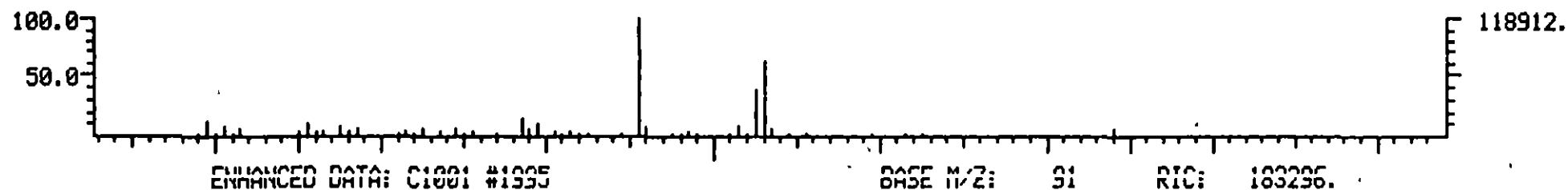


DATA FILE: C1001 #1995
TARGET COMPOUND COMPARISON
COMPOUND: C250 M+P-XYLENES

STANDARD FILE: CU0202B #1995
CALI: C1001 #3

RAW DATA: C1001 #1995
02/02/95 19:13

BASE M/Z: 91 RIC: 506880.

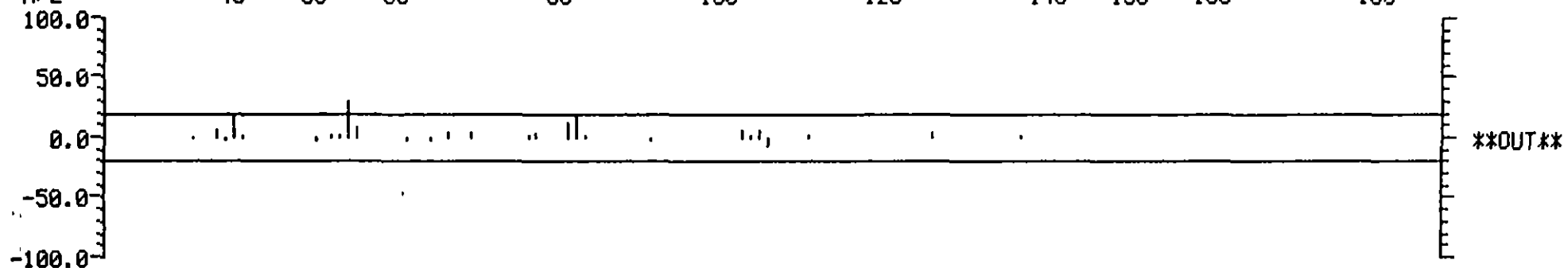
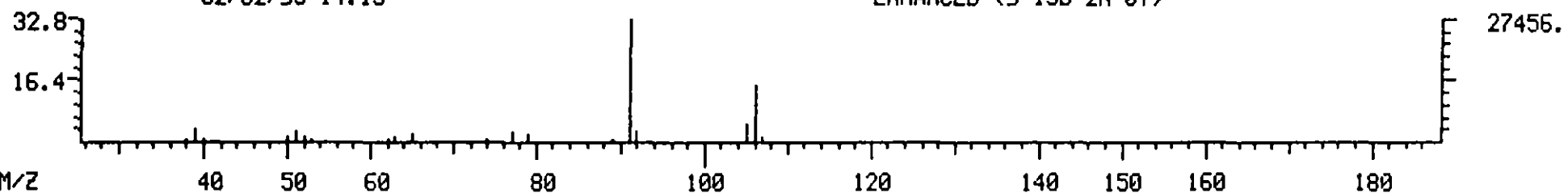
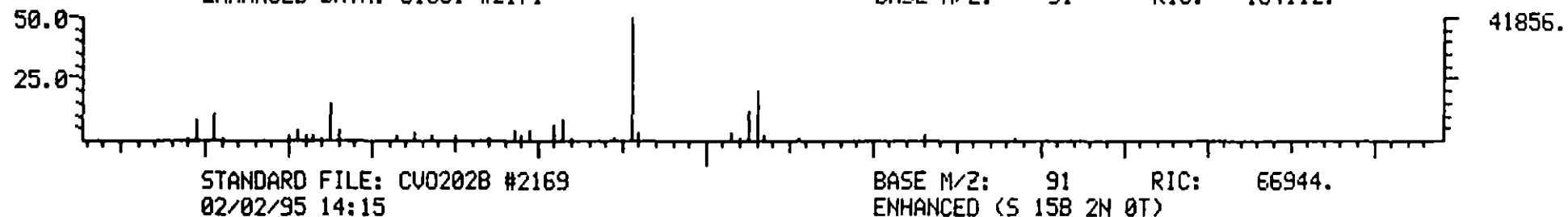
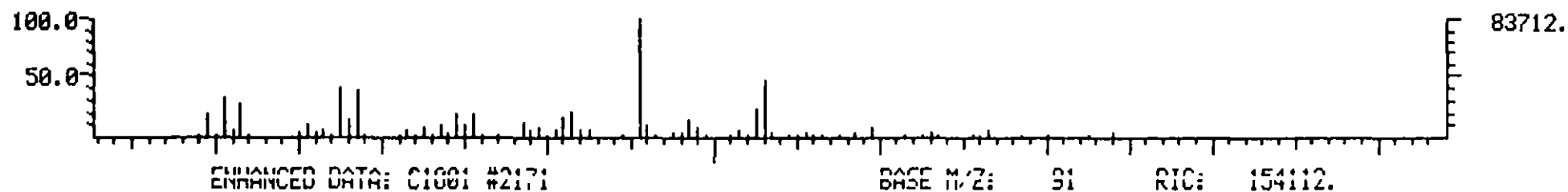


DATA FILE: C1001 #2171
TARGET COMPOUND COMPARISON
COMPOUND: C250 O-XYLENE

STANDARD FILE: CV0202B #2169
CALI: C1001 #3

RAW DATA: C1001 #2171
02/02/95 19:13

BASE M/Z: 91 RIC: 583680.



DATA FILE C1001

FILTER SCAN PARAMETERS

```

-----
MAX NUMBER TICS      15
11-TABLE ENTRIES    539
SCAN TOLERANCE       1
MIN RIC HT [%]      10
FIRST SCAN           350
LAST SCAN            3168
TIC THRESHOLD        600

```

METHOD LIBRARY & LISTS

```

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TIC I S LIBRARY  LIBRARYLS
NBS SEARCH PROC  SERLIB
PEAK FINDER PROC VOME
TCA I S LL       LS
FILE NAME LIST   TCAREF2

```

TARGET COMPOUND ANALYSIS

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
10	3	13

FILTER PROCESSING

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
105	4	0	0	9	77	90	15

TIC PROCESSING.

NO	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	2555	848	970	120	BENZENE, 1,2,3-TRIMETHYL-
2	2717	583	789	140	CYCLOPENTANE, 1,2-DIMETHYL-3-(
3	2721	801	932	120	BENZENE, 1,2,4-TRIMETHYL-
4	2726	881	965	120	BENZENE, 1,3,5-TRIMETHYL-
5	2938	618	895	138	NAPHTHALENE, DECAHYDRO-
6	2940	659	930	134	BENZENE, 1-METHYL-3-PROPYL-
7	2943	774	933	134	BENZENE, DIETHYL-
8	2963	726	807	118	BENZENE, 1-ETHENYL-2-METHYL-
9	2966	697	844	134	BENZENE, (1,1-DIMETHYLETHYL)-
10	2969	770	914	134	BENZENE, 2-ETHYL-1,4-DIMETHYL-
11	3078	868	965	134	BENZENE, 2-ETHYL-1,4-DIMETHYL-
12	3116	323	945	152	NAPHTHALENE, DECAHYDRO-2-METHY
13	3118	313	818	170	UNDECANAL
14	3120	342	705	148	BENZENEMETHANOL, ALPHA -ETHEN
15	3124	837	950	132	BENZENE, 1-METHYL-2-(2-PROPENY

Quantitation Report File C1001

Data C1001 TI

02/02/95 19 13.00

Sample 366-02 1786 1 SITE D

Conds EPA METHOD 8240

Formula 5G/10M

Submitted by US ARMY

Instrument FINN

Analyst UC

Weight 0 000

Acct No 0366-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE **INT. STD **
2	0-00-0	CI10 1,4-DIFLUOROBENZENE **INT STD **
3	0-00-0	CI20 CHLOROBENZENE-D5 **INT STD **
4	526-73-8	BENZENE, 1,2,3-TRIMETHYL-
5	95-63-6	BENZENE, 1,2,4-TRIMETHYL-
6	91-17-8	NAPHTHALENE, DECAHYDRO-
7	1074-43-7	BENZENE, 1-METHYL-3-PROPYL-
8	25340-17-4	BENZENE, DIETHYL-
9	611-15-4	BENZENE, 1-ETHENYL-2-METHYL-
10	98-06-6	BENZENE, (1,1-DIMETHYLETHYL)-
11	1758-88-9	BENZENE, 2-ETHYL-1,4-DIMETHYL-
12	1758-88-9	BENZENE, 2-ETHYL-1,4-DIMETHYL-
13	0-00-0	UNKNOWN
14	0-00-0	UNKNOWN
15	0-00-0	UNKNOWN
16	1987-04-8	BENZENE, 1-METHYL-2-(2-PROPENYL)-

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	XTot
1	TOT	671	8.32	0	ISINV	A BB	1299240	***** UG/L	00.00
2	TOT	894	11.23	0	ISINV	A BB	1893360.	***** UG/L	00.00
3	TOT	1911	24.19	0	ISINV	A BB	2027740.	***** UG/L	00.00
4	TOT	2555	32.31	3	1.337	A BB	26526700	654 094 41,000	8.12
5	TOT	2721	34.37	3	1.424	A BB	52151000	1285 940 80,000	15.97
6	TOT	2940	37.25	3	1.538	A BB	6775300.	167 065 10,000	2.08
7	TOT	2943	37.27	3	1.540	A BB	23358500	575 971 36,000	7.15
8	TOT	2943	37.27	3	1.540	A BB	22706700	559 898	6.95
9	TOT	2966	37.44	3	1.552	A BB	33806800	833.605 2,000	10.35
10	TOT	2967	37.45	3	1.553	A BB	37323300	920 314	11.43
11	TOT	2968	37.46	3	1.553	A BB	39288300	968 768 61,000	12.03
12	TOT	3078	39.10	3	1.611	A BB	25075700	618 314	7.68
13	TOT	3117	39.40	3	1.631	A BV	7925250.	195 420 12,000	2.43
14	TOT	3118	39.40	3	1.632	A BV	11275800	278 037	3.45
15	TOT	3123	39.44	3	1.634	A VV	17667600	435 645 27,000	5.41
16	TOT	3123	39.44	3	1.634	A BV	22603800	557 361	6.92

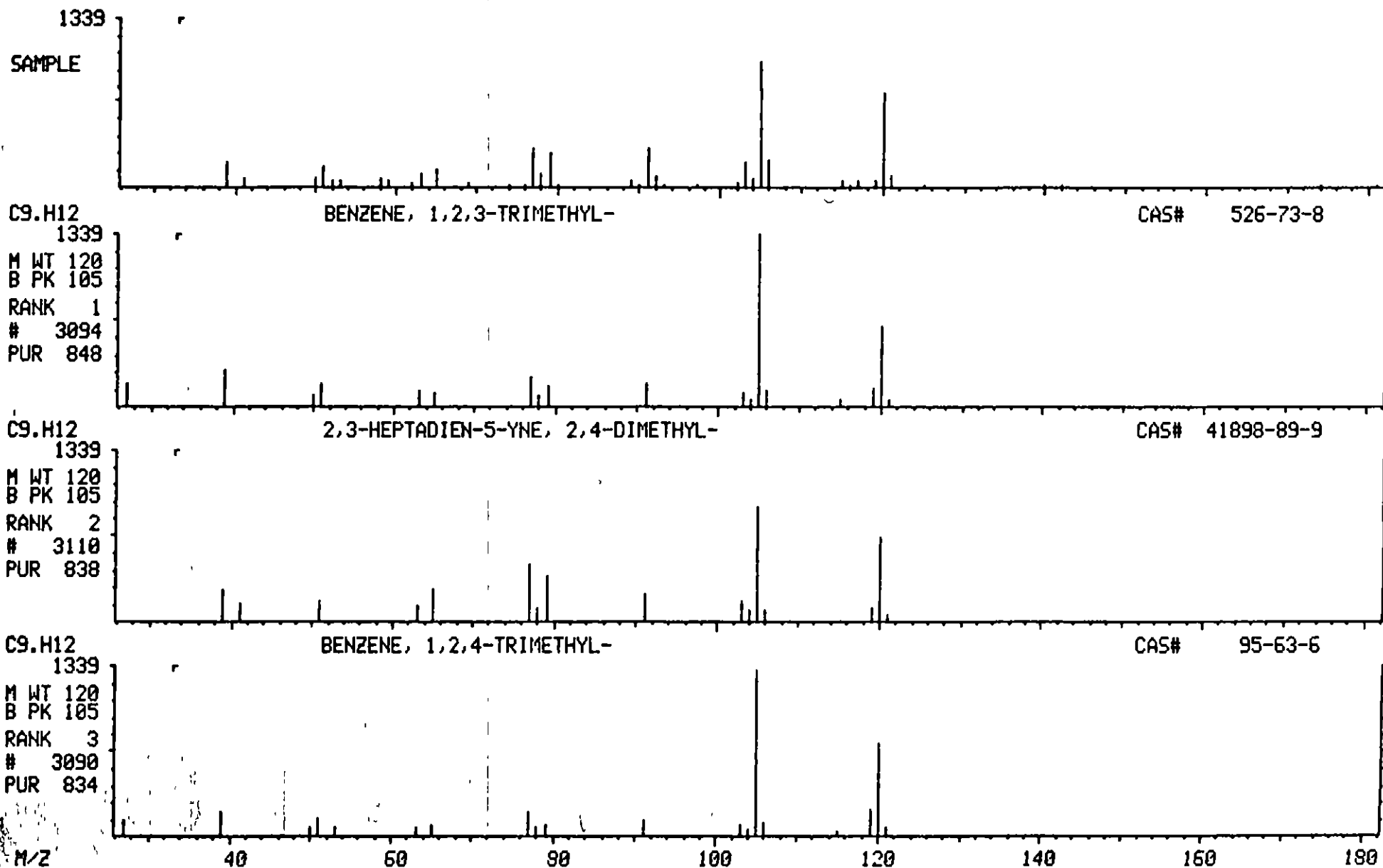
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2	19.21	0.59	1.000						
3	23.54	1.02	1.000						
4					654 09	1.00 654 094	1.000	654 09	
5					1285.94	1.001285 940	1.000	1285 94	
6					167.06	1.00 167 065	1.000	167.06	
7					575 97	1.00 575.972	1.000	575 97	

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R	Fac	R	Fac(L)	Ratio
8					559 90	1 00	559	900	1	000	559 90
9					833.61	1 00	833	607	1	000	833.61
10					920 31	1 00	920	315	1	000	920 31
11					968 77	1 00	968	769	1	000	968.77
12					618 32	1 00	618	315	1	000	618.32
13					195 42	1 00	195	420	1	000	195 42
14					278 04	1 00	278	037	1	000	278 04
15					435 65	1.00	435	646	1	000	435 65
16					557 36	1 00	557	363	1	000	557.36

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 32:31
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2555
CALI: C1001 # 3

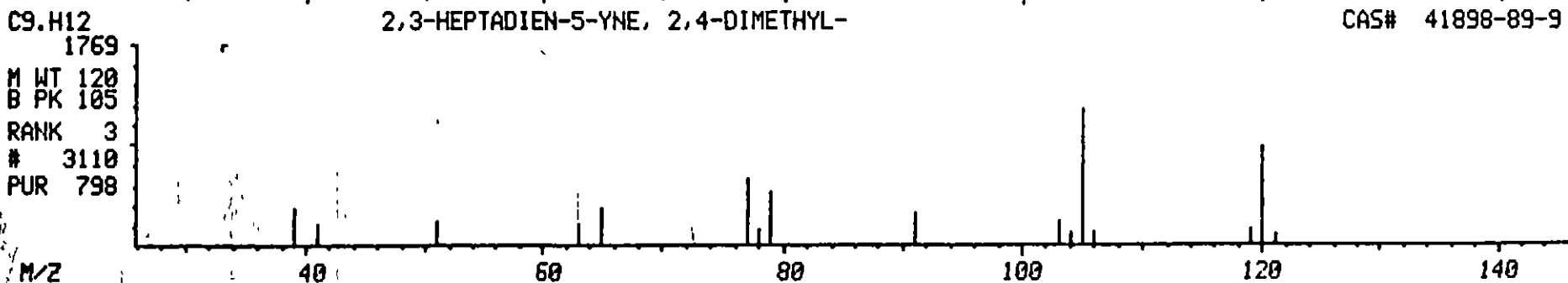
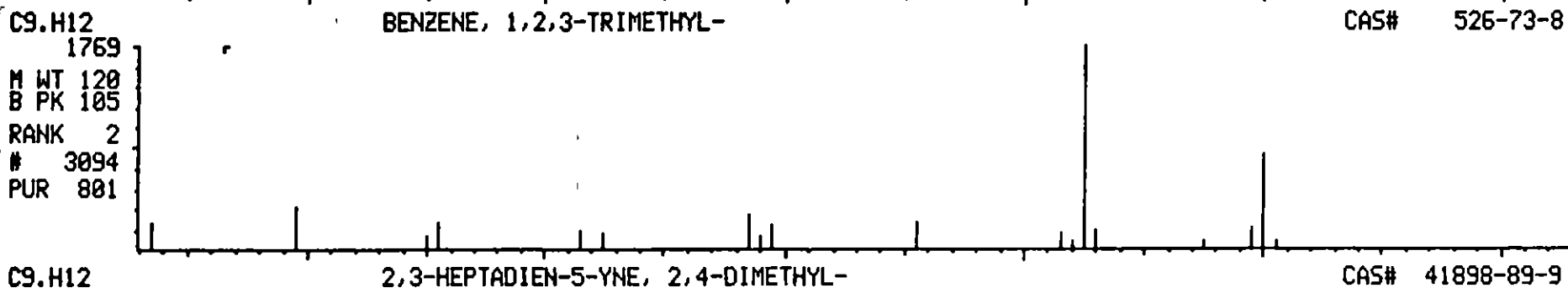
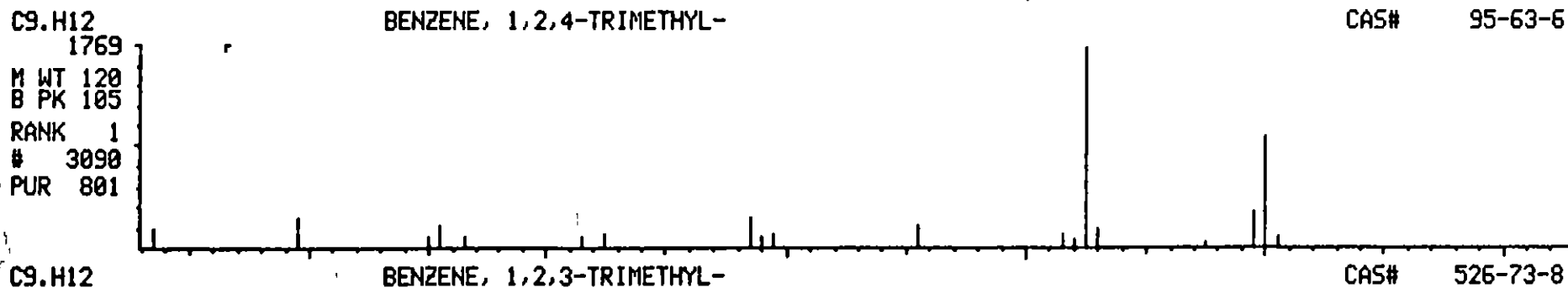
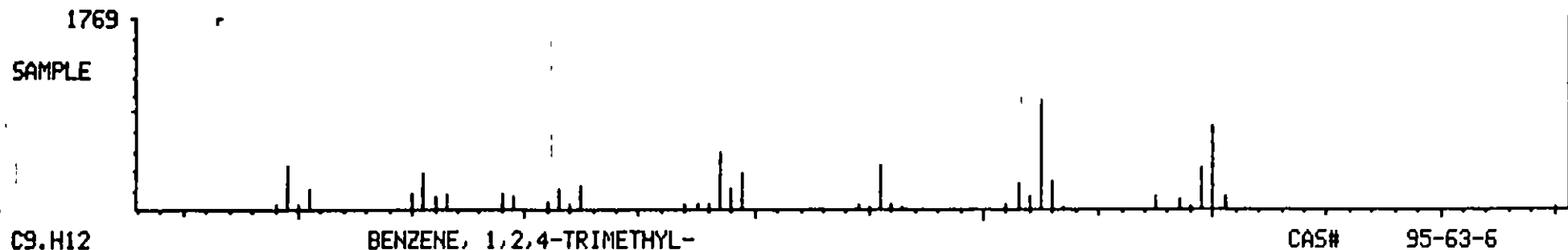
BASE M/Z: 105
RIC: 1374210.



MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 34:37
SAMPLE: 365-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2721
CALI: C1001 # 3

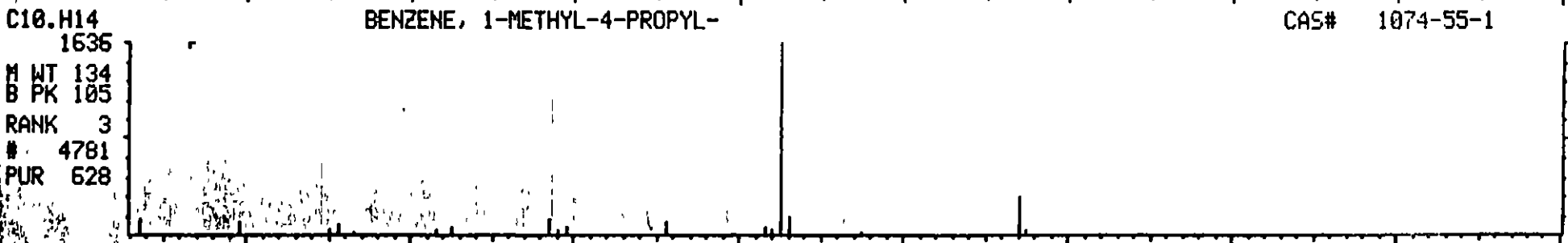
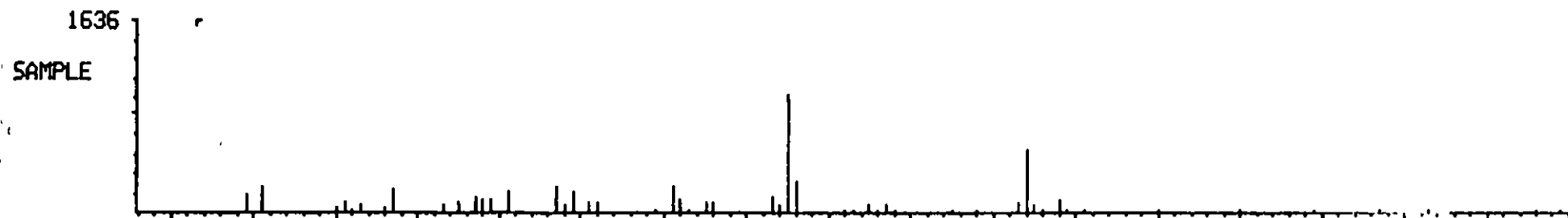
BASE M/Z: 105
RIC: 2183170.



MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 37:25
SAMPLE: 365-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2940
CALI: C1001 # 3

BASE M/Z: 105
RIC: 1476610.



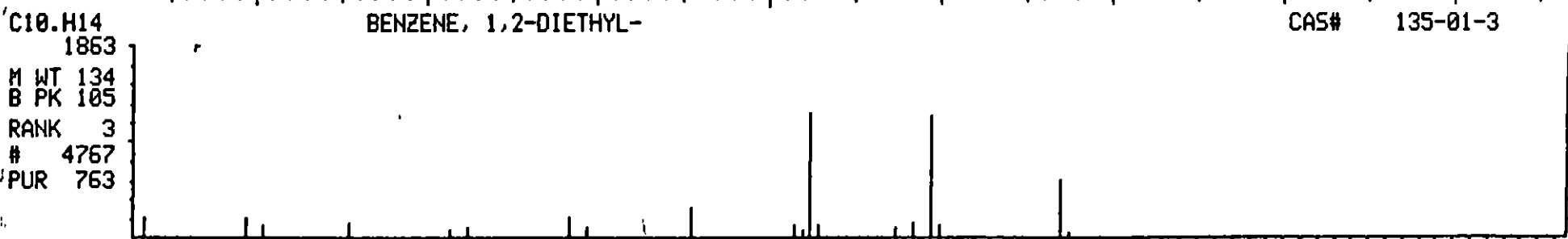
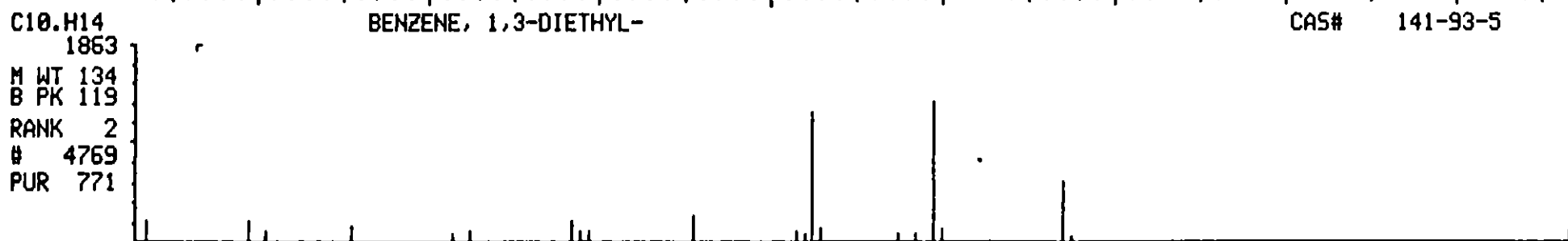
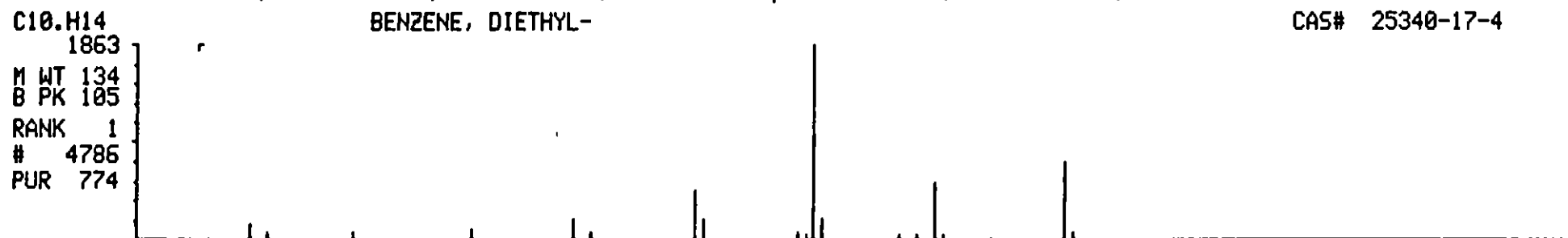
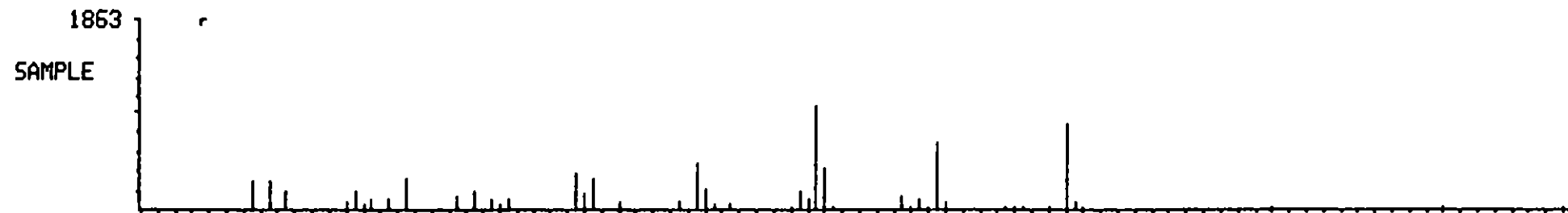
45 M/Z

40 60 80 100 120 140 160 180 200

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 37:27
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2943
CALI: C1001 # 3

BASE M/Z: 105
RIC: 2025470.



M/Z

40

60

80

100

120

140

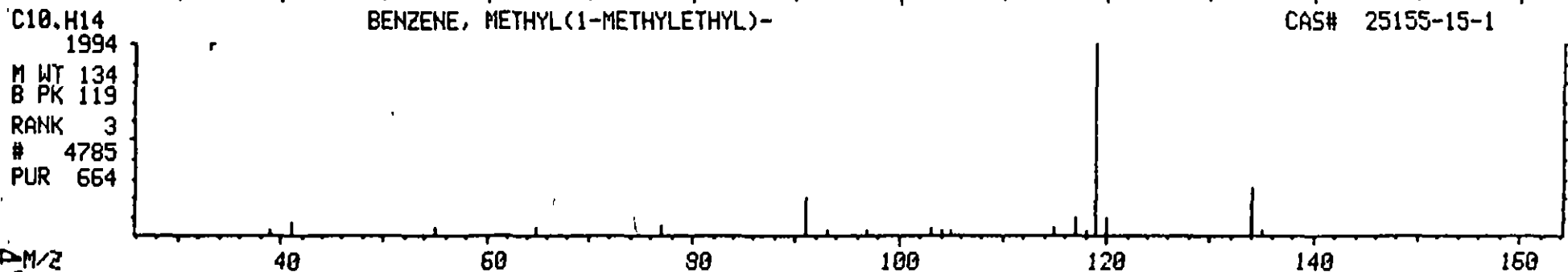
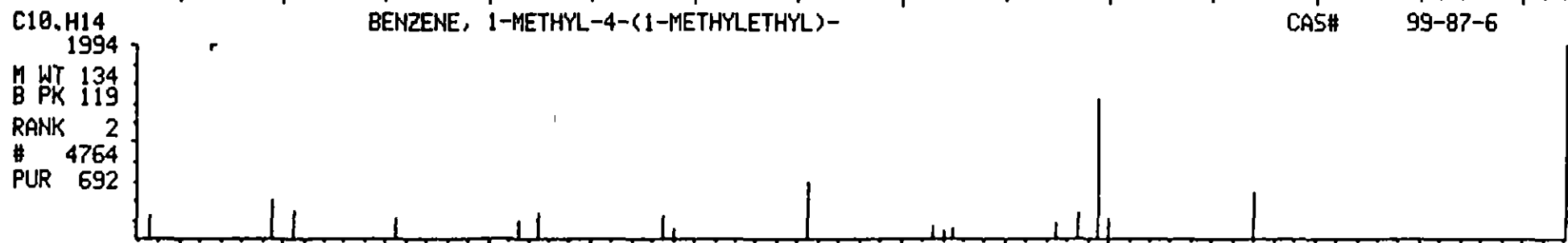
160

180

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 37:44
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2966
CALI: C1001 # 3

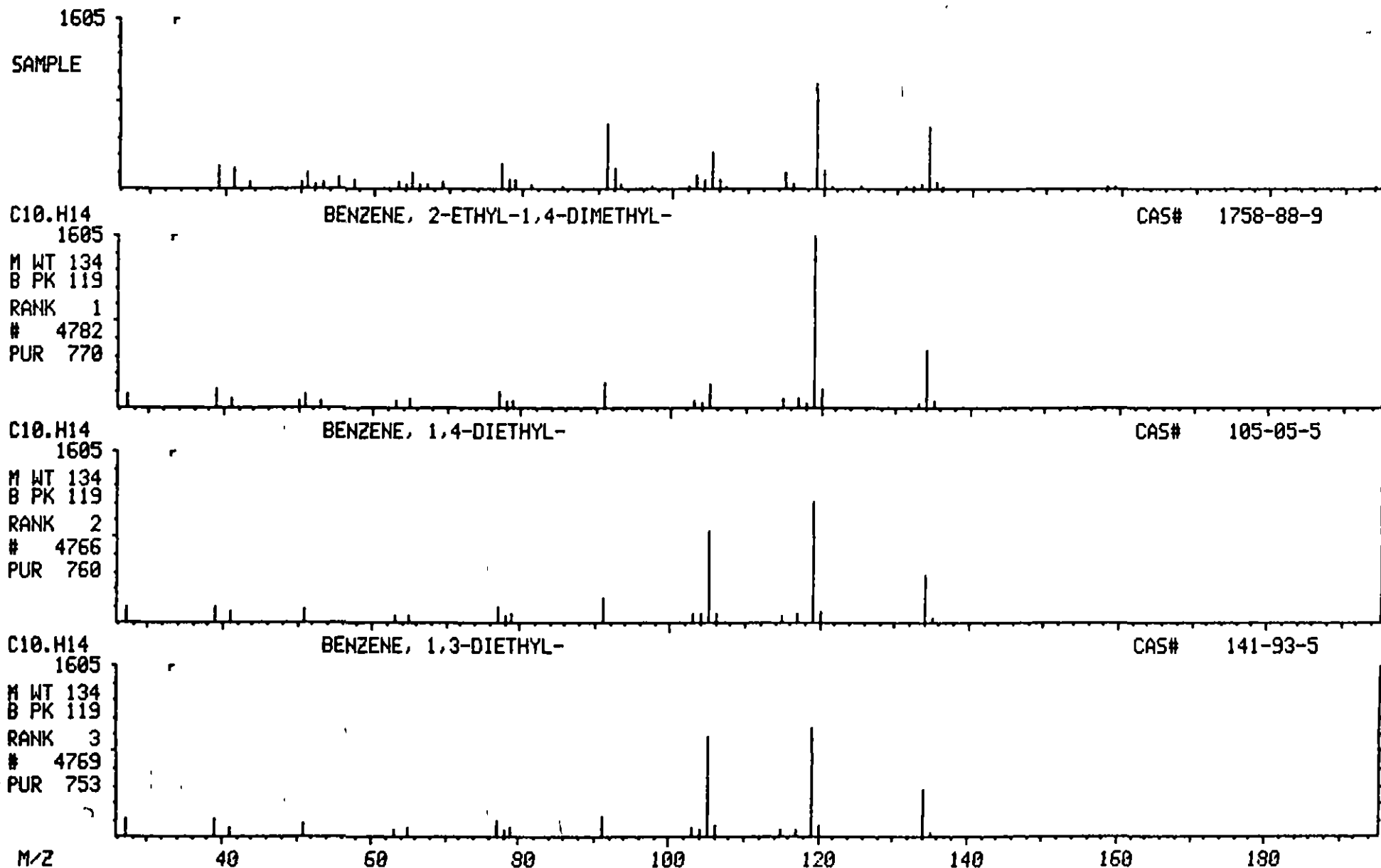
BASE M/Z: 119
RIC: 2019330.



MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 37:47
SAMPLE: 355-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2969
CALI: C1001 # 3

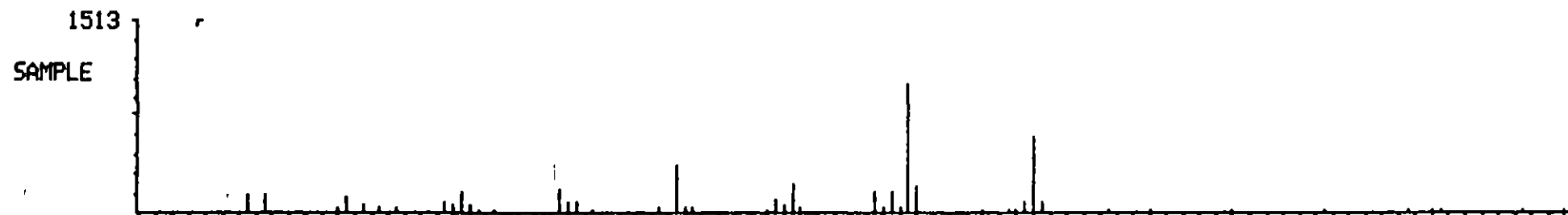
BASE M/Z: 119
RIC: 2084860.



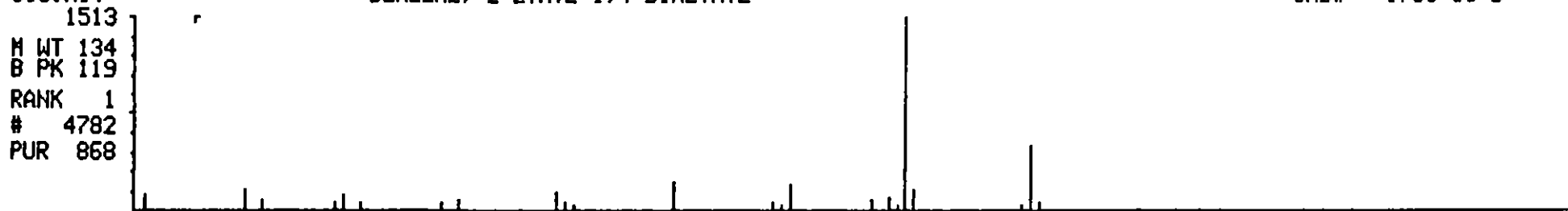
MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 39:10
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 158 2N 0T)

DATA: C1001 #3078
CALI: C1001 # 3

BASE M/Z: 119
RIC: 2013180.



