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February 22, 1996
Project 20H93-001.06

Mr. Jim Ross
Section Chief - Site Cleanup Unit
California Regional Water Quality Control Board
Los Angeles Region
101 Centre Plaza Drive
Monterey Park, California 91754-2156

Re: File No. 95-066: Fourth Quarter Progress Report 1995
The Dial Corp. Main Facility and South Parking Lot
9300 and 9400 Rayo Avenue
South Gate, California

Dear Mr. Ross:

This letter report presents the results of semiannual groundwater sampling conducted in the fourth quarter of 1995 and the progress of vapor extraction activities at the Dial Corp. (Dial) former Main Facility at 9300 Rayo Avenue, South Gate, California. Further, this letter presents the progress and status of further assessment activities at the former Dial South Parking Lot site located due south of the Main Facility at 9400 Rayo Avenue in South Gate (Figure 1). Additional site assessment at the South Parking Lot was requested by the California Regional Water Quality Control Board (RWQCB) in a letter to Dial dated October 19, 1995. The semiannual groundwater sampling program and vapor extraction activities were initiated voluntarily by Dial.

BACKGROUND

The Main Facility was formerly used for soap and bleach manufacturing by the Purex Corporation, then later by Dial. The facility was operational from the 1930s until December 1991. Since early 1992, site assessment and remedial activities have been undertaken by EMCON on behalf of Dial, in an effort to prepare the property for sale. Dial initiated a Phase I Assessment to identify areas of concern where past activities could have impacted subsurface soil (Phase One, November 1991). Three subsequent phases of assessment (EMCON, August 5, 1992; April 9, 1993) have been conducted to assess former waste management units, process and storage areas, and former underground storage tanks. Low concentrations of aromatic hydrocarbon compounds (BTEX) and halogenated volatile organic compounds (VOCs) have been reported in wells located downgradient of two former underground storage tanks (USTs) that were next to a former maintenance garage in the central portion of the property. Soil vapor extraction (SVE) was initiated in late January 1995 to remediate petroleum hydrocarbon and VOC-impacted soil in this area.

The South Parking Lot site was closed at the same time as the Main Facility in 1991. The Pacific Cast Iron Fittings Company (Pacific) occupied the site beginning sometime in the early 1930s before Dial converted the property to a parking lot. The Pacific facility contained foundry, molding, and pattern shop areas. Assessment activities conducted in 1992 and 1993 identified petroleum hydrocarbon impacted soils in the area of a well MW-8 and the former cleaning room of the Pacific facility (EMCON, July 31, and November 18, 1992). A remedial action plan (RAP) to remove these soils by excavation was forwarded to the Los Angeles County Fire Department in September 1993. To date the RAP has not been implemented, but has received verbal approval from the RWQCB. We will proceed upon completion of further assessment scheduled for completion in late December 1995.

In a letter dated July 7, 1995, the RWQCB agreed to oversee closure of environmental issues for both soil and groundwater at the former Dial Main Facility and South Parking Lot. Under a voluntary cleanup contract with Dial, the RWQCB began reviewing site assessment data for both sites in July 1995. Following their review (RWQCB October 19, 1995) of the South Parking Lot data, they concluded that additional assessment was required before closure of soil and groundwater could be granted. The additional assessment program consisting of 11 shallow exploratory soil borings and vapor sampling of three vapor extraction wells was initiated on December 12, 1995. The results of the assessment program have been received and a report will be submitted to the RWQCB in early January 1996. Review of the Dial Main Area assessment and groundwater monitoring data has not been completed by the RWQCB to date.

Groundwater Assessment

The former Main Facility and South Parking Lot are located within the Central Ground Water Basin (Central Basin) of the Los Angeles Coastal Plain. Recognized aquifers include the Exposition and Gage Aquifers of the Lakewood Formation; and the Jefferson, Lynwood, and Silverado Aquifers of the San Pedro Formation (DWR, 1988). According to the Los Angeles County Department of Public Works (LACDPW), Hydrologic Records Division, the nearest water well is located approximately 1/4-mile east of the Main Facility (well 1525G) across the Los Angeles river and south of Firestone Boulevard, where the ground surface elevation is 102.5 feet above mean sea level (MSL). The depth to water in well 1525G measured on May 15, 1995 was 80 feet below ground surface (bgs), at an elevation of approximately 22.5 feet MSL. Groundwater at this elevation would be contained within the uppermost portion of the Exposition aquifer. The top of the Exposition Aquifer is estimated to occur at a depth of approximately 80 feet bgs (DWR, 1961).

A total of ten (10) groundwater monitoring wells (MW-1 through MW-10) have been installed at locations either on or adjacent to the Main Facility (Figure 2). Wells MW-1

through MW-3 were installed on-site near the perimeter of the Main Facility. Wells MW-4 and MW-5 were installed off-site and are situated hydrologically cross-gradient from well MW-3 to assess a suspected off-site source of VOCs. On-site wells MW-6 and MW-7 were installed downgradient from a former underground storage tank (UST) that was located near the old garage adjacent to Building 2. Wells MW-8, MW-9, and MW-10 were installed in the South Parking Lot to assess on-site groundwater conditions and a suspected upgradient source of VOCs. Well completion details for these monitoring wells are presented in Table 1.

During the initial sampling event in September 1992, groundwater samples collected from wells MW-6 and MW-7 contained benzene concentrations of 5.8 and 10 ug/L, respectively (Table 2). Benzene was not reported in groundwater samples collected from upgradient well MW-1 or downgradient well MW-2, and VOCs were not reported (<5 ug/L) in groundwater samples collected from wells MW-1, MW-2, MW-6 and MW-7 (Table 2). Based on these results, Dial initiated semi-annual monitoring of wells MW-1, MW-2, MW-6, and MW-7 (EMCON, November 16, 1993).

Because of a suspected off-site source of VOCs, groundwater monitoring wells MW-3, MW-4, MW-5, MW-8, MW-9, and MW-10 have been excluded from the semiannual monitoring program (Table 2). Wells MW-3, MW-4, and MW-5 are situated cross- and upgradient from wells MW-6 and MW-7 and have historically contained VOC concentrations above those reported in groundwater samples collected from onsite wells (Figure 2). Wells MW-8 and MW-10 are located downgradient of the Main Facility and show a similar pattern of elevated VOC concentrations. In addition, VOCs were not reported above method reporting limits in soil samples collected from 26 soil borings drilled in the former South Parking Lot. Monitoring well MW-9 was installed in a perched aquifer and has been dry during subsequent monitoring events.

SEMI-ANNUAL GROUNDWATER MONITORING RESULTS

On December 6, 1995, monitoring wells MW-1 through MW-10 were gauged, and semiannual groundwater samples were collected from wells MW-1, MW-2, MW-6, and MW-7. The groundwater monitoring and sampling procedures, analytical methods, and field data sheets are presented in Attachment 1. Certified analytical laboratory reports and chain-of-custody documentation are included in Attachment 2.

Groundwater levels were measured prior to sample collection. The depths to groundwater measured in wells MW-1 through MW-8, and MW-10 ranged from approximately 45 to 48 feet bgs and have increased since the second quarter 1995 monitoring event by an average of 1.21 feet. The maximum groundwater elevation increase was 1.28 feet measured in wells MW-1 and MW-10; the minimum increase was

1.12 feet measured in well MW-8 (Table 2). Monitoring well MW-9 was installed in a locally perched aquifer and was found to be dry.

The increase in water-levels measured in monitoring wells screened within the semi-perched aquifer located above the Exposition Aquifer may be attributed to seasonal groundwater fluctuations and/or a reduction in basinwide groundwater extraction. The groundwater flow direction and the gradient showed no significant changes since the last quarterly sampling event. Based on groundwater levels measured in monitoring wells groundwater flows to the south at a gradient of approximately 0.002 ft/ft (Figure 2).

Groundwater samples were collected from on-site monitoring wells MW-1, MW-2, MW-6, and MW-7 and were analyzed for total petroleum hydrocarbons (TPH) and VOCs by U.S. EPA Methods 8015 modified and 8260, respectively.

TPH concentrations of 0.11 and 0.33 mg/L were reported for groundwater samples collected from wells MW-6 and MW-7, respectively (Table 2). Benzene was detected in groundwater samples at a concentrations of 17 µg/L in well MW-6 and at 65 µg/L in well MW-7. TPH, BTEX and VOCs were not reported at concentrations above the MRLs in samples from wells MW-1 and MW-2 (Table 2).

VOCs, including 1,1-dichloroethane (1,1-DCA, 0.5 ug/L) and 1,2-dichloroethane (1,2-DCA, 0.6 ug/L) were reported in the groundwater sample from well MW-6 centrally located on the Main Facility property. The groundwater sample from well MW-7, located downgradient of the former USTs adjacent to the Main Area Garage, contained 1,1-DCA (1.7 ug/L), 1,2-DCA (1.1 ug/L), trichoroethyene (TCE, 0.9 ug/L) and 1,2-dichloropropane (1,2-DCP, 1.2 ug/L) (Table 2). The groundwater sample from well MW-7 also contained 1.0 ug/L of cis-1,10 dichloroethene (1,1-DCE), which is a daughter product of TCE in anaerobic environments.

SOIL VAPOR EXTRACTION: MAIN AREA - FORMER GARAGE FACILITY

Three phases of site assessment activity have been conducted in the area of the former USTs and the old garage near Building 2 (Figure 2) (EMCON, August 5, 1992; April 9, 1993). Thirteen exploratory soil borings (B5, B26-B28, B44-B50, MW-6 and MW-7) were drilled to depths of approximately 50 to 75 feet bgs in these areas to assess the lateral and vertical extent of petroleum hydrocarbons and VOCs. TPH was detected at concentrations up to 13,000 mg/kg in soil samples collected from these borings at depths between 10 and 40 feet bgs in the area of the old garage. In addition, 1,2-DCA and chloroform were reported at concentrations up to 290 and 360 ug/kg, respectively, in soil samples collected at depths between 10 and 50 feet bgs (EMCON, April 9, 1993). Seven of the 13 exploratory borings drilled in the area of the old garage were converted

to vapor extraction wells (VW-1 through VW-7) and vapor extraction well nests (Figure 2).

Dial voluntarily initiated remedial activities to mitigate BTEX- and VOC-impacted soil in the area of the old garage using the network of seven vapor extraction wells. A soil vapor extraction test (VET) was initially implemented from October to December, 1993. By the end of the VET, approximately 12,848 pounds of hydrocarbons had been removed using an internal combustion engine as the emissions control device. The influent hydrocarbon concentration to the emissions control equipment dropped from 36,000 parts per million by volume (ppmv) in September to 4,200 ppmv in November, 1993. VOCs were not reported above method reporting limits in the influent samples collected during operation of the vapor extraction system during this period.

The soil vapor extraction (SVE) program was restarted on January 26, 1995, using a Stealth Industries (SI 250) 250 scfm thermal/catalytic oxidizer. The system uses a network of above-ground conveyance piping connected to wells VW-1, VW-2, VW-3, VW-4 and VW-5. During the SVE program the vapor extraction wells have been cycled (periodically opened and closed) to induce oxygen into the subsurface and to maximize recovery of the hydrocarbons from the soil matrix.

During the period of February 2 through November 20, 1995, approximately 21,427 lbs. of total volatile hydrocarbons as gasoline (TVH) and approximately 106 lbs. of benzene were extracted from the wells and oxidized by the SI 250 unit in 6423 hours of operation. Halogenated VOCs, 1,2-DCA and Chloroform were only reported in the initial influent samples collected to the treatment system and have not been reported in samples collected during March, April, or May 1995. For a summary of the system mass removal data see Table 3, and for a graphical representation see Charts 1 and 2.

The remedial effort, including the internal combustion engine (ICE) operation in 1993 and the SI 250 operation, has removed 34,275 lbs. of TVH as gasoline. The highest TVH concentration (C_5-C_{12} range) recorded during the remedial efforts was 36,000 ppmv, and the latest TVH concentration was 460 ppmv. Benzene has not been reported in the past three (3) monthly influent samples to the thermal oxidizer, indicating the SVE program has reached its engineered efficiency.

DISCUSSION

Groundwater samples collected from wells MW-6 and MW-7 showed a slight decrease in benzene concentrations compared to the results of the previous sampling event during the second quarter of 1995 (April 14, 1995). This decreasing trend can probably be attributed to the SVE program and source removal in the area of the old garage. The benzene concentrations reported in the groundwater samples from wells MW-6 and

MW-7 are above State Maximum Contaminant Levels (MCLs) for a drinking water resource. Other aromatic compounds, toluene, ethylbenzene and xylenes were not reported at concentrations above MCLs (Table 2).

The VOC concentrations reported in groundwater samples from wells MW-6 and MW-7 showed no significant change from the results reported from previous sampling events. With the exception of 1,2 DCA, VOCs reported in the groundwater samples from these wells were not above State MCLs for drinking water. The concentrations of 1,2-DCA reported in wells MW-6 (0.6 ug/L) and MW-7 (1.1 ug/L) were slightly above the State MCL of 0.5 ug/L for a drinking water resource.

The recent SVE data collected in November 1995 follows an expected trend, with declining TVH concentrations and an absence of benzene in the extracted vapor. The absence of benzene in influent vapor samples collected in October and November 1995 and the declining TVH trend suggests that the remedial program has reached its peak efficiency in removing volatile hydrocarbon compounds from soil in the area of the former USTs and old garage. Periodic cycling of the extraction wells (opening and closing) over the life of the project has enhanced extraction efficiency and served to increase oxygen levels in the subsurface 10 to 15 ppmv. Based on a short term respirometry test in early December 1995, it appears that insitu biodegradation of hydrocarbons by indigenous bacteria is occurring. Increased levels of CO_2 and decreased levels of oxygen was measured in wells that have historically produced the highest vapor concentrations indicate that hydrocarbons are being degraded. Wells that have historically produced low vapor concentrations showed no significant change in oxygen consumption or CO_2 production. Given the absence of benzene in the oxtuacred vapor, the steady decreasing concentrations of volatile hydrocarbons in the SVE wells and the corresponding indication that the SVE program will be shutdown in late December 1995 and a confirmatory sampling program will be proposed in the first quarter of 1996.

WORK TO PERFORMED NEXT QUARTER

- The Main facility and South Parking Lot groundwater monitoring wells will be gauged.
- The first quarter groundwater monitoring report will be prepared.
- The assessment report for the work performed in December 1995 at the South Parking Lot will be forwarded to the RWQCB for review.
- The remedial action program to remove the residual hydrocarbon-impacted soils in the area of the former Pacific facility cleaning room will be completed and a

report will be forwarded to the RWQCB for review. Closure will be requested given the results of the remedial action program.

- EMCON will forward a confirmatory boring plan to the RWQCB for review and approval to close the SVE program in the area of the old garage on the former Main facility.

The next semiannual groundwater sampling event is scheduled to occur during the second quarter of 1996. This letter report was prepared consistent with current and generally accepted environmental consulting practices that are within the limitations described in Attachment 3. If you have any questions regarding this progress report, please contact us at (818) 841-1160.

Sincerely,

EMCON

Mark Kuncir
Staff Geologist

Michael E. Flack, R.G. #5473
Project Manager

Attachments: References
Table 1 - Well Completion Details
Table 2 - Summary of Groundwater Analytical Results
Table 3 - Benzene and TVH Gasoline Mass Removal Data
Figure 1 - Site Location Map
Figure 2 - Groundwater Contour Map, December 1995
Chart 1 - TVH Concentration & Mass Removal vs. Operating Hours
Chart 2 - Benzene Concentration & Mass Removal vs. Operating Hours
Attachment 1 - Groundwater Sampling and Gauging Procedures and Field Data Sheets and Analytical Methods
Attachment 2- Certified Analytical Laboratory Reports and Chain-of-Custody Documentation
Attachment 3 Limitations

cc: Mr. Michael Cavanaugh - The Dial Corp
Ms. Jenny Au, California Regional Water Quality Control Board - Los Angeles Region

REFERENCES

DWR, April 1988, Planned Utilization of Groundwater Resources of The Central Plain of Los Angeles County - Bulletin 104 Groundwater Hydrogeology: Department of Water Resources, Sacramento, California.

EMCON, July 31, 1992, Phase II and III Site Assessment Report, South Parking Lot at 9400 Rayo Avenue, South Gate, California. EMCON Associates, Burbank California.

EMCON, August 5, 1992, Phase II and III Subsurface Assessment Report - Main Facility: The Dial Corporation, 9300 Rayo Avenue, South Gate, California: EMCON Associates, Burbank, California.

EMCON, November 18, 1992, Phase IV Site Assessment Report, Dial South Parking Lot, 9400 Rayo Avenue, South Gate, California. EMCON Associates, Burbank California.

EMCON, April 9, 1993, Phase IV Site Assessment Report, The Dial Corporation, Main Facility, 9300 Rayo Avenue, South Gate, California. EMCON Associates, Burbank California.

EMCON, July 6, 1993, Notification of Impacted Groundwater, The Dial Corporation, Main Facility at 9300 Rayo Avenue, South Gate, California. EMCON Associates, Burbank California.

EMCON, November 16, 1993, Semi-Annual Groundwater Sampling and Analysis, The Dial Corporation, 9300 Rayo Avenue, South Gate, California. EMCON Associates, Burbank California.

LACDPW, April 1990; Hydrologic Report 1988-89, Los Angeles Department of Public Works.

Phase One, November, 1991, Phase I Environmental Assessment for the Dial Corporation: Phase One Incorporated.

TABLES

Project H93-001.05

Table 1
Well Completion Details
Dial Corporation
9300 Rayo Avenue, South Gate, California
Los Angeles

Well Number	MW-1	MW-2	MW-3	MW-4	MW-5
Date Installed	4/3/92	4/2/92	4/3/92	6/4/92	6/4/92
Well Permit	129589	129589	129589	verbal *	verbal *
Casing Material		Sch 40 PVC	Sch 40 PVC	Sch 40 PVC	Sch 40 PVC
Well Box Style	EMCO-Wheaton	EMCO-Wheaton	EMCO-Wheaton	EMCO-Wheaton	EMCO-Wheaton
A. Boring Diameter (inches)	10	10	10	10	10
B. Casing Diameter (inches)	4	4	4	4	4
C. Total Depth of Boring (feet)	65.5	70.5	72.0	76.0	75.0
D. Total Depth of Well (feet)	64.7	69.7	71.0	76.0	70.1
E. Top of Casing Elevation (feet)	107.69	105.65	107.24	106.39	109.71
F. Top of Well Box Elevation (feet)	108.11	105.92	107.95	106.95	110.14
G. Perforated Interval					
Perforation Size (inches)	0.020	0.020	0.020	0.020	0.020
Perforation Type	machine slot	machine slot	machine slot	machine slot	machine slot
Depth of Bottom (feet)	64.1	69.1	70.5	75.4	69.5
H. Depth of Top (feet)	44.6	49.6	50.9	45.6	40.0
Length (feet)	19.5	19.5	19.6	29.8	29.5
I. Surface Seal					
Material	concrete	concrete	concrete	concrete	concrete
Depth of Bottom (feet)	2.0	2.0	2.0	2.7	1.3
Depth of Top (feet)	0.0	0.0	0.0	0.0	0.0
Thickness (feet)	2.0	2.0	2.0	2.7	1.3
J. Backfill-Seal(s)					
Material	bentonite	bentonite	bentonite	bentonite	bentonite
Depth of Bottom (feet)	42.0	47.0	47.2	44.0	38.0
Depth of Top (feet)	2.0	2.0	2.0	2.7	1.3
Thickness (feet)	40.0	45.0	45.2	41.3	36.7
K. Gravel Pack(s)					
Material	2/12 Lonestar	2/12 Lonestar	2/12 Lonestar	2/12 Lonestar	2/12 Lonestar
Depth to Bottom (feet)	64.7	69.7	71.0	76.0	70.1
Depth to Top (feet)	42.0	47.0	47.2	44.0	38.0
Thickness (feet)	22.7	22.7	23.8	32.0	32.1
L. Bottom Seal					
Material	native	native	native	- -	native
Depth of Bottom (feet)	65.5	70.5	72.0	- -	75.0
Depth of Top (feet)	64.7	69.7	71.0	- -	70.1
Thickness (feet)	0.8	0.8	1.0	- -	4.9

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Table 1
Well Completion Details
Dial Corporation
9300 Rayo Avenue, South Gate, California
Los Angeles

Well Number	MW-6		MW-7		MW-8	
Date Installed	8/19/92		8/19/92		8/19/92	
Well Permit	134051*		134051*		237706	
Casing Material	Sch 40 PVC		Sch 40 PVC		Sch 40 PVC	
Well Box Style	EMCO-Wheaton		EMCO-Wheaton		EMCO-Wheaton	
A. Boring Diameter (inches)	10.0		10.0		10.0	
B. Casing Diameter (inches)	4.0		4.0		4.0	
C. Total Depth of Boring (feet)	70.0		70.0		76.5	
D. Total Depth of Well (feet)	70.0		68.5		75.0	
E. Top of Casing Elevation (feet)	106.88		107.01		107.07	
F. Top of Well Box Elevation (feet)	107.40		107.43		107.34	
G. Perforated Interval						
Perforation Size (inches)	0.0		0.0		0.0	
Perforation Type	machine slot		machine slot		machine slot	
Depth of Bottom (feet)	69.4		68.1		75.0	
H. Depth of Top (feet)	44.8		43.5		45.0	
Length (feet)	24.6		24.6		30.0	
I. Surface Seal						
Material	concrete		concrete		concrete	
Depth of Bottom (feet)	3.0		1.8		2.0	
Depth of Top (feet)	0.0		0.0		0.0	
Thickness (feet)	3.0		1.8		2.0	
J. Backfill-Seal(s)						
Material	volclay grout	bentonite	volclay grout	bentonite	volclay grout	bentonite
Depth of Bottom (feet)	39.0	42.0	36.0	39.6	41.0	43.0
Depth of Top (feet)	3.0	39.0	3.0	36.0	2.0	41.0
Thickness (feet)	36.0	3.0	33.0	3.6	39.0	2.0
K. Gravel Pack(s)						
Material	2/12 Lonestar		2/12 Lonestar		No. 3 Lonestar	
Depth to Bottom (feet)	70.0		68.7		76.5	
Depth to Top (feet)	42.0		39.6		43.0	
Thickness (feet)	28.0		29.1		33.5	
L. Bottom Seal						
Material	--		native		--	
Depth of Bottom (feet)	--		70.0		--	
Depth of Top (feet)	--		68.7		--	
Thickness (feet)	--		1.3		--	

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Table 1
Well Completion Details
Dial Corporation
9300 Rayo Avenue, South Gate, California
Los Angeles

Well Number	MW-9	MW-10	VW-1
Date Installed	8/19/92	8/19/92	8/17/92
Well Permit	237706	237706	NA
Casing Material	Sch 40 PVC	Sch 40 PVC	Sch 40 PVC
Well Box Style	EMCO-Wheaton	EMCO-Wheaton	EMCO-Wheaton
A. Boring Diameter (inches)	10.0	10.0	10.0
B. Casing Diameter (inches)	4.0	4.0	4.0
C. Total Depth of Boring (feet)	41.5	76.5	51.0
D. Total Depth of Well (feet)	25.0	75.0	50.0
E. Top of Casing Elevation (feet)	107.35	107.25	NA
F. Top of Well Box Elevation (feet)	107.67	107.54	NA
G. Perforated Interval			
Perforation Size (inches)	0.0	0.0	0.02
Perforation Type	machine slot	machine slot	machine slot
Depth of Bottom (feet)	25.0	75.0	50.0
H. Depth of Top (feet)	5.0	45.0	5.0
Length (feet)	20.0	30.0	45.0
I. Surface Seal			
Material	concrete	concrete	concrete
Depth of Bottom (feet)	2.5	2.0	2.0
Depth of Top (feet)	0.0	0.0	0.0
Thickness (feet)	2.5	2.0	2.0
J. Backfill-Seal(s)			
Material	-- bentonite	volclay grout bentonite	bentonite
Depth of Bottom (feet)	-- 4.0	41.0 43.0	5.0
Depth of Top (feet)	-- 2.5	2.0 41.0	2.0
Thickness (feet)	-- 1.5	39.0 2.0	3.0
K. Gravel Pack(s)			
Material	No. 3 Lonestar	No. 3 Lonestar	2/12 Lonestar
Depth to Bottom (feet)	25.0	76.5	51.0
Depth to Top (feet)	4.0	43.0	5.0
Thickness (feet)	21.0	33.5	46.0
L. Bottom Seal			
Material	native	--	native
Depth of Bottom (feet)	41.5	--	51.0
Depth of Top (feet)	25.0	--	50.0
Thickness (feet)	16.5	--	1.0

Table 1
Well Completion Details
Dial Corporation
9300 Rayo Avenue, South Gate, California
Los Angeles

Well Number	VW-2		VW-3	
Date Installed	8/18/92		8/18/92	
Well Permit	NA		NA	
Casing Material	Sch 40 PVC		Sch 40 PVC	
Well Box Style	EMCO-Wheaton		EMCO-Wheaton	
A. Boring Diameter (inches)	10.0		10.0	
B. Casing Diameter (inches)	2.0		2.0	
C. Total Depth of Boring (feet)	51.0		51.0	
D. Total Depth of Well (feet)	50.0		50.0	
E. Top of Casing Elevation (feet)	NA		NA	
F. Top of Well Box Elevation (feet)	NA		NA	
G. Perforated Interval				
Perforation Size (inches)	0.02		0.02	
Perforation Type	machine slot		machine slot	
Depth of Bottom (feet)	35.0	50.0	35.0	50.0
H. Depth of Top (feet)	5.0	40.0	5.0	40.0
Length (feet)	30.0	10.0	30.0	10.0
I. Surface Seal				
Material	concrete		concrete	
Depth of Bottom (feet)	2.0		2.0	
Depth of Top (feet)	0.0		0.0	
Thickness (feet)	2.0		2.0	
J. Backfill-Seal(s)				
Material	bentonite		bentonite	
Depth of Bottom (feet)	5.0	40.0	5.0	40.0
Depth of Top (feet)	2.0	35.0	2.0	35.0
Thickness (feet)	3.0	5.0	3.0	5.0
K. Gravel Pack(s)				
Material	2/12 Lonestar		2/12 Lonestar	
Depth to Bottom (feet)	35.0	51.0	35.0	51.0
Depth to Top (feet)	5.0	40.0	5.0	40.0
Thickness (feet)	30.0	11.0	30.0	11.0
L. Bottom Seal				
Material	native		native	
Depth of Bottom (feet)	51.0		51.0	
Depth of Top (feet)	50.0		50.0	
Thickness (feet)	1.0		1.0	

QA/QC:_____

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Table 1
Well Completion Details
Dial Corporation
9300 Rayo Avenue, South Gate, California
Los Angeles

Well Number	VW-4		VW-5		VW-6
Date Installed	8/17/92		8/17/92		8/17/92
Well Permit	NA		NA		NA
Casing Material	Sch 40 PVC		Sch 40 PVC		Sch 40 PVC
Well Box Style	EMCO-Wheaton		EMCO-Wheaton		EMCO-Wheaton
A. Boring Diameter (inches)	10.0		10.0		10.0
B. Casing Diameter (inches)	2.0		2.0		4.0
C. Total Depth of Boring (feet)	51.0		51.0		51.0
D. Total Depth of Well (feet)	50.0		50.0		50.0
E. Top of Casing Elevation (feet)	NA		NA		NA
F. Top of Well Box Elevation (feet)	NA		NA		NA
G. Perforated Interval					
Perforation Size (inches)	0.02		0.02		0.02
Perforation Type	machine slot		machine slot		machine slot
Depth of Bottom (feet)	30.0	50.0	35.0	50.0	50.0
H. Depth of Top (feet)	5.0	35.0	5.0	40.0	5.0
Length (feet)	25.0	15.0	30.0	10.0	45.0
I. Surface Seal					
Material	concrete		concrete		concrete
Depth of Bottom (feet)	2.0		2.0		2.0
Depth of Top (feet)	0.0		0.0		0.0
Thickness (feet)	2.0		2.0		2.0
J. Backfill-Seal(s)					
Material	bentonite		bentonite		bentonite
Depth of Bottom (feet)	5.0	35.0	5.0	40.0	5.0
Depth of Top (feet)	2.0	30.0	2.0	35.0	2.0
Thickness (feet)	3.0	5.0	3.0	5.0	3.0
K. Gravel Pack(s)					
Material	2/12 Lonestar		2/12 Lonestar		2/12 Lonestar
Depth to Bottom (feet)	30.0	51.0	35.0	51.0	51.0
Depth to Top (feet)	5.0	35.0	5.0	40.0	5.0
Thickness (feet)	25.0	16.0	30.0	11.0	46.0
L. Bottom Seal					
Material	native		native		native
Depth of Bottom (feet)	51.0		51.0		51.0
Depth of Top (feet)	50.0		50.0		50.0
Thickness (feet)	1.0		1.0		1.0

Table 1
Well Completion Details
Dial Corporation
9300 Rayo Avenue, South Gate, California
Los Angeles

Well Number	VW-7		
Date Installed	8/17/92		
Well Permit	NA		
Casing Material	Sch 40 PVC		
Well Box Style	EMCO-Wheaton		
A. Boring Diameter (inches)	10.0		
B. Casing Diameter (inches)	2.0		
C. Total Depth of Boring (feet)	51.0		
D. Total Depth of Well (feet)	50.0		
E. Top of Casing Elevation (feet)	NA		
F. Top of Well Box Elevation (feet)	NA		
G. Perforated Interval			
Perforation Size (inches)	0.02		
Perforation Type	machine slot		
Depth of Bottom (feet)	15.0	30.0	50.0
H. Depth of Top (feet)	5.0	20.0	35.0
Length (feet)	10.0	10.0	15.0
I. Surface Seal			
Material	concrete		
Depth of Bottom (feet)	2.0		
Depth of Top (feet)	0.0		
Thickness (feet)	2.0		
J. Backfill-Seal(s)			
Material	bentonite		
Depth of Bottom (feet)	5.0	20.0	35.0
Depth of Top (feet)	2.0	15.0	30.0
Thickness (feet)	3.0	5.0	5.0
K. Gravel Pack(s)			
Material	2/12 Lonestar		
Depth to Bottom (feet)	15.0	30.0	51.0
Depth to Top (feet)	5.0	20.0	35.0
Thickness (feet)	10.0	10.0	16.0
L. Bottom Seal			
Material	native		
Depth of Bottom (feet)	51.0		
Depth of Top (feet)	50.0		
Thickness (feet)	1.0		

TABLE 2
Summary of Groundwater Analytical Results
The Dial Corporation
9300 Rayo Avenue, South Gate, California

Well No. and Elevation (ft-MSL)	Date Sampled	Depth to Water (feet)	Groundwater Elevation (ft-MSL)	Total Petroleum Hydrocarbons (1) (mg/L)	Benzene (2) (µg/L)	Toluene (2) (µg/L)	Ethyl-benzene (2) (µg/L)	Xylenes (2) (µg/L)	1,1-Dichloro-ethane (3) (µg/L)	1,2-Dichloro-ethane (3) (µg/L)	Trichloro-ethylene (3) (µg/L)	1,2-Dichloro-propane (3) (µg/L)
MW-1	20-Apr-92	51.45	56.24	<1.0	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5
(107.69)	11-Sep-92	52.00	55.69	<0.5	<5	<5	<5	<5	<5	<5	<5	<5
	19-Mar-93	50.90	56.79	Water level only								
	30-Sep-93	49.95	57.74	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	06-Apr-94	48.39	59.30	<0.5	<0.3	<0.4	<0.5	<0.6	<0.4	<0.3	<0.4	<0.3
	14-Apr-95	46.08	61.61	<0.04	<0.3	<0.4	<0.5	<0.6	<0.4	<0.3	<0.4	<0.3
	06-Dec-95	44.80	62.89	<0.04	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
MW-2	20-Apr-92	52.73	52.92	<1.0	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5
(105.65)	11-Sep-92	52.60	53.05	<0.5	<5	<5	<5	<5	<5	<5	<5	<5
	19-Mar-93	51.17	54.48	Water level only								
	30-Sep-93	49.84	55.81	<0.05	**4**	**0.5**	<0.5	**0.8**	<0.5	<0.5	<0.5	<0.5
	06-Apr-94	47.74	57.91	<0.5	**2.5**	<0.4	<0.5	<0.6	<0.4	<0.3	<0.4	<0.3
	14-Apr-95	45.50	60.15	<0.04	**1.4**	<0.4	<0.5	<0.6	<0.4	<0.3	<0.4	<0.3
	06-Dec-95	44.32	61.33	<0.04	<10*	<10*	<10*	<20*	<10*	<10*	<10*	<10*
MW-3	20-Apr-92	53.80	53.44	NA	NA	NA	NA	NA	<0.5	<0.5	**26**	<0.5
(107.24)	19-Mar-93	53.83	53.41	Water level only								
	19-Mar-93	52.30	54.94	Water level only								
	30-Sep-93	51.06	56.18	Water level only								
	05-Apr-94	49.15	58.09	Water level only								
	14-Apr-95	47.04	60.20	Water level only								
	06-Dec-95	45.85	61.39	Water level only								
MW-4	20-Apr-92	52.40	53.99	NA	NA	NA	NA	NA	<0.5	**0.6**	**28**	<0.5
(106.39)	05-Jun-92	52.59	53.80	Water level only								
	19-Mar-93	51.23	55.16	Water level only								
	30-Sep-93	49.96	56.43	Water level only								
	05-Apr-94	47.95	58.44	Water level only								
	14-Apr-95	45.88	60.51	Water level only								
	06-Dec-95	44.68	61.71	Water level only								

TABLE 2
Summary of Groundwater Analytical Results
The Dial Corporation
9300 Rayo Avenue, South Gate, California

Well No. and Elevation (ft-MSL)	Date Sampled	Depth to Water (feet)	Groundwater Elevation (ft-MSL)	Total Petroleum Hydrocarbons (1) (mg/L)	Benzene (2) (µg/L)	Toluene (2) (µg/L)	Ethyl-benzene (2) (µg/L)	Xylenes (2) (µg/L)	1,1-Dichloro-ethane (3) (µg/L)	1,2-Dichloro-ethane (3) (µg/L)	Trichloro-ethylene (3) (µg/L)	1,2-Dichloro-propane (3) (µg/L)
MW-5	20-Apr-92	56.00	53.71	NA	NA	NA	NA	NA	<5*	<5*	**1,400**	<5*
(109.71)	05-Jun-92	56.21	53.50	Water level only								
	19-Mar-93	54.95	54.76	Water level only								
	30-Sep-93	53.62	56.09	Water level only								
	05-Apr-94	51.68	58.03	Water level only								
	14-Apr-95	49.52	60.19	Water level only								
	06-Dec-95	48.33	61.38	Water level only								
MW-6	11-Sep-92	53.07	53.81	<0.5	**5.8**	<5	<5	<5	<5	<5	<5	<5
(106.88)	19-Mar-93	51.80	55.08	Water level only								
	30-Sep-93	50.47	56.41	**0.1**	**48**	**2**	<0.5	**0.9**	<0.5	<0.5	<0.5	<0.5
	06-Apr-94	48.54	58.34	<0.5	**53**	**1.6**	**0.5**	**0.7**	**0.7**	**0.7**	<0.4	<0.3
MW-6A	14-Apr-95	46.33	60.55	**0.058**	**27**	**1.4**	<0.5	<0.6	**0.5**	<0.3	<0.4	<0.3
MW-6B	14-Apr-95	46.33	60.55	**0.059**	**23**	**1.2**	<0.5	<0.6	**0.5**	<0.3	<0.4	<0.3
	06-Dec-95	45.17	61.71	**0.11**	**17**	<0.5	<0.5	<1.0	**0.5**	**0.6**	<0.5	<0.5
MW-7	11-Sep-92	53.17	53.84	<0.5	**10**	**5.9**	<5	<5	<5	<5	<5	<5
(107.01)	19-Mar-93	52.11	54.90	Water level only								
	30-Sep-93	50.86	56.15	**0.3**	**120**	**3**	**2**	**3**	**1.3**	**0.6**	**0.6**	**2.0**
	06-Apr-94[4]	48.70	58.31	**0.6**	**230**	**5**	**4.8**	**3.7**	**2.7**	**1.1**	**1.8**	**1.8**
	14-Apr-95[6]	46.48	60.53	NA	**70**	**3.9**	**1.3**	**2.0**	**2.1**	<0.3	**1.6**	**1.4**
	06-Dec-95	45.22	61.79	**0.33**	**65**	**2.7**	**2**	**1.9**	**1.7**	**1.1**	**0.9**	**1.2**
MW-8	19-Mar-93	52.97	54.04	NA	<0.5	<0.5	<0.5	<1	<0.5	**0.9**	**200**	<0.5
(107.07)	06-Apr-94[5]	49.76	57.25	Water level only								
	14-Apr-95	47.54	59.47	Water level only								
	06-Dec-95	46.48	60.59	Water level only								
MW-9	19-Mar-93	10.23	96.78	NA	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
(107.35)	05-Apr-94	dry	- -	Water level only								
	14-Apr-95	13.48	93.53	Water level only								
	06-Dec-95	dry	- -	Water level only								

TABLE 2
Summary of Groundwater Analytical Results
The Dial Corporation
9300 Rayo Avenue, South Gate, California

Well No. and Elevation (ft-MSL)	Date Sampled	Depth to Water (feet)	Groundwater Elevation (ft-MSL)	Total Petroleum Hydrocarbons (1) (mg/L)	Benzene (2) (µg/L)	Toluene (2) (µg/L)	Ethyl-benzene (2) (µg/L)	Xylenes (2) (µg/L)	1,1-Dichloro-ethane (3) (µg/L)	1,2-Dichloro-ethane (3) (µg/L)	Trichloro-ethylene (3) (µg/L)	1,2-Dichloro-propane (3) (µg/L)
MW-10	19-Mar-93	53.26	53.75	NA	<0.5	<0.5	<0.5	<1	<0.5	<0.5	**11**	<0.5
(107.25)	05-Apr-94	- -	- -	Water level could not be measured - no site access								
	14-Apr-95	47.92	59.09	Water level only								
	06-Dec-95	46.88	60.37	Water level only								
Trip	14-Apr-95	- -	- -	**0.26**	<0.3	<0.4	<0.5	<0.6	<0.4	<0.3	<0.4	<0.3
Blank	06-Dec-95	- -	- -	<0.04	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5
Equip. Blank	06-Dec-95	- -	- -	<0.04	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5
MCLs (µg/L)					1	150	700	1750	5	0.5	5	5

Notes:
Samples analzed by Golden State/CAS Laboratories Inc., Canoga Park, California.
NA = Not analyzed.
- - = Not applicable
* = Method reporting limit elevated because the sample required diluting.
(1) Analyzed by U.S. EPA Method 8015 (modified).
(2) Analyzed by U.S. EPA Method 8020 or 8260.
(3) Analyzed by U.S. EPA Methods 8010 / 8240 / 8260.
(4) Other VOCs by EPA Method 8260 detected were cis-1,2-Dichloroethene (1.0 ug/L) and Chloroform (2.3).
(5) Other VOCs by EPA Method 8260 detected were trans-1,2-Dichloroethene (4 ug/L) and cis-1,2-Dichloroethene (89 ug/L).
(6) Other VOCs by EPA Method 8260 detected were Chloroform (0.4tr), cis-1,2-Dichloroethylene (1.0), Acetone (14tr), Isopropylbenzene (0.3tr) and Naphtalene (0.5).
Chloromethane (1.7) was detected in the Method Blank for sampling date 14-Apr-95.
Cis-1,1 dichloroethene (1,1-DCE) which is the daughter product of TCE in anaerobic environments was detected in the groundwater sample collected from well MW-7 at a concentration of 1.0ug/L on 12/6/95.
MCL = Maximum Contaminant Level (MCL) listed in 22 CCR, Section 64444.5 Table 5 "Maximum Contaminant Levels for Organic Consituents."

Certified analytical report included as an attachment.

