Lockheed Martin Corporation - Environment, Safety & Health
Burbank Program Office
2550 N. Hollywood Way, 3rd Floor - Burbank, CA 91505-1085
Program Office, Regulatory Affairs, and
Remediation Demolition Departments: 818-847-0256 (Facsimile)
Business Office and Groundwater Department: 818-847-0170 (Facsimile)

2462-00001

SFUND RECORDS CTR
110084

LOCKHEED MARTIN

Via Federal Express
CAY0997/278
WBS# 48

September 30, 1997

Mr. Gerard J. Thibeault
Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

Dear Mr. Thibeault:

Subject: July 1997 Production Well Sampling Report
Water Supply Contingency Plan Crafton-Redlands Plume Project

In compliance with the Water Supply Contingency Plan, enclosed please find one copy of the subject report prepared by HSI-GeoTrans for Lockheed Martin Corporation, Burbank, California. This report presents analytical results from samples collected at Bunker Hill Basin Production Wells in July of 1997. Laboratory Quality Assurance/Quality Control documentation is in Attachment C which is also enclosed for your review.

Should you have any comments or requests, please contact me at (818) 847-0197 or Mr. Tom Blackman at (818) 847-0791.

Sincerely,

Carol Yuge

Carol Yuge
Deputy Director

Enclosures

cc: See Attached Distribution List

CAY0997/278
September 29, 1997

cc: (Abbreviated Report Without Attachment "C," Which is Available Upon Request)
Tom Bartol, USAF, Norton Air Force Base
Sean Bradley, Victoria Farms Mutual Water Company
Kim Brown, Southern California Edison
Gary Forth, City of Loma Linda
Eric Fraser, DHS-Division of Drinking Water (San Bernardino)
Peter Garcia, Department of Toxic Substances Control
Kevin Mayer, U. S. Environmental Protection Agency
Eugene McMeans, Riverside Highland Water Company
Robert Reiter, San Bernardino Valley Municipal Water District
Toby Roy, DHS-Division of Drinking Water (San Diego)
Joe Stejskal, City of San Bernardino

HSI GEOTRANS
A TETRA TECH COMPANY

3150 Bristol Street
Suite 500
Costa Mesa, California
92626

714-513-1415 FAX 714-513-1278

October 3, 1997

Lockheed Martin Corporation
2550 N. Hollywood Way, 3rd Floor
Burbank, California 91505

Attention: Mr. Masood Choudhury
Project Hydrogeologist

Subject: July 1997 Data Report
Water Supply Contingency Plan
Production Well Sampling Program
Crafton-Redlands Plume Project

Dear Mr. Choudhury:

This report presents a brief summary of field procedures, protocols, and results of the Water Supply Contingency Plan production well sampling for the month of July 1997. The Water Supply Contingency Plan (WSCP) was prepared by Lockheed Martin Corporation and submitted to the State of California Regional Water Quality Control Board (RWQCB) Santa Ana Region on September 30, 1996. The plan was conditionally approved by the RWQCB in a letter dated March 6, 1997. The WSCP for the Crafton-Redlands Plume was prepared to address maintenance of water supply to purveyors in the event that wells become impacted with trichloroethene (TCE) from the Crafton-Redlands TCE Plume.

The September 30, 1996 WSCP identifies eight existing production wells in the eastern Bunker Hill Basin in the vicinity of the leading edge of the Crafton-Redlands Plume for monthly groundwater quality sampling. These eight production wells are operated by three local water purveyors/suppliers including; the City of Loma Linda (COLL), Victoria Farms Mutual Water Company (Victoria Farms), and Southern California Edison (SCE). The wells selected for sampling include COLL Mountain View wells #1 and #2, COLL Richardson wells #1 and #2, Victoria Farms wells #1 and #3, and SCE wells #1 and #2. The locations of these wells are shown on Figure 1. The sampling frequency of each well is once a month for the first year of the WSCP. More frequent sampling, if required, would be based on the analytical results as outlined on the WSCP decision matrix provided as Figure 2.

In April and May 1997, the State Department of Health Services (DHS) sampled Victoria Farms wells #1 and #3 for perchlorate. The resulting analysis revealed that Victoria Farms #3 was above the provisional action level of 18 µg/L. Victoria Farms #3 was the only well that was being used by Victoria Farms to supply water. Since June 9, 1997 all water used by Victoria Farms was provided by the City of San Bernardino, and no water was pumped from Victoria Farms wells #1 and #3. Thus, WSCP sampling for Victoria Farms #1 and #3 has been suspended until such time as the wells are operated again.

Southern California Edison has two wells on their property that are part of the September 30, 1996 WSCP Sampling Program. SCE does not use the SCE #1 well, and only uses the SCE #2 Auxiliary (AUX) well for their facility use. The SCE #2 (AUX) well has a smaller pump set above the SCE #2 pump in the same well. Because SCE #1 is not used, WSCP sampling of SCE #1 has been suspended. WSCP sampling at SCE is limited to the SCE #2 (AUX) well.

FIELD METHODS

HSI GeoTrans conducted the July 1997 WSCP groundwater sampling event on July 1, 1997. The wells sampled on July 1, 1997 included COLL Mountain View wells #1 and #2, and COLL Richardson wells #1 and #2. Southern California Edison's #2 Auxiliary well was not sampled in July 1997 due to scheduling issues.

Groundwater sampling followed State of California Regional Water Quality Control Board - Los Angeles Region (LARWQCB) Well Investigation Program (WIP) standards. In addition, HSI GeoTrans followed applicable components of the Quality Assurance Project Plan (QAPP) Addendum, Standard Operating Procedures (SOP) Addendum, and Health and Safety Plan (HASP) Addendum dated March 15, 1996, developed for sampling existing active and inactive wells for Task 1 of the Redlands Groundwater Plume Project.

Prior to sampling and between wells, all field equipment that came into contact with groundwater was decontaminated. The decontamination procedure consisted of washing equipment with non-phosphate detergent and potable water, followed by a potable water wash, and concluded with a deionized water rinse.

When possible, a static water level measurement was obtained at the time of sampling. The COLL wells were pumping on July 1, 1997 at the time of sampling and turning off the pump to obtain a water level measurement was not permitted thus, water level data collected earlier by COLL personnel on July 1, 1997 using the airline system was used. Water levels were allowed to recover a minimum of 30 minutes prior to collecting a static water level measurement.

Field parameters of pH, conductivity, temperature, and turbidity were measured during purging prior to sampling. A groundwater sample was collected when the field parameters had stabilized and a minimum of three casing volumes of groundwater had been removed.

Wells were sampled using an existing low-flow valve on the discharge pipe. Groundwater samples obtained for volatile organic compound (VOC) analysis were collected in three laboratory-supplied, certified-clean, 40-milliliter (mL) glass volatile organic analysis (VOA) vials. All samples were labeled with the name of the sampler, time and date of collection, well designation, and required analysis, and placed in a cooler chilled to approximately 4 degrees Celsius using ice in a sealed bag. Samples were submitted under chain-of custody to Del Mar Analytical, a State of California Department of Health Services (Department of Toxic Substances Control) certified laboratory located in Irvine, California. Water samples were analyzed for VOCs by EPA Method 502.2 per Level III and WIP quality assurance quality control (QA/QC) analytical protocols and documentation. Additionally, one trip blank was collected and analyzed with the well samples.

All field collected data were recorded on the following GEOLIS forms; Water Level Form, Well Purging Form, and Water Sampling Form. Copies of the GEOLIS field forms are provided in Attachment A. Other field-related data not recorded on the GEOLIS forms were recorded in a field notebook. Log entries in the field notebook were in accordance with WIP procedures.

RESULTS

A summary of the analytical results of the July 1997 sampling event is presented on Table 1. Groundwater elevations measured in the four wells sampled on July 1, 1997 are provided on Table 2. Chain-of-custody and laboratory data sheets are provided in Attachment B. Level III QA/QC documentation is provided in Attachment C, and available upon request.

Groundwater samples collected from COLL Mountain View #1, COLL Mountain View #2, COLL Richardson #1, and COLL Richardson #2 contained no detectable VOCs using EPA Method 502.2. The trip blank also contained no detectable analytes.

Next month WSCP sampling will consist of sampling of COLL Mt. View wells #1 and #2, COLL Richardson wells #1 and #2, and SCE #2 (AUX) well. Additional wells will be sampled in August 1997 as a result of the perchlorate findings by the DHS. A description of the additional wells identified for WSCP sampling was provided in the August 15, 1997 Perchlorate Work Plan submitted to the RWQCB.

CLOSING

HSI GeoTrans greatly appreciates being of continued service to Lockheed Martin Corporation on this project. Should you have any questions or comments, please do not hesitate to call.

Sincerely,
HSI GEOTRANS

Roy J. Marroquin
Project Manager

James C. Norman, R.G., C.HG.
Project Director

cc: Tom Blackman Lockheed Martin Corporation
Eric Hodder Lockheed Martin Corporation

TABLES

TABLE 1

SUMMARY OF TRICHLOROETHENE SAMPLING RESULTS
JULY 1997 SAMPLING EVENT

WELL NAME	SAMPLE DATE	RESULT(DL)
COLL Mountain View #1	July 1, 1997	ND(0.5)
COLL Mountain View #2	July 1, 1997	ND(0.5)
COLL Richardson #1	July 1, 1997	ND(0.5)
COLL Richardson #2	July 1, 1997	ND(0.5)
Trip Blank	July 1, 1997	ND(0.5)
SCE #2 (Aux)	July 1, 1997	NS

Notes:
All samples analyzed using EPA Method 502.2
All results reported in micrograms/liter (ug/L)
ND(0.5) = Not detected at the specified limit
DL = Detection Limit
NS = Not Sampled

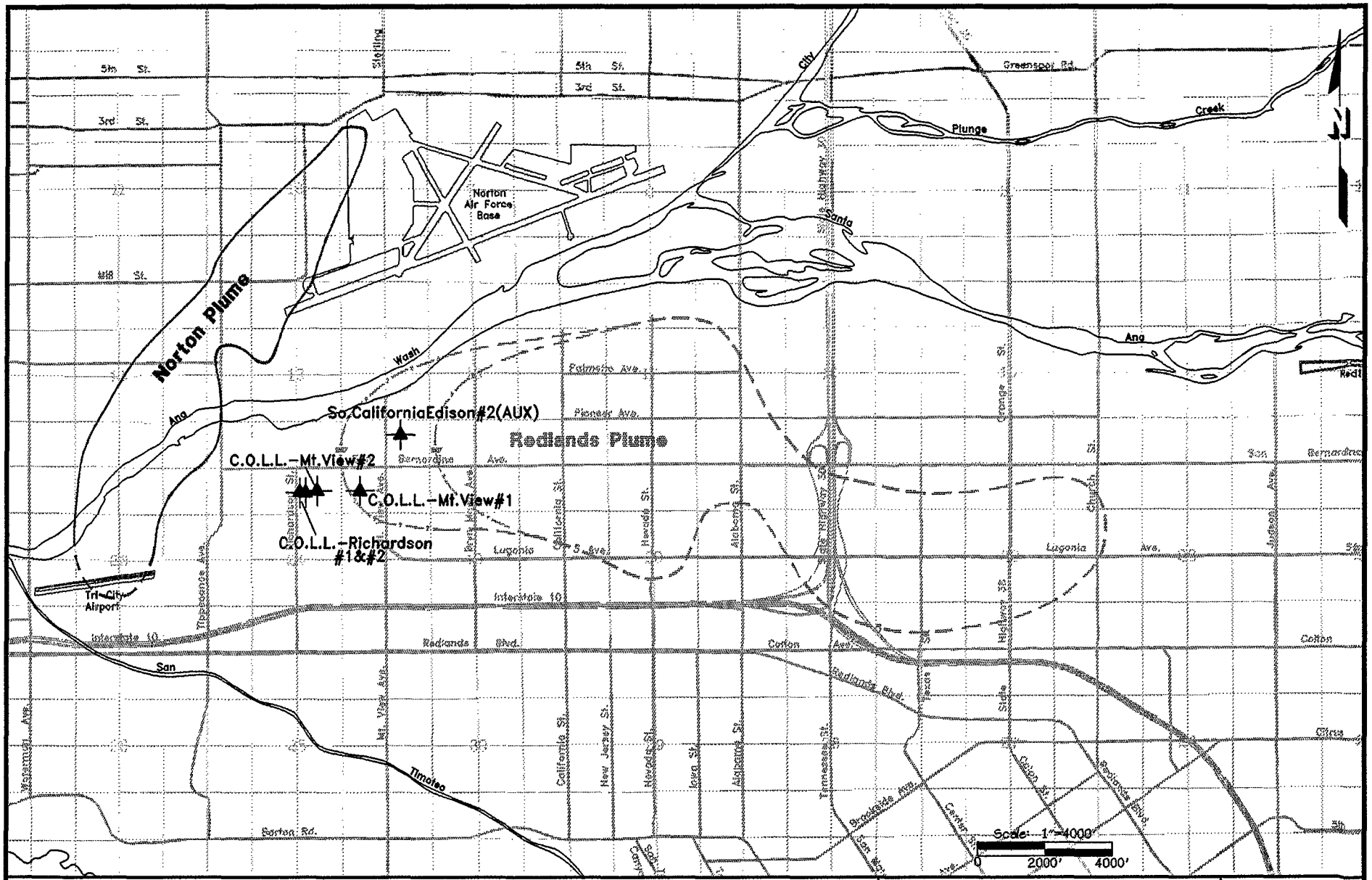
TABLE 2

SUMMARY OF WATER LEVEL MEASUREMENTS
JULY 1997 SAMPLING EVENT

WELL NAME	MEASURE DATE	DEPTH TO WATER	MEASURING POINT ELEVATION	GROUNDWATER ELEVATION	COMMENTS
COLL Mountain View #1	July 1, 1997	128	1095	967	Static
COLL Mountain View #2	July 1, 1997	176	1085	909	Static
COLL Richardson #1	July 1, 1997	174	1090	916	Static
COLL Richardson #2	July 1, 1997	155	1078	923	Static
SCE #2 (Aux)	July 1, 1997	NM	1100.00	NM	NS