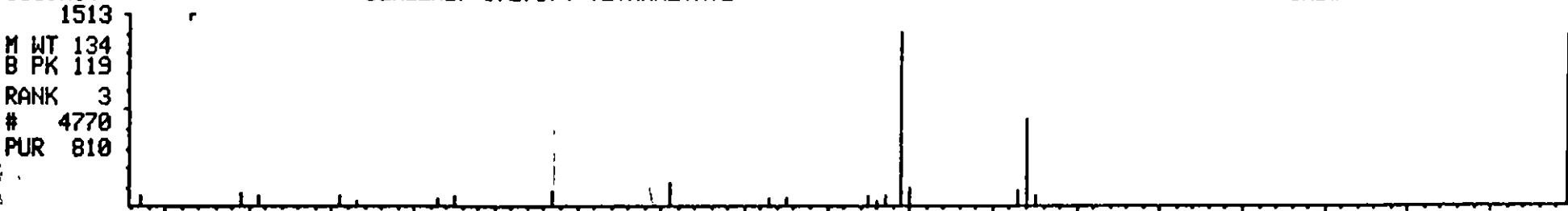
C10.H14 BENZENE, 2-ETHYL-1,4-DIMETHYL- CAS# 1758-88-9



C10.H14 BENZENE, 1,2,3,5-TETRAMETHYL- CAS# 527-53-7



C10.H14 BENZENE, 1,2,3,4-TETRAMETHYL- CAS# 488-23-3

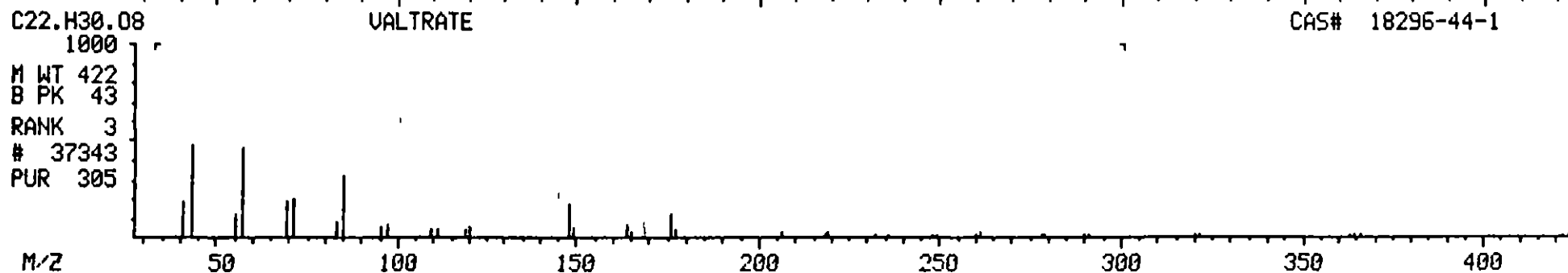
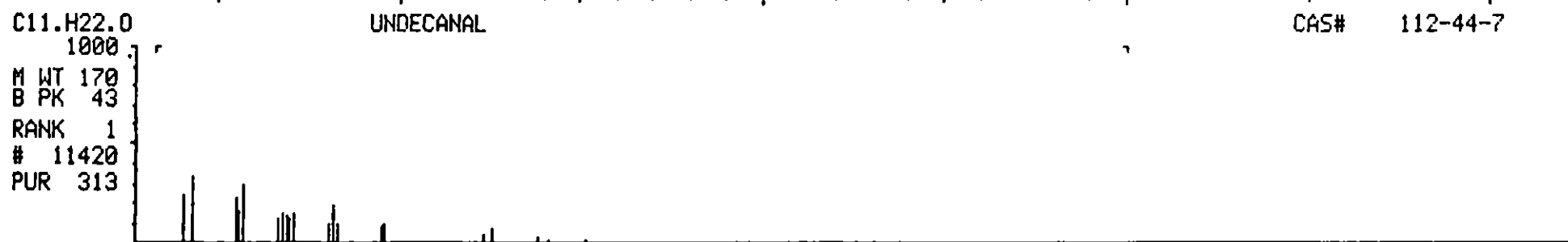
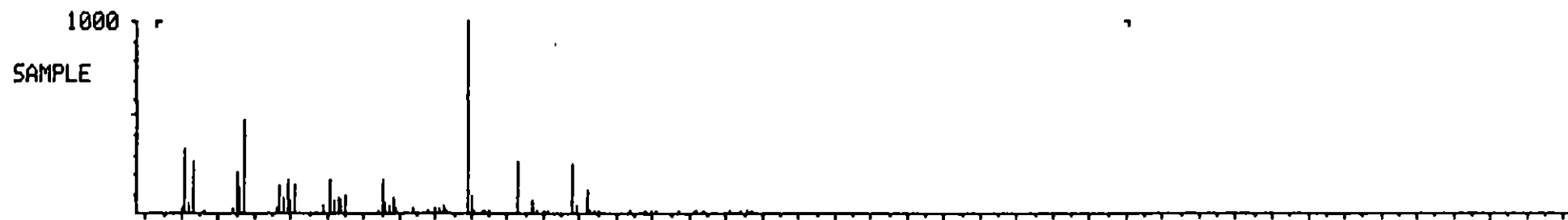


M/Z 40 60 80 100 120 140 160 180

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 39:40
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C1001 #3118
CALI: C1001 # 3

BASE M/Z: 119
RIC: 914432.

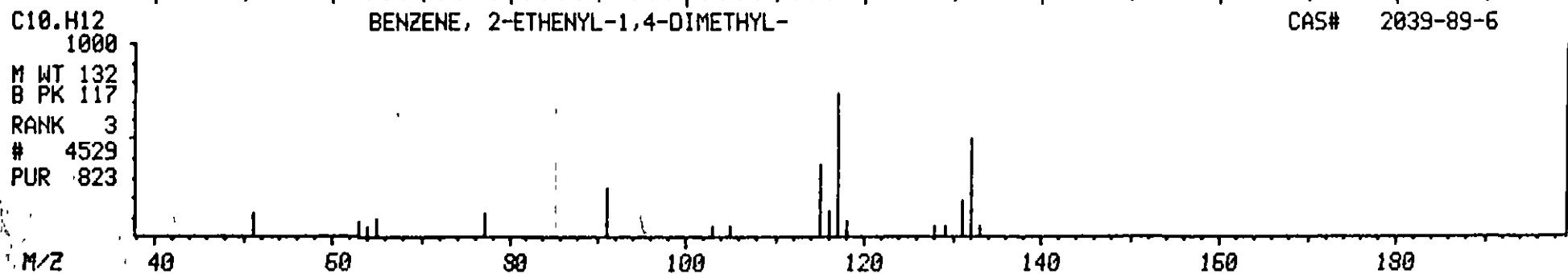
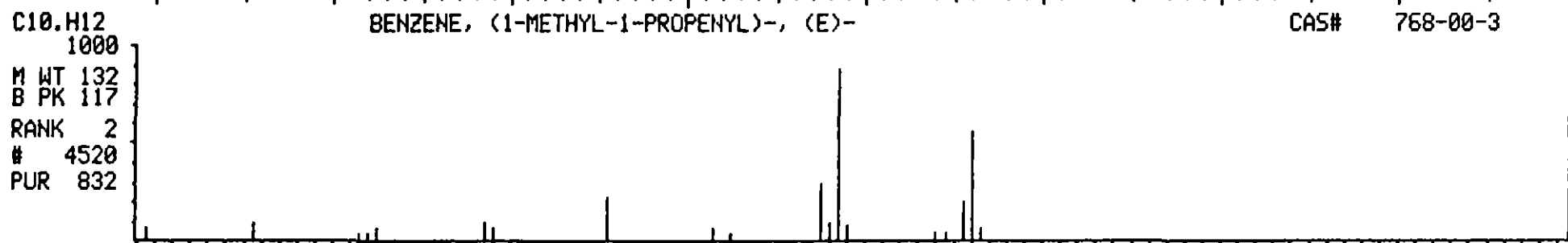
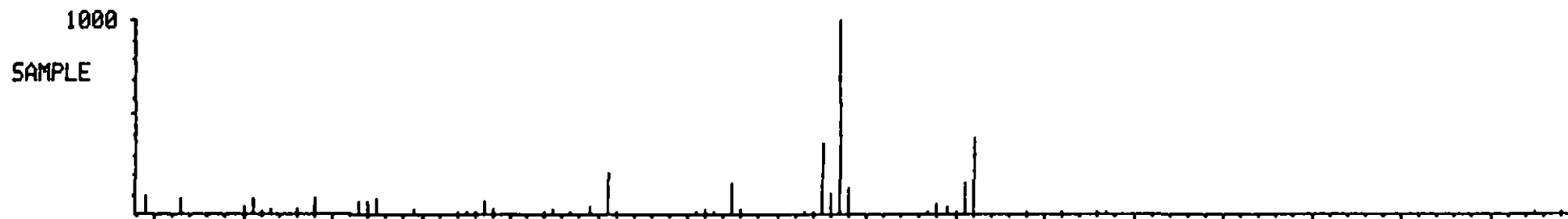


M/Z

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 39:45
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C1001 #3124
CALI: C1001 # 3

BASE M/Z: 117
RIC: 1509380.



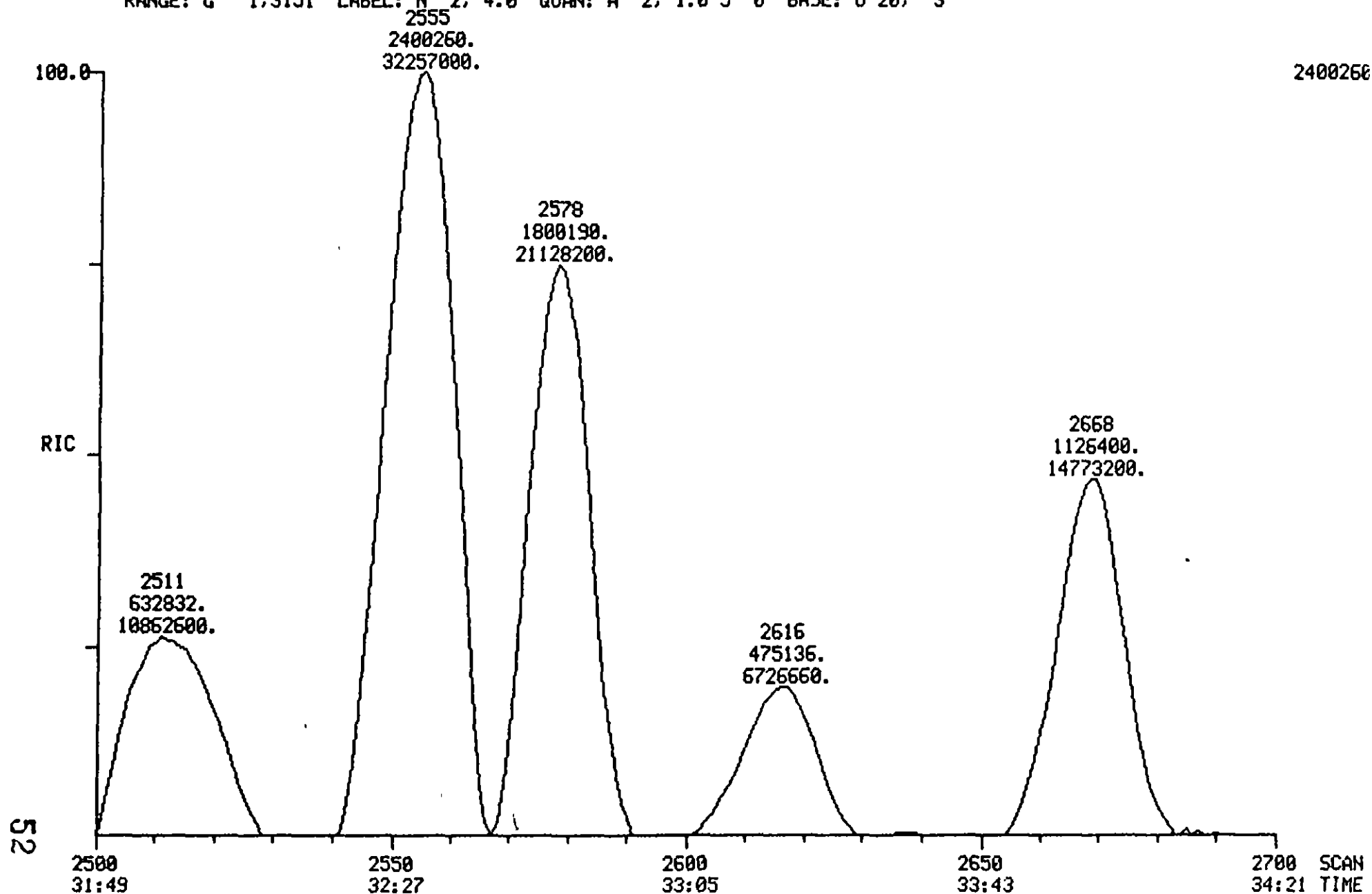
M/Z

RIC
02/02/95 19:13:00
SAMPLE: 366-02 1706.1 SITE D
CONDS.: EPA METHOD 8240
RANGE: G 1.3151 LABEL: N 2, 4.0

DATA: C1001 #1
CALI: C1001 #3

SCANS 2500 TO 2700

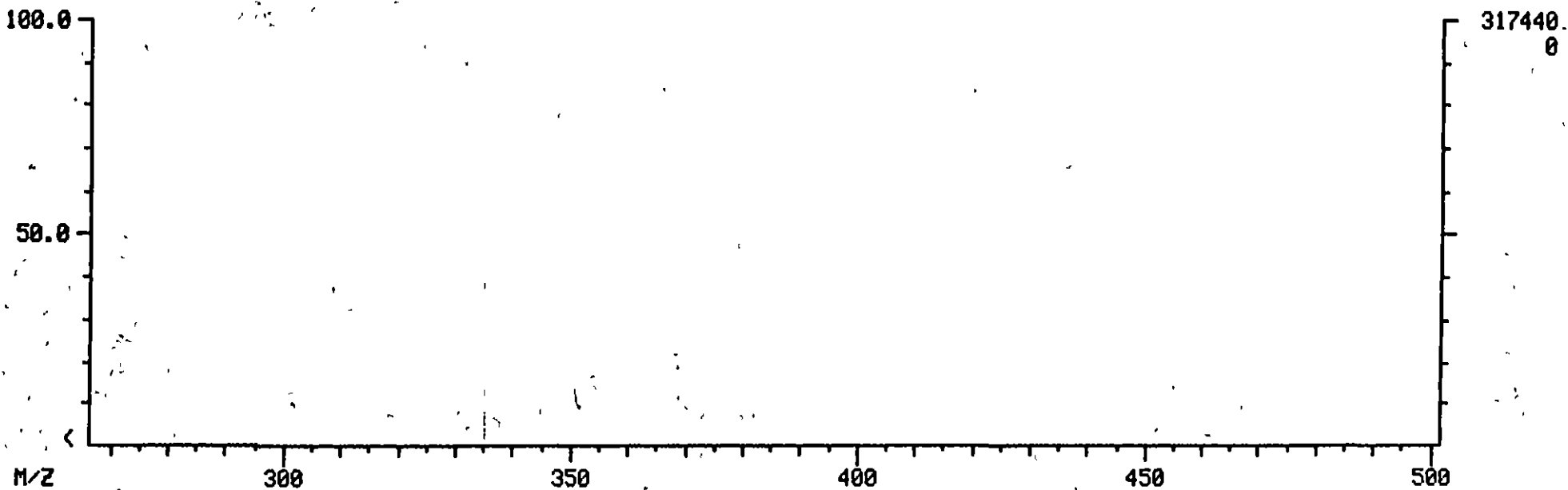
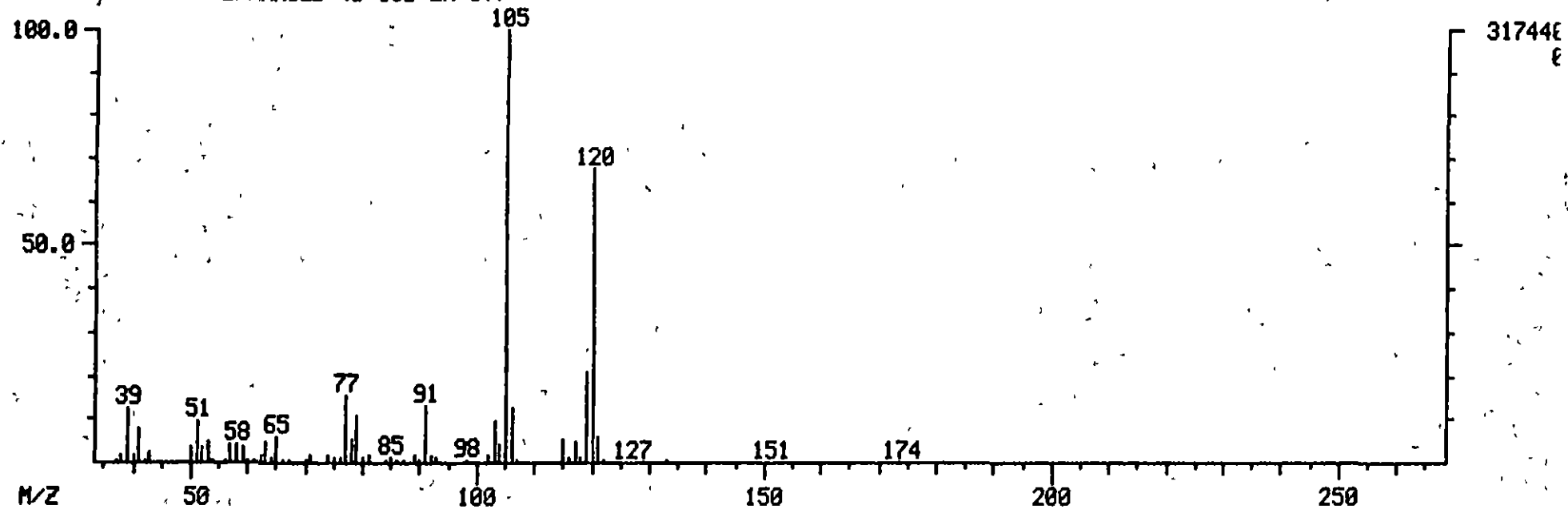
QUAN: A 2, 1.0 J 0 BASE: U 20, 3



MASS SPECTRUM
02/02/95 19:13:00 + 32:48
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
TEMP: 115 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2578
CALI: C1001 #3

BASE M/Z: 105
RIC: 1200130.



Library Search
02/02/95 19 13 00 + 32 48
Sample 366-02 1786.1 SITE D
Conds EPA METHOD 8240
Enhanced (S 15B 2N OT)

Data C1001 #2578
Cal: C1001 # 3

Base m/z 105
RIC 1118210

42223 spectra in LIBRARYNB searched for maximum FIT
127 matched at least 7 of the 16 largest peaks in the unknown

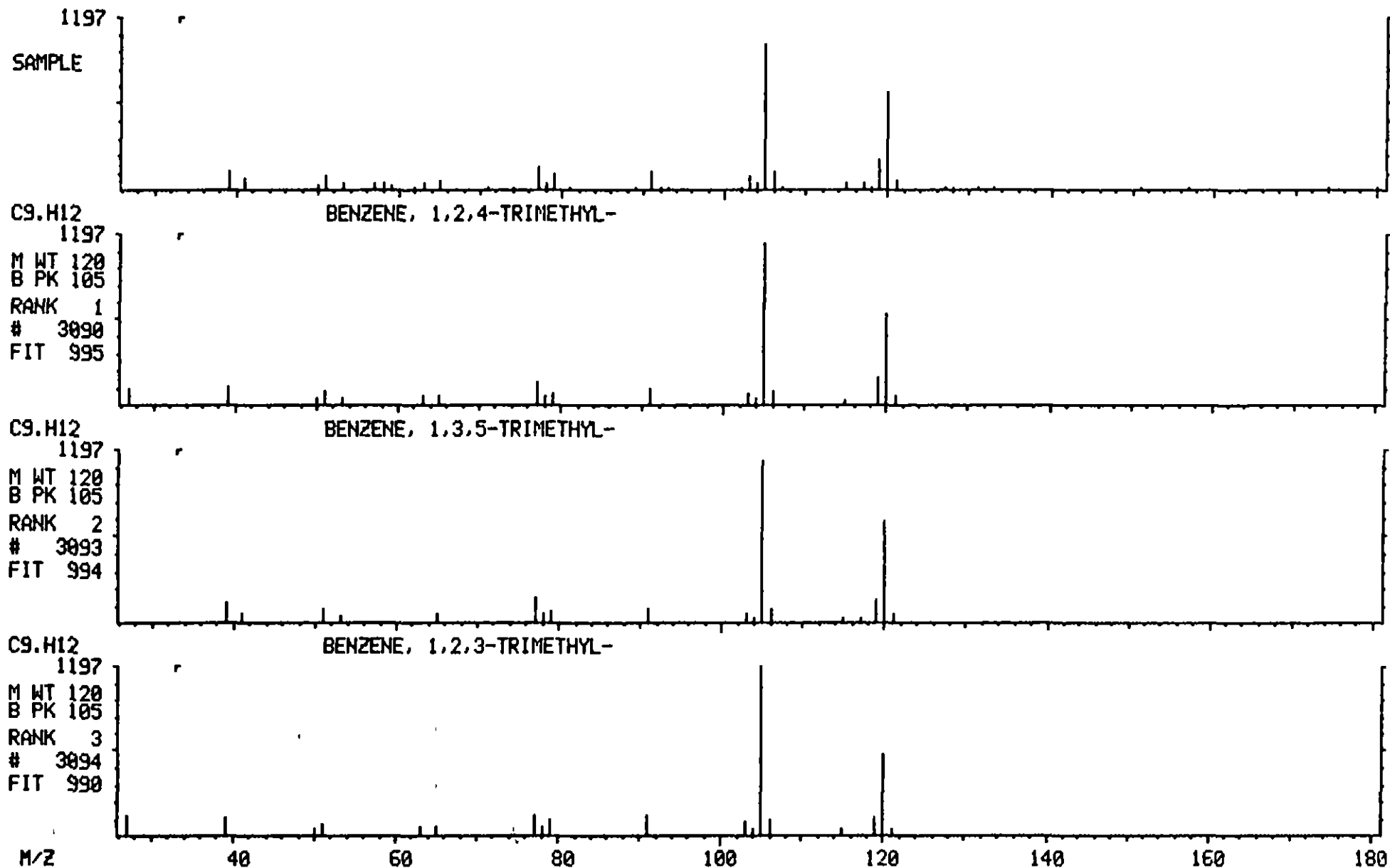
Rank	In	Name
1	3090	BENZENE, 1,2,4-TRIMETHYL-
2	3093	BENZENE, 1,3,5-TRIMETHYL-
3	3094	BENZENE, 1,2,3-TRIMETHYL-
4	3110	2,3-HEPTADIEN-5-YNE, 2,4-DIMETHYL-
5	7744	BENZENE, (1-NITROETHYL)-

Rank	Formula	M Wt	B Pk	Purity	Fit	RFit
1	C9 H12	120	105	908	995	908
2	C9 H12	120	105	917	994	917
3	C9 H12	120	105	897	990	897
4	C9 H12	120	105	878	984	878
5	C8 H9 O2 N	151	105	506	965	512

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 32:48
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2578
CALI: C1001 # 3

BASE M/Z: 105
RIC: 1118210.



RIC

02/02/95 19:13:00

SAMPLE: 366-02 1786.1 SITE D

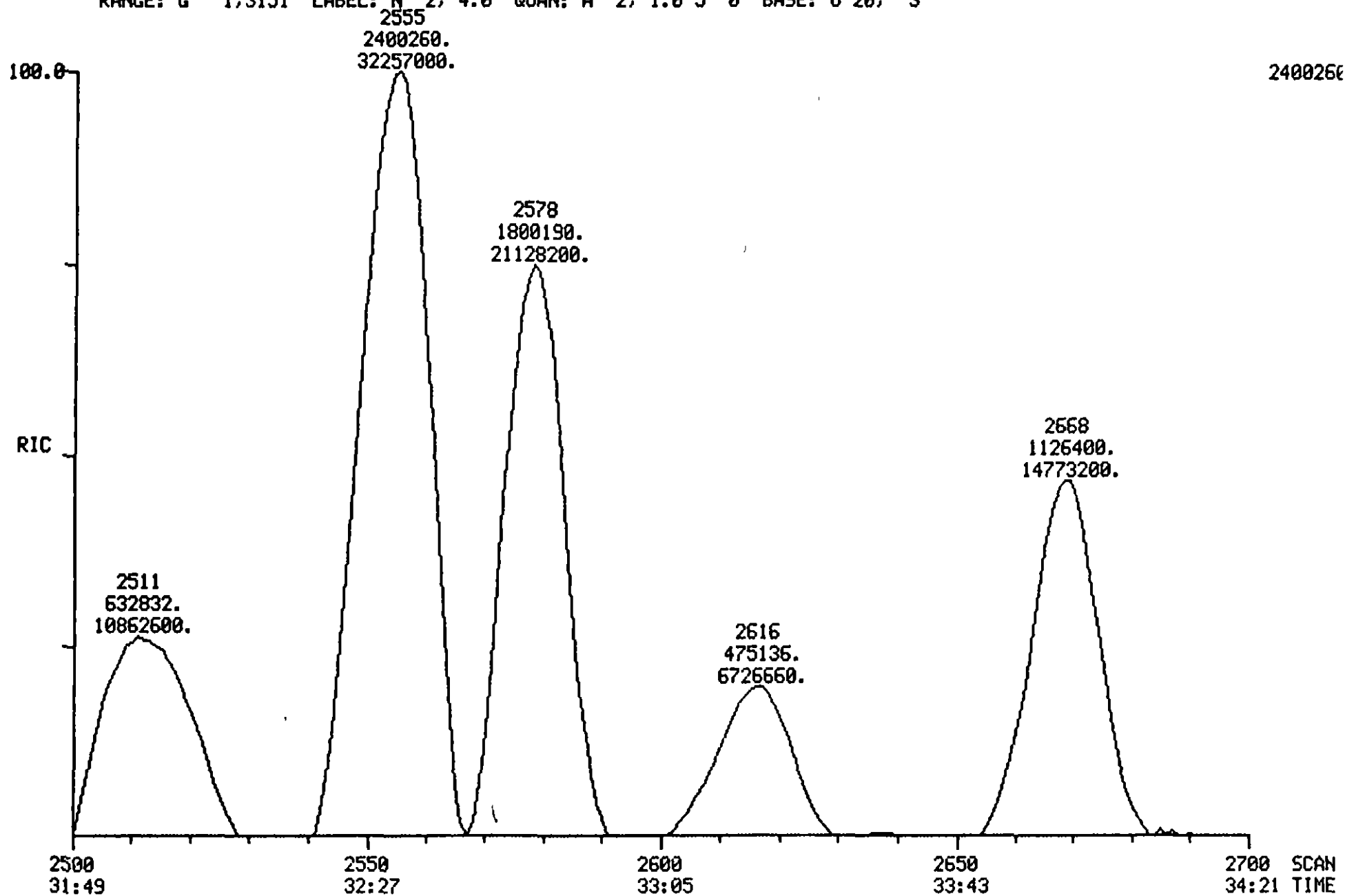
CONDS.: EPA METHOD 8240

RANGE: G 1,3151 LABEL: N 2, 4.0 QUAN: A 2, 1.0 J 0 BASE: U 20, 3

DATA: C1001 #1

CALI: C1001 #3

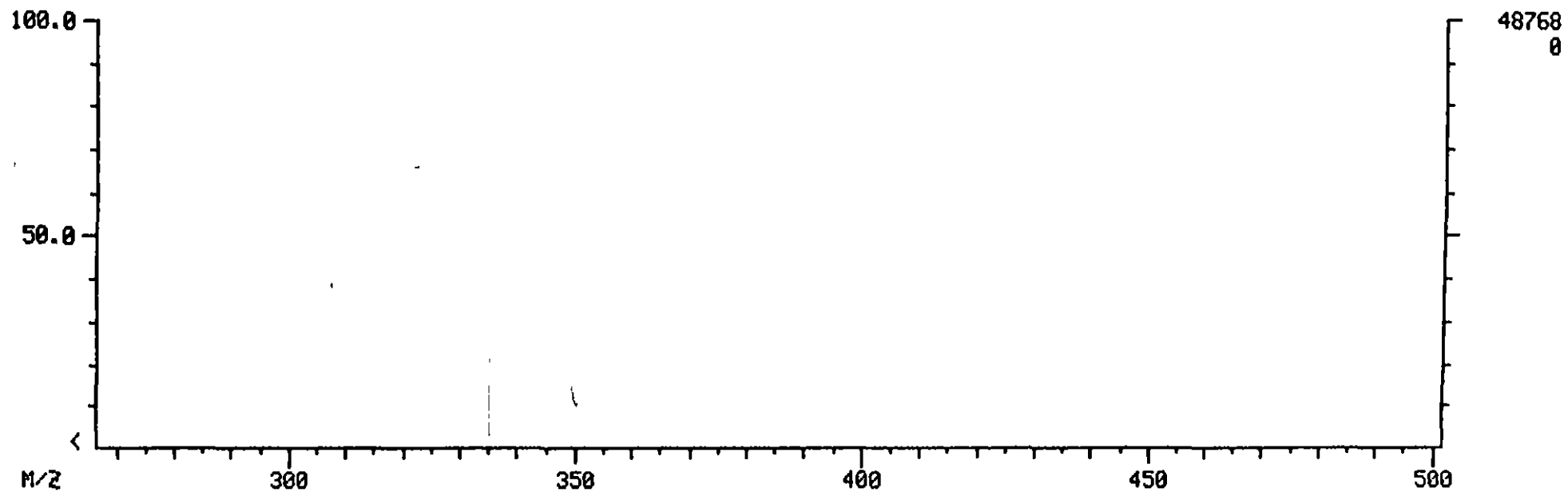
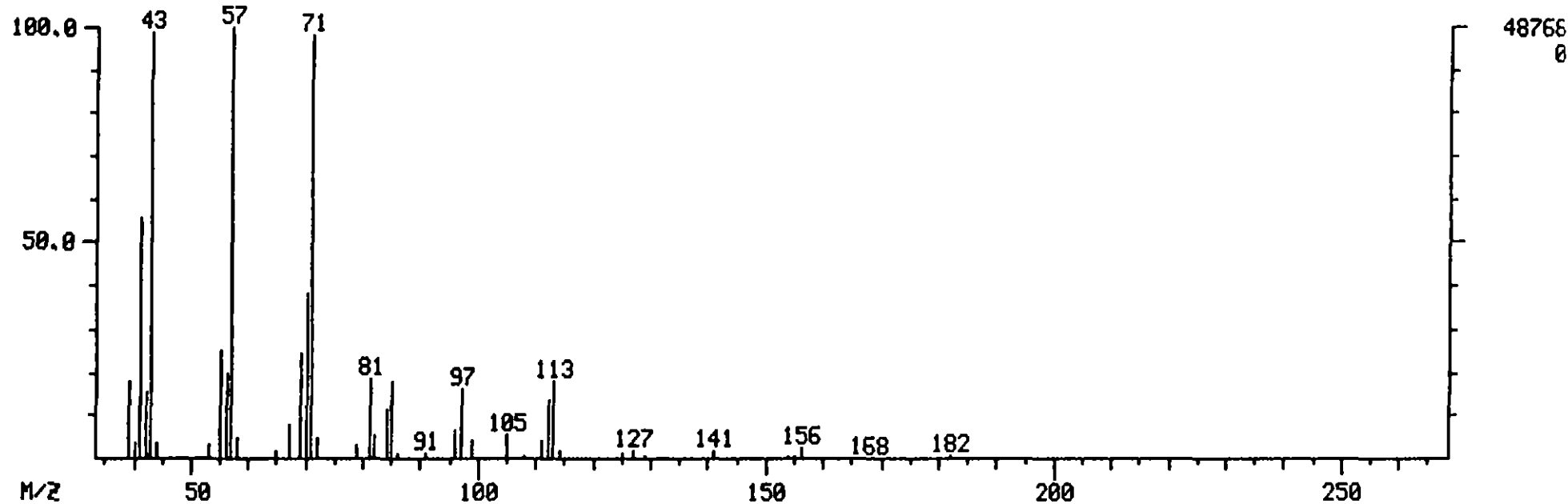
SCANS 2500 TO 2700



MASS SPECTRUM
02/02/95 19:13:00 + 33:17
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
TEMP: 118 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2616
CALI: C1001 #3

BASE M/Z: 57
RIC: 322048.



Library Search Data C1001 #2616 Base m/z 57
 02/02/95 19 13.00 + 33 17 Cali C1001 # 3 RIC 318976
 Sample 366-02 1786 1 SITE D
 Conds. EPA METHOD 8240
 Enhanced (S 15B 2N 0T)

42223 spectra in LIBRARYNB searched for maximum FIT
 88 matched at least 8 of the 16 largest peaks in the unknown

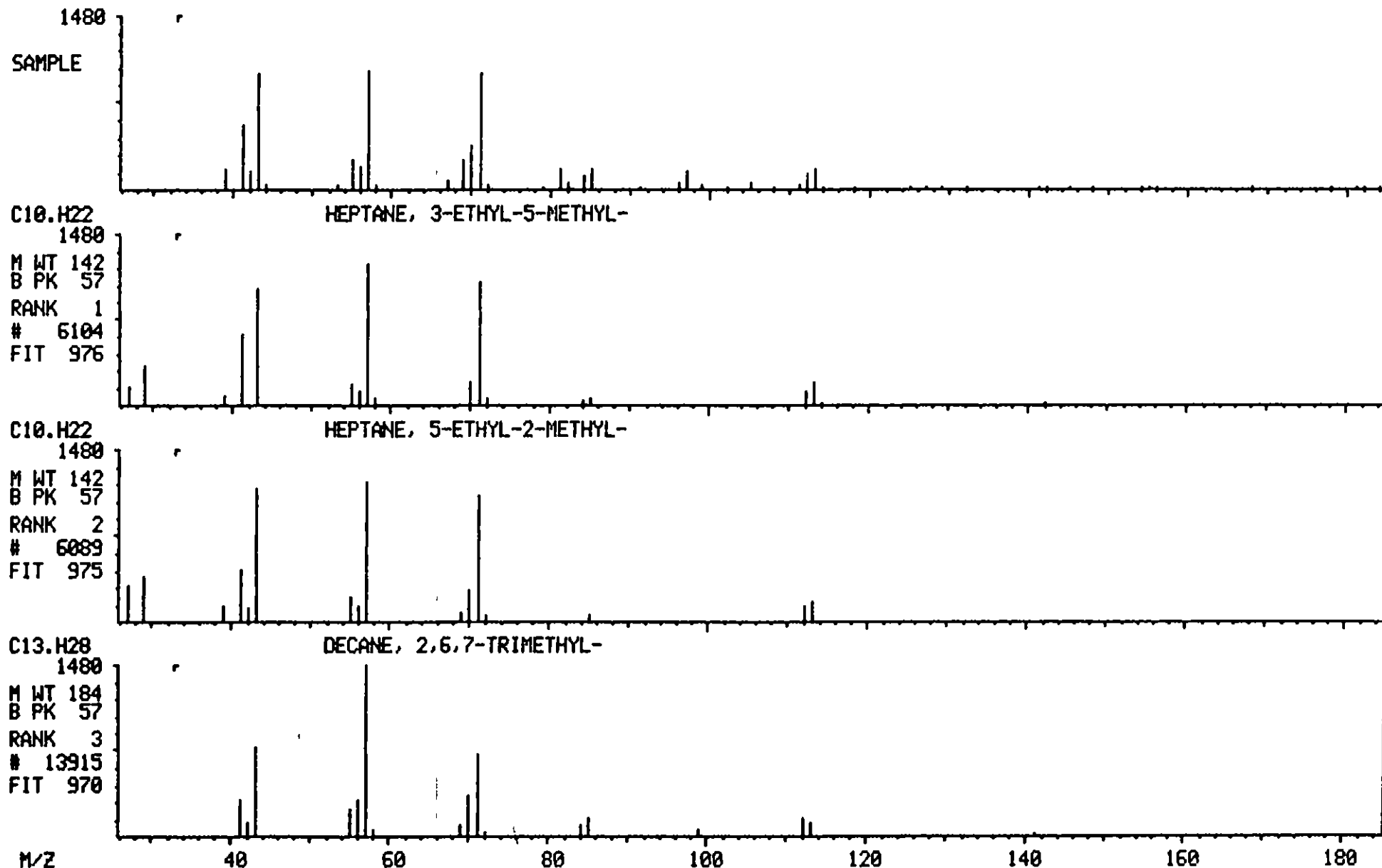
Rank In.	Name
1	6104 HEPTANE, 3-ETHYL-5-METHYL-
2	6089 HEPTANE, 5-ETHYL-2-METHYL-
3	13915 DECANE, 2,6,7-TRIMETHYL-
4	8732 OCTANE, 2,3,7-TRIMETHYL-
5	6085 OCTANE, 3-ETHYL-

Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C10 H22	142	57	732	976	732
2	C10 H22	142	57	752	975	752
3	C13 H28	184	57	773	970	773
4	C11 H24	156	57	751	967	751
5	C10 H22	142	43	701	952	709

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 33:17
SAMPLE: 365-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 158 2N 0T)

DATA: C1001 #2616
CALI: C1001 # 3

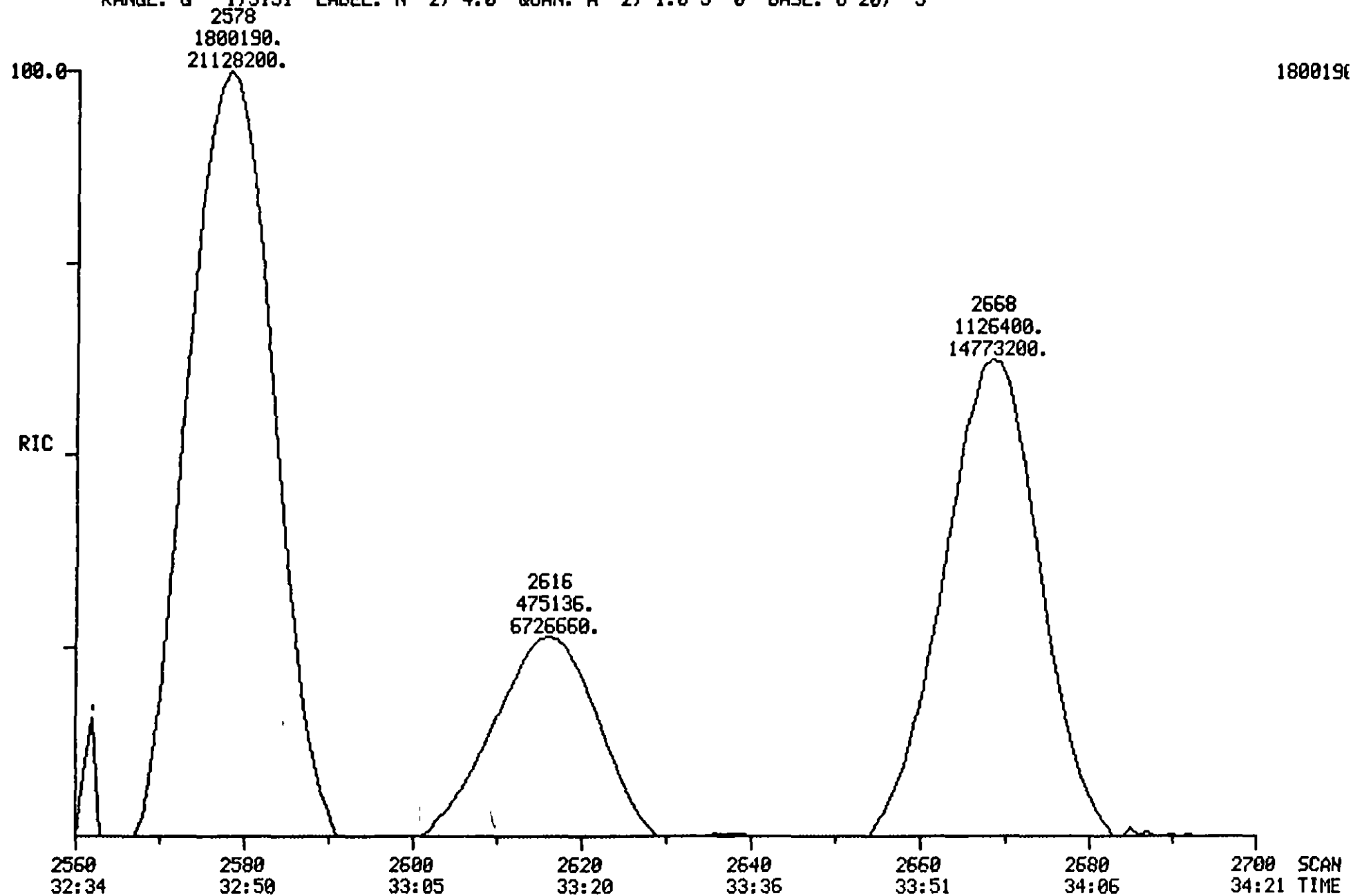
BASE M/Z: 57
RIC: 318976.