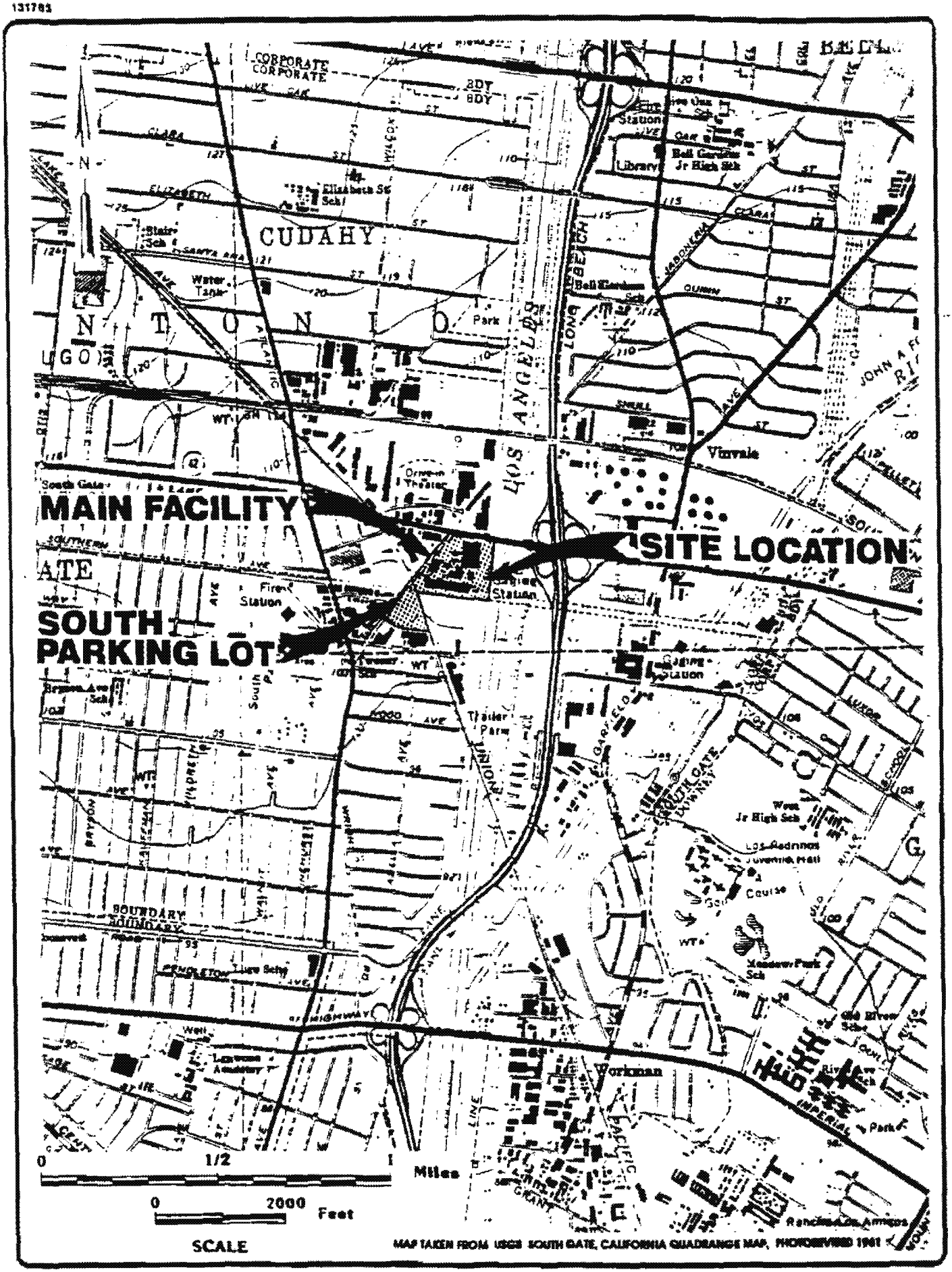
Table 3
Benzene and TVH Gasoline Mass Removal Data

In-Situ Vapor Extraction Program
Former Dial Facility
South Gate, California

Sampling Date	Cumulative Operational Hrs. (1)	Process Flow Rate (SCFM) (2)	Benzene (ppmv) (8)	C5-C12 TVH Gasoline (ppmv) (8)	Benzene Mass Removed (lbs) (9)	TVH Gasoline (C5-C12) Mass Removed (lbs) (9)
2/1/95	54.3	159	52	4400	0	0
2/8/95	219.8	162	40	2500	15	1378
3/28/95	1211.2	35	27	4500	55	6519
5/11/95	2213.2	185	10	2200	81	12072
6/6/95	2842	58	16	3300	93	15232
7/6/95	3556.4	130	2	720	100	17262
8/23/95	4716.4	117	2.3	1100	104	19222
10/9/95	5783.2	101	0	720	106	20814
11/20/95	6423.2	115	0	460	106	21427

FIGURES

131785



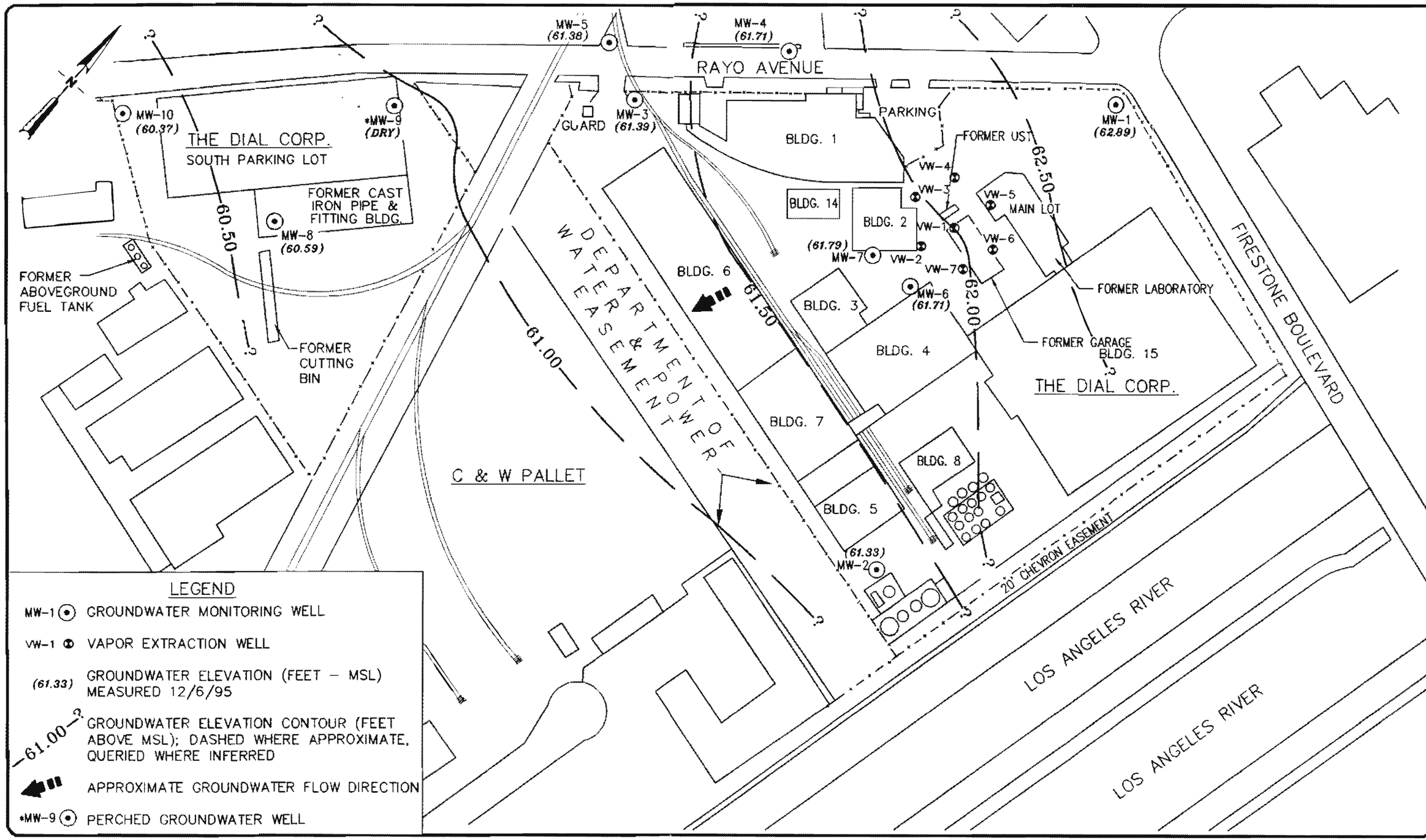
EMCON Associates

THE DIAL CORPORATION
9300 RAYO AVENUE
SOUTH GATE, CALIFORNIA

SITE LOCATION MAP

FIGURE 1

PROJECT NO. OHB3-001.04



EMCON

0 50 100 FEET
SCALE

THE DIAL CORPORATION
9300 & 9400 RAYO AVENUE
MAIN LOT – SOUTH PARKING LOT
SOUTH GATE, CALIFORNIA

GROUNDWATER CONTOUR MAP, DECEMBER 6, 1995

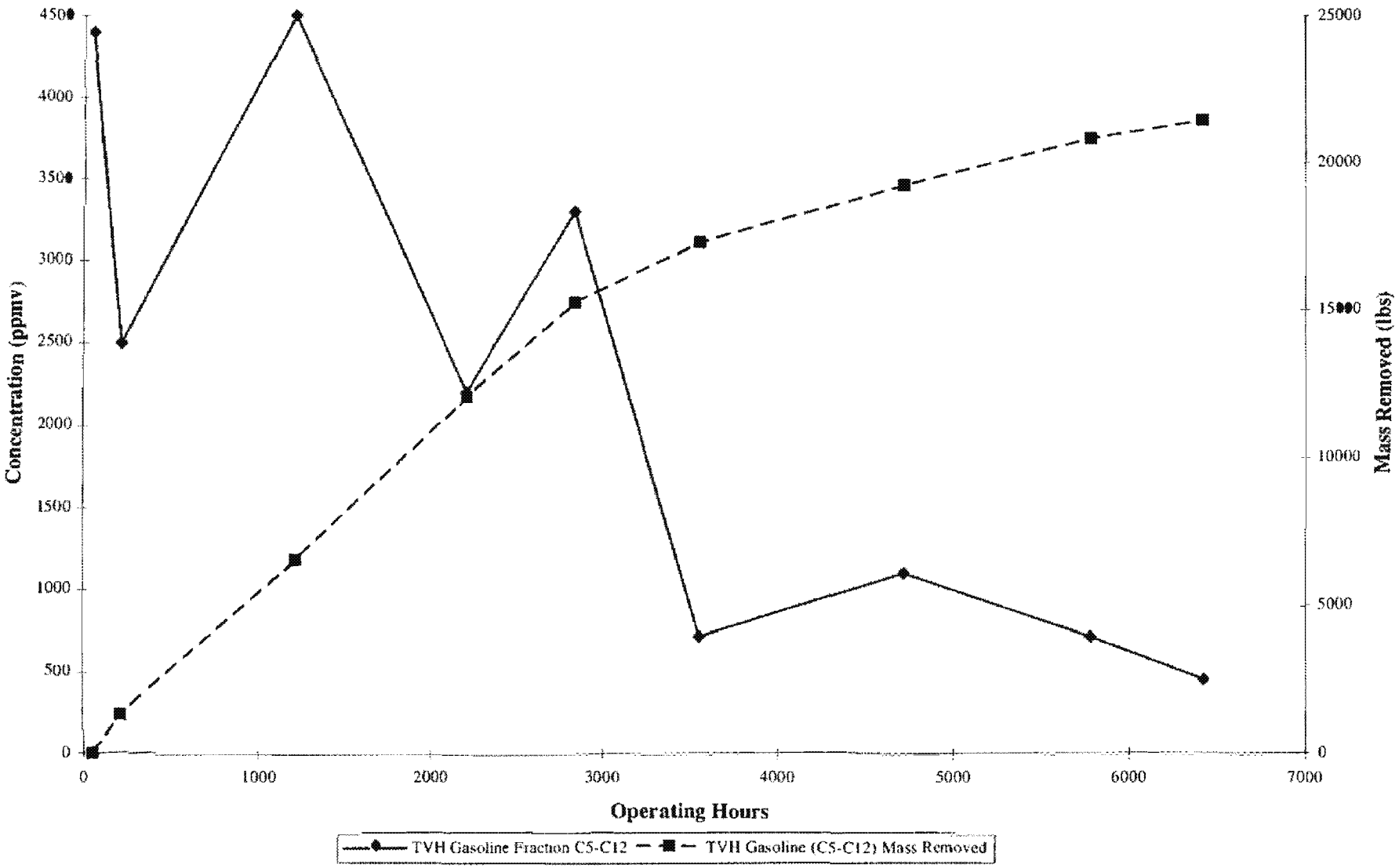
FIGURE
2
PROJECT NO.
0H93-001.05

CADD FILE: 1295-GEC
DATE LAST REVISED: 12/18/95

12/26/95
0H93-001.006

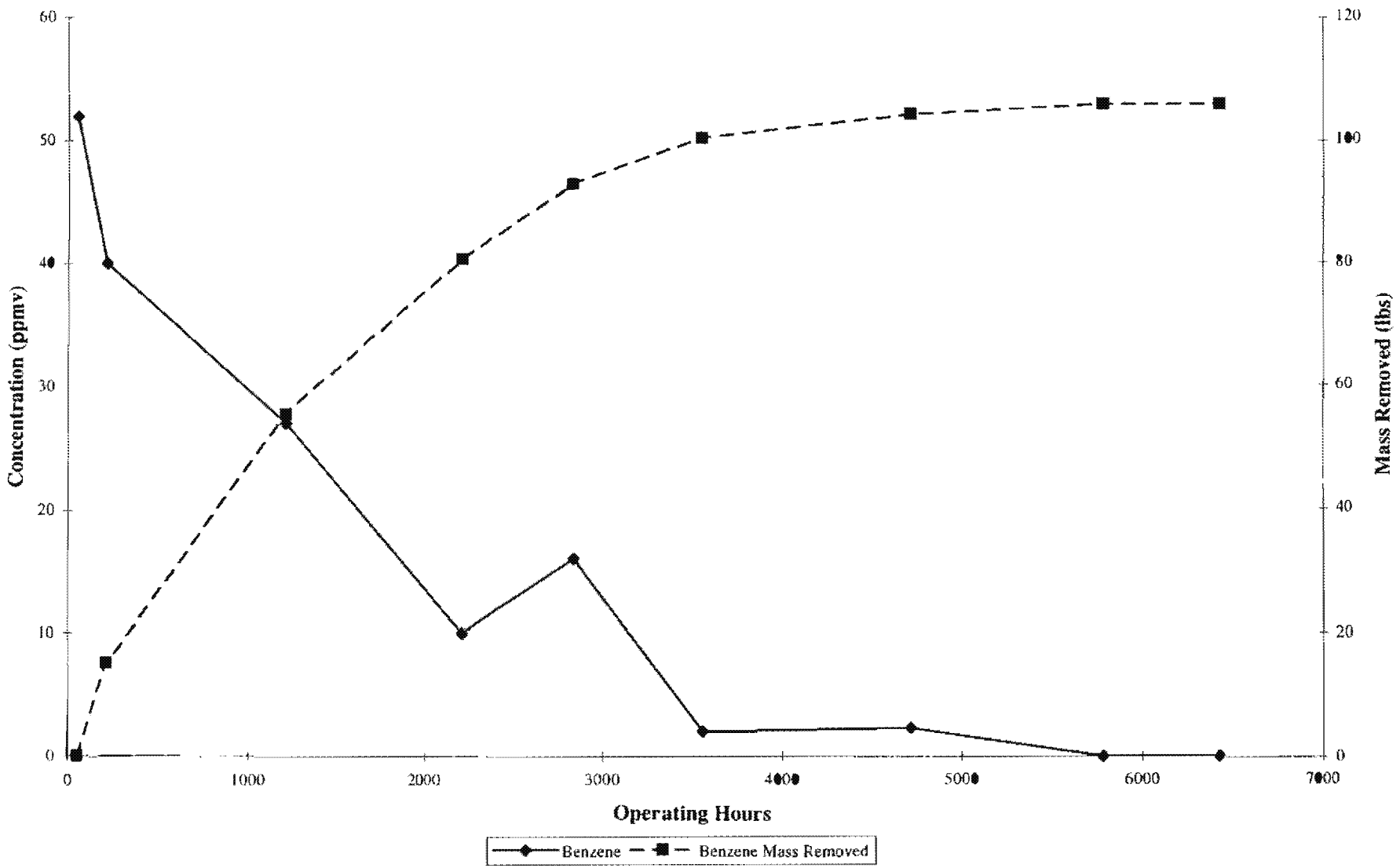
Chart 1
TVH Concentration and Mass Removed vs. Operating Hours

In-Situ Vapor Extraction Program
Former Dial Facility
South Gate, California



12/26/95
0H93-001.006

Chart 2
Benzene Concentration and Mass Removed vs. Operating Hours
In-Situ Vapor Extraction Program
Former Dial Facility
South Gate, California



ATTACHMENT 1

GROUNDWATER GAUGING PROCEDURES AND FIELD DATA SHEETS

ATTACHMENT 1

GROUNDWATER GAUGING PROCEDURES AND FIELD DATA SHEETS

Prior to collecting a groundwater sample, the depth to water and well depth in the site wells, including those not scheduled for sampling, were measured using an Solnist electronic sounder. The measurements were taken from a surveyed reference point and were read to the nearest 0.01 foot. Using a submersible pump, each well was purged a minimum of three casing volumes of water. During pumping, purged water was monitored for temperature, pH, and specific conductance to assess if formation water has entered the well. A minimum of three measurements were collected within the calculated purge volume. For low yield wells where recovery exceeds 2 hours to a level 80% of static, the well was evacuated to dryness once. Field data sheets are presented in this attachment.

When the above-described parameters were stabilized, the water level in the well was allowed to recover to approximately static conditions. After recovery, representative groundwater samples were collected from each well using a Teflon bailer. These samples were collected and placed into 40 ml VOA containers, supplied by the laboratory, with the appropriate preservative. After collection and placement into the VOA containers, the groundwater samples were labeled and stored in an ice-cooled, insulated container and transported to a California-certified laboratory along with appropriate chain-of-custody documentation.

Equipment that was used to collect or come into contact with the groundwater in each well was thoroughly steam cleaned and was rinsed with deionized water. Cleaning of the equipment occurred before sampling began, between each well, and upon completion of the sampling program. A new bailer cord was used for each well sample and was discarded after the completion of the sampling program. An equipment blank was collected after the final cleaning cycle.

Groundwater samples, including a trip and equipment blank were collected and analyzed for the following:

Analyte	Method	Detection Limit
Total petroleum hydrocarbons (TPH)	California DTSC Draft LUFT Method	0.50 mg/l
Volatile Organic Compounds (VOCs)	U.S. EPA Method 8260	0.1 to 10 µg/l

Groundwater samples collected followed chain-of-custody documentation procedures from sample collection to final analysis (Attachment 2). The group of groundwater samples collected were accompanied by completed laboratory analysis request forms that included information as to the date and time sample was collected, sample name, sample identification, and sample type.

Purge water generated from groundwater sampling operations was contained in Department of Transportation(DOT) 55 gallon drums pending consideration of disposal options. Once the water has been characterized for disposal and taken offsite to an appropriate TSDF the waste manifests will be forwarded to the RWQCB.

WELL GAUGING FORM

EMCON

PROJECT NO. 0493-001.06 TASK NO. _____ TECHNICIAN J. CASAS DATE 12-6-95

SITE NAME DIAL CORPORATION LOCATION SOUTH GATE

WELL ID	TOTAL DEPTH (FEET)	DEPTH TO PRODUCT (FEET)	1st DEPTH TO WATER (FEET)	2nd DEPTH TO WATER (FEET)	FREE PRODUCT THICKNESS (FEET)	WELL SEAL OK? (Y/N)	WELLBOX AND WELL SECURE? (Y/N)	COMMENTS
MW-4	75'		44.68					
MW-6	70'		45.17					NEW LOCK
MW-7	68.20		45.22					
MW-9	24.5		DRY					NEW LOCK
MW-8	75'		46.48					NEW LOCK
MW-10	74.40		46.88					NEW LOCK
MW-5	69.5		48.33					
MW-1	63.80		44.80					NEW LOCK
MW-2	69		44.32					NEW LOCK
MW-3	70		45.85					NEW LOCK

GROUNDWATER MONITORING DATA SHEET

EMCON

PROJECT NO. OH93-001.06 SAMPLER J. CASAS WELL ID MW-1
SITE NAME DIAL CORPORATION LOCATION SOUTH GATE

WELL GAUGING INFORMATION

Date Gauged	Total Depth of Well (feet)	Depth to Water (feet)	Calculated Purge Vol. (gallons)	Actual Purge Vol. (gallons)
12-6-95	63.80	44.80	51	55±

CASING DIAMETER: 2"___ 4" X 4½"___ 6"___ OTHER___
FLOATING PRODUCT? YES___ NO X COLOR___ THICKNESS___ ODOR___
SAMPLE DATE 12-7-95 SAMPLE TIME 8:25 DTW AT SAMPLE TIME 45.06

PURGE WATER MONITORING

DATE PURGED 12-6-95 START (2400Hr) 1237 END (2400Hr) 1249

Time	Cumulative Purge Vol. (gallons)	Temp. (°F)	E.C. (µS/cm)	pH	Color	Turbidity	Other
1240	12	74.5	5020	7.45	CLOUDY	L	
1242	25	73.1	4910	7.22	CLEAR	—	
1245	37	72.9	4940	7.17	CLEAR	—	
1249	55	72.9	4950	7.12	CLEAR	—	

PURGE METHOD

X Submersible Pump ___ Vacuum Truck ___ Bladder Pump
___ Dedicated Pump ___ Bailer (PVC, Teflon, SS) Other (specify)___

SAMPLE METHOD

X Bailer (Teflon, Dispose.) ___ Bladder Pump ___ Dedicated Pump
___ Submersible Pump ___ Peristaltic Pump Other (specify):___

WELL BOX TYPE / INTEGRITY GOOD — NEW-3476 LOCK
COMMENTS___

GROUNDWATER MONITORING DATA SHEET

EMCON

PROJECT NO. 0493-001.06 SAMPLER J. CASAS WELL ID MW-2
SITE NAME DIAG CORPORATION LOCATION SOUTH GATE

WELL GAUGING INFORMATION

Date Gauged	Total Depth of Well (feet)	Depth to Water (feet)	Calculated Purge Vol. (gallons)	Actual Purge Vol. (gallons)
12-6-95	69	44.32	67	67±

CASING DIAMETER: 2"___ 4" X 4½"___ 6"___ OTHER___
FLOATING PRODUCT? YES___ NO X COLOR___ THICKNESS___ ODOR___
SAMPLE DATE 12-7-95 SAMPLE TIME 845 DTW AT SAMPLE TIME 44.25

PURGE WATER MONITORING

DATE PURGED 12-6-95 START (2400Hr) 1330 END (2400Hr) 1338

Time	Cumulative Purge Vol. (gallons)	Temp. (°F)	E.C. (µS/cm)	pH	Color	Turbidity	Other
1332	17±	72.2	5440	7.65	CLEAR	—	—
1334	32±	71.2	5190	7.15	CLEAR	—	—
1336	48±	71.0	5070	7.17	CLEAR	—	—
1338	67±	71.0	5060	7.30	CLEAR	—	—

PURGE METHOD

X Submersible Pump ___ Vacuum Truck ___ Bladder Pump
___ Dedicated Pump ___ Bailer (PVC, Teflon, SS) Other (specify)___

SAMPLE METHOD

X Bailer (Teflon, Dispose.) ___ Bladder Pump ___ Dedicated Pump
___ Submersible Pump ___ Peristaltic Pump Other (specify):___

WELL BOX TYPE / INTEGRITY GOOD — NEW LOCK
COMMENTS___

GROUNDWATER MONITORING DATA SHEET

EMCON

PROJECT NO. OH93-001.06 SAMPLER J. CASAS WELL ID MW-6
SITE NAME DIAL CORPORATION LOCATION SOUTH GATE

WELL GAUGING INFORMATION

Date Gauged	Total Depth of Well (feet)	Depth to Water (feet)	Calculated Purge Vol. (gallons)	Actual Purge Vol. (gallons)
12-6-95	70'	45.17	67	85±

CASING DIAMETER: 2"___ 4" X 4½"___ 6"___ OTHER___
FLOATING PRODUCT? YES___ NO X COLOR___ THICKNESS___ ODOR___
SAMPLE DATE 12-7-95 SAMPLE TIME 1108 DTW AT SAMPLE TIME 45.06

PURGE WATER MONITORING

DATE PURGED 12-7-95 START (2400Hr) 900 END (2400Hr) 931

Time	Cumulative Purge Vol. (gallons)	Temp. (°F)	E.C. (µS/cm)	pH	Color	Turbidity	Other
903	17	69.5	13680	9.30	BROWN	M	—
905	34	70.2	13680	8.45	BROWN	L	—
920	51	68.7	10620	8.30	CLEAR	—	—
925	67	70.1	10510	8.36	CLEAR	—	—
931	85	70.3	10270	8.40	CLEAR	—	—

PURGE METHOD

X Submersible Pump ___ Vacuum Truck ___ Bladder Pump
___ Dedicated Pump ___ Bailer (PVC, Teflon, SS) Other (specify)___

SAMPLE METHOD

X Bailer (Teflon, Dispose.) ___ Bladder Pump ___ Dedicated Pump
___ Submersible Pump ___ Peristaltic Pump Other (specify):___

WELL BOX TYPE / INTEGRITY GOOD — NEW LOCK 3476
COMMENTS___

~~GATES~~ ~~FLARR~~

GROUNDWATER MONITORING DATA SHEET

EMCON

PROJECT NO. 0493-001.06 SAMPLER J. CASAS WELL ID MW-7
SITE NAME DIAL CORPORATION LOCATION SOUTH GATE

WELL GAUGING INFORMATION

Date Gauged	Total Depth of Well (feet)	Depth to Water (feet)	Calculated Purge Vol. (gallons)	Actual Purge Vol. (gallons)
12-6-95	68.20	45.22	62	35+

CASING DIAMETER: 2" ____ 4" X 4½" ____ 6" ____ OTHER ____
FLOATING PRODUCT? YES ____ NO X COLOR ____ THICKNESS ____ ODOR ____
SAMPLE DATE 12-7-95 SAMPLE TIME 11.36 DTW AT SAMPLE TIME 47.53

PURGE WATER MONITORING

DATE PURGED 12-7-95 START (2400Hr) 10.00 END (2400Hr) 1038

Time	Cumulative Purge Vol. (gallons)	Temp. (°F)	E.C. (µS/cm)	pH	Color	Turbidity	Other
1005	16	70.9	11900	6.53	BROWN	M	
1014	25	73.1	12980	6.67	BROWN	L	
1038	35	71.7	12310	6.66	CLEAR	—	

PURGE METHOD

X Submersible Pump ____ Vacuum Truck ____ Bladder Pump
____ Dedicated Pump ____ Bailer (PVC, Teflon, SS) Other (specify) ____

SAMPLE METHOD

X Bailer (Teflon, Dispose.) ____ Bladder Pump ____ Dedicated Pump
____ Submersible Pump ____ Peristaltic Pump Other (specify): ____

WELL BOX TYPE / INTEGRITY GOOD
COMMENTS – WELL PUMPED DRY AT 25 GAL. – LET IT RECHARGE FOR 15 MINUTES
– STARTED BACK ON AT 1035 AND PUMPED DRY FOR SEC. TIME AT 1038 OF 35 GAL. TOTAL PURGED.

GROUNDWATER MONITORING DATA SHEET

EMCON

PROJECT NO. OH93-001-06 SAMPLER J. CASAS WELL ID MW-3
SITE NAME DIAL CORPORATION LOCATION SOUTH GATE

WELL GAUGING INFORMATION

Date Gauged	Total Depth of Well (feet)	Depth to Water (feet)	Calculated Purge Vol. (gallons)	Actual Purge Vol. (gallons)
12-6-95	70'	45.85		

CASING DIAMETER: 2"____ 4" X 4½"____ 6"____ OTHER____
FLOATING PRODUCT? YES____ NO X COLOR____ THICKNESS____ ODOR____
SAMPLE DATE____ SAMPLE TIME____ DTW AT SAMPLE TIME____

PURGE WATER MONITORING

DATE PURGED____ START (2400Hr)____ END (2400Hr)____

Time	Cumulative Purge Vol. (gallons)	Temp. (°F)	E.C. (µS/cm)	pH	Color	Turbidity	Other

PURGE METHOD

____Submersible Pump ____Vacuum Truck ____Bladder Pump
____Dedicated Pump ____Bailer (PVC, Teflon, SS) Other (specify)____

SAMPLE METHOD

____Bailer (Teflon, Dispose.) ____Bladder Pump ____Dedicated Pump
____Submersible Pump ____Peristaltic Pump Other (specify):____

WELL BOX TYPE / INTEGRITY GOOD NEW LOCK
COMMENTS GAUGE ONLY

GROUNDWATER MONITORING DATA SHEET

EMCON

PROJECT NO. 0493-001.06 SAMPLER J. CASAS WELL ID MW-4
SITE NAME DIAL CORPORATION LOCATION SOUTH GATE

WELL GAUGING INFORMATION

Date Gauged	Total Depth of Well (feet)	Depth to Water (feet)	Calculated Purge Vol. (gallons)	Actual Purge Vol. (gallons)
12-6-95	75'	44.68		

CASING DIAMETER: 2"____ 4" X 4½"____ 6"____ OTHER____
FLOATING PRODUCT? YES____ NO X COLOR____ THICKNESS____ ODOR____
SAMPLE DATE — SAMPLE TIME — DTW AT SAMPLE TIME —

PURGE WATER MONITORING

DATE PURGED____ START (2400Hr)____ END (2400Hr)____

Time	Cumulative Purge Vol. (gallons)	Temp. (°F)	E.C. (µS/cm)	pH	Color	Turbidity	Other

PURGE METHOD

____Submersible Pump ____Vacuum Truck ____Bladder Pump
____Dedicated Pump ____Bailer (PVC, Teflon, SS) Other (specify)____

SAMPLE METHOD

____Bailer (Teflon, Dispose.) ____Bladder Pump ____Dedicated Pump
____Submersible Pump ____Peristaltic Pump Other (specify):____

WELL BOX TYPE / INTEGRITY GOOD
COMMENTS GAUGE ONLY

GROUNDWATER MONITORING DATA SHEET

emcon

PROJECT NO. 01493-001-06 SAMPLER J. CASAS WELL ID MW-5
SITE NAME DIAL CORPORATION LOCATION SOUTH GATE

WELL GAUGING INFORMATION

Date Gauged	Total Depth of Well (feet)	Depth to Water (feet)	Calculated Purge Vol. (gallons)	Actual Purge Vol. (gallons)
12-6-95	69.5	48.33		

CASING DIAMETER: 2"____ 4" X 4½"____ 6"____ OTHER____
FLOATING PRODUCT? YES___ NO X COLOR____ THICKNESS____ ODOR____
SAMPLE DATE ____ SAMPLE TIME ____ DTW AT SAMPLE TIME ____

PURGE WATER MONITORING

DATE PURGED ____ START (2400Hr) ____ END (2400Hr) ____

Time	Cumulative Purge Vol. (gallons)	Temp. (°F)	E.C. (µS/cm)	pH	Color	Turbidity	Other

PURGE METHOD

____Submersible Pump ____Vacuum Truck ____Bladder Pump
____Dedicated Pump ____Bailer (PVC, Teflon, SS) Other (specify)____

SAMPLE METHOD

✓ Bailer (Teflon, Dispose.) ____Bladder Pump ____Dedicated Pump
____Submersible Pump ____Peristaltic Pump Other (specify):____

WELL BOX TYPE / INTEGRITY GOOD
COMMENTS GAUGE ONLY

GROUNDWATER MONITORING DATA SHEET

EMCON

PROJECT NO. 01493-001.06 SAMPLER J. CASAS WELL ID MW-8
SITE NAME DIAL CORPORATION LOCATION SOUTH GATE

WELL GAUGING INFORMATION

Date Gauged	Total Depth of Well (feet)	Depth to Water (feet)	Calculated Purge Vol. (gallons)	Actual Purge Vol. (gallons)
12-6-95	75'	46.48		

CASING DIAMETER: 2"____ 4" X 4½"____ 6"____ OTHER____
FLOATING PRODUCT? YES____ NO____ COLOR____ THICKNESS____ ODOR____
SAMPLE DATE ____ SAMPLE TIME ____ DTW AT SAMPLE TIME ____

PURGE WATER MONITORING

DATE PURGED ____ START (2400Hr) ____ END (2400Hr) ____

Time	Cumulative Purge Vol. (gallons)	Temp. (°F)	E.C. (µS/cm)	pH	Color	Turbidity	Other

PURGE METHOD

____Submersible Pump ____Vacuum Truck ____Bladder Pump
____Dedicated Pump ____Bailer (PVC, Teflon, SS) Other (specify)____

SAMPLE METHOD

____Bailer (Teflon, Dispose.) ____Bladder Pump ____Dedicated Pump
____Submersible Pump ____Peristaltic Pump Other (specify):____

WELL BOX TYPE / INTEGRITY GOOD NEW LOCK 3476
COMMENTS GAUGE ONLY

GROUNDWATER MONITORING DATA SHEET

EMCON

PROJECT NO. 0493-001-06 SAMPLER J. CASAS WELL ID MW-9
SITE NAME DIAL CORPORATION LOCATION SOUTH GATE

WELL GAUGING INFORMATION

Date Gauged	Total Depth of Well (feet)	Depth to Water (feet)	Calculated Purge Vol. (gallons)	Actual Purge Vol. (gallons)
12-6-95	24.5	DRY		

CASING DIAMETER: 2"___ 4" X 4½"___ 6"___ OTHER___
FLOATING PRODUCT? YES___ NO X COLOR___ THICKNESS___ ODOR___
SAMPLE DATE___ SAMPLE TIME___ DTW AT SAMPLE TIME___

PURGE WATER MONITORING

DATE PURGED___ START (2400Hr)___ END (2400Hr)___

Time	Cumulative Purge Vol. (gallons)	Temp. (°F)	E.C. (µS/cm)	pH	Color	Turbidity	Other

PURGE METHOD

___Submersible Pump ___Vacuum Truck ___Bladder Pump
___Dedicated Pump ___Bailer (PVC, Teflon, SS) Other (specify)___

SAMPLE METHOD

___Bailer (Teflon, Dispose.) ___Bladder Pump ___Dedicated Pump
___Submersible Pump ___Peristaltic Pump Other (specify):___

WELL BOX TYPE / INTEGRITY GOOD NEW LOCK 3476
COMMENTS GAUGE ONLY

GROUNDWATER MONITORING DATA SHEET

EMCON

PROJECT NO. 0493-001.06 SAMPLER J. CASAS WELL ID MW-10
SITE NAME DIAL CORPORATION LOCATION SOUTH GATE

WELL GAUGING INFORMATION

Date Gauged	Total Depth of Well (feet)	Depth to Water (feet)	Calculated Purge Vol. (gallons)	Actual Purge Vol. (gallons)
12-6-95	74.40	46.88		

CASING DIAMETER: 2"____ 4" X 4½"____ 6"____ OTHER____
FLOATING PRODUCT? YES____ NO X COLOR____ THICKNESS____ ODOR____
SAMPLE DATE____ SAMPLE TIME____ DTW AT SAMPLE TIME____

PURGE WATER MONITORING

DATE PURGED____ START (2400Hr)____ END (2400Hr)____

Time	Cumulive. Purge Vol. (gallons)	Temp. (°F)	E.C. (µS/cm)	pH	Color	Turbidity	Other

PURGE METHOD

____Submersible Pump ____Vacuum Truck ____Bladder Pump
____Dedicated Pump ____Bailer (PVC, Teflon, SS) Other (specify)____

SAMPLE METHOD

____Bailer (Teflon, Dispose.) ____Bladder Pump ____Dedicated Pump
____Submersible Pump ____Peristaltic Pump Other (specify):____

WELL BOX TYPE / INTEGRITY GAUGE ONLY — NEW LOCK 3476
COMMENTS____

ATTACHMENT 2

CERTIFIED ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

GOLDEN STATE/CAS
LABORATORIES, INC.

December 18, 1995

Mike Flack
EMCON
3300 North San Fernando Blvd.
Burbank, CA 91504

Re: **Dial Corporation, South Gate / Project #OH93-001.06**

Dear Mike:

Enclosed are the results of the samples submitted to our lab on December 8, 1995. For your reference, these analyses have been assigned our service request number L9504260.

All analyses were performed in accordance with our laboratory's quality assurance program. Golden State / CAS is certified for environmental analyses by the California Department of Health Services (Certificate # 1296/Expiration - August 1996).

Please call if you have any questions.

Respectfully submitted,

Golden State / CAS Laboratories, Inc.

Eydie Schwartz

Eydie Schwartz
Project Chemist

ES/sjt

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COLUMBIA ANALYTICAL SERVICES, INC.

Acronyms

A2LA	American Association for Laboratory Accreditation
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAM	California Assessment Metals
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
CFU	Colony Forming Unit
COD	Chemical Oxygen Demand
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOE	Department of Ecology
DOH or DHS	Department of Health Services
ELAP	Environmental Laboratory Accreditation Program
EPA	US Environmental Protection Agency
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank sample
ICP	Inductively Coupled Plasma atomic emission spectrometry
ICV	Initial Calibration Verification sample
J	Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding.
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified
MBAS	Methylene Blue Active Substances
MCL	Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U.S. EPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl*tert*-Butyl Ether
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the paper industry for Air and Stream Improvement
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NIOSH	National Institute of Occupational Safety and Health
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SM	*Standard Methods for the Examination of Water and Wastewater*, 18th Ed., 1992.
STLC	Solubility Threshold Limit Concentration
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986, and as amended by Updates I, II, IIA, and IIB.
TCLP	Toxicity Characteristics Leaching Procedure
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding.
TRPH	Total Recoverable Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Extracted: NA

Reporting Units: ug/L (ppb)

		DATE ANALYZED	12/12/95	12/14/95	12/14/95	12/14/95
		DILUTION FACTOR	1	1	1	1
		LAB SAMPLE I.D.	L9504260-MB	L9504260-MB	L9504260-001	L9504260-002
		CLIENT SAMPLE I.D.	Method Blank	Method Blank	MW-1	MW-2
		EXTRACTION SOLVENT	NA	NA	NA	NA
		EXTRACTION METHOD	5030	5030	5030	5030
		BATCH NO.	J121295	J121495	J121495	J121495
PETROLEUM HYDROCARBONS	**CRDL**					
Gasoline (EPA 8015M)	40		ND	ND	ND	ND
Surrogate	**Spk Conc**	**ACP%**	**% RC**	**% RC**	**% RC**	**% RC**
a,a,a-Trifluorotoluene	50	60-140	92	74	92	111

Spk Conc = Spike Concentration; ACP % = Acceptable Range of Percent; % RC = % Recovery

Approved By: Eydie Schwartz Date: 12/13/95

WBPHC/0e2794 L9504260 XLS - 8015crdl 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Extracted: NA

Reporting Units: ug/L (ppb)

		DATE ANALYZED	12/14/95	12/14/95	12/12/95	12/12/95
		DILUTION FACTOR	1	1	1	1
		LAB SAMPLE I.D.	L9504260-003	L9504260-004	L9504260-005	L9504260-006
		CLIENT SAMPLE I.D.	MW-6	MW-7	TRIP BLANK	EQUIP. BLANK
		EXTRACTION SOLVENT	NA	NA	NA	NA
		EXTRACTION METHOD	5030	5030	5030	5030
		BATCH NO.	J121495	J121495	J121295	J121295
PETROLEUM HYDROCARBONS	**CRDL**					
Gasoline (EPA 8015M)	40		110	330	ND	ND
Surrogate	**Spk Conc**	**ACP%**	**% RC**	**% RC**	**% RC**	**% RC**
a,a,a-Trifluorotoluene	50	60-140	109	115	70	73

Spk Conc = Spike Concentration; ACP % = Acceptable Range of Percent; % RC = % Recovery

Approved By: Eydie Schwartz Date: 12/18/95

WBPHC06.2295
L9504260.XLS - 8015crdl (2) 12/18/95

Page No.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

	Sample Name:	**Method Blank**	**MW-1**	**MW-2**
	Lab Code:	L9504260-MB	L9504260-001	L9504260-002*
	Dilution Factor:	1	1	20
	Extraction Solvent:	NA	NA	NA
	Extraction Method:	5030	5030	5030
	Date Analyzed:	12/14/95	12/14/95	12/14/95
	Batch No.:	120995	120995	120995
Analyte	**CRDL**			
Bromobenzene	0.5	ND	ND	<10
Bromochloromethane	0.5	ND	ND	<10
Bromodichloromethane	0.5	ND	ND	<10
Bromoform	0.5	ND	ND	<10
Bromomethane	0.5	ND	ND	<10
Carbon Disulfide	5	ND	ND	<100
Carbon tetrachloride	0.5	ND	ND	<10
Chloroethane	0.5	ND	ND	<10
Chloroform	0.5	ND	ND	<10
Chloromethane	0.5	ND	ND	<10
Dibromochloromethane	0.5	ND	ND	<10
Dibromomethane	0.5	ND	ND	<10
Dichloromethane (Methylene Chloride)	2	ND	ND	<40
Dichlorodifluoromethane	0.5	ND	ND	<10
1,1-Dichloroethane (1,1-DCA)	0.5	ND	ND	<10
1,2-Dichloroethane (1,2-DCA)	0.5	ND	ND	<10
1,1-Dichloroethylene (1,1-DCE)	0.5	ND	ND	<10
trans-1,2-Dichloroethylene	0.5	ND	ND	<10
cis-1,2-Dichloroethylene	0.5	ND	ND	<10
1,2-Dichloropropane	0.5	ND	ND	<10
cis-1,3-Dichloropropylene	0.5	ND	ND	<10
trans-1,3-Dichloropropylene	0.5	ND	ND	<10
1,1,1,2-Tetrachloroethane	0.5	ND	ND	<10
1,1,2,2-Tetrachloroethane	0.5	ND	ND	<10
Tetrachloroethylene(PCE)	0.5	ND	ND	<10
1,1,1-Trichloroethane (1,1,1-TCA)	0.5	ND	ND	<10
1,1,2-Trichloroethane (1,1,2-TCA)	0.5	ND	ND	<10
Trichloroethylene (TCE)	0.5	ND	ND	<10
1,2,3-Trichloropropane	0.5	ND	ND	<10
Trichlorofluoromethane	0.5	ND	ND	<10
Vinyl Chloride (VC)	0.5	ND	ND	<10
Benzene	0.5	ND	ND	<10
Chlorobenzene	0.5	ND	ND	<10
1,2-Dichlorobenzene	1.0	ND	ND	<20
1,3-Dichlorobenzene	1.0	ND	ND	<20
1,4-Dichlorobenzene	1.0	ND	ND	<20

* MRL is elevated because of matrix interferences and because the sample required diluting.