Notes:
All measurements reported in feet below measuring point (ft-bmp)
Water level measurements for all COLL wells were obtained by COLL personnel using airline system
Water level measurements for all other wells were collected by HSI GeoTrans using Slope Indicator water level meter
Elevations given in feet above mean sea level (ft-msl)
NM=Not measured
NS=Not sampled
Water levels were allowed to recover a minimum of 30 minutes to obtain a static water level measurement

FIGURES



Explanation:

- Wells Sampled Under the WSCP Sampling Program
- 5 — Approximate TCE Plume Location µg/l (1997 Interpretation of Redlands Plume Task 1)
- 5 — Approximate TCE Plume Location µg/l (1997 Interpretation of Norton AFB Plume)
- 1997 — Projected 5 µg/l TCE Contour in Hydrostratigraphic Unit 2 (Task 2)
- 1997 — Projected 5 µg/l TCE Contour in Hydrostratigraphic Unit 4 (Task 2)

m:\redlands\view-graphs\71wl20-a.dwg

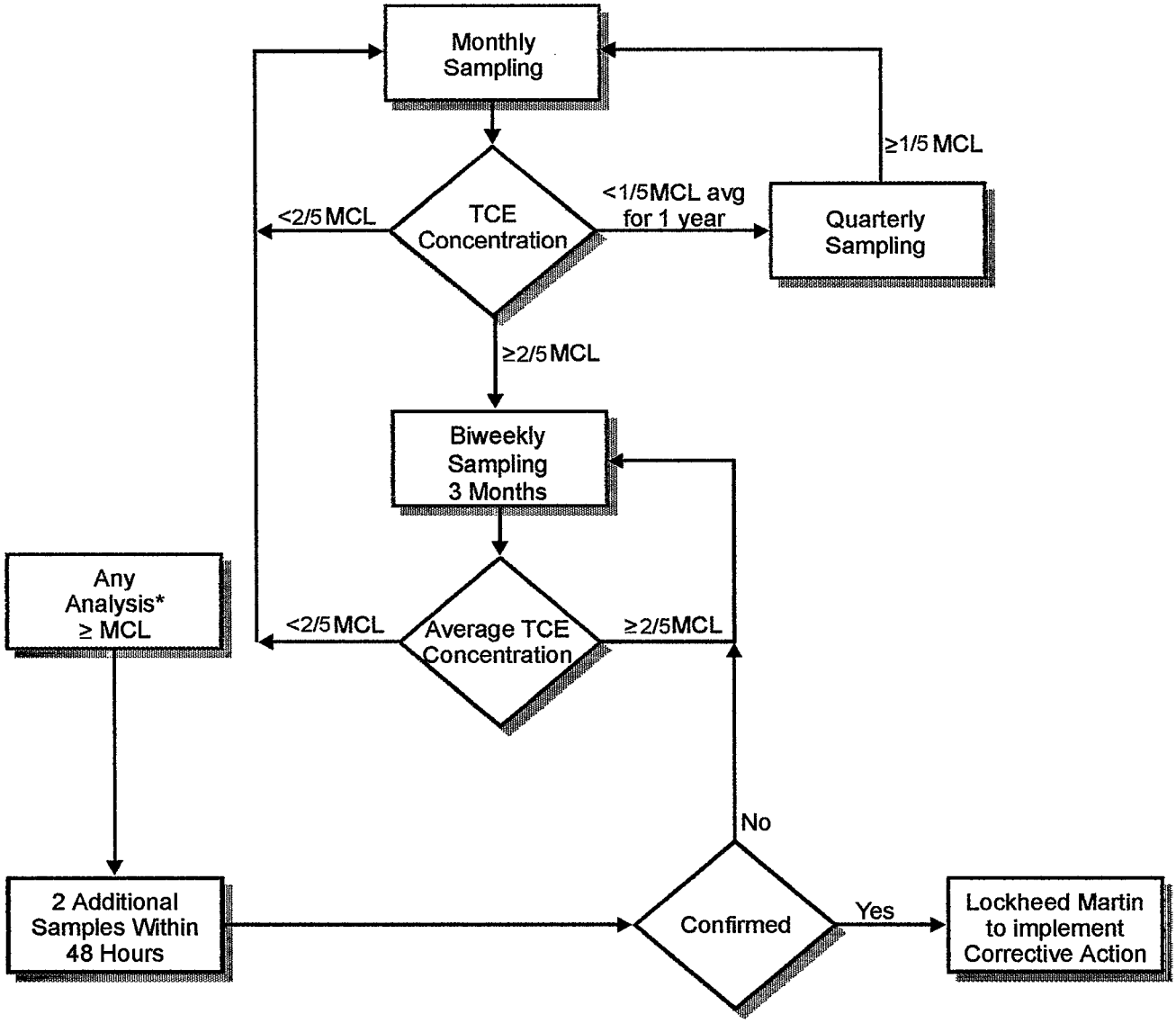
LOCKHEED MARTIN
REDLANDS, CALIFORNIA

Well Locations

DATE:	10/02/97
DESIGNED:	RJM
CHECKED:	RDL
APPROVED:	JCN
DRAWN:	HM
PROJ.:	N534-101

HSI GEOTRANS
A TETRA TECH COMPANY

Figure 1



Footnote:

* If, at a specific well, blending is occuring to provide acceptable water for compounds other than TCE, a higher standard than MCL may be suggested.

TCE MCL = 5 μg/l (California Regulations, Title 22, Division 4, Chapter 15, Section 64444)

Lockheed Martin Redlands, California	DATE: 8/28/97
Decision Matrix for Sampling of Production Wells for TCE from the Crafton-Redlands Plume	DESIGNED: RPB CHECKED: RJM APPROVED: RJM DRAWN: RPB PROJ.: N534-101
HSI GEOTRANS A TETRA TECH COMPANY	Figure 2

j:\lockheed\red_plum\wscp\dm-prod3.cdr

ATTACHMENT A

GEOLIS FIELD FORMS

GEOLIS® Water Level Form

COMPANY: Hydro-Search. Inc.
CLIENT: Lockheed Martin Corp.
PROJECT: WSCP Sampling
SITE/AREA: Mountain View #1

LOCATION ID: (SEE FIRST COLUMN ON THE LEFT)
DATE: 7-1-97
MEASURED BY: GOLL
SIGNATURE: [illegible]

LOCATION ID	TIME	DEPTH TO WATER (ft)	DEPTH TO PRODUCT (ft)	DEPTH TO BOTTOM (ft)	BOTTOM CONDITION CODE	LEVEL STATUS CODE	LOCATION TYPE CODE	MEASURING POINT CODE	FIELD MEASURE CODE
-691	-	128'	-	746	FRM	STA	WSC	OMP	

COMMENTS:

LOCATION TYPE CODE
- BUC - UNCASED BORING
- WOH - OPEN HOLE WELL
- WSC - SCREENED WELL OR PIEZOMETER
- TPO - OPEN TEST PIT
- STR - RIVER/STREAM
- SPR - SPRING/SEEP
- OTH - _____

LEVEL STATUS CODE
- STA - STATIC
- WDV - DURING DEVELOPMENT
- PPR - POST PURGE
- TPP - PUMP TEST/PUMPED WELL
- TPO - PUMP TEST/MONITOR WELL
- TSR - SLUG TEST/RISING HEAD
- TSF - SLUG TEST/FALLING HEAD
- TAP - PACKER TEST/PUMPED ZONE
- TAO - PACKER TEST/OBSERVED ZONE
- OTH - _____

MEASUREMENT POINT CODE
- TIC - TOP OF INNER CASING
- TOC - TOP OF OUTER CASING
- ELM - ELEVATION MARKER
- GRS - GROUND SURFACE
- OMP - OTHER: _____

BOTTOM CONDITION CODE
- FRM - FIRM BOTTOM
- SFT - SOFT BOTTOM
- DRY - DRY BOTTOM, NO WATER

FIELD MEASUREMENT CODE
- MTP - TEMPERATURE
- MSC - SPECIFIC CONDUCTANCE
- MPD - PHOTOIONIZER (e.g., HNu)
- MFD - FLAME IONIZER(e.g., OVA)
- MDO - DISSOLVED OXYGEN
- MPH - pH
- MEH - Eh
- MO1 - Other: _____
- MO2 - Other: _____

COPYRIGHT © 1991 by Roy F. Weston, Inc.

GEOLIS® Water Level Form

COMPANY: Hydro-Search, Inc.
CLIENT: Lockheed Martin Corp.
PROJECT: WSCP Sampling
SITE/AREA: Mountain View #2

LOCATION ID: (SEE FIRST COLUMN ON THE LEFT)
DATE: 2-1-97
MEASURED BY: COLL
SIGNATURE: [illegible]

LOCATION ID	TIME	DEPTH TO WATER (ft)	DEPTH TO PRODUCT (ft)	DEPTH TO BOTTOM (ft)	BOTTOM CONDITION CODE	LEVEL STATUS CODE	LOCATION TYPE CODE	MEASURING POINT CODE	FIELD MEASURE. CODE
-692	-	176	-	900	FRM	STA	WSC	OMP	

COMMENTS:

LOCATION TYPE CODE
- BUC - UNCASED BORING
- WOH - OPEN HOLE WELL
- WSC - SCREENED WELL OR PIEZOMETER
- TPO - OPEN TEST PIT
- STR - RIVER/STREAM
- SPR - SPRING/SEEP
- OTH - _____

LEVEL STATUS CODE
- STA - STATIC
- WDV - DURING DEVELOPMENT
- PPR - POST PURGE
- TPP - PUMP TEST/PUMPED WELL
- TPO - PUMP TEST/MONITOR WELL
- TSR - SLUG TEST/RISING HEAD
- TSF - SLUG TEST/FALLING HEAD
- TAP - PACKER TEST/PUMPED ZONE
- TAO - PACKER TEST/OBSERVED ZONE
- OTH - _____

MEASUREMENT POINT CODE
- TIC - TOP OF INNER CASING
- TOC - TOP OF OUTER CASING
- ELM - ELEVATION MARKER
- GRS - GROUND SURFACE
- OMP - OTHER: _____

BOTTOM CONDITION CODE
- FRM - FIRM BOTTOM
- SFT - SOFT BOTTOM
- DRY - DRY BOTTOM, NO WATER

FIELD MEASUREMENT CODE
- MTP - TEMPERATURE
- MSC - SPECIFIC CONDUCTANCE
- MPO - PHOTOIONIZER (e.g., HNu)
- MFO - FLAME IONIZER(e.g., OVA)
- MOO - DISSOLVED OXYGEN
- MPH - pH
- MEH - Eh
- MO1 - Other: _____
- MO2 - Other: _____

COPYRIGHT © 1991 by Roy F. Weston, Inc.

GEOLIS® Water Level Form

COMPANY: Hydro-Search. Inc.
CLIENT: Lockheed Martin Corp.
PROJECT: WSCP Sampling
SITE/AREA: Richardson #1

LOCATION ID: (SEE FIRST COLUMN ON THE LEFT)
DATE: 7-1-97
MEASURED BY: [illegible]
SIGNATURE: [illegible]

LOCATION ID	TIME	DEPTH TO WATER (ft)	DEPTH TO PRODUCT (ft)	DEPTH TO BOTTOM (ft)	BOTTOM CONDITION CODE	LEVEL STATUS CODE	LOCATION TYPE CODE	MEASURING POINT CODE	FIELD MEASURE. CODE
-693	—	174	—	1200	FRM	STA	WSC	OMP	

COMMENTS:

LOCATION TYPE CODE
- BUC - UNCASED BORING
- WOH - OPEN HOLE WELL
- WSC - SCREENED WELL OR PIEZOMETER
- TPO - OPEN TEST PIT
- STR - RIVER/STREAM
- SPR - SPRING/SEEP
- OTH - _____

LEVEL STATUS CODE
- STA - STATIC
- WDV - DURING DEVELOPMENT
- PPR - POST PURGE
- TPP - PUMP TEST/PUMPED WELL
- TPO - PUMP TEST/MONITOR WELL
- TSR - SLUG TEST/RISING HEAD
- TSF - SLUG TEST/FALLING HEAD
- TAP - PACKER TEST/PUMPED ZONE
- TAO - PACKER TEST/OBSERVED ZONE
- OTH - _____

MEASUREMENT POINT CODE
- TIC - TOP OF INNER CASING
- TOC - TOP OF OUTER CASING
- ELM - ELEVATION MARKER
- GRS - GROUND SURFACE
- OMP - OTHER: _____

BOTTOM CONDITION CODE
- FRM - FIRM BOTTOM
- SFT - SOFT BOTTOM
- DRY - DRY BOTTOM, NO WATER

FIELD MEASUREMENT CODE
- MTP - TEMPERATURE
- MSC - SPECIFIC CONDUCTANCE
- MPO - PHOTOIONIZER (e.g., HNu)
- MFO - FLAME IONIZER(e.g., OVA)
- MDO - DISSOLVED OXYGEN
- MPH - pH
- MEH - Eh
- MO1 - Other: _____
- MO2 - Other: _____

COPYRIGHT © 1991 by Roy F. Weston, Inc.