RIC
02/02/95 19:13:00
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
RANGE: G 1,3151 LABEL: N 2, 4.0 QUAN: A 2, 1.0 J 0 BASE: U 20, 3

DATA: C1001 #2668
CALI: C1001 #3

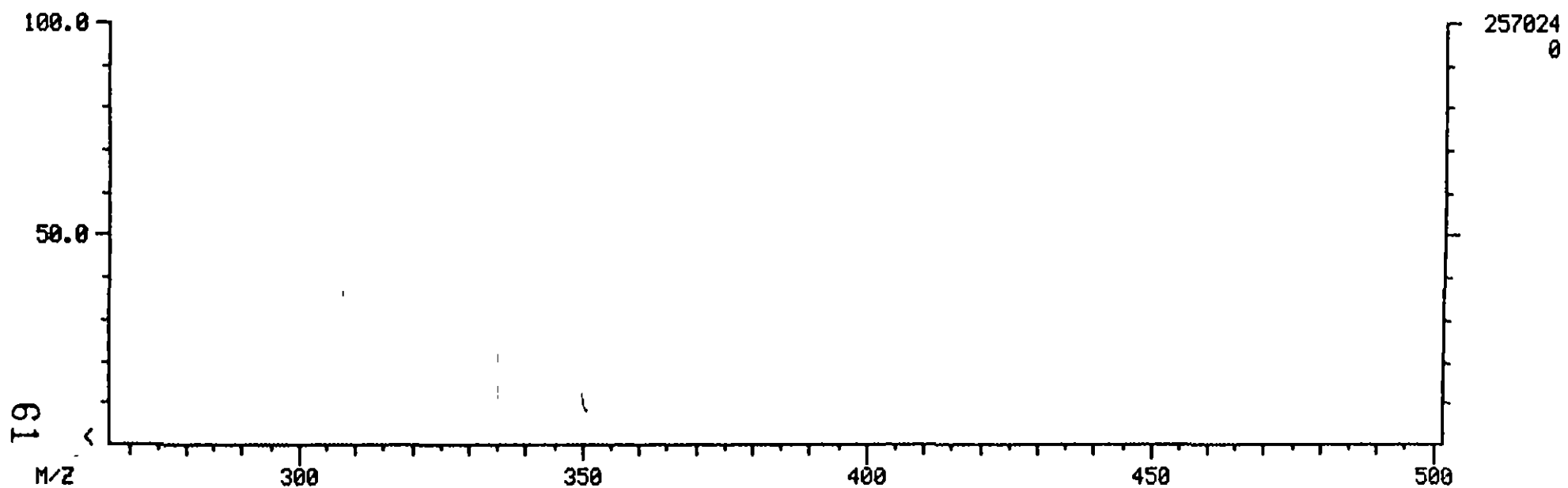
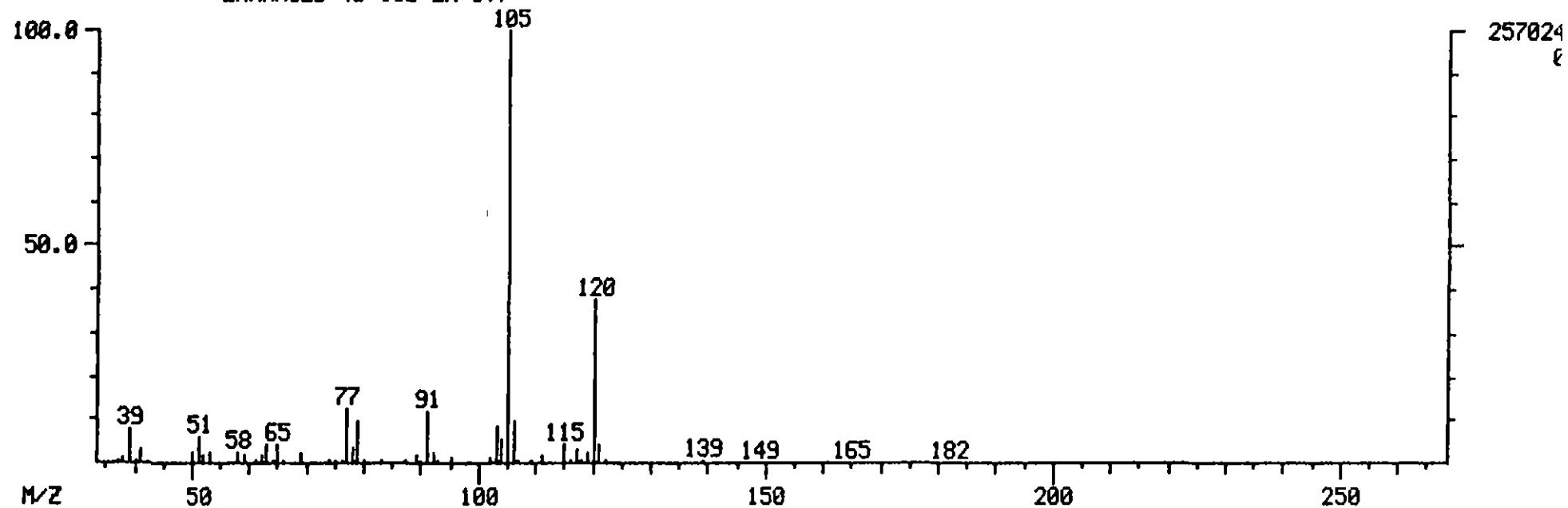
SCANS 2560 TO 2700



MASS SPECTRUM
02/02/95 19:13:00 + 33:57
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
TEMP: 121 DEG. C
ENHANCED (S 158 2N 0T)

DATA: C1001 #2668
CALI: C1001 #3

BASE M/Z: 105
RIC: 705536.



Library Search Data C1001 #2668 Base m/z 105
 02/02/95 19 13 00 + 33 57 Call C1001 # 3 RIC 683008
 Sample 366-02 1786 1 SITE D
 Conds EPA METHOD 8240
 Enhanced (S 15B 2N 0T)

42223 spectra in LIBRARYNB searched for maximum FIT
 127 matched at least 7 of the 16 largest peaks in the unknown

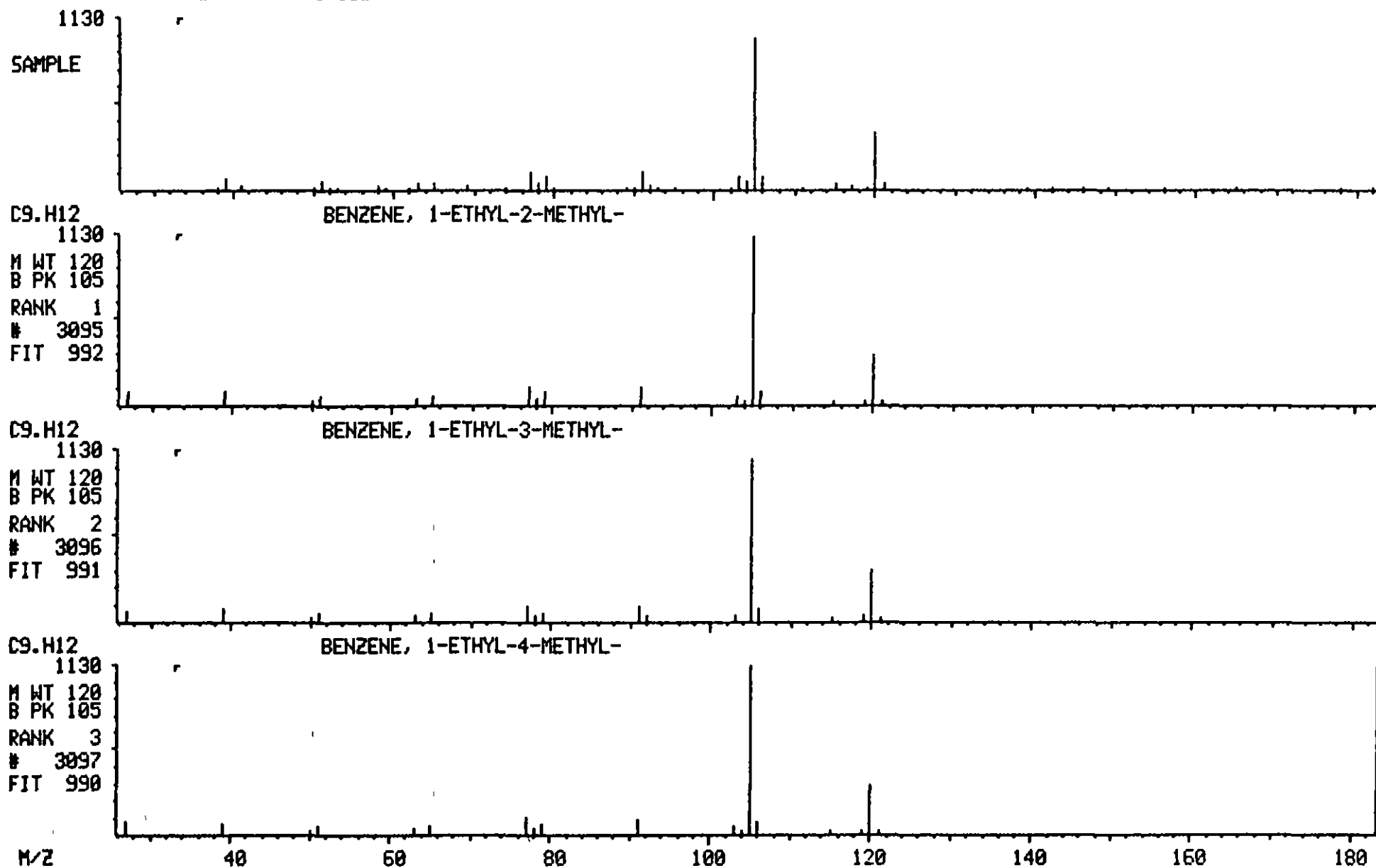
Rank	In	Name
1	3095	BENZENE, 1-ETHYL-2-METHYL-
2	3096	BENZENE, 1-ETHYL-3-METHYL-
3	3097	BENZENE, 1-ETHYL-4-METHYL-
4	3094	BENZENE, 1,2,3-TRIMETHYL-
5	3091	BENZENE, (1-METHYLETHYL)-

Rank	Formula	M Wt	B Pk	Purity	Fit	RFit
1	C9 H12	120	105	898	992	898
2	C9 H12	120	105	883	991	883
3	C9 H12	120	105	896	990	896
4	C9 H12	120	105	889	983	889
5	C9 H12	120	105	858	981	858

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 33:57
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2658
CALI: C1001 # 3

BASE M/Z: 105
RIC: 683008.

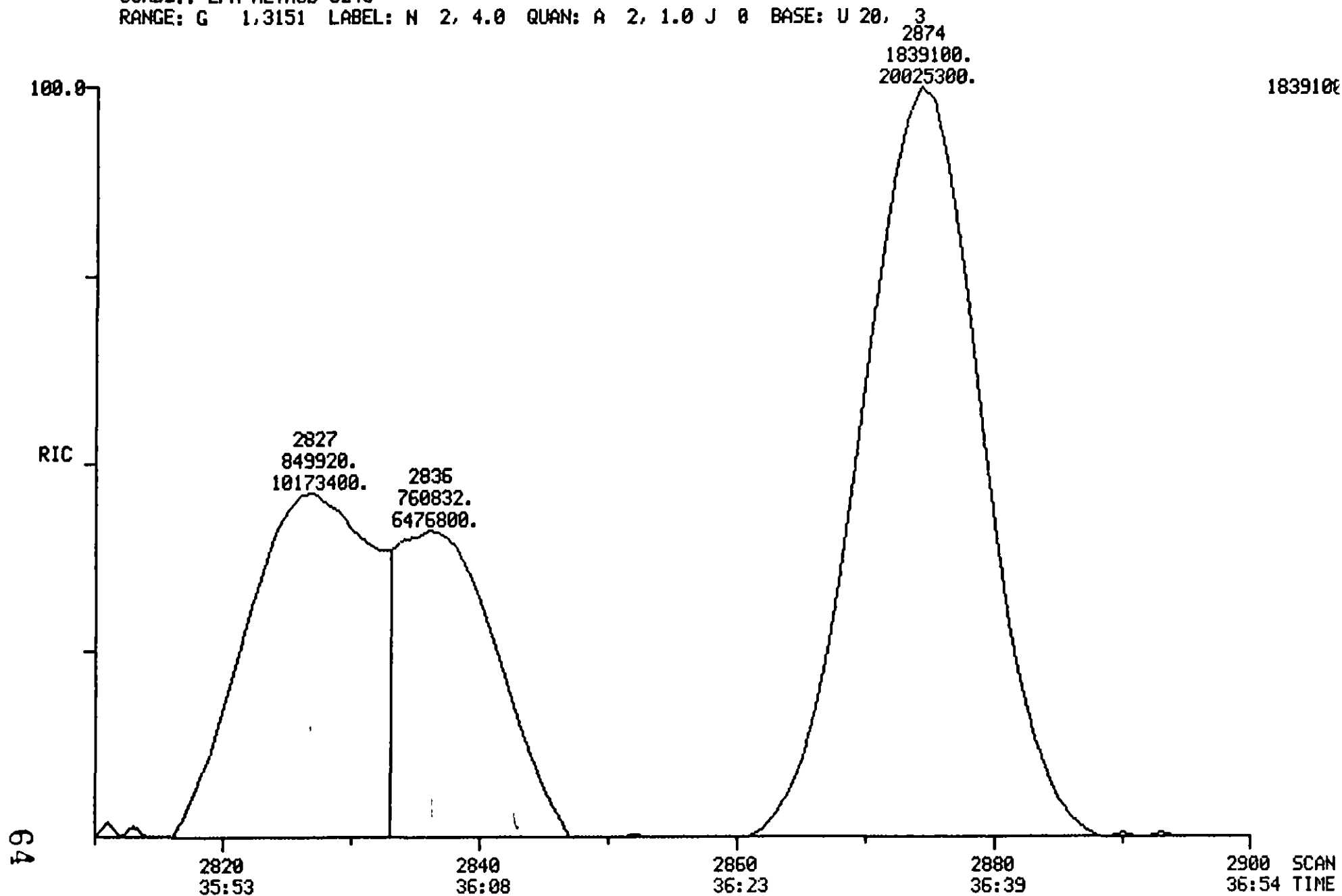


RIC
02/02/95 19:13:00
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
RANGE: G 1.3151 LABEL: N 2, 4.0

DATA: C1001 #2668
CALI: C1001 #3

SCANS 2810 TO 2900

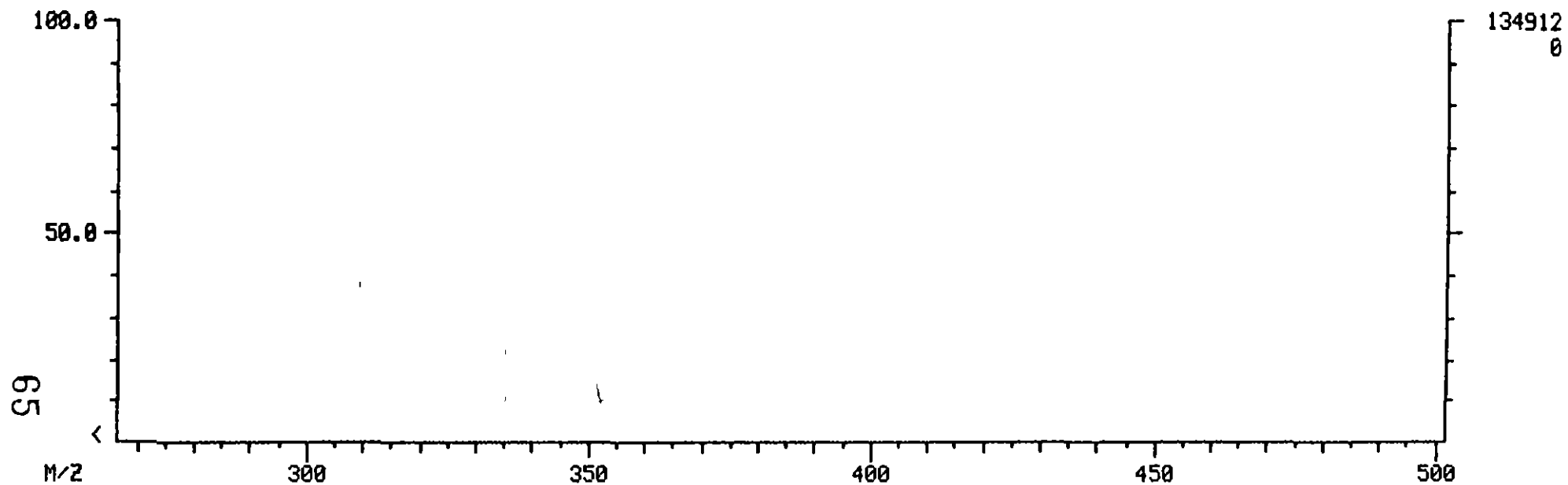
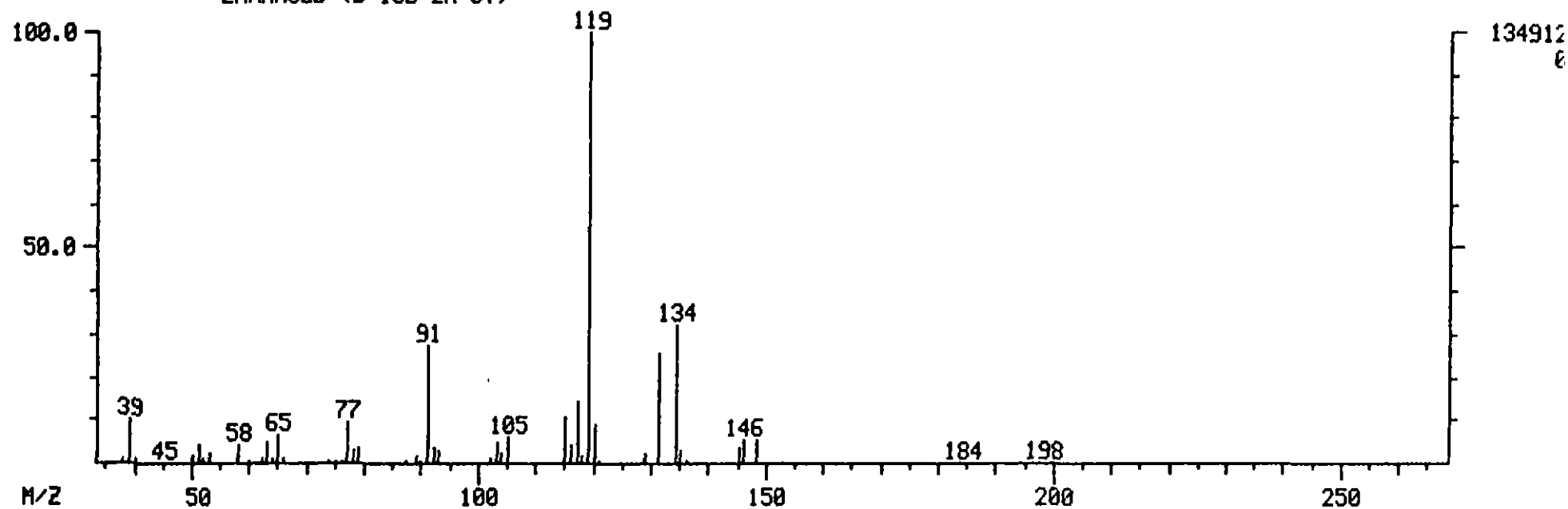
BASE: U 20, 3



MASS SPECTRUM
02/02/95 19:13:00 + 35:58
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
TEMP: 133 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2827
CALI: C1001 #3

BASE M/Z: 119
RIC: 444928.



Library Search
02/02/95 19 13 00 + 35 58
Sample 366-02 1786 1 SITE D
Conditions EPA METHOD 8240
Enhanced (S 15B 2N OT)

Data C1001 #2827
Call C1001 # 3

Base m/z 119
RIC 441856

42223 spectra in LIBRARYNB searched for maximum FIT
187 matched at least 6 of the 16 largest peaks in the unknown

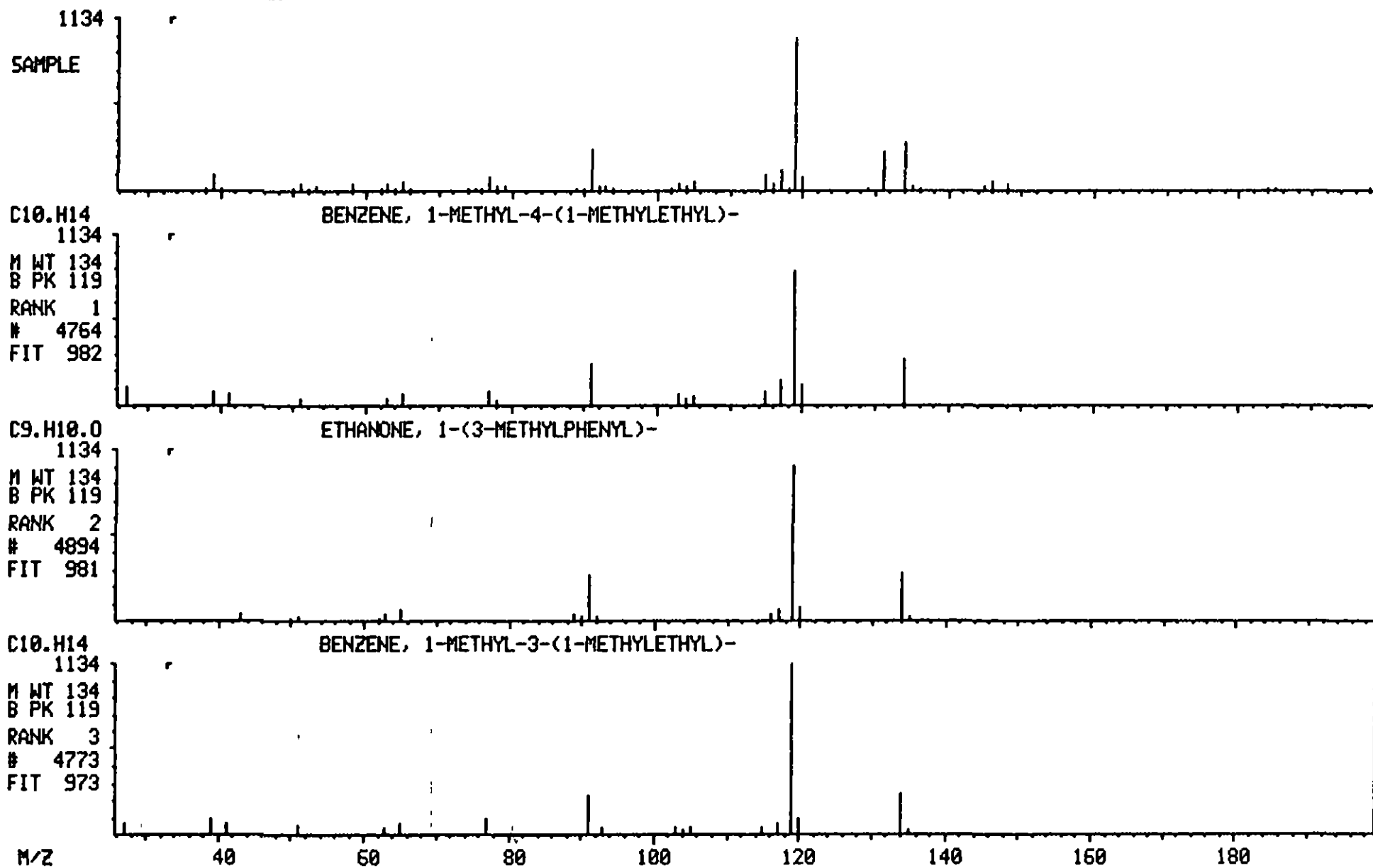
Rank In	Name
1	4764 BENZENE, 1-METHYL-4-(1-METHYLETHYL)-
2	4894 ETHANONE, 1-(3-METHYLPHENYL)-
3	4773 BENZENE, 1-METHYL-3-(1-METHYLETHYL)-
4	4783 BENZENE, 2-ETHYL-1,3-DIMETHYL-
5	4776 BENZENE, 1-ETHYL-2,3-DIMETHYL-

Rank	Formula	M Wt	B Pk	Purity	Fit	RFit
1	C10 H14	134	119	731	982	739
2	C9 H10 O	134	119	663	981	669
3	C10 H14	134	119	737	973	746
4	C10 H14	134	119	732	967	739
5	C10 H14	134	119	730	965	738

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 35:58
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 158 2N 0T)

DATA: C1001 #2827
CALI: C1001 # 3

BASE M/Z: 119
RIC: 441856.



RIC
02/02/95 19:13:00
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
RANGE: G 1.3151 LABEL: N 2, 4.0

DATA: C1001 02668
CALI: C1001 #3

SCANS 2810 TO 2900

QUAN: A 2, 1.0 J 0 BASE: U 20, 3

2874
1839100.
20025300.

1839100

100.0

RIC

2827
849920.
10173400.

2836
760832.
6476800.

2820
35:53

2840
36:08

2860
36:23

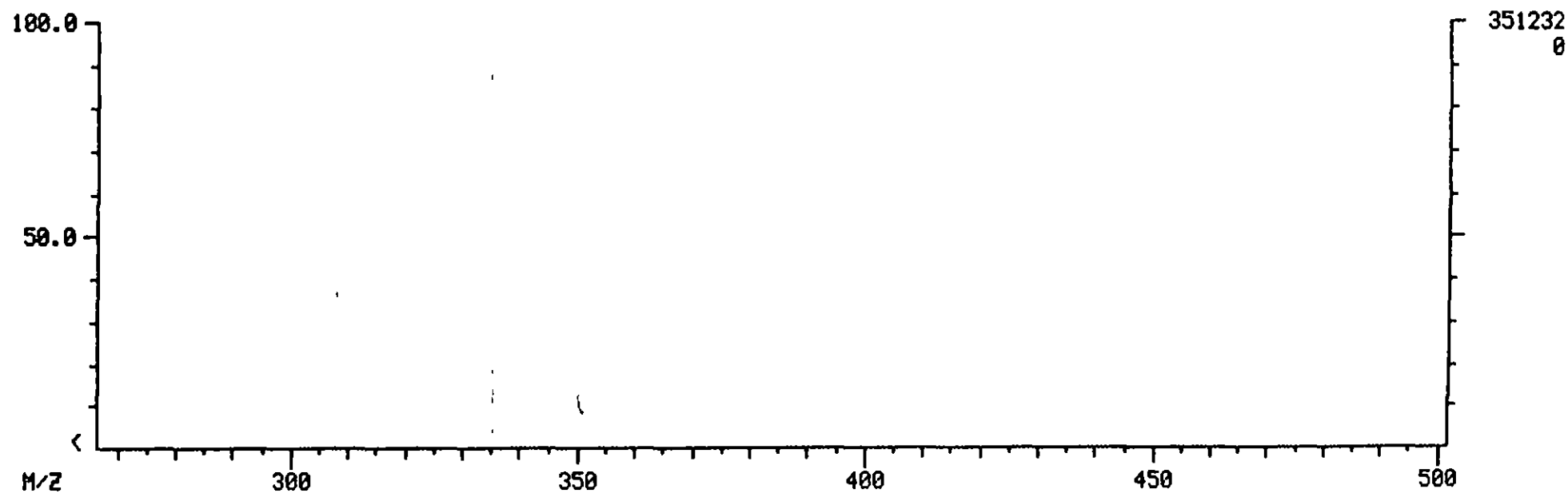
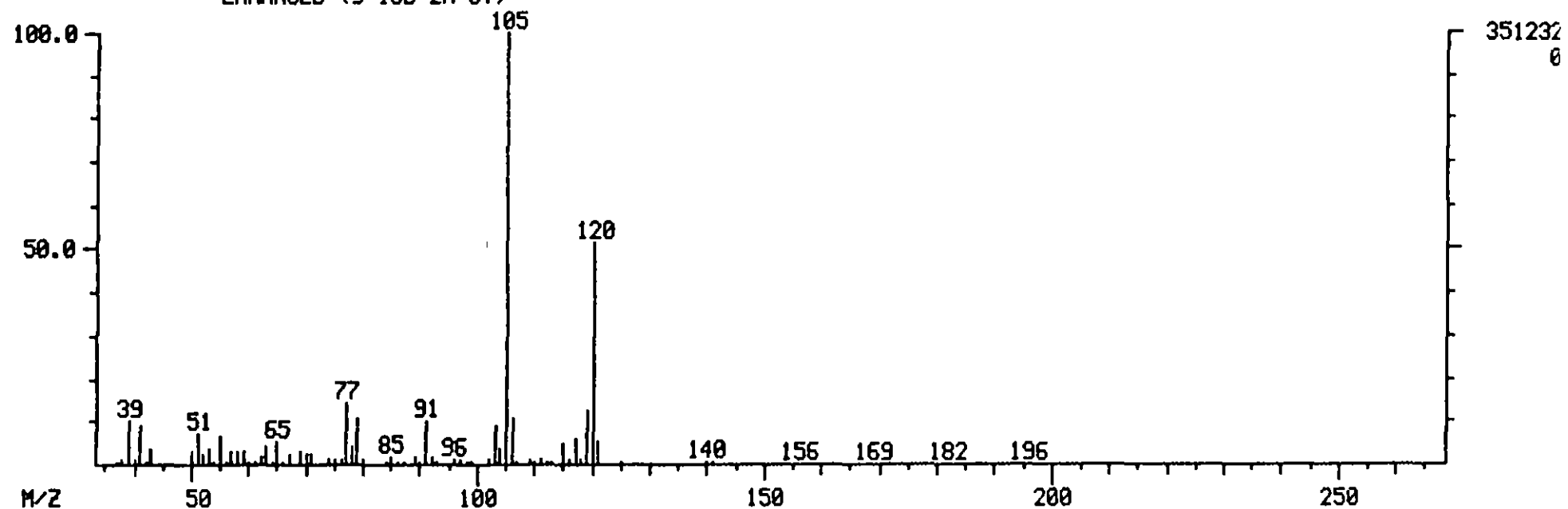
2880
36:39

2900
36:54 TIME

MASS SPECTRUM
02/02/95 19:13:00 + 36:34
SAMPLE: 365-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
TEMP: 137 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: C1001 #2874
CALI: C1001 #3

BASE M/Z: 105
RIC: 1239040.



Library Search
02/02/95 19 13 00 + 36 34
Sample 366-02 1786 1 SITE D
Conds. EPA METHOD 8240
Enhanced (S 15B 2N 0T)

Data C1001 #2874
Cal1. C1001 # 3

Base m/z 105
RIC 1130500.

42223 spectra in LIBRARYNB searched for maximum FIT
87 matched at least 7 of the 16 largest peaks in the unknown

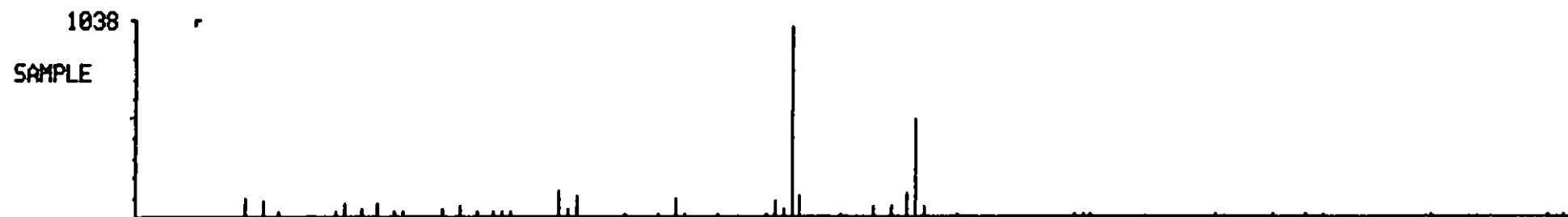
Rank In	Name
1	3094 BENZENE, 1,2,3-TRIMETHYL-
2	3090 BENZENE, 1,2,4-TRIMETHYL-
3	3093 BENZENE, 1,3,5-TRIMETHYL-
4	3110 2,3-HEPTADIEN-5-YNE, 2,4-DIMETHYL-
5	3096 BENZENE, 1-ETHYL-3-METHYL-

Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C9 H12	120	105	866	997	866
2	C9 H12	120	105	870	994	870
3	C9 H12	120	105	887	989	887
4	C9 H12	120	105	843	984	843
5	C9 H12	120	105	841	976	841

MID LIBRARY SEARCH (LIBRARY.NB)
02/02/95 19:13:00 + 36:34
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

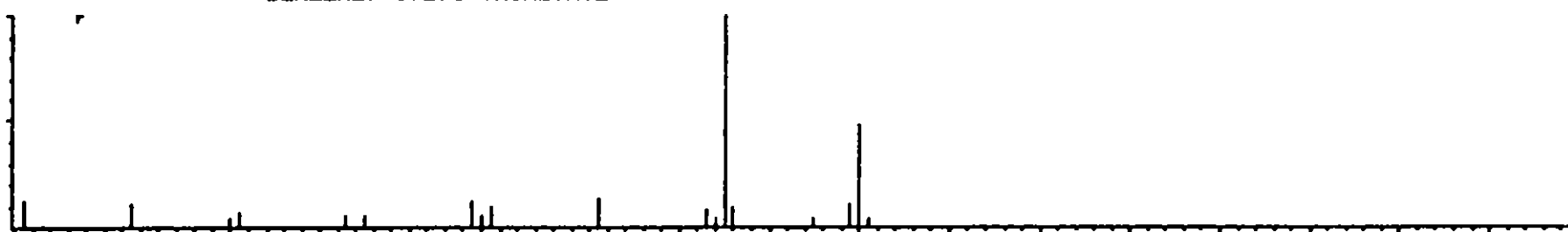
DATA: C1001 #2874
CALI: C1001 # 3

BASE M/Z: 105
RIC: 1130500.