Approved By: Eydie Schwartz Date: 12/18/95

L9504260 XLS - 8260crdl12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

	Sample Name:	**Method Blank**	**MW-1**	**MW-2**
	Lab Code:	L9504260-MB	L9504260-001	L9504260-002*
	Dilution Factor:	1	1	20
	Extraction Solvent:	NA	NA	NA
	Extraction Method:	5030	5030	5030
	Date Analyzed:	12/14/95	12/14/95	12/14/95
	Batch No.:	120995	120995	120995
Analyte	**CRDL**			
Ethyl benzene	0.5	ND	ND	<10
Toluene	0.5	ND	ND	<10
Total Xylenes	1.0	ND	ND	<20
Acetone	25	ND	ND	<500
n-Butylbenzene	0.5	ND	ND	<10
sec-Butylbenzene	0.5	ND	ND	<10
tert-Butylbenzene	0.5	ND	ND	<10
2-Chloroethylvinyl ether	0.5	ND	ND	<10
2-Chlorotoluene	1.0	ND	ND	<20
4-Chlorotoluene	0.5	ND	ND	<10
1,3-Dichloropropane	0.5	ND	ND	<10
2,2-Dichloropropane	0.5	ND	ND	<10
1,1-Dichloropropylene	0.5	ND	ND	<10
Ethylene dibromide (EDB)	0.5	ND	ND	<10
Hexachlorobutadiene	0.5	ND	ND	<10
Isopropylbenzene	0.5	ND	ND	<10
p-Isopropyltoluene	0.5	ND	ND	<10
Methyl Ethyl Ketone	25	ND	ND	<500
Methyl Isobutyl Ketone	25	ND	ND	<500
Naphthalene	1.0	ND	ND	<20
n-Propylbenzene	0.5	ND	ND	<10
Styrene	0.5	ND	ND	<10
1,2,3-Trichlorobenzene	0.5	ND	ND	<10
1,2,4-Trichlorobenzene	0.5	ND	ND	<10
1,2,4-Trimethylbenzene	0.5	ND	ND	<10
1,3,5-Trimethylbenzene	0.5	ND	ND	<10
1,1,2-Trichloro-1,2,2-Trifluoroethane	2	ND	ND	<40
1,2-Dibromo-3-chloropropane (DBCP)	0.5	ND	ND	<10
Acrolein	100	ND	ND	<2000
Acrylonitrile	100	ND	ND	<2000

Surrogate	**SPK CONC**	**ACP%**	**%RC**	**%RC**	**%RC**
Pentafluorobenzene	25	70-130	94	94	101
Toluene-D_8	25	88-110	88	88	88
4-Bromofluorobenzene	25	86-115	99	100	100

SPK CONC = Spike Concentration; ACP% = Acceptable Range of Percent; %RC = % Recovery

* MRL is elevated because of matrix interferences and because the sample required diluting.

Approved By: Eydie Schwartz Date: 12/18/95

WB3S2PDF/080294

L9504260.XLS - 8260crdl 12/18/95

Page No

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

	Sample Name:	**MW-6**	**MW-7**	**TRIP BLANK**
	Lab Code:	L9504260-003	L9504260-004	L9504260-005
	Dilution Factor:	1	1	1
	Extraction Solvent:	NA	NA	NA
	Extraction Method:	5030	5030	5030
	Date Analyzed:	12/14/95	12/14/95	12/14/95
	Batch No.:	120995	120995	120995
Analyte	**CRDL**			
Bromobenzene	0.5	ND	ND	ND
Bromochloromethane	0.5	ND	ND	ND
Bromodichloromethane	0.5	ND	ND	ND
Bromoform	0.5	ND	ND	ND
Bromomethane	0.5	ND	ND	ND
Carbon Disulfide	5	ND	ND	ND
Carbon tetrachloride	0.5	ND	ND	ND
Chloroethane	0.5	ND	ND	ND
Chloroform	0.5	ND	ND	ND
Chloromethane	0.5	ND	ND	ND
Dibromochloromethane	0.5	ND	ND	ND
Dibromomethane	0.5	ND	ND	ND
Dichloromethane (Methylene Chloride)	2	ND	ND	ND
Dichlorodifluoromethane	0.5	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	0.5	0.5	1.7	ND
1,2-Dichloroethane (1,2-DCA)	0.5	0.6	1.1	ND
1,1-Dichloroethylene (1,1-DCE)	0.5	ND	ND	ND
trans-1,2-Dichloroethylene	0.5	ND	ND	ND
cis-1,2-Dichloroethylene	0.5	ND	1.0	ND
1,2-Dichloropropane	0.5	ND	1.2	ND
cis-1,3-Dichloropropylene	0.5	ND	ND	ND
trans-1,3-Dichloropropylene	0.5	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	ND	ND	ND
Tetrachloroethylene(PCE)	0.5	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	0.5	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	0.5	ND	ND	ND
Trichloroethylene (TCE)	0.5	ND	0.9	ND
1,2,3-Trichloropropane	0.5	ND	ND	ND
Trichlorofluoromethane	0.5	ND	ND	ND
Vinyl Chloride (VC)	0.5	ND	ND	ND
Benzene	0.5	17	65	ND
Chlorobenzene	0.5	ND	ND	ND
1,2-Dichlorobenzene	1.0	ND	ND	ND
1,3-Dichlorobenzene	1.0	ND	ND	ND
1,4-Dichlorobenzene	1.0	ND	ND	ND

Approved By: Eric Schwartz Date: 12/19/95

6925 CANOGA AVENUE ■ CANOGA PARK, CA 91303 ■ 818 587-5550 ■ FAX 818 587-5555

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

	Sample Name:	**MW-6**	**MW-7**	**TRIP BLANK**
	Lab Code:	L9504260-003	L9504260-004	L9504260-005
	Dilution Factor:	1	1	1
	Extraction Solvent:	NA	NA	NA
	Extraction Method:	5030	5030	5030
	Date Analyzed:	12/14/95	12/14/95	12/14/95
	Batch No.:	120995	120995	120995
Analyte	**CRDL**			
Ethyl benzene	0.5	ND	2.0	ND
Toluene	0.5	ND	2.7	ND
Total Xylenes	1.0	ND	1.9	ND
Acetone	25	ND	ND	ND
n-Butylbenzene	0.5	ND	ND	ND
sec-Butylbenzene	0.5	ND	ND	ND
tert-Butylbenzene	0.5	ND	ND	ND
2-Chloroethylvinyl ether	0.5	ND	ND	ND
2-Chlorotoluene	1.0	ND	ND	ND
4-Chlorotoluene	0.5	ND	ND	ND
1,3-Dichloropropane	0.5	ND	ND	ND
2,2-Dichloropropane	0.5	ND	ND	ND
1,1-Dichloropropylene	0.5	ND	ND	ND
Ethylene dibromide (EDB)	0.5	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND
Isopropylbenzene	0.5	ND	ND	ND
p-Isopropyltoluene	0.5	ND	ND	ND
Methyl Ethyl Ketone	25	ND	ND	ND
Methyl Isobutyl Ketone	25	ND	ND	ND
Naphthalene	1.0	ND	ND	ND
n-Propylbenzene	0.5	ND	ND	ND
Styrene	0.5	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	ND	ND	ND
1,2,4-Trimethylbenzene	0.5	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	ND	ND	ND
1,1,2-Trichloro-1,2,2-Trifluoroethane	2	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	0.5	ND	ND	ND
Acrolein	100	ND	ND	ND
Acrylonitrile	100	ND	ND	ND
Surrogate	**SPK CONC**	**ACP%**	**%RC**	**%RC**	**%RC**
Pentafluorobenzene	25	70-130	84	92	102
Toluene-D_8	25	88-110	92	90	88
4-Bromofluorobenzene	25	86-115	96	99	101

SPK CONC = Spike Concentration; ACP% = Acceptable Range of Percent; %RC = % Recovery

Approved By: Cydie Schwartz Date: 12/18/95

WHIS2PDF/080294
L9504260.XLS - 8260crdl (2) 12/18/95

6925 CANOGA AVENUE ■ CANOGA PARK, CA 91303 ■ 818 587-5550 ■ FAX 818 587-5555

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

		EQUIPMENT
	Sample Name:	**BLANK**
	Lab Code:	L9504260-006
	Dilution Factor:	1
	Extraction Solvent:	NA
	Extraction Method:	5030
	Date Analyzed:	12/14/95
	Batch No.:	120995
Analyte	**CRDL**	
Bromobenzene	0.5	ND
Bromochloromethane	0.5	ND
Bromodichloromethane	0.5	ND
Bromoform	0.5	ND
Bromomethane	0.5	ND
Carbon Disulfide	5	ND
Carbon tetrachloride	0.5	ND
Chloroethane	0.5	ND
Chloroform	0.5	ND
Chloromethane	0.5	ND
Dibromochloromethane	0.5	ND
Dibromomethane	0.5	ND
Dichloromethane (Methylene Chloride)	2	ND
Dichlorodifluoromethane	0.5	ND
1,1-Dichloroethane (1,1-DCA)	0.5	ND
1,2-Dichloroethane (1,2-DCA)	0.5	ND
1,1-Dichloroethylene (1,1-DCE)	0.5	ND
trans-1,2-Dichloroethylene	0.5	ND
cis-1,2-Dichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
cis-1,3-Dichloropropylene	0.5	ND
trans-1,3-Dichloropropylene	0.5	ND
1,1,1,2-Tetrachloroethane	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
Tetrachloroethylene(PCE)	0.5	ND
1,1,1-Trichloroethane (1,1,1-TCA)	0.5	ND
1,1,2-Trichloroethane (1,1,2-TCA)	0.5	ND
Trichloroethylene (TCE)	0.5	ND
1,2,3-Trichloropropane	0.5	ND
Trichlorofluoromethane	0.5	ND
Vinyl Chloride (VC)	0.5	ND
Benzene	0.5	ND
Chlorobenzene	0.5	ND
1,2-Dichlorobenzene	1.0	ND
1,3-Dichlorobenzene	1.0	ND
1,4-Dichlorobenzene	1.0	ND

Approved By: Eydie Schwartz Date: 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

	EQUIPMENT
Sample Name:	**BLANK**
Lab Code:	L9504260-006
Dilution Factor:	1
Extraction Solvent:	NA
Extraction Method:	5030
Date Analyzed:	12/14/95
Batch No.:	120995

Analyte	**CRDL**	
Ethyl benzene	0.5	ND
Toluene	0.5	ND
Total Xylenes	1.0	ND
Acetone	25	ND
n-Butylbenzene	0.5	ND
sec-Butylbenzene	0.5	ND
tert-Butylbenzene	0.5	ND
2-Chloroethylvinyl ether	0.5	ND
2-Chlorotoluene	1.0	ND
4-Chlorotoluene	0.5	ND
1,3-Dichloropropane	0.5	ND
2,2-Dichloropropane	0.5	ND
1,1-Dichloropropylene	0.5	ND
Ethylene dibromide (EDB)	0.5	ND
Hexachlorobutadiene	0.5	ND
Isopropylbenzene	0.5	ND
p-Isopropyltoluene	0.5	ND
Methyl Ethyl Ketone	25	ND
Methyl Isobutyl Ketone	25	ND
Naphthalene	1.0	ND
n-Propylbenzene	0.5	ND
Styrene	0.5	ND
1,2,3-Trichlorobenzene	0.5	ND
1,2,4-Trichlorobenzene	0.5	ND
1,2,4-Trimethylbenzene	0.5	ND
1,3,5-Trimethylbenzene	0.5	ND
1,1,2-Trichloro-1,2,2-Trifluoroethane	2	ND
1,2-Dibromo-3-chloropropane (DBCP)	0.5	ND
Acrolein	100	ND
Acrylonitrile	100	ND

Surrogate	**SPK CONC**	**ACP%**	**%RC**
Pentafluorobenzene	25	70-130	84
Toluene-D_8	25	88-110	90
4-Bromofluorobenzene	25	86-115	96

SPK CONC = Spike Concentration; ACP% = Acceptable Range of Percent; %RC = % Recovery

Approved By: Eydie Schwartz Date: 12/18/95

WB3S2PDF/080294
L9504260.XLS - 8260crdl (3) 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-001.06	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Batch No.:	J121295	**Date Extracted:**	NA
		Date Analyzed:	12/13/95

Matrix Spike/Duplicate Matrix Spike Summary
TPH as Gasoline
EPA Methods 5030/8015M
Reporting Units: ug/L (ppb)

Sample Name: Batch QC
Lab Code: L9504239-014

						Percent Recovery				
Analyte	**Sample Result**	**Spike CONC**	**MS**	**%MS**	**Spike CONC DUP**	**DMS**	**%DMS**	**RPD**	**MS/DMS Limit**	**RPD Limit**
TPH as Gasoline	ND	2000	1850	92	2000	2140	107	8	70-140	25

Approved By: Eydie Schwartz Date: 12/18/95

DMSIS/120594
L9504260 XLS - 8015cms (2) 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-001.06	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
Batch No.:	J121295	**Date Analyzed:**	12/12/95

Laboratory Control Sample Summary
TPH as Gasoline
Reporting Units: ug/L (ppb)

Supply Source:	Mobil
Lot Number:	NA
Date of Source:	12/5/95
Lab LCS I.D.:	B101G

Analyte	EPA Method	Spike CONC	Result	Percent Recovery	ACP Percent Recovery Limit
TPH as Gasoline	5030/8015M	2000	1680	84	70-140

Approved By: Cindie Schwartz Date: 12/18/95

LCSEPA/121594
L9504260 XLS - 8015ics (2) 12/18/95

Page No

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Batch No.: J121295

Service Request: L9504260
Date Analyzed: 10/12/95

Calibration Standards
TPH as Gasoline
EPA Methods 5030/8015M

Supply Source: ARCO
Lot Number: NA
Date of Source: 11/28/95
Lab CCV I.D.: B82B

Analyte	Average Calibration Response Initial (RF_{ave}) Date: 10/26/95	Percent Relative Standard Deviation (%RSD) ≤20%	Daily Response Factor (RF) Date: 12/12/95	Percent Difference (%DIFF) ≤ ±15%
TPH as Gasoline	2.865×10^{-5}	6	2.861×10^{-5}	<1

Approved By: Eydie Schwartz Date: 12/18/95

CCVISRF/120994

L9504260 XLS - gench (2) 12/18/95

Page No

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-001.06	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Batch No.:	J121495	**Date Extracted:**	NA
		Date Analyzed:	12/15/95

Matrix Spike/Duplicate Matrix Spike Summary
TPH as Gasoline
EPA Methods 5030/8015M
Reporting Units: ug/L (ppb)

Sample Name: Batch QC
Lab Code: L9504285-003

			Percent Recovery							
Analyte	**Sample Result**	**Spike CONC**	**MS**	**%MS**	**Spike CONC DUP**	**DMS**	**%DMS**	**RPD**	**MS/DMS Limit**	**RPD Limit**
TPH as Gasoline	ND	1000	1250	125	2000	1340	134	7	70-140	25

Approved By: Eydie Schwartz Date: 12/18/95

DMS1S/120594
L9504260 XLS- 8015cms 12/18/95

Page No

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-001.06	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
Batch No.:	J121495	**Date Analyzed:**	12/14-15/95

Laboratory Control Sample Summary
TPH as Gasoline
Reporting Units: ug/L (ppb)

Supply Source:	Mobil
Lot Number:	NA
Date of Source:	12/5/95
Lab LCS I.D.:	B101G

Analyte	EPA Method	Spike CONC	Result	Percent Recovery	ACP Percent Recovery Limit
TPH as Gasoline	5030/8015M	1000	1090	109	70-140

Approved By: Eydie Schwartz Date: 12/18/95

LCSEPA/121594
L9504260 XLS - 8015lcs 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Batch No.: J121495

Service Request: L9504260
Date Analyzed: 12/14/95

Calibration Standards
TPH as Gasoline
EPA Methods 5030/8015M

Supply Source: ARCO
Lot Number: NA
Date of Source: 11/28/95
Lab CCV I.D.: B82B

Analyte	Average Calibration Response Initial (RF_{avg}) Date: 10/26/95	Percent Relative Standard Deviation (%RSD) ≤20%	Daily Response Factor (RF) Date: 12/14/95	Percent Difference (%DIFF) ≤±15%
TPH as Gasoline	2.865×10^{-5}	6	2.971×10^{-5}	4

Approved By: Eydie Schwartz Date: 12/18/95

CCVISRF/120594

L9504260.XLS - geneb 12/18/95

Page No.:

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-801.06	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Batch No.:	120995	**Date Extracted:**	NA
		Date Analyzed:	12/10/95

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds
EPA Methods 5030/8260
Reporting Units: ug/L (ppb)

Sample Name: Batch QC
Lab Code: L9504237-001

						Percent Recovery				
Analyte	**Sample Result**	**Spike CONC**	**MS**	**%MS**	**Spike CONC DUP**	**DMS**	**%DMS**	**RPD**	**MS/DMS Limit**	**RPD Limit**
Chloroform	ND	5.00	4.68	94	5.00	5.09	102	8	71-120	11
1,1-Dichloroethane (1,1-DCA)	ND	5.00	4.75	95	5.00	5.13	103	8	71-120	11
1,2-Dichloroethane	ND	5.00	5.05	101	5.00	5.15	103	2	71-120	11
1,1-Dichloroethylene (1,1-DCE)	ND	5.00	4.66	93	5.00	4.89	98	5	65-145	14
Tetrachloroethylene (PCE)	ND	5.00	4.13	83	5.00	4.03	81	2	71-120	14
Trichloroethylene (TCE)	ND	5.00	4.04	81	5.00	4.01	80	<1	71-120	14
Benzene	ND	5.00	5.23	105	5.00	4.62	92	10	76-127	11
Toluene	ND	5.00	4.78	96	5.00	5.07	101	12	76-125	13

Approved By: Eydie Schwartz Date: 12/18/95

DMSIS/120594
L9504260 XLS - 8260cms 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-001.06	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
Batch No.:	120995	**Date Analyzed:**	12/14/95

Laboratory Control Sample Summary
Volatile Organic Compounds
Reporting Units: ug/L (ppb)

Supply Source:	ULTRA Scientific
Lot Number:	J-0316
Date of Source:	10/16/95
Lab LCS I.D.:	94C

Analyte	EPA Method	Spike CONC	Result	Percent Recovery	ACP Percent Recovery Limit
Chloroform	5030/8260	5.00	5.05	101	80-120
1,1-Dichloroethane (1,1-DCA)	5030/8260	5.00	4.68	94	80-120
1,2-Dichloroethane	5030/8260	5.00	5.33	107	80-120
1,1-Dichloroethylene (1,1-DCE)	5030/8260	5.00	5.03	101	80-120
Tetrachloroethylene (PCE)	5030/8260	5.00	4.92	98	80-120
Trichloroethylene (TCE)	5030/8260	5.00	4.39	88	80-120
Benzene	5030/8260	5.00	4.82	96	80-120
Toluene	5030/8260	5.00	4.66	93	80-120

Approved By: Eydie Schwartz Date: 12/18/95

LCSEPA/121594
L9504260 XLS-8260lcs 12/18/95

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GOLDEN STATE/CAS LABORATORIES, INC.

6925 CANOGA AVENUE • CANOGA PARK, CA 91303
818 587-5550 • FAX #818 587-5555

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

CAS SERVICE REQUEST #: L9504260 DATE _____ PAGE ___ OF ___

COMPANY/ADDRESS: EMCON
3300 N. SAN FERNANDO BLVD.
BURBANK CA, 91504 PHONE (818) 841-1160
PROJECT NAME/LOCATON: DIAL CORPORATION
SOUTH GATE / PROJECT # CH93-00106
PROJECT MNGR.: MIKE FLACK
SAMPLERS SIGNATURE: [signature]

L9504260-

ANALYSIS REQUESTED

	SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	TPH Gas/BTEX (8015/8020/602) M FOR GAS	TPH/8015 Modified Diesel □ FC □ Gasoline □	BTEX 602/8020	Total Petroleum Hydrocarbons EPA 418.1	Halogenated Volatiles 601/8010	Volatile Organics GC/MS 624/8240/8260 FOR VOCs	Base/Nuel/Acid Organic GC/ms 625/8270	CAM Metals 6010/7000							REMARKS
1	MW-1	12-7-95	825	L9504260-1	H_2O	3	X					X									GROUNDWATER
2	MW-2		845	2		3	X					X									" "
3	MW-6		1108	3		3	X					X									" "
4	MW-7		1136	4		3	X					X									" "
5	TRIP BLANK		700	5		3	X					X									—
6	EQUIPMENT BLANK		800	6		3	X					X									—

RELINQUISHED BY:	RECEIVED BY:	TURNAROUND REQUIREMENTS:	REPORT REQUIREMENTS:	INVOICE INFORMATION:	SAMPLE RECEIPT:
Signature: [signature]	Signature: [signature]	___ 24 hr ___ 48 hr ___ 5 day	___ I. Routine Report	P.O. # _____	Shipping VIA: _____
Firm: EMCON	Firm: GS/CAS	X Standard	___ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)	Bill to: _____	Shipping #: _____
Date/Time: 12-8-95 11:00	Date/Time: 12-8-95 11:00	___ Other (Specify)	___ III. Data Validation Report (includes All Raw Data)		Condition: _____
		___ Provide Verbal Preliminary Results	___ RWQCB		Accepted for Analysis by: _____
		Requested Report Date _____			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:	SPECIAL INSTRUCTIONS/COMMENTS:
Signature	Signature	Signature	Signature	
Firm	Firm	Firm	Firm	
Date/Time	Date/Time	Date/Time	Date/Time	

COLUMBIA ANALYTICAL SERVICES, INC.

INITIAL CALIB.: 10/08/95
DATE ACQUIRED: 12/14/95
DATA FILE: 1214002.D
DETECTOR: MASS SELECTIVE
INSTRUMENT ID: MS01

ANALYTICAL METHOD: EPA8260
STANDARD SUPPLY SOURCE: Accustandard
IC LOT # : 128-128,075-263,085-203,065-313
Lab ID: 90a,92d,92e,90b,83c
DATE OF SOURCE: 10/08/95
CC LOT #: 128-128,075-263,085-203,065-313
LAB ID: 100f,97b,97d,96e
DATE OF SOURCE: 11/13/95

CMPND#	COMPOUND	RT	CONC. (PPB)	AREA	RF	AVRG RF	% DIFF	ACP RGE % DIFF
1	Dibromofluoromethane	8.33	25	652870				ISTD
2	Dichlorodifluoromethane	2.46	10	411327	1 575	1 265	25	25
3	Chloromethane	2.61	10	198959	0.762	0.592	29	25
4	Vinyl Chloride	2.81	10	179551	0.688	0 636	8	25
5	Bromomethane	3.23	10	204143	0 782	0 808	3	25
6	Chloroethane	3.41	10	90131	0 345	0.296	17	25
7	Trichlorofluoromethane	4.14	10	429212	1 644	1.618	2	25
8	1,1-Dichloroethene	4 93	10	159563	0 611	0.636	4	25
9	carbon disulfide	5 42	60	2204885	1 407	1 463	4	25
10	Freon 113	5.32	10	285326	1 093	1.112	2	25
11	ACROLEIN	4 19	150	168510	0.043	0.05	14	25
12	Acetone	4.43	50	726053	0.556	0.492	13	25
13	acrylonitrile	5.14	150	916684	0.234	0 252	7	25
14	Methylene Chloride	5.22	10	181312	0.694	0.822	16	25
15	Vinyl Acetate	5.41	50	672595	0.515	0.503	2	25
16	tr-1,2-Dichloroethene	6.34	10	172343	0.660	0 701	6	25
17	1,1-Dichloroethane	6 77	10	332416	1 273	1 306	3	25
18	Diisopropyl ether	7 73	10		0 000			25
19	cis-1,2-Dichloroethene	7 75	10	196462	0.752	0 731	3	25
20	2,2-Dichloropropane	8 24	10	299357	1.146	1 120	2	25
21	Bromochloromethane	8.01	10	116934	0.448	0.440	2	25
22	Chloroform	8.13	10	394311	1.510	1 509	0	25
23	1,1,1-Trichloroethane	9.44	10	295882	1.133	1 302	13	25
24	Carbon Tetrachloride	10.09	10	341112	1.306	1 397	6	25
25	1,1-Dichloropropene	9.83	10	206801	0 792	1 101	28	25
26	Pentafluorobenzene	9.27	25	821187	1.258	1 333	6	25
27	1,2-Dichloroethane	9.29	10	265362	1 016	0.99	3	
28	1,4-Difluorobenzene	10.77	25	1603693				ISTD
29	2-Butanone	7 65	50	976212	0 304	0.312	2	25
30	Benzene	10.20	10	559984	0 873	1 088	20	25
31	Trichloroethene	11 38	10	282942	0 441	0.520	15	25
32	1,2-Dichloropropane	11.31	10	221823	0 346	0.403	14	25
33	Dibromomethane	11 20	10	278935	0.435	0 469	7	25
34	Bromodichloromethane	11.46	10	471856	0 736	0.834	12	25
35	2-CLEVE	12.36	50	823534	0 257	0 238	8	25
36	cis-1,3-Dichloropropene	12.62	10	363328	0.566	0.656	14	25
37	Toluene-d8	13 77	25	1624900	1 013	1 062	5	25
38	4-Methyl-2-Pentanone	12 92	50	2134048	0.665	0 624	7	25
39	Toluene	13 88	10	458584	0 715	0.779	9	25
40	tr-1,3-Dichloropropene	13 37	10	344445	0 537	0.62	9	25
41	Chlorobenzene-d5	16 01	25	1579647				ISTD
42	1,1,2-Trihloroethane	13 58	10	210118	0 333	0 375	11	25

Approved By Eydie Schwartz Date 12/18/95

COLUMBIA ANALYTICAL SERVICES, INC.

INITIAL CALIB.: 10/08/95
DATE ACQUIRED: 12/14/95
DATA FILE: 1214002.D
DETECTOR: MASS SELECTIVE
INSTRUMENT ID: MS01

ANALYTICAL METHOD: EPA8260
STANDARD SUPPLY SOURCE: Accustandard
IC LOT #: 128-128,075-263,085-203,065-313
Lab ID: 90a,92d,92e,90b,83c
DATE OF SOURCE: 10/08/95
CC LOT #: 128-128,075-263,085-203,065-313
LAB ID: 100f,97b,97d,96e
DATE OF SOURCE: 11/13/95

CMPND#	COMPOUND	RT	CONC. (PPB)	AREA	RF	AVRG RF	% DIFF	ACP RGE % DIFF
43	Tetrachloroethene	15.00	10	259558	0.411	0.523	21	25
44	1,3-Dichloropropane	13.97	10	395713	0.626	0.698	10	25
45	Dibromochloromethane	14.32	10	366841	0.581	0.709	18	25
46	2-Hexanone	14.35	50	1819269	0.576	0.587	2	25
47	1,2-Dibromoethane	14.70	10	390141	0.617	0.723	15	25
48	Chlorobenzene	16.06	10	558755	0.884	1.096	19	25
49	1,1,1,2-Tetrachloroethane	15.95	10	246701	0.390	0.497	21	25
50	Ethylbenzene	16.42	10	904396	1.431	1.727	17	25
51	Xylenes	16.74	20	645386	0.511	0.593	14	25
52	xylene	17.33	10	322207	0.510	0.622	18	25
53	styrene	17.23	10	601311	0.952	1.034	8	25
54	Bromoform	16.78	10	330669	0.523	0.611	14	25
55	Isopropylbenzene	17.91	10	891469	1.411	1.744	19	25
56	Bromobenzene	18.20	10	267214	0.423	0.544	22	25
57	Bromofluorobenzene	17.92	25	1024450	0.649	0.747	13	25
58	2-Chlorotoluene	18.68	10	844109	1.336	1.624	18	25
59	n-Propylbenzne	18.58	10	1238830	1.961	2.642	26	25
60	1,2,3-Trichloropropane	17.53	10	401622	0.636	0.700	9	25
61	1,1,2,2-Tetrachloroethane	17.32	10	309827	0.490	0.427	15	25
62	4-Chlorotoluene	18.80	10	804146	1.273	1.456	13	25
63	1,3,5-Trimethylbenzene	19.06	10	683419	1.082	0.936	16	25
64	tert-Butylbenzene	19.44	10	643406	1.018	1.248	18	25
65	1,2,4-Trimethylbenzene	19.77	10	728386	1.153	0.965	19	25
66	sec-Butylbenzene	19.78	10	1050448	1.662	1.83	9	25
67	1,3-Dichlorobenzene	19.83	10	476927	0.755	0.936	19	25
68	p-Isopropyltoluene	20.09	10	789011	1.249	1.263	1	25
69	1,4-Dichlorobenzene	19.94	10	504260	0.798	0.959	17	25
70	1,2-Dichlorobenzene	20.46	10	477008	0.755	0.912	17	25
71	n-Butylbenzene	20.71	10	839481	1.329	1.125	18	25
72	1,2-Dibromo-3-chloroprop	21.17	10	198136	0.314	0.365	14	25
73	1,2,4-Trichlorobenzene	23.56	10	415525	0.658	0.685	4	25
74	Hexachlorobutadiene	24.25	10	239655	0.379	0.353	7	25
75	Naphthalene	24.05	10	1177607	1.864	1.663	12	25
75	1,2,3-Trichlorobenzene	24.48	10	411616	0.651	0.668	2	25
76	Dichlorotrifluoroethane	4.02	50		0.000	0.969	100	25

Approved By Eydie Schwartz Date 12/18/95

Quantitation Report

Data File : J:\MS01\DATA\121495\1214004.D
Acq Time : 14 Dec 95 10:36 am
Sample : 4260-1 p9
Misc :
Quant Time: Dec 14 14:08 1995

Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Dibromofluoromethane	8.32	113	645979	25.00 ug/l	-0.07
28) 1,4-Difluorobenzene	10.78	114	1590644	25.00 ug/l	-0.07
41) Chlorobenzene-d5	16.01	117	1396892	25.00 ug/l	-0.05
77) 1,4-Dichlorobenzene-d4	19.90	150	1216334	25.00 ug/l	-0.03
System Monitoring Compounds					**%Recovery**
26) Pentafluorobenzene	9.26	168	810002	23.52 %	94.10%
37) Toluene-d8	13.77	98	1695395	22.00 %	88.00%
57) Bromofluorobenzene	17.92	95	1042394	24.98 %	99.91%
Target Compounds					**Qvalue**

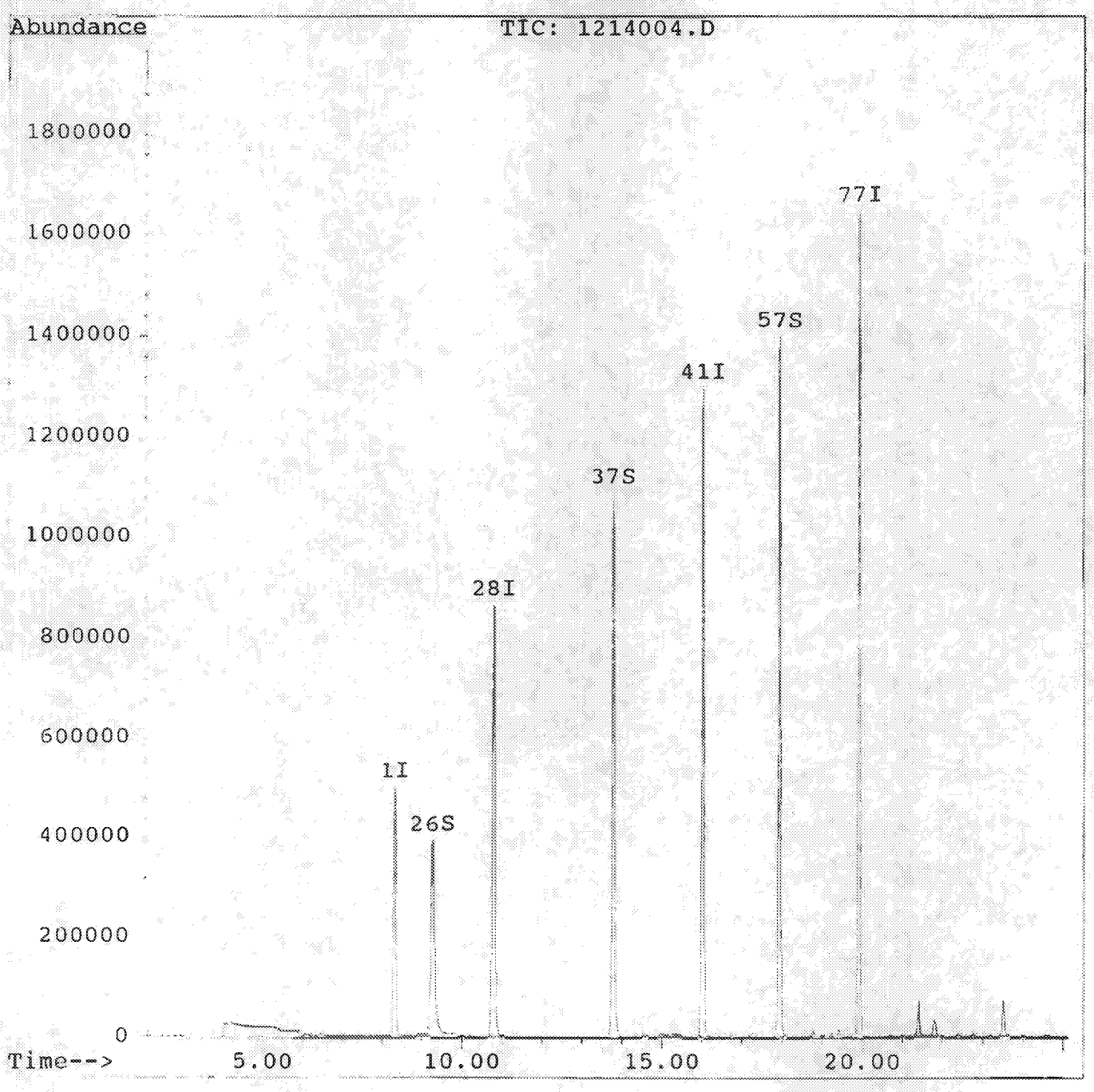
(#) = qualifier out of range (m) = manual integration
1214004.D 8260OCTR.M Thu Dec 14 14:07:48 1995 PRE-INSTALL

Quantitation Report

Data File : J:\MS01\DATA\121495\1214004.D
Acq Time : 14 Dec 95 10:36 am
Sample : 4260-1 p9
Misc :
Quant Time: Dec 14 11:04 1995

Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : J:\MS01\DATA\121495\1214005.D
Acq Time : 14 Dec 95 11:10 am
Sample : 4260-2 p10 20x Foaming Sample
Misc :
Quant Time: Dec 14 14:10 1995

Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Dibromofluoromethane	8.35	113	657682	25.00 ug/l(	-0.04
28) 1,4-Difluorobenzene	10.79	114	1655588	25.00 ug/l(	-0.05
41) Chlorobenzene-d5	16.02	117	1442289	25.00 ug/l(	-0.04
77) 1,4-Dichlorobenzene-d4	19.90	150	1270275	25.00 ug/l(	-0.04
System Monitoring Compounds					%Recovery
26) Pentafluorobenzene	9.30	168	881951	25.16 %	100.63%
37) Toluene-d8	13.79	98	1769274	22.06 %	88.23%
57) Bromofluorobenzene	17.92	95	1072300	24.89 %	99.54%
Target Compounds					Qvalue
12) Acetone	4.41	43	34806	2.69 ug/l(#	63
46) 2-Hexanone	14.58	43	10158	0.30 ug/l(	100

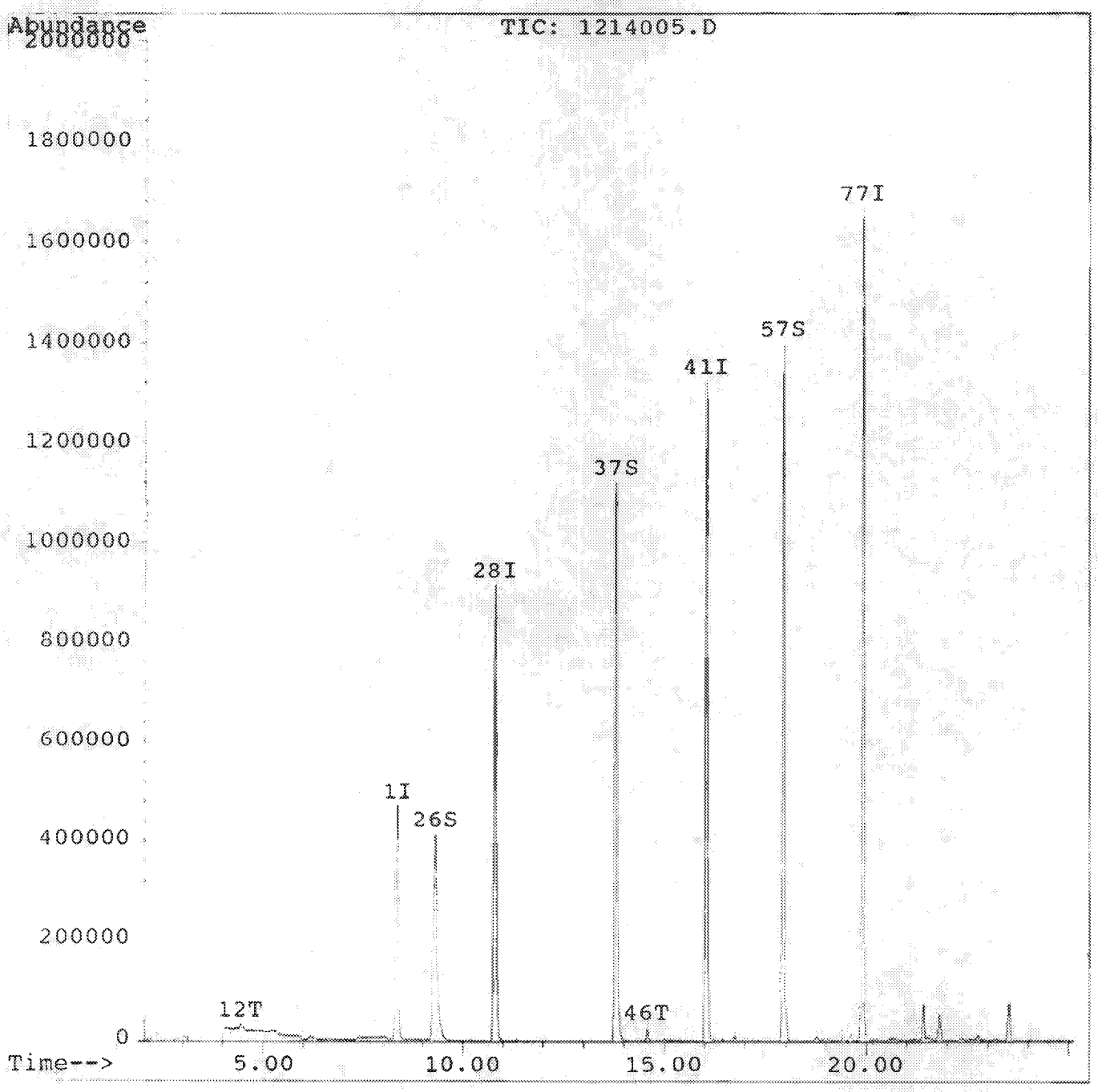
(#) = qualifier out of range (m) = manual integration
1214005.D 8260OCTR.M Thu Dec 14 14:09:11 1995 PRE-INSTALL