GEOLIS® Water Level Form

COMPANY: Hydro-Search, Inc.
CLIENT: Lockheed Martin Corp.
PROJECT: WSCP Sampling
SITE/AREA: Richardson #2

LOCATION ID: (SEE FIRST COLUMN ON THE LEFT)
DATE: 7-1-97
MEASURED BY: GOLA
SIGNATURE:

LOCATION ID	TIME	DEPTH TO WATER (ft)	DEPTH TO PRODUCT (ft)	DEPTH TO BOTTOM (ft)	BOTTOM CONDITION CODE	LEVEL STATUS CODE	LOCATION TYPE CODE	MEASURING POINT CODE	FIELD MEASURE. CODE
-694	—	155'	—	970	FRM	STA	WSC	OMP	

COMMENTS:

LOCATION TYPE CODE
- BUC - UNCASED BORING
- WOH - OPEN HOLE WELL
- WSC - SCREENED WELL OR PIEZOMETER
- TPO - OPEN TEST PIT
- STR - RIVER/STREAM
- SPR - SPRING/SEEP
- OTH - _____

LEVEL STATUS CODE
- STA - STATIC
- WDV - DURING DEVELOPMENT
- PPR - POST PURGE
- TPP - PUMP TEST/PUMPED WELL
- TPO - PUMP TEST/MONITOR WELL
- TSR - SLUG TEST/RISING HEAD
- TSF - SLUG TEST/FALLING HEAD
- TAP - PACKER TEST/PUMPED ZONE
- TAO - PACKER TEST/OBSERVED ZONE
- OTH - _____

MEASUREMENT POINT CODE
- TIC - TOP OF INNER CASING
- TOC - TOP OF OUTER CASING
- ELM - ELEVATION MARKER
- GRS - GROUND SURFACE
- OMP - OTHER: _____

BOTTOM CONDITION CODE
- FRM - FIRM BOTTOM
- SFT - SOFT BOTTOM
- DRY - DRY BOTTOM, NO WATER

FIELD MEASUREMENT CODE
- MTP - TEMPERATURE
- MSC - SPECIFIC CONDUCTANCE
- MPO - PHOTOIONIZER (e.g., HNu)
- MFO - FLAME IONIZER(e.g., OVA)
- MDO - DISSOLVED OXYGEN
- MPH - pH
- MEH - Eh
- MO1 - Other: _____
- MO2 - Other: _____

COPYRIGHT © 1991 by Roy F. Weston, Inc.

GEOLIS Well Purging Form

COMPANY: Hydro-Search, Inc.
CLIENT: Lockheed Martin Corp.
PROJECT: Redlands Plume
SITE / AREA: Mountain View #1

LOCATION ID: 691
DATE: 7-1-97
SAMPLER: [illegible]
SIGNATURE: [illegible]

WELL OBSERVATIONS

CASING & LID: OK - DAMAGED - HEAVED - NO LID LOCKED: YES - NO KEY NO: — STICKUP: — FT-M

WELL DIAMETER: 2" - 4" - 6" - 8" - OTH: 16" BOREHOLE DIAMETER: — IN-CM MEASURING POINT: TIC - TOC - GRS

VAPOR READINGS: PID - FID - OTHER: 0ppm BACKGROUND: 0ppm INSIDE WELL: —

CHECKED FOR NAPL LAYER: YES - NO OBSERVED: NON - FLT - SNK THICKNESS: — IN-CM SHEEN: YES - NO

PURGING CALCULATIONS

(A) DEPTH TO WELL BOTTOM: 246 FT-M BMP
(B) DEPTH TO WATER: 128' FT-M BMP
(C) SAND PACK LENGTH: — FT-M
(D) WATER COLUMN HEIGHT (A - B): 118 FT-M
(E) CASING VOLUME FACTOR: 10.50 GPF-LPM
(F) SAND PACK VOLUME FACTOR: — GPF-LPM
(G) CASING VOLUME (D x E): 6489 GAL-L
(H) SAND PACK VOLUME (C x F): — GAL-L

Casing Factor (GPF for inches) = 0.041 (Well Diameter)²
2" = 0.16; 4" = 0.65; 6" = 1.47; 8" = 2.61 GPF

Sand Pack Factor (GPF for inches)
= [0.041 (Hole Diameter)² - 0.041 (Well Diameter)²] 0.45

(I) TOTAL WELL VOLUME (G + H): 6489 GAL-L
(J) VOLUMES TO BE PURGED: 3
(K) TOTAL PURGE VOLUME (I x J): 19467 GAL-L

÷ 1000 = 19.46

PURGING INFORMATION

PURGE ENDPOINT: VOLUME - TIME - PARAMETER STABILIZATION - TURBIDITY CRITERIA: —
PURGING METHOD: BAILER - SUB. PUMP - CENT. PUMP - PACKER & PUMP - OTHER: —
DEVICE DESCRIPTION: Vertical Turbine Pump DEVICE No.: —
PUMP/BAILER INTAKE: SCREEN TOP - SCREEN/WELL BOTTOM - MID SCREEN/WELL - WATER LEVEL - MOVED UP/DOWN
PURGE WATER: DISCHARGED - TREATED - STORED ONSITE STORED IN: TANKS - DRUMS NO.: —
FIELD MEASURMENTS IN: FLOW THRU CHAMBER - OPEN JAR CASCADING WATER: YES - NO DEPTH: — FT-M BMP
WELL PURGING INTERVAL: ✓ TO — FT-M BMP PURGE DEPTH TO WATER (MAX): — FT-M BMP

TIME	DEPTH TO WATER (FT-M BMP)	PURGE RATE or VOLUME (GPM-GAL)	TURBIDITY (NTU)	FIELD MEASUREMENTS AND UNITS: MTP °C.	mSC	PH				COMMENTS
1030		1000	.59	20.4	350	8.40				Pre Purge Readings
1035		"	.58	20.3	"	8.34				
1040		"	.48	"	"	8.32				
1045		"	.38	"	"	8.33				
										Post Purge Readings

TOTAL PURGE TIME: — HRS TOTAL PURGE VOLUME: — GAL - L RECOVERY: FAST - SLOW - V.SLOW

FIELD MEASUREMENT CODES

MTP - Temperature (°C.)
MSC - Specific Conductance (mS/cm)
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MCL - Color
MPH - pH
MEH - Eh
MAL - Alkalinity
MDO - Dissolved Oxygen (mg/L)
MO1 - Other: —
MO2 - Other: —
MO3 - Other: —
MD1 - DTW in Well —
MD2 - DTW in Well —
MD3 - DTW in Well —
MD4 - DTW in Well —

COPYRIGHT © 1990, 1994 by Roy F. Weston, Inc.

GEOLIS® Well Purging Form

COMPANY: Hydro-Search, Inc.
CLIENT: Lockheed Martin Corp.
PROJECT: Redlands Plume
SITE / AREA: Mountain View #2

LOCATION ID: G92
DATE: 7-1-97
SAMPLER: [illegible] Panna
SIGNATURE: [illegible]

WELL OBSERVATIONS

CASING & LID: OK - DAMAGED - HEAVED - NO LID LOCKED: YES - NO KEY NO: — STICKUP: — FT-M
WELL DIAMETER: 2" - 4" - 6" - 8" - OTH: 20" BOREHOLE DIAMETER: — IN-CM MEASURING POINT: TIC - TOC - GRS
VAPOR READINGS: PID - FID - OTHER: 0ppm BACKGROUND: 0ppm INSIDE WELL: —
CHECKED FOR NAPL LAYER: YES - NO OBSERVED: NON - FLT - SNK THICKNESS: — IN-CM SHEEN: YES - NO

PURGING CALCULATIONS

(A) DEPTH TO WELL BOTTOM: 900 FT-M BMP
(B) DEPTH TO WATER: 176 FT-M BMP
(C) SAND PACK LENGTH — FT-M
(D) WATER COLUMN HEIGHT (A - B): 724 FT-M
(E) CASING VOLUME FACTOR: 16.4 GPF-LPM
(F) SAND PACK VOLUME FACTOR: — GPF-LPM
(G) CASING VOLUME (D x E): 11873.6 GAL-L
(H) SAND PACK VOLUME (C x F): — GAL-L

Casing Factor (GPF for inches) = 0.041(Well Diameter)²
2" = 0.16; 4" = 0.65; 6" = 1.47; 8" = 2.61 GPF

Sand Pack Factor (GPF for inches)
= [0.041(Hole Diameter)² - 0.041(Well Diameter)²] 0.45

(I) TOTAL WELL VOLUME (G + H): 11873.6 GAL-L
(J) VOLUMES TO BE PURGED: 3
(K) TOTAL PURGE VOLUME (I x J): 35620.8 GAL-L

PURGING INFORMATION

#1500 = 23.74 mins

PURGE ENDPOINT: VOLUME - TIME - PARAMETER STABILIZATION - TURBIDITY CRITERIA: ____
PURGING METHOD: BAILER - SUB. PUMP - CENT. PUMP - PACKER & PUMP - OTHER: ____
DEVICE DESCRIPTION: Vertical Turbine Pump DEVICE No.: ____
PUMP/BAILER INTAKE: SCREEN TOP - SCREEN/WELL BOTTOM - MID SCREEN/WELL - WATER LEVEL - MOVED UP/DOWN
PURGE WATER: DISCHARGED - TREATED - STORED ONSITE STORED IN: TANKS - DRUMS NO.: ____
FIELD MEASURMENTS IN: FLOW THRU CHAMBER - OPEN JAR CASCADING WATER: YES - NO DEPTH: — FT-M BMP
WELL PURGING INTERVAL: — TO ____ FT-M BMP PURGE DEPTH TO WATER (MAX): — FT-M BMP

TIME	DEPTH TO WATER (FT-M BMP)	PURGE RATE or VOLUME (GPM-GAL)	TURBIDITY (NTU)	FIELD MEASUREMENTS AND UNITS: MTP °C.	mSC	mpH				COMMENTS
1112		1500	.54	23.9	300	8.9				Pre Purge Readings
1116		"	.53	23.3	"	"				
1120		"	"	"	"	"				
										Post Purge Readings

TOTAL PURGE TIME: ____ HRS TOTAL PURGE VOLUME: ____ GAL - L RECOVERY: FAST - SLOW - V.SLOW

FIELD MEASUREMENT CODES

MTP - Temperature (°C.)
MSC - Specific Conductance (mS/cm)
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MCL - Color
MPH - pH
MEH - Eh
MAL - Alkalinity
MDO - Dissolved Oxygen (mg/L)
MO1 - Other: ____
MO2 - Other: ____
MO3 - Other: ____
MD1 - DTW in Well ____
MD2 - DTW in Well ____
MD3 - DTW in Well ____
MD4 - DTW in Well ____

COPYRIGHT © 1990, 1994 by Roy F. Weston, Inc.

GEOLIS Well Purging Form

COMPANY: Hydro-Search, Inc.
CLIENT: Lockheed Martin Corp.
PROJECT: Redlands Plume
SITE / AREA: Richardson #1

LOCATION ID: 693
DATE: 2-1-97
SAMPLER: [illegible]
SIGNATURE: [illegible]

WELL OBSERVATIONS

CASING & LID: OK - DAMAGED - HEAVED - NO LID LOCKED: YES - NO KEY NO: — STICKUP: — FT-M

WELL DIAMETER: 2" - 4" - 6" - 8" - OTH: 15" BOREHOLE DIAMETER: — IN-CM MEASURING POINT: TC - TOC - GRS

VAPOR READINGS: PID - FID - OTHER: 0ppm BACKGROUND: 0ppm INSIDE WELL: —

CHECKED FOR NAPL LAYER: YES - NO OBSERVED: NON - FLT - SNK THICKNESS: — IN-CM SHEEN: YES - NO

PURGING CALCULATIONS

(A) DEPTH TO WELL BOTTOM: 1200 FT-M BMP
(B) DEPTH TO WATER: 174' FT-M BMP
(C) SAND PACK LENGTH: — FT-M
(D) WATER COLUMN HEIGHT (A - B): 1026 FT-M
(E) CASING VOLUME FACTOR: 9.23 GPF-LPM
(F) SAND PACK VOLUME FACTOR: — GPF-LPM
(G) CASING VOLUME (D x E): 9469.98 GAL-L
(H) SAND PACK VOLUME (C x F): — GAL-L

Casing Factor (GPF for inches) = 0.041 (Well Diameter)²
2" = 0.16; 4" = 0.65; 6" = 1.47; 8" = 2.61 GPF

Sand Pack Factor (GPF for inches)
= [0.041 (Hole Diameter)² - 0.041 (Well Diameter)²] 0.45

(I) TOTAL WELL VOLUME (G + H): 9469.98 GAL-L
(J) VOLUMES TO BE PURGED: 3
(K) TOTAL PURGE VOLUME (I x J): 28409.94 GAL-L

÷1200 = 23.67 m.L

PURGING INFORMATION

PURGE ENDPOINT: VOLUME - TIME - PARAMETER STABILIZATION - TURBIDITY CRITERIA: —
PURGING METHOD: BAILER - SUB. PUMP - CENT. PUMP - PACKER & PUMP - OTHER:
DEVICE DESCRIPTION: Vertical Turbine Pump DEVICE No.: —
PUMP/BAILER INTAKE: SCREEN TOP - SCREEN/WELL BOTTOM - MID SCREEN/WELL - WATER LEVEL - MOVED UP/DOWN
PURGE WATER: DISCHARGED - TREATED - STORED ONSITE STORED IN: TANKS - DRUMS NO.: —
FIELD MEASURMENTS IN: FLOW THRU CHAMBER - OPEN JAR CASCADING WATER: YES - NO DEPTH: — FT-M BMP
WELL PURGING INTERVAL: — TO — FT-M BMP PURGE DEPTH TO WATER (MAX): — FT-M BMP

TIME	DEPTH TO WATER (FT-M BMP)	PURGE RATE or VOLUME (GPM-GAL)	TURBIDITY (NTU)	FIELD MEASUREMENTS AND UNITS: MTP °C.	MSC	mpH				COMMENTS
1155		1200	.51	25.4	300	8.9				Pre Purge Readings
1200		"	.50	25.4	"	"				
1205		"	"	"	"	"				
										Post Purge Readings

TOTAL PURGE TIME: — HRS TOTAL PURGE VOLUME: — GAL - L RECOVERY: FAST - SLOW - V.SLOW

FIELD MEASUREMENT CODES

MTP - Temperature (°C.)
MSC - Specific Conductance (mS/cm)
MPO - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MCL - Color
MPH - pH
MEH - Eh
MAL - Alkalinity
MDO - Dissolved Oxygen (mg/L)
MO1 - Other: —
MO2 - Other: —
MO3 - Other: —
MD1 - DTW in Well —
MD2 - DTW in Well —
MD3 - DTW in Well —
MD4 - DTW in Well —

COPYRIGHT © 1990, 1994 by Roy F. Weston, Inc.