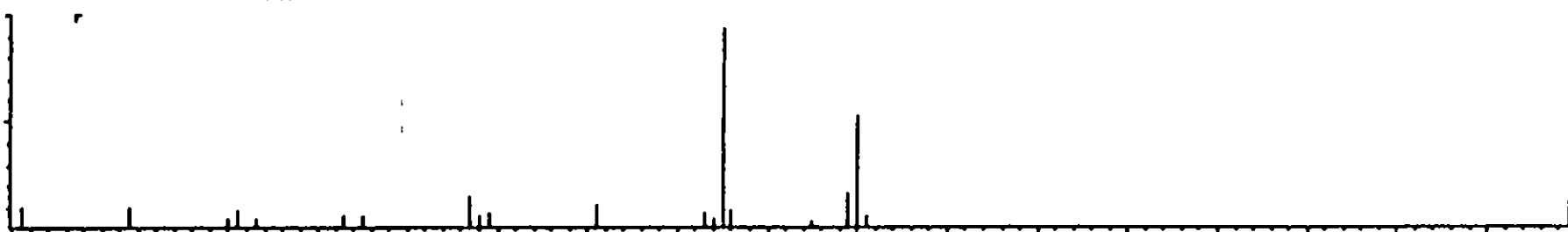
C9.H12 BENZENE, 1,2,3-TRIMETHYL-

1038
M WT 120
B PK 105
RANK 1
3094
FIT 997



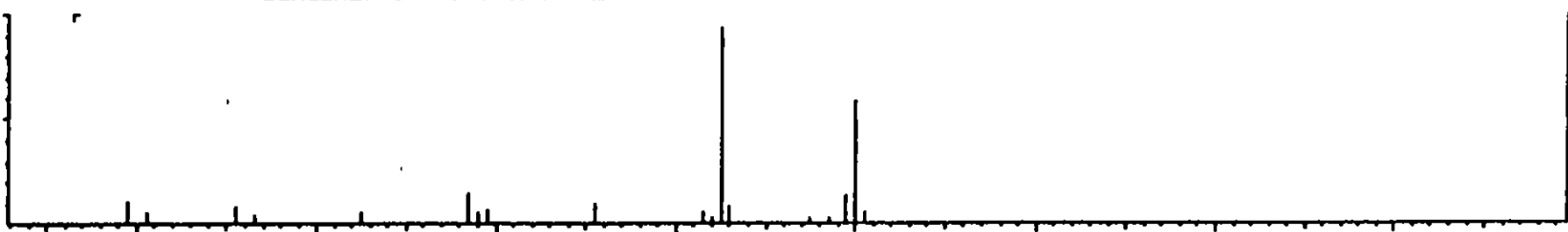
C9.H12 BENZENE, 1,2,4-TRIMETHYL-

1038
M WT 120
B PK 105
RANK 2
3090
FIT 994



C9.H12 BENZENE, 1,3,5-TRIMETHYL-

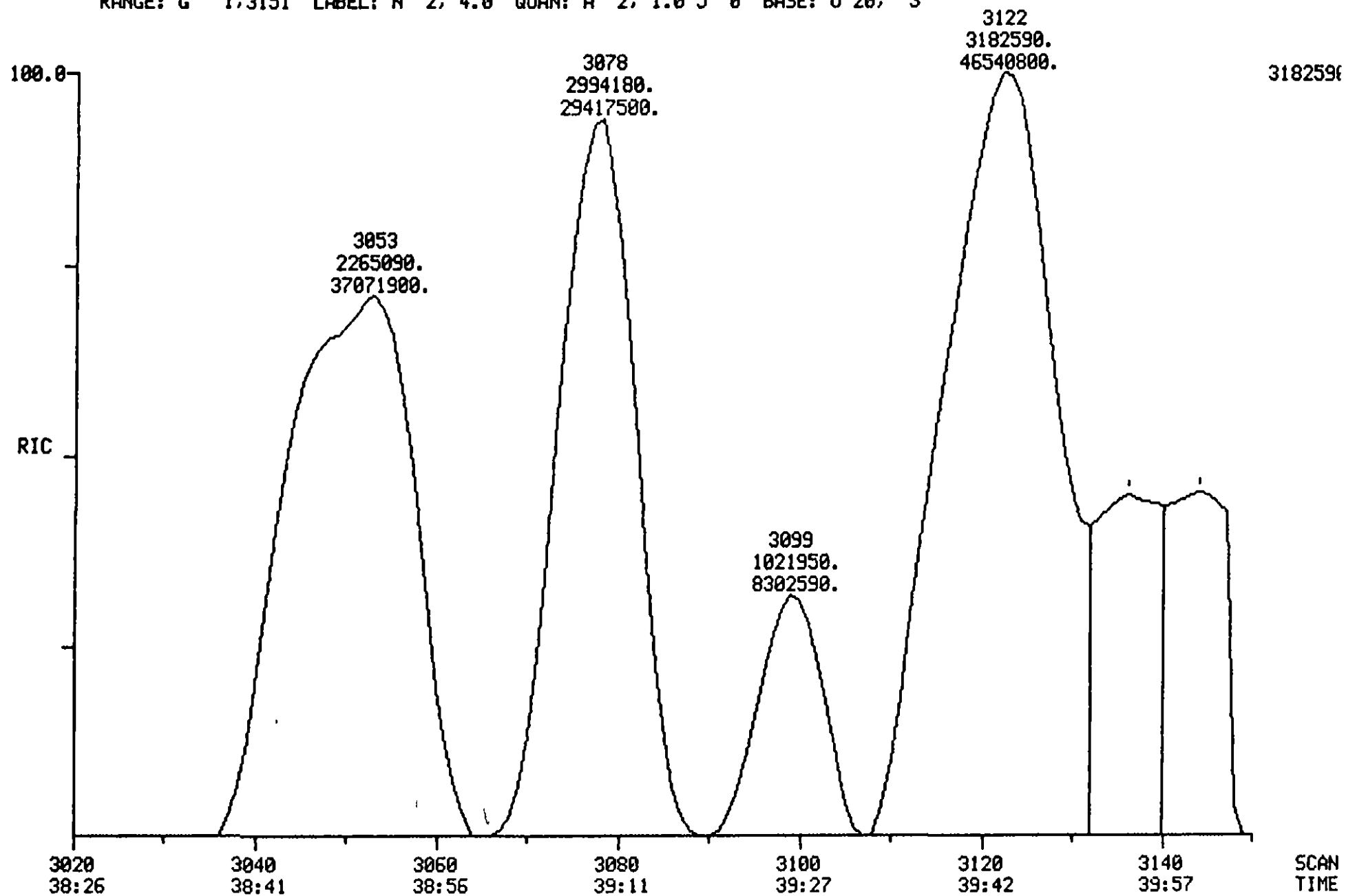
1038
M WT 120
B PK 105
RANK 3
3093
FIT 989



RIC
02/02/95 19:13:00
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
RANGE: G 1.3151 LABEL: N 2, 4.0 QUAN: A 2, 1.0 J 0 BASE: U 20, 3

DATA: C1001 02874
CALI: C1001 #3

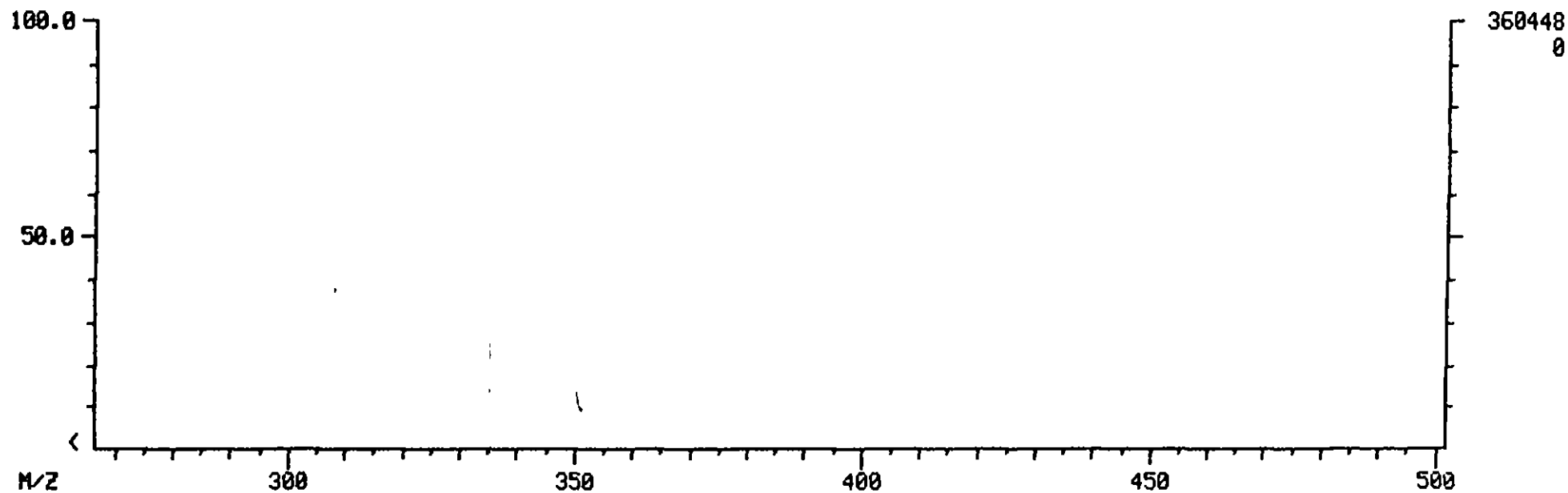
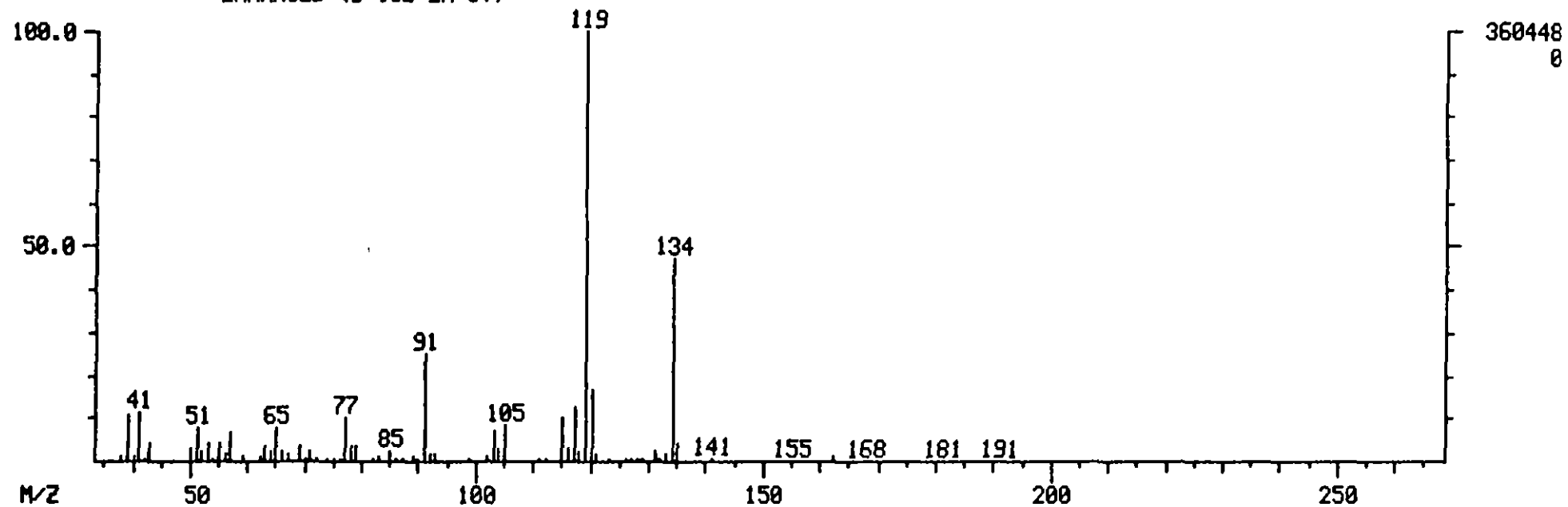
SCANS 3020 TO 3150



MASS SPECTRUM
02/02/95 19:13:00 + 38:51
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
TEMP: 151 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: C1001 #3053
CALI: C1001 #3

BASE M/Z: 119
RIC: 1345540.



Library Search Data C1001 #3053 Base m/z 119
 02/02/95 19 13:00 + 38 51 Cal: C1001 # 3 RIC 1253380
 Sample 366-02 1786 1 SITE D
 Conditions EPA METHOD 8240
 Enhanced (S 15B 2N OT)

12223 spectra in LIBRARYNB searched for maximum FIT
 158 matched at least 6 of the 16 largest peaks in the unknown

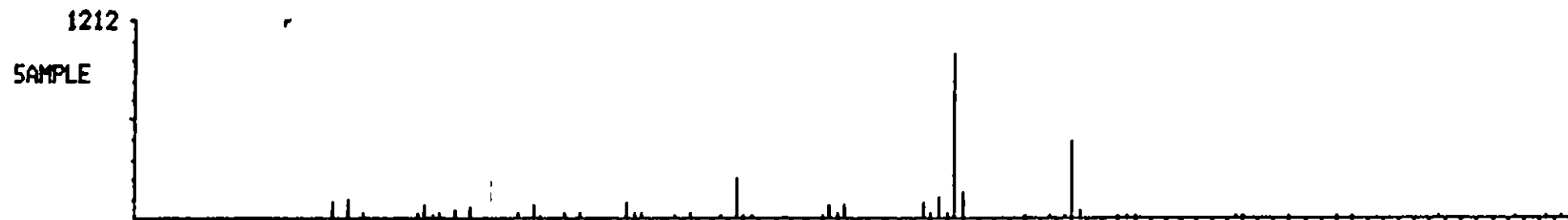
Rank	In.	Name
1	4764	BENZENE, 1-METHYL-4-(1-METHYLETHYL)-
2	4778	BENZENE, 4-ETHYL-1,2-DIMETHYL-
3	4782	BENZENE, 2-ETHYL-1,4-DIMETHYL-
4	4776	BENZENE, 1-ETHYL-2,3-DIMETHYL-
5	4783	BENZENE, 2-ETHYL-1,3-DIMETHYL-

Rank	Formula	M. Wt	B	Pk	Purity	Fit	RFit
1	C10 H14	134		119	840	989	840
2	C10 H14	134		119	846	983	846
3	C10 H14	134		119	884	981	884
4	C10 H14	134		119	849	979	849
5	C10 H14	134		119	846	976	846

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 38:51
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 150 2N 0T)

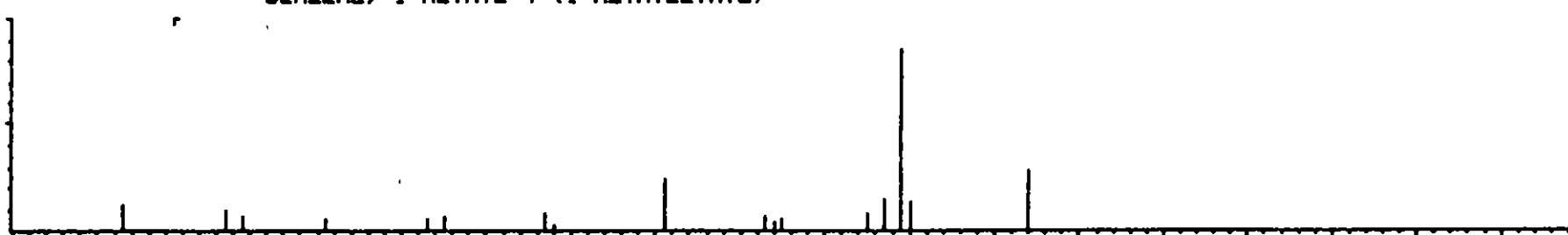
DATA: C1001 #3053
CALI: C1001 # 3

BASE M/Z: 119
RIC: 1253380.



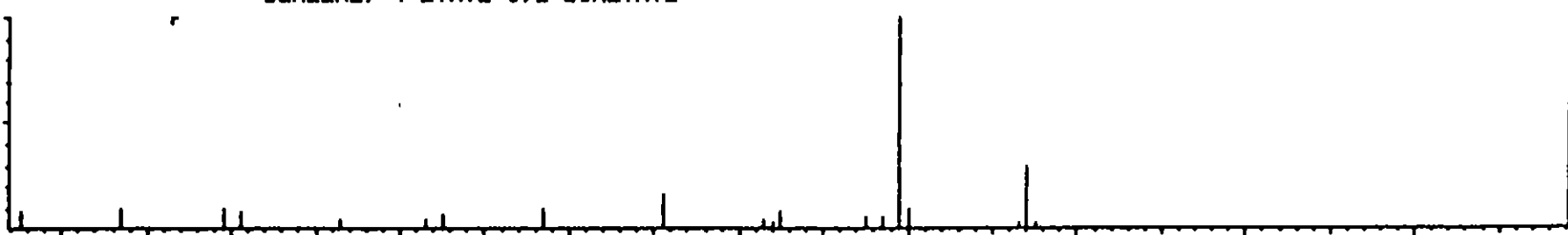
C10.H14 BENZENE, 1-METHYL-4-(1-METHYLETHYL)-

1212
M WT 134
B PK 119
RANK 1
4764
FIT 989



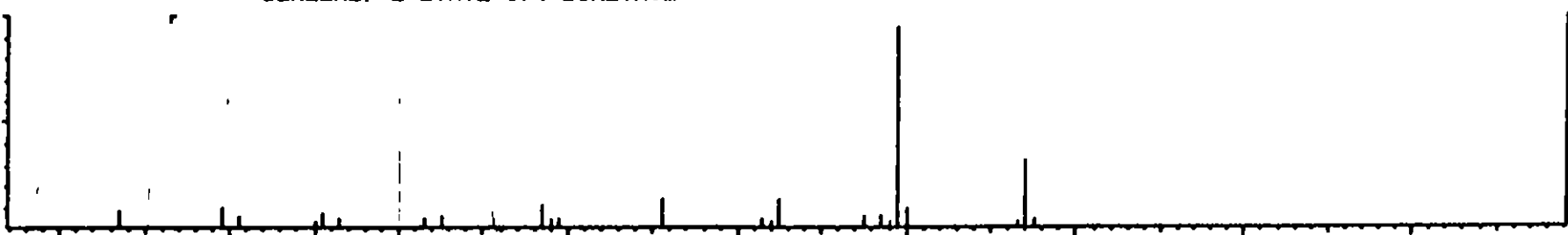
C10.H14 BENZENE, 4-ETHYL-1,2-DIMETHYL-

1212
M WT 134
B PK 119
RANK 2
4778
FIT 983



C10.H14 BENZENE, 2-ETHYL-1,4-DIMETHYL-

1212
M WT 134
B PK 119
RANK 3
4782
FIT 981



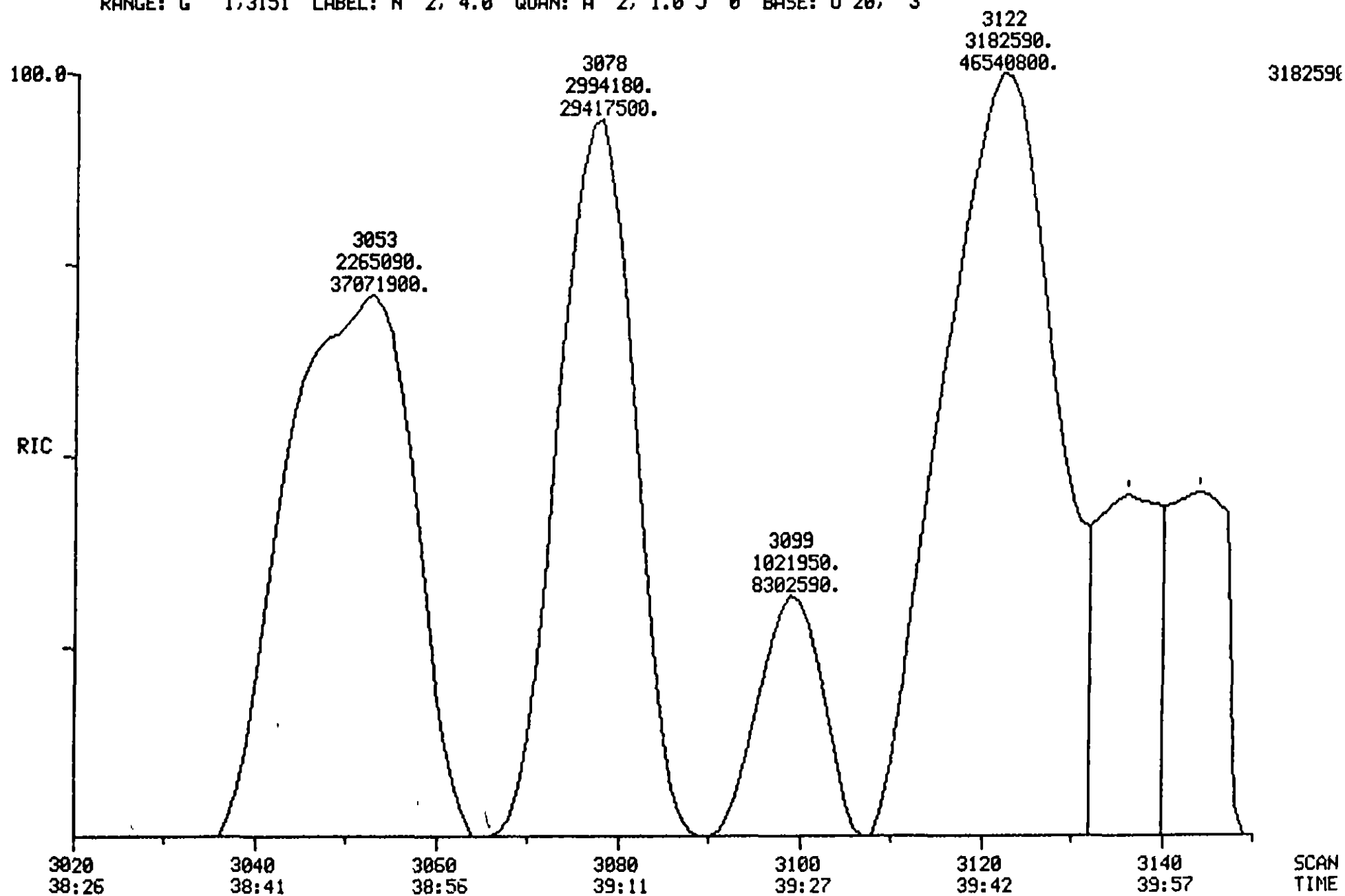
M/Z 20 40 60 80 100 120 140 160 180

RIC
02/02/95 19:13:00
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
RANGE: G 1.3151 LABEL: N 2, 4.0

DATA: C1001 #2874
CALI: C1001 #3

SCANS 3020 TO 3150

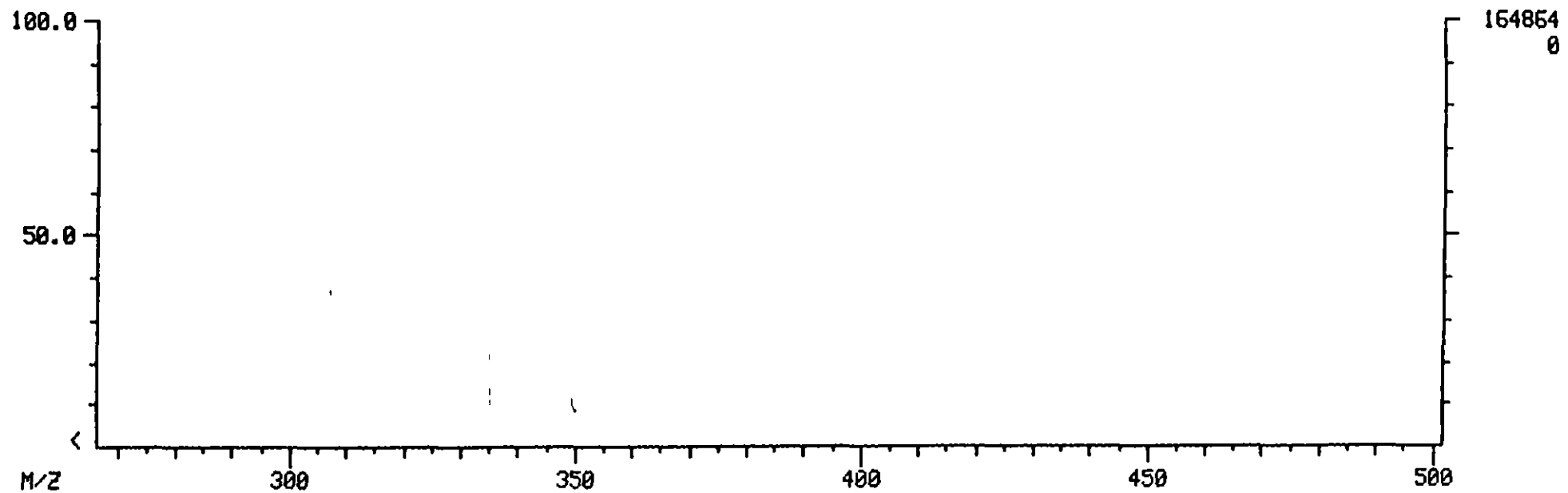
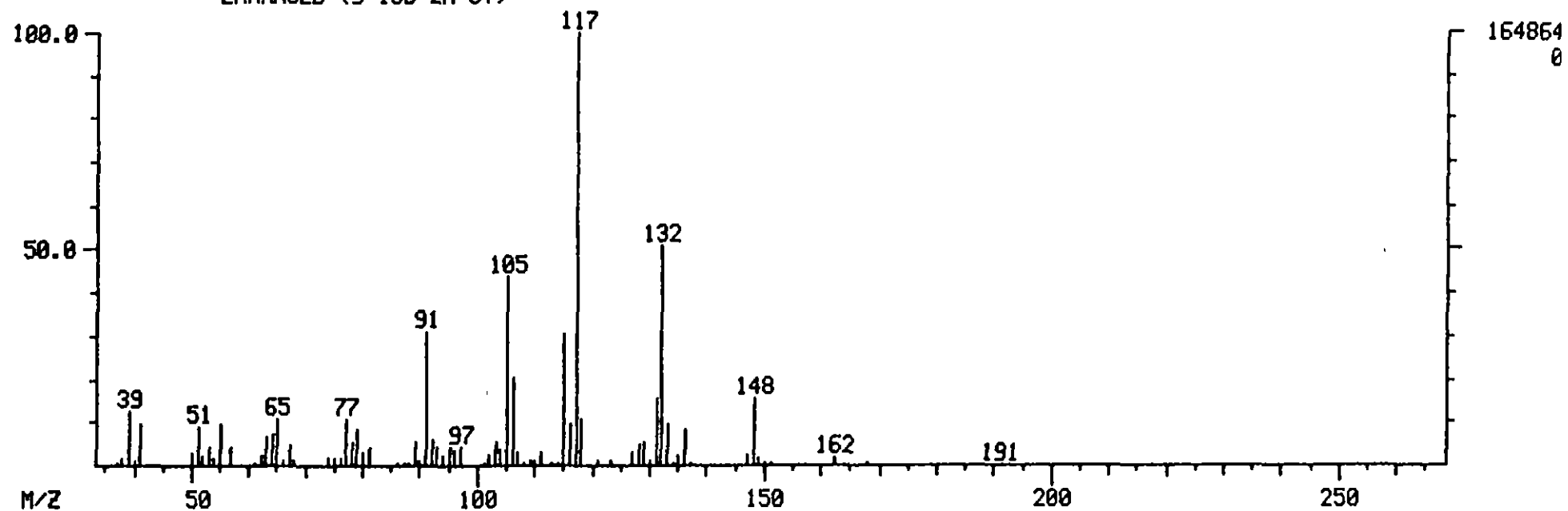
QUAN: A 2, 1.0 J 0 BASE: U 20, 3



MASS SPECTRUM
02/02/95 19:13:00 + 39:26
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
TEMP: 155 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: C1001 #3099
CALI: C1001 #3

BASE M/Z: 117
RIC: 928768.



Library Search Data C1001 #3099 Base m/z 117
 02/02/95 19 13 00 + 39 26 Cali C1001 # 3 RIC 858112.
 Sample 366-02 1786.1 SITE D
 Conds . EPA METHOD 8240
 Enhanced (S 15B 2N OT)

42223 spectra in LIBRARYNB searched for maximum FIT
 54 matched at least 7 of the 16 largest peaks in the unknown

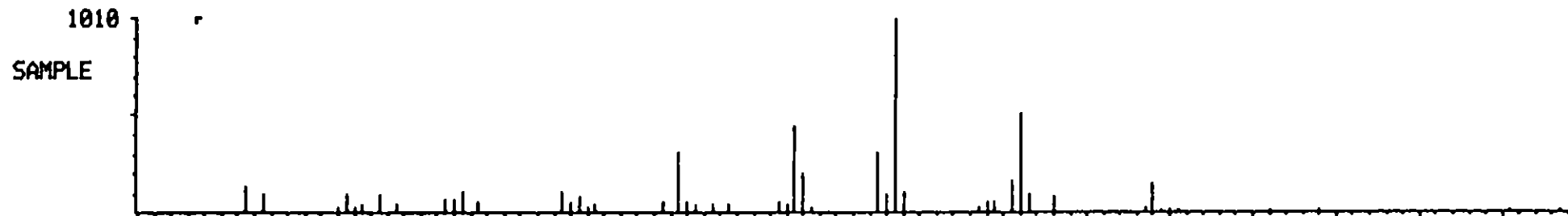
Rank	In.	Name
1	4527	BENZENE, 2-BUTENYL-
2	4524	1H-INDENE, 2,3-DIHYDRO-2-METHYL-
3	2969	TRICYCLO[3.2.1]OCT-6-ENE, 8-METHYLENE-, (1 ALPHA., 2 ALPHA., 4 A*
4	4519	BENZENE, (1-METHYL-1-PROPENYL)-, (Z)-
5	4523	1H-INDENE, 2,3-DIHYDRO-4-METHYL-

Rank	Formula	M Wt	B. Pk	Purity	Fit	RFit
1	C10 H12	132	117	650	995	650
2	C10 H12	132	117	651	995	651
3	C9 H10	118	117	404	994	404
4	C10 H12	132	117	647	993	647
5	C10 H12	132	117	644	985	644

MID LIBRARY SEARCH (LIBRARYNB)
02/02/95 19:13:00 + 39:26
SAMPLE: 366-02 1786.1 SITE D
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

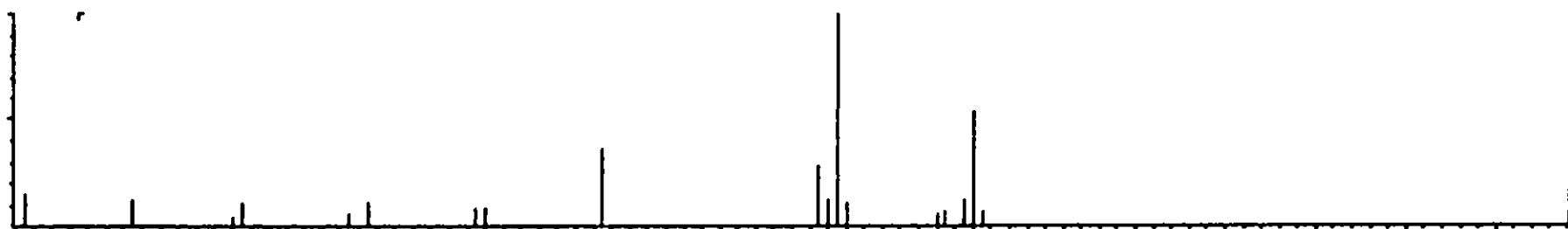
DATA: C1001 #3099
CALI: C1001 # 3

BASE M/Z: 117
RIC: 858112.



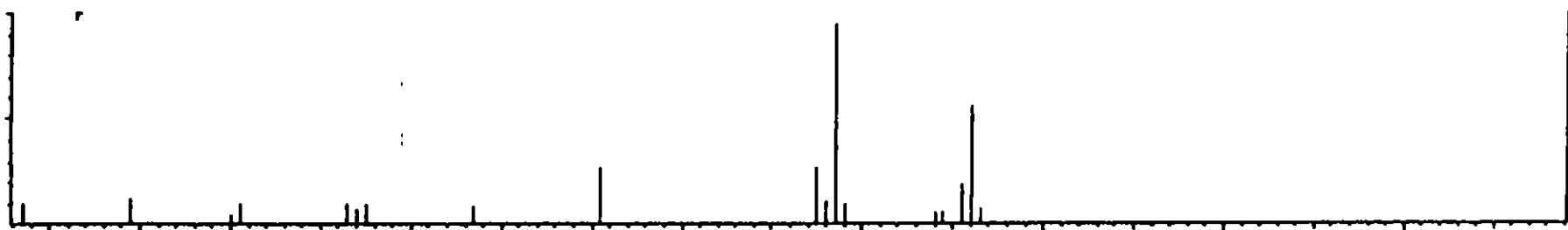
C10.H12 BENZENE, 2-BUTENYL-

1010
M WT 132
B PK 117
RANK 1
4527
FIT 995



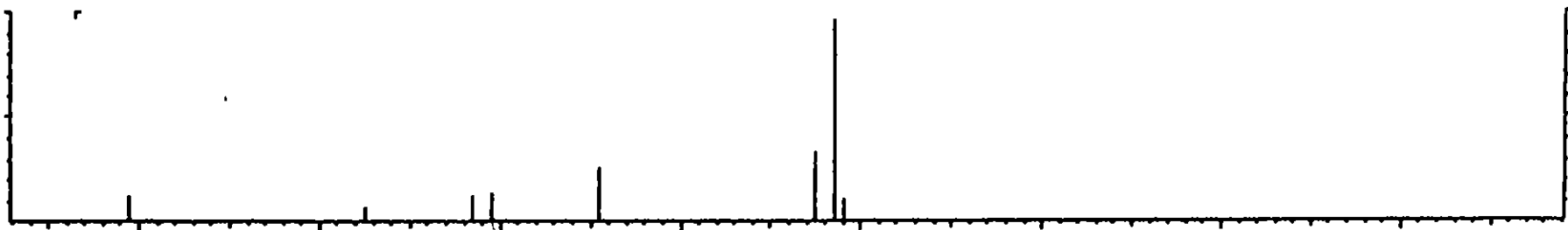
C10.H12 1H-INDENE, 2,3-DIHYDRO-2-METHYL-

1010
M WT 132
B PK 117
RANK 2
4524
FIT 995



C9.H10 TRICYCLO[3.2.1.0^{2,4}]OCT-6-ENE, 8-METHYLENE-, (1.ALPHA.,2.ALPHA.,4.ALPHA.)

1010
M WT 118
B PK 117
RANK 3
2969
FIT 994



M/Z 40 60 80 100 120 140 160 180

STANDARDS DATA

Initial Calibration Data

Instrument Identifier

Calibration Date 1/27/95

35% RSD

MIN RF FOR SPCC (**) = 0 30

Compound	RF 10	RF 20	RF 50	RF 100	RF 200	Mean RF	%RSD
C010 CHLORDMETHANE **	0.923	0.806	0.945	0.895	0.838	0.881	6.603
C015 BROMOMETHANE	1.478	1.268	1.337	1.259	0.770	1.222	21.877
C020 VINYL CHLORIDE *	1.247	1.101	1.140	1.025	0.779	1.058	16.591
C025 CHLOROETHANE	0.663	0.627	0.703	0.657	0.442	0.618	16.532
C030 METHYLENE CHLORIDE	0.760	1.427	0.869	0.948	1.254	1.052	26.506
C251 ACROLIN	0.092	0.073	0.091	0.087	0.065	0.081	14.682
C035 ACETONE	0.658	0.412	0.448	0.425	0.343	0.457	26.022
C252 ACRYLONITRILE	0.276	0.227	0.253	0.271	0.247	0.255	7.645
C040 CARBON DISULFIDE	2.290	2.170	2.666	2.498	2.307	2.386	8.193
C045 1,1-DICHLOROETHENE *	0.936	0.782	0.919	0.859	0.761	0.851	9.248
C050 1,1-DICHLOROETHANE **	2.197	2.267	2.138	2.139	1.859	2.120	7.322
C055 TRANS-1,2-DICHLOROETHEN	2.032	2.003	2.075	2.024	1.851	1.997	4.287
C000 TRICHLOROFLUOROMETHA	2.116	1.686	2.141	1.789	1.163	1.779	22.362
C060 CHLOROFORM *	2.452	2.472	2.429	2.417	2.145	2.383	5.643
C065 1,2-DICHLOROETHANE	1.742	1.722	1.671	1.637	1.511	1.657	5.511
C110 2-BUTANONE	0.135	0.133	0.133	0.125	0.111	0.127	7.613
C115 1,1,1-TRICHLOROETHANE	0.390	0.428	0.422	0.380	0.358	0.396	7.391
C120 CARBON TETRACHLORIDE	0.394	0.404	0.427	0.384	0.382	0.398	4.624
C125 VINYL ACETATE	0.521	0.580	0.589	0.561	0.542	0.559	4.935
C130 BROMO DICHLORDMETHANE	0.463	0.502	0.519	0.544	0.488	0.503	6.085
C140 1,2-DICHLOROPROPANE	0.317	0.305	0.308	0.302	0.278	0.302	4.868
C145 TRANS-1,3 DICHLOROPROPE	0.319	0.360	0.394	0.420	0.411	0.381	10.906
C150 TRICHLOROETHENE	0.379	0.365	0.361	0.361	0.317	0.357	6.598
C155 DIBROMOCHLORDMETHANE	0.418	0.511	0.526	0.550	0.550	0.511	10.662
C160 1,1,2-TRICHLOROETHANE	0.295	0.333	0.312	0.316	0.296	0.310	5.035
C165 BENZENE	0.820	0.822	0.825	0.760	0.696	0.784	7.169
C143 CIS-1,3-DICHLOROPROPENE	0.414	0.413	0.440	0.487	0.430	0.437	6.937
C175 2-CHLOROETHYL VINYL ETH	0.125	0.144	0.143	0.159	0.142	0.143	-8.456
C180 BROMOFORM **	0.334	0.369	0.414	0.483	0.484	0.417	16.078
C220 TETRACHLOROETHENE	0.633	0.639	0.655	0.661	0.633	0.644	2.013
C210 2-HEXANONE	0.415	0.352	0.390	0.443	0.345	0.389	10.700
C205 4-METHYL 2-PENTANONE	0.233	0.198	0.217	0.228	0.195	0.214	8.024
C225 1,1,2,2-TETRACHLOROETHA	0.559	0.545	0.492	0.552	0.462	0.522	8.232
C230 TOLUENE *	1.172	1.126	1.101	1.194	1.027	1.124	5.836
C235 CHLOROBENZENE **	1.045	0.959	0.947	0.927	0.844	0.945	7.612
C240 ETHYL BENZENE *	0.458	0.443	0.441	0.446	0.404	0.438	4.632
C245 STYRENE	0.896	0.885	0.904	0.981	0.866	0.906	4.882
C250 M+P-XYLENES	1.216	1.169	1.170	1.139	1.141	1.167	2.678
C253 1,3-DICHLOROBENZENE	1.192	1.227	1.162	1.258	1.211	1.210	2.975
C254 1,4-DICHLOROBENZENE	1.216	1.295	1.222	1.288	1.226	1.249	3.110
C255 1,2-DICHLOROBENZENE	1.132	1.188	1.110	1.174	1.089	1.139	3.681
C250 O-XYLENE	0.580	0.511	0.533	0.543	0.540	0.541	4.616

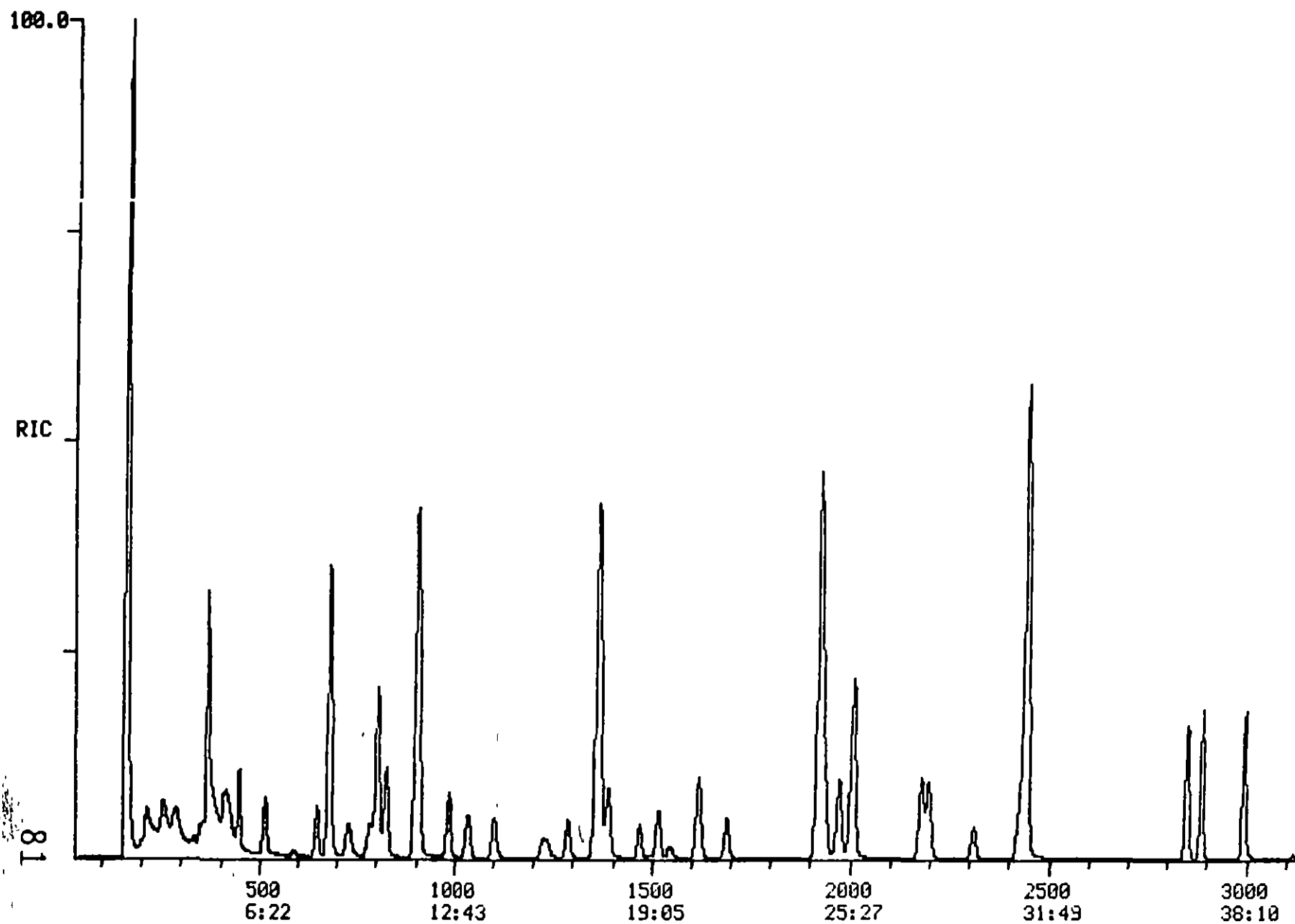
RIC
01/27/95 10:50:00
SAMPLE: 10 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1.3151 LABEL: N 0, 4.0

DATA: CV12710 #49
CALI: CV12710 #3

SCANS 30 TO 3151

QUAN: A 0, 1.0 J 0 BASE: U 20, 3

340992.