Quantitation Report

Data File : J:\MS01\DATA\121495\1214005.D
Acq Time : 14 Dec 95 11:10 am
Sample : 4260-2 p10 20x
Misc :
Quant Time: Dec 14 11:37 1995

Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : J:\MS01\DATA\121495\1214006.D
Acq Time : 14 Dec 95 11:47 am
Sample : 4260-3 p11
Misc :
Quant Time: Dec 14 14:11 1995

Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Dibromofluoromethane	8.32	113	679466	25.00 ug/l(	-0.07
28) 1,4-Difluorobenzene	10.76	114	1492772	25.00 ug/l(	-0.08
41) Chlorobenzene-d5	16.01	117	1336864	25.00 ug/l(	-0.06
77) 1,4-Dichlorobenzene-d4	19.90	150	1138576	25.00 ug/l(	-0.03

System Monitoring Compounds					%Recovery
26) Pentafluorobenzene	9.25	168	759404	20.97 %	83.87%
37) Toluene-d8	13.77	98	1660650	22.96 %	91.84%
57) Bromofluorobenzene	17.93	95	959741	24.03 %	96.12%

Target Compounds					Qvalue
17) 1,1-Dichloroethane	6.75	63	17607	0.50 ug/l(#	61
18) Diisopropyl ether	7.70	45	63384	1.76 ug/l(#	88
19) cis-1,2-Dichloroethene	7.74	96	6767	0.34 ug/l(	91
27) 1,2-Dichloroethane	9.29	62	14831	0.55 ug/l(#	89
29) 2-Butanone	7.70	43	42016	2.25 ug/l(#	54
30) Benzene	10.19	78	1085796	16.71 ug/l(	98
38) 4-Methyl-2-Pentanone	12.50	43	16145	0.43 ug/l(	100
39) Toluene	13.87	92	22412	0.48 ug/l(	89
46) 2-Hexanone	14.25	43	26947	0.86 ug/l(	100
50) Ethylbenzene	16.42	91	29783	0.32 ug/l(	94

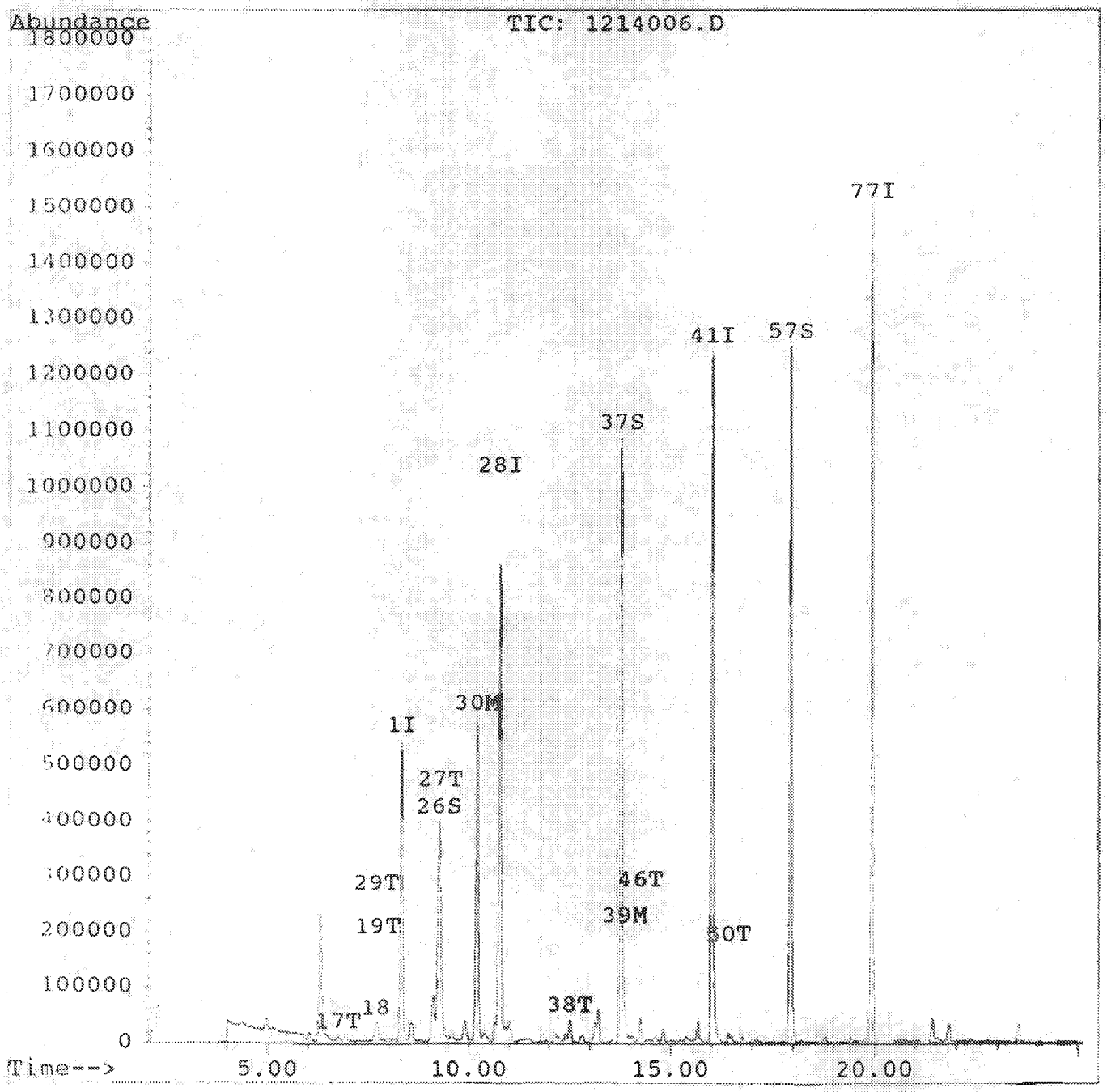
(#) = qualifier out of range (m) = manual integration

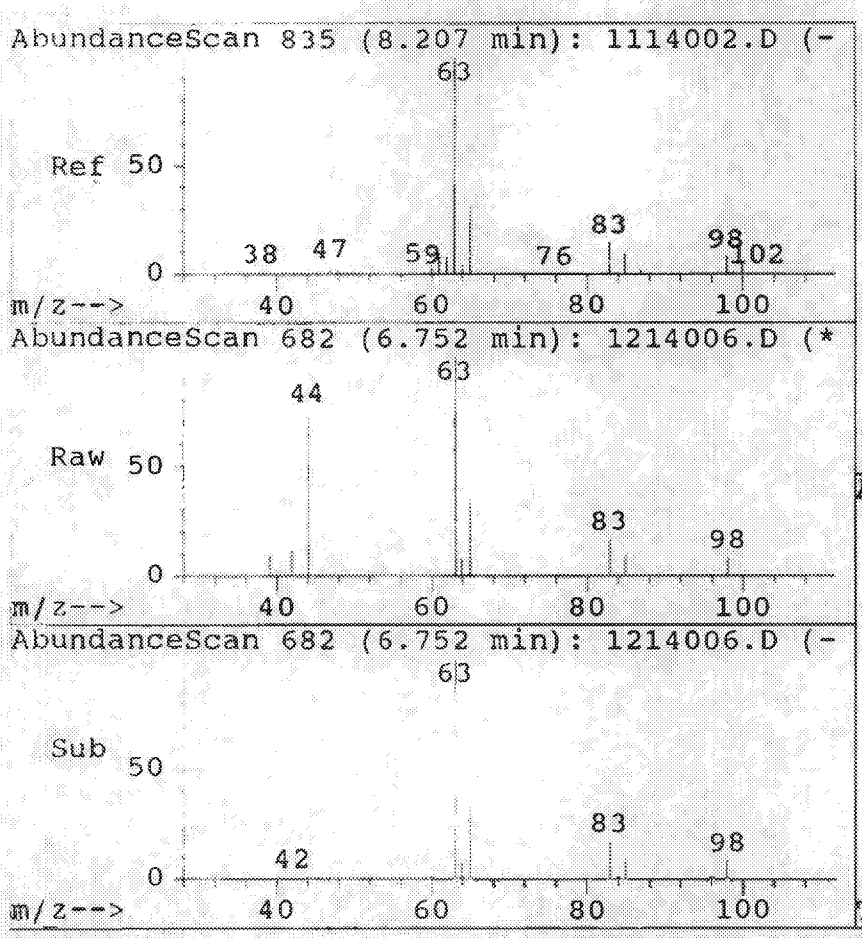
Quantitation Report

Data File : J:\MS01\DATA\121495\1214006.D
Acq Time : 14 Dec 95 11:47 am
Sample : 4260-3 p11
Misc :
Quant Time: Dec 14 14:11 1995

Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration

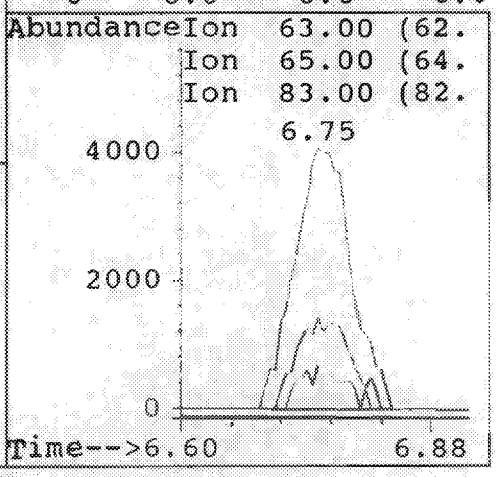


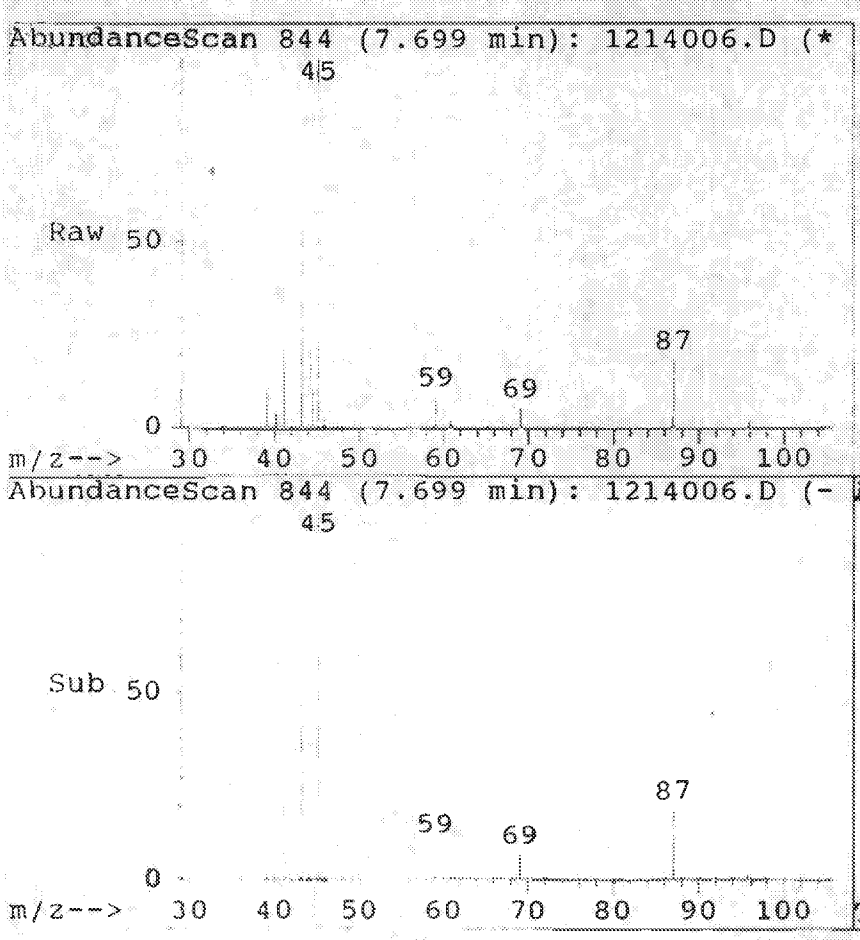


#17
1,1-Dichloroethane
Concen: 0.50 ug/l(kg
RT: 6.75 min Scan# 682
Delta R.T. -0.06 min
Lab File: 1214006.D
Acq: 14 Dec 95 11:47 am

Tgt Ion:63 Resp: 17607

Ion	Ratio	Lower	Upper
63	100		
65	0.0	24.1	36.1#
83	12.8	10.2	15.2
0	0.0	0.0	0.0

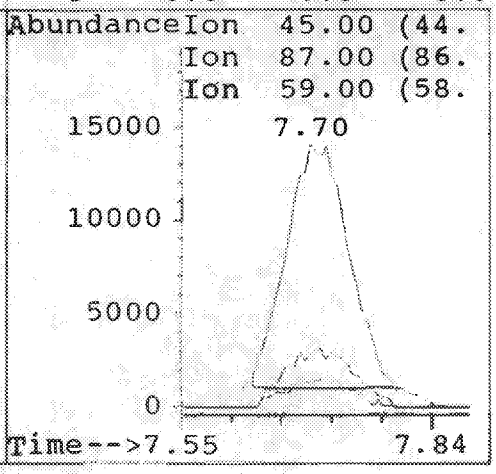


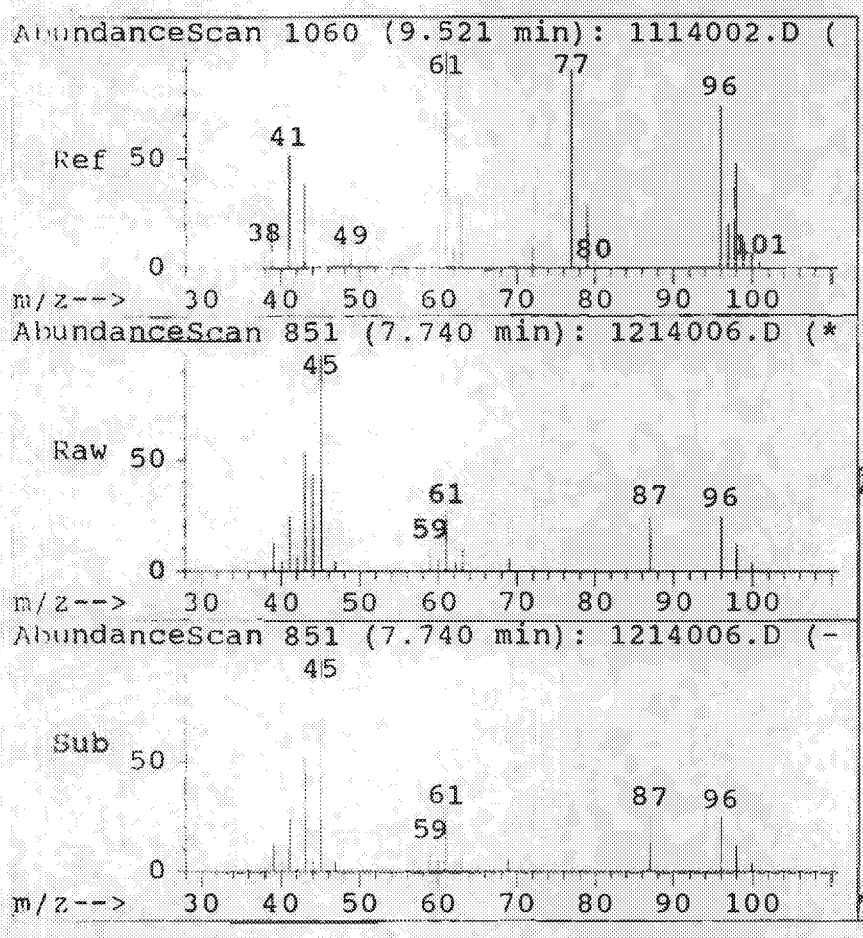


#18
Diisopropyl ether
Concen: 1.76 ug/l(kg
RT: 7.70 min Scan# 844
Delta R.T. -0.09 min
Lab File: 1214006.D
Acq: 14 Dec 95 11:47 am

Tgt Ion:45 Resp: 63384

Ion	Ratio	Lower	Upper
45	100		
87	25.1	17.6	26.4
59	4.9	10.4	15.6#
0	0.0	0.0	0.0

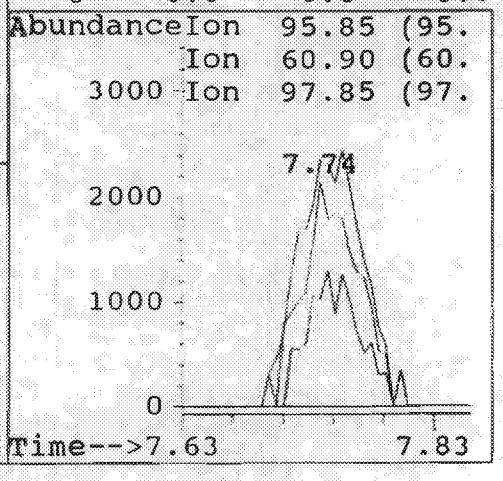


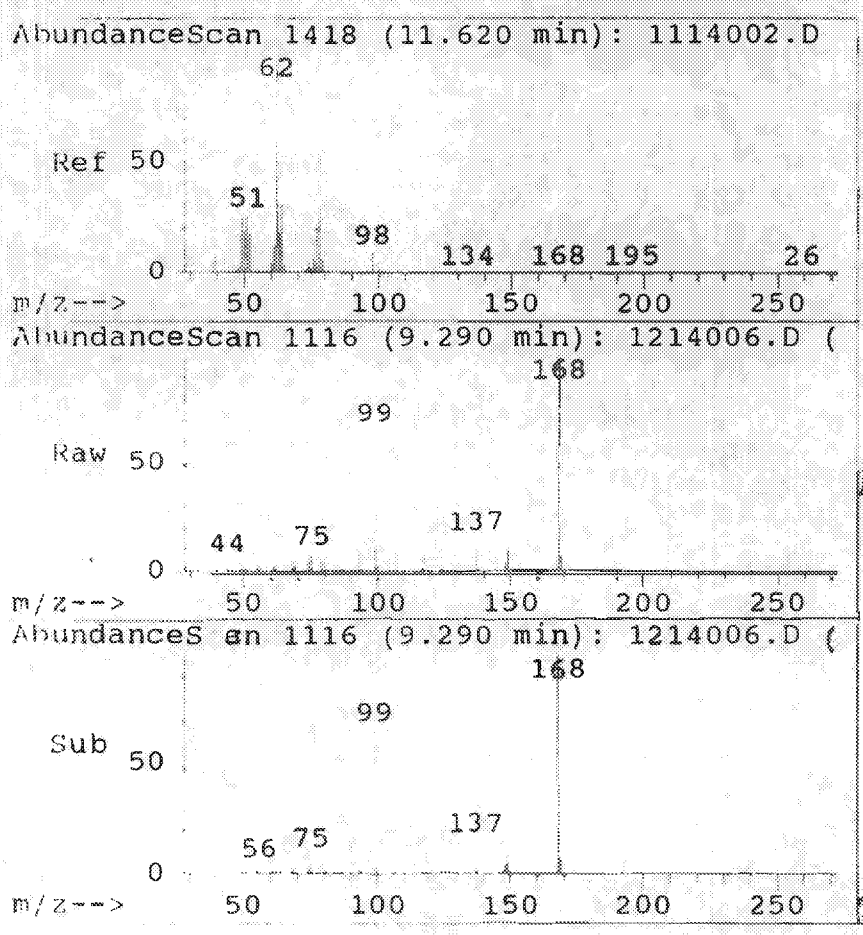


#19
cis-1,2-Dichloroethene
Concen: 0.34 ug/l(kg
RT: 7.74 min Scan# 851
Delta R.T. -0.07 min
Lab File: 1214006.D
Acq: 14 Dec 95 11:47 am

Tgt Ion:95.85 Resp: 6767

Ion	Ratio	Lower	Upper
96	100		
61	131.9	114.6	172.0
98	56.1	50.4	75.6
0	0.0	0.0	0.0

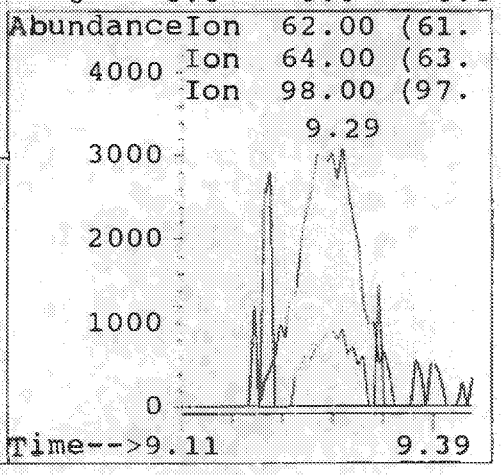


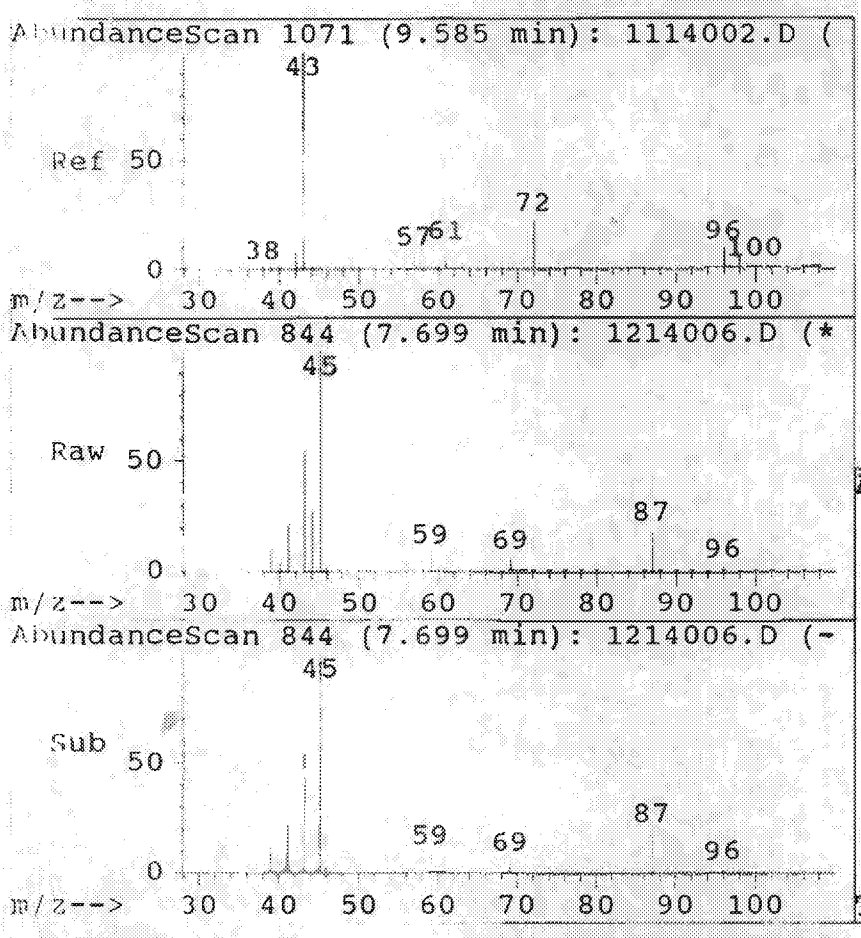


#27
1,2-Dichloroethane
Concen: 0.55 ug/l(kg
RT: 9.29 min Scan# 1116
Delta R.T. -0.08 min
Lab File: 1214006.D
Acq: 14 Dec 95 11:47 am

Tgt Ion:62 Resp: 14831

Ion	Ratio	Lower	Upper
62	100		
64	22.8	25.8	38.8#
98	15.7	12.6	18.8
0	0.0	0.0	0.0

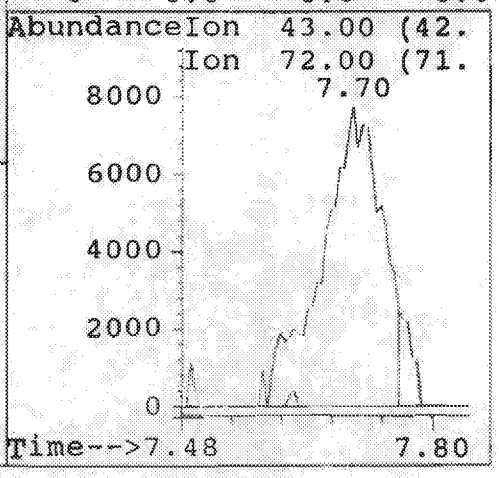


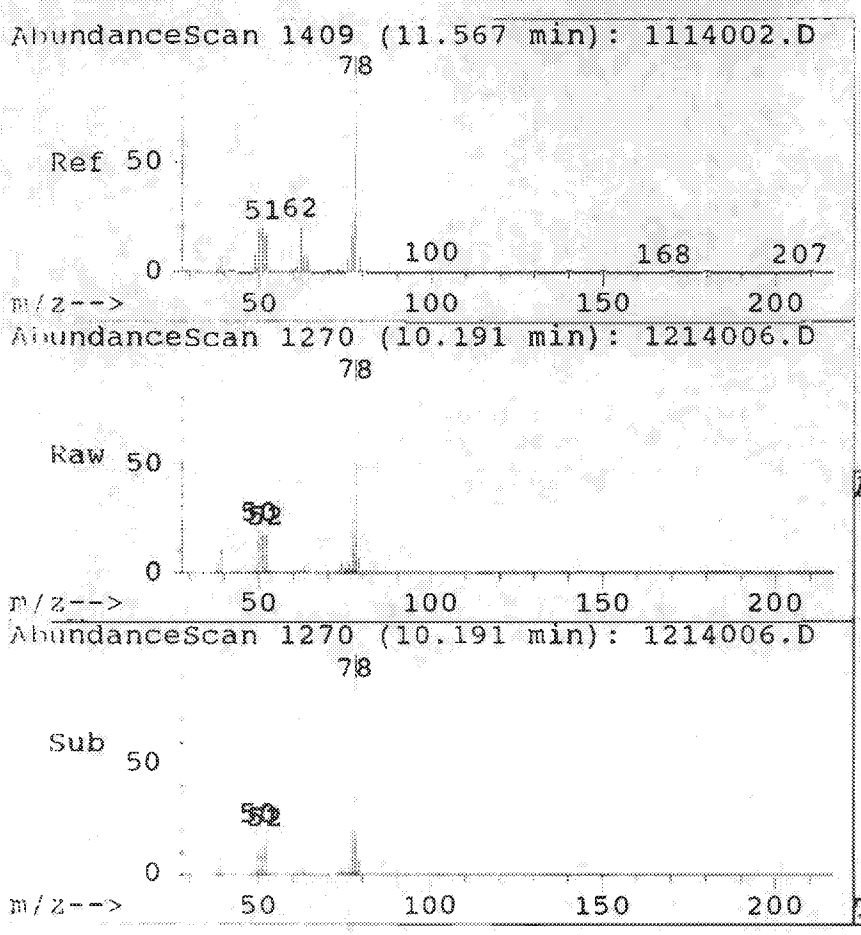


#29
2-Butanone
Concen: 2.25 ug/l(kg
RT: 7.70 min Scan# 844
Delta R.T. 0.08 min
Lab File: 1214006.D
Acq: 14 Dec 95 11:47 am

Tgt Ion:43 Resp: 42016

Ion	Ratio	Lower	Upper
43	100		
72	0.6	18.3	27.5#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

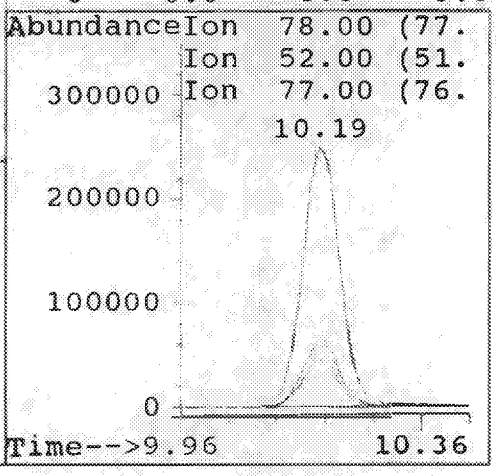


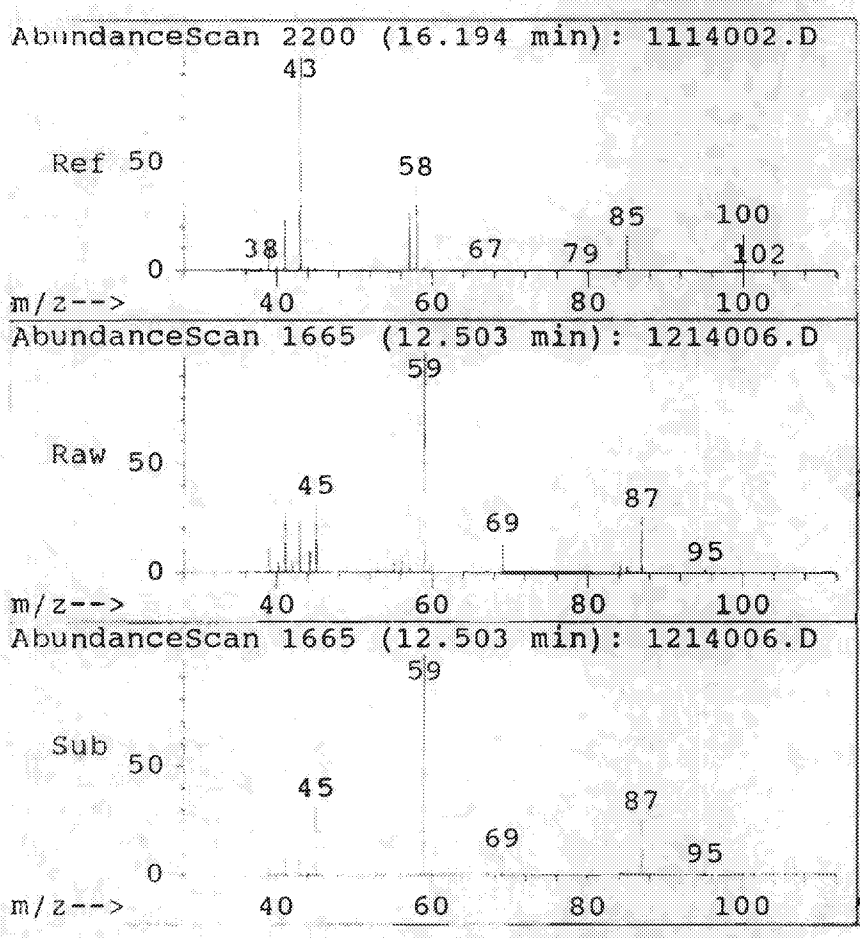


#30
Benzene
Concen: 16.71 ug/l(kg
RT: 10.19 min Scan# 1270
Delta R.T. -0.09 min
Lab File: 1214006.D
Acq: 14 Dec 95 11:47 am

Tgt Ion:78 Resp: 1085796

Ion	Ratio	Lower	Upper
78	100		
52	17.9	14.8	22.2
77	25.1	19.0	28.4
0	0.0	0.0	0.0

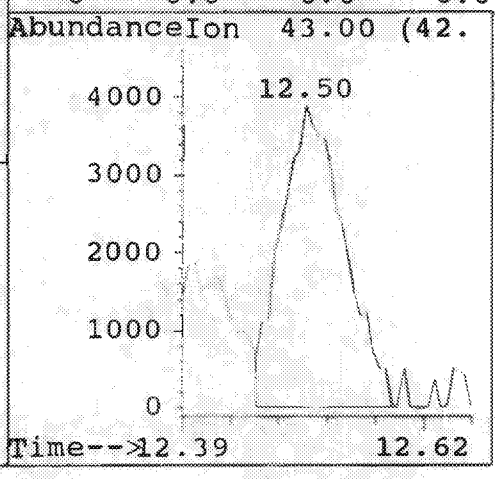


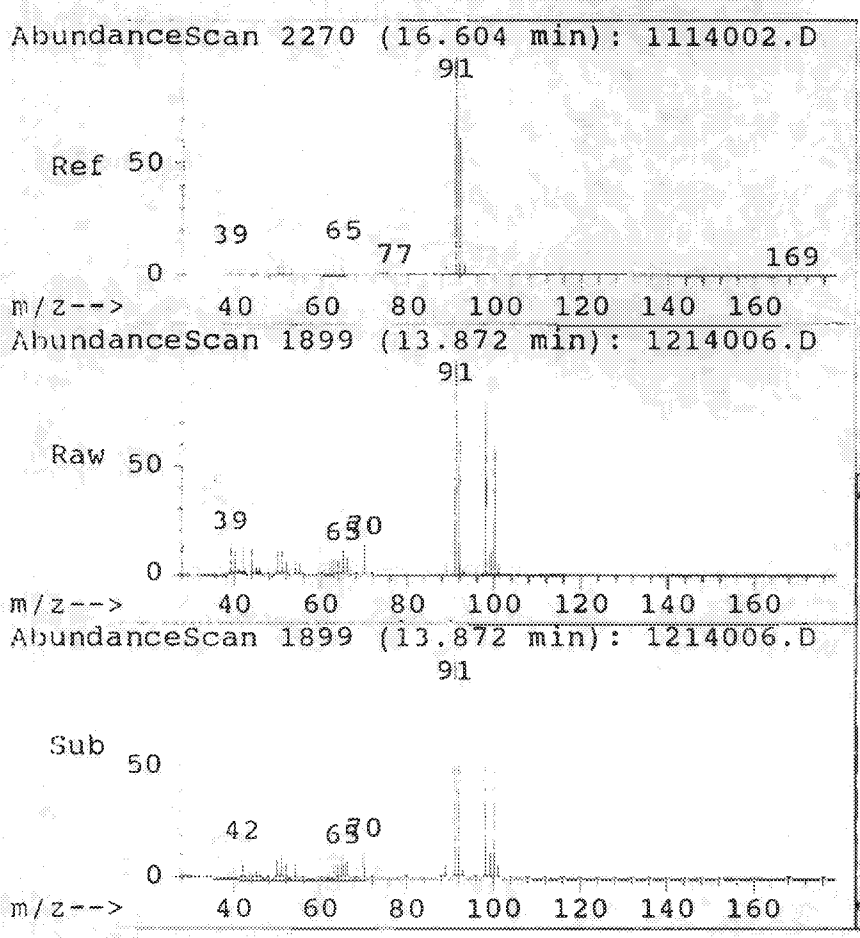


#38
4-Methyl-2-Pentanone
Concen: 0.43 ug/l(kg
RT: 12.50 min Scan# 1665
Delta R.T. -0.47 min
Lab File: 1214006.D
Acq: 14 Dec 95 11:47 am

Tgt Ion:43 Resp: 16145

Ion	Ratio	Lower	Upper
43	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

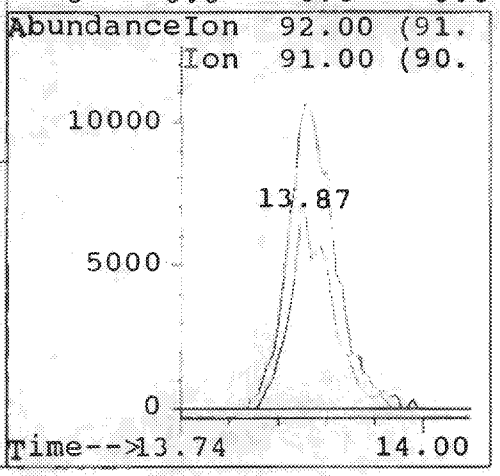


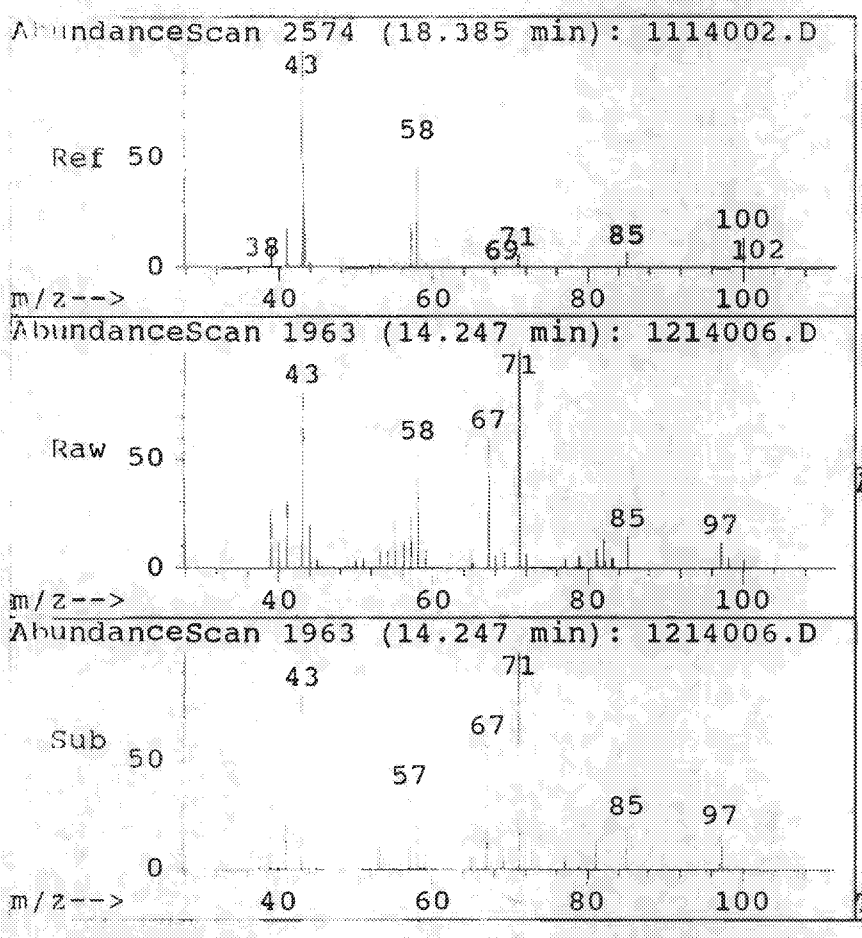


#39
Toluene
Concen: 0.48 ug/l(kg <CRDL
RT: 13.87 min Scan# 1899
Delta R.T. 0.12 min
Lab File: 1214006.D
Acq: 14 Dec 95 11:47 am

Tgt Ion:92 Resp: 22412

Ion	Ratio	Lower	Upper
92	100		
91	172.8	126.8	190.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