GEOLIS® Well Purging Form

COMPANY: Hydro-Search, Inc.
CLIENT: Lockheed Martin Corp.
PROJECT: Redlands Plume
SITE / AREA: Richardson #2

LOCATION ID: 694
DATE: 2-1-97
SAMPLER: [illegible]
SIGNATURE: [illegible]

WELL OBSERVATIONS

CASING & LID: OK - DAMAGED - HEAVED - NO LID LOCKED: YES - NO KEY NO: — STICKUP: — FT-M
WELL DIAMETER: 2" - 4" - 6" - 8" - OTH: 15" BOREHOLE DIAMETER: — IN-CM MEASURING POINT: TIC - TOC - GRS
VAPOR READINGS: PID - FID - OTHER: 0ppm BACKGROUND: 0ppm INSIDE WELL: —
CHECKED FOR NAPL LAYER: YES - NO OBSERVED: NON - FLT - SNK THICKNESS: — IN-CM SHEEN: YES - NO

PURGING CALCULATIONS

(A) DEPTH TO WELL BOTTOM: 970 FT-M BMP
(B) DEPTH TO WATER: 155' FT-M BMP
(C) SAND PACK LENGTH — FT-M
(D) WATER COLUMN HEIGHT (A - B): 815 FT-M
(E) CASING VOLUME FACTOR: 9.23 GPF-LPM
(F) SAND PACK VOLUME FACTOR: — GPF-LPM
(G) CASING VOLUME (D x E): 7522.45 GAL-L
(H) SAND PACK VOLUME (C x F): — GAL-L

Casing Factor (GPF for inches) = 0.041 (Well Diameter)²
2" = 0.16; 4" = 0.65; 6" = 1.47; 8" = 2.61 GPF

Sand Pack Factor (GPF for inches)
= [0.041 (Hole Diameter)² - 0.041 (Well Diameter)²] 0.45

(I) TOTAL WELL VOLUME (G + H): 7522.45 GAL-L
(J) VOLUMES TO BE PURGED: 3
(K) TOTAL PURGE VOLUME (I x J): 22567.35 GAL-L
÷2200 = 10.25 mins

PURGING INFORMATION

PURGE ENDPOINT: VOLUME - TIME - PARAMETER STABILIZATION - TURBIDITY CRITERIA: ____
PURGING METHOD: BAILER - SUB. PUMP - CENT. PUMP - PACKER & PUMP - OTHER: ____
DEVICE DESCRIPTION: Vertical Turbine Pump DEVICE No.: ____
PUMP/BAILER INTAKE: SCREEN TOP - SCREEN/WELL BOTTOM - MID SCREEN/WELL - WATER LEVEL - MOVED UP/DOWN
PURGE WATER: DISCHARGED - TREATED - STORED ONSITE STORED IN: TANKS - DRUMS NO.: ____
FIELD MEASURMENTS IN: FLOW THRU CHAMBER - OPEN JAR CASCADING WATER: YES - NO DEPTH: ____ FT-M BMP
WELL PURGING INTERVAL: ____ TO ____ FT-M BMP PURGE DEPTH TO WATER (MAX): ____ FT-M BMP

TIME	DEPTH TO WATER (FT-M BMP)	PURGE RATE or VOLUME (GPM-GAL)	TURBIDITY (NTU)	FIELD MEASUREMENTS AND UNITS: MTP °C.	MSC	mpH				COMMENTS
1230	155	2200	1.01	23	300	9.1				Pre Purge Readings
1235	"	"	.88	22.4	"	"				
1240	"	"	.85	22.5	"	"				
										Post Purge Readings

TOTAL PURGE TIME: ____ HRS TOTAL PURGE VOLUME: ____ GAL - L RECOVERY: FAST - SLOW - V.SLOW

FIELD MEASUREMENT CODES

MTP - Temperature (°C.)
MSC - Specific Conductance (mS/cm)
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MCL - Color
MPH - pH
MEH - Eh
MAL - Alkalinity
MDO - Dissolved Oxygen (mg/L)
MO1 - Other: ____
MO2 - Other: ____
MO3 - Other: ____
MD1 - DTW in Well ____
MD2 - DTW in Well ____
MD3 - DTW in Well ____
MD4 - DTW in Well ____

COPYRIGHT © 1990, 1994 by Roy F. Weston, Inc.

GEOLIS Water Sampling Form

COMPANY: HST Geotrans
PROJECT: WISCP Sampling
PROPERTY:
SITE/AREA: Mt View #1
LOCATION ID: 691
DATE: 7-1-97
SAMPLER: [illegible]
SIGNATURE: [illegible]

SITE SKETCH

	ESTIMATED/GPS	SURVEYED
SURFACE ELEVATION:		
N. COORDINATE:		
E. COORDINATE:		

WELL PERMIT No.:
MEASURING POINT: TOC - TSG - WAT - OTH:

SAMPLING INFORMATION

SAMPLE ID: Mt View #1-7-1-97
COLLECTION TIME (24:00): 10:55
DURATION HRS:MIN: :15
SAMPLE DEPTH FT-M BMP:
SAMPLING QTR/ROUND:
SAMPLE PURPOSE: BKG - SCR - RSK - RND - SDW - CON - OTH:
SAMPLE TYPE: DISCRETE - COMPOSITE - OTHER:
SAMPLING METHOD:
GROUNDWATER: BLO - BLC - PSB - PPR - PCN - PSL - NLF - MLS
SURFACE WATER: BOT - KEM - BCB - SCP - TGS
OTHER:
SAMPLER DECONTAMINATION: DED - LAB - FLD - NON
(1) DET - (2) STM - (3) ACE - (4) HEX - (5) MET - (6) DIW - (7) POT - (8) NO3
(9) OTH: SEQUENCE:
SAMPLING PROCEDURES USED: NON - SAP/CAPP - SOP - OTH
REFERENCE:
CA SAMPLES: MS/MSD SAMPLE COLLECTED: YES - NO
DUPLICATE ID:
TRIP BLANK ID: Trip Blank-7-1-97
AMBIENT - RINSE BLANK ID:
CHAIN-OF-CUSTODY No.:
48 HOUR PRECIPITATION: NON - LTE - MOD - HVY
CUR - 8 - 16 - 24 - HOURS PRIOR TO SAMPLING
WELL PURGE RECOVERY: % OF INITIAL WATER LEVEL

SAMPLE DESCRIPTION

GROUNDWATER: WCS - WBS - WBO - SUP - PES - BCR - HYD - SPR
SEP - PIT - SMP - OTH:
SURFACE WATER: TAL - LAK - PND - RVM - RVB - RVS - STP - STI - WET
OUS - INS - LAG - RIP - SWR - CUL - CHN - DCH - OTH:
SAMPLED: WATER - NAPL/PRODUCT - OTH:
WATER BODY/FORMATION NAME:
FLOW: FLD - FUL - LOW - POO - DRY - NA WIDTH: FT-M
DEPTH: FT-M VELOCITY: FT/S-M/S
VELOCITY METHOD: MMB - PYG - DYE - OBJ - EST
WATER COLOR: CLR - LSN - MBN - DSN - TUR - GRE - STN
NAPL LAYER PRESENT: NO - FLT - SNK
THICKNESS IN-CM SHEEN: YES - NO
DESCRIPTION

FIELD PARAMETERS:	UNITS	BEFORE	AFTER
TIME	24:00		
WATER LEVEL (BMP)	FT-M		
TEMPERATURE			
SP. CONDUCTANCE			
pH			
Eh			
DISS. OXYGEN			
PID / FID			
ALKALINITY			
TURBIDITY			

ANALYTICAL PARAMETERS

CHM: VOC - SNA - PES - PCB - HRB - PHE - TOC - UMT - FMT - ION - SOL - INO - OTH: LAB NAME: Del Mar
CHM: VOC - SNA - PES - PCB - HRB - PHE - TOC - UMT - FMT - ION - SOL - INO - OTH:
RAD/OTH: GAL - GBT - GGM - SAL - TRT - ASB - OTH:

SPLIT SAMPLES: NON - CLI - CWN - CVR - OTH:
SPLIT SAMPLE ID NO.:
ORGANIZATION NAME:
PARAMETERS: SAME - OTHER:
REPRESENTATIVES NAME:
QA/QC SAMPLES: NON - COL - RNS - TRP - MSD

COMMENTS: Pump was on when Sampled
Pump was on 4 Hours Previous to Sampling

COPYRIGHT © 1990, 1994 by Roy F. Weston, Inc.

GEOLIS Water Sampling Form

COMPANY: HSI Geo Trans
PROJECT:
PROPERTY:
SITE/AREA: Mt View #2

LOCATION ID: #692
DATE: 7-1-97
SAMPLER: Ralph Delia Panna
SIGNATURE: [signature]

SITE SKETCH

	ESTIMATED/GPS	SURVEYED
SURFACE ELEVATION:		
N. COORDINATE:		
E. COORDINATE:		

WELL PERMIT No.:
MEASURING POINT: TOC - TSG - WAT - OTH:

SAMPLING INFORMATION

SAMPLE ID: Mt View #2-7-1-97

COLLECTION TIME (24:00): 11:30
DURATION HRS:MIN: :10
SAMPLE DEPTH FT-M BMP:
SAMPLING QTR/ROUND:

SAMPLE PURPOSE: BKG - SCR - RSK - RND - SDW - CON - OTH:
SAMPLE TYPE: DISCRETE - COMPOSITE - OTHER:
SAMPLING METHOD:
GROUNDWATER: BLO - BLC - PSB - PPR - PCN - PBL - NLF - MLS
SURFACE WATER: BOT - KEM - BCS - SCP - TGS
OTHER:
SAMPLER DECONTAMINATION: DED - LAB - FLD - NON
(1)DET - (2)STM - (3)ACE - (4)HEX - (5)MET - (6)DIW - (7)POT - (8)NO3
(9)OTH: SEQUENCE:
SAMPLING PROCEDURES USED: NON - SAP/QAPP - SOP - OTH
REFERENCE:
QA SAMPLES: MS/MSD SAMPLE COLLECTED: YES - NO
DUPLICATE ID:
TRIP BLANK ID:
AMBIENT - RINSE BLANK ID:
CHAIN-OF-CUSTODY No.:
48 HOUR PRECIPITATION: NON - LTE - MOD - HVY
CUR - 6 - 16 - 24 - HOURS PRIOR TO SAMPLING
WELL PURGE RECOVERY: % OF INITIAL WATER LEVEL

SAMPLE DESCRIPTION

GROUNDWATER: WCS - WBS - WBC - SUP - PES - BCR - HYD - SPR
SEP - PIT - SMP - OTH:
SURFACE WATER: TAL - LAK - PND - RVM - RVB - RVS - STP - STI - WET
CUB - INB - LAG - PIP - SWR - CUL - CHN - DCH - OTH:
SAMPLED: WATER - NAPL/PRODUCT - OTH:
WATER BODY/FORMATION NAME:
FLOW: FLD - FUL - LOW - POO - DRY - NA WIDTH: FT-M
DEPTH: FT-M VELOCITY: FT/S-M/S
VELOCITY METHOD: MMB - PYG - DYE - OBJ - EST
WATER COLOR: CLR - LBN - MBN - DBN - TUR - GRE - STN
NAPL LAYER PRESENT: NO - FLT - SNK
THICKNESS IN-CM SHEEN: YES - NO
DESCRIPTION

FIELD PARAMETERS:	UNITS	BEFORE	AFTER
TIME	24:00		
WATER LEVEL (BMP)	FT-M		
TEMPERATURE			
SP. CONDUCTANCE			
pH			
Eh			
DISS. OXYGEN			
PID / FID			
ALKALINITY			
TURBIDITY			

ANALYTICAL PARAMETERS

CHM: VOC - BNA - PES - PCS - HRB - PHE - TOC - UMT - FMT - ION - SOL - INO - OTH: LAB NAME: Del Mar
CHM: VOC - BNA - PES - PCS - HRB - PHE - TOC - UMT - FMT - ION - SOL - INO - OTH:
RAD/OTH: GAL - GBT - GGM - SAL - TRT - ASB - OTH:

SPLIT SAMPLES: NON - CLI - CWN - CVR - OTH:
SPLIT SAMPLE ID NO.:
ORGANIZATION NAME:
PARAMETERS: SAME - OTHER:
REPRESENTATIVES NAME:
QA/QC SAMPLES: NON - COL - RNS - TRP - MSD

COMMENTS: Pump was on when Sampled

COPYRIGHT © 1990, 1994 by Ray F. Weston, Inc.