Quantitation Report File CV12710

Data CV12710 TI

01/27/95 10 50 00

Sample 10 PPB VOA STD

Conds EPA METHOD 8240

Formula 5ML

Submitted by PTL

Instrument FINN

Analyst UC

Weight 0 000

Acct No

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD **
2	CI10 1,4-DIFLUOROBENZENE **INT STD **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-D8 **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

No Name
 48 C250 O-XYLENE
 49 BENZENE-D6 ***S STD **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	678	8 38	1	1 000	A BB	181932	50 000 NG	6.85
2	114	902	11 29	2	1 000	A BB	749136	50 000 NG	6.85
3	117	1920	24 26	3	1 000	A BB	650284	50 000 NG	6.85
4	65	801	10 12	1	1 181	A BB	265717	53 195 NG	7.29
5	98	1362	17 20	3	0 709	A BB	718756	52.672 NG	7.22
6	174	2439	31 02	3	1 270	A BB	439767	53 896 NG	7.39
7	50	200	2.33	1	0 295	A BB	33566	9 766 NG	1.34
8	94	252	3.12	1	0 372	A BB	53743	11 055 NG	1.52
9	62	211	2.41	1	0 311	A BB	45358	10 944 NG	1.50
10	64	262	3 20	1	0 386	A BB	24102	9 433 NG	1.29
11	49	415	5 17	1	0 612	A VB	27649	8 752 NG	1.20
12	56	325	4 08	1	0 479	M XX	3314	10 078 NG	1.38
13	43	333	4 14	1	0 491	M XX	23938	14 691 NG	2.01
14	53	425	5 24	1	0 627	A BB	10011	10 888 NG	1.49
15	76	414	5 16	1	0 611	A BB	83321	8 592 NG	1.18
16	96	354	4 30	1	0 522	A BB	34041	10 185 NG	1.40
17	63	512	6 31	1	0 755	A BB	79936	10 278 NG	1.41
18	61	447	5 41	1	0 659	A BB	73912	9 792 NG	1.34
19	101	285	3 38	1	0 420	A BB	76970	9 884 NG	1.35
20	83	647	8 14	1	0 954	A BB	89193	10 093 NG	1.38
21	62	823	10 28	1	1 214	A BB	63383	10 428 NG	1.43
22	43	590	7 30	2	0 654	A BB	20111	10 132 NG	1.39
23	97	728	9 16	2	0 807	M XX	58402.	9.239 NG	1.27
24	117	785	9 59	2	0 870	A BB	58898	9 214 NG	1.26
25	43	516	6.34	2	0 572	A BB	78054	8 852 NG	1.21
26	83	1102	14 01	2	1 222	A BB	69315	8.919 NG	1.22
27	63	1036	13 11	2	1 149	A BB	47467	10 309 NG	1.41
28	75	1468	18 41	2	1 627	A BB	47724	8 104 NG	1.11
29	95	984	12 31	2	1 091	A BB	56735	10 503 NG	1.44
30	129	1689	21.29	2	1 873	A BB	62589	7 954 NG	1.09
31	97	1516	19 17	2	1 681	A BB	44099	9 447 NG	1.29
32	78	823	10 28	2	0 912	A BB	122752	9 940 NG	1.36
33	75	1288	16 23	2	1 428	A BB	62000	9 424 NG	1.29
34	63	1223	15.34	2	1 356	A BB	18699	8.732 NG	1.20
35	173	2311	29 24	2	2.562	A BB	49940	8 051 NG	1.10
36	166	1618	20.35	3	0 843	A BB	82318	9.672 NG	1.33
37	43	1234	15.42	3	0 643	A BB	53935.	10 634 NG	1.46
38	43	1548	19.42	3	0.806	A BB	30196	10 732 NG	1.47
39	83	2423	30 50	3	1.262	M XX	72688.	11.379 NG	1.56
40	91	1387	17.39	3	0 722	A BB	152374	10.645 NG	1.46
41	112	1935	24 37	3	1 008	A BB	135865	11.031 NG	1.91
42	106	1972	25.06	3	1.027	A BB	59526	10 400 NG	1.43
43	104	2197	27 57	3	1 144	A BB	116406	9 902 NG	1.36
44	106	2004	25.30	3	1.044	A BB	158112	10 396 NG	1.43
45	146	2848	36 14	3	1.483	A BB	154949	10.255 NG	1.41
46	146	2886	36.43	3	1 503	A BB	158061.	9.946 NG	1.36
47	146	2993	38.05	3	1 559	A BB	147134	10.200 NG	1.40
48	106	2179	27 44	3	1 135	A BB	75355	10.876 NG	1.49
49	NOT FOUND								

RIC

01/27/95 11:35:00

SAMPLE: 20 PPB UOA STD

CONDS.: EPA METHOD 8240

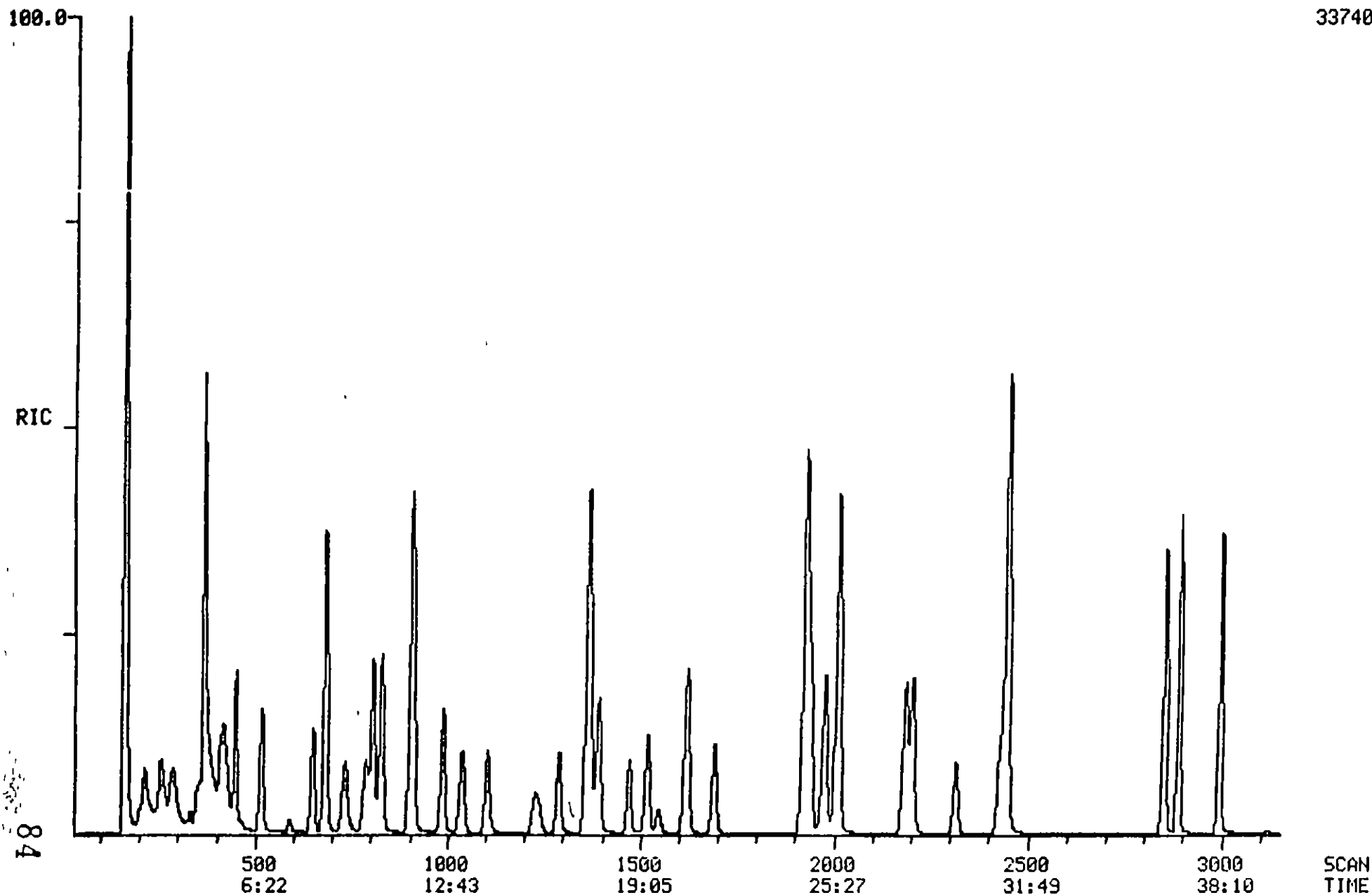
RANGE: G 1.3151 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: CU12720 #49

CALI: CALTAB #3

SCANS 30 TO 3151

337408.



Quantitation Report File CV12720

Data CV12720 TI

01/27/95 11 35 00

Sample 20 PPB VOA STD

Conds EPA METHOD 8240

Formula SML

Submitted by. PTL

Instrument FINN

Analyst UC

Weight 0 000

Acct No

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD **
2	CI10 1,4-DIFLUOROBENZENE **INT STD. **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-D8 **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROETHENE
46	C254 1,4-DICHLOROETHENE
47	C255 1,2-DICHLOROETHENE

No Name
 48 C250 O-XYLENE
 49 BENZENE-D6 **S STD **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	679	8 38	1	1 000	A BB	186367	50 000 NG	4 43
2	114	903	11 29	2	1 000	A BB	736312	50 000 NG	4 43
3	117	1921	24 27	3	1 000	A BB	659976	50 000 NG	4 43
4	65	801	10 12	1	1 180	A BB	260313	50 873 NG	4 51
5	98	1363	17 21	3	0 710	A BB	715144	51 638 NG	4 58
6	174	2441	31 04	3	1 271	A BB	430636	52 002 NG	4 61
7	50	200	2 33	1	0 295	A BB	60061	17 058 NG	1 51
8	94	252	3 12	1	0 371	A BB	94523	18 980 NG	1 68
9	62	210	2 40	1	0 309	A BB	82049	19 325 NG	1 71
10	64	263	3 21	1	0 387	A BB	46704	17 844 NG	1 58
11	49	407	5 11	1	0 599	M XX	106313	32 852 NG	2 91
12	56	324	4 07	1	0 477	A BB	5404	16 042 NG	1 42
13	43	332	4 13	1	0 489	A BB	30689	18 385 NG	1 63
14	53	425	5 24	1	0 626	A BB	16899	17 941 NG	1 59
15	76	414	5 16	1	0 610	A BB	161730	16 280 NG	1 44
16	96	354	4 30	1	0 521	A BB	58267	17 018 NG	1 51
17	63	513	6 32	1	0 756	A BB	168974	21 208 NG	1 88
18	61	448	5 42	1	0 660	A BB	149302	19 309 NG	1 71
19	101	285	3 38	1	0 420	A BB	125615	15 747 NG	1 40
20	83	648	8 15	1	0 954	A BB	184242	20 353 NG	1 80
21	62	824	10 29	1	1 214	A BB	128364	20 617 NG	1 83
22	43	590	7 30	2	0 653	A BB	38984	19 982 NG	1 77
23	97	730	9 17	2	0 808	A BB	125875	20 260 NG	1 80
24	117	785	9 59	2	0 869	A BB	118765	18 903 NG	1 68
25	43	516	6 34	2	0 571	A BB	170633	19 687 NG	1 74
26	83	1103	14 02	2	1 221	A BB	147842	19 356 NG	1 72
27	63	1036	13 11	2	1 147	A BB	89626	19 803 NG	1 75
28	75	1469	18 42	2	1 627	A BB	105740	18 269 NG	1 62
29	95	985	12 32	2	1 091	A BB	107374	20 223 NG	1 79
30	129	1690	21 30	2	1 872	A BB	150209	19 421 NG	1 72
31	97	1516	19 17	2	1 679	A BB	97893	21 335 NG	1 89
32	78	825	10 30	2	0 914	A BB	241824	19 923 NG	1 77
33	75	1288	16 23	2	1 426	A BB	121393	18 772 NG	1 66
34	63	1224	15 34	2	1 355	A BB	42170	20 035 NG	1 78
35	173	2313	29 26	2	2 561	A BB	108678	17 826 NG	1 58
36	166	1617	20 34	3	0 842	A BB	168548	19 512 NG	1 73
37	43	1234	15 42	3	0 642	A BB	92852	18 038 NG	1 60
38	43	1546	19 40	3	0 805	A BB	52064	18 232 NG	1 62
39	83	2427	30 53	3	1 263	A BB	143753	22 173 NG	1 96
40	91	1389	17 40	3	0 723	A BB	297016	20 446 NG	1 81
41	112	1935	24 37	3	1 007	A BB	253065	20 246 NG	1 79
42	106	1973	25 06	3	1 027	A BB	116905	20 125 NG	1 78
43	104	2201	28 00	3	1 146	A BB	233502	19 570 NG	1 73
44	106	2005	25 31	3	1 044	A BB	308344	19 976 NG	1 77
45	146	2849	36 15	3	1 483	A BB	323729	21 111 NG	1 87
46	146	2886	36 43	3	1 502	A BB	341841	21 194 NG	1 88
47	146	2992	38 04	3	1 558	A BB	313481	21 412 NG	1 90
48	106	2182	27 46	3	1 136	A BB	134675	19 153 NG	1 70
49	NOT FOUND								

RIC

01/27/95 10:02:00

SAMPLE: 50 PPB VOA STD

CONDS.: EPA METHOD 8240

RANGE: G 1.3151 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

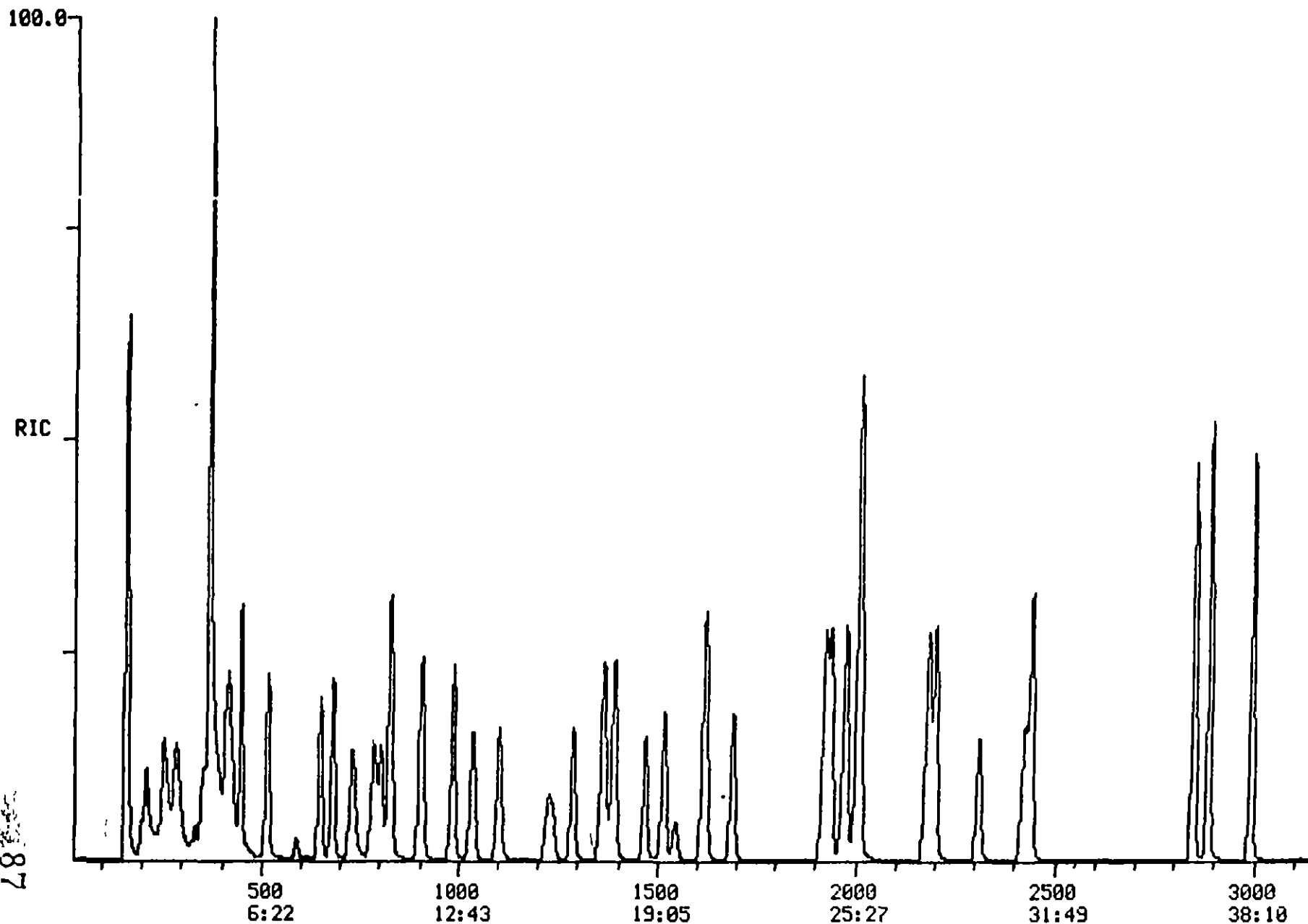
DATA: CV12750 #49

CALI: CALTAB #3

SCANS 30 TO 3151

9

617472.



Quantitation Report File CV12750

Data CV12750 TI

01/27/95 10 02 00

Sample 50 PPB VOA STD

Conds EPA METHOD 8240

Formula 5ML

Submitted by PTL

Instrument FINN

Analyst UC

Weight 0 000

Acct No

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD **
2	CI10 1,4-DIFLUOROBENZENE **INT STD **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-D8 **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROETHENE
46	C254 1,4-DICHLOROETHENE
47	C255 1,2-DICHLOROETHENE

No Name
 48 C250 O-XYLENE
 49 BENZENE-D6 **S STD **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	678	8.38	1	1.000	A BB	203709	50.000 NG	2.08
2	114	903	11.29	2	1.000	A BB	784200	50.000 NG	2.08
3	117	1920	24.26	3	1.000	A BB	703815	50.000 NG	2.08
4	65	802	10.12	1	1.183	A BB	279651	50.000 NG	2.08
5	98	1361	17.19	3	0.709	A BB	738456	50.000 NG	2.08
6	174	2438	31.01	3	1.270	A BB	441558	50.000 NG	2.08
7	50	200	2.33	1	0.295	A BB	192431	50.000 NG	2.08
8	94	253	3.13	1	0.373	A BB	272172	50.000 NG	2.08
9	62	210	2.40	1	0.310	A BB	232035	50.000 NG	2.08
10	64	263	3.21	1	0.388	A BB	143049	50.000 NG	2.08
11	49	418	5.19	1	0.617	A VB	176864	50.000 NG	2.08
12	56	325	4.08	1	0.479	A BB	18410	50.000 NG	2.08
13	43	333	4.14	1	0.491	A BB	91226	50.000 NG	2.08
14	53	424	5.24	1	0.625	A BB	51478	50.000 NG	2.08
15	76	414	5.16	1	0.611	A BB	542930	50.000 NG	2.08
16	96	353	4.29	1	0.521	A BB	187118	50.000 NG	2.08
17	63	512	6.31	1	0.755	A BB	435433	50.000 NG	2.08
18	61	448	5.42	1	0.661	A BB	422589	50.000 NG	2.08
19	101	285	3.38	1	0.420	A BB	435978	50.000 NG	2.08
20	83	648	8.15	1	0.956	A BB	494728	50.000 NG	2.08
21	62	823	10.28	1	1.214	A BB	340279	50.000 NG	2.08
22	43	589	7.30	2	0.652	A BB	103893	50.000 NG	2.08
23	97	729	9.17	2	0.807	A BB	330860	50.000 NG	2.08
24	117	785	9.59	2	0.869	A BB	334573	50.000 NG	2.08
25	43	515	6.33	2	0.570	A BB	461539	50.000 NG	2.08
26	83	1103	14.02	2	1.221	A BB	406747	50.000 NG	2.08
27	63	1034	13.09	2	1.145	A BB	241010	50.000 NG	2.08
28	75	1467	18.40	2	1.625	A BB	308223	50.000 NG	2.08
29	95	984	12.31	2	1.090	A BB	282742	50.000 NG	2.08
30	129	1688	21.29	2	1.869	A BB	411879	50.000 NG	2.08
31	97	1516	19.17	2	1.679	A BB	244335	50.000 NG	2.08
32	78	824	10.29	2	0.913	A BB	646372	50.000 NG	2.08
33	75	1287	16.23	2	1.425	A BB	344364	50.000 NG	2.08
34	63	1222	15.33	2	1.353	A BB	112084	50.000 NG	2.08
35	173	2309	29.23	2	2.557	A BB	324653	50.000 NG	2.08
36	166	1618	20.35	3	0.843	A BB	460584	50.000 NG	2.08
37	43	1233	15.41	3	0.642	A BB	274476	50.000 NG	2.08
38	43	1546	19.40	3	0.805	A BB	152267	50.000 NG	2.08
39	83	2422	30.49	3	1.261	A BB	345698	50.000 NG	2.08
40	91	1389	17.40	3	0.723	A BB	774592	50.000 NG	2.08
41	112	1934	24.37	3	1.007	A BB	666504	50.000 NG	2.08
42	106	1971	25.05	3	1.027	A BB	309747	50.000 NG	2.08
43	104	2197	27.57	3	1.144	A BB	636196	50.000 NG	2.08
44	106	2004	25.30	3	1.044	A BB	823056	50.000 NG	2.08
45	146	2847	36.14	3	1.483	A BB	817643	50.000 NG	2.08
46	146	2885	36.43	3	1.503	A BB	860008	50.000 NG	2.08
47	146	2991	38.03	3	1.558	A BB	780643	50.000 NG	2.08
48	106	2178	27.43	3	1.134	A BB	374934	50.000 NG	2.08
49	NOT FOUND								

RIC

01/27/95 12:22:00

SAMPLE: 100 PBB UOA STD

CONDS.: EPA METHOD 8240

RANGE: G 1.3151 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: CV127100 #49

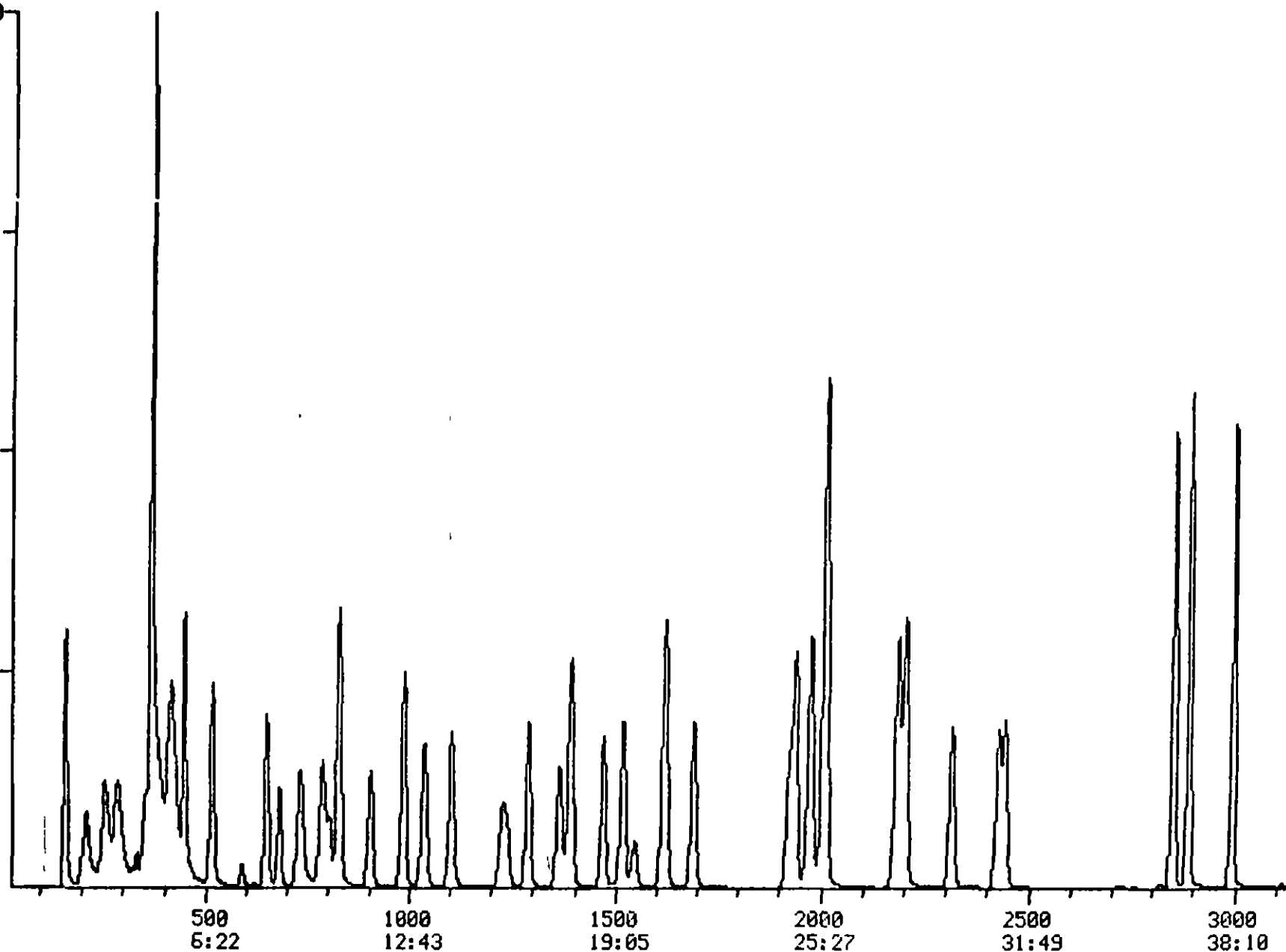
CALI: CALTAB #3

SCANS 30 TO 3151

1089540.

100.0

RIC



SCAN
TIME

Quantitation Report File CV127100

Data CV127100 TI

01/27/95 12 22 00

Sample 100 PBB VOA STD

Conds EPA METHOD 8240

Formula SML

Submitted by PTL

Instrument FINN

Analyst UC

Weight 0.000

Acct No

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD **
2	CI10 1,4-DIFLUOROBENZENE **INT STD **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-DB **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	CI10 2-BUTANONE
23	CI15 1,1,1-TRICHLOROETHANE
24	CI20 CARBON TETRACHLORIDE
25	CI25 VINYL ACETATE
26	CI30 BROMO DICHLOROMETHANE
27	CI40 1,2-DICHLOROPROPANE *
28	CI45 TRANS-1,3 DICHLOROPROPENE
29	CI50 TRICHLOROETHENE
30	CI55 DIBROMOCHLOROMETHANE
31	CI60 1,1,2-TRICHLOROETHANE
32	CI65 BENZENE
33	CI43 CIS-1,3-DICHLOROPROPENE
34	CI75 2-CHLOROETHYL VINYL ETHER
35	CI80 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

No Name
 48 C250 O-XYLENE
 49 BENZENE-D6 **S STD **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	679	8 38	1	1 000	A BB	183851	50 000 NG	1 10
2	114	903	11.29	2	1 000	A BB	761396	50 000 NG	1 10
3	117	1920	24 26	3	1 000	A BB	644628	50 000 NG	1. 10
4	65	801	10 12	1	1 180	A BB	253578	50 235 NG	1 11
5	98	1361	17 19	3	0 709	A BB	737168	54 496 NG	1. 20
6	174	2440	31 03	3	1 271	A BB	475276	58. 759 NG	1. 29
7	50	204	2. 36	1	0 300	A BB	328957	94 706 NG	2. 09
8	94	252	3 12	1	0 371	A BB	462582	94 159 NG	2. 07
9	62	210	2. 40	1	0 309	A BB	376747	89 952 NG	1. 98
10	64	263	3 21	1	0 387	A BB	241332	93 464 NG	2. 06
11	49	416	5 18	1	0 613	A VB	348326	109 109 NG	2. 40
12	56	325	4 08	1	0 479	A BB	31672	95 306 NG	2. 10
13	43	333	4 14	1	0 490	A BB	156264	94 898 NG	2. 09
14	53	424	5 24	1	0 624	A BB	99455	107 034 NG	2 36
15	76	415	5 17	1	0 611	A BB	918288	93 702 NG	2. 06
16	96	353	4 29	1	0 520	A BB	315488	93 407 NG	2. 06
17	63	512	6. 31	1	0 754	A BB	786215	100 031 NG	2 20
18	61	447	5 41	1	0 658	A BB	744150	97 557 NG	2. 15
19	101	285	3 38	1	0 420	A BB	657536	83. 554 NG	1. 84
20	83	648	8 15	1	0 954	A BB	888368	99 481 NG	2. 19
21	62	824	10 29	1	1 214	A BB	601820	97 982 NG	2. 16
22	43	588	7 29	2	0. 651	A BB	189742	94 051 NG	2. 07
23	97	729	9 17	2	0 807	A BB	578172	89. 991 NG	1. 98
24	117	784	9 59	2	0. 868	A BB	583528	89 817 NG	1. 98
25	43	515	6. 33	2	0 570	A BB	854191	95 309 NG	2. 10
26	83	1103	14 02	2	1 221	A BB	827484	104. 766 NG	2. 31
27	63	1036	13 11	2	1 147	A BB	459012	98 079 NG	2. 16
28	75	1468	18 41	2	1. 626	A BB	639306	106 814 NG	2. 35
29	95	985	12. 32	2	1 091	A BB	548920	99 978 NG	2. 20
30	129	1689	21 29	2	1 870	A BB	836519	104 590 NG	2. 30
31	97	1516	19 17	2	1. 679	A BB	479950	101 157 NG	2. 23
32	78	825	10 30	2	0 914	A BB	1157080	92. 186 NG	2. 03
33	75	1288	16 23	2	1 426	A BB	741032	110. 817 NG	2. 44
34	63	1223	15 34	2	1. 354	A BB	241977	111 178 NG	2. 45
35	173	2312	29 25	2	2. 560	A BB	734176	116. 458 NG	2. 57
36	166	1617	20. 34	3	0 842	A BB	851424	100 915 NG	2. 22
37	43	1232	15. 41	3	0. 642	A BB	571120	113 591 NG	2. 50
38	43	1545	19 40	3	0 805	A BB	293824	105. 342 NG	2. 32
39	83	2426	30. 52	3	1. 264	A BB	710868	112 256 NG	2. 47
40	91	1388	17 40	3	0 723	A BB	1539060	108 468 NG	2. 39
41	112	1935	24 37	3	1. 008	A BB	1194390	97. 828 NG	2. 15
42	106	1973	25. 06	3	1 028	A BB	573936	101. 152 NG	2. 23
43	104	2200	28: 00	3	1 146	A BB	1264580	108 511 NG	2. 39
44	106	2006	25: 31	3	1 045	A BB	1467260	97 319 NG	2. 14
45	146	2849	36. 15	3	1 484	A BB	1621060	108 232 NG	2. 38
46	146	2885	36 43	3	1. 503	A BB	1660120	105 380 NG	2. 32
47	146	2992	38: 04	3	1 558	A BB	1513580	105 846 NG	2. 33
48	106	2181	27: 45	3	1. 136	A BB	699192.	101 803 NG	2. 24
49	NOT FOUND								

RIC

01/27/95 13:10:00

SAMPLE: 200 PPB UOA STD

CONDS.: EPA METHOD 8240

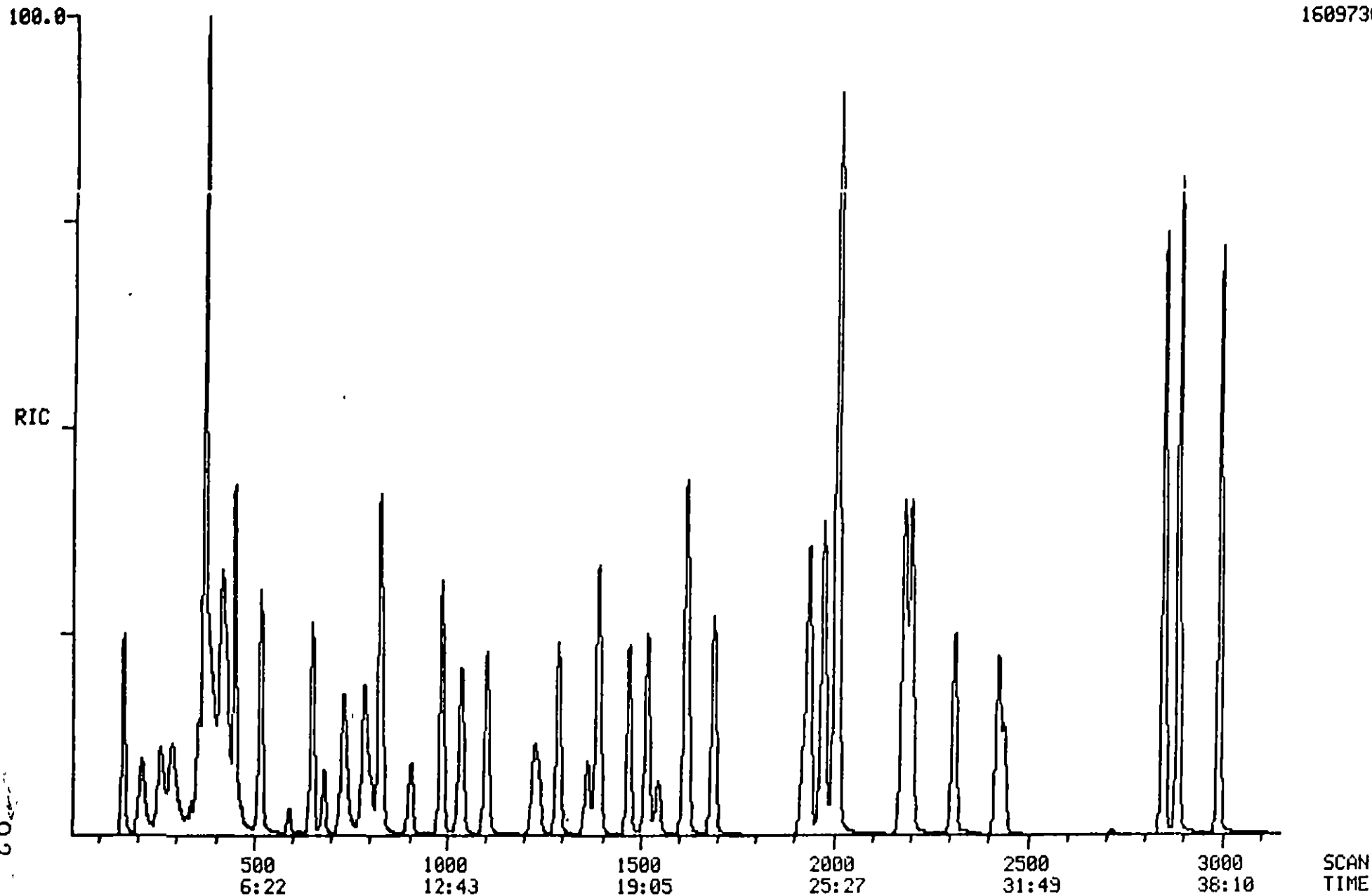
RANGE: G 1.3151 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: CV127200 #49

CALI: CALTAB #3

SCANS 30 TO 3151

1609730.