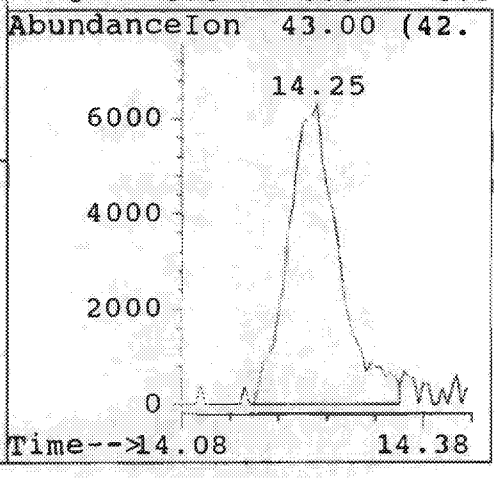


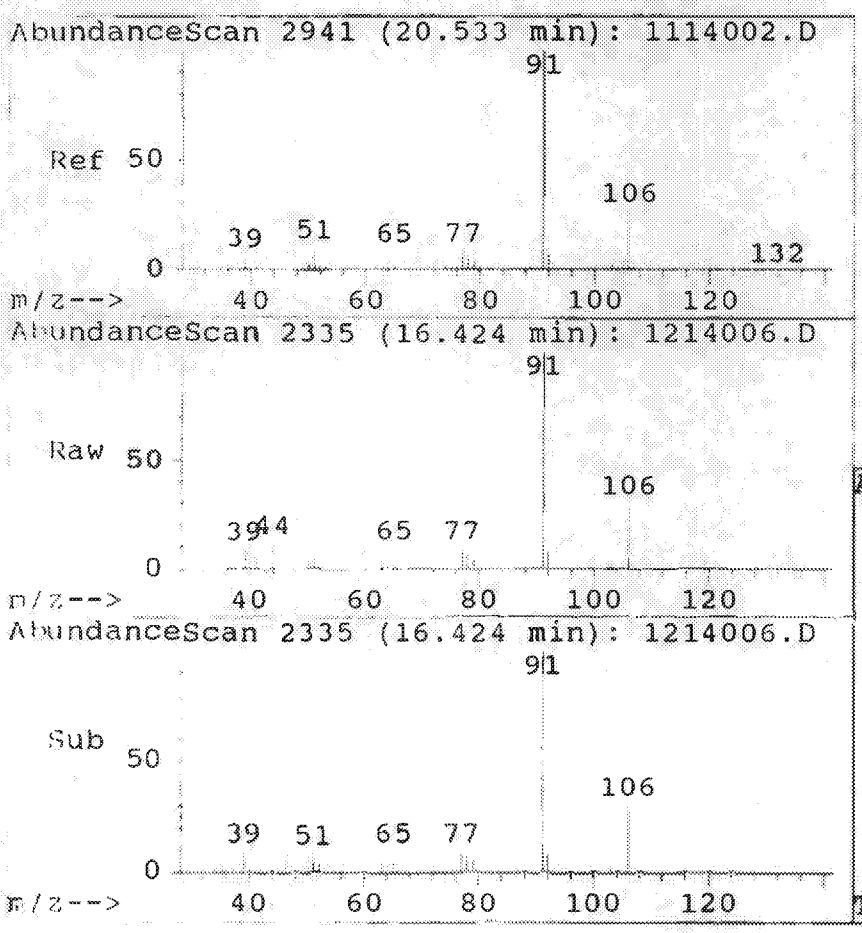


#46
2-Hexanone
Concen: 0.86 ug/l(kg
RT: 14.25 min Scan# 1963
Delta R.T. -0.14 min
Lab File: 1214006.D
Acq: 14 Dec 95 11:47 am

Tgt Ion:43 Resp: 26947

Ion	Ratio	Lower	Upper
43	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

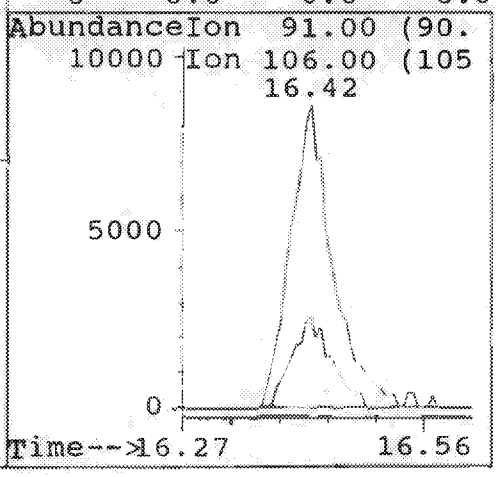




#50
Ethylbenzene
Concen: 0.32 ug/l(kg
RT: 16.42 min Scan# 2335
Delta R.T. 0.02 min
Lab File: 1214006.D
Acq: 14 Dec 95 11:47 am

Tgt Ion:91 Resp: 29783

Ion	Ratio	Lower	Upper
91	100		
106	27.4	24.7	37.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Quantitation Report

ta File : J:\MS01\DATA\121495\1214007.D
q Time : 14 Dec 95 12:24 pm
mple : 4260-4 p12
sc :
uant Time: Dec 14 14:14 1995

Operator:
Inst : MS01
Multiplr: 1.00

ethod : J:\MS01\METHODS\8260OCTR.M
itle : Volatile Organic Compounds 8260
st Update : Sun Dec 10 12:10:39 1995
esponse via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Dibromofluoromethane	8.33	113	687560	25.00	ug/l(	-0.06
2) 1,4-Difluorobenzene	10.77	114	1609506	25.00	ug/l(	-0.07
4) Chlorobenzene-d5	16.02	117	1418660	25.00	ug/l(	-0.04
7) 1,4-Dichlorobenzene-d4	19.90	150	1243923	25.00	ug/l(	-0.03

System Monitoring Compounds						%Recovery
2) Pentafluorobenzene	9.27	168	840715	22.94	%	91.76%
3) Toluene-d8	13.78	98	1756069	22.52	%	90.08%
5) Bromofluorobenzene	17.93	95	1044884	24.65	%	98.61%

Target Compounds						Qvalue
9) carbon disulfide	5.45	76	16011	0.40	ug/l(#	86
10) ACROLEIN	4.20	55	2135	1.56	ug/l(#	1
11) Acetone	4.38	43	107964	7.97	ug/l(#	48
12) 1,1-Dichloroethane	6.78	63	61315	1.71	ug/l(	98
13) Diisopropyl ether	7.72	45	563937	15.51	ug/l(#	96
19) cis-1,2-Dichloroethene	7.75	96	19729	0.98	ug/l(	95
27) 1,2-Dichloroethane	9.30	62	29778	1.09	ug/l(#	88
29) 2-Butanone	7.71	43	308060	15.33	ug/l(# NO	53
30) Benzene	10.21	78	4522760	64.55	ug/l(	95
31) Trichloroethene	11.39	132	31585	0.94	ug/l(#	89
32) 1,2-Dichloropropane	11.31	63	30188	1.16	ug/l(#	86
33) 4-Methyl-2-Pentanone	12.51	43	34775	0.87	ug/l(	100
39) Toluene	13.88	92	134927	2.69	ug/l(	93
45) 2-Hexanone	14.25	43	36692	1.10	ug/l(	100
50) Ethylbenzene	16.43	91	198803	2.03	ug/l(	95
51) Xylenes	16.76	106	46368	1.38	ug/l(	100
52) xylene	17.34	106	17854	0.51	ug/l(	100
53) Isopropylbenzene	17.91	105	29880	0.30	ug/l(	98
64) 1,2,4-Trimethylbenzene	19.64	105	18694	0.34	ug/l(	98

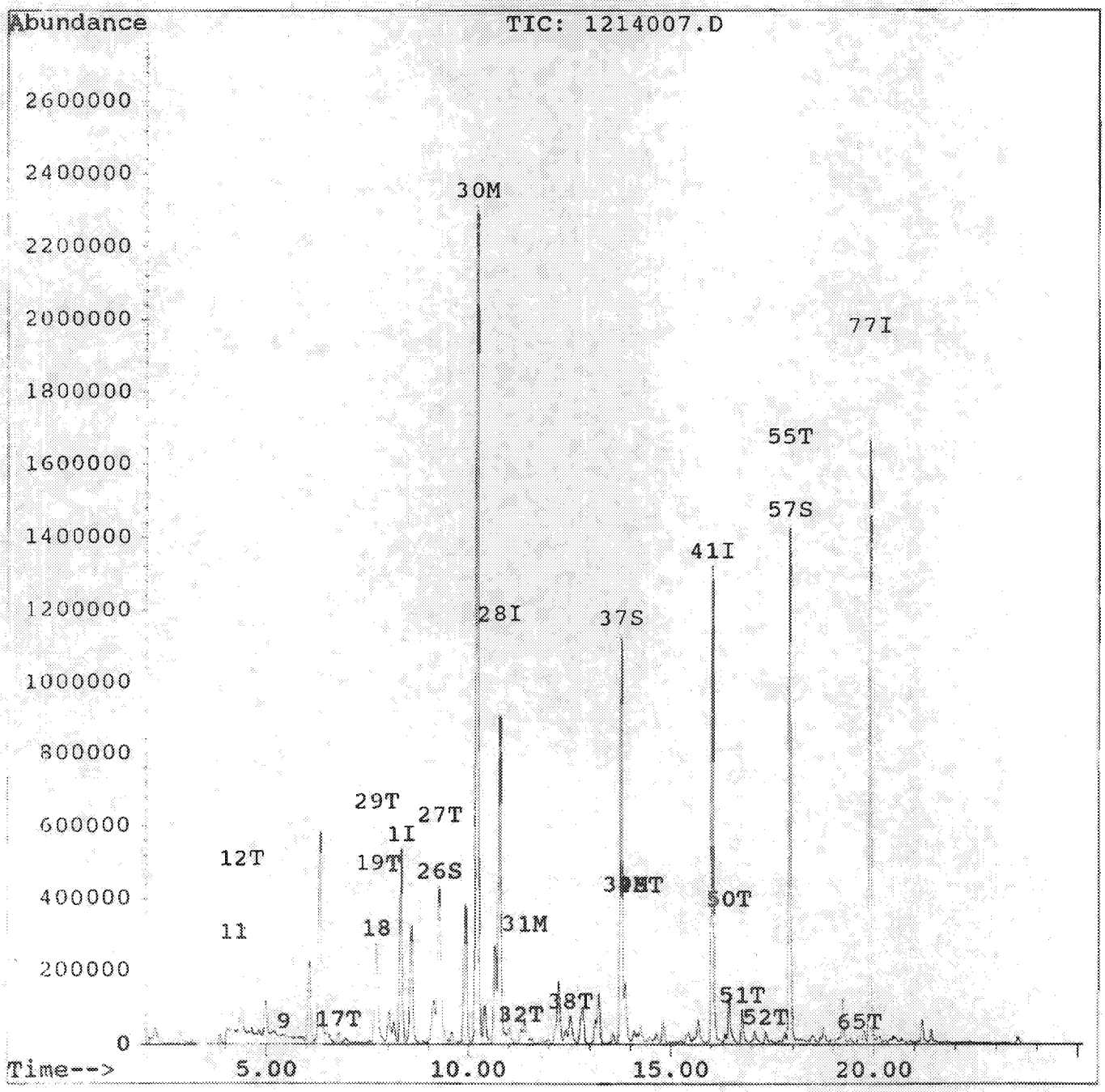
(#) = qualifier out of range (m) = manual integration

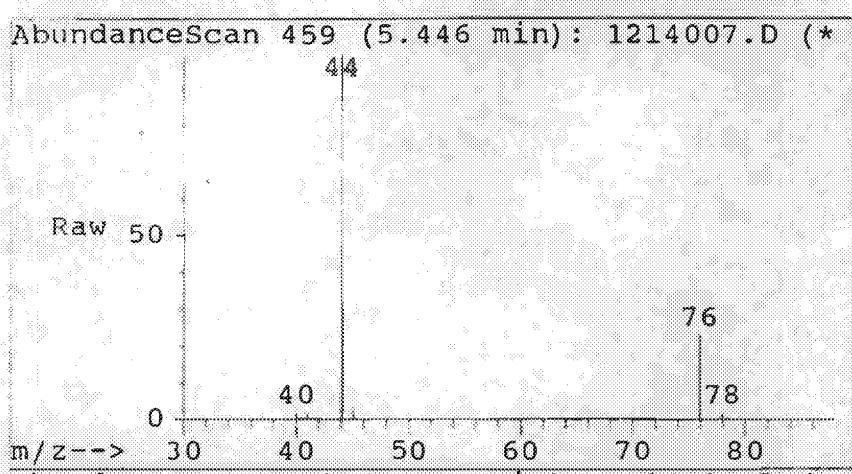
Quantitation Report

Data File : J:\MS01\DATA\121495\1214007.D
Acq Time : 14 Dec 95 12:24 pm
Sample : 4260-4 p12
Misc :
Quant Time: Dec 14 14:14 1995

Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration

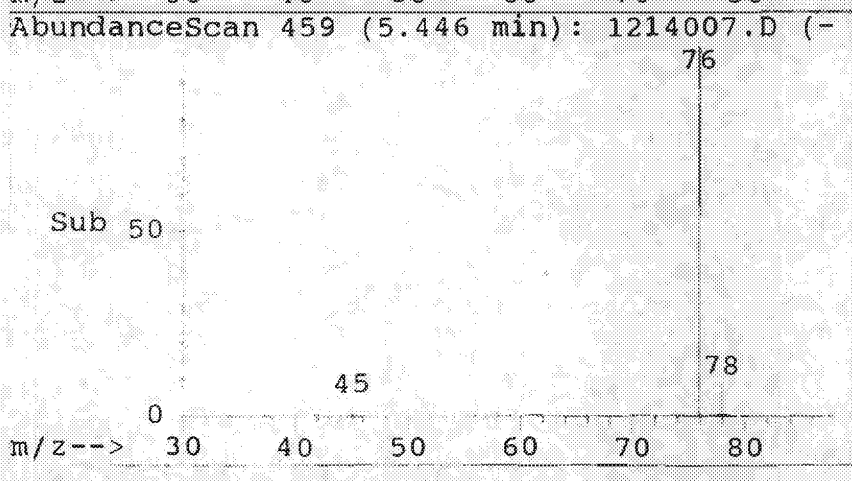


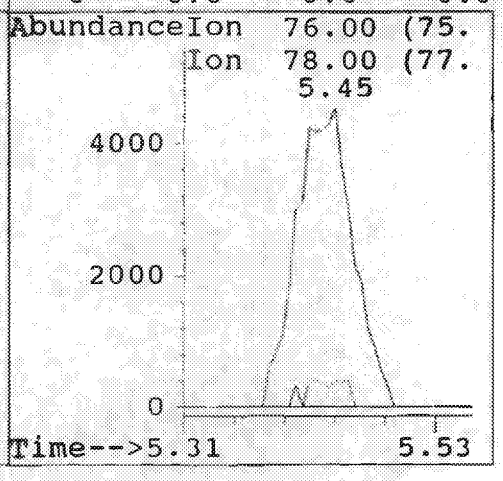


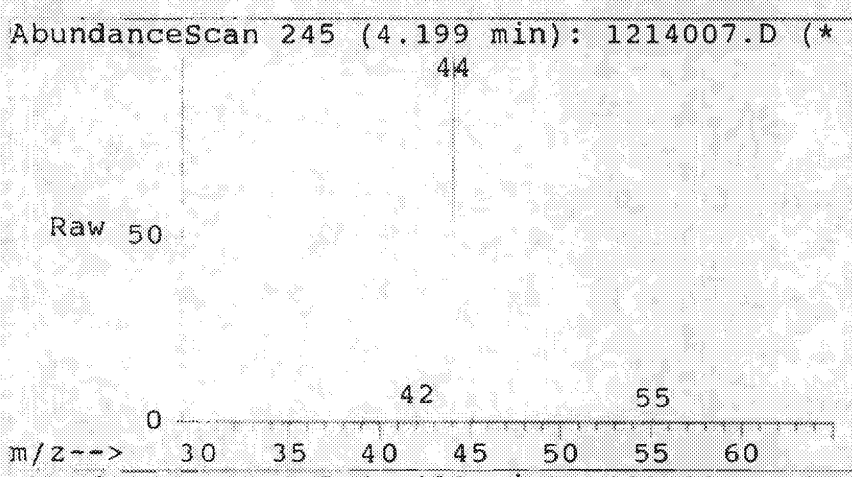
#9
carbon disulfide
Concen: 0.40 ug/l(kg
RT: 5.45 min Scan# 459
Delta R.T. -0.07 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:76 Resp: 16011

Ion	Ratio	Lower	Upper
76	100		
78	4.1	7.2	10.8#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



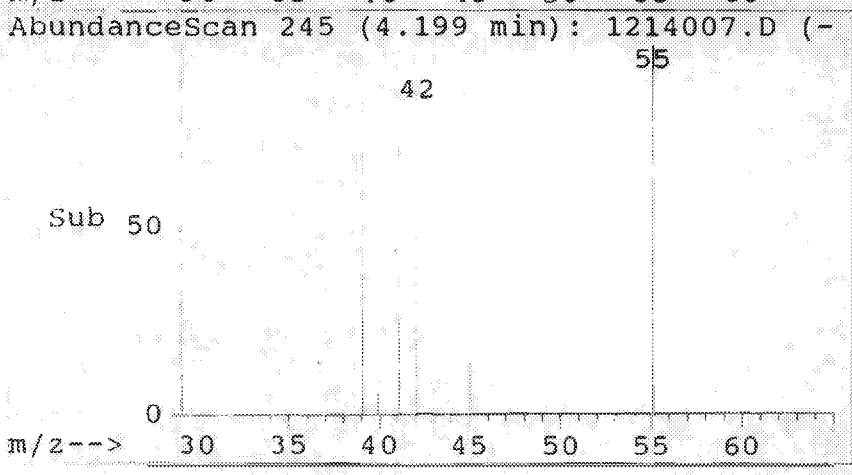


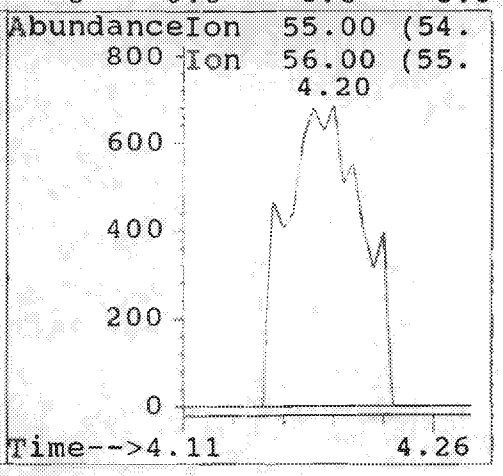


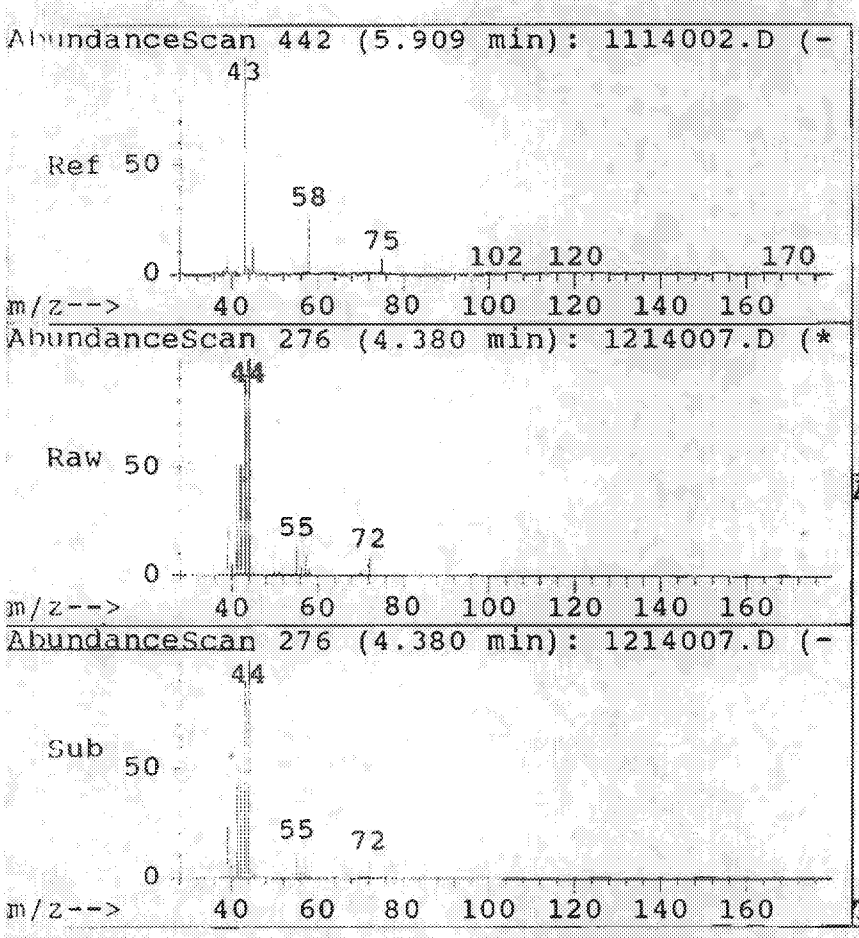
#11
ACROLEIN
Concen: 1.56 ug/l(kg
RT: 4.20 min Scan# 245
Delta R.T. 0.02 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:55 Resp: 2135

Ion	Ratio	Lower	Upper
55	100		
56	0.0	108.8	163.2#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



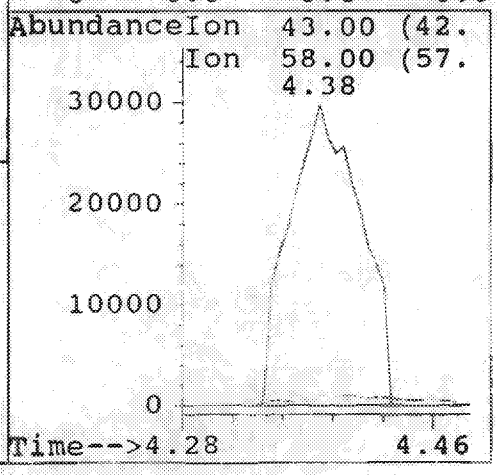


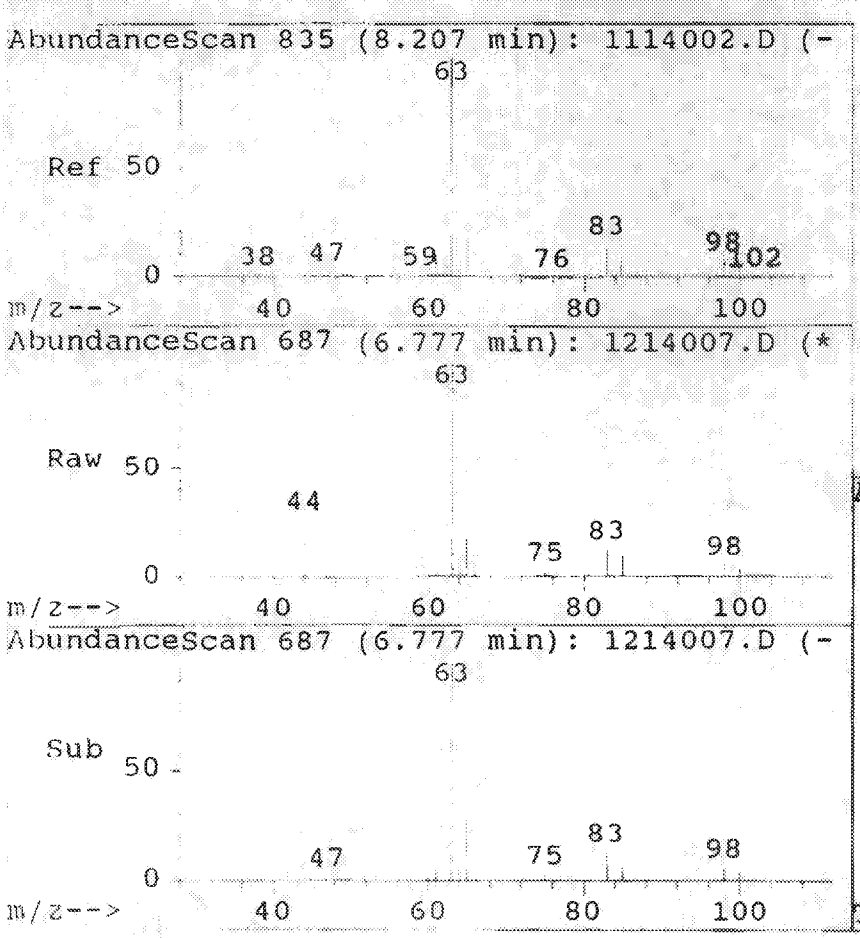


#12
Acetone
Concen: 7.97 ug/l(kg
RT: 4.38 min Scan# 276
Delta R.T. -0.04 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:43 Resp: 107964

Ion	Ratio	Lower	Upper
43	100		
58	0.0	21.3	31.9#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

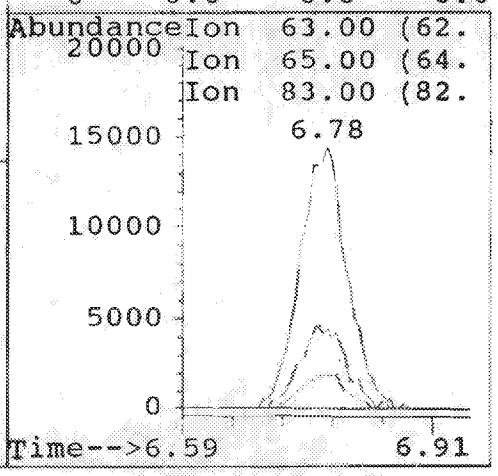


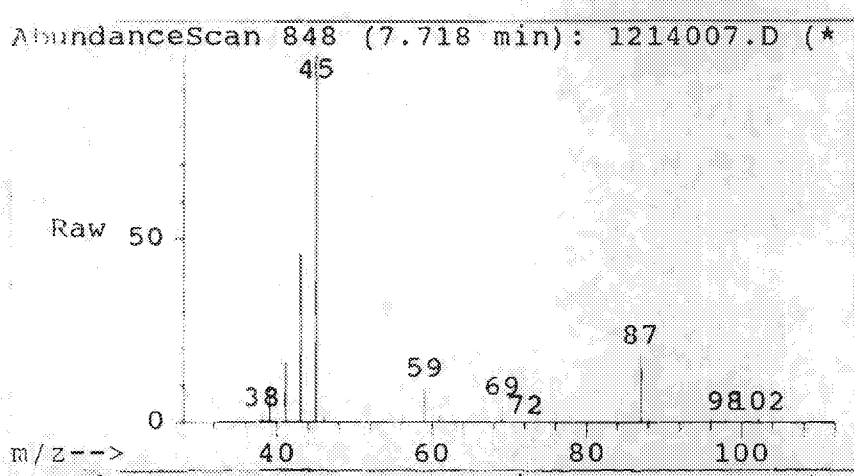


#17
1,1-Dichloroethane
Concen: 1.71 ug/l(kg
RT: 6.78 min Scan# 687
Delta R.T. -0.03 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:63 Resp: 61315

Ion	Ratio	Lower	Upper
63	100		
65	31.6	24.1	36.1
83	12.9	10.2	15.2
0	0.0	0.0	0.0

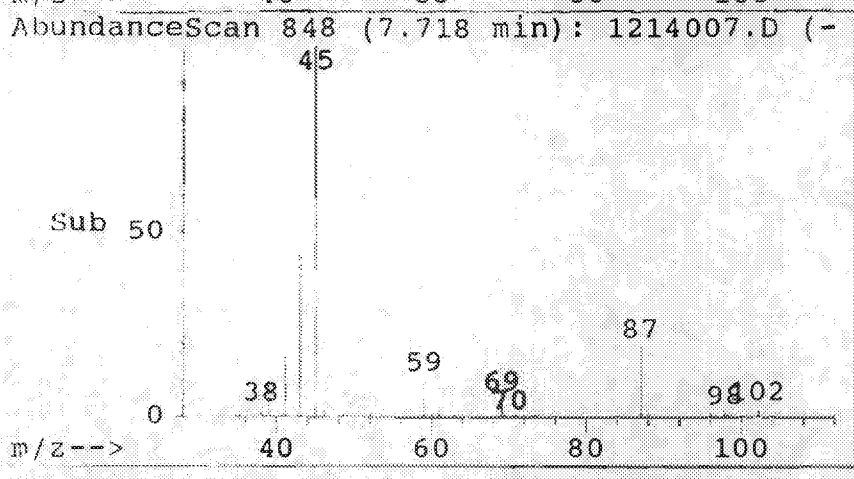


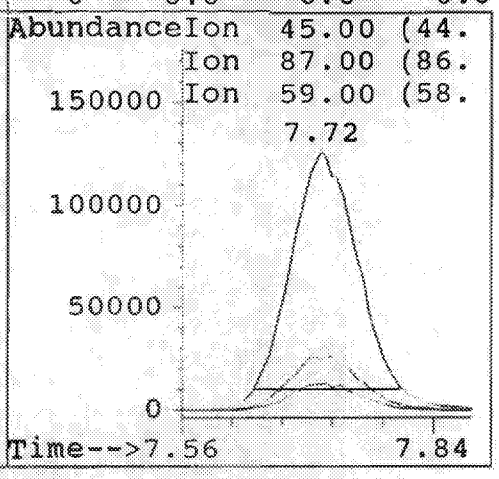


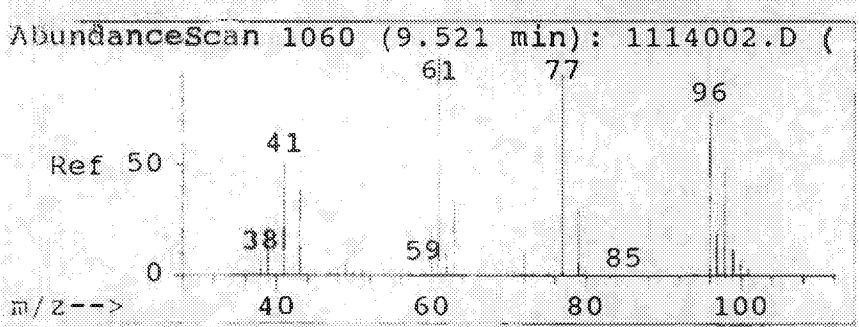
#18
Diisopropyl ether
Concen: 15.51 ug/l(kg
RT: 7.72 min Scan# 848
Delta R.T. -0.07 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:45 Resp: 563937

Ion	Ratio	Lower	Upper
45	100		
87	21.1	17.6	26.4
59	10.2	10.4	15.6#
0	0.0	0.0	0.0



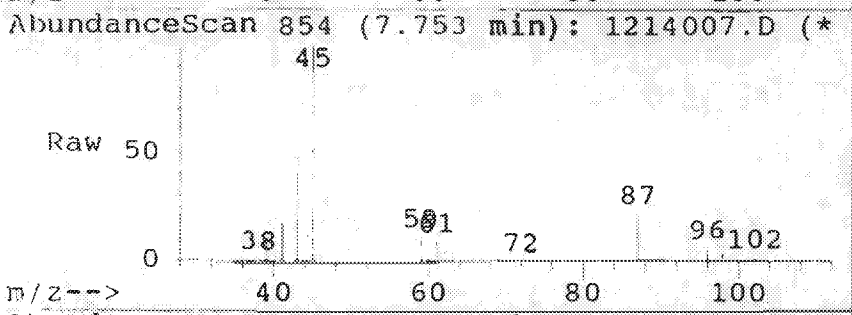


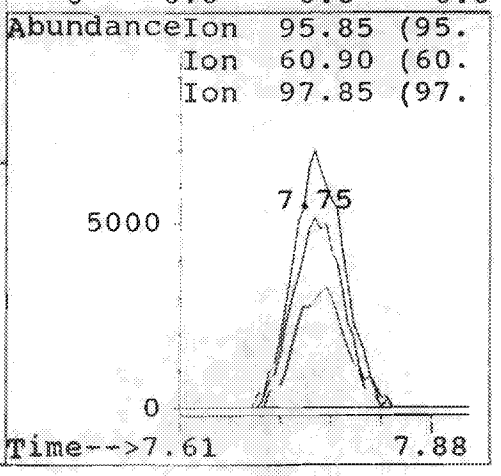


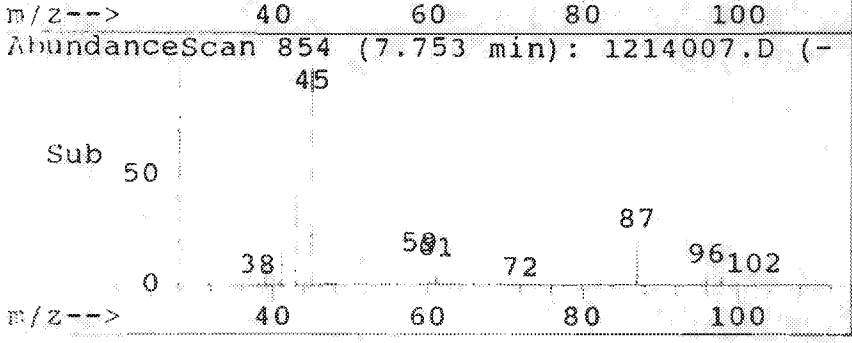
#19
cis-1,2-Dichloroethene
Concen: 0.98 ug/l(kg
RT: 7.75 min Scan# 854
Delta R.T. -0.06 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

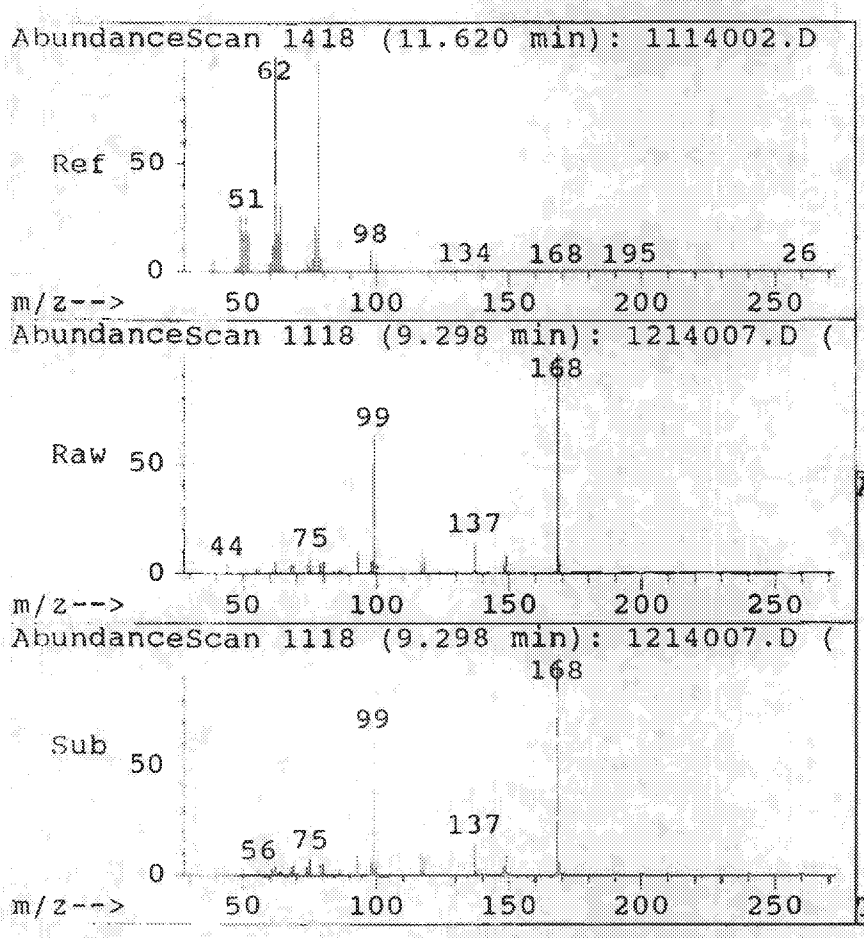
Tgt Ion:95.85 Resp: 19729

Ion	Ratio	Lower	Upper
96	100		
61	134.5	114.6	172.0
98	61.9	50.4	75.6
0	0.0	0.0	0.0





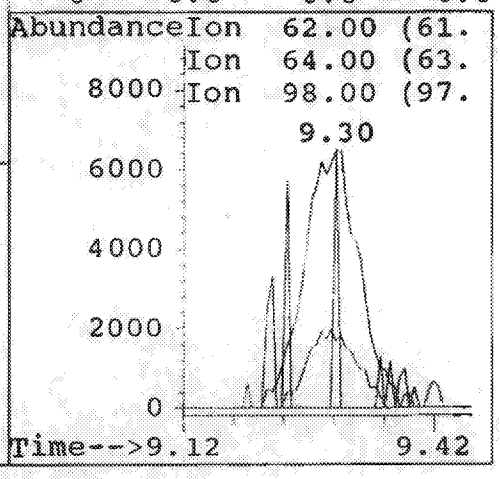


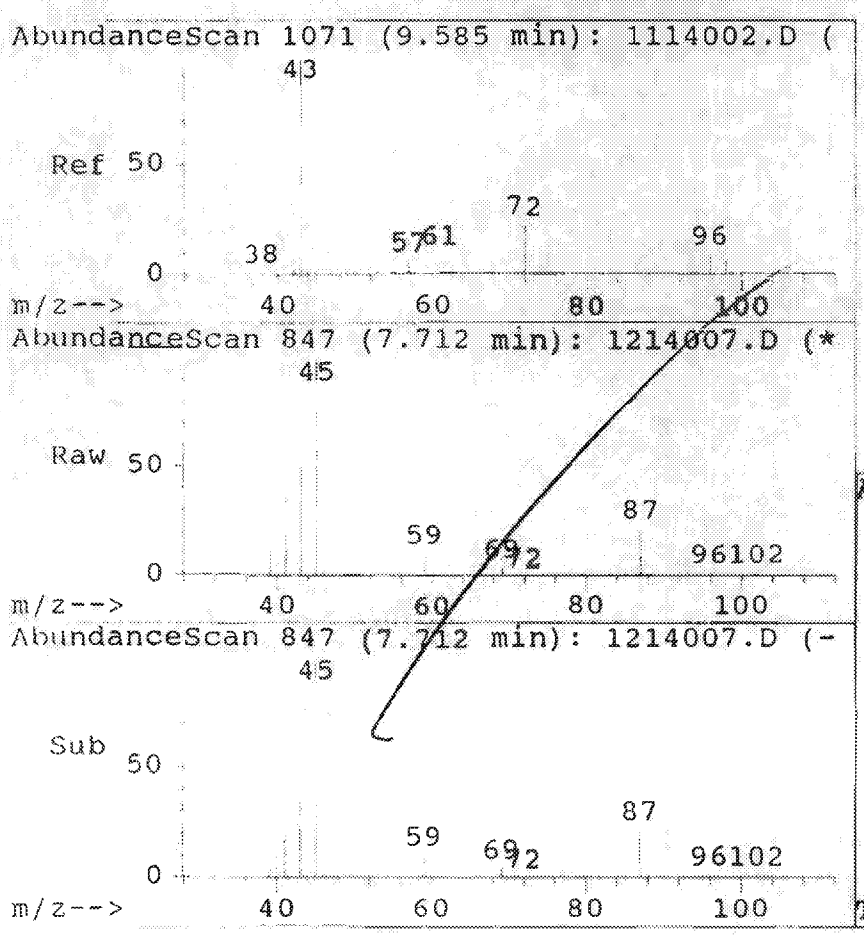


#27
1,2-Dichloroethane
Concen: 1.09 ug/l(kg
RT: 9.30 min Scan# 1118
Delta R.T. -0.07 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:62 Resp: 29778

Ion	Ratio	Lower	Upper
62	100		
64	27.3	25.8	38.8
98	7.7	12.6	18.8#
0	0.0	0.0	0.0

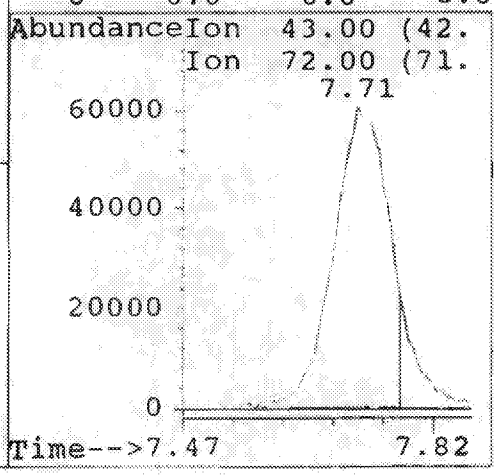


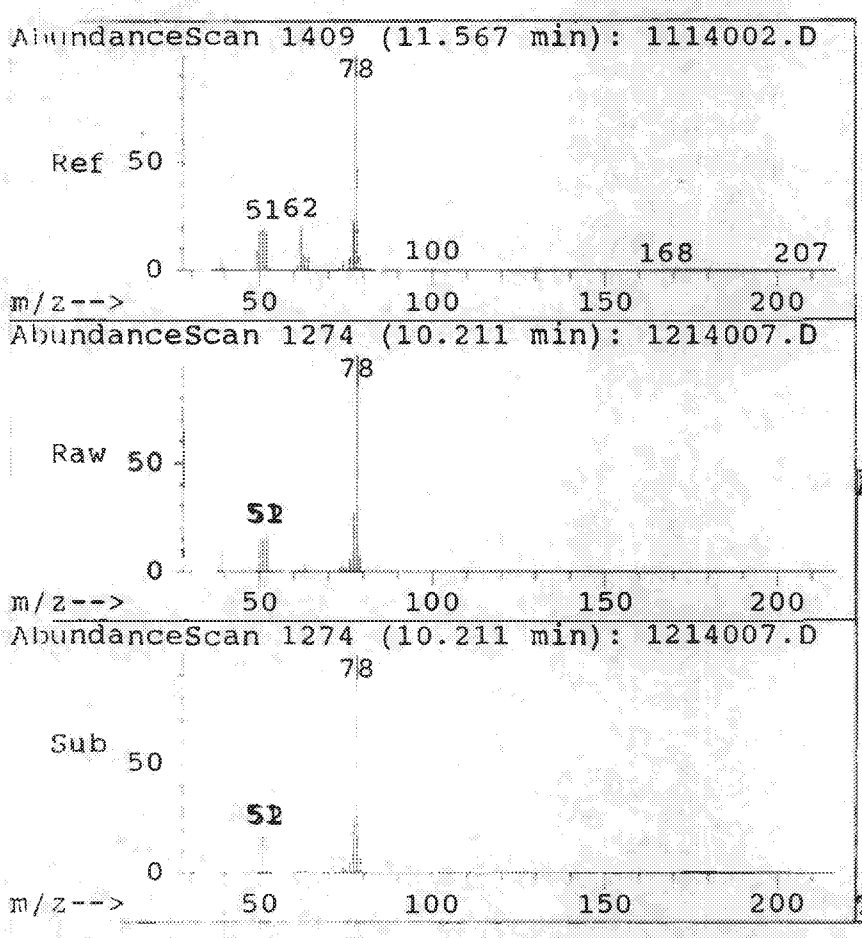


#29
2-Butanone
Concen: 15.33 ug/l(kg
RT: 7.71 min Scan# 847
Delta R.T. 0.09 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:43 Resp: 308060