GEOLIS Water Sampling Form

COMPANY: HSI Geotrans
PROJECT: WSCP Sampling
PROPERTY:
SITE/AREA: Richardson #1
LOCATION ID: 093
DATE: 2-1-97
SAMPLER: [illegible]
SIGNATURE: [illegible]

SITE SKETCH

	ESTIMATED/GPS	SURVEYED
SURFACE ELEVATION:		
N. COORDINATE:		
E. COORDINATE:		

WELL PERMIT No.:
MEASURING POINT: TOC - TSG - WAT - OTH:

SAMPLING INFORMATION

SAMPLE ID: Richardson#1-2-1-97
COLLECTION TIME (24:00): 1215
DURATION HRS:MIN: :10
SAMPLE DEPTH FT-M BMP:
SAMPLING QTR/ROUND: WSCP
SAMPLE PURPOSE: BKG - SCR - RSK - RND - SDW - CON - OTH:
SAMPLE TYPE: DISCRETE - COMPOSITE - OTHER:
SAMPLING METHOD:
GROUNDWATER: BLC - BLC - PSB - PPR - PCN - PBL - NLF - MLS
SURFACE WATER: BOT - KEM - BCS - SCP - TGS
OTHER:
SAMPLER DECONTAMINATION: DED - LAB - FLD - NON
(1)DET - (2)STM - (3)ACE - (4)HEX - (5)MET - (6)DIW - (7)POT - (8)NO3
(9)OTH: SEQUENCE:
SAMPLING PROCEDURES USED: NON - SAP/QAPP - SOP - OTH
REFERENCE:
QA SAMPLES: MS/MSD SAMPLE COLLECTED: YES - NO
DUPLICATE ID:
TRIP BLANK ID: Trip Blank-2-1-97
AMBIENT - RINSE BLANK ID:
CHAIN-OF-CUSTODY No.:
48 HOUR PRECIPITATION: NON - LTE - MOD - HVY
CUR - 8 - 16 - 24 - HOURS PRIOR TO SAMPLING
WELL PURGE RECOVERY: % OF INITIAL WATER LEVEL

SAMPLE DESCRIPTION

GROUNDWATER: WCS - WBS - WBO - SUP - PES - BOR - HYD - SPR
SEP - PIT - SMP - OTH:
SURFACE WATER: TAL - LAK - PND - RVM - RVB - RVS - STP - STI - WET
CUB - INB - LAG - PIP - SWR - CUL - CHN - DCH - OTH:
SAMPLED: WATER - NAPL/PRODUCT - OTH:
WATER BODY/FORMATION NAME:
FLOW: FLD - FUL - LOW - POO - DRY - NA WIDTH: FT-M
DEPTH: FT-M VELOCITY: FT/S-M/S
VELOCITY METHOD: MMB - PYG - DYE - OBJ - EST
WATER COLOR: CLS - LBN - MBN - DBN - TUR - GRE - STN
NAPL LAYER PRESENT: NO - FLT - SNK
THICKNESS IN-CM SHEEN: YES - NO
DESCRIPTION

FIELD PARAMETERS:	UNITS	BEFORE	AFTER
TIME	24:00		
WATER LEVEL (BMP)	FT-M		
TEMPERATURE			
SP. CONDUCTANCE			
pH			
Eh			
DISS. OXYGEN			
PID / FID			
ALKALINITY			
TURBIDITY			

ANALYTICAL PARAMETERS

CHM: VOC - BNA - PES - PCS - HRB - PHE - TOC - UMT - FMT - ION - SOL - INO - OTH:
CHM: VOC - BNA - PES - PCS - HRB - PHE - TOC - UMT - FMT - ION - SOL - INO - OTH:
RAD/OTH: GAL - GBT - GGM - SAL - TRT - ASB - OTH:

LAB NAME: Del Mar

SPLIT SAMPLES: NON - CLI - CWN - CVR - OTH:
ORGANIZATION NAME:
REPRESENTATIVES NAME:
SPLIT SAMPLE ID NO.:
PARAMETERS: SAME - OTHER:
QA/QC SAMPLES: NON - COL - RNS - TRP - MSD

COMMENTS: Pump was on when sampled
Pump was on 5Hrs previous to Sampling

COPYRIGHT © 1990, 1994 by Roy F. Weston, Inc.

GEOLIS Water Sampling Form

COMPANY: HSI Geo Trans
LOCATION ID: 1997
PROJECT: WSCP Sampling
DATE: 7-1-97
PROPERTY:
SAMPLER: Kirk Delvarrne
SITE/AREA: Richardson #12
SIGNATURE:

SITE SKETCH

	ESTIMATED/GPS	SURVEYED
SURFACE ELEVATION:		
N. COORDINATE:		
E. COORDINATE:		

WELL PERMIT No.:
MEASURING POINT: TOC - TSG - WAT - OTH:

SAMPLE DESCRIPTION

GROUNDWATER: WCS - WBS - WBC - SUP - RES - SCR - HYD - SPR
SEP - PIT - SMP - OTH:
SURFACE WATER: TAL - LAK - PND - RVM - RVB - RVS - STP - STI - WET
CUB - INB - LAG - RIP - SWR - CUL - CHN - DCH - OTH:
SAMPLED: WATER - NAPL/PRODUCT - OTH:
WATER BODY/FORMATION NAME:
FLOW: FLD - FUL - LOW - POO - DRY - NA WIDTH: FT-M
DEPTH: FT-M VELOCITY: FT/S-M/S
VELOCITY METHOD: MMB - PYG - DYE - CBJ - EST
WATER COLOR: CLR - LBN - MBN - DBN - TUR - GRE - STN
NAPL LAYER PRESENT: NO - FLT - SNK
THICKNESS IN-CM SHEEN: YES - NO
DESCRIPTION

SAMPLING INFORMATION

SAMPLE ID: Richardson#2-7-1-97
COLLECTION TIME (24:00): 12:50
DURATION HRS:MIN: :10
SAMPLE DEPTH FT-M BMP:
SAMPLING QTR/ROUND: WSCP
SAMPLE PURPOSE: BKG - SCR - RSK - RND - SGW - CON - OTH:
SAMPLE TYPE: DISCRETE - COMPOSITE - OTHER:
SAMPLING METHOD:
GROUNDWATER: BLO - BLC - PSB - PPR - PCN - PBL - NLF - MLS
SURFACE WATER BOT - KEM - BCS - SCP - TGS
OTHER:
SAMPLER DECONTAMINATION: DED - LAB - FLD - NON
(1) DET - (2) STM - (3) ACE - (4) HEX - (5) MET - (6) DW - (7) POT - (8) NO3
(9) OTH: SEQUENCE:
SAMPLING PROCEDURES USED: NON - SAP/CAPP - SOP - OTH
REFERENCE:
QA SAMPLES: MS/MSD SAMPLE COLLECTED: YES - NO
DUPLICATE ID:
TRIP BLANK ID: Trip Blank-7-1-97
AMBIENT - RINSE BLANK ID:
CHAIN-OF-CUSTODY No.:
48 HOUR PRECIPITATION: NON - LTE - MOD - HVY
CUR - 6 - 16 - 24 - HOURS PRIOR TO SAMPLING
WELL PURGE RECOVERY: % OF INITIAL WATER LEVEL

FIELD PARAMETERS:	UNITS	BEFORE	AFTER
TIME	24:00		
WATER LEVEL (BMP)	FT-M		
TEMPERATURE			
SP. CONDUCTANCE			
pH			
Eh			
DISS. OXYGEN			
PID / FID			
ALKALINITY			
TURBIDITY			

ANALYTICAL PARAMETERS

	LAB NAME
CHM: VOC - BNA - PES - PCB - HPB - PHE - TOC - UMT - PMT - ICN - SOL - INO - OTH:	Del Mar
CHM: VOC - BNA - PES - PCB - HPB - PHE - TOC - UMT - PMT - ICN - SOL - INO - OTH:	
RAD/OTH: GAL - GBT - GGM - SAL - TRT - ASB - OTH:	

SPLIT SAMPLES: NON - CLI - CWN - CVR - OTH:
SPLIT SAMPLE ID NO.:
ORGANIZATION NAME:
PARAMETERS: SAME - OTHER:
REPRESENTATIVES NAME:
QA/QC SAMPLES: NON - COL - RNS - TRP - MSD

COMMENTS: Pump was on when Sampled
Pump was on 5.5 Hrs previous to Sampling

COPYRIGHT © 1990, 1994 by Roy F. Weston, Inc.

ATTACHMENT B

CHAIN-OF-CUSTODY RECORDS
AND
LABORATORY DATA SHEETS

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (714) 261-1022 FAX (714) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

CRWQCB - L.A. REGION
WELL INVESTIGATION PROGRAM
QA/QC REPORT

PREPARED FOR HSI GEOTRANS
PROJECT: WSCP SAMPLING
SAMPLED: 7/1/97

ATTENTION: ROY MARROQUIN

Celebrating 10 years of service 1987-1997

Del Mar Analytical
2852 Alton Ave., Irvine, CA 92714 (714) 261-1022 FAX (714) 261 1228
1014 E Cooley Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779 1844 FAX (818) 779 1843
2465 W 17th St., Suite 1, Tempe, AZ 85281 (602) 968 8272 FAX (602) 968 1338

CHAIN OF CUSTODY FORM

Client Name/Address: HSI Geo Trans, 3150 Bristol Suite 500, Costa Mesa, CA, 92626

Project/PO Number: WSCP Sampling

Project Manager/Phone Number: Rox Marroquin (714) 513-1415

Sampler: Ralph DeLaParra

Analysis Required: 502.2

Sample Description	Sample Matrix	Container Type	#of Cont	Sampling Date/Time		Preservatives	502.2									Special Instructions
MtView#1-7-1-97	H2O	40ml glass vial	3	7-1-97	1055	HCL	X									Please fax
MtView#2-7-1-97			3		1130		X									results to
Richardson#1-7-1-97			3		1215		X									Rox Marroquin
Richardson#2-7-1-97			3		1250		X									asap
Victoria Farms#3-7-1-97			3		1415		X									
Victoria Farms#1-7-1-97			3		1435		X									
Trip Blank-7-1-97			2		—		X									
MUN-520-7-1-97			3		—		X									

Relinquished By:	Date /Time:	Received by:	Date /Time:	Turnaround Time: (check)	
[signature]	7-1-97 1905			same day	72 hours
Relinquished By:	Date /Time:	Received by:	Date /Time:	24 hours	5 days
				48 hours	normal X
Relinquished By	Date /Time:	Received in Lab by: [signature]	Date/Time: 7/1/97 1905	Sample Integrity: (Check) intact X	on ice

Note Sample(s) will be disposed of after 30 days

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

LABORATORY REPORT FORM (COVER PAGE 1)

Laboratory Name: Del Mar Analytical

Address: 2852 Alton Avenue

Irvine, CA 92606

Telephone/FAX: (714) 261-1022 / (714) 261-1228.