Quantitation Report File CV127200

Data CV127200 TI

01/27/95 13 10 00

Sample 200 PPB VOA STD

Conds EPA METHOD 8240

Formula SML

Submitted by PTL

Instrument FINN

Analyst UC

Weight 0 000

Acct No

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD **
2	CI10 1,4-DIFLUOROBENZENE **INT STD **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-D8 **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

No Name
 48 C250 O-XYLENE
 49 BENZENE-D6 **S STD **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	XTot
1	128	678	8:38	1	1.000	A BB	198422	50.000 NG	0.63
2	114	902	11:29	2	1.000	A BB	775908	50.000 NG	0.63
3	117	1918	24:24	3	1.000	A BB	694896	50.000 NG	0.63
4	65	800	10:11	1	1.180	A BB	239240	43.914 NG	0.55
5	98	1361	17:19	3	0.710	A BB	736020	50.475 NG	0.64
6	174	2438	31:01	3	1.271	A BB	488036	55.972 NG	0.71
7	50	204	2:36	1	0.301	A BB	664450	177.246 NG	2.24
8	94	253	3:13	1	0.373	A BB	610924	115.221 NG	1.45
9	62	210	2:40	1	0.310	A BB	617681	136.647 NG	1.73
10	64	262	3:20	1	0.386	A BB	350340	125.717 NG	1.59
11	49	416	5:18	1	0.614	A BB	995152	288.826 NG	3.65
12	56	325	4:08	1	0.479	A BB	50948	142.053 NG	1.79
13	43	334	4:15	1	0.493	A BB	271678	152.871 NG	1.93
14	53	426	5:25	1	0.628	A BB	195825	195.271 NG	2.47
15	76	415	5:17	1	0.612	A BB	1830280	173.046 NG	2.19
16	96	353	4:29	1	0.521	A BB	603484	165.553 NG	2.09
17	63	512	6:31	1	0.755	A BB	1475170	173.904 NG	2.20
18	61	447	5:41	1	0.659	A BB	1468900	178.428 NG	2.25
19	101	285	3:38	1	0.420	A BB	922504	108.616 NG	1.37
20	83	648	8:15	1	0.956	A BB	1702410	176.639 NG	2.23
21	62	824	10:29	1	1.215	A BB	1199240	180.908 NG	2.28
22	43	589	7:30	2	0.653	A BB	344163.	167.403 NG	2.11
23	97	728	9:16	2	0.807	A BB	1110250	169.575 NG	2.14
24	117	784	9:59	2	0.869	A BB	1184700	178.939 NG	2.26
25	43	515	6:33	2	0.571	A BB	1680650	184.016 NG	2.32
26	83	1101	14:01	2	1.221	A BB	1512680	187.935 NG	2.37
27	63	1035	13:10	2	1.147	A BB	860500	180.427 NG	2.28
28	75	1467	18:40	2	1.626	A BB	1273420	208.781 NG	2.64
29	95	984	12:31	2	1.091	A BB	981280	175.384 NG	2.21
30	129	1687	21:28	2	1.870	A BB	1706190	209.336 NG	2.64
31	97	1516	19:17	2	1.681	A BB	918092	189.884 NG	2.40
32	78	824	10:29	2	0.914	A BB	2158620	168.765 NG	2.13
33	75	1286	16:22	2	1.426	A BB	1333660.	195.711 NG	2.47
34	63	1222	15:33	2	1.355	A BB	439897	198.333 NG	2.50
35	173	2309	29:23	2	2.560	A BB	1500420	233.551 NG	2.95
36	166	1616	20:34	3	0.843	A BB	1756820	193.164 NG	2.44
37	43	1233	15:41	3	0.643	A BB	957728	176.704 NG	2.23
38	43	1545	19:40	3	0.806	A BB	541280	180.022 NG	2.27
39	83	2422	30:49	3	1.263	A BB	1281780.	187.770 NG	2.37
40	91	1387	17:39	3	0.723	A BB	2852860.	186.517 NG	2.36
41	112	1933	24:36	3	1.008	A BB	2345710	178.230 NG	2.25
42	106	1970	25:04	3	1.027	A BB	1121880.	183.421 NG	2.32
43	104	2197	27:57	3	1.145	A BB	2405580	191.487 NG	2.42
44	106	2004	25:30	3	1.045	A BB	3170660.	195.087 NG	2.46
45	146	2845	36:12	3	1.483	A BB	3364740	208.399 NG	2.63
46	146	2883	36:41	3	1.503	A BB	3405210	200.517 NG	2.53
47	146	2988	38:01	3	1.558	A BB	3026830	196.356 NG	2.48
48	106	2178	27:43	3	1.136	A BB	1500670	202.693 NG	2.56
49	NOT FOUND								

DATAFILE CVD0202A

Calibration Check

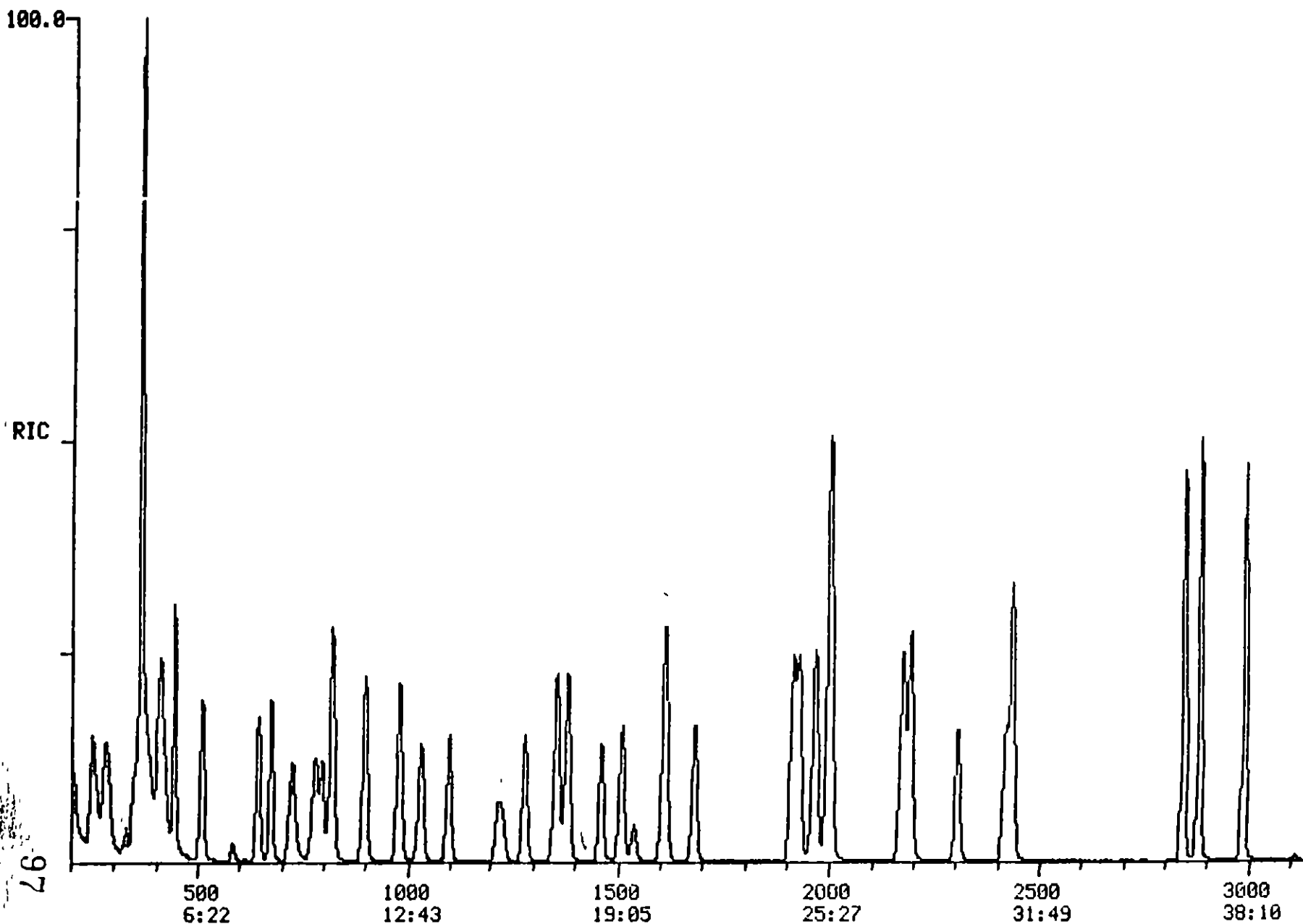
Instrument Identifier FINN
 Calibration Date 1/27/95
 Standard File CVD0202A
 Date 02/02/95 Time 10 04 00
 25% D
 MIN RF FOR SPCC (**) = 0 300

Compound	Mean RF(I)	RF(O)	% D
CS15 1,2-DICHLOROETHANE-D4 *	1 364	1 395	0 000
CS05 TOLUENE-D8 **S STD **	1.089	1 113	0.000
CS10 4-BROMOFLUOROBENZENE **	0 680	0 798	0 000
C010 CHLOROMETHANE **	0 881	1 092	23 879
C015 BROMOMETHANE	1.222	1 624	32 892
C020 VINYL CHLORIDE *	1 058	1 237	16 914
C025 CHLOROETHANE	0 618	0 876	41 613
C030 METHYLENE CHLORIDE	1 052	0 914	13 071
C251 ACROLIN	0 081	0 098	20 721
C035 ACETONE	0.457	0.584	27 723
C252 ACRYLONITRILE	0.255	0 271	6 199
C040 CARBON DISULFIDE	2.386	3 326	39 405
C045 1,1-DICHLOROETHENE *	0 851	1 155	35 703
C050 1,1-DICHLOROETHANE **	2.120	2 172	2.442
C055 TRANS-1,2-DICHLOROETHEN	1 997	2.315	15 902
C000 TRICHLOROFLUOROMETHA	1 779	2.522	41 763
C060 CHLOROFORM *	2.383	2 409	1 112
C065 1,2-DICHLOROETHANE	1.657	1.774	7.042
C110 2-BUTANONE	0 127	0 128	0 385
C115 1,1,1-TRICHLOROETHANE	0 396	0 407	2.820
C120 CARBON TETRACHLORIDE	0 398	0 429	7 884
C125 VINYL ACETATE	0 559	0 541	3.267
C130 BROMO DICHLOROMETHANE	0 503	0 551	9 533
C140 1,2-DICHLOROPROPANE	0 302	0 304	0 573
C145 TRANS-1,3 DICHLOROPROPE	0 381	0 408	7 171
C150 TRICHLOROETHENE	0 357	0.364	2 183
C155 DIBROMOCHLOROMETHANE	0.511	0 554	8.346
C160 1,1,2-TRICHLOROETHANE	0.310	0 314	1.231
C165 BENZENE	0.784	0.776	1.073
C143 CIS-1,3-DICHLOROPROPENE	0 437	0.475	8 750
C175 2-CHLOROETHYL VINYL ETH	0.143	0.151	6.007
C180 BROMOFORM **	0.417	0.496	19 087
C220 TETRACHLOROETHENE	0 644	0.692	7.453
C210 2-HEXANONE	0.389	0.408	4.804
C205 4-METHYL 2-PENTANONE	0 214	0.223	4 198
C225 1,1,2,2-TETRACHLOROETHA	0 522	0 565	8.180
C230 TOLUENE *	1.124	1.184	5.362
C235 CHLOROBENZENE **	0.945	0.940	0.473
C240 ETHYL BENZENE *	0.438	0.438	0 019
C245 STYRENE	0.906	0.994	9.695
C250 M+P-XYLENES	1.167	1.141	2.249
C253 1,3-DICHLOROBENZENE	1.210	1.323	9.366
C254 1,4-DICHLOROBENZENE	1.249	1.360	8.849
C255 1,2-DICHLOROBENZENE	1.139	1.243	9.121
C250 O-XYLENE	0.541	0.554	2.404

RIC
02/02/95 10:04:00
SAMPLE: 50 PPB UOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1.3151

DATA: CU0202A #1
CALI: CALTAB #3

SCANS 200 TO 3151



623616.

Quantitation Report File CVD0202A

Data CVD0202A TI

02/02/95 10 04 00

Sample 50 PPB VOA STD

Conds EPA METHOD 8240

Formula SML

Instrument FINN

Weight 0 000

Submitted by PTL

Analyst UC

Acct No

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD.**
2	CI10 1,4-DIFLUOROBENZENE **INT STD **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-D8 **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROETHENE
46	C254 1,4-DICHLOROETHENE
47	C255 1,2-DICHLOROETHENE

No Name
 48 C250 D-XYLENE
 49 BENZENE-D6 ***S STD **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	673	8 34	1	1 000	M XX	181319	50 000 NG	2.09
2	114	896	11 24	2	1 000	A BB	713174	50 000 NG	2.09
3	117	1913	24 20	3	1 000	A BB	623212	50 000 NG	2.09
4	65	795	10 07	1	1 181	A BB	252840	49 170 NG	2.06
5	98	1353	17 13	3	0 707	A BB	693344	50 000 NG	2.09
6	174	2432	30 57	3	1 271	A BB	497016	50.000 NG	2.09
7	50	201	2.33	1	0 299	A BB	197891	49 171 NG	2.06
8	94	250	3 11	1	0 371	M XX	294425	49 752 NG	2.08
9	62	207	2 38	1	0 308	A BB	224259	49 170 NG	2.06
10	64	260	3 18	1	0 386	A BB	158664	49 170 NG	2.06
11	49	413	5 15	1	0 614	A VB	165657	49 170 NG	2.06
12	56	321	4 05	1	0 477	A BB	17717	49 170 NG	2.06
13	43	329	4 11	1	0 489	M XX	105844	50 448 NG	2.11
14	53	420	5 21	1	0 624	A BB	48982	49 170 NG	2.06
15	76	409	5 12	1	0 608	M XX	603041	49 250 NG	2.06
16	96	349	4 26	1	0 519	M XX	209380	49 249 NG	2.06
17	63	507	6 27	1	0 753	A BB	393708	49 170 NG	2.06
18	61	443	5 38	1	0 658	A BB	419608	49 170 NG	2.06
19	101	282	3 35	1	0 419	M XX	457120	49 348 NG	2.07
20	83	642	8.10	1	0 954	A BB	436790	49 170 NG	2.06
21	62	816	10.23	1	1 212	A BB	321490	49 170 NG	2.06
22	43	583	7 25	2	0 651	A BB	90861	50.000 NG	2.09
23	97	722	9 11	2	0 806	A BB	289877	50 000 NG	2.09
24	117	778	9.54	2	0 868	A BB	305926	50 000 NG	2.09
25	43	511	6 30	2	0 570	A BB	385120	50 000 NG	2.09
26	83	1095	13 56	2	1.222	A BB	392812	50 000 NG	2.09
27	63	1029	13 06	2	1 148	A BB	216203	50 000 NG	2.09
28	75	1460	18 35	2	1 629	A BB	290575	50 000 NG	2.09
29	95	977	12 26	2	1 090	A BB	259501	50 000 NG	2.09
30	129	1680	21 23	2	1 875	A BB	394419	50 000 NG	2.09
31	97	1508	19 11	2	1 683	A BB	223705	50 000 NG	2.09
32	78	818	10 25	2	0 913	A BB	553120	50.000 NG	2.09
33	75	1279	16 16	2	1 427	A BB	338407	50 000 NG	2.09
34	63	1215	15.28	2	1 356	A BB	107610	50 000 NG	2.09
35	173	2303	29.18	2	2 570	A BB	353694	50 000 NG	2.09
36	166	1608	20.28	3	0 841	A BB	431052	50 000 NG	2.09
37	43	1226	15 36	3	0 641	A BB	253954	50 000 NG	2.09
38	43	1538	19.34	3	0 804	A BB	138769	50 000 NG	2.09
39	83	2417	30.45	3	1.263	A BB	351567	50 000 NG	2.09
40	91	1380	17.34	3	0.721	A BB	737720.	50 000 NG	2.09
41	112	1926	24.30	3	1.007	A BB	589603.	50 000 NG	2.09
42	106	1964	24.59	3	1.027	A BB	272840	50 000 NG	2.09
43	104	2191	27 53	3	1 145	A BB	619372	50.000 NG	2.09
44	106	1998	25.25	3	1 044	A BB	710548	50.000 NG	2.09
45	146	2840	36.08	3	1 485	A BB	824373.	50.000 NG	2.09
46	146	2877	36.36	3	1.504	A BB	847281	50.000 NG	2.09
47	146	2985	37.59	3	1 560	A BB	774054	50 000 NG	2.09
48	106	2172	27.38	3	1 135	A BB	345204	50.000 NG	2.09
49	NOT	FOUND							

Instrument Identifier FINN
 Calibration Date 1/27/95
 Standard File CVO202B
 Date 02/02/95 Time 15 07 00
 25% D
 MIN RF FOR SPCC (**) = 0 300

Compound	Mean RF(I)	RF(O)	% D
CS15 1,2-DICHLOROETHANE-D4 *	1 364	1 409	0 000
CS05 TOLUENE-D8 *** STD **	1 089	1 095	0 000
CS10 4-BROMOFLUOROBENZENE **	0 680	0.726	0 000
CO10 CHLOROMETHANE **	0 881	0 946	7 372
CO15 BROMOMETHANE	1 222	1 539	25 886
CO20 VINYL CHLORIDE *	1 058	1 168	10 317
CO25 CHLOROETHANE	0 618	0 776	25 550
CO30 METHYLENE CHLORIDE	1 052	0 935	11 083
CO51 ACROLIN	0 081	0 106	30 441
CO35 ACETONE	0.457	0 512	11 889
CO52 ACRYLONITRILE	0 255	0 290	13 693
CO40 CARBON DISULFIDE	2 386	3 078	28 993
CO45 1,1-DICHLOROETHENE *	0.851	0 994	16 777
CO50 1,1-DICHLOROETHANE **	2 120	2 065	2 584
CO55 TRANS-1,2-DICHLOROETHENE	1 997	2.143	7 314
CO00 TRICHLOROFLUOROMETHANE	1 779	2.210	24 250
CO60 CHLOROFORM *	2.383	2 419	1 530
CO65 1,2-DICHLOROETHANE	1 657	1 722	3.953
C110 2-BUTANONE	0 127	0 134	5.157
C115 1,1,1-TRICHLOROETHANE	0 396	0 408	3.203
C120 CARBON TETRACHLORIDE	0 398	0 412	3.601
C125 VINYL ACETATE	0 559	0 159	71.509
C130 BROMO DICHLOROMETHANE	0.503	0 540	7 274
C140 1,2-DICHLOROPROPANE	0 302	0.307	1 834
C145 TRANS-1,3 DICHLOROPROPE	0 381	0 415	9 034
C150 TRICHLOROETHENE	0 357	0 417	16 890
C155 DIBROMOCHLOROMETHANE	0 511	0 580	13 604
C160 1,1,2-TRICHLOROETHANE	0 310	0 342	10 295
C165 BENZENE	0 784	0 798	1.780
C143 CIS-1,3-DICHLOROPROPENE	0 437	0 460	5 388
C175 2-CHLOROETHYL VINYL ETH	0 143	0.148	3.934
C180 BROMOFORM **	0.417	0 481	15 417
C220 TETRACHLOROETHENE	0.644	0.715	10.997
C210 2-HEXANONE	0 389	0 417	7.228
C205 4-METHYL 2-PENTANONE	0 214	0 235	9.730
C225 1,1,2,2-TETRACHLOROETHANE	0.522	0 488	6.505
C230 TOLUENE *	1.124	1.152	2.518
C235 CHLOROBENZENE **	0.945	0 966	2.294
C240 ETHYL BENZENE *	0 438	0.452	3.071
C245 STYRENE	0.906	0 945	4.249
C250 M+P-XYLENES	1.167	1.185	1.538
C253 1,3-DICHLOROBENZENE	1.210	1.414	16.860
C254 1,4-DICHLOROBENZENE	1.249	1.436	14.934
C255 1,2-DICHLOROBENZENE	1.139	1.301	14.240
C250 O-XYLENE	0.541	0.554	2.299

RIC
02/02/95 14:15:00
SAMPLE: 50 PPB UOA STD
COND.: EPA METHOD 8240
RANGE: G 1,3151 LABEL: N 0, 4.0

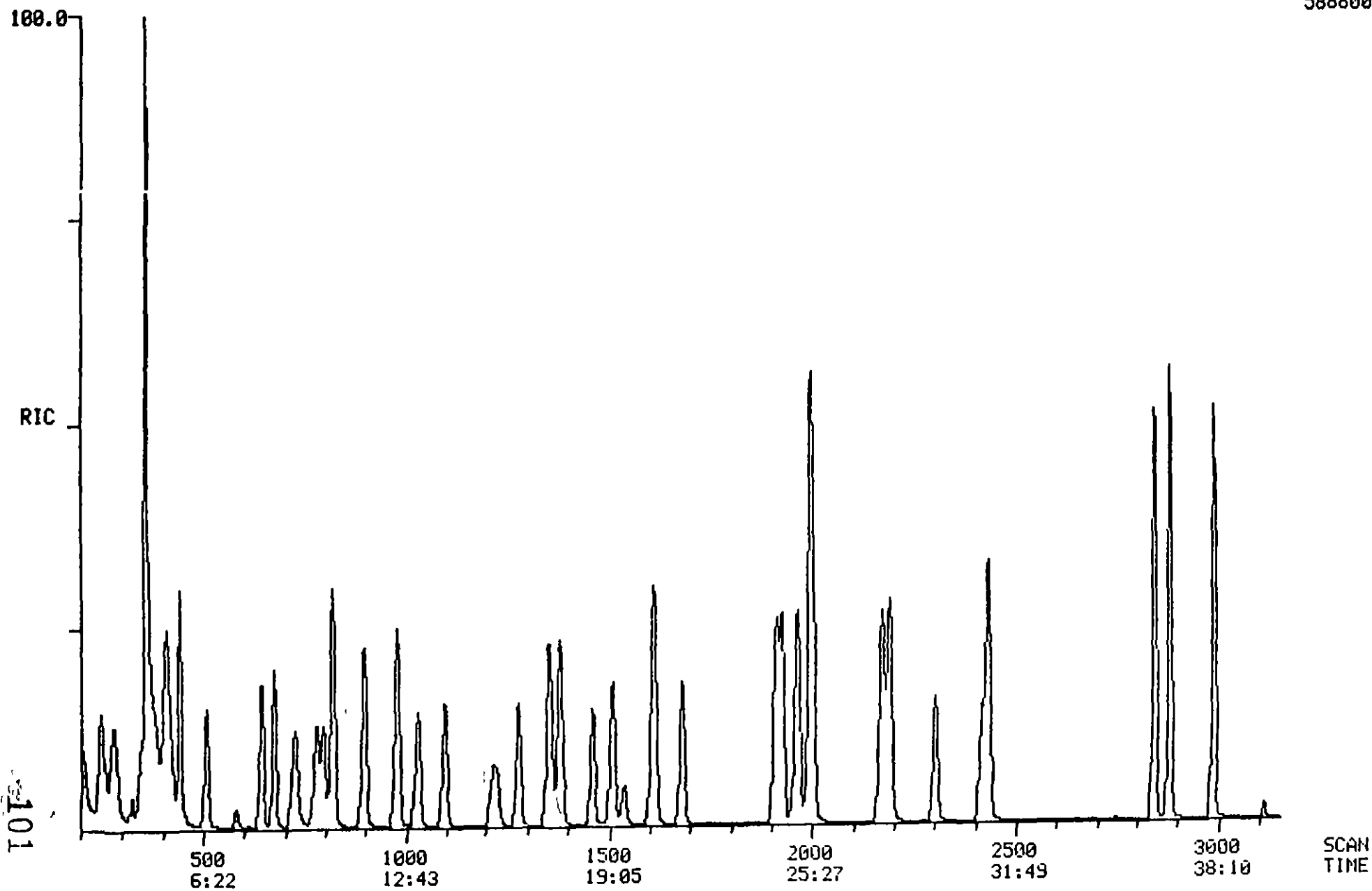
DATA: CV0202B #1
CALI: CALTAB #3

SCANS 200 TO 3151

9

QUAN: A 0, 1.0 J 0 BASE: U 20, 3

588800.



Data CVD0202B.TI

02/02/95 14 15 00

Sample 50 PPB VOA STD

Conds EPA METHOD 8240

Formula 5ML

Submitted by PTL

Instrument FINN

Analyst UC

Weight 0 000

Acct No

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD **
2	CI10 1,4-DIFLUOROBENZENE **INT STD **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-D8 **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

(V06--)

No Name
48 C250 O-XYLENE
49 BENZENE-D6 **S STD **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	671	8 32	1	1 000	A BB	176998	50 000 NG	2.08
2	114	894	11 23	2	1 000	A BB	693200	50 000 NG	2.08
3	117	1911	24 19	3	1 000	A BB	614200	50 000 NG	2.08
4	65	793	10 05	1	1 182	A BB	249370	50 000 NG	2.08
5	98	1352	17 12	3	0 707	A BB	672472	50 000 NG	2.08
6	174	2430	30 55	3	1 272	A BB	445829	50 000 NG	2.08
7	50	200	2 33	1	0 298	A BB	167424	50 000 NG	2.08
8	94	248	3 09	1	0 370	A BB	272253	50 000 NG	2.08
9	62	206	2 37	1	0 307	A BB	206557	50 000 NG	2.08
10	64	258	3 17	1	0 385	A BB	137304	50 000 NG	2.08
11	49	410	5 13	1	0 611	A VB	165409	50 000 NG	2.08
12	56	319	4 04	1	0 475	A BB	18694	50 000 NG	2.08
13	43	327	4 10	1	0 487	A BB	90502	50 000 NG	2.08
14	53	418	5 19	1	0 623	A BB	51196	50 000 NG	2.08
15	76	408	5 11	1	0 608	A BB	544698	50 000 NG	2.08
16	96	349	4 26	1	0 520	A BB	175873	50 000 NG	2.08
17	63	505	6 26	1	0 753	A BB	365465.	50 000 NG	2.08
18	61	441	5 37	1	0 657	A BB	379252	50 000 NG	2.08
19	101	280	3 34	1	0 417	A BB	391088	50 000 NG	2.08
20	83	640	8 09	1	0 954	A BB	428146	50 000 NG	2.08
21	62	816	10 23	1	1 216	A BB	304770	50 000 NG	2.08
22	43	581	7 24	2	0 650	A BB	92531	50 000 NG	2.08
23	97	722	9 11	2	0 808	A BB	282808.	50 000 NG	2.08
24	117	776	9 52	2	0 868	A BB	285540	50 000 NG	2.08
25	43	509	6 29	2	0 569	A BB	110008	50 000 NG	2.08
26	83	1094	13 55	2	1 224	A BB	373928	50 000 NG	2.08
27	63	1028	13 05	2	1 150	A BB	212788	50 000 NG	2.08
28	75	1459	18 34	2	1 632	A BB	287351	50 000 NG	2.08
29	95	975	12 24	2	1 091	A BB	288587	50 000 NG	2.08
30	129	1679	21 22	2	1 878	A BB	401994	50 000 NG	2.08
31	97	1506	19 10	2	1 685	A BB	236940	50 000 NG	2.08
32	78	816	10 23	2	0 913	A BB	553144	50 000 NG	2.08
33	75	1278	16 16	2	1 430	A BB	318750	50 000 NG	2.08
34	63	1214	15 27	2	1 358	A BB	102544	50 000 NG	2.08
35	173	2301	29 17	2	2 574	A BB	333181	50 000 NG	2.08
36	166	1607	20 27	3	0 841	A BB	438840	50 000 NG	2.08
37	43	1224	15 34	3	0 641	A BB	256078	50 000 NG	2.08
38	43	1536	19 33	3	0 804	A BB	144039	50 000 NG	2.08
39	83	2415	30 44	3	1 264	A BB	299406	50 000 NG	2.08
40	91	1379	17 33	3	0 722	A BB	707424	50 000 NG	2.08
41	112	1926	24 30	3	1 008	A BB	593188.	50 000 NG	2.08
42	106	1962	24 58	3	1 027	A BB	277216	50 000 NG	2.08
43	104	2188	27 50	3	1 145	A BB	580096.	50 000 NG	2.08
44	106	1995	25 23	3	1 044	A BB	727416	50 000 NG	2.08
45	146	2841	36 09	3	1 487	A BB	868146	50 000 NG	2.08
46	146	2878	36 37	3	1 506	A BB	881727.	50 000 NG	2.08
47	146	2985	37 59	3	1 562	A BB	798658.	50 000 NG	2.08
48	106	2169	27 36	3	1 135	A BB	339862	50 000 NG	2.08
49	NOT FOUND								

RAW QC DATA

BROMOFLUOROBENZENE

Tuning Report
01/27/95 9 47 00 + 3 57
Instrument FINN
#310 to #312 summed
Case Number

Data BFB127 # 311
Cal: CALTAB # 3
Analyst UC

Base m/z: 95
RIC 259328.
Acct No 257-001

Laboratory

Contract

m/z	Intensity	% RA	Ion Abundance Criteria			Actual	Status
			Min %	Max %	Mass		
50	8832	15.6	15.0	40.0	95	15.6	PASS
75	23072	40.6	30.0	60.0	95	40.6	PASS
95	56768	100.0	100.0	---	---	100.0	PASS
96	4584	8.1	5.0	9.0	95	8.1	PASS
173	40	0.1	---	2.0	174	0.1	PASS
174	51520	90.8	50.0	---	95	90.8	PASS
175	3580	6.3	5.0	9.0	174	6.9	PASS
176	50048	88.2	95.0	101.0	174	97.1	PASS
177	3196	5.6	5.0	9.0	176	6.4	PASS

Mass List
 01/27/95 9 47 00 + 3 57
 Sample SONG BFB MASS SPECTROMETER TUNE CHECK
 Conds EPA METHOD 8240
 #310 to #312 summed

Data BFB127 # 311
 Cal1 CALTAB # 3

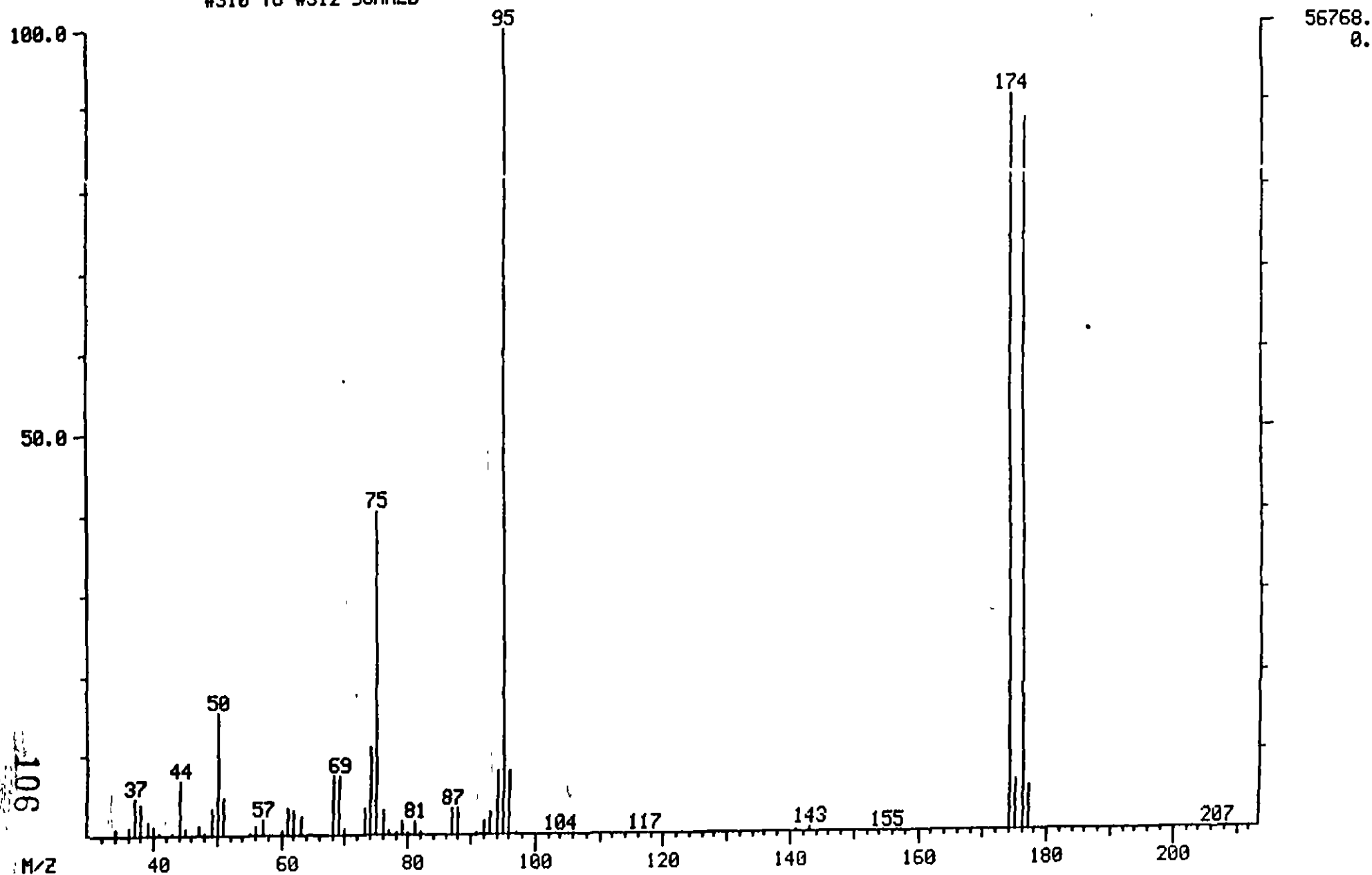
Base m/z 95
 RIC. 259328.

Mass	% RA	Inten	Minima Maxima Mass	Min #	Inten 0 % RA	Inten
34	0 00	0				0
207						
34?	0 87	496	155		0 05	26
36?	0 97	550	173		0 07	40
37?	4 77	2708	174		90 76	51520.
38?	3. 95	2244	175		6. 31	3580
39?	1. 73	982	176		88 16	50048
40?	1. 10	622	177		5 63	3196
41?	0 31	178	207		0 06	36
43?	0 35	196				
44?	6. 79	3852				
45?	0 78	442				
47?	1 05	598				
48?	0. 16	92				
49?	3. 24	1840				
50?	15 56	8832				
51?	4 78	2712.				
55?	0. 41	232.				
56?	1. 00	570				
57?	2. 06	1170				
60?	0. 53	300				
61?	3. 27	1854				
62?	3. 02	1716.				
63?	2. 17	1230				
68?	7 38	4192				
69	7 43	4216				
70	0. 78	440				
72	0. 04	22.				
73	3. 28	1860				
74	11. 16	6336				
75	40 64	23072				
76	3. 17	1802				
77	0. 42	240				
78	0. 22	124				
79	1. 66	944				
80	0. 34	194				
81	1. 73	982.				
82	0 29	166.				
87	3. 39	1922.				
88	3. 26	1848.				
91	0 32	180				
92	1. 69	960.				
93	2. 76	1568				
94	8. 15	4624				
95	100 00	56768				
96	8. 07	4584				
97	0. 16	90.				
104	0. 04	22.				
117	0. 05	30.				
119	0. 04	22.				
141	0. 40	226.				
143	0. 47	266.				

MASS SPECTRUM
01/27/95 9:47:00 + 3:57
SAMPLE: 50NG 8FB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 8240
TEMP: 175 DEG. C
#310 TO #312 SUMMED

DATA: BFB127 #311
CALI: CALTAB #3

BASE M/Z: 95
RIC: 259328.



MASS CHROMATOGRAMS

01/27/95 9:47:00

SAMPLE: 50NG BFB

CONDS.: EPA METHOD 8240

RANGE: G 1, 393

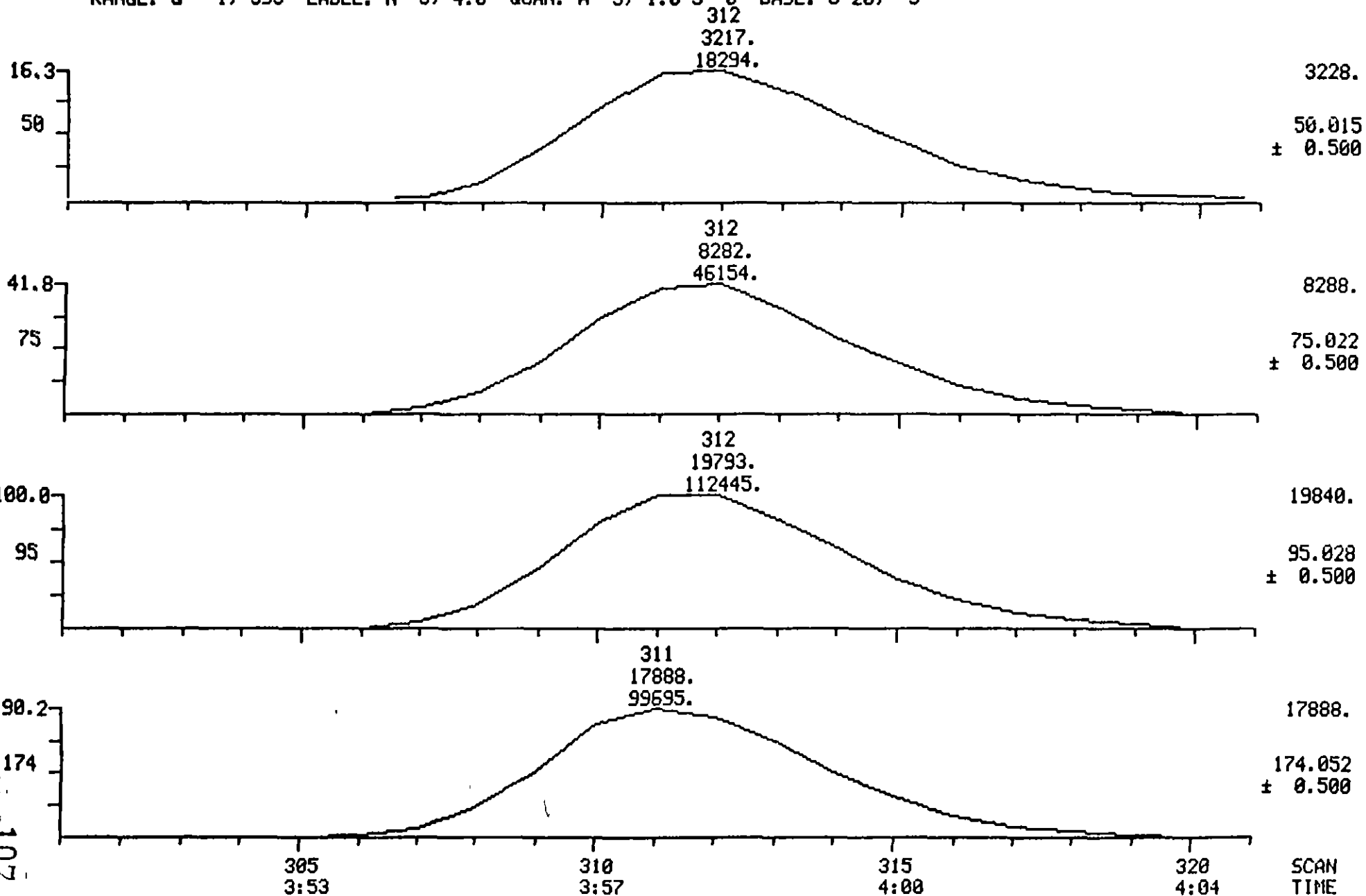
DATA: BFB127 #310

CALI: CALTAB #3

MASS SPECTROMETER TUNE CHECK

LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3

SCANS 301 TO 321



BROMOFLUOROBENZENE

Tuning Report
02/02/95 9 56 00 + 3 55
Instrument FINN
#207 to #309 summed
Case Number

Data BFB0202 # 308
Cal1 CALTAB # 3
Analyst UC

Base m/z 95
RIC 227328
Acct No 265-001

Laboratory.