Ion	Ratio	Lower	Upper
43	100		
72	0.3	18.3	27.5#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

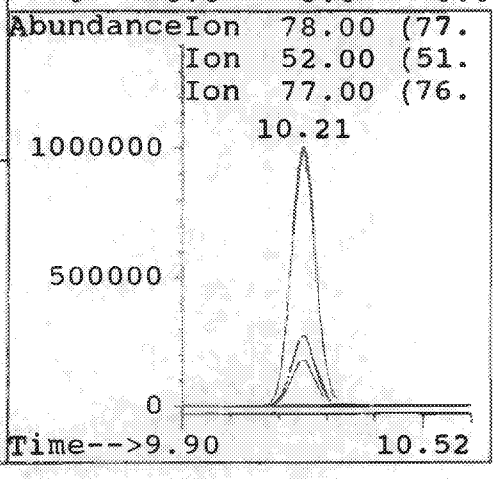


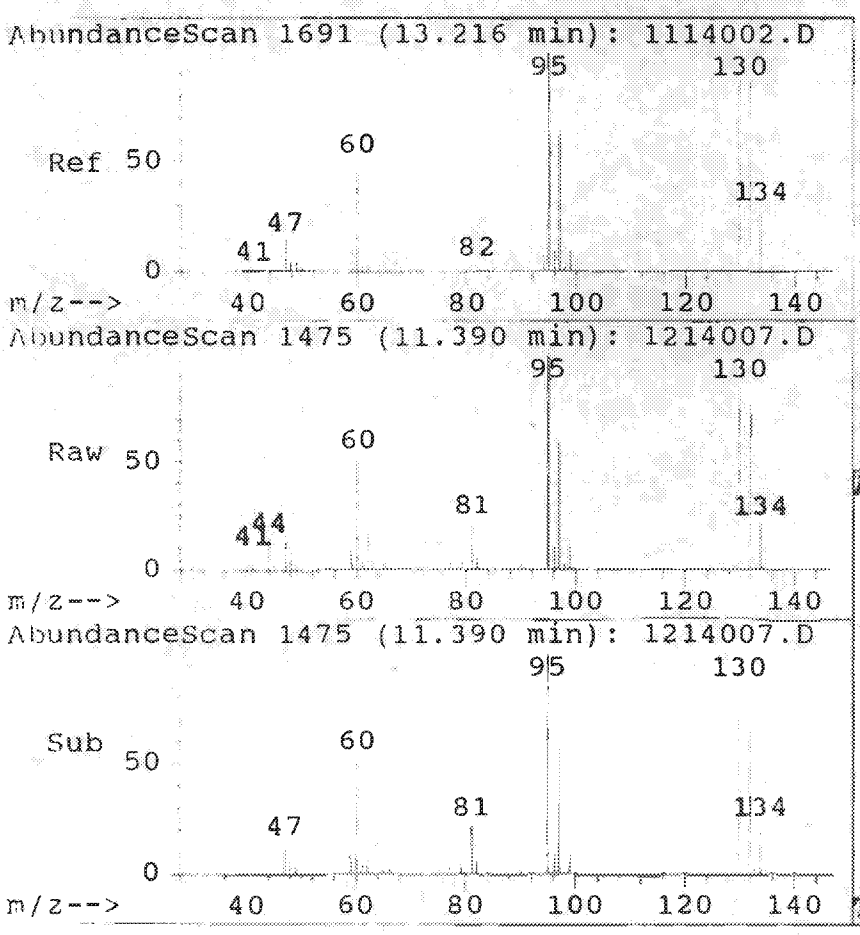


#30
Benzene
Concen: 64.55 ug/l(kg
RT: 10.21 min Scan# 1274
Delta R.T. -0.07 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:78 Resp: 4522760

Ion	Ratio	Lower	Upper
78	100		
52	17.6	14.8	22.2
77	26.9	19.0	28.4
0	0.0	0.0	0.0

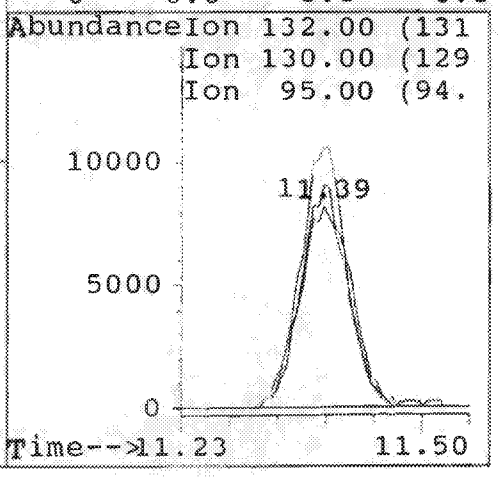


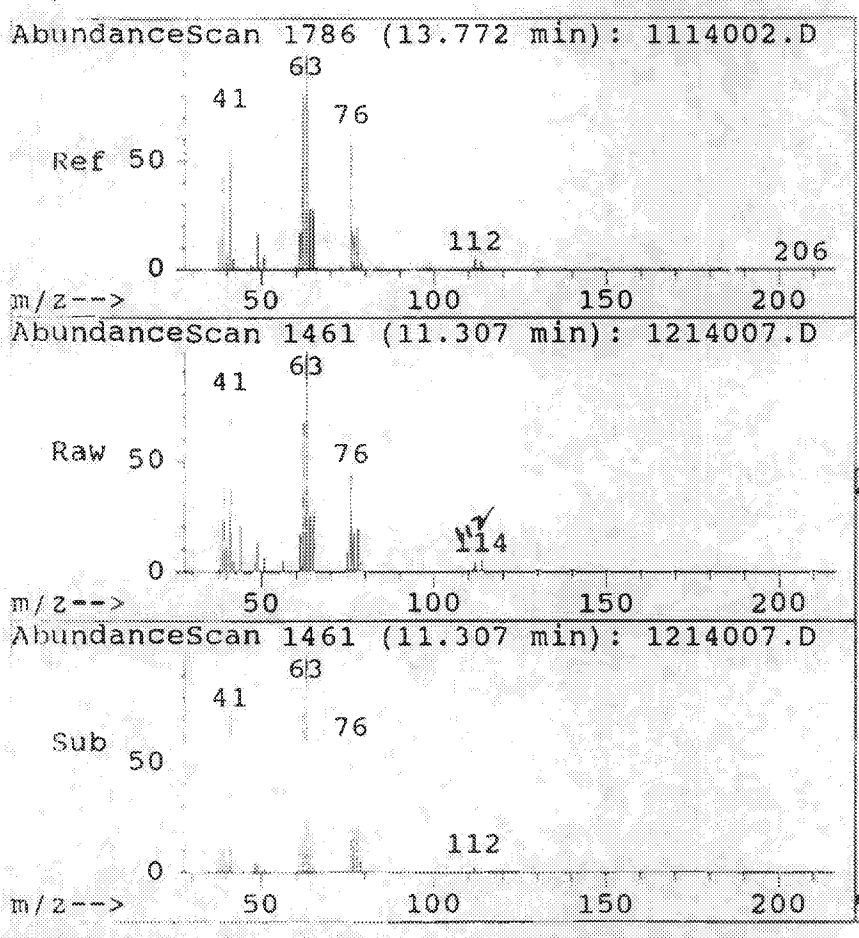


#31
Trichloroethene
Concen: 0.94 ug/l(kg
RT: 11.39 min Scan# 1475
Delta R.T. -0.07 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:132 Resp: 31585

Ion	Ratio	Lower	Upper
132	100		
130	106.4	85.4	128.2
95	128.2	84.7	127.1#
0	0.0	0.0	0.0

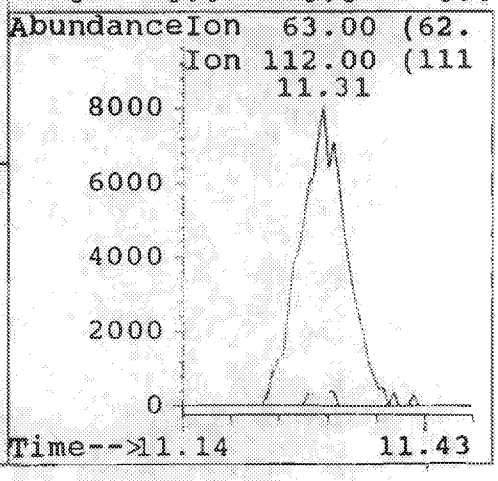


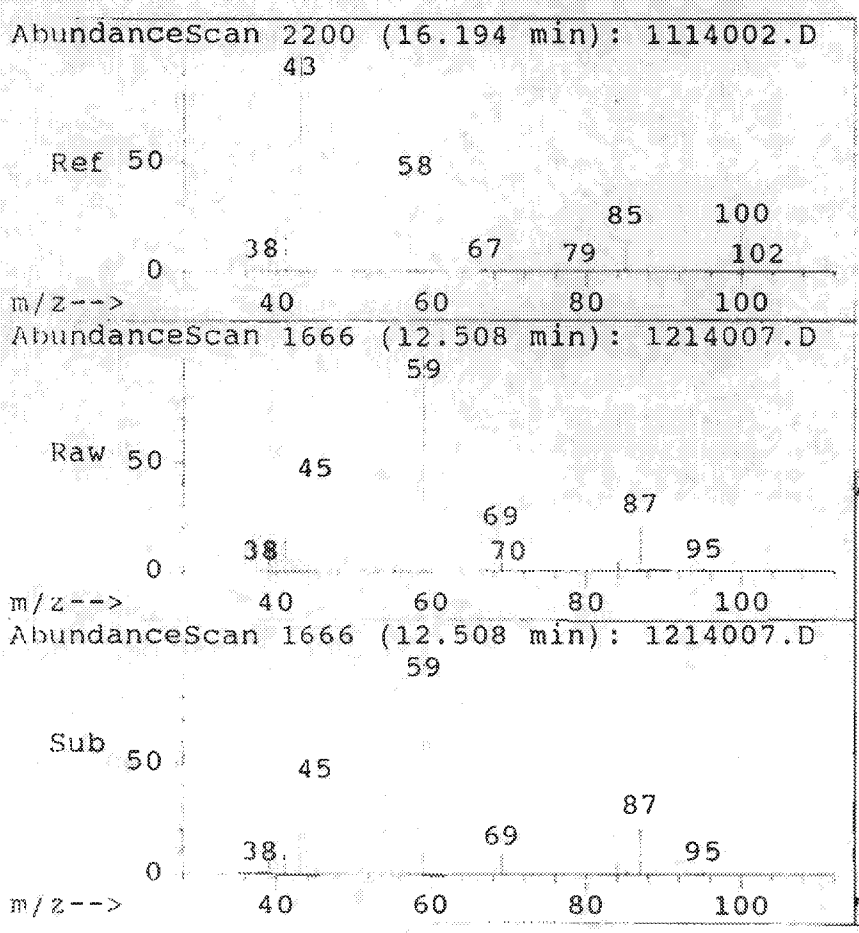


#32
1,2-Dichloropropane
Concen: 1.16 ug/l(kg
RT: 11.31 min Scan# 1461
Delta R.T. -0.06 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:63 Resp: 30188

Ion	Ratio	Lower	Upper
63	100		
112	0.0	3.6	5.4#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

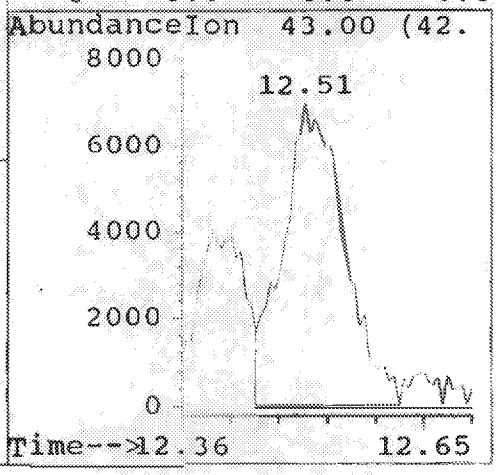


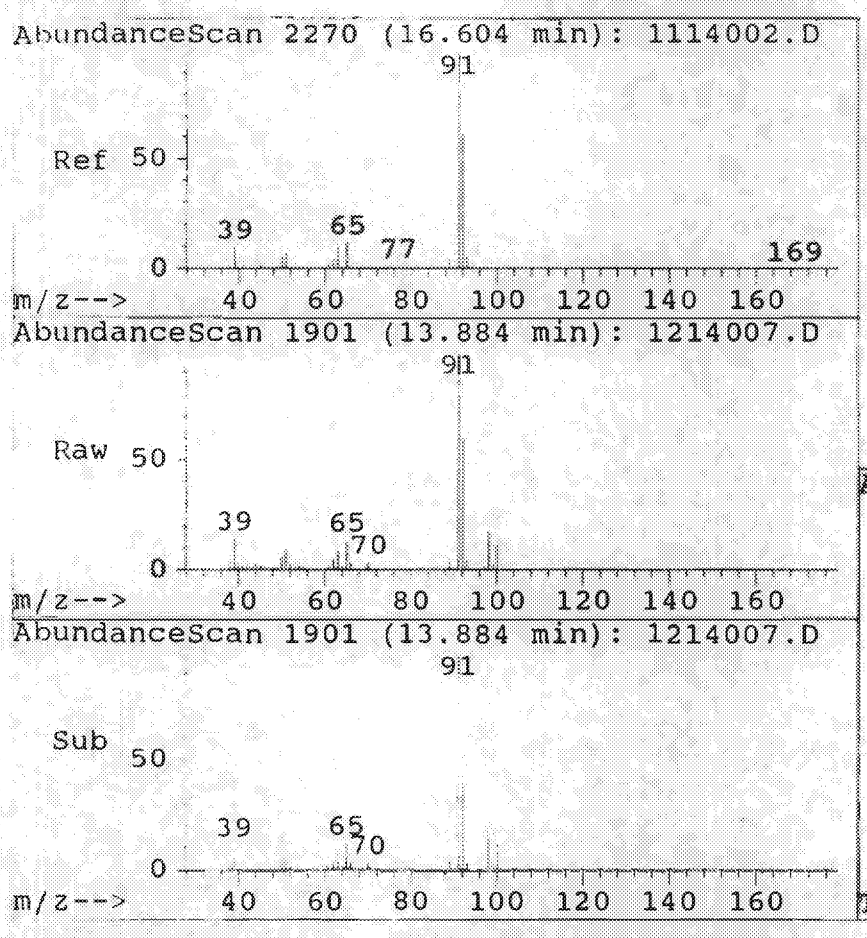


#38
4-Methyl-2-Pentanone
Concen: 0.87 ug/l(kg
RT: 12.51 min Scan# 1666
Delta R.T. -0.46 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:43 Resp: 34775

Ion	Ratio	Lower	Upper
43	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

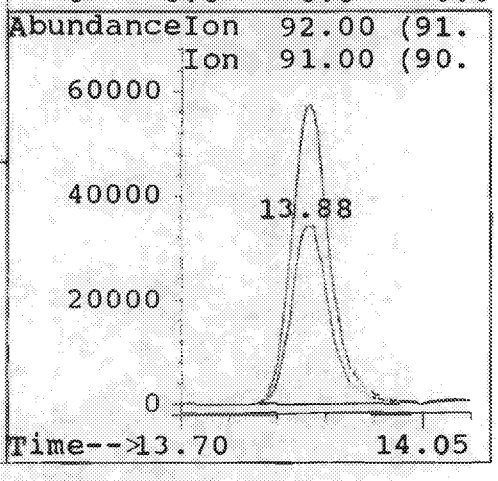


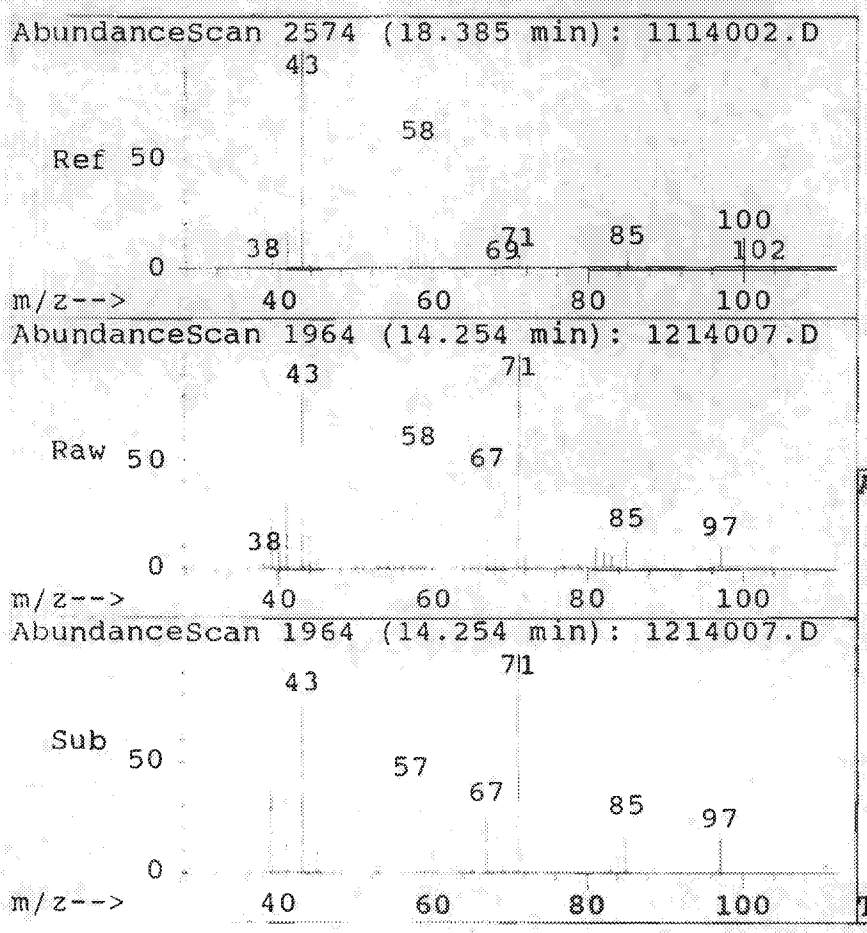


#39
Toluene
Concen: 2.69 ug/l(kg
RT: 13.88 min Scan# 1901
Delta R.T. 0.13 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:92 Resp: 134927

Ion	Ratio	Lower	Upper
92	100		
91	167.0	126.8	190.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

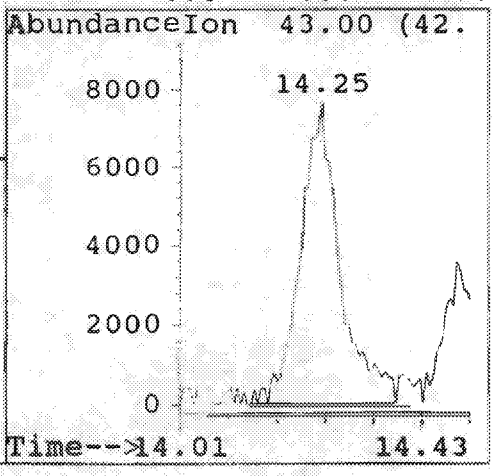


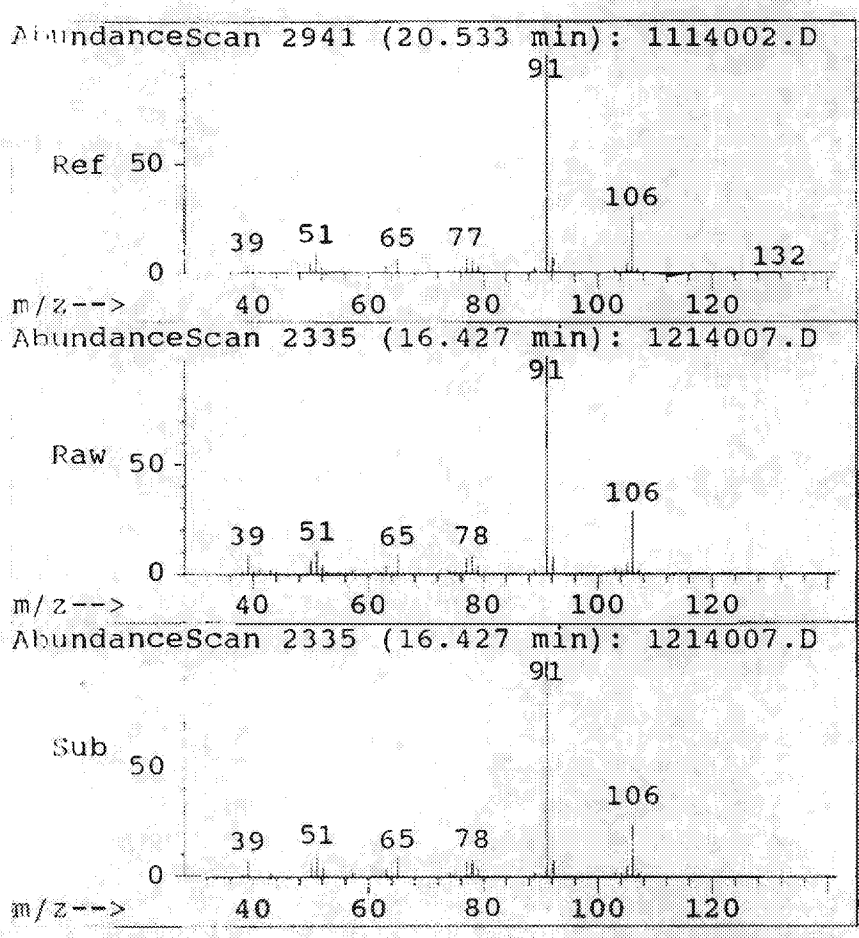


#46
2-Hexanone
Concen: 1.10 ug/l(kg
RT: 14.25 min Scan# 1964
Delta R.T. -0.13 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:43 Resp: 36692

Ion	Ratio	Lower	Upper
43	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

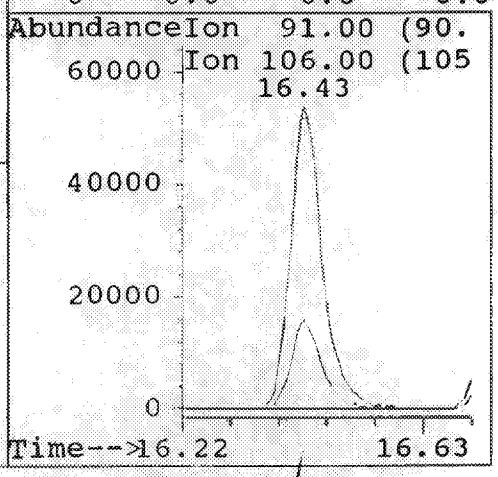


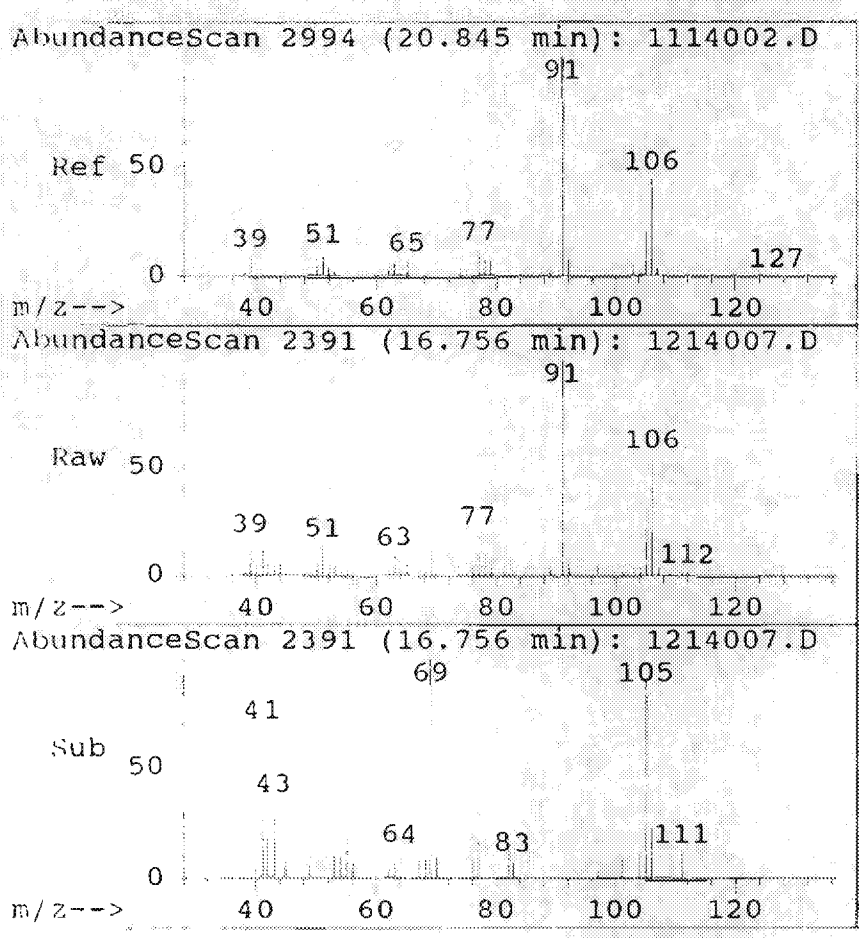


#50
Ethylbenzene
Concen: 2.03 ug/l(kg
RT: 16.43 min Scan# 2335
Delta R.T. 0.02 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:91 Resp: 198803

Ion	Ratio	Lower	Upper
91	100		
106	28.1	24.7	37.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

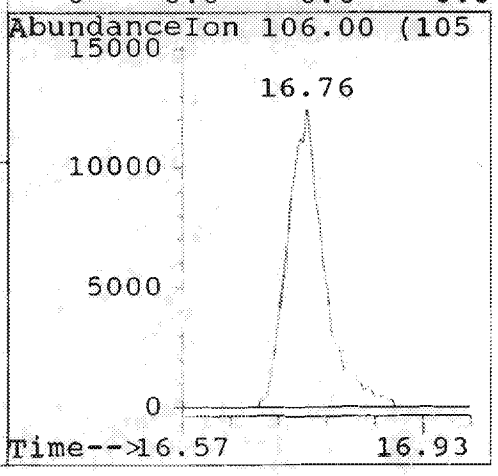


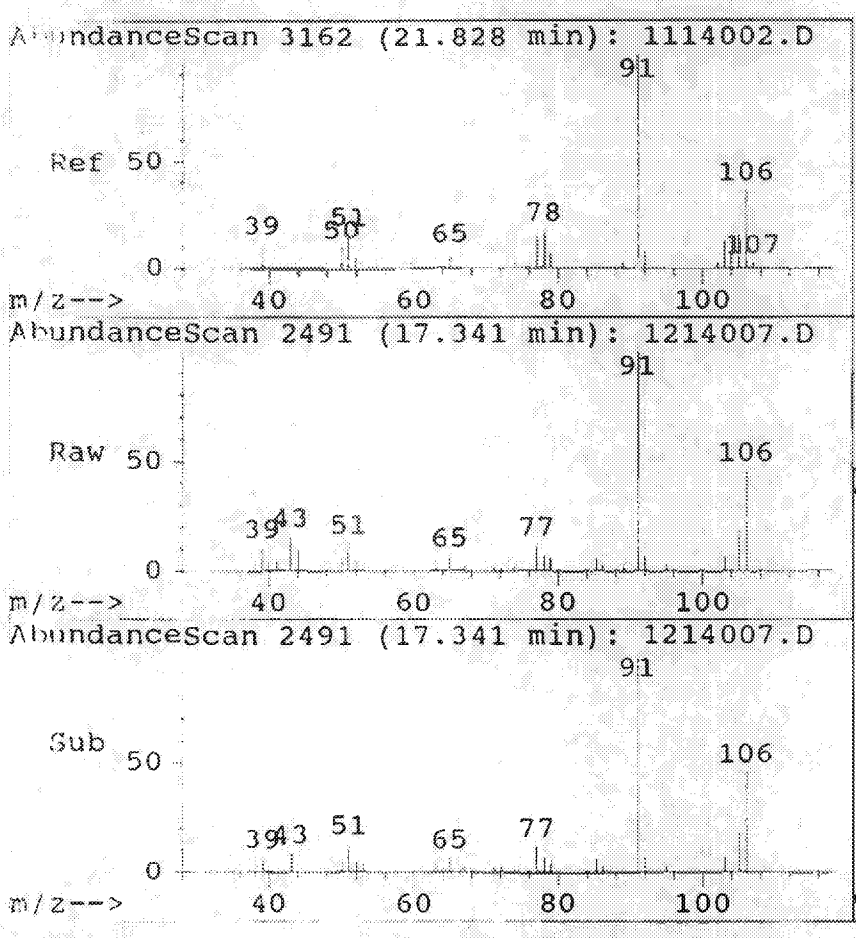


#51
Xylenes
Concen: 1.38 ug/l(kg
RT: 16.76 min Scan# 2391
Delta R.T. -0.01 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:106 Resp: 46368

Ion	Ratio	Lower	Upper
106	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

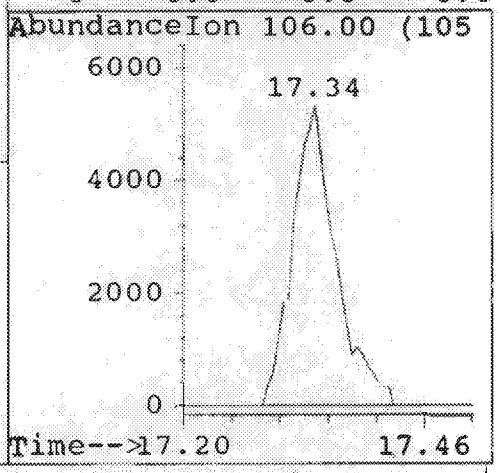


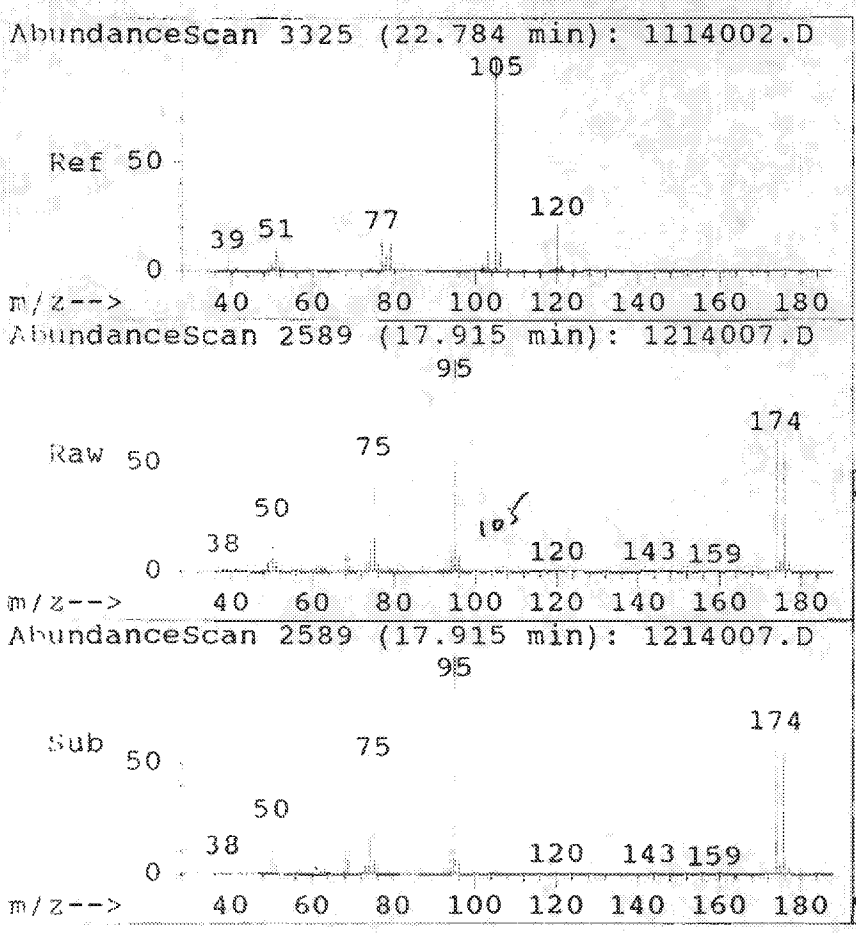


#52
xylene
Concen: 0.51 ug/l(kg
RT: 17.34 min Scan# 2491
Delta R.T. 0.01 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:106 Resp: 17854

Ion	Ratio	Lower	Upper
106	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

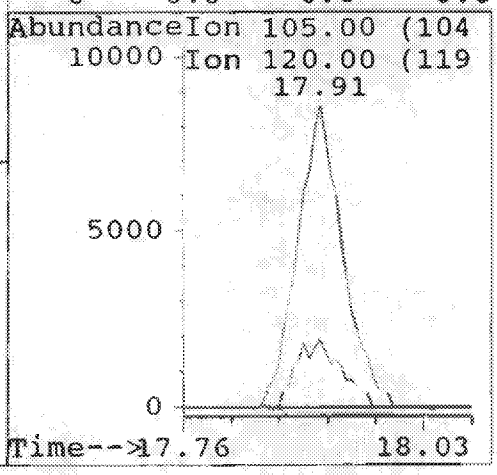


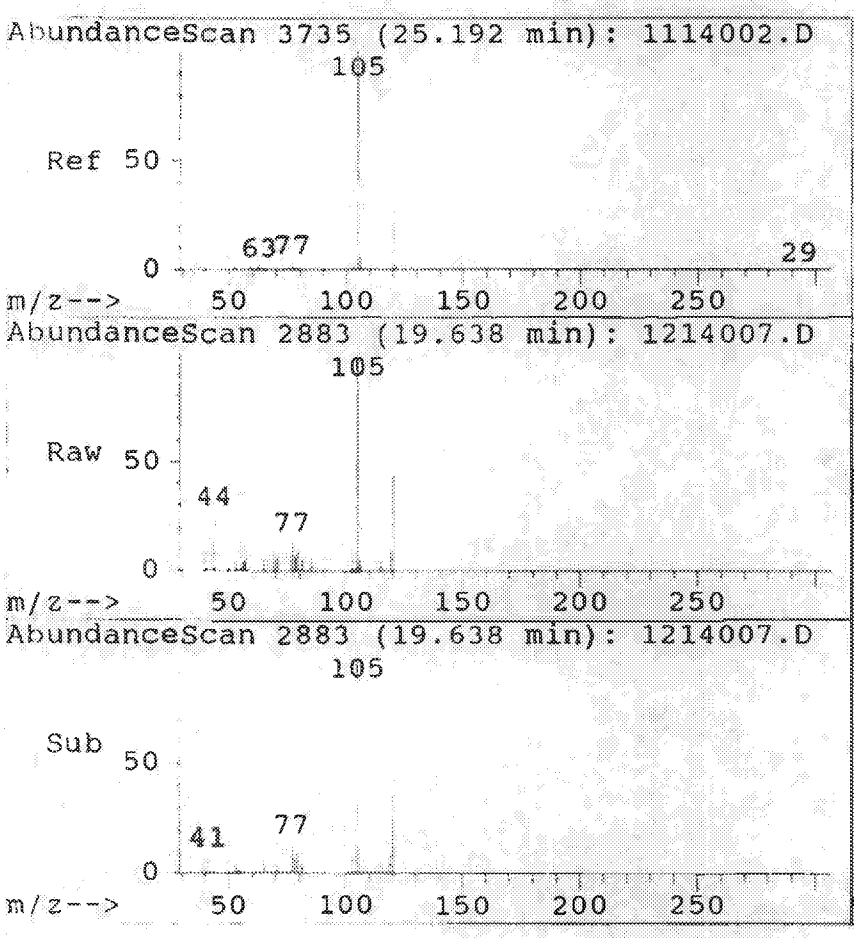


#55
Isopropylbenzene
Concen: 0.30 ug/l(kg <CRDL
RT: 17.91 min Scan# 2589
Delta R.T. 0.04 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:105 Resp: 29880

Ion	Ratio	Lower	Upper
105	100		
120	21.8	18.1	27.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

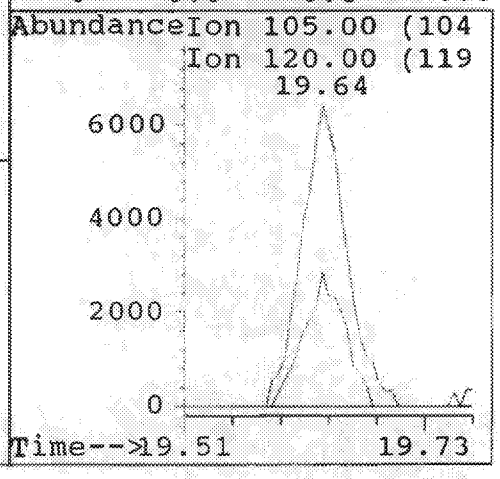




#65
1,2,4-Trimethylbenzene
Concen: 0.34 ug/l(kg L CHL
RT: 19.64 min Scan# 2883
Delta R.T. -0.03 min
Lab File: 1214007.D
Acq: 14 Dec 95 12:24 pm

Tgt Ion:105 Resp: 18694

Ion	Ratio	Lower	Upper
105	100		
120	40.4	33.5	50.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Quantitation Report

Data File : J:\MS01\DATA\121495\1214008.D
Acq Time : 14 Dec 95 12:58 pm
Sample : 4260-5 p13
Misc :
Quant Time: Dec 15 13:27 1995

Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Dibromofluoromethane	8.32	113	534976	25.00 ug/l(	-0.07
28) 1,4-Difluorobenzene	10.80	114	1474582	25.00 ug/l(	-0.05
41) Chlorobenzene-d5	16.02	117	1308652	25.00 ug/l(	-0.04
77) 1,4-Dichlorobenzene-d4	19.91	150	1150190	25.00 ug/l(	-0.03
System Monitoring Compounds					**%Recovery**
26) Pentafluorobenzene	9.27	168	728856	25.56 %	102.24%
37) Toluene-d8	13.79	98	1575205	22.05 %	88.19%
57) Bromofluorobenzene	17.93	95	984986	25.19 %	100.78%
Target Compounds					**Qvalue**
10) Freon 113	5.35	101	22429	0.94 ug/l(	100
14) Methylene Chloride	5.23	84	5811	0.33 ug/l(	100