ELAP Certification No.: 1197 Expiration Date: May 31, 1998

Authorized Signature:
Name, Title (print) Debbie Ranck, Quality Assurance Officer

Signature, Date: Debbie Ranck 7/24/97

Client Name: HSI Geotrans

Project No.: WSCP Sampling

Date(s) Sampled: 7/1/97 To

Date(s) Received: 7/1/97 To

Date(s) Reported: 7/7/97 To

Chain of Custody received: Yes X No

Comments:

(RWQCB LabForm; Ver 12/94)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

LABORATORY REPORT FORM (COVER PAGE 2)

Organic Analyses	# of Samples	# of Samples Subcontracted
EPA 502.2	8	0

Sample Condition: Acceptable

Inorganic Analyses	# of Samples	# of Samples Subcontracted

Sample Condition:

Microbiological Analyses	# of Samples	# of Samples Subcontracted

Sample Condition:

Other Types of Analyses	# of Samples	# of Samples Subcontracted

Sample Condition:

PROJECT NO: WSCP Sampling (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: EPA 502.2 **REPORTING UNIT:** µg/L

	DATE ANALYZED	7/3/97	7/3/97	7/3/97	7/3/97
	DATE EXTRACTED	7/3/97	7/3/97	7/3/97	7/3/97
	LAB SAMPLE ID	Method Blank	GG00417	GG00418	GG00419
	CLIENT SAMPLE ID	n/a	Mt. View #1-7-1-97	Mt. View #2-7-1-97	Richardson #1-7-1-97
	EXTRACTION SOLVENT	n/a	n/a	n/a	n/a
	EXTRACTION METHOD	502.2	502.2	502.2	502.2
	DILUTION FACTOR	1	1	1	1
COMPOUND	**CRDL**				
Benzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromochloromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromodichloromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromomethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
n-Butylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
sec-Butylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
tert-Butylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbon tetrachloride	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroform	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorotoluene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorotoluene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromochloromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dibromo-3-chloropropane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dibromoethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromomethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dichlorodifluoromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-Dichloroethane (1,1-DCA)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichloroethane (1,2-DCA)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-Dichloroethene (1,1-DCE)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,2-Dichloroethene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,2-Dichloroethene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichloropropane	0.50	< 0.50	< 0.50	< 0.50	< 0.50

PROJECT NO: WSCP Sampling

ANALYTICAL RESULT FOR ORGANICS (cont'd)

METHOD: **EPA 502.2** **REPORTING UNIT:** **µg/L**

	LAB SAMPLE ID	Method Blank	GG00417	GG00418	GG00419
	CLIENT SAMPLE ID	n/a	Mt. View #1-7-1-97	Mt. View #2-7-1-97	Richardson #1-7-1-97
COMPOUND	**CRDL**				
1,3-Dichloropropane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2-Dichloropropane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-Dichloropropene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,3-Dichloropropene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,3-Dichloropropene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isopropylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
p-Isopropyltoluene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Methylene chloride	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
n-Propylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Styrene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,1,2-Tetrachloroethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-Tetrachloroethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Tetrachloroethene (PCE)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Toluene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,3-Trichlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,1-Trichloroethane (1,1,1-TCA)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-Trichloroethane (1,1,2-TCA)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Trichloroethene (TCE)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Trichlorofluoromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,3-Trichloropropane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trimethylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3,5-Trimethylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Vinyl chloride	0.50	< 0.50	< 0.50	< 0.50	< 0.50
o-Xylene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
m,p-Xylenes	0.50	< 0.50	< 0.50	< 0.50	< 0.50

SURROGATE	**SPIKE CONC**	**ACCEPT LIMITS %**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**
1-Chloro-3-fluorobenzene	10	80-120	96	95	95	95
a,a,a-Trifluorotoluene	10	80-120	101	105	102	102

PROJECT NO: WSCP Sampling (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: EPA 502.2 **REPORTING UNIT:** µg/L

	DATE ANALYZED	7/3/97	7/3/97	7/3/97	7/3/97
	DATE EXTRACTED	7/3/97	7/3/97	7/3/97	7/3/97
	LAB SAMPLE ID	GG00420	GG00421	GG00422	GG00423
	CLIENT SAMPLE ID	Richardson #2-7-1-97	Victoria Farms #3-7-1-97	Victoria Farms #1-7-1-97	Trip Blank-7-1-97
	EXTRACTION SOLVENT	n/a	n/a	n/a	n/a
	EXTRACTION METHOD	502.2	502.2	502.2	502.2
	DILUTION FACTOR	1	1	1	1
COMPOUND	**CRDL**				
Benzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromochloromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromodichloromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromomethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
n-Butylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
sec-Butylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
tert-Butylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbon tetrachloride	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroform	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorotoluene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorotoluene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromochloromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dibromo-3-chloropropane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dibromoethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromomethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dichlorodifluoromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-Dichloroethane (1,1-DCA)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichloroethane (1,2-DCA)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-Dichloroethene (1,1-DCE)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,2-Dichloroethene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,2-Dichloroethene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichloropropane	0.50	< 0.50	< 0.50	< 0.50	< 0.50

PROJECT NO: WSCP Sampling

ANALYTICAL RESULT FOR ORGANICS (cont'd)

METHOD: **EPA 502.2** **REPORTING UNIT:** **µg/L**

	LAB SAMPLE ID	GG00420	GG00421	GG00422	GG00423
	CLIENT SAMPLE ID	Richardson #2-7-1-97	Victoria Farms #3-7-1-97	Victoria Farms #1-7-1-97	Trip Blank-7-1-97
COMPOUND	**CRDL**				
1,3-Dichloropropane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2-Dichloropropane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-Dichloropropene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
cis-1,3-Dichloropropene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,3-Dichloropropene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isopropylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
p-Isopropyltoluene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Methylene chloride	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
n-Propylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Styrene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,1,2-Tetrachloroethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-Tetrachloroethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Tetrachloroethene (PCE)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Toluene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,3-Trichlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,1-Trichloroethane (1,1,1-TCA)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-Trichloroethane (1,1,2-TCA)	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Trichloroethene (TCE)	0.50	< 0.50	< 0.50	**2.3**	< 0.50
Trichlorofluoromethane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,3-Trichloropropane	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trimethylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3,5-Trimethylbenzene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Vinyl chloride	0.50	< 0.50	< 0.50	< 0.50	< 0.50
o-Xylene	0.50	< 0.50	< 0.50	< 0.50	< 0.50
m,p-Xylenes	0.50	< 0.50	< 0.50	< 0.50	< 0.50

SURROGATE	**SPIKE CONC**	**ACCEPT LIMITS %**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**
1-Chloro-3-fluorobenzene	10	80-120	98	95	94	95
a,a,a-Trifluorotoluene	10	80-120	101	101	101	100

PROJECT NO: WSCP Sampling (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: EPA 502.2 **REPORTING UNIT:** µg/L

	DATE ANALYZED	7/3/97			
	DATE EXTRACTED	7/3/97			
	LAB SAMPLE ID	GG00424			
	CLIENT SAMPLE ID	MUN-520-7-1-97			
	EXTRACTION SOLVENT	n/a			
	EXTRACTION METHOD	502.2			
	DILUTION FACTOR	1			
COMPOUND	**CRDL**				
Benzene	0.50	< 0.50			
Bromobenzene	0.50	< 0.50			
Bromochloromethane	0.50	< 0.50			
Bromodichloromethane	0.50	< 0.50			
Bromoform	0.50	< 0.50			
Bromomethane	0.50	< 0.50			
n-Butylbenzene	0.50	< 0.50			
sec-Butylbenzene	0.50	< 0.50			
tert-Butylbenzene	0.50	< 0.50			
Carbon tetrachloride	0.50	< 0.50			
Chlorobenzene	0.50	< 0.50			
Chloroethane	0.50	< 0.50			
Chloroform	0.50	< 0.50			
Chloromethane	0.50	< 0.50			
2-Chlorotoluene	0.50	< 0.50			
4-Chlorotoluene	0.50	< 0.50			
Dibromochloromethane	0.50	< 0.50			
1,2-Dibromo-3-chloropropane	0.50	< 0.50			
1,2-Dibromoethane	0.50	< 0.50			
Dibromomethane	0.50	< 0.50			
1,2-Dichlorobenzene	0.50	< 0.50			
1,3-Dichlorobenzene	0.50	< 0.50			
1,4-Dichlorobenzene	0.50	< 0.50			
Dichlorodifluoromethane	0.50	< 0.50			
1,1-Dichloroethane (1,1-DCA)	0.50	< 0.50			
1,2-Dichloroethane (1,2-DCA)	0.50	< 0.50			
1,1-Dichloroethene (1,1-DCE)	0.50	< 0.50			
cis-1,2-Dichloroethene	0.50	< 0.50			
trans-1,2-Dichloroethene	0.50	< 0.50			
1,2-Dichloropropane	0.50	< 0.50			

PROJECT NO: WSCP Sampling

ANALYTICAL RESULT FOR ORGANICS (cont'd)

METHOD: EPA 502.2 **REPORTING UNIT:** µg/L

	LAB SAMPLE ID	GG00424			
	CLIENT SAMPLE ID	MUN-520-7-1-97			
COMPOUND	**CRDL**				
1,3-Dichloropropane	0.50	< 0.50			
2,2-Dichloropropane	0.50	< 0.50			
1,1-Dichloropropene	0.50	< 0.50			
cis-1,3-Dichloropropene	0.50	< 0.50			
trans-1,3-Dichloropropene	0.50	< 0.50			
Ethylbenzene	0.50	< 0.50			
Hexachlorobutadiene	0.50	< 0.50			
Isopropylbenzene	0.50	< 0.50			
p-Isopropyltoluene	0.50	< 0.50			
Methylene chloride	1.0	< 1.0			
Naphthalene	0.50	< 0.50			
n-Propylbenzene	0.50	< 0.50			
Styrene	0.50	< 0.50			
1,1,1,2-Tetrachloroethane	0.50	< 0.50			
1,1,2,2-Tetrachloroethane	0.50	< 0.50			
Tetrachloroethene (PCE)	0.50	< 0.50			
Toluene	0.50	< 0.50			
1,2,3-Trichlorobenzene	0.50	< 0.50			
1,2,4-Trichlorobenzene	0.50	< 0.50			
1,1,1-Trichloroethane (1,1,1-TCA)	0.50	< 0.50			
1,1,2-Trichloroethane (1,1,2-TCA)	0.50	< 0.50			
Trichloroethene (TCE)	0.50	**2.2**			
Trichlorofluoromethane	0.50	< 0.50			
1,2,3-Trichloropropane	0.50	< 0.50			
1,2,4-Trimethylbenzene	0.50	< 0.50			
1,3,5-Trimethylbenzene	0.50	< 0.50			
Vinyl chloride	0.50	< 0.50			
o-Xylene	0.50	< 0.50			
m,p-Xylenes	0.50	< 0.50			

SURROGATE	SPIKE CONC	ACCEPT LIMITS %	% RECOVERY	% RECOVERY	% RECOVERY	% RECOVERY
1-Chloro-3-fluorobenzene	10	80-120	94			
a,a,a-Trifluorotoluene	10	80-120	100			

Project Number: WSCP Sampling (RWQCB LabForm 10A; Ver12/94)

QA/QC REPORT

II. MATRIX SPIKE (MS) MATRIX SPIKE DUPLICATE (MSD)

Date Performed: 07/03/97
Batch Number: GG03101W
Lab Sample I.D.: GG00417

Analytical Method: EPA 502.2
Reporting Unit: µg/L

Analyte	Sample Result	Spike Conc	MS	% MS	Spike Conc (Dup)	MSD	% MSD	RPD	MS/MSD % Limit	RPD Limit
Benzene	0	10	9.3	93	10	9.1	91	1.5	80-120	≤ 20
Chloroform	0	10	9.8	98	10	9.8	98	0.18	80-120	≤ 20
1,1-Dichloroethane	0	10	9.7	97	10	9.5	95	2.1	80-120	≤ 20
1,2-Dichloroethane	0	10	9.4	94	10	9.3	93	1.0	80-120	≤ 20
1,1-Dichloroethene	0	10	10	100	10	10	101	0.76	80-120	≤ 20
Tetrachloroethene	0	10	11	107	10	11	106	1.2	80-120	≤ 20
Toluene	0	10	9.2	92	10	9.2	92	0.81	80-120	≤ 20
Trichloroethene	0.34	10	10	101	10	11	105	4.3	80-120	≤ 20

III. LABORATORY QUALITY CONTROL CHECK SAMPLE (LCS)

Date Performed: 07/03/97
Supply Source: AccuStandard
Lot Number: 085-307
Date of Source: 1/2/97

Analytical Method: EPA 502.2
Reporting Unit: µg/L
Lab LCS I.D.: LCS

Analyte	Spike Concentration	Result	% Recovery	Acceptance % Recovery Limit
Benzene	10	9.2	92	80-120
Chloroform	10	9.5	95	80-120
1,1-Dichloroethane	10	9.5	95	80-120
1,2-Dichloroethane	10	9.1	91	80-120
1,1-Dichloroethene	10	9.8	98	80-120
Tetrachloroethene	10	11	110	80-120
Toluene	10	9.1	91	80-120
Trichloroethene	10	10	100	80-120

Sample File : H:\DATA\GC10A\PC9706A.smp

Created by : on : 1/25/95 12:46 PM
Edited by : on : 6/9/97 11:55 AM
Number Of Times Edited : 217

Sample Description :

Default Injection Volume : 1.0000 ul
Quantitation Units : ng
Void Time : 0.000 min
Correct Amounts During Calibration : YES
Reject Outliers During Calibration : NO
An Internal Standard Calibration Will Be Used
Unknown Peaks Will Be Quantitated Using A Response Factor of 1000000.000000

Component Information :

CIS-1,2-DCE

Component Type : Single Peak Component
Retention Time : 12.781 min Search Window: 1.40 s, 1.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

ELCD NA 6-12-97

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	10771.00	1433.17	0.13397	0.10000	1
2	10.0000	10343.50	1407.46	0.13339	0.20000	1
3	50.0000	58484.00	7423.16	0.72917	1.00000	1
4	100.0000	118059.00	14678.68	1.48435	2.00000	1
5	150.0000	182775.00	22735.17	2.31230	3.00000	1
6	300.0000	340235.00	42146.19	4.58643	6.00000	1

Calibration Curve : y = (-0.001657) + (0.763513)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999567

BENZENE

Component Type : Single Peak Component
Retention Time : 17.712 min Search Window: 1.00 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	15400.00	2380.16	0.19154	0.10000	1
2	10.0000	28169.00	4289.35	0.36326	0.20000	1
3	50.0000	136240.00	20354.19	1.69863	1.00000	1
4	100.0000	267993.00	39649.01	3.36946	2.00000	1
5	150.0000	413245.00	60982.77	5.22797	3.00000	1
6	300.0000	771206.00	113834.16	10.39599	6.00000	1

Calibration Curve : y = (-0.008253) + (1.732082)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999868