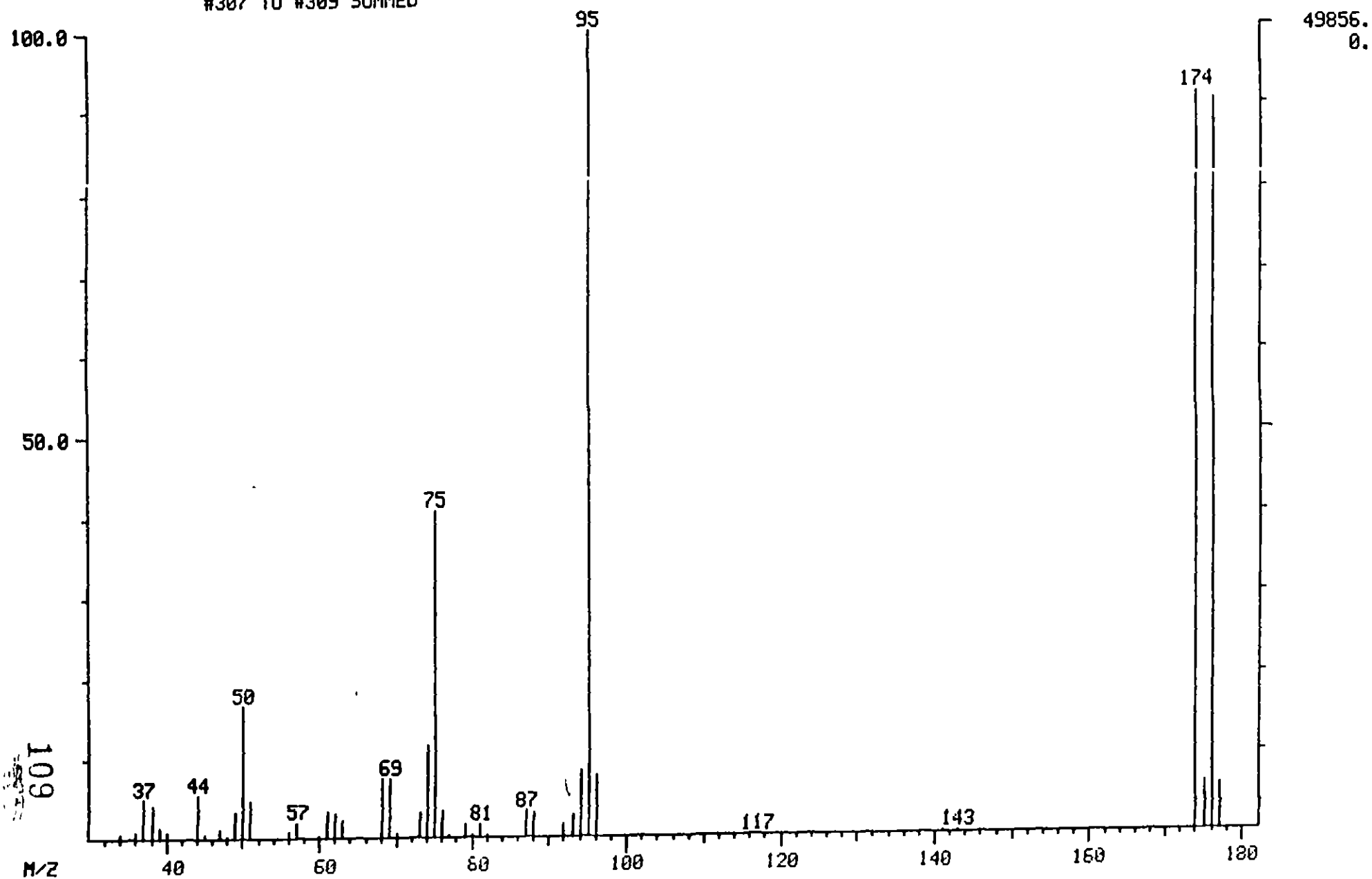
Contract

			Ion Abundance Criteria			Actual	Status
m/z	Intensity	% RA	Min %	Max %	Mass		
50	8224	16.5	15.0	40.0	95	16.5	PASS
75	20448	41.0	30.0	60.0	95	41.0	PASS
95	49856	100.0	100.0	---	---	100.0	PASS
96	3900	7.8	5.0	9.0	95	7.8	PASS
173	0	0.0	---	2.0	174	0.0	PASS
174	45568	91.4	50.0	---	95	91.4	PASS
175	3008	6.0	5.0	9.0	174	6.6	PASS
176	45120	90.5	95.0	101.0	174	99.0	PASS
177	2832	5.7	5.0	9.0	176	6.3	PASS

MASS SPECTRUM
02/02/95 9:56:00 + 3:55
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 8240
TEMP: 175 DEG. C
#307 TO #309 SUMMED

DATA: BFB0202 #308
CALI: CALTAB #3

BASE M/Z: 95
RIC: 227328.



Mass List

02/02/95 9 56 00 + 3.55

Data BFBO202 # 308

Cali CALTAB # 3

Base m/z 95

RIC 227328.

Sample SONG BFB MASS SPECTROMETER TUNE CHECK

Conds EPA METHOD 8240

#307 to #309 summed

34 177 Mass	0 00 % RA	0 Inten	Minima Maxima	Min #	Inten 0	0
34?	0 65	324				
36?	0 89	444				
37?	4 97	2480				
38?	4 24	2112				
39?	1 48	736				
40?	0 91	452				
44?	5 58	2780				
45?	0 69	344				
47?	0 98	488				
48?	0 27	134				
49?	3 22	1604				
50?	16 50	8224				
51?	4 83	2408				
55?	0 04	18				
56?	0 79	394				
57?	2 03	1012				
60?	0 40	198				
61?	3 30	1646				
62?	2 99	1490				
63?	2 26	1126				
68?	7 35	3664				
69	7 45	3712				
70	0 54	270				
72	0 04	18				
73	3 01	1500				
74	11 62	5792				
75	41 01	20448				
76	3 27	1628				
77	0 24	118				
79	1 53	764				
80	0 18	92				
81	1 75	872				
82	0 15	74				
87	3 38	1686				
88	3 14	1566				
91	0 07	34				
92	1 55	774				
93	2 66	1326				
94	8 19	4084				
95	100 00	49856				
96	7 82	3900				
97	0 04	20				
117	0 07	36				
141	0 16	78				
143	0 31	154				
174	91 40	45568				
175	6 03	3008				
176	90 50	45120				
177	5 68	2832				

MASS CHROMATOGRAMS

02/02/95 9:56:00

SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK

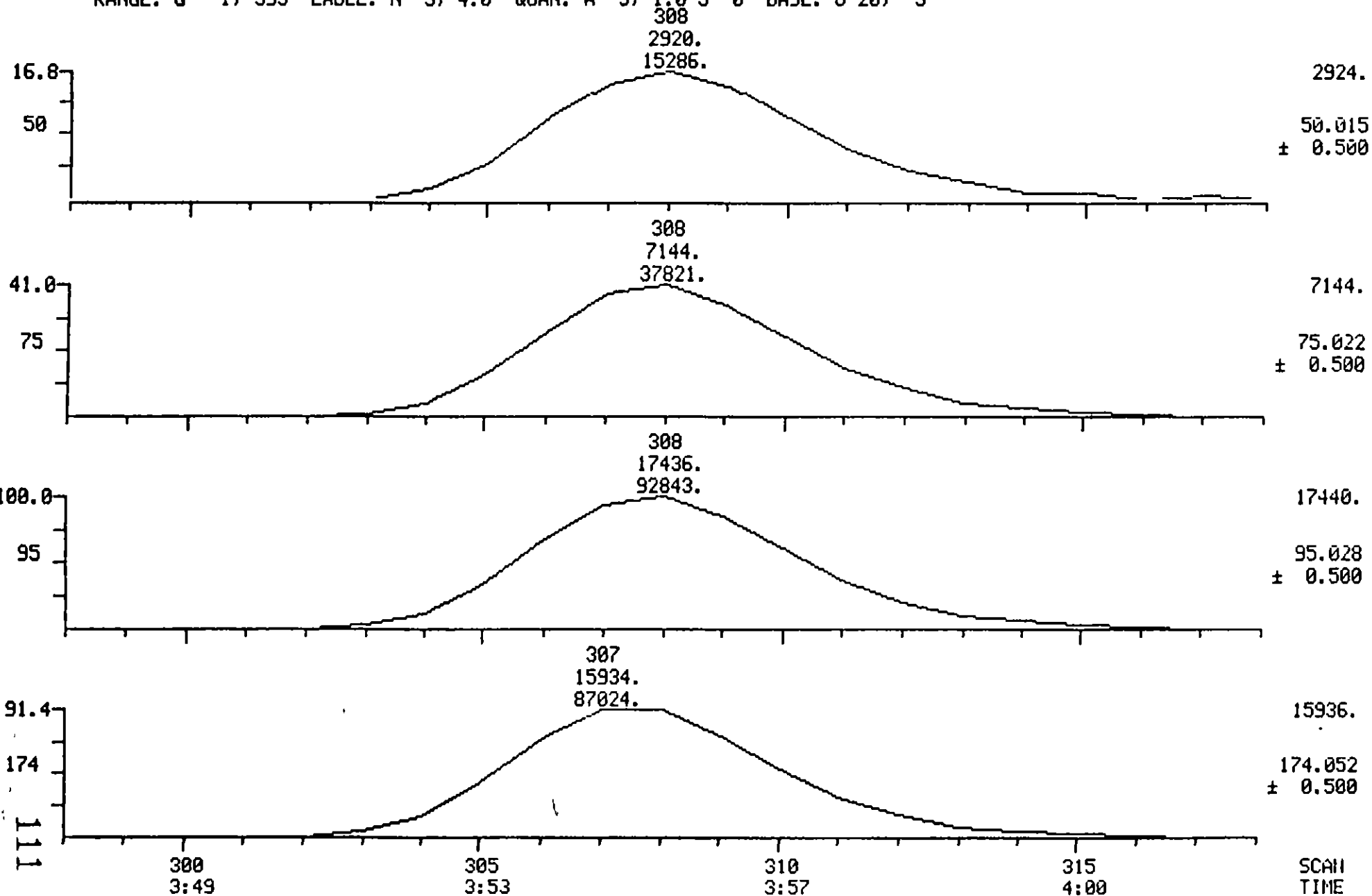
CONDS.: EPA METHOD 8240

RANGE: G 1, 393 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3

DATA: BFB0202 #307

CALI: CALTAB #3

SCANS 298 TO 318



BROMOFLUOROBENZENE

Tuning Report
02/02/95 14 07 00 + 3 57
Instrument FINN
#310 to #312 summed
Case Number

Data BFB202B # 311
Cal: CALTAB # 3
Analyst UC

Base m/z 95
RIC 237568
Acct No 265-001

Laboratory

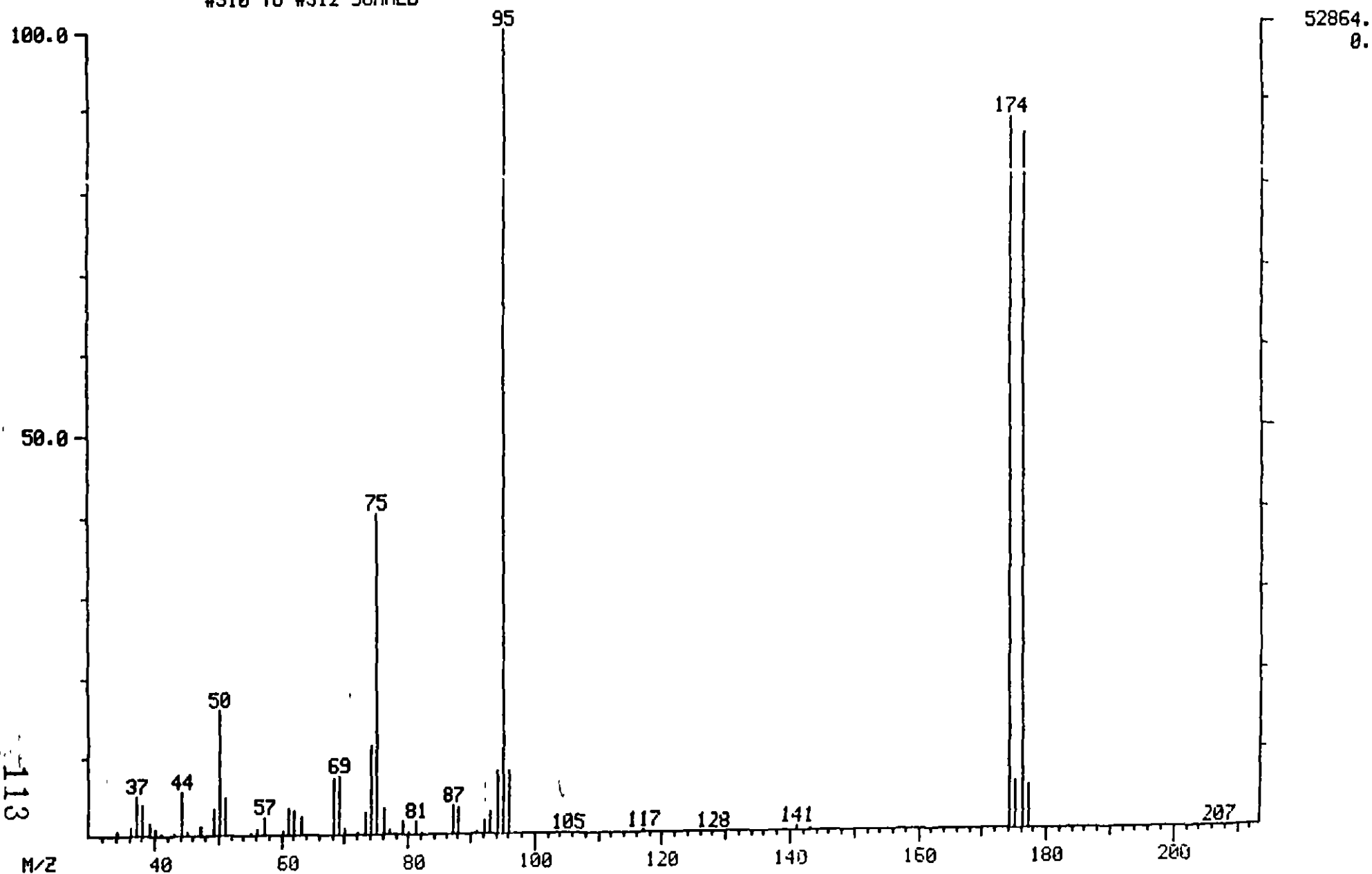
Contract

m/z	Intensity	% RA	Ion Abundance Criteria			Actual	Status
			Min %	Max %	Mass		
50	8384	15 9	15 0	40 0	95	15 9	PASS
75	21280	40 3	30 0	60 0	95	40 3	PASS
95	52864	100 0	100 0	---	---	100 0	PASS
96	4280	8 1	5 0	9 0	95	8 1	PASS
173	50	0 1	---	2 0	174	0 1	PASS
174	46528	88 0	50 0	---	95	88 0	PASS
175	3168	6 0	5 0	9 0	174	6 8	PASS
176	45632	86 3	95 0	101 0	174	98 1	PASS
177	2908	5 5	5 0	9 0	176	6 4	PASS

MASS SPECTRUM
02/02/95 14:07:00 + 3:57
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 8240
TEMP: 175 DEG. C
#310 TO #312 SUMMED

DATA: BFB202B #311
CALI: CALTAB #3

BASE M/Z: 95
RIC: 237568.



Mass List
 02/02/95 14 07 00 + 3 57
 Sample 50NG BFB MASS SPECTROMETER TUNE CHECK
 Conds EPA METHOD 8240
 #310 to #312 summed

Data BFB202B # 311
 Cal: CALTAB # 3

Base m/z 95
 RIC 237568

34 207 Mass	0 00 % RA	0 Inten	Minima Maxima Mass	Min #	Inten 0 % RA	0 Inten
34	0 47	248	128		0 09	50
36	1 01	536	130		0 03	16
37	5 02	2652	141		0 51	268
38	4 00	2116	142		0 09	50
39	1 63	860	143		0 31	166
40	0 90	476	173		0 09	50
41	0 14	74	174		88 01	46528
43	0 28	150	175		5 99	3168
44	5 61	2968	176		86 32	45632
45	0 50	262	177		5 50	2908
47	1 05	554	207		0 03	18
48	0 14	72				
49	3 26	1722				
50	15 86	8384				
51	4 79	2532				
52	0 03	18				
55	0 19	100				
56	0 91	480				
57	2 13	1126				
60	0 53	278				
61	3 30	1744				
62	2 95	1562				
63	2 24	1186				
67	0 11	58				
68	7 17	3788				
69	7 42	3924				
70	0 75	394				
72	0 16	82				
73	2 85	1508				
74	11 20	5920				
75	40 25	21280				
76	3 25	1716				
77	0 45	238				
78	0 04	22				
79	1 61	850				
80	0 34	178				
81	1 76	928				
82	0 31	162				
87	3 57	1886				
88	3 26	1724				
91	0 15	80				
92	1 70	898				
93	2 84	1502				
94	8 14	4304				
95	100 00	52864				
96	8 10	4280				
97	0 04	20				
105	0 03	16				
117	0 14	76				
119	0 04	22				

MASS CHROMATOGRAMS

02/02/95 14:07:00

SAMPLE: 50NG BFB

CONDS.: EPA METHOD 8240

RANGE: G 1, 393

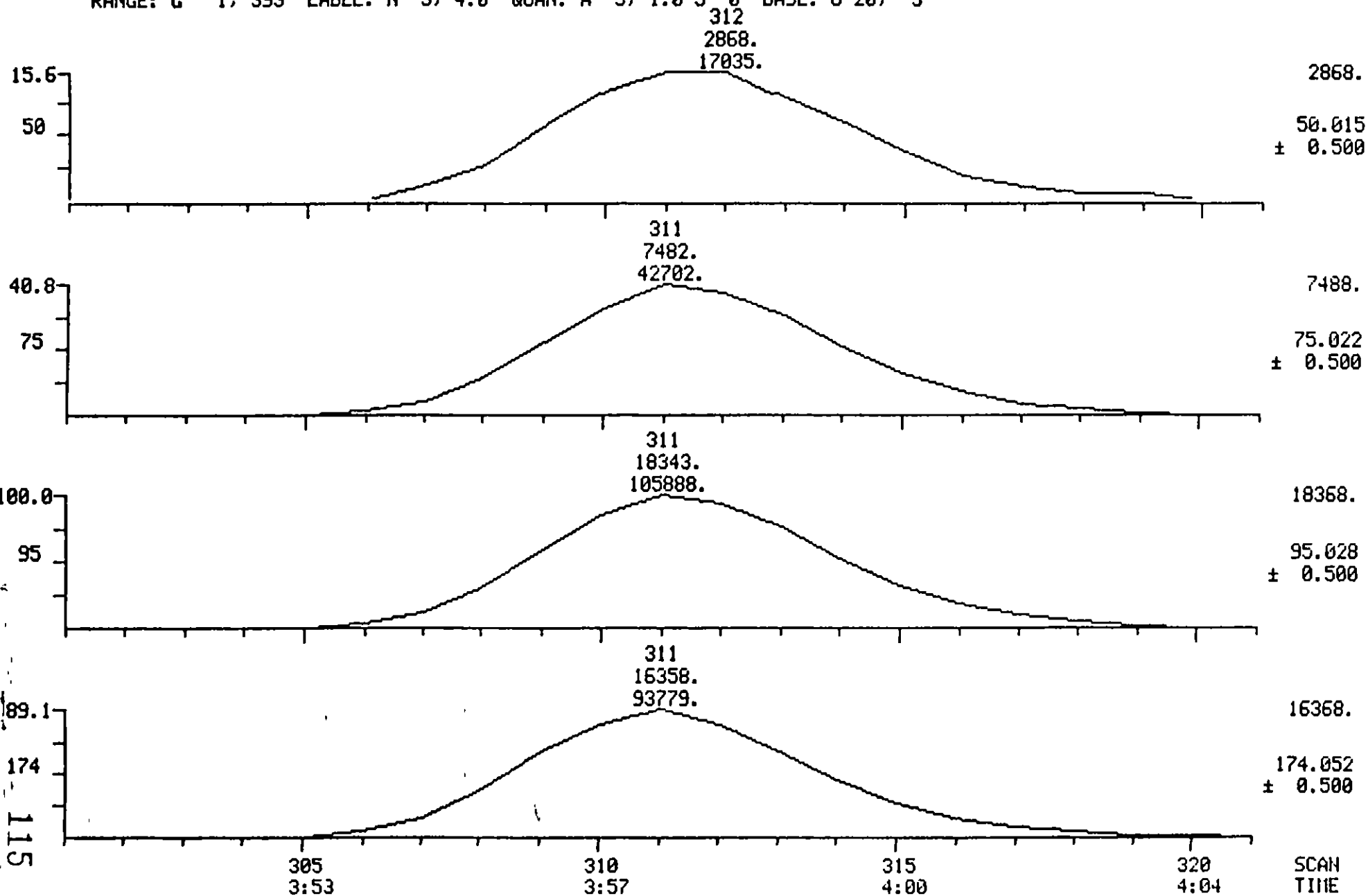
DATA: BFB2028 #310

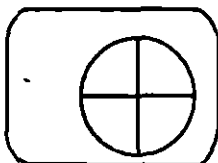
CALI: CALTAB #3

MASS SPECTROMETER TUNE CHECK

LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3

SCANS 301 TO 321





Princeton Testing Laboratory Inc.

P O Box 3108
3480 U S Route 1
Princeton, NJ 08543-3108
(609) 452-9050
(FAX) (609) 452-1959

U S Army, Fort Monmouth N.J.
Attn. SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108
Attention: Charles Appleby
Project Name: Bldg. 616 UST# 0081533-90

Report Date: 02/09/95
Job Number: 9500366-001
Date Received: 01/30/95
Client Job No.: 94-12-8-1040-10
Page: 1

Analysis: Volatile Organics, SW, SW-846 8240
Units: ug/kg

Parameters	Sample I D.	Blank 02/02/95
Chloromethane		<10
Bromomethane		<10
Vinyl chloride		<10
Chloroethane		<10
Methylene chloride		<5.0
Acetone		1.4 J
Carbon disulfide		<5.0
1,1-Dichloroethene		<5.0
1,1-Dichloroethane		<5.0
1,2-Dichloroethene (Total)		<5.0
Chloroform		<5.0
1,2-Dichloroethane		<5.0
2-Butanone		<5.0
1,1,1-Trichloroethane		<5.0
Carbon tetrachloride		<5.0
Bromodichloromethane		<5.0
1,1,2,2-Tetrachloroethane		<5.0
1,2-Dichloropropane		<5.0
trans-1,3-Dichloropropene		<5.0
Trichloroethene		<5.0
Dibromochloromethane		<5.0
1,1,2-Trichloroethane		<5.0
Benzene		<5.0
cis-1,3-Dichloropropene		<5.0
Bromoform		<5.0
2-Hexanone		<5.0
4-Methyl-2-Pentanone		<5.0
Tetrachloroethene		<5.0
Toluene		<5.0
Chlorobenzene		<5.0
Ethylbenzene		<5.0
Styrene		<5.0
Total Xylenes		<5.0

RECOVERY DATA

QC LIMITS

1,2-Dichloroethane-d4 (Surrogate)	70-121%	108
Toluene-d8 (Surrogate)	84-138%	97
4-Bromofluorobenzene (Surrogate)	59-113%	88

J - Estimated Value Detected Below MDL

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. M. BLANK

Lab Name: Princeton Testing Lab US ARMY, FORT MONMOUTH, N.J.

Lab Code: PTL Case No.: 9500386 SAS No.: XXX SDG No.: XXX

Matrix: (Soil/Water) SOIL Lab Sample ID: Lac-blank

Sample wt/vol. 5.0 (g/mL) g Lab File ID: CELK202A

Level: (low/med) LOW Date Received _____

Moisture: not dec _____ Date Analyzed: 02 02/95

GC Column: VOCOL ID: 0 55 Dilution Factor 1

Soil Extract Vol. _____ ul Soil Aliquot Vol. _____ ul

Number TICs found: 0 CONCENTRATION UNITS.
(ug/L or ug/Kg) ug/L

#S	CAS NUMB	COMPOUND NAME	RT	EST CONC	SCAN

RIC
02/02/95 10:57:00

DATA: CBLK202A #1
CALI: CALTAB #3

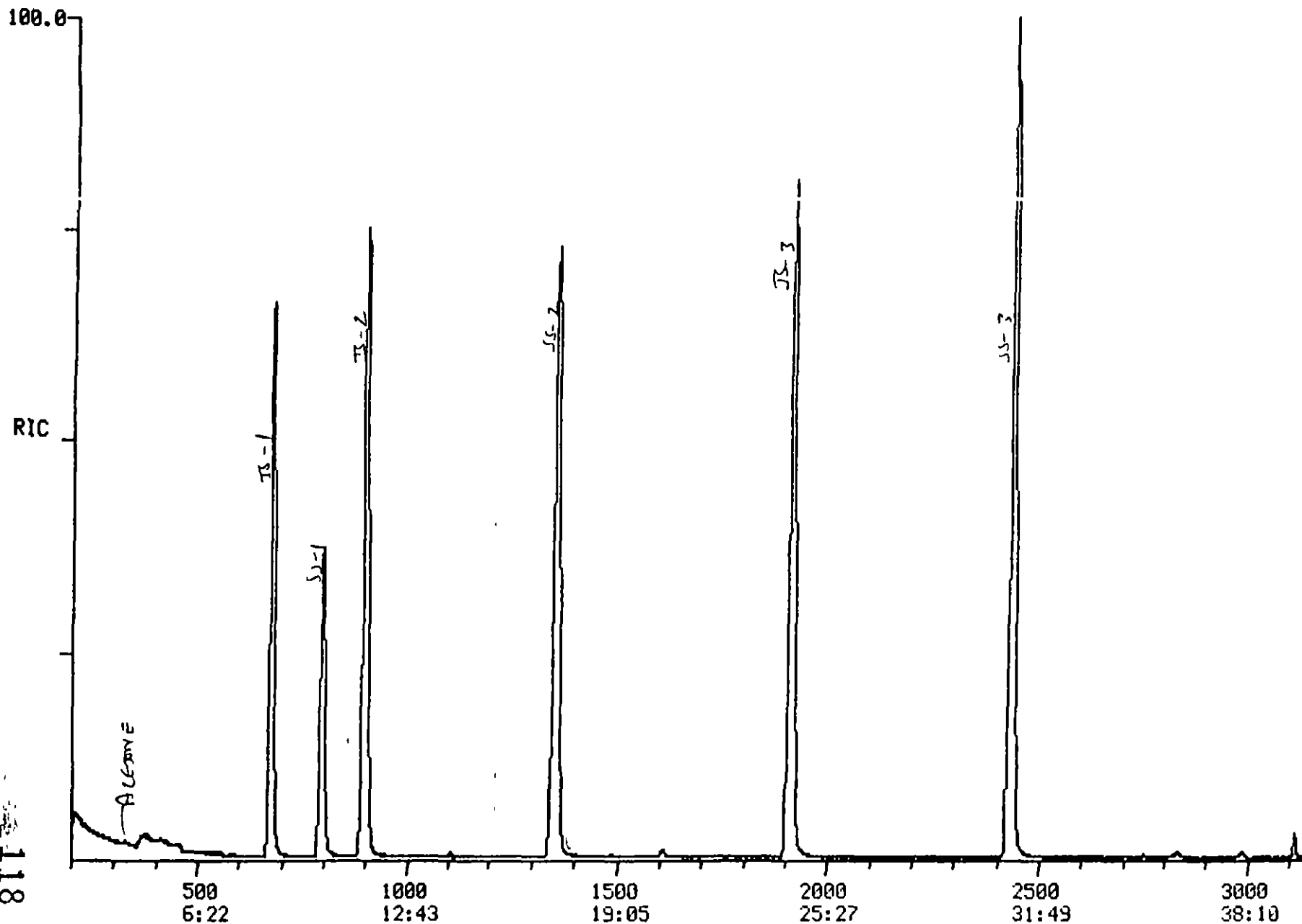
SCANS 200 TO 3151

SAMPLE: M.BLK

CONDS.: EPA METHOD 8240

RANGE: G 1.3151 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

174336.



Quantitation Report File CBLK202A

Data CBLK202A TI

02/02/95 10 57 00

Sample M BLK

Conds EPA METHOD 8240

Formula SML

Submitted by PTL

Instrument FINN

Analyst UC

Weight 0 000

Acct No. 265-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD **
2	CI10 1,4-DIFLUOROBENZENE **INT STD **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-D8 **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

No Name
 48 C250 O-XYLENE
 49 BENZENE-D6 ***S STD**

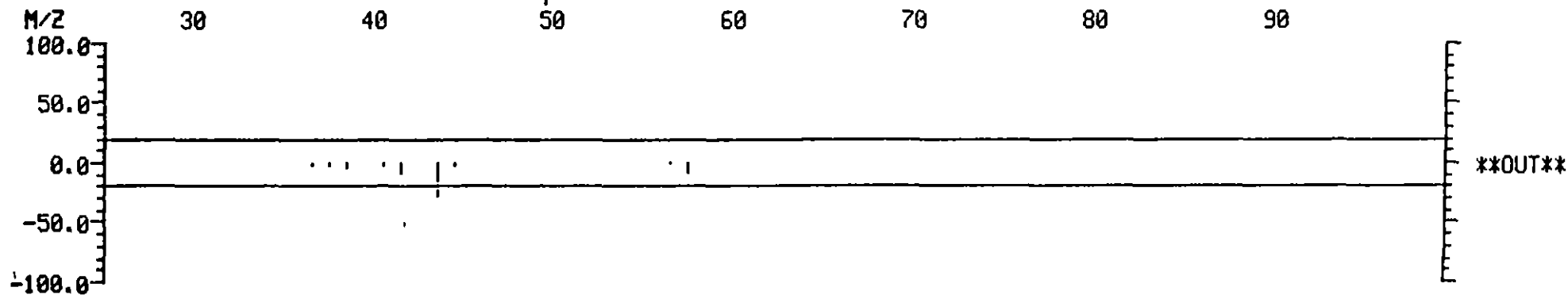
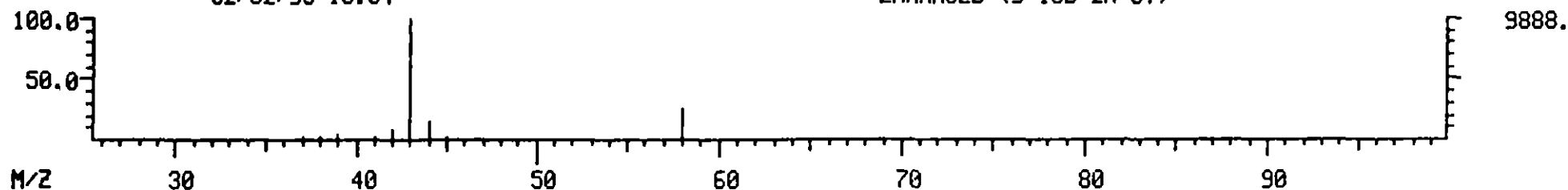
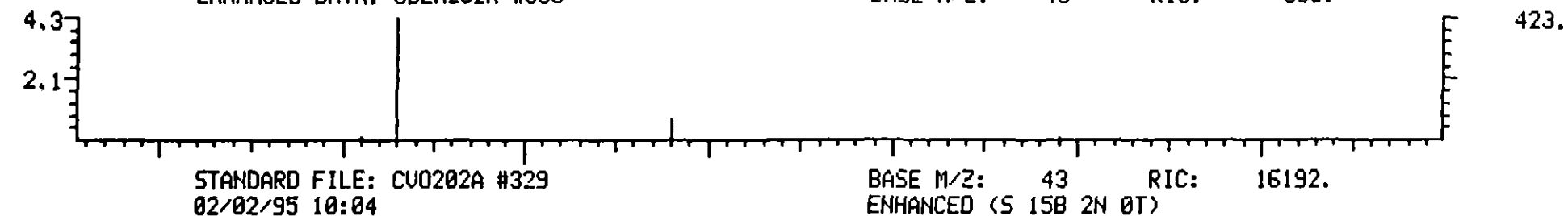
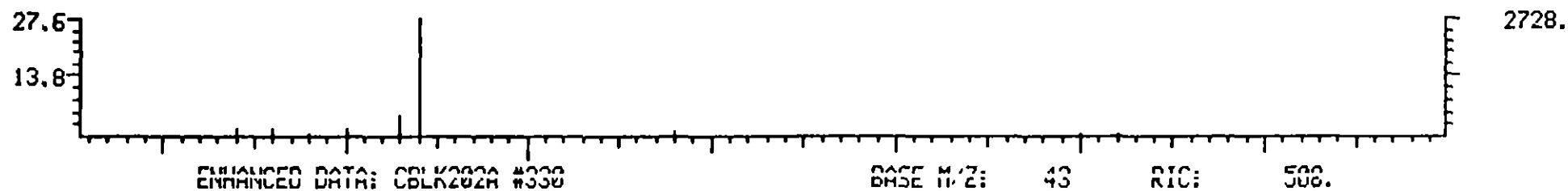
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	674	8 35	1	1 000	A BB	171457	50 000 NG	16.71
2	114	897	11 25	2	1 000	A BB	675316	50 000 NG	16.71
3	117	1912	24 20	3	1 000	A BB	573032	50 000 NG	16.71
4	65	795	10 07	1	1 180	A BB	258600	54 081 NG	18.07
5	98	1354	17 14	3	0 708	A BB	616044	48 316 NG	16.15
6	174	2432	30 57	3	1 272	A BB	404266	44 231 NG	14.78
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	43	329	4 11	1	0 488	A BB	2814	1 406 NG	0.47
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	43	585	7 27	2	0 652	A BB	1229	0.715 NG	0.24
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	166	1610	20 29	3	0.842	A BB	3903	0.492 NG	0.16
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								

DATA FILE: CBLK202A #330
TARGET COMPOUND COMPARISON
COMPOUND: C035 ACETONE

STANDARD FILE: CV0202A #329
CALI: CALTAB #3

RAW DATA: CBLK202A #330
02/02/95 10:57

BASE M/Z: 44 RIC: 4044.



DATA FILE CBLK202A

FILTER SCAN PARAMETERS

MAX NUMBER TICS 15
11-TABLE ENTRIES 539
SCAN TOLERANCE 1
MIN RIC HT [%] 10
FIRST SCAN 350
LAST SCAN 3168
TIC THRESHOLD 600

METHOD LIBRARY & LISTS

TIC I S LIBRARY LIBRARYLS
NBS SEARCH PROC SERLIB
PEAK FINDER PROC. VOME
TCA I S LL LS
FILE NAME LIST TCAREF2

TARGET COMPOUND ANALYSIS

TARGETS
(QUAN LIST)
6

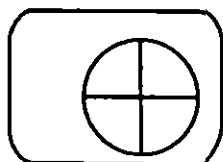
IS
PEAKS
3

TOTAL TARGET
PEAKS
9

FILTER PROCESSING

-----REJECT PEAKS-----
TOTAL < 1ST > LAST < MIN < SCAN > MAX # TOTAL TOTAL
PEAKS SCAN SCAN RIC HT TOL PEAKS REJECTS TICS
6 0 0 0 6 0 6 0

NO UNKNOWN PEAKS TO BE IDENTIFIED



Princeton Testing Laboratory Inc.

P O Box 3108
3490 U S Route 1
Princeton, NJ 08543-3108
(609) 452-9050
(FAX) (609) 452-1959

U S Army, Fort Monmouth N.J.
Attn: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108
Attention Charles Appleby
Project Name: Bldg. 616 UST# 0081533-90

Report Date: 02/09/95
Job Number: 9500366-001
Date Received: 01/30/95
Client Job No.: 94-12-8-1040-10
Page: 1

Analysis: Volatile Organics, WW, SW-846 8240
Units: ug/liter

Parameters Sample I D Blank 02/02/95

Chloromethane	<10	
Bromomethane	<10	
Vinyl chloride	<10	
Chloroethane	<10	
Methylene chloride	1.4 J	
Acetone	1.3 J	
Carbon disulfide	<5.0	
1,1-Dichloroethene	<5.0	
1,1-Dichloroethane	<5.0	
1,2-Dichloroethene (Total)	<5.0	
Chloroform	<5.0	
1,2-Dichloroethane	<5.0	
2-Butanone	1.3 J	
1,1,1-Trichloroethane	<5.0	
Carbon tetrachloride	<5.0	
Bromodichloromethane	<5.0	
1,1,2,2-Tetrachloroethane	<5.0	
1,2-Dichloropropane	<5.0	
trans-1,3-Dichloropropene	<5.0	
Trichloroethene	<5.0	
Dibromochloromethane	<5.0	
1,1,2-Trichloroethane	<5.0	
Benzene	<5.0	
cis-1,3-Dichloropropene	<5.0	
Bromoform	<5.0	
2-Hexanone	<5.0	
4-Methyl-2-Pentanone	<5.0	
Tetrachloroethene	<5.0	
Toluene	<5.0	
Chlorobenzene	<5.0	
Ethylbenzene	<5.0	
Styrene	<5.0	
Total Xylenes	<5.0	

RECOVERY DATA QC LIMITS

1,2-Dichloroethane-d4 (Surrogate)	76-114%	106
Toluene-d8 (Surrogate)	88-110%	102
4-Bromofluorobenzene (Surrogate)	86-115%	100

J - Estimated Value Detected Below MDL

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. M. BLANK

Lab Name: Princeton Testing Lab US ARMY FORT MONMOUTH N.J.