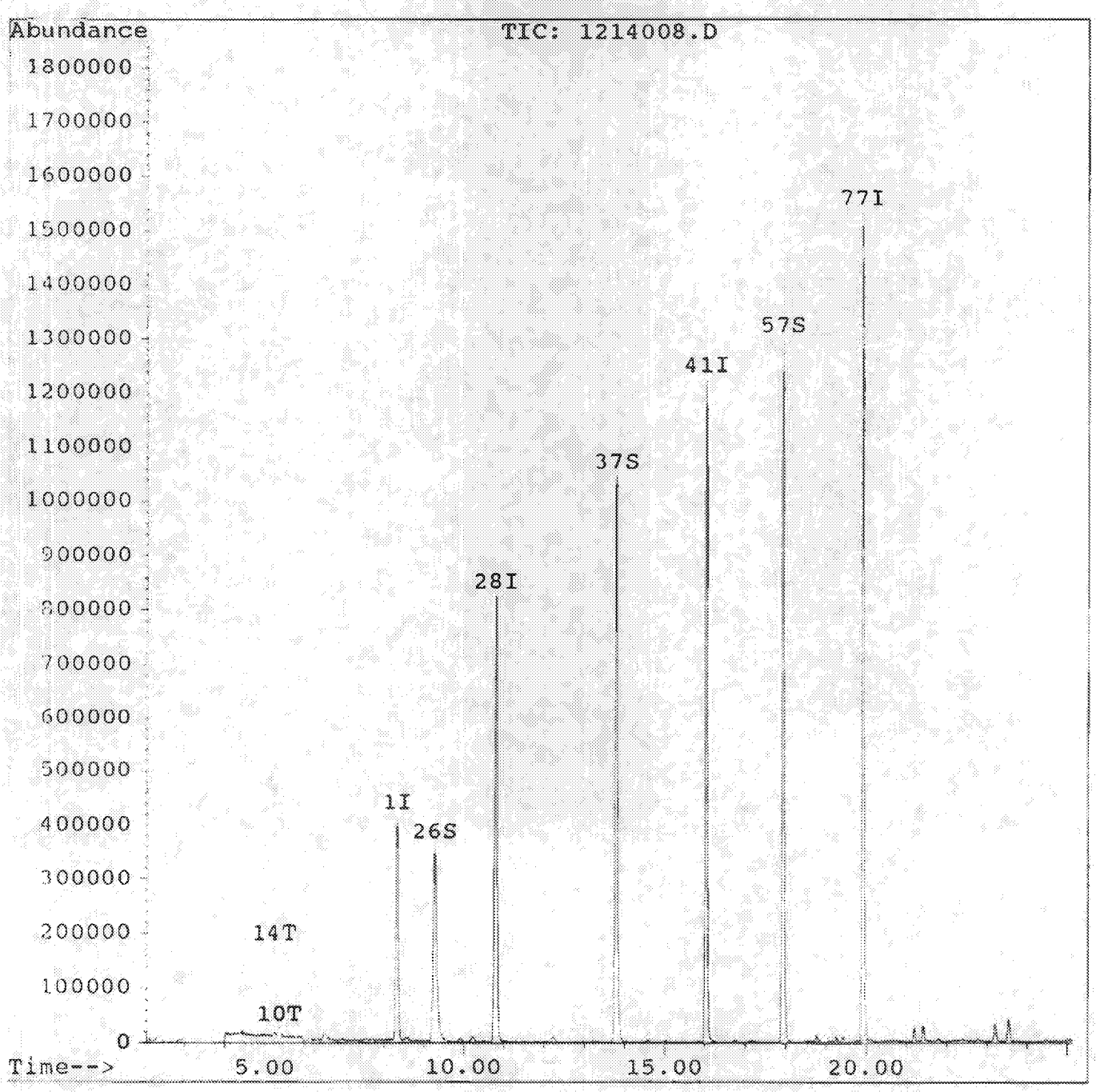
(#) = qualifier out of range (m) = manual integration

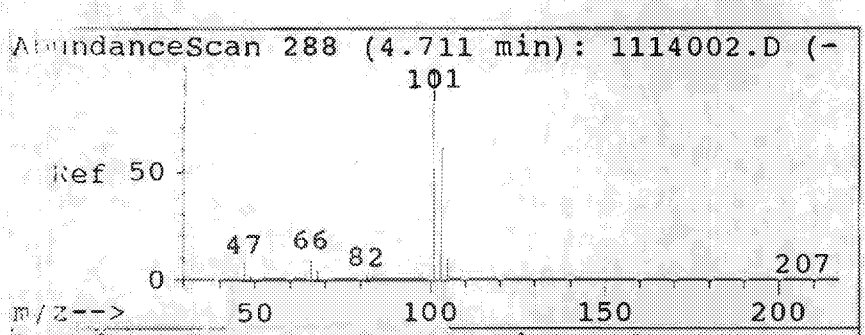
Quantitation Report

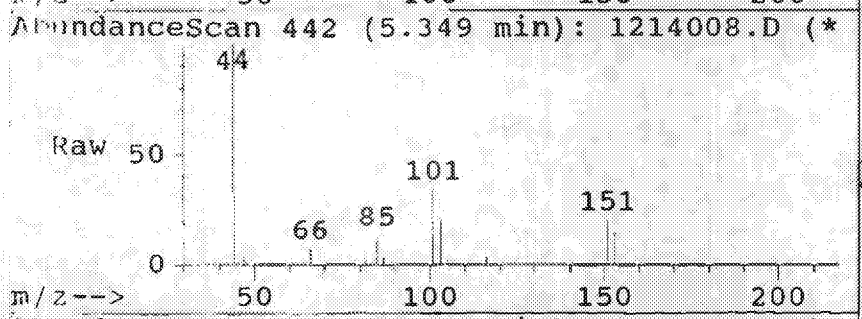
Data File : J:\MS01\DATA\121495\1214008.D
Acq Time : 14 Dec 95 12:58 pm
Sample : 4260-5 p13
Misc :
Quant Time: Dec 15 13:27 1995

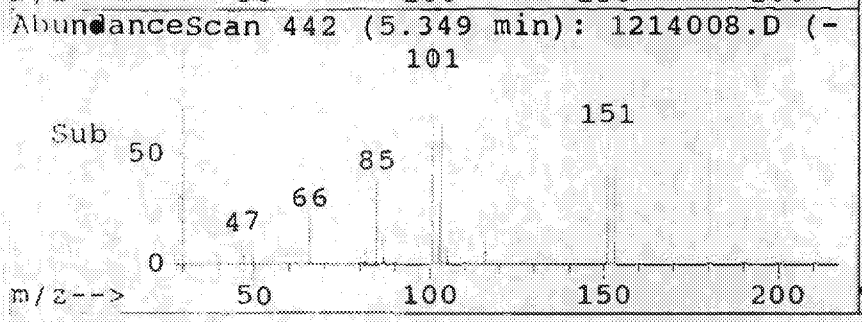
Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration





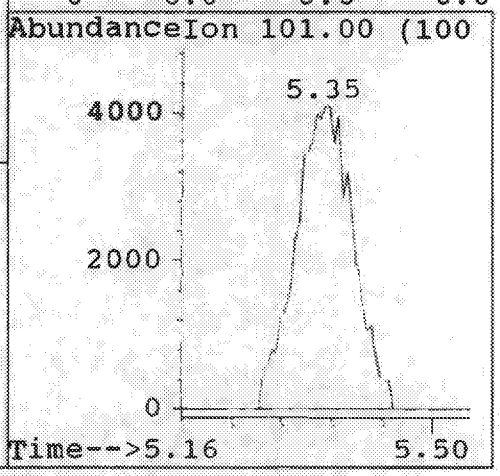


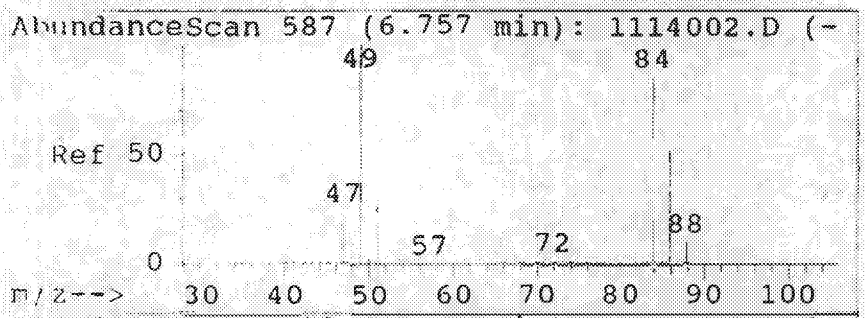


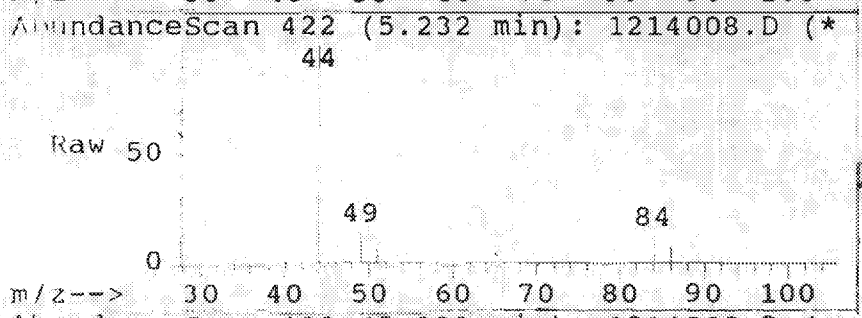
#10
Freon 113
Concen: 0.94 ug/l(kg
RT: 5.35 min Scan# 442
Delta R.T. -0.02 min
Lab File: 1214008.D
Acq: 14 Dec 95 12:58 pm

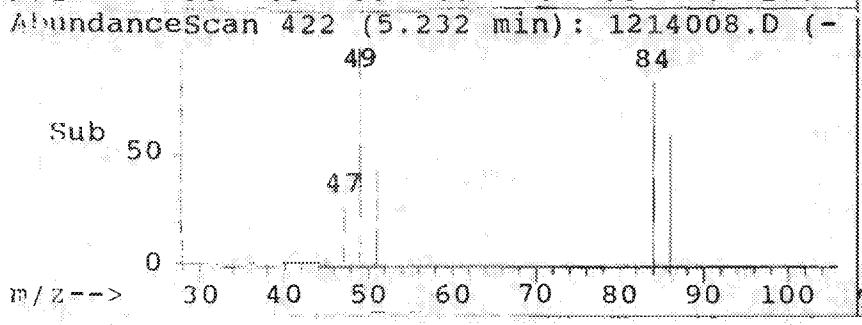
Tgt Ion:101 Resp: 22429

Ion	Ratio	Lower	Upper
101	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0





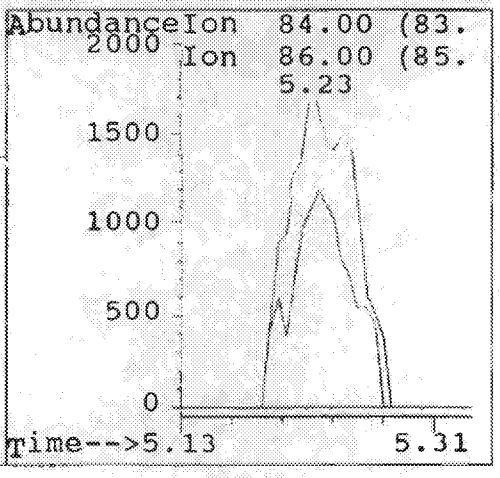




#14
Methylene Chloride
Concen: 0.33 ug/l(kg
RT: 5.23 min Scan# 422
Delta R.T. -0.02 min
Lab File: 1214008.D
Acq: 14 Dec 95 12:58 pm

Tgt Ion:84 Resp: 5811

Ion	Ratio	Lower	Upper
84	100		
86	63.3	50.6	75.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Quantitation Report

Data File : J:\MS01\DATA\121495\1214009.D
Acq Time : 14 Dec 95 1:35 pm
Sample : 4260-6 p14
Misc :
Quant Time: Dec 14 14:19 1995

Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Dibromofluoromethane	8.33	113	603579	25.00 ug/l(	-0.06
28) 1,4-Difluorobenzene	10.76	114	1410894	25.00 ug/l(	-0.08
41) Chlorobenzene-d5	16.02	117	1249081	25.00 ug/l(	-0.05
77) 1,4-Dichlorobenzene-d4	19.90	150	1060035	25.00 ug/l(	-0.03

System Monitoring Compounds					%Recovery
26) Pentafluorobenzene	9.26	168	678314	21.08 %	84.34%
37) Toluene-d8	13.77	98	1541456	22.55 %	90.20%
57) Bromofluorobenzene	17.93	95	895224	23.99 %	95.96%

Target Compounds	Qvalue

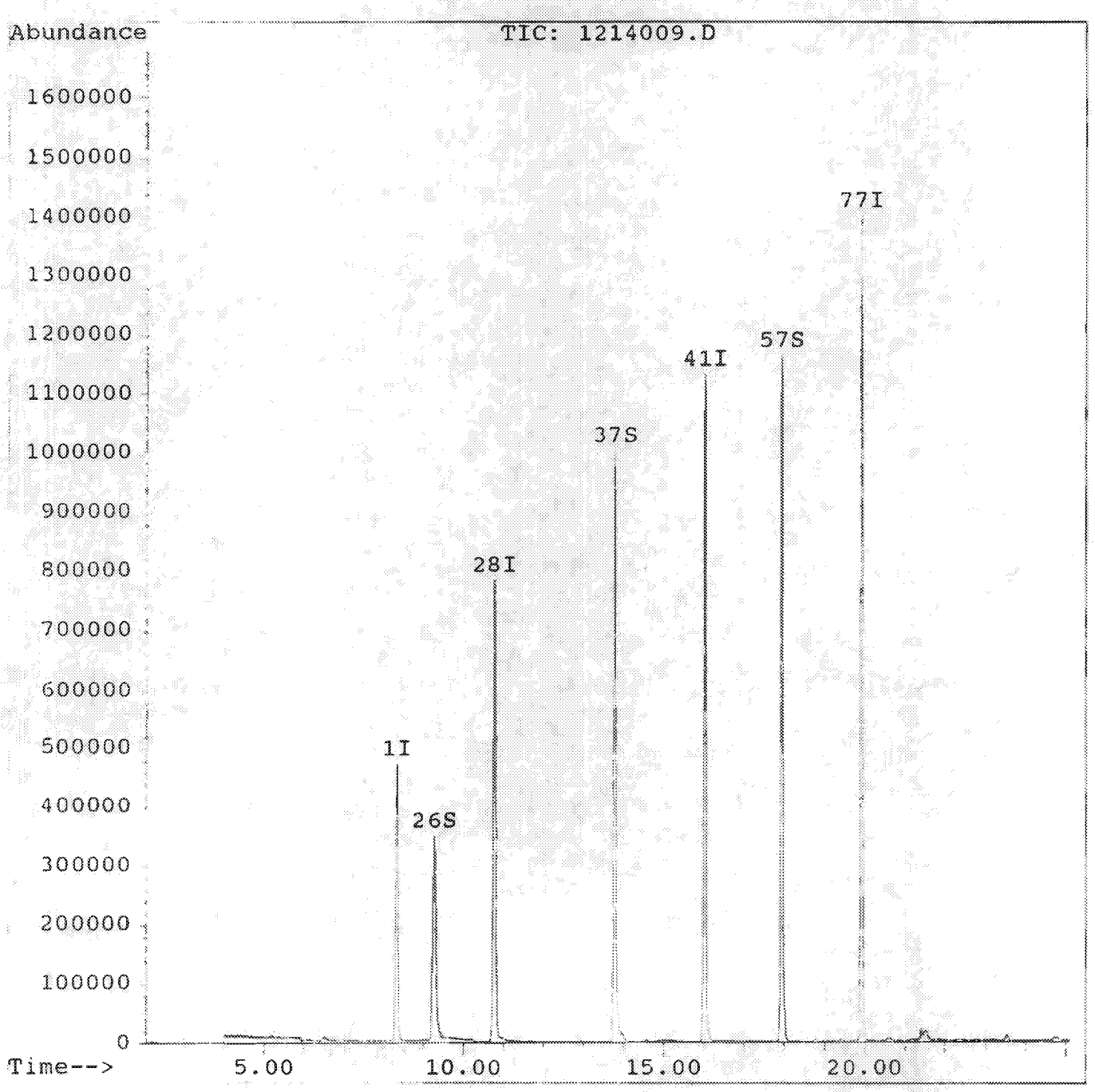
(#) = qualifier out of range (m) = manual integration
1214009.D 8260OCTR.M Thu Dec 14 14:18:36 1995 PRE-INSTALL

Quantitation Report

Data File : J:\MS01\DATA\121495\1214009.D
Acq Time : 14 Dec 95 1:35 pm
Sample : 4260-6 p14
Misc :
Quant Time: Dec 14 14:02 1995

Operator:
Inst : MS01
Multiplr: 1.00

Method : J:\MS01\METHODS\8260OCTR.M
Title : Volatile Organic Compounds 8260
Last Update : Sun Dec 10 12:10:39 1995
Response via : Multiple Level Calibration



Response Factor Report MS01

Method : J:\MS01\METHODS\8260OCT8.M
Title : Volatile Organic Compounds 8260
Last Update : Wed Oct 18 13:27:56 1995
Response via : Initial Calibration

Calibration Files
1 =1008004A.D 2 =1005004.D 3 =1005005.D
4 =1005006.D 5 =1005007.D 6 =1017015.D

		Compound	1	2	3	4	5	6	Avg	%RSD
1)	I	Dibromofluoromethane	----------ISTD----------							
2)	T	Dichlorodifluoromet	1.273	1.298	1.203	1.278	1.271		1.265	2.85
3)	T	Chloromethane	0.630	0.582	0.569	0.602	0.614	0.555	0.592	4.79
4)	T	Vinyl Chloride	0.633	0.634	0.592	0.641	0.678		0.636	4.80
5)	T	Bromomethane	0.759	0.836	0.837	0.817	0.791		0.808	4.12
6)	T	Chloroethane	0.309	0.299	0.300	0.287	0.301	0.279	0.296	3.72
7)	T	Trichlorofluorometh	1.741	1.647	1.537	1.569	1.596		1.618	4.93
8)	M	1,1-Dichloroethene	0.655	0.686	0.602	0.652	0.664	0.557	0.636	7.53
9)		carbon disulfide	1.336	1.382	1.448	1.550	1.596		1.463	7.49
10)	T	Freon 113	1.112	1.194	1.024	1.042	1.187		1.112	7.12
11)		ACROLEIN	0.041	0.048	0.057	0.043	0.059		0.050	16.51
12)	T	Acetone	0.461	0.453	0.537	0.544	0.467		0.492	8.98
13)		acrylonitrile	0.252	0.259	0.244	0.260	0.244		0.252	3.08
14)	T	Methylene Chloride	0.926	0.807	0.822	0.727	0.906	0.744	0.822	9.92
15)	T	Vinyl Acetate	0.428	0.440	0.490	0.555	0.602		0.503	14.78
16)	T	tr-1,2-Dichloroethe	0.702	0.755	0.660	0.724	0.737	0.627	0.701	6.97
17)	T	1,1-Dichloroethane	1.291	1.370	1.214	1.345	1.379	1.236	1.306	5.35
18)	T	cis-1,2-Dichloroeth	0.758	0.677	0.712	0.751	0.792	0.695	0.731	5.95
19)	T	2,2-Dichloropropane	0.972	1.093	1.177	1.120	1.173	1.183	1.120	7.23
20)	T	Bromochloromethane	0.474	0.363	0.438	0.431	0.496	0.437	0.440	10.35
21)	T	Chloroform	1.574	1.411	1.434	1.588	1.506	1.538	1.509	4.83
22)	T	1,1,1-Trichloroetha	1.404	1.271	1.151	1.230	1.316	1.438	1.302	8.28
23)	T	Carbon Tetrachlorid	1.371	1.323	1.332	1.492	1.362	1.503	1.397	5.71
24)	T	1,1-Dichloropropene	1.035	1.116	1.011	1.043	1.276	1.124	1.101	8.83
25)	S	Pentafluorobenzene	1.309	1.290	1.195	1.280	1.571	1.350	1.333	9.57
26)	T	1,2-Dichloroethane	0.852	1.042	0.912	1.083	1.022	1.031	0.990	8.94
27)	I	1,4-Difluorobenzene	----------ISTD----------							
28)	T	2-Butanone	0.327	0.297	0.335	0.338	0.263		0.312	10.19
29)	M	Benzene	1.133	1.116	1.003	1.129	1.048	1.101	1.088	4.76
30)	M	Trichloroethene	0.569	0.520	0.525	0.525	0.499	0.479	0.520	5.77
31)	T	1,2-Dichloropropane	0.397	0.365	0.425	0.398	0.406	0.427	0.403	5.64
32)	T	Dibromomethane	0.456	0.467	0.442	0.480	0.481	0.488	0.469	3.67
33)	T	Bromodichloromethan	0.759	0.819	0.781	0.847	0.873	0.926	0.834	7.37
34)	T	2-CLEVE	0.235	0.232	0.246	0.252	0.225		0.238	4.55
35)	T	cis-1,3-Dichloropro	0.600	0.645	0.610	0.655	0.693	0.731	0.656	7.58
36)	S	Toluene-d8	1.053	1.053	1.046	1.061	1.028	1.134	1.062	3.46
37)	T	4-Methyl-2-Pentanon	0.636	0.604	0.656	0.659	0.565		0.624	6.34
38)	M	Toluene	0.723	0.671	0.781	0.822	0.851	0.824	0.779	8.86
39)	T	tr-1,3-Dichloroprop	0.604	0.648	0.610	0.648	0.605	0.608	0.620	3.45
40)	I	Chlorobenzene-d5	----------ISTD----------							
41)	T	1,1,2-Trihloroethan	0.389	0.389	0.362	0.375	0.346	0.390	0.375	4.77

(#) = Out of Range

Response Factor Report MS01

Method : J:\MS01\METHODS\8260OCT8.M
Title : Volatile Organic Compounds 8260
Last Update : Wed Oct 18 13:27:56 1995
Response via : Initial Calibration

Calibration Files
1 =1008004A.D 2 =1005004.D 3 =1005005.D
4 =1005006.D 5 =1005007.D 6 =1017015.D

		Compound	1	2	3	4	5	6	Avg	%RSD
42)	T	Tetrachloroethene	0.548	0.578	0.514	0.529	0.504	0.462	0.523	7.60
43)	T	1,3-Dichloropropane	0.738	0.729	0.661	0.687	0.639	0.732	0.698	5.94
44)	T	Dibromochloromethan	0.700	0.733	0.683	0.721	0.686	0.733	0.709	3.20
45)	T	2-Hexanone	0.641	0.565	0.618	0.610	0.499		0.587	9.58
46)	T	1,2-Dibromoethane	0.768	0.768	0.702	0.736	0.664	0.697	0.723	5.80
47)	M	Chlorobenzene	1.144	1.163	1.064	1.111	1.025	1.070	1.096	4.79
48)	T	1,1,1,2-Tetrachloro	0.512	0.529	0.492	0.513	0.489	0.447	0.497	5.74
49)	T	Ethylbenzene	1.771	1.802	1.638	1.718	1.644	1.788	1.727	4.17
50)	T	Xylenes	0.461	0.649	0.596	0.605	0.599	0.645	0.593	11.55
51)	T	xylene	0.637	0.644	0.594	0.605	0.602	0.654	0.622	4.05
52)	T	styrene	0.863	1.150	1.038	1.054	1.004	1.094	1.034	9.43
53)	T	Bromoform	0.614	0.637	0.604	0.650	0.600	0.563	0.611	4.98
54)	T	Isopropylbenzene	1.807	1.852	1.676	1.690	1.672	1.766	1.744	4.36
55)	T	Bromobenzene	0.572	0.580	0.525	0.551	0.520	0.513	0.544	5.23
56)	S	Bromofluorobenzene	0.765	0.741	0.713	0.706	0.690	0.866	0.747	8.61
57)	T	2-Chlorotoluene	1.832	1.741	1.494	1.644	1.472	1.559	1.624	8.76
58)	T	n-Propylbenzne	3.035	2.800	2.358	2.721	2.464	2.471	2.642	9.69
59)	T	1,2,3-Trichloroprop	0.774	0.751	0.709	0.725	0.622	0.620	0.700	9.30
60)	T	1,1,2,2-Tetrachloro	0.481	0.469	0.410	0.408	0.385	0.409	0.427	9.09
61)	T	4-Chlorotoluene	1.481	1.539	1.396	1.418	1.353	1.545	1.456	5.43
62)	T	1,3,5-Trimethylbenz	0.978	1.010	0.903	0.879	0.860	0.985	0.936	6.72
63)	T	tert-Butylbenzene	1.290	1.288	1.204	1.221	1.214	1.273	1.248	3.16
64)	T	1,2,4-Trimethylbenz	0.996	1.016	0.929	0.909	0.912	1.026	0.965	5.58
65)	T	sec-Butylbenzene	1.882	1.870	1.718	1.758	1.799	1.950	1.830	4.74
66)	T	1,3-Dichlorobenzene	0.987	1.008	0.897	0.932	0.882	0.910	0.936	5.44
67)	T	p-Isopropyltoluene	1.245	1.252	1.182	1.199	1.246	1.453	1.263	7.73
68)	T	1,4-Dichlorobenzene	0.996	1.036	0.917	0.964	0.900	0.942	0.959	5.30
69)	T	1,2-Dichlorobenzene	0.988	0.970	0.876	0.914	0.846	0.880	0.912	6.19
70)	T	n-Butylbenzene	1.171	1.174	1.037	1.047	1.113	1.206	1.125	6.29
71)	T	1,2-Dibromo-3-chlor	0.394	0.377	0.371	0.385	0.324	0.340	0.365	7.48
72)	T	1,2,4-Trichlorobenz	0.732	0.731	0.636	0.658	0.645	0.705	0.685	6.35
73)	T	Hexachlorobutadiene	0.385	0.338	0.351	0.346	0.354	0.344	0.353	4.70
74)	T	Naphthalene	1.762	1.642	1.492	1.458	1.743	1.882	1.663	9.92
75)	T	1,2,3-Trichlorobenz	0.717	0.705	0.622	0.640	0.620	0.703	0.668	6.73
76)	I	1,4-Dichlorobenzene-d4	----------ISTD----------							

(#) = Out of Range

DATA ANALYSIS PARAMETERS

Method Name: J:\MS01\METHODS\8260OCT8.M

Percent Report Settings

Sort By: Retention Time

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Qualitative Report Settings

Peak Location of Unknown: Apex

Library to Search	Minimum Quality
nbs54k.l	0

Integration Events: Meth Default

Report Type: Detailed

Output Destination
Screen: No
Printer: Yes
File: No

Generate Report During Run Method: No

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: No
Printer: Yes
File: No

Generate Report During Run Method: Yes

Volatile Organic Compounds 8260
Calibration Last Updated: Wed Oct 18 13:27:56 1995

Reference Window: 1.00 Minutes
Non-Reference Window: 10.00 Percent
Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

---

1) Dibromofluoromethane (ISTD TR)

Ret. Time 8.65 min., Extract & Integrate from 7.93 to 8.93 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 113.00			*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	25.000	993471
2	25.000	983225
3	25.000	1034419
4	25.000	978422
5	25.000	956897
6	25.000	791243

Qualifier Peak Analysis ON ISTD conc: 25.000 ug/l(kg
Curve Fit: Avg. RF

---

2) Dichlorodifluoromethane ( )

Ret. Time 2.53 min., Extract & Integrate from 2.03 to 3.03 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 85.00			*** METH DEFAULT ***
Q1 50.00	14.70	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	101146
2	5.000	255304
3	10.000	497881
4	20.000	1000358

5	50.000	2432728
6	not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

3) Chloromethane ( )

Ret. Time 2.71 min., Extract & Integrate from 2.21 to 3.21 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 50.00			*** METH DEFAULT ***
Q1 52.00	33.50	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	50057
2	5.000	114441
3	10.000	235502
4	20.000	470937
5	50.000	1174842
6	80.000	1404420

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

4) Vinyl Chloride ( )

Ret. Time 2.93 min., Extract & Integrate from 2.43 to 3.43 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 62.00			*** METH DEFAULT ***
Q1 64.00	31.80	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	50332
2	5.000	124759
3	10.000	244999
4	20.000	501992
5	50.000	1297360
6	not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

5) Bromomethane ( )

Ret. Time 3.38 min., Extract & Integrate from 2.88 to 3.88 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 93.90			*** METH DEFAULT ***
Q1 95.85	95.70	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response

1	2.000	60297
2	5.000	164298
3	10.000	346440
4	20.000	639596
5	50.000	1513236
6	not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

6) Chloroethane ( )

Ret. Time 3.56 min., Extract & Integrate from 3.06 to 4.06 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 64.00			*** METH DEFAULT ***
Q1 66.00	36.10	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	24569
2		5.000	58849
3		10.000	124318
4		20.000	224726
5		50.000	576991
6		80.000	706045

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

7) Trichlorofluoromethane ( )

Ret. Time 4.30 min., Extract & Integrate from 3.80 to 4.80 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 101.00			*** METH DEFAULT ***
Q1 103.00	66.40	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	138397
2		5.000	323802
3		10.000	635909
4		20.000	1228160
5		50.000	3054493
6		not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

8) 1,1-Dichloroethene ( )

Ret. Time 5.12 min., Extract & Integrate from 4.62 to 5.62 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration

Tgt 96.00 *** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	52075
2		5.000	134992
3		10.000	248974
4		20.000	510564
5		50.000	1271657
6		80.000	1409187

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

9) carbon disulfide ( )

Ret. Time 5.69 min., Extract & Integrate from 5.19 to 6.19 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 76.00			*** METH DEFAULT ***
Q1 78.00	9.00	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		10.000	531094
2		25.000	1359144
3		50.000	2996222
4		100.000	6066792
5		200.000	12215891
6		not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

10) Freon 113 ( )

Ret. Time 5.53 min., Extract & Integrate from 5.03 to 6.03 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 101.00			*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		5.000	220975
2		10.000	469644
3		20.000	847351
4		40.000	1630484
5		100.000	4542524
6		not used for this compound	

Qualifier Peak Analysis OFF
Curve Fit: Avg. RF

---

11) ACROLEIN ( )

Ret. Time 4.31 min., Extract & Integrate from 4.16 to 4.46 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 55.00			*** METH DEFAULT ***
Q1 56.00	136.00	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		20.000	32707
2		100.000	188128
3		200.000	471777
4		400.000	670625
5		800.000	1814784
6		not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

12) Acetone ( )

Ret. Time 4.56 min., Extract & Integrate from 3.93 to 4.93 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 43.00			*** METH DEFAULT ***
Q1 58.00	26.60	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		10.000	183265
2		25.000	445227
3		50.000	1110100
4		100.000	2129706
5		200.000	3575028
6		not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

13) acrylonitrile ( )

Ret. Time 5.35 min., Extract & Integrate from 5.20 to 5.50 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 53.00			*** METH DEFAULT ***
Q1 52.00	84.00	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		20.000	200498
2		100.000	1017583
3		200.000	2018990
4		400.000	4074461
5		800.000	7473500
6		not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

14) Methylene Chloride ( )

Ret. Time 5.41 min., Extract & Integrate from 4.92 to 5.82 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 84.00			*** METH DEFAULT ***
Q1 86.00	63.20	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	73589
2	5.000	158721
3	10.000	340032
4	20.000	568671
5	50.000	1733885
6	80.000	1884563

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

15) Vinyl Acetate ( )

Ret. Time 5.57 min., Extract & Integrate from 4.98 to 5.98 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 43.00			*** METH DEFAULT ***
Q1 74.00	20.80	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	10.000	170249
2	25.000	432759
3	50.000	1013748
4	100.000	2172940
5	200.000	4604697
6	not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

16) tr-1,2-Dichloroethene ( )

Ret. Time 6.57 min., Extract & Integrate from 6.07 to 7.07 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 96.00			*** METH DEFAULT ***
Q1 61.00	182.90	20.0	*** METH DEFAULT ***
Q2 98.00	64.80	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	55817
2	5.000	148382
3	10.000	272892
4	20.000	566948
5	50.000	1410417

6	80.000	1587085

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

17) 1,1-Dichloroethane ( )

Ret. Time 7.01 min., Extract & Integrate from 6.34 to 7.34 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 63.00			*** METH DEFAULT ***
Q1 65.00	30.10	20.0	*** METH DEFAULT ***
Q2 83.00	12.70	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	102587
2	5.000	269309
3	10.000	502397
4	20.000	1052458
5	50.000	2639454
6	80.000	3130346

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

18) cis-1,2-Dichloroethene ( )

Ret. Time 8.05 min., Extract & Integrate from 7.55 to 8.55 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 95.85			*** METH DEFAULT ***
Q1 60.90	143.30	20.0	*** METH DEFAULT ***
Q2 97.85	63.00	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	60264
2	5.000	133134
3	10.000	294692
4	20.000	588136
5	50.000	1515553
6	80.000	1758559

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

19) 2,2-Dichloropropane ( )

Ret. Time 8.54 min., Extract & Integrate from 8.04 to 9.04 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 77.00			*** METH DEFAULT ***
Q1 97.00	16.60	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	77217
2		5.000	214950
3		10.000	487020
4		20.000	877028
5		50.000	2244858
6		80.000	2994653

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

20) Bromochloromethane ( )

Ret. Time 8.31 min., Extract & Integrate from 7.48 to 8.42 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 128.00			*** METH DEFAULT ***
Q1 49.00	196.90	20.0	*** METH DEFAULT ***
Q2 130.00	129.40	20.0	*** METH DEFAULT ***
Q3 51.00	64.10	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	37656
2		5.000	71319
3		10.000	181321
4		20.000	337031
5		50.000	949329
6		80.000	1107521

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

21) Chloroform ( )

Ret. Time 8.44 min., Extract & Integrate from 7.61 to 8.61 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 83.00			*** METH DEFAULT ***
Q1 85.00	64.30	20.0	*** METH DEFAULT ***
Q2 47.00	26.60	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	125097
2		5.000	277474
3		10.000	593387
4		20.000	1243279
5		50.000	2882951
6		80.000	3893229

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

22) 1,1,1-Trichloroethane ( )

Ret. Time 9.83 min., Extract & Integrate from 9.33 to 10.33 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 97.00			*** METH DEFAULT ***
Q1 99.00	63.90	20.0	*** METH DEFAULT ***
Q2 61.00	51.10	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	111561
2	5.000	249891
3	10.000	476231
4	20.000	962642
5	50.000	2518894
6	80.000	3641618

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

23) Carbon Tetrachloride ( )

Ret. Time 10.51 min., Extract & Integrate from 9.67 to 10.67 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 119.00			*** METH DEFAULT ***
Q1 116.80	100.80	20.0	*** METH DEFAULT ***
Q2 121.00	31.50	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	108974
2	5.000	260073
3	10.000	551060
4	20.000	1167617
5	50.000	2606554
6	80.000	3804457

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

24) 1,1-Dichloropropene ( )

Ret. Time 10.23 min., Extract & Integrate from 10.13 to 10.42 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 75.00			*** METH DEFAULT ***
Q1 110.00	27.70	20.0	*** METH DEFAULT ***
Q2 77.00	31.50	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	82277
2	5.000	219397
3	10.000	418253
4	20.000	816734
5	50.000	2442534

6	80.000	2844986

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

25) Pentafluorobenzene ( )

Ret. Time 9.68 min., Extract & Integrate from 9.38 to 10.01 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 168.00			*** METH DEFAULT ***

Lvl ID	Conc (%)	Response
1	25.000	1300460
2	25.000	1268117
3	25.000	1236215
4	25.000	1252345
5	25.000	1503354
6	25.000	1068467

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

26) 1,2-Dichloroethane ( )

Ret. Time 9.65 min., Extract & Integrate from 9.15 to 9.75 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 62.00			*** METH DEFAULT ***
Q1 64.00	32.30	20.0	*** METH DEFAULT ***
Q2 98.00	15.70	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	67702
2	5.000	204900
3	10.000	377365
4	20.000	847701
5	50.000	1956344
6	80.000	2609675

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

27) 1,4-Difluorobenzene (ISTD TR)

Ret. Time 11.10 min., Extract & Integrate from 10.60 to 11.60 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 114.00			*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	25.000	2327107
2	25.000	2294430

3	25.000	2274935
4	25.000	2176396
5	25.000	2269863
6	25.000	1643799

Qualifier Peak Analysis ON ISTD conc: 25.000 ug/l(kg
Curve Fit: Avg. RF

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28) 2-Butanone ( )

Ret. Time 7.80 min., Extract & Integrate from 7.60 to 8.02 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 43.00			*** METH DEFAULT ***
Q1 72.00	22.90	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	10.000	304513
2	25.000	681592
3	50.000	1523500
4	100.000	2944790
5	200.000	4779888
6	not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

29) Benzene ( )

Ret. Time 10.53 min., Extract & Integrate from 9.93 to 10.93 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 78.00			*** METH DEFAULT ***
Q1 52.00	18.50	20.0	*** METH DEFAULT ***
Q2 77.00	23.70	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	210836
2	5.000	512132
3	10.000	913154
4	20.000	1966421
5	50.000	4755794
6	80.000	5792227

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

30) Trichloroethene ( )

Ret. Time 11.73 min., Extract & Integrate from 11.33 to 12.33 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 132.00			*** METH DEFAULT ***

Q1	130.00	106.80	20.0	*** METH DEFAULT ***
Q2	95.00	105.90	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	105852
2		5.000	238678
3		10.000	477376
4		20.000	914880
5		50.000	2264912
6		80.000	2521921

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

31) 1,2-Dichloropropane ( )

Ret. Time 11.64 min., Extract & Integrate from 11.14 to 12.14 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration	
Tgt	63.00			*** METH DEFAULT ***
Q1	112.00	4.50	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	73952
2		5.000	167406
3		10.000	386308
4		20.000	692335
5		50.000	1843532
6		80.000	2247215

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

32) Dibromomethane ( )

Ret. Time 11.55 min., Extract & Integrate from 11.21 to 12.01 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration	
Tgt	93.00			*** METH DEFAULT ***
Q1	95.00	83.20	20.0	*** METH DEFAULT ***
Q2	174.00	107.00	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	84916
2		5.000	214152
3		10.000	402609
4		20.000	835074
5		50.000	2182832
6		80.000	2565579

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

33) Bromodichloromethane ( )

Ret. Time 11.81 min., Extract & Integrate from 11.31 to 12.31 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 83.00			*** METH DEFAULT ***
Q1 85.00	65.70	20.0	*** METH DEFAULT ***
Q2 127.00	8.60	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	141270
2	5.000	375834
3	10.000	710368
4	20.000	1474848
5	50.000	3961070
6	80.000	4871970

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

34) 2-CLEVE ( )

Ret. Time 12.63 min., Extract & Integrate from 12.18 to 12.98 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 63.00			*** METH DEFAULT ***
Q1 65.00	36.10	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	10.000	218633
2	25.000	532166
3	50.000	1117655
4	100.000	2189659
5	200.000	4078348
6	not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

35) cis-1,3-Dichloropropene ( )

Ret. Time 13.00 min., Extract & Integrate from 12.53 to 13.43 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 75.00			*** METH DEFAULT ***
Q1 77.00	31.70	20.0	*** METH DEFAULT ***
Q2 39.00	59.60	20.0	*** METH DEFAULT ***
Q3 110.00	20.50	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	111770
2	5.000	295829
3	10.000	555091
4	20.000	1139615

5	50.000	3145233
6	80.000	3846537

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

36) Toluene-d8 ( )

Ret. Time 14.25 min., Extract & Integrate from 13.99 to 14.39 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 98.00			*** METH DEFAULT ***

Lvl ID	Conc (%)	Response
1	25.000	2450828
2	25.000	2415274
3	25.000	2378459
4	25.000	2309969
5	25.000	2333649
6	25.000	1863724

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

37) 4-Methyl-2-Pentanone ( )

Ret. Time 13.28 min., Extract & Integrate from 12.46 to 13.52 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 43.00			*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	10.000	592416
2	25.000	1385862
3	50.000	2984806
4	100.000	5740976
5	200.000	10266568
6	not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

38) Toluene ( )

Ret. Time 14.08 min., Extract & Integrate from 13.60 to 14.60 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 92.00			*** METH DEFAULT ***
Q1 91.00	158.50	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	134622
2	5.000	307884

3	10.000	710675
4	20.000	1431333
5	50.000	3862008
6	80.000	4333837

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

39) tr-1,3-Dichloropropene ( )

Ret. Time 13.76 min., Extract & Integrate from 13.29 to 13.99 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 75.00			*** METH DEFAULT ***
Q1 77.00	32.50	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	112470
2	5.000	297484
3	10.000	555040
4	20.000	1127624
5	50.000	2746331
6	80.000	3197307

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

40) Chlorobenzene-d5 (ISTD TR)

Ret. Time 16.27 min., Extract & Integrate from 16.07 to 16.57 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 117.00			*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	25.000	2096386
2	25.000	2139256
3	25.000	2160458
4	25.000	2105257
5	25.000	2152312
6	25.000	1466638

Qualifier Peak Analysis ON ISTD conc: 25.000 ug/l(kg
Curve Fit: Avg. RF

---

41) 1,1,2-Trihloroethane ( )

Ret. Time 13.81 min., Extract & Integrate from 13.42 to 14.22 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 83.00			*** METH DEFAULT ***
Q1 97.00	114.20	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	65158
2		5.000	166400
3		10.000	312978
4		20.000	631020
5		50.000	1489393
6		80.000	1829548

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

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42) Tetrachloroethene ( )

Ret. Time 15.25 min., Extract & Integrate from 14.68 to 15.58 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 165.70			*** METH DEFAULT ***
Q1 167.80	48.40	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	91932
2		5.000	247457
3		10.000	444179
4		20.000	890465
5		50.000	2168823
6		80.000	2168842

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

43) 1,3-Dichloropropane ( )

Ret. Time 14.20 min., Extract & Integrate from 14.05 to 14.54 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 76.00			*** METH DEFAULT ***
Q1 78.00	32.60	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	123691
2		5.000	311716
3		10.000	571505
4		20.000	1157832
5		50.000	2750937
6		80.000	3436793

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

44) Dibromochloromethane ( )

Ret. Time 14.56 min., Extract & Integrate from 14.09 to 14.99 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 129.00			*** METH DEFAULT ***
Q1 127.00	76.30	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	117372
2		5.000	313674
3		10.000	590446
4		20.000	1213701
5		50.000	2952883
6		80.000	3441051

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

45) 2-Hexanone ( )

Ret. Time 14.57 min., Extract & Integrate from 13.97 to 14.97 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 43.00			*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		10.000	537373
2		25.000	1208605
3		50.000	2670947
4		100.000	5137946
5		200.000	8592959
6		not used for this compound	

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

46) 1,2-Dibromoethane ( )

Ret. Time 14.94 min., Extract & Integrate from 14.50 to 15.40 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 107.00			*** METH DEFAULT ***
Q1 109.00	96.30	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	128822
2		5.000	328419
3		10.000	607045
4		20.000	1239740
5		50.000	2858092
6		80.000	3271462

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

47) Chlorobenzene ( )

Ret. Time 16.30 min., Extract & Integrate from 15.90 to 16.70 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 112.00			*** METH DEFAULT ***
Q1 77.00	62.40	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	191790
2	5.000	497617
3	10.000	919632
4	20.000	1871063
5	50.000	4410672
6	80.000	5022151

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

48) 1,1,1,2-Tetrachloroethane ( )

Ret. Time 16.19 min., Extract & Integrate from 15.78 to 16.58 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 131.00			*** METH DEFAULT ***
Q1 133.00	95.80	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	85925
2	5.000	226206
3	10.000	425190
4	20.000	863260
5	50.000	2104452
6	80.000	2097976

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

49) Ethylbenzene ( )

Ret. Time 16.62 min., Extract & Integrate from 16.10 to 17.00 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 91.00			*** METH DEFAULT ***
Q1 106.00	30.90	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	297063
2	5.000	770930
3	10.000	1415852
4	20.000	2893347
5	50.000	7078942
6	80.000	8389758

Qualifier Peak Analysis ON

Curve Fit: Avg. RF

---

50) Xylenes ( )

Ret. Time 16.98 min., Extract & Integrate from 16.66 to 17.56 min.