FB

Component Type : Single Peak Component
Retention Time : 18.637 min Search Window: 1.00 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard :
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	80401.50	11256.19	1.00000	1.00000	1
2	50.0000	77545.00	10968.51	1.00000	1.00000	1
3	50.0000	80206.00	11397.02	1.00000	1.00000	1
4	50.0000	79536.00	11317.89	1.00000	1.00000	1
5	50.0000	79045.00	11219.86	1.00000	1.00000	1
6	50.0000	74183.00	10590.01	1.00000	1.00000	1

Calibration Curve : y = (0.000000) + (1.000000)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.000000

TCE.
Component Type : Single Peak Component
Retention Time : 20.131 min Search Window: 0.90 s, 0.90 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	8235.00	1619.65	0.10242	0.10000	1
2	10.0000	15737.00	3016.16	0.20294	0.20000	1
3	50.0000	76257.00	14404.55	0.95076	1.00000	1
4	100.0000	151074.00	28126.52	1.89944	2.00000	1
5	150.0000	234668.00	43677.65	2.96879	3.00000	1
6	300.0000	440478.00	82005.86	5.93772	6.00000	1

Calibration Curve : y = (-0.015528) + (0.989494)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999778

AAA-TFT
Component Type : Single Peak Component
Retention Time : 21.032 min Search Window: 0.90 s, 0.90 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	40286.50	8606.86	0.50107	1.00000	1
2	50.0000	38699.00	8272.77	0.49905	1.00000	1
3	50.0000	40315.00	8604.40	0.50264	1.00000	1
4	50.0000	40050.50	8546.45	0.50355	1.00000	1
5	50.0000	39216.00	8383.22	0.49612	1.00000	1
6	50.0000	36954.00	7877.25	0.49815	1.00000	1

Calibration Curve : y = (0.000000) + (0.500097)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999813

TOLUENE

Component Type : Single Peak Component
Retention Time : 23.373 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	17759.50	4717.35	0.22089	0.10000	1
2	10.0000	28895.00	8369.60	0.37262	0.20000	1
3	50.0000	127046.00	38881.82	1.58400	1.00000	1
4	100.0000	245009.00	74567.20	3.08048	2.00000	1
5	150.0000	373914.00	114529.62	4.73039	3.00000	1
6	300.0000	690389.00	215672.38	9.30657	6.00000	1

Calibration Curve : y = (0.039609) + (1.546153)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999877

CFB

Component Type : Single Peak Component
Retention Time : 24.983 min Search Window: 0.80 s, 0.50 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	74861.00	27037.93	0.93109	1.00000	1
2	50.0000	73328.00	27014.27	0.94562	1.00000	1
3	50.0000	77970.00	29559.51	0.97212	1.00000	1
4	50.0000	78423.50	29773.77	0.98601	1.00000	1
5	50.0000	78150.50	29461.30	0.98868	1.00000	1
6	50.0000	73356.00	27361.83	0.98885	1.00000	1

Calibration Curve : y = (0.000000) + (0.968730)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996205

CHLOROBENZENE

Component Type : Single Peak Component
Retention Time : 25.407 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	14196.00	5473.33	0.17656	0.10000	1
2	10.0000	25720.00	9836.42	0.33168	0.20000	1
3	50.0000	127151.00	47428.42	1.58531	1.00000	1
4	100.0000	250457.50	94535.24	3.14898	2.00000	1
5	150.0000	388335.00	149576.09	4.91283	3.00000	1
6	300.0000	721110.50	280648.05	9.72070	6.00000	1

Calibration Curve : y = (-0.009402) + (1.621291)x + (0.000000)x^2 + (0.000000)x^3

R-squared : 0.999838

ETHYLBENZENE

Component Type : Single Peak Component
Retention Time : 25.702 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	12437.50	4767.84	0.15469	0.10000	1
2	10.0000	22438.50	8480.54	0.28936	0.20000	1
3	50.0000	107815.00	42149.84	1.34423	1.00000	1
4	100.0000	211940.00	82965.99	2.66471	2.00000	1
5	150.0000	324885.00	127360.29	4.11013	3.00000	1
6	300.0000	599239.50	234129.64	8.07785	6.00000	1

Calibration Curve : y = (0.010465) + (1.346968)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999889

M,P-XYLENES

Component Type : Single Peak Component
Retention Time : 25.955 min Search Window: 0.20 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	10.0000	28358.00	10019.95	0.35270	0.20000	1
2	20.0000	51929.00	17799.43	0.66966	0.40000	1
3	100.0000	247951.00	86123.27	3.09143	2.00000	1
4	200.0000	486602.00	171335.85	6.11801	4.00000	1
5	300.0000	744554.00	265486.75	9.41937	6.00000	1
6	600.0000	1371360.00	487547.52	18.48618	12.00000	1

Calibration Curve : y = (0.031704) + (1.541277)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999890

STYRENE

Component Type : Single Peak Component
Retention Time : 26.334 min Search Window: 0.20 s, 0.17 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	13602.00	5297.46	0.16918	0.10000	1
2	10.0000	25498.17	10095.76	0.32882	0.20000	1
3	50.0000	123021.18	53339.64	1.53382	1.00000	1
4	100.0000	248670.00	106327.20	3.12651	2.00000	1
5	150.0000	384894.00	159283.57	4.86930	3.00000	1
6	300.0000	719697.22	295826.84	9.70165	6.00000	1

Calibration Curve : y = (-0.025138) + (1.618312)x + (0.000000)x^2 - (0.000000)x^3
R-squared : 0.999796

O-XYLENE

Component Type : Single Peak Component
Retention Time : 26.415 min Search Window: 0.70 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	13078.00	5022.06	0.16266	0.10000	1
2	10.0000	22846.33	9442.15	0.29462	0.20000	1
3	50.0000	113915.82	45066.81	1.42029	1.00000	1
4	100.0000	220038.00	86278.79	2.76652	2.00000	1
5	150.0000	333859.00	129195.57	4.22366	3.00000	1
6	300.0000	625020.28	238838.28	8.42538	6.00000	1

Calibration Curve : y = (0.007154) + (1.401874)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999954

ISOPROPYLBENZENE

Component Type : Single Peak Component
Retention Time : 26.835 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	10986.00	4185.84	0.13664	0.10000	1
2	10.0000	19204.00	7581.72	0.24765	0.20000	1
3	50.0000	90031.50	36714.68	1.12250	1.00000	1
4	100.0000	176487.00	72377.80	2.21896	2.00000	1
5	150.0000	271102.00	109011.07	3.42972	3.00000	1
6	300.0000	499356.00	200606.09	6.73141	6.00000	1

Calibration Curve : y = (0.012726) + (1.121772)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999867

BROMOBENZENE

Component Type : Single Peak Component
Retention Time : 27.065 min Search Window: 0.30 s, 0.25 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	13923.34	5203.58	0.17317	0.10000	1
2	10.0000	24804.00	10018.69	0.31987	0.20000	1
3	50.0000	122186.00	50790.49	1.52340	1.00000	1
4	100.0000	244509.50	97240.72	3.07420	2.00000	1
5	150.0000	375059.00	153610.43	4.74488	3.00000	1
6	300.0000	699933.00	288702.00	9.43522	6.00000	1

Calibration Curve : y = (-0.011393) + (1.573210)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999890

n-PROPYLBENZENE

Component Type : Single Peak Component
Retention Time : 27.311 min Search Window: 0.20 s, 0.22 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	12436.92	4646.03	0.15469	0.10000	1
2	10.0000	20274.40	8267.41	0.26145	0.20000	1
3	50.0000	96117.74	38836.83	1.19839	1.00000	1
4	100.0000	194706.68	79903.44	2.44803	2.00000	1
5	150.0000	300702.70	124851.47	3.80420	3.00000	1
6	300.0000	559646.40	231008.95	7.54413	6.00000	1

Calibration Curve : y = (-0.008099) + (1.257527)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999790

2-CL-TOLUENE

Component Type : Single Peak Component
Retention Time : 27.391 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	13310.38	5458.39	0.16555	0.10000	1
2	10.0000	23473.00	9329.18	0.30270	0.20000	1
3	50.0000	109097.18	43982.13	1.36021	1.00000	1
4	100.0000	213456.42	92341.89	2.68377	2.00000	1
5	150.0000	324296.50	142375.37	4.10268	3.00000	1
6	300.0000	603771.43	263135.52	8.13895	6.00000	1

Calibration Curve : y = (0.014006) + (1.354132)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999942

4-CLOROTOLUENE

Component Type : Single Peak Component
Retention Time : 27.477 min Search Window: 0.15 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	12711.74	4988.41	0.15810	0.10000	1
2	10.0000	22136.60	8883.33	0.28547	0.20000	1
3	50.0000	107821.58	43870.95	1.34431	1.00000	1
4	100.0000	214234.89	93970.70	2.69356	2.00000	1

5	150.0000	324485.80	147926.70	4.10508	3.00000	1
6	300.0000	620370.03	276666.28	8.36270	6.00000	1

Calibration Curve : y = (-0.020243) + (1.389505)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999789

1,3,5-TRIMETHYLBENZE

Component Type : Single Peak Component
Retention Time : 27.630 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	17198.62	7096.28	0.21391	0.10000	1
2	10.0000	29999.00	12900.79	0.38686	0.20000	1
3	50.0000	141888.50	60856.94	1.76905	1.00000	1
4	100.0000	281457.00	118017.92	3.53874	2.00000	1
5	150.0000	426719.00	184870.62	5.39843	3.00000	1
6	300.0000	811906.14	340120.42	10.94464	6.00000	1

Calibration Curve : y = (-0.016325) + (1.818366)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999828

t-BUTYLBENZENE

Component Type : Single Peak Component
Retention Time : 27.904 min Search Window: 0.15 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	10015.27	3796.27	0.12457	0.10000	1
2	10.0000	17854.72	6733.28	0.23025	0.20000	1
3	50.0000	81825.35	32541.69	1.02019	1.00000	1
4	100.0000	160513.42	65465.87	2.01812	2.00000	1
5	150.0000	245489.65	99037.91	3.10569	3.00000	1
6	300.0000	452862.54	183611.80	6.10467	6.00000	1

Calibration Curve : y = (0.013897) + (1.016765)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999890

1,2,4-TRIMETHYLBENZE

Component Type : Single Peak Component
Retention Time : 28.027 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	12683.37	5280.05	0.15775	0.10000	1
2	10.0000	22551.17	9339.38	0.29081	0.20000	1

3	50.0000	107914.53	43981.08	1.34547	1.00000	1
4	100.0000	213220.31	93749.78	2.68080	2.00000	1
5	150.0000	323135.38	143875.56	4.08799	3.00000	1
6	300.0000	594233.85	264487.41	8.01038	6.00000	1

Calibration Curve : y = (0.020444) + (1.335780)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999903

sec-BUTYLBENZENE

Component Type : Single Peak Component
Retention Time : 28.132 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	10651.50	4006.40	0.13248	0.10000	1
2	10.0000	19455.99	7357.83	0.25090	0.20000	1
3	50.0000	94887.01	34481.65	1.18304	1.00000	1
4	100.0000	169571.68	65573.05	2.13201	2.00000	1
5	150.0000	262414.81	102115.09	3.31982	3.00000	1
6	300.0000	482595.41	187659.41	6.50547	6.00000	1

Calibration Curve : y = (0.032543) + (1.080969)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999639

1,3-DCBE

Component Type : Single Peak Component
Retention Time : 28.191 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	10630.34	4308.02	0.13222	0.10000	1
2	10.0000	18647.89	7725.51	0.24048	0.20000	1
3	50.0000	93356.56	40147.88	1.16396	1.00000	1
4	100.0000	201778.82	89234.03	2.53695	2.00000	1
5	150.0000	306004.69	137295.69	3.87127	3.00000	1
6	300.0000	575934.59	259557.67	7.76370	6.00000	1

Calibration Curve : y = (-0.035550) + (1.297352)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999718

1,4-DCBE

Component Type : Single Peak Component
Retention Time : 28.266 min Search Window: 0.15 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates

1	5.0000	9820.31	3668.52	0.12214	0.10000	1
2	10.0000	17998.00	7179.57	0.23210	0.20000	1
3	50.0000	95706.92	39918.58	1.19326	1.00000	1
4	100.0000	192963.33	79274.60	2.42611	2.00000	1
5	150.0000	297513.30	126307.30	3.76384	3.00000	1
6	300.0000	561948.33	237869.43	7.57516	6.00000	1

Calibration Curve : y = (-0.033241) + (1.263846)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999805

p-ISOPROPYLTOLUENE

Component Type : Single Peak Component
Retention Time : 28.329 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	10378.70	3988.25	0.12909	0.10000	1
2	10.0000	17455.24	7233.92	0.22510	0.20000	1
3	50.0000	80448.13	34012.39	1.00302	1.00000	1
4	100.0000	173418.94	68975.68	2.18038	2.00000	1
5	150.0000	257339.96	106164.13	3.25561	3.00000	1
6	300.0000	474280.28	194895.41	6.39338	6.00000	1

Calibration Curve : y = (0.006720) + (1.068256)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999712

1,2-DCBE

Component Type : Single Peak Component
Retention Time : 28.639 min Search Window: 0.40 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	8909.60	3343.71	0.11081	0.10000	1
2	10.0000	16291.00	5995.92	0.21008	0.20000	1
3	50.0000	80900.47	31904.62	1.00866	1.00000	1
4	100.0000	165489.80	68196.18	2.08069	2.00000	1
5	150.0000	252537.60	103167.77	3.19486	3.00000	1
6	300.0000	474991.10	196977.31	6.40296	6.00000	1