Lab Code: PTL Case No.: 9500386 SAS No.: XXX SDG No.: XXX

Matrix: (Soil/Water) WATER Lab Sample ID: Lab blank

Sample wt/vol: 5.0 (g/mL)mL Lab File ID: CBLK202B

Level: (low/med) LOW Date Received: _____

%Moisture: not dec. _____ Date Analyzed: 02/02/95

GC Column: VOCOL ID: 0.53 mm Dilution Factor: 1

Soil Extract Vol. _____ ul Soil Aliquot Vol: _____ ul

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

#S	CAS NUMB	COMPOUND NAME	RT	EST. CONC.	SCAN

RIC
02/02/95 15:07:00

DATA: CBLK202B #1
CALI: CALTAB #3

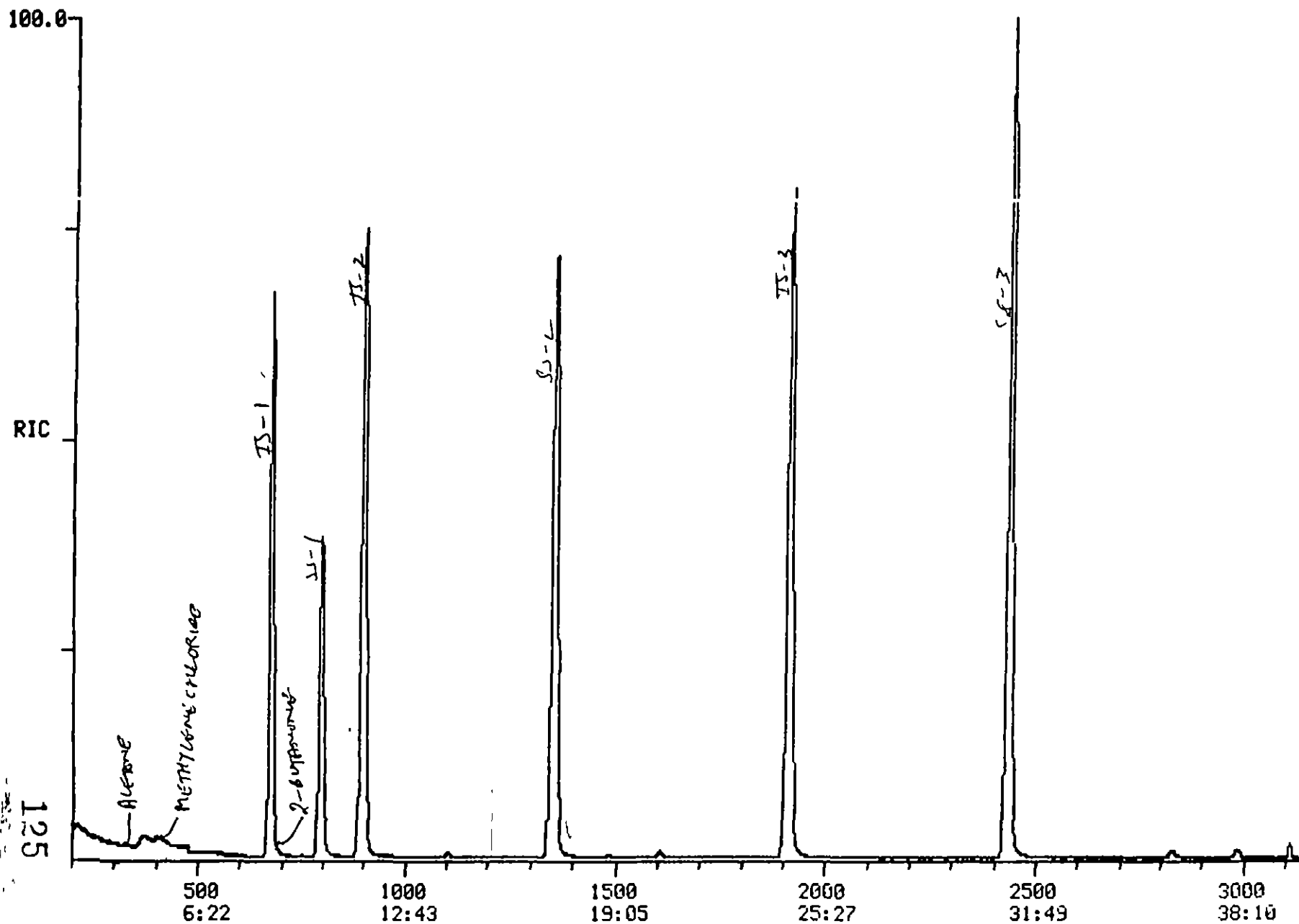
SCANS 200 TO 3151

SAMPLE: M.BLK

CONDS.: EPA METHOD 8240

RANGE: G 1.3151 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

177920.



Quantitation Report File CBLK202B

Data CBLK202B TI

2/02/95 15 07 00

Sample M BLK

Cond EPA METHOD 8240

Formula

Instrument FINN

Weight 0 000

Submitted by PTL

Analyst UC

Acct No

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD **
2	CI10 1,4-DIFLUOROBENZENE **INT STD **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S STD **
5	CS05 TOLUENE-D8 **S STD **
6	CS10 4-BROMOFLUOROBENZENE **S STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

No Name
 48 C250 O-XYLENE
 49 BENZENE-D6 **S STD **

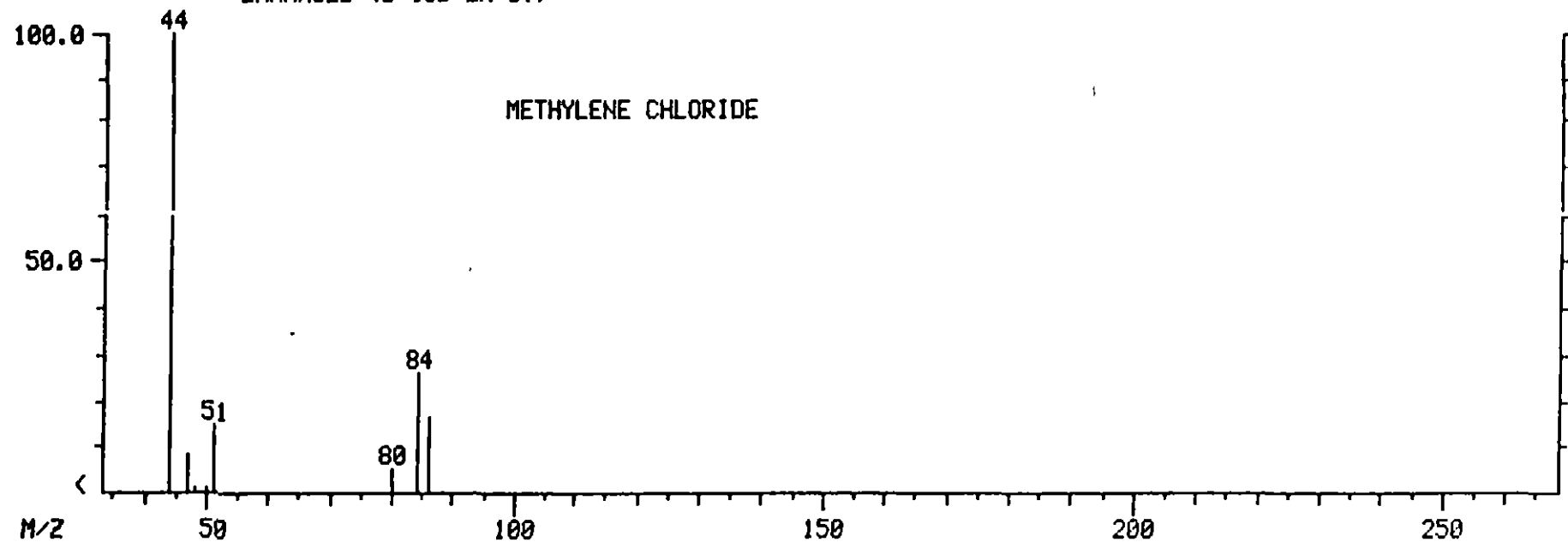
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	672	8 33	1	1 000	A BB	177645	50 000 NG	16 20
2	114	894	11 23	2	1 000	A BB	696116	50 000 NG	16 20
3	117	1911	24 19	3	1.000	A BB	575708	50.000 NG	16.20
4	65	794	10 06	1	1 182	A BB	265742	53 089 NG	17 20 ¹⁰⁶
5	98	1353	17 13	3	0 708	A BB	641668	50 900 NG	16.49 ¹⁰²
6	174	2432	30.57	3	1 273	A BB	418230	50 041 NG	16.22 ¹⁰⁰
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	49	412	5 15	1	0.613	A VB	4560	1.373 NG	0.45
12	NOT FOUND								
13	43	328	4 10	1	0 488	A BB	2414	1 329 NG	0 43
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	43	582	7 24	2	0.651	A BB	2460	1.324 NG	0.43
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	166	1608	20.28	3	0.841	A BB	4414	0.537 NG	0.17
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								

MASS SPECTRUM
02/02/95 15:07:00 + 5:15
SAMPLE: M.BLK
CONDS.: EPA METHOD 8240
TEMP: 47 DEG. C
ENHANCED (S 158 2N 0T)

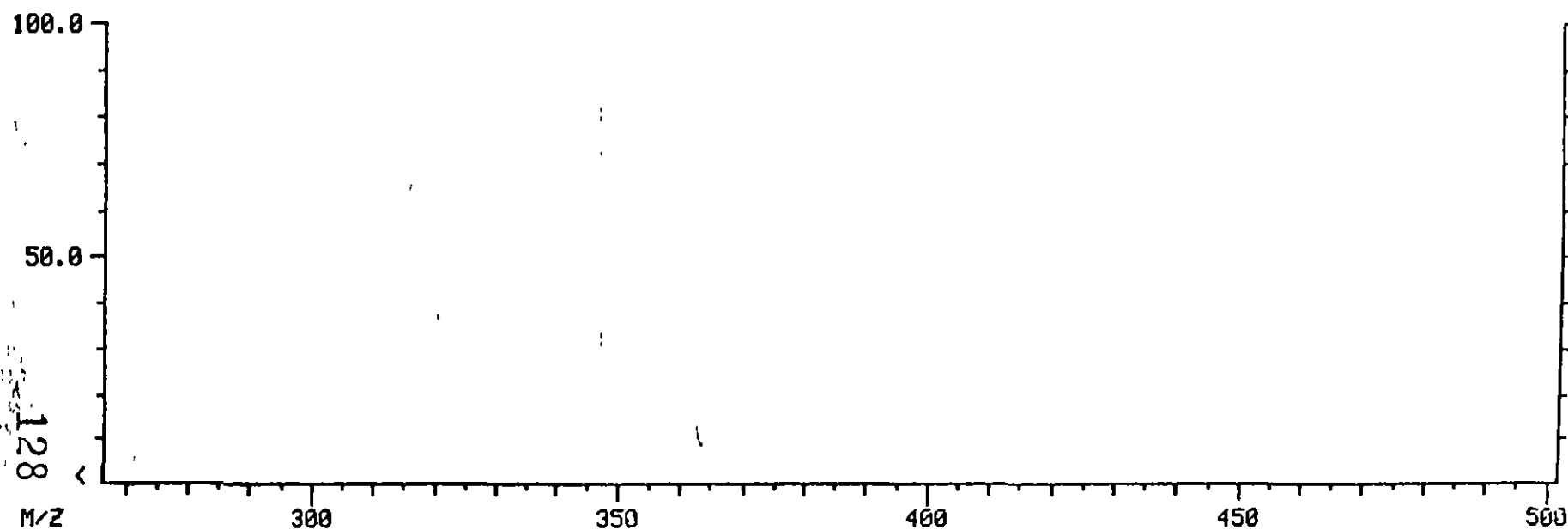
DATA: CBLK202B #412
CALI: CALTAB #3

BASE M/Z: 44
RIC: 974.

METHYLENE CHLORIDE



544.
0.

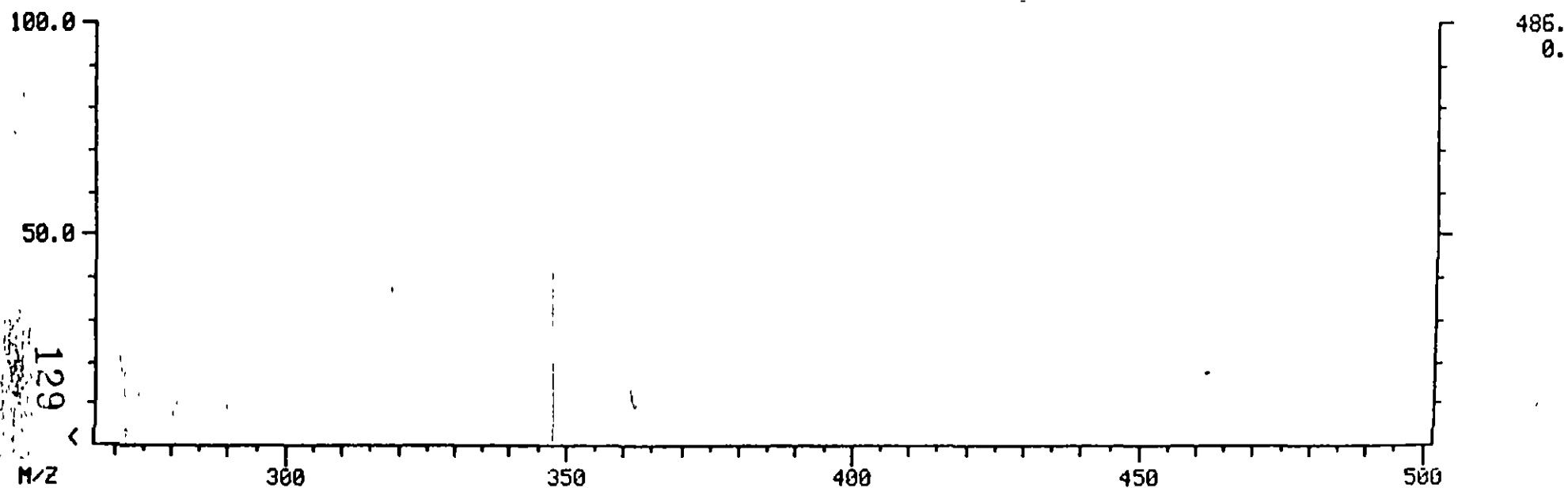
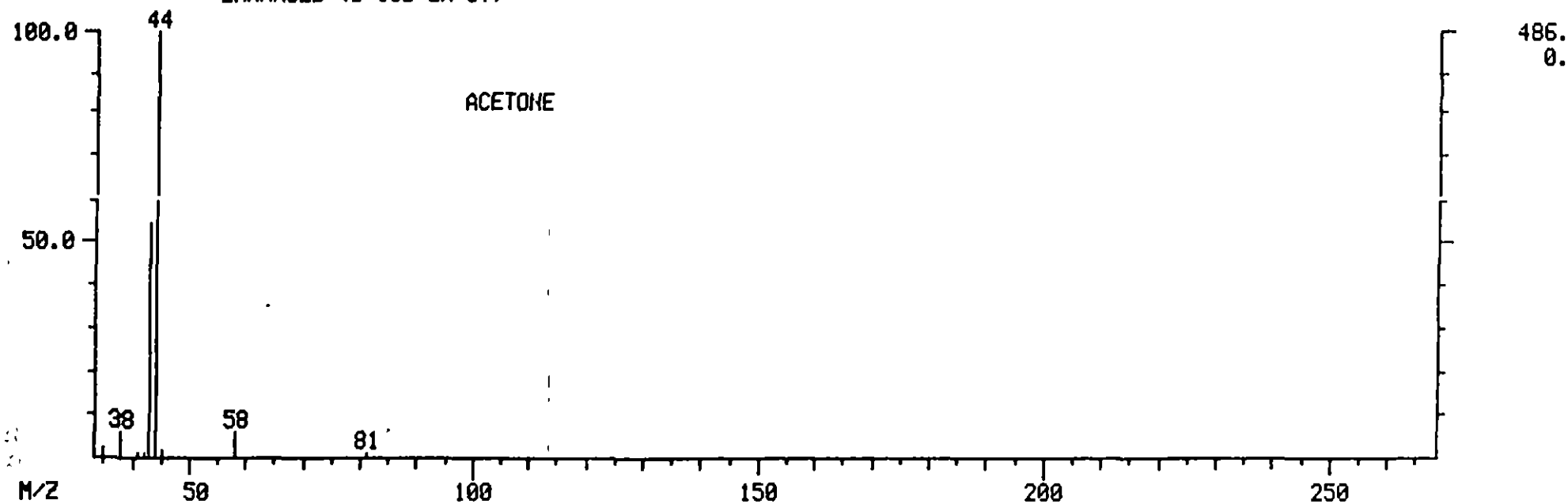


544.
0.

MASS SPECTRUM
02/02/95 15:07:00 + 4:10
SAMPLE: M.BLK
CONDS.: EPA METHOD 8240
TEMP: 44 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: CBLK202B #328
CALI: CALTAB #3

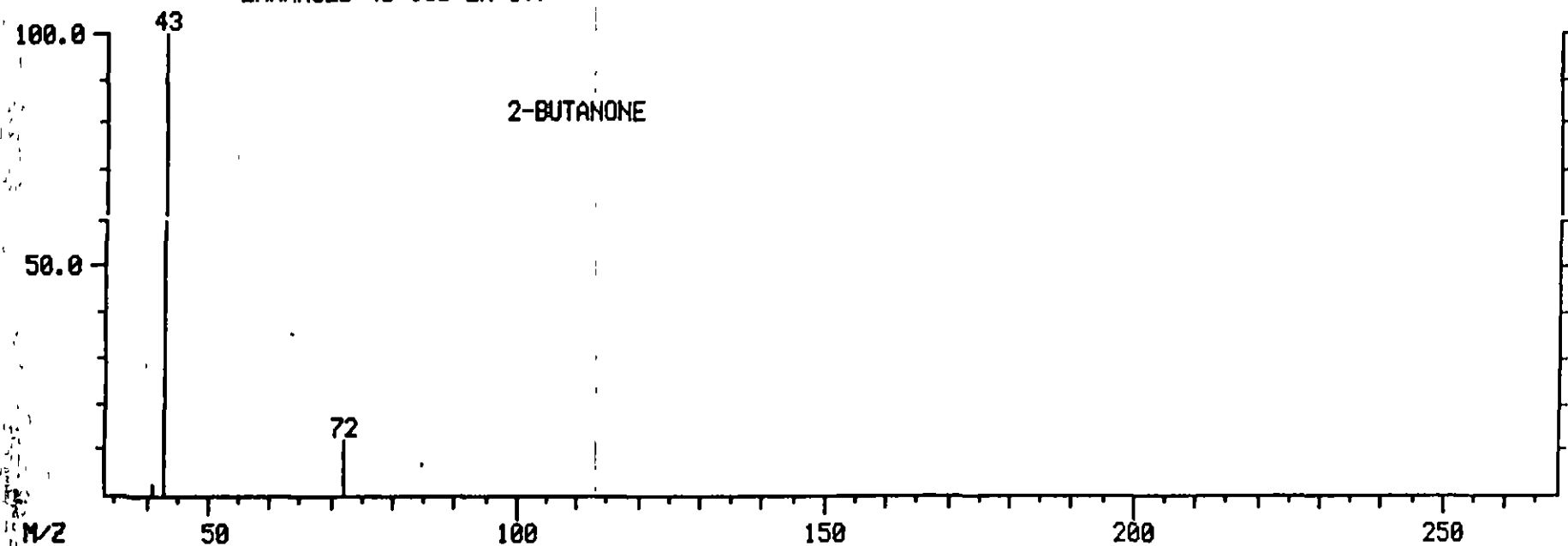
BASE M/Z: 44
RIC: 850.



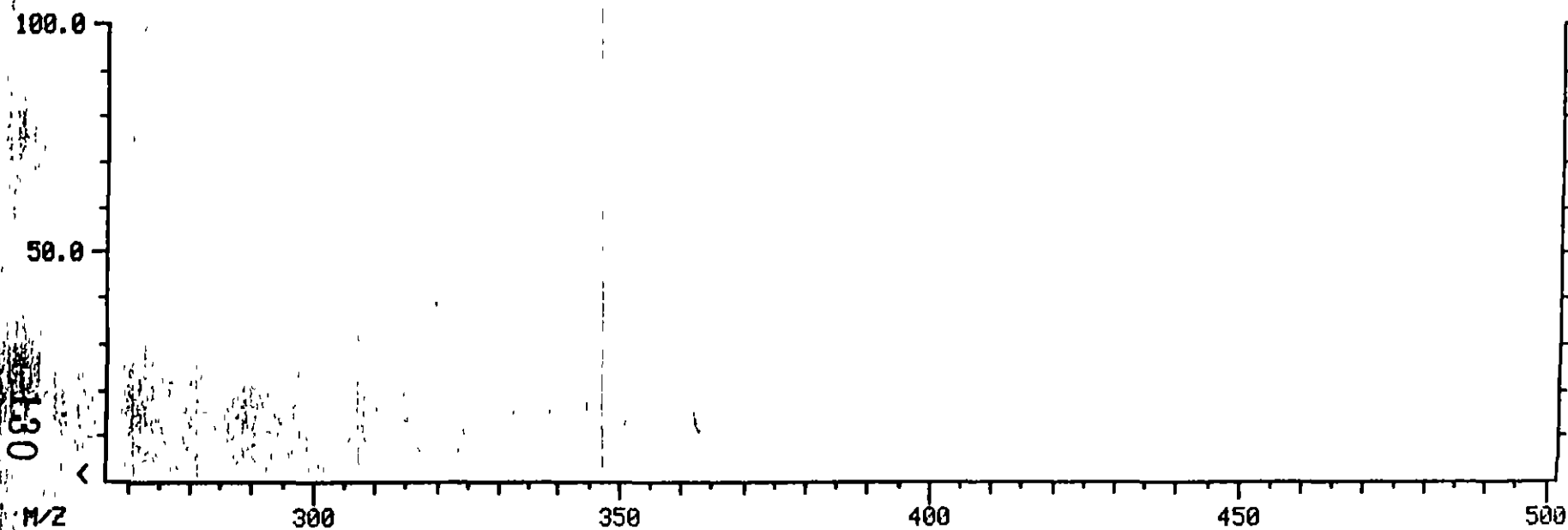
MASS SPECTRUM
02/02/95 15:07:00 + 7:24
SAMPLE: M.BLK
CONDS.: EPA METHOD 8240
TEMP: 51 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: CBLK202B #582
CALI: CALTAB #3

BASE M/Z: 43
RIC: 199.



174.
0.



174.
0.

DATA FILE CBLK202B

FILTER SCAN PARAMETERS

MAX NUMBER TICS 15
11-TABLE ENTRIES 539
SCAN TOLERANCE 1
MIN RIC HT [%] 10
FIRST SCAN 350
LAST SCAN 3168
TIC THRESHOLD 600

METHOD LIBRARY & LISTS

TIC I S. LIBRARY LIBRARYLS
NBS SEARCH PROC SERLIB
PEAK FINDER PROC VOME
TCA I S LL LS
FILE NAME LIST TCAREF2

TARGET COMPOUND ANALYSIS

TARGETS
(GUAN LIST)
7

IS
PEAKS
3

TOTAL TARGET
PEAKS
10

FILTER PROCESSING

<-----REJECT PEAKS----->
TOTAL < 1ST > LAST < MIN < SCAN > MAX # TOTAL TOTAL
PEAKS SCAN SCAN RIC HT TOL PEAKS REJECTS TICS
6 0 0 0 6 0 6 0

NO UNKNOWN PEAKS TO BE IDENTIFIED

RIC

02/02/95 12:31:00

SAMPLE: 9500365-001-02 1785.2 SITE B M5

CONDS.: EPA METHOD 8240

RANGE: G 1.3151 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

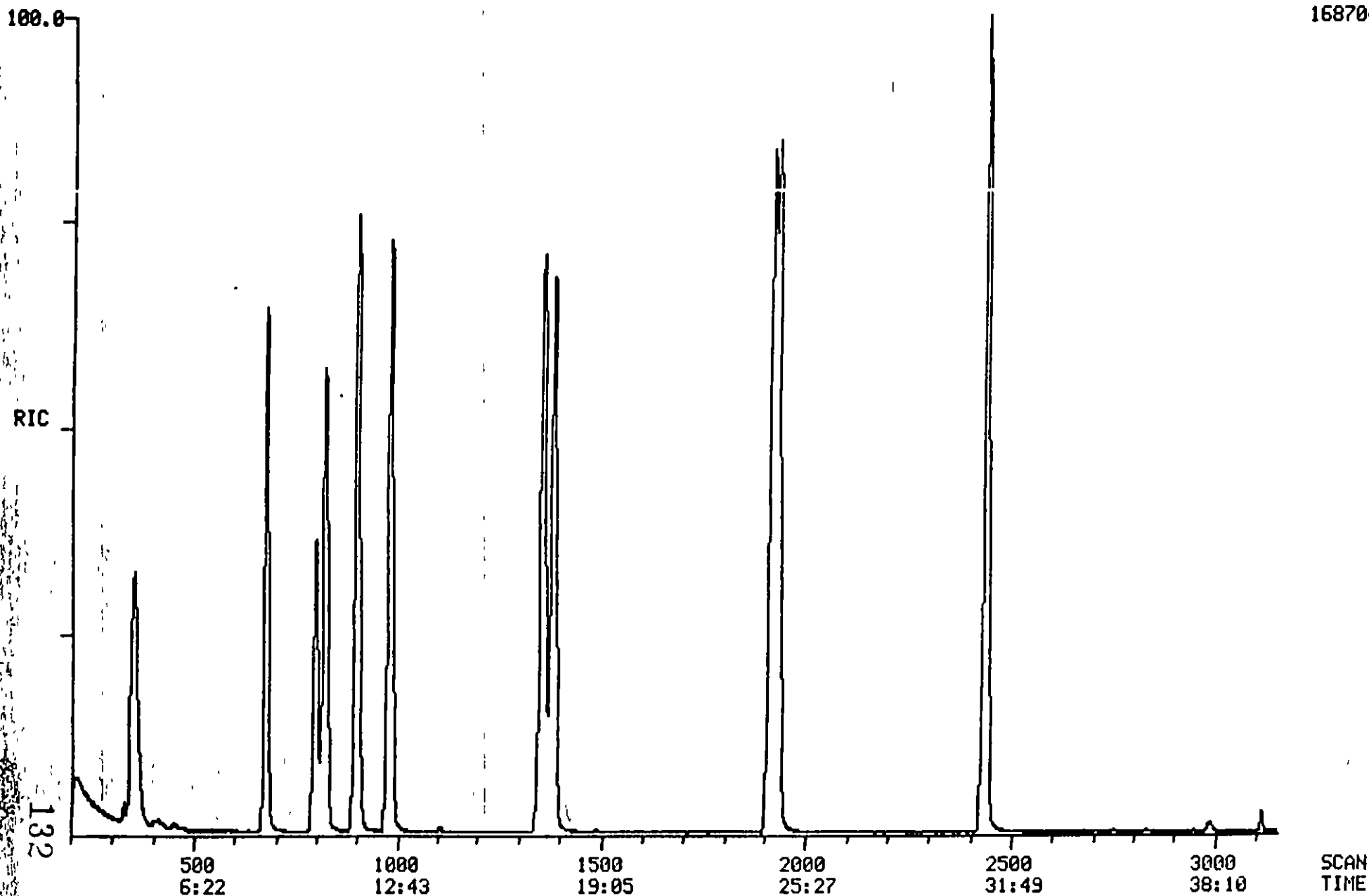
DATA: C9995 #1

CALI: CALTAB #3

SCANS 200 TO 3151

9

168704.



Quantitation Report File C9995

Data C9995 TI

02/02/95 12 31.00

Sample 9500365-001-02 1785.2 SITE B MS

Conds EPA METHOD 8240

Formula 2.5G/5ML

Instrument FINN

Weight 0.000

Submitted by USARMY

Analyst UC

Acct No 365-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No Name

1	CI01	BROMOCHLOROMETHANE	**INT. STD **
2	CI10	1,4-DIFLUOROBENZENE	**INT STD. **
3	CI20	CHLOROBENZENE-D5	**INT STD **
4	CS15	1,2-DICHLOROETHANE-D4	**S. STD **
5	CS05	TOLUENE-DB	**S. STD. **
6	CS10	4-BROMOFLUOROBENZENE	**S STD **
7	CO10	CHLOROMETHANE	**
8	CO15	BROMOMETHANE	
9	CO20	VINYL CHLORIDE	*
10	CO25	CHLOROETHANE	
11	CO30	METHYLENE CHLORIDE	
12	C251	ACROLIN	
13	CO35	ACETONE	
14	C252	ACRYLONITRILE	
15	CO40	CARBON DISULFIDE	
16	CO45	1,1-DICHLOROETHENE	*
17	CO50	1,1-DICHLOROETHANE	**
18	CO55	TRANS-1,2-DICHLOROETHENE	
19	CO00	TRICHLOROFLUOROMETHANE	
20	CO60	CHLOROFORM	*
21	CO65	1,2-DICHLOROETHANE	
22	C110	2-BUTANONE	
23	C115	1,1,1-TRICHLOROETHANE	
24	C120	CARBON TETRACHLORIDE	
25	C125	VINYL ACETATE	
26	C130	BROMO DICHLOROMETHANE	
27	C140	1,2-DICHLOROPROPANE	*
28	C145	TRANS-1,3 DICHLOROPROPENE	
29	C150	TRICHLOROETHENE	
30	C155	DIBROMOCHLOROMETHANE	
31	C160	1,1,2-TRICHLOROETHANE	
32	C165	BENZENE	
33	C143	CIS-1,3-DICHLOROPROPENE	
34	C175	2-CHLOROETHYL VINYL ETHER	
35	C180	BROMOFORM	**
36	C220	TETRACHLOROETHENE	
37	C210	2-HEXANONE	
38	C205	4-METHYL 2-PENTANONE	
39	C225	1,1,2,2-TETRACHLOROETHANE	**
40	C230	TOLUENE	*
41	C235	CHLOROBENZENE	**
42	C240	ETHYL BENZENE	*
43	C245	STYRENE	
44	C250	M+P-XYLENES	
45	C253	1,3-DICHLOROBENZENE	
46	C254	1,4-DICHLOROBENZENE	
47	C255	1,2-DICHLOROBENZENE	

9445-

No Name
48 C250 O-XYLENE
49 BENZENE-D6 ***S STD **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	673	8:34	1	1.000	A BB	158627	50 000 NG	9.05
2	114	896	11:24	2	1.000	A BB	661019	50 000 NG	9.05
3	117	1912	24:20	3	1.000	A BB	553988.	50 000 NG	9.05
4	65	795	10:07	1	1.181	A BB	243959	110 55.145 NG	9.98
5	98	1353	17:13	3	0.708	A BB	592260	97 48 047 NG	8.70
6	174	2433	30:57	3	1.272	A BB	388334.	86 43 948 NG	7.95
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	49	412	5:15	1	0.612	A VB	5133	1.771 NG	0.32
12	NOT FOUND								
13	43	329	4:11	1	0.489	A BB	22941.	12.387 NG	2.24
14	NOT FOUND								
15	NOT FOUND								
16	96	350	4:27	1	0.520	A BB	153451	41 886 NG	7.58
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	95	977	12:26	2	1.090	A BB	243783.	50 677 NG	9.17
30	NOT FOUND								
31	NOT FOUND								
32	78	817	10:24	2	0.912	A BB	506671	49.415 NG	8.94
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	91	1380	17:34	3	0.722	A BB	608472	46.393 NG	8.40
41	112	1927	24:31	3	1.008	A BB	550253.	52.852 NG	9.57
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								

RIC

02/02/95 13:23:00

SAMPLE: 9000365-001-02 1785.2 SITE B MSD

CONDS.: EPA METHOD 8240

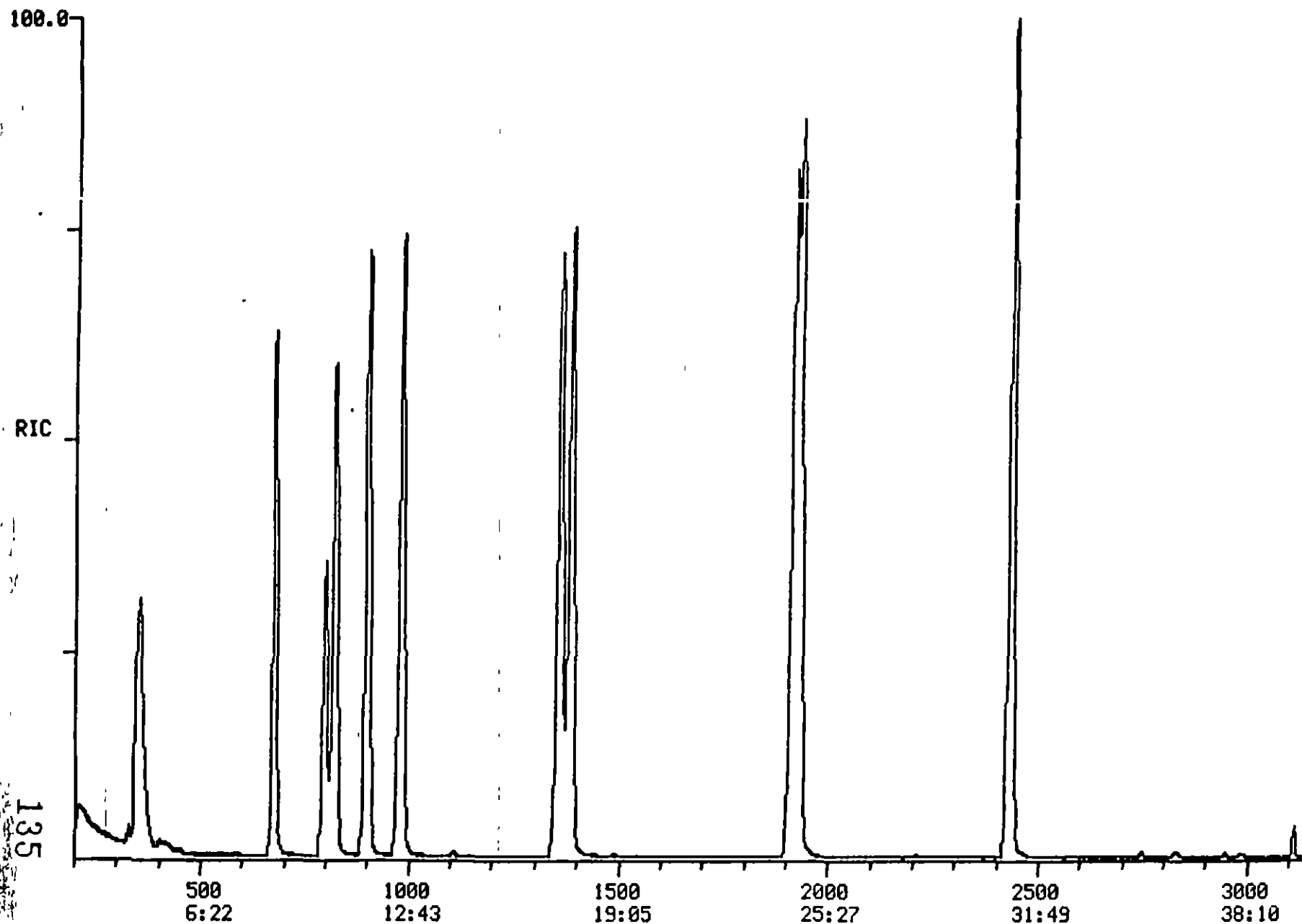
RANGE: G 1.3151 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: C9996 #1

CALI: CALTAB #3

SCANS 200 TO 3151

171008.



Quantitation Report File C9996

Data C9996 TI

02/02/95 13.23.00

Sample 9000365-001-02 1785 2 SITE B MSD

Conds EPA METHOD 8240

Formula 2 5G/5ML

Submitted by USARMY

Instrument FINN

Analyst UC

Weight 0.000

Acct No. 365-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp fac from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT STD.**
2	CI10 1,4-DIFLUOROBENZENE **INT. STD **
3	CI20 CHLOROBENZENE-D5 **INT STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S. STD **
5	CS05 TOLUENE-D8 **S. STD **
6	CS10 4-BROMOFLUOROBENZENE **S. STD **
7	CO10 CHLOROMETHANE **
8	CO15 BROMOMETHANE
9	CO20 VINYL CHLORIDE *
10	CO25 CHLOROETHANE
11	CO30 METHYLENE CHLORIDE
12	C251 ACROLIN
13	CO35 ACETONE
14	C252 ACRYLONITRILE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO00 TRICHLOROFLUOROMETHANE
20	CO60 CHLOROFORM *
21	CO65 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROENZENE
46	C254 1,4-DICHLOROENZENE
47	C255 1,2-DICHLOROENZENE

1999/

No Name
48 C250 O-XYLENE
49 BENZENE-D6 **S. STD. **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	674	8:35	1	1 000	A BB	158985.	50.000 NG	8.77
2	114	897	11:25	2	1 000	A BB	644052.	50.000 NG	8.77
3	117	1912	24:20	3	1 000	A BB	549448	50.000 NG	8.77
4	65	796	10:08	1	1 181	A BB	241615	54.492 NG	9.55
5	98	1355	17:14	3	0 709	A BB	612876	50.131 NG	8.79
6	174	2430	30:55	3	1 271	A BB	390762	44.588 NG	7.82
7	NOT	FOUND							
8	NOT	FOUND							
9	NOT	FOUND							
10	NOT	FOUND							
11	49	413	5:15	1	0 613	A VB	4994.	1.719 NG	0.30
12	NOT	FOUND							
13	43	329	4:11	1	0 488	A BB	20846	11.231 NG	1.97
14	NOT	FOUND							
15	NOT	FOUND							
16	96	351	4:28	1	0 521	A BB	154095	41.967 NG	7.36
17	NOT	FOUND							
18	NOT	FOUND							
19	NOT	FOUND							
20	NOT	FOUND							
21	NOT	FOUND							
22	43	583	7:25	2	0 650	A BB	2416.	1.472 NG	0.26
23	NOT	FOUND							
24	NOT	FOUND							
25	NOT	FOUND							
26	NOT	FOUND							
27	NOT	FOUND							
28	NOT	FOUND							
29	95	979	12:27	2	1.091	A BB	261882.	55.874 NG	9.80
30	NOT	FOUND							
31	NOT	FOUND							
32	78	819	10:25	2	0 913	A BB	535522	53.605 NG	9.40
33	NOT	FOUND							
34	NOT	FOUND							
35	NOT	FOUND							
36	NOT	FOUND							
37	NOT	FOUND							
38	NOT	FOUND							
39	NOT	FOUND							
40	91	1381	17:34	3	0.722	A BB	657236.	50.525 NG	8.86
41	112	1927	24:31	3	1.008	A BB	566232.	54.836 NG	9.61
42	NOT	FOUND							
43	NOT	FOUND							
44	NOT	FOUND							
45	NOT	FOUND							
46	NOT	FOUND							
47	NOT	FOUND							
48	NOT	FOUND							
49	NOT	FOUND							