Signal Rel Resp. Pct. Unc.(rel) Integration
Tgt 106.00 *** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		4.000	154644
2		10.000	555547
3		20.000	1030755
4		40.000	2037434
5		100.000	5160996
6		160.000	6050701

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

51) xylene ( )

Ret. Time 17.55 min., Extract & Integrate from 17.15 to 17.95 min.

Signal Rel Resp. Pct. Unc.(rel) Integration
Tgt 106.00 *** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	106775
2		5.000	275350
3		10.000	513140
4		20.000	1019355
5		50.000	2590239
6		80.000	3068088

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

52) styrene ( )

Ret. Time 17.42 min., Extract & Integrate from 16.89 to 17.79 min.

Signal Rel Resp. Pct. Unc.(rel) Integration
Tgt 104.00 *** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	144793
2		5.000	491977
3		10.000	896852
4		20.000	1775873
5		50.000	4321399
6		80.000	5135814

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

53) Bromoform ( )

Ret. Time 17.03 min., Extract & Integrate from 16.60 to 17.50 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 172.75			*** METH DEFAULT ***
Q1 174.75	50.00	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	102931
2	5.000	272705
3	10.000	522080
4	20.000	1093965
5	50.000	2581259
6	80.000	2643852

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

54) Isopropylbenzene ( )

Ret. Time 18.11 min., Extract & Integrate from 17.32 to 18.32 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 105.00			*** METH DEFAULT ***
Q1 120.00	22.60	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	303031
2	5.000	792521
3	10.000	1448424
4	20.000	2846017
5	50.000	7198798
6	80.000	8288972

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

55) Bromobenzene ( )

Ret. Time 18.44 min., Extract & Integrate from 17.94 to 18.94 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 155.85			*** METH DEFAULT ***
Q1 77.00	181.50	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	95974
2	5.000	248248
3	10.000	453881

4	20.000	927383
5	50.000	2237233
6	80.000	2408288

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

56) Bromofluorobenzene ( )

Ret. Time 18.20 min., Extract & Integrate from 18.02 to 18.38 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 95.00			*** METH DEFAULT ***
Q1 174.00	76.10	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (%)	Response
1		25.000	1603069
2		25.000	1585629
3		25.000	1540453
4		25.000	1486213
5		25.000	1485200
6		25.000	1270606

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

57) 2-Chlorotoluene ( )

Ret. Time 18.72 min., Extract & Integrate from 18.65 to 18.97 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 91.00			*** METH DEFAULT ***
Q1 126.00	29.00	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	307163
2		5.000	744829
3		10.000	1291074
4		20.000	2768838
5		50.000	6337512
6		80.000	7318159

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

58) n-Propylbenzne ( )

Ret. Time 18.63 min., Extract & Integrate from 18.47 to 18.71 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 91.00			*** METH DEFAULT ***
Q1 120.00	21.10	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	509059
2	5.000	1198025
3	10.000	2038147
4	20.000	4583057
5	50.000	10607518
6	80.000	11595584

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

59) 1,2,3-Trichloropropane ( )

Ret. Time 17.57 min., Extract & Integrate from 17.47 to 17.72 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 75.00			*** METH DEFAULT ***
Q1 77.00	32.80	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	129891
2	5.000	321277
3	10.000	612491
4	20.000	1220424
5	50.000	2679381
6	80.000	2910702

Qualifier Peak Analysis OFF
Curve Fit: Avg. RF

---

60) 1,1,2,2-Tetrachloroethane ( )

Ret. Time 17.36 min., Extract & Integrate from 16.73 to 17.73 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 83.00			*** METH DEFAULT ***
Q1 131.00	8.40	20.0	*** METH DEFAULT ***
Q2 85.00	66.60	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	80750
2	5.000	200811
3	10.000	354389
4	20.000	687000
5	50.000	1656400
6	80.000	1917653

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

61) 4-Chlorotoluene ( )

Ret. Time 18.65 min., Extract & Integrate from 18.65 to 19.35 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 91.00			*** METH DEFAULT ***
Q1 126.00	29.50	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	248435
2		5.000	658621
3		10.000	1206578
4		20.000	2387611
5		50.000	5825123
6		80.000	7252663

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

62) 1,3,5-Trimethylbenzene ( )

Ret. Time 19.11 min., Extract & Integrate from 18.91 to 19.31 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 105.00			*** METH DEFAULT ***
Q1 120.00	48.50	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	164077
2		5.000	431993
3		10.000	780034
4		20.000	1479689
5		50.000	3703379
6		80.000	4622183

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

63) tert-Butylbenzene ( )

Ret. Time 19.63 min., Extract & Integrate from 19.13 to 20.13 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 119.00			*** METH DEFAULT ***
Q1 91.00	81.80	20.0	*** METH DEFAULT ***
Q2 134.00	23.20	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	216337
2		5.000	551010
3		10.000	1040105
4		20.000	2056633
5		50.000	5226194
6		80.000	5972437

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

64) 1,2,4-Trimethylbenzene ( )

Ret. Time 19.68 min., Extract & Integrate from 19.48 to 19.85 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 105.00			*** METH DEFAULT ***
Q1 120.00	45.50	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	167062
2	5.000	434767
3	10.000	802797
4	20.000	1530750
5	50.000	3927350
6	80.000	4813711

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

65) sec-Butylbenzene ( )

Ret. Time 19.97 min., Extract & Integrate from 19.47 to 20.47 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 105.00			*** METH DEFAULT ***
Q1 134.00	16.70	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	315601
2	5.000	800263
3	10.000	1484349
4	20.000	2961341
5	50.000	7744857
6	80.000	9153826

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

66) 1,3-Dichlorobenzene ( )

Ret. Time 19.88 min., Extract & Integrate from 19.72 to 20.04 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 146.00			*** METH DEFAULT ***
Q1 111.00	44.50	20.0	*** METH DEFAULT ***
Q2 148.00	63.80	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	165530
2	5.000	431211
3	10.000	774894
4	20.000	1568875

5	50.000	3796677
6	80.000	4268511

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

67) p-Isopropyltoluene ( )

Ret. Time 20.13 min., Extract & Integrate from 19.63 to 20.63 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 119.00			*** METH DEFAULT ***
Q1 134.00	25.00	20.0	*** METH DEFAULT ***
Q2 91.00	25.40	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	208737
2	5.000	535662
3	10.000	1021375
4	20.000	2019173
5	50.000	5363813
6	80.000	6820327

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

68) 1,4-Dichlorobenzene ( )

Ret. Time 19.98 min., Extract & Integrate from 19.68 to 20.26 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 146.00			*** METH DEFAULT ***
Q1 111.00	43.40	20.0	*** METH DEFAULT ***
Q2 148.00	65.20	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	167040
2	5.000	443394
3	10.000	792118
4	20.000	1623417
5	50.000	3875568
6	80.000	4421293

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

69) 1,2-Dichlorobenzene ( )

Ret. Time 20.50 min., Extract & Integrate from 20.30 to 20.70 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 146.00			*** METH DEFAULT ***
Q1 111.00	50.80	20.0	*** METH DEFAULT ***

Q2 148.00 64.30 20.0 *** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	165758
2		5.000	415123
3		10.000	757338
4		20.000	1539040
5		50.000	3639597
6		80.000	4128776

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

70) n-Butylbenzene ( )

Ret. Time 20.88 min., Extract & Integrate from 20.38 to 21.38 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 91.00			*** METH DEFAULT ***
Q1 92.00	57.10	20.0	*** METH DEFAULT ***
Q2 134.00	20.70	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	196453
2		5.000	502219
3		10.000	896336
4		20.000	1763039
5		50.000	4792654
6		80.000	5659037

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

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71) 1,2-Dibromo-3-chloropropane ( )

Ret. Time 21.35 min., Extract & Integrate from 20.85 to 21.85 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 75.00			*** METH DEFAULT ***
Q1 154.85	94.70	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/l(kg)	Response
1		2.000	66085
2		5.000	161236
3		10.000	320517
4		20.000	647770
5		50.000	1393057
6		80.000	1596529

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

72) 1,2,4-Trichlorobenzene ( )

Ret. Time 23.78 min., Extract & Integrate from 23.39 to 24.19 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 180.00			*** METH DEFAULT ***
Q1 182.00	89.20	20.0	*** METH DEFAULT ***
Q2 145.00	25.40	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	122777
2	5.000	312749
3	10.000	549838
4	20.000	1107834
5	50.000	2777788
6	80.000	3310487

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

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73) Hexachlorobutadiene ( )

Ret. Time 24.50 min., Extract & Integrate from 24.00 to 25.00 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 224.70			*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	64580
2	5.000	144698
3	10.000	303499
4	20.000	582550
5	50.000	1521807
6	80.000	1615383

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

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74) Naphthalene ( )

Ret. Time 24.33 min., Extract & Integrate from 23.87 to 24.67 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 128.00			*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	295579
2	5.000	702431
3	10.000	1289035
4	20.000	2455235
5	50.000	7504139
6	80.000	8831046

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

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75) 1,2,3-Trichlorobenzene ( )

Ret. Time 24.86 min., Ex ract & Integrate from 24.30 to 25.10 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 180.00			*** METH DEFAULT ***
Q1 182.00	97.60	20.0	*** METH DEFAULT ***
Q2 145.00	26.60	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	2.000	120297
2	5.000	301483
3	10.000	537759
4	20.000	1078731
5	50.000	2670865
6	80.000	3299429

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

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76) 1,4-Dichlorobenzene-d4 (ISTD TR)

Ret. Time 19.97 min., Extract & Integrate from 19.47 to 20.47 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 150.00			*** METH DEFAULT ***

Lvl ID	Conc (ug/l(kg)	Response
1	25.000	1958558
2	25.000	1945362
3	25.000	1994656
4	25.000	2093509
5	25.000	2211880
6	25.000	1853150

Qualifier Peak Analysis ON ISTD conc: 25.000 ug/l(kg
Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Wed Oct 18 14:00:28 1995

GOLDEN STATE/CAS
LABORATORIES INC.

December 18, 1995

Mike Flack
EMCON
3300 North San Fernando Blvd.
Burbank, CA 91504

Re: **Dial Corporation, South Gate / Project #OH93-001.06**

Dear Mike:

Enclosed are the results of the samples submitted to our lab on December 8, 1995. For your reference, these analyses have been assigned our service request number L9504260.

All analyses were performed in accordance with our laboratory's quality assurance program. Golden State / CAS is certified for environmental analyses by the California Department of Health Services (Certificate # 1296/Expiration - August 1996).

Please call if you have any questions.

Respectfully submitted,

Golden State / CAS Laboratories, Inc.

Eydie Schwartz

Eydie Schwartz
Project Chemist

ES/sjt

6925 CANOGA AVENUE ■ CANOGA PARK, CA 91303 ■ 818 587 5550 ■ FAX 818 587 5555

Acronyms

A2LA	American Association for Laboratory Accreditation
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAM	California Assessment Metals
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
CFU	Colony Forming Unit
COD	Chemical Oxygen Demand
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOE	Department of Ecology
DOH or DHS	Department of Health Services
ELAP	Environmental Laboratory Accreditation Program
EPA	US Environmental Protection Agency
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank sample
ICP	Inductively Coupled Plasma atomic emission spectrometry
ICV	Initial Calibration Verification sample
J	Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding.
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified
MBAS	Methylene Blue Active Substances
MCL	Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U.S. EPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl-*tert*-Butyl Ether
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the paper industry for Air and Stream Improvement
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NIOSH	National Institute of Occupational Safety and Health
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SM	*Standard Methods for the Examination of Water and Wastewater*, 18th Ed., 1992.
STLC	Solubility Threshold Limit Concentration
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986, and as amended by Updates I, II, IIA, and IIB.
TCLP	Toxicity Characteristics Leaching Procedure
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding.
TRPH	Total Recoverable Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Extracted: NA

Reporting Units: ug/L (ppb)

		DATE ANALYZED	12/12/95	12/14/95	12/14/95	12/14/95
		DILUTION FACTOR	1	1	1	1
		LAB SAMPLE I.D.	L9504260-MB	L9504260-MB	L9504260-001	L9504260-002
		CLIENT SAMPLE I.D.	Method Blank	Method Blank	MW-1	MW-2
		EXTRACTION SOLVENT	NA	NA	NA	NA
		EXTRACTION METHOD	5030	5030	5030	5030
		BATCH NO.	J121295	J121495	J121495	J121495
PETROLEUM HYDROCARBONS	**CRDL**					
Gasoline (EPA 8015M)	40		ND	ND	ND	ND
Surrogate	**Spk Conc**	**ACP%**	**% RC**	**% RC**	**% RC**	**% RC**
a,a,a-Trifluorotoluene	50	60-140	92	74	92	111

Spk Conc = Spike Concentration; ACP % = Acceptable Range of Percent; % RC = % Recovery

Approved By Cydie Schwartz Date: 12/13/95

6925 CANOGA AVENUE ■ CANOGA PARK, CA 91303 ■ 818 587-5550 ■ FAX 818 587-5555

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Extracted: NA

Reporting Units: ug/L (ppb)

DATE ANALYZED			12/14/95	12/14/95	12/12/95	12/12/95
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			L9504260-003	L9504260-004	L9504260-005	L9504260-006
CLIENT SAMPLE I.D.			MW-6	MW-7	TRIP BLANK	EQUIP. BLANK
EXTRACTION SOLVENT			NA	NA	NA	NA
EXTRACTION METHOD			5030	5030	5030	5030
BATCH NO.			J121495	J121495	J121295	J121295
PETROLEUM HYDROCARBONS	**CRDL**					
Gasoline (EPA 8015M)	40		110	330	ND	ND
Surrogate	**Spk Conc**	**ACP%**	**% RC**	**% RC**	**% RC**	**% RC**
a,a,a-Trifluorotoluene	50	60-140	109	115	70	73

Spk Conc = Spike Concentration; ACP % = Acceptable Range of Percent; % RC = % Recovery

Approved By: Eydie Schwartz Date: 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

	Sample Name:	**Method Blank**	**MW-1**	**MW-2**
	Lab Code:	L9504260-MB	L9504260-001	L9504260-002*
	Dilution Factor:	1	1	20
	Extraction Solvent:	NA	NA	NA
	Extraction Method:	5030	5030	5030
	Date Analyzed:	12/14/95	12/14/95	12/14/95
	Batch No.:	120995	120995	120995
Analyte	**CRDL**			
Bromobenzene	0.5	ND	ND	<10
Bromochloromethane	0.5	ND	ND	<10
Bromodichloromethane	0.5	ND	ND	<10
Bromoform	0.5	ND	ND	<10
Bromomethane	0.5	ND	ND	<10
Carbon Disulfide	5	ND	ND	<100
Carbon tetrachloride	0.5	ND	ND	<10
Chloroethane	0.5	ND	ND	<10
Chloroform	0.5	ND	ND	<10
Chloromethane	0.5	ND	ND	<10
Dibromochloromethane	0.5	ND	ND	<10
Dibromomethane	0.5	ND	ND	<10
Dichloromethane (Methylene Chloride)	2	ND	ND	<40
Dichlorodifluoromethane	0.5	ND	ND	<10
1,1-Dichloroethane (1,1-DCA)	0.5	ND	ND	<10
1,2-Dichloroethane (1,2-DCA)	0.5	ND	ND	<10
1,1-Dichloroethylene (1,1-DCE)	0.5	ND	ND	<10
trans-1,2-Dichloroethylene	0.5	ND	ND	<10
cis-1,2-Dichloroethylene	0.5	ND	ND	<10
1,2-Dichloropropane	0.5	ND	ND	<10
cis-1,3-Dichloropropylene	0.5	ND	ND	<10
trans-1,3-Dichloropropylene	0.5	ND	ND	<10
1,1,1,2-Tetrachloroethane	0.5	ND	ND	<10
1,1,2,2-Tetrachloroethane	0.5	ND	ND	<10
Tetrachloroethylene(PCE)	0.5	ND	ND	<10
1,1,1-Trichloroethane (1,1,1-TCA)	0.5	ND	ND	<10
1,1,2-Trichloroethane (1,1,2-TCA)	0.5	ND	ND	<10
Trichloroethylene (TCE)	0.5	ND	ND	<10
1,2,3-Trichloropropane	0.5	ND	ND	<10
Trichlorofluoromethane	0.5	ND	ND	<10
Vinyl Chloride (VC)	0.5	ND	ND	<10
Benzene	0.5	ND	ND	<10
Chlorobenzene	0.5	ND	ND	<10
1,2-Dichlorobenzene	1.0	ND	ND	<20
1,3-Dichlorobenzene	1.0	ND	ND	<20
1,4-Dichlorobenzene	1.0	ND	ND	<20

* MRL is elevated because of matrix interferences and because the sample required diluting.

Approved By: Eydie Schwartz Date: 12/12/95

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

		Sample Name:	**Method Blank**	**MW-1**	**MW-2**
		Lab Code:	L9504260-MB	L9504260-001	L9504260-002*
		Dilution Factor:	1	1	20
		Extraction Solvent:	NA	NA	NA
		Extraction Method:	5030	5030	5030
		Date Analyzed:	12/14/95	12/14/95	12/14/95
		Batch No.:	120995	120995	120995
Analyte		**CRDL**			
Ethyl benzene		0.5	ND	ND	<10
Toluene		0.5	ND	ND	<10
Total Xylenes		1.0	ND	ND	<20
Acetone		25	ND	ND	<500
n-Butylbenzene		0.5	ND	ND	<10
sec-Butylbenzene		0.5	ND	ND	<10
tert-Butylbenzene		0.5	ND	ND	<10
2-Chloroethylvinyl ether		0.5	ND	ND	<10
2-Chlorotoluene		1.0	ND	ND	<20
4-Chlorotoluene		0.5	ND	ND	<10
1,3-Dichloropropane		0.5	ND	ND	<10
2,2-Dichloropropane		0.5	ND	ND	<10
1,1-Dichloropropylene		0.5	ND	ND	<10
Ethylene dibromide (EDB)		0.5	ND	ND	<10
Hexachlorobutadiene		0.5	ND	ND	<10
Isopropylbenzene		0.5	ND	ND	<10
p-Isopropyltoluene		0.5	ND	ND	<10
Methyl Ethyl Ketone		25	ND	ND	<500
Methyl Isobutyl Ketone		25	ND	ND	<500
Naphthalene		1.0	ND	ND	<20
n-Propylbenzene		0.5	ND	ND	<10
Styrene		0.5	ND	ND	<10
1,2,3-Trichlorobenzene		0.5	ND	ND	<10
1,2,4-Trichlorobenzene		0.5	ND	ND	<10
1,2,4-Trimethylbenzene		0.5	ND	ND	<10
1,3,5-Trimethylbenzene		0.5	ND	ND	<10
1,1,2-Trichloro-1,2,2-Trifluoroethane		2	ND	ND	<40
1,2-Dibromo-3-chloropropane (DBCP)		0.5	ND	ND	<10
Acrolein		100	ND	ND	<2000
Acrylonitrile		100	ND	ND	<2000
Surrogate	**SPK CONC**	**ACP%**	**%RC**	**%RC**	**%RC**
Pentafluorobenzene	25	70-130	94	94	101
Toluene-D_8	25	88-110	88	88	88
4-Bromofluorobenzene	25	86-115	99	100	100

SPK CONC = Spike Concentration; ACP% = Acceptable Range of Percent; %RC = % Recovery

* MRL is elevated because of matrix interferences and because the sample required diluting.

Approved By: Eydie Schwartz Date: 12/12/95

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

	Sample Name:	MW-6	MW-7	TRIP BLANK
	Lab Code:	L9504260-003	L9504260-004	L9504260-005
	Dilution Factor:	1	1	1
	Extraction Solvent:	NA	NA	NA
	Extraction Method:	5030	5030	5030
	Date Analyzed:	12/14/95	12/14/95	12/14/95
	Batch No.:	120995	120995	120995
Analyte	**CRDL**			
Bromobenzene	0.5	ND	ND	ND
Bromochloromethane	0.5	ND	ND	ND
Bromodichloromethane	0.5	ND	ND	ND
Bromoform	0.5	ND	ND	ND
Bromomethane	0.5	ND	ND	ND
Carbon Disulfide	5	ND	ND	ND
Carbon tetrachloride	0.5	ND	ND	ND
Chloroethane	0.5	ND	ND	ND
Chloroform	0.5	ND	ND	ND
Chloromethane	0.5	ND	ND	ND
Dibromochloromethane	0.5	ND	ND	ND
Dibromomethane	0.5	ND	ND	ND
Dichloromethane (Methylene Chloride)	2	ND	ND	ND
Dichlorodifluoromethane	0.5	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	0.5	0.5	1.7	ND
1,2-Dichloroethane (1,2-DCA)	0.5	0.6	1.1	ND
1,1-Dichloroethylene (1,1-DCE)	0.5	ND	ND	ND
trans-1,2-Dichloroethylene	0.5	ND	ND	ND
cis-1,2-Dichloroethylene	0.5	ND	1.0	ND
1,2-Dichloropropane	0.5	ND	1.2	ND
cis-1,3-Dichloropropylene	0.5	ND	ND	ND
trans-1,3-Dichloropropylene	0.5	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.5	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	ND	ND	ND
Tetrachloroethylene(PCE)	0.5	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	0.5	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	0.5	ND	ND	ND
Trichloroethylene (TCE)	0.5	ND	0.9	ND
1,2,3-Trichloropropane	0.5	ND	ND	ND
Trichlorofluoromethane	0.5	ND	ND	ND
Vinyl Chloride (VC)	0.5	ND	ND	ND
Benzene	0.5	17	65	ND
Chlorobenzene	0.5	ND	ND	ND
1,2-Dichlorobenzene	1.0	ND	ND	ND
1,3-Dichlorobenzene	1.0	ND	ND	ND
1,4-Dichlorobenzene	1.0	ND	ND	ND

Approved By: Eydie Schwartz Date: 12/13/95

6925 CANOGA AVENUE ■ CANOGA PARK, CA 91304 ■ 818 587-5550 ■ FAX 818 587-5555

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

	Sample Name:	MW-6	MW-7	TRIP BLANK
	Lab Code:	L9504260-003	L9504260-004	L9504260-005
	Dilution Factor:	1	1	1
	Extraction Solvent:	NA	NA	NA
	Extraction Method:	5030	5030	5030
	Date Analyzed:	12/14/95	12/14/95	12/14/95
	Batch No.:	120995	120995	120995
Analyte	**CRDL**			
Ethyl benzene	0.5	ND	2.0	ND
Toluene	0.5	ND	2.7	ND
Total Xylenes	1.0	ND	1.9	ND
Acetone	25	ND	ND	ND
n-Butylbenzene	0.5	ND	ND	ND
sec-Butylbenzene	0.5	ND	ND	ND
tert-Butylbenzene	0.5	ND	ND	ND
2-Chloroethylvinyl ether	0.5	ND	ND	ND
2-Chlorotoluene	1.0	ND	ND	ND
4-Chlorotoluene	0.5	ND	ND	ND
1,3-Dichloropropane	0.5	ND	ND	ND
2,2-Dichloropropane	0.5	ND	ND	ND
1,1-Dichloropropylene	0.5	ND	ND	ND
Ethylene dibromide (EDB)	0.5	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND
Isopropylbenzene	0.5	ND	ND	ND
p-Isopropyltoluene	0.5	ND	ND	ND
Methyl Ethyl Ketone	25	ND	ND	ND
Methyl Isobutyl Ketone	25	ND	ND	ND
Naphthalene	1.0	ND	ND	ND
n-Propylbenzene	0.5	ND	ND	ND
Styrene	0.5	ND	ND	ND
1,2,3-Trichlorobenzene	0.5	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	ND	ND	ND
1,2,4-Trimethylbenzene	0.5	ND	ND	ND
1,3,5-Trimethylbenzene	0.5	ND	ND	ND
1,1,2-Trichloro-1,2,2-Trifluoroethane	2	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	0.5	ND	ND	ND
Acrolein	100	ND	ND	ND
Acrylonitrile	100	ND	ND	ND

Surrogate	SPK CONC	ACP%	%RC	%RC	%RC
Pentafluorobenzene	25	70-130	84	92	102
Toluene-D_8	25	88-110	92	90	88
4-Bromofluorobenzene	25	86-115	96	99	101

SPK CONC = Spike Concentration; ACP% = Acceptable Range of Percent; %RC = % Recovery

Approved By: Eydie Schwartz Date: 12/18/95

6925 CANOGA AVENUE ■ CANOGA PARK, CA 91303 ■ 818 587-5550 ■ FAX 818 587-5555

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

		EQUIPMENT
	Sample Name:	**BLANK**
	Lab Code:	L9504260-006
	Dilution Factor:	1
	Extraction Solvent:	NA
	Extraction Method:	5030
	Date Analyzed:	12/14/95
	Batch No.:	120995
Analyte	**CRDL**	
Bromobenzene	0.5	ND
Bromochloromethane	0.5	ND
Bromodichloromethane	0.5	ND
Bromoform	0.5	ND
Bromomethane	0.5	ND
Carbon Disulfide	5	ND
Carbon tetrachloride	0.5	ND
Chloroethane	0.5	ND
Chloroform	0.5	ND
Chloromethane	0.5	ND
Dibromochloromethane	0.5	ND
Dibromomethane	0.5	ND
Dichloromethane (Methylene Chloride)	2	ND
Dichlorodifluoromethane	0.5	ND
1,1-Dichloroethane (1,1-DCA)	0.5	ND
1,2-Dichloroethane (1,2-DCA)	0.5	ND
1,1-Dichloroethylene (1,1-DCE)	0.5	ND
trans-1,2-Dichloroethylene	0.5	ND
cis-1,2-Dichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	ND
cis-1,3-Dichloropropylene	0.5	ND
trans-1,3-Dichloropropylene	0.5	ND
1,1,1,2-Tetrachloroethane	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
Tetrachloroethylene(PCE)	0.5	ND
1,1,1-Trichloroethane (1,1,1-TCA)	0.5	ND
1,1,2-Trichloroethane (1,1,2-TCA)	0.5	ND
Trichloroethylene (TCE)	0.5	ND
1,2,3-Trichloropropane	0.5	ND
Trichlorofluoromethane	0.5	ND
Vinyl Chloride (VC)	0.5	ND
Benzene	0.5	ND
Chlorobenzene	0.5	ND
1,2-Dichlorobenzene	1.0	ND
1,3-Dichlorobenzene	1.0	ND
1,4-Dichlorobenzene	1.0	ND

Approved By: Eydie Schwartz Date: 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Sample Matrix: Water

Service Request: L9504260
Date Collected: 12/7/95
Date Received: 12/8/95
Date Extracted: NA

Volatile Organic Compounds
EPA Method 8260
Reporting Units: ug/L (ppb)

		EQUIPMENT
Sample Name:		BLANK
Lab Code:		L9504260-006
Dilution Factor:		1
Extraction Solvent:		NA
Extraction Method:		5030
Date Analyzed:		12/14/95
Batch No.:		120995
Analyte	**CRDL**	
Ethyl benzene	0.5	ND
Toluene	0.5	ND
Total Xylenes	1.0	ND
Acetone	25	ND
n-Butylbenzene	0.5	ND
sec-Butylbenzene	0.5	ND
tert-Butylbenzene	0.5	ND
2-Chloroethylvinyl ether	0.5	ND
2-Chlorotoluene	1.0	ND
4-Chlorotoluene	0.5	ND
1,3-Dichloropropane	0.5	ND
2,2-Dichloropropane	0.5	ND
1,1-Dichloropropylene	0.5	ND
Ethylene dibromide (EDB)	0.5	ND
Hexachlorobutadiene	0.5	ND
Isopropylbenzene	0.5	ND
p-Isopropyltoluene	0.5	ND
Methyl Ethyl Ketone	25	ND
Methyl Isobutyl Ketone	25	ND
Naphthalene	1.0	ND
n-Propylbenzene	0.5	ND
Styrene	0.5	ND
1,2,3-Trichlorobenzene	0.5	ND
1,2,4-Trichlorobenzene	0.5	ND
1,2,4-Trimethylbenzene	0.5	ND
1,3,5-Trimethylbenzene	0.5	ND
1,1,2-Trichloro-1,2,2-Trifluoroethane	2	ND
1,2-Dibromo-3-chloropropane (DBCP)	0.5	ND
Acrolein	100	ND
Acrylonitrile	100	ND

Surrogate	SPK CONC	ACP%	%RC
Pentafluorobenzene	25	70-130	84
Toluene-D_8	25	88-110	90
4-Bromofluorobenzene	25	86-115	96

SPK CONC = Spike Concentration; ACP% = Acceptable Range of Percent; %RC = % Recovery

Approved By: Eydie Schwartz Date: 12/18/95

6923 CANOGA AVENUE ■ CANOGA PARK, CA 91303 ■ 818 587-5550 ■ FAX 818 587-5555

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	[redacted]ial Corp./#OH93-001.06	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Batch No.:	J121295	**Date Extracted:**	NA
		Date Analyzed:	12/13/95

Matrix Spike/Duplicate Matrix Spike Summary
TPH as Gasoline
EPA Methods 5030/8015M
Reporting Units: ug/L (ppb)

Sample Name: Batch QC
Lab Code: L9504239-014

							Percent Recovery			
Analyte	**Sample Result**	**Spike CONC**	**MS**	**%MS**	**Spike CONC [redacted]UP**	**DMS**	**%DMS**	**RPD**	**MS/DMS Limit**	**RPD Limit**
TPH as Gasoline	ND	2000	1850	92	20[redacted]0	2140	107	8	70-14[redacted]	25

Approved By Eydie Schwartz Date: 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-001.06	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
Batch No.:	J121295	**Date Analyzed:**	12/12/95

Laboratory Control Sample Summary
TPH as Gasoline
Reporting Units: ug/L (ppb)

Supply Source:	Mobil
Lot Number:	NA
Date of Source:	12/5/95
Lab LCS I.D.:	B101G

Analyte	EPA Method	Spike CONC	Result	Percent Recovery	ACP Percent Recovery Limit
TPH as Gasoline	5030/8015M	2000	1680	84	70-140

Approved By: Eydie Schwartz Date: 12/13/95

6925 CANOGA AVENUE ■ CANOGA PARK, CA 91303 ■ 818 587-5550 ■ FAX 818 587-5555

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Batch No.: J121295

Service Request: L9504260
Date Analyzed: 10/12/95

Calibration Standards
TPH as Gasoline
EPA Methods 5030/8015M

Supply Source: ARCO
Lot Number: NA
Date of Source: 11/28/95
Lab CCV I.D.: B82B

Analyte	Average Calibration Response Initial (RF_{ave}) Date: 10/26/95	Percent Relative Standard Deviation (%RSD) ≤20%	Daily Response Factor (RF) Date: 12/12/95	Percent Difference (%DIFF) ≤ ±15%
TPH as Gasoline	2.865×10^{-5}	6	2.861×10^{-5}	<1

Approved By: Eydie Schwartz Date: 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-001.06	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Batch No.:	J121495	**Date Extracted:**	NA
		Date Analyzed:	12/15/95

Matrix Spike/Duplicate Matrix Spike Summary
TPH as Gasoline
EPA Methods 5030/8015M
Reporting Units: ug/L (ppb)

Sample Name: Batch QC
Lab Code: L9504285-003

				Percent Recovery						
Analyte	**Sample Result**	**Spike CONC**	**MS**	**%MS**	**Spike CONC DUP**	**DMS**	**%DMS**	**RPD**	**MS/DMS Limit**	**RPD Limit**
TPH as Gasoline	ND	1000	1250	125	2000	1340	134	7	70-140	25

Approved By: Eydie Schwartz Date: 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-001.06	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
Batch No.:	J121495	**Date Analyzed:**	12/14-15/95

Laboratory Control Sample Summary
TPH as Gasoline
Reporting Units: ug/L (ppb)

Supply Source:	Mobil
Lot Number:	NA
Date of Source:	12/5/95
Lab LCS I.D.:	B101G

Analyte	EPA Method	Spike CONC	Result	Percent Recovery	ACP Percent Recovery Limit
TPH as Gasoline	5030/8015M	1000	1090	109	70-140

Approved By: Eydie Schwartz Date: 12/18/95

6925 CANOGA AVENUE ■ CANOGA PARK, CA 91303 ■ 818 587-5550 ■ FAX 818 587-5555

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: EMCON
Project: Dial Corp./#OH93-001.06
Batch No.: J121495

Service Request: L9504260
Date Analyzed: 12/14/95

Calibration Standards
TPH as Gasoline
EPA Methods 5030/8015M

Supply Source: ARCO
Lot Number: NA
Date of Source: 11/28/95
Lab CCV I.D.: B82B

Analyte	Average Calibration Response Initial (RF_{ave}) Date: 10/26/95	Percent Relative Standard Deviation (%RSD) ≤20%	Daily Response Factor (RF) Date: 12/14/95	Percent Difference (%DIFF) ≤ ±15%
TPH as Gasoline	2.865×10^{-5}	6	2.971×10^{-5}	4

Approved By: Eydie Schwartz Date: 12/18/95

6925 CANOGA AVENUE ■ CANOGA PARK, CA 91303 ■ 818 587-5550 ■ FAX 818 587-5555

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-001.06	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Batch No.:	120995	**Date Extracted:**	NA
		Date Analyzed:	12/10/95

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds
EPA Methods 5030/8260
Reporting Units: ug/L (ppb)

Sample Name: Batch QC
Lab Code: L9504237-001

						Percent Recovery				
Analyte	**Sample Result**	**Spike CONC**	**MS**	**%MS**	**Spike CONC DUP**	**DMS**	**%DMS**	**RPD**	**MS/DMS Limit**	**RPD Limit**
Chloroform	ND	5.00	4.68	94	5.00	5.09	102	8	71-120	11
1,1-Dichloroethane (1,1-DCA)	ND	5.00	4.75	95	5.00	5.13	103	8	71-120	11
1,2-Dichloroethane	ND	5.00	5.05	101	5.00	5.15	103	2	71-120	11
1,1-Dichloroethylene (1,1-DCE)	ND	5.00	4.66	93	5.00	4.89	98	5	65-145	14
Tetrachloroethylene (PCE)	ND	5.00	4.13	83	5.00	4.03	81	2	71-120	14
Trichloroethylene (TCE)	ND	5.00	4.04	81	5.00	4.01	80	<1	71-120	14
Benzene	ND	5.00	5.23	105	5.00	4.62	92	10	76-127	11
Toluene	ND	5.00	4.78	96	5.00	5.07	101	12	76-125	13

Approved By: Eydie Schwartz Date: 12/18/95

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	EMCON	**Service Request:**	L9504260
Project:	Dial Corp./#OH93-001.06	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
Batch No.:	120995	**Date Analyzed:**	12/14/95

Laboratory Control Sample Summary
Volatile Organic Compounds
Reporting Units: ug/L (ppb)

Supply Source:	ULTRA Scientific
Lot Number:	J-0316
Date of Source:	10/16/95
Lab LCS I.D.:	94C

Analyte	EPA Method	Spike CONC	Result	Percent Recovery	ACP Percent Recovery Limit
Chloroform	5030/8260	5.00	5.05	101	80-120
1,1-Dichloroethane (1,1-DCA)	5030/8260	5.00	4.68	94	80-120
1,2-Dichloroethane	5030/8260	5.00	5.33	107	80-120
1,1-Dichloroethylene (1,1-DCE)	5030/8260	5.00	5.03	101	80-120
Tetrachloroethylene (PCE)	5030/8260	5.00	4.92	98	80-120
Trichloroethylene (TCE)	5030/8260	5.00	4.39	88	80-120
Benzene	5030/8260	5.00	4.82	96	80-120
Toluene	5030/8260	5.00	4.66	93	80-120

Approved By: Eydie Schwartz Date: 12/18/95

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GOLDEN STATE/CAS
LABORATORIES, INC.
6925 CANOGA AVENUE ▪ CANOGA PARK, CA 91303
818 587-5550 ▪ FAX #818 587-5555

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

CAS SERVICE REQUEST #: L9504260 DATE _____ PAGE ___ OF ___

COMPANY/ADDRESS EMCON
3300 N. SAN FERNANDO BLVD.
BURBANK CA, 91504 PHONE (818) 841-1160
PROJECT NAME/LOCATON DIAL CORPORATION
SOUTH GATE / PROJECT # 0493-00106
PROJECT MNGR. MIKE FLACK
SAMPLERS SIGNATURE Jim Casas

L9504260-

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	TPH Gas/BTEX 8015/8020/8020 M FOR GAS	TPH/8015 Modified Diesel ☐ FC ☐ Gasoline ☐	BTEX 602/8020	Total Petroleum Hydrocarbons EPA 418.1	Halogenated Volatiles 601/8010	Volatile Organics GC/MS 624/8240/8260 FOR VOCS	Base/Nuc/Acid Organic GC/ms 625/8270	CAM Metals 6010/7000	REMARKS
MW-1	12-7-95	825	L9504260-1	H_2O	3	X					X			GROUNDWATER
MW-2		845	2		3	X					X			" "
MW-6		1108	3		3	X					X			" "
MW-7		1136	4		3	X					X			" "
TRIP BLANK		700	5		3	X					X			—
EQUIPMENT BLANK		800	6		3	X					X			—

RELINQUISHED BY:	RECEIVED BY:	TURNAROUND REQUIREMENTS:	REPORT REQUIREMENTS:	INVOICE INFORMATION:	SAMPLE RECEIPT:
Signature: Jim Casas	Signature: [signature]	___ 24 hr ___ 48 hr ___ 5 day	___ i. Routine Report	P.O. # _____	Shipping VIA: _____
Firm: Emcon	Firm: G S Cas	X Standard	___ ii. Report (includes DUP, MS, MSD, as required, may be charged as samples)	Bill to: _____	Shipping #: _____
Date/Time: 12-8-95 11:00	Date/Time: 12-8-95 11:00	___ Other (Specify)	___ iii. Data Validation Report (includes All Raw Data)		Condition: _____
		___ Provide Verbal Preliminary Results	___ RWQCB		Accepted for Analysis by: _____
		Requested Report Date _____			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:	SPECIAL :
Signature	Signature	Signature	Signature	
Firm	Firm	Firm	Firm	
Date/Time	Date/Time	Date/Time	Date/Time	

ATTACHMENT 3

LIMITATIONS

LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.