Calibration Curve : y = (-0.018184) + (1.067915)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999865

n-BUTYLBENZENE

Component Type : Single Peak Component
Retention Time : 28.763 min Search Window: 0.60 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	9168.40	3428.40	0.11403	0.10000	1
2	10.0000	16409.00	5446.17	0.21161	0.20000	1
3	50.0000	83623.53	32244.02	1.04261	1.00000	1
4	100.0000	173656.20	69090.67	2.18337	2.00000	1
5	150.0000	260185.40	105214.25	3.29161	3.00000	1
6	300.0000	485003.40	196266.56	6.53793	6.00000	1

Calibration Curve : y = (-0.007177) + (1.091983)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999924

1,2,4-TCBE

Component Type : Single Peak Component
Retention Time : 30.891 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	3369.00	931.33	0.04190	0.10000	1
2	10.0000	5367.00	1632.73	0.06921	0.20000	1
3	50.0000	34794.50	10933.12	0.43381	1.00000	1
4	100.0000	84507.00	27499.14	1.06250	2.00000	1
5	150.0000	134569.00	43723.33	1.70244	3.00000	1
6	300.0000	257607.50	84779.03	3.47259	6.00000	1

Calibration Curve : y = (-0.056920) + (0.583813)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998278

CL6BUTADIENE

Component Type : Single Peak Component
Retention Time : 31.263 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	5837.00	1403.58	0.07260	0.10000	1
2	10.0000	6864.45	2044.40	0.08852	0.20000	1
3	50.0000	37806.14	11489.38	0.47136	1.00000	1
4	100.0000	81539.25	26712.56	1.02519	2.00000	1
6	300.0000	276430.33	81944.50	3.72633	6.00000	1

Calibration Curve : y = (-0.066331) + (0.621719)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.995624

NAPHTHALENE

Component Type : Single Peak Component
Retention Time : 31.346 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1

Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	7223.00	2031.04	0.08984	0.10000	1
2	10.0000	12117.55	3315.84	0.15626	0.20000	1
3	50.0000	49213.86	14348.62	0.61359	1.00000	1
4	100.0000	102074.75	29119.88	1.28338	2.00000	1
5	150.0000	152365.42	43790.18	1.92758	3.00000	1
6	300.0000	253706.67	81088.29	3.42001	6.00000	1

Calibration Curve : y = (0.059128) + (0.575347)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.995876

1,2,3 TCBE

Component Type : Single Peak Component
Retention Time : 31.557 min Search Window: 0.60 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	3956.00	1142.81	0.04920	0.10000	1
2	10.0000	7117.00	1915.44	0.09178	0.20000	1
3	50.0000	33982.50	10531.70	0.42369	1.00000	1
4	100.0000	78452.00	24989.99	0.98637	2.00000	1
5	150.0000	124578.00	39624.70	1.57604	3.00000	1
6	300.0000	228442.00	73601.08	3.07944	6.00000	1

Calibration Curve : y = (-0.022830) + (0.517588)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998831

Calibration Replicate Lists:

Component: CIS-1,2-DCE

Level : 1

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
10771.00	1433.17	5.0000	0.1340	0.1000	3/5/97	9:25 AM	O03C028X

Level : 2

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
10343.50	1407.46	10.0000	0.1334	0.2000	6/9/97	11:50 AM	R06C012.

Level : 3

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
58484.00	7423.16	50.0000	0.7292	1.0000	6/9/97	11:50 AM	R06C013.

Level : 4

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
118059.00	14678.68	100.0000	1.4843	2.0000	6/9/97	11:50 AM	R06C016.

Level : 5

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
182776.00	22735.17	150.0000	2.3123	3.0000	6/9/97	11:50 AM	R06C017.

Sample File : H:\DATA\GC10A\EC9706A.smp
Created by : on : 1/23/91 8:42 AM
Edited by : on : 6/11/97 3:07 PM
Number Of Times Edited : 838

ample Description :

Default Injection Volume : 1.0000 ul
Quantitation Units : ng
Void Time : 0.000 min
Correct Amounts During Calibration : YES
Reject Outliers During Calibration : YES
Allowed Replicate Deviation : 20.00 %

An Internal Standard Calibration Will Be Used
Unknown Peaks Will Be Quantitated Using A Response Factor of 1000000.000000

omponent Information :

DICHLORODIFLUOROMETH

Component Type : Single Peak Component
Retention Time : 3.691 min Search Window: 2.40 s, 2.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	8242.00	1423.22	0.03057	0.10000	1
2	10.0000	23094.00	3954.98	0.08911	0.20000	1
3	50.0000	137377.28	22031.96	0.47736	1.00000	1
4	100.0000	270564.26	41826.00	0.95424	2.00000	1
5	150.0000	414175.00	65417.88	1.49233	3.00000	1
6	300.0000	867039.56	133799.52	3.20752	6.00000	1

Calibration Curve : y = (-0.042779) + (0.532567)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998193

CHLOROMETHANE

Component Type : Single Peak Component
Retention Time : 3.867 min Search Window: 2.50 s, 1.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	36802.00	8992.17	0.13651	0.10000	1
2	10.0000	76132.50	17559.44	0.29377	0.20000	1
3	50.0000	403574.83	89470.67	1.40234	1.00000	1
4	100.0000	744735.75	160959.86	2.62656	2.00000	1
5	150.0000	1150846.00	246204.26	4.14664	3.00000	1
6	300.0000	2177752.26	463092.01	8.05636	6.00000	1

Calibration Curve : y = (0.018181) + (1.344303)x + (0.000000)x^2 + (0.000000)x^3

R-squared : 0.999639

VINYL CHLORIDE

Component Type : Single Peak Component
Retention Time : 4.172 min Search Window: 2.00 s, 1.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	25586.00	6346.30	0.09491	0.10000	1
2	10.0000	54568.50	13044.72	0.21056	0.20000	1
3	50.0000	292605.89	63635.90	1.01674	1.00000	1
4	100.0000	542185.98	117391.63	1.91220	2.00000	1
5	150.0000	843661.00	173133.30	3.03982	3.00000	1
6	300.0000	1604408.40	321464.00	5.93534	6.00000	1

Calibration Curve : y = (0.003572) + (0.990616)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999634

BROMOMETHANE

Component Type : Single Peak Component
Retention Time : 4.802 min Search Window: 1.20 s, 2.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	15756.16	3513.37	0.05845	0.10000	1
2	10.0000	34585.23	7619.73	0.13345	0.20000	1
3	50.0000	187715.58	37895.79	0.65227	1.00000	1
4	100.0000	363707.90	70133.96	1.28274	2.00000	1
5	150.0000	572584.64	109010.55	2.06310	3.00000	1
6	300.0000	1068261.52	200582.12	3.95192	6.00000	1

Calibration Curve : y = (-0.001281) + (0.662674)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999344

CHLOROETHANE

Component Type : Single Peak Component
Retention Time : 5.066 min Search Window: 1.20 s, 1.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	26273.84	5594.34	0.09746	0.10000	1
2	10.0000	58665.77	12040.00	0.22637	0.20000	1
3	50.0000	302855.42	57403.00	1.05236	1.00000	1
4	100.0000	576937.10	105196.74	2.03477	2.00000	1
5	150.0000	915473.36	166089.66	3.29857	3.00000	1
6	300.0000	1701312.76	300553.50	6.29383	6.00000	1

Calibration Curve : y = (0.004723) + (1.054495)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999210

TRICHLOROFLUOROMETH

Component Type : Single Peak Component
Retention Time : 6.148 min Search Window: 2.00 s, 2.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	23194.00	2839.48	0.08604	0.10000	1
2	10.0000	56170.50	6604.54	0.21674	0.20000	1
3	50.0000	330610.00	33114.59	1.14880	1.00000	1
4	100.0000	691581.00	67684.34	2.43910	2.00000	1
5	150.0000	1061253.00	98470.72	3.82383	3.00000	1
6	300.0000	2057015.00	183203.30	7.60971	6.00000	1

Calibration Curve : y = (-0.052697) + (1.275861)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999683

1,1-DCE

Component Type : Single Peak Component
Retention Time : 7.320 min Search Window: 1.40 s, 2.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	41675.00	7398.07	0.15459	0.10000	1
2	10.0000	87190.00	14700.24	0.33644	0.20000	1
3	50.0000	450358.00	71108.70	1.56490	1.00000	1
4	100.0000	871385.00	134552.40	3.07324	2.00000	1
5	150.0000	1393053.89	208124.20	5.01935	3.00000	1
6	300.0000	2490541.50	372753.41	9.21349	6.00000	1

Calibration Curve : y = (0.040344) + (1.551187)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998062

MECL2

Component Type : Single Peak Component
Retention Time : 7.733 min Search Window: 2.00 s, 1.90 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
2	10.0000	145350.00	23597.44	0.56086	0.20000	1
3	50.0000	610982.33	100445.61	2.12304	1.00000	1
4	100.0000	1056543.36	169732.60	3.72626	2.00000	1
5	150.0000	1722362.58	272977.04	6.20589	3.00000	1
6	300.0000	2888356.32	467279.05	10.68517	6.00000	1

Calibration Curve : y = (0.254376) + (1.784833)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.993601

FREON 113

Component Type : Single Peak Component
Retention Time : 7.957 min Search Window: 1.00 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

From #2 m 15 9 3 NA 6-12-97

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	72090.09	30240.55	0.26741	0.10000	0
2	10.0000	138920.63	41691.36	0.53605	0.20000	0
3	50.0000	610075.70	66670.49	2.11989	1.00000	0
4	100.0000	1198652.81	83421.94	4.22746	2.00000	0
5	150.0000	1692180.42	129040.71	6.09714	3.00000	0
6	300.0000	3075290.39	202554.42	11.3767i	6.00000	0

Calibration Curve : y = (0.181657) + (1.898623)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998104

T-1,2-DCE

Component Type : Single Peak Component
Retention Time : 9.671 min Search Window: 2.00 s, 1.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	46994.00	7350.98	0.17432	0.10000	1
2	10.0000	98340.00	14218.16	0.37946	0.20000	1
3	50.0000	517318.50	71482.48	1.79757	1.00000	1
4	100.0000	1000445.50	135875.50	3.52841	2.00000	1
5	150.0000	1581436.50	214570.39	5.69812	3.00000	1
6	300.0000	2767151.00	371379.84	10.23678	6.00000	1

Calibration Curve : y = (0.080539) + (1.727715)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997088

1,1-DCA

Component Type : Single Peak Component
Retention Time : 10.505 min Search Window: 1.60 s, 1.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	44089.00	5906.99	0.16354	0.10000	1
2	10.0000	83116.00	10664.42	0.32072	0.20000	1
3	50.0000	478856.00	56496.11	1.66392	1.00000	1
4	100.0000	937873.50	108478.69	3.30773	2.00000	1
5	150.0000	1476533.00	169586.23	5.32014	3.00000	1
6	300.0000	2627522.50	297356.48	9.72024	6.00000	1

Calibration Curve : y = (0.046951) + (1.639645)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997901

CIS-1,2-DCE

Component Type : Single Peak Component
Retention Time : 12.792 min Search Window: 1.00 s, 1.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	37106.00	5030.71	0.13764	0.10000	1
2	10.0000	74939.00	9398.58	0.28916	0.20000	1
3	50.0000	435734.50	52174.15	1.51409	1.00000	1
4	100.0000	854261.00	100812.63	3.01284	2.00000	1
5	150.0000	1349825.50	156370.23	4.86359	3.00000	1
6	300.0000	2406021.00	281841.57	8.90082	6.00000	1

Calibration Curve : y = (0.034544) + (1.502141)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997943

BROMOCHLOROMETHAN

Component Type : Single Peak Component
Retention Time : 13.372 min Search Window: 1.00 s, 1.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	28163.81	3965.45	0.10447	0.10000	1
2	10.0000	54301.72	7456.46	0.20953	0.20000	1
3	50.0000	340392.58	43806.67	1.18279	1.00000	1
4	100.0000	659894.25	83559.30	2.32734	2.00000	1
5	150.0000	1032999.39	131992.32	3.72203	3.00000	1
6	300.0000	1902152.67	237052.87	7.03681	6.00000	1

Calibration Curve : y = (0.003886) + (1.183396)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999098

CHLOROFORM

Component Type : Single Peak Component
Retention Time : 13.649 min Search Window: 1.00 s, 1.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	61961.00	8036.87	0.22984	0.10000	1
2	10.0000	115316.77	14901.11	0.44497	0.20000	1
3	50.0000	637917.80	76928.40	2.21663	1.00000	1
4	100.0000	1197021.00	143200.08	4.22170	2.00000	1

5	150.0000	1869223.77	221143.51	6.73505	3.00000	1
6	300.0000	3368988.00	393333.55	12.46321	6.00000	1

Calibration Curve : y = (0.080788) + (2.093162)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998488

2,2-DCP

Component Type : Single Peak Component
Retention Time : 13.886 min Search Window: 0.70 s, 1.30 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	31936.19	3659.25	0.11846	0.10000	1
2	10.0000	72681.01	7752.24	0.28045	0.20000	1
3	50.0000	388918.62	39699.65	1.35141	1.00000	1
4	100.0000	775857.75	75142.56	2.73633	2.00000	1
5	150.0000	1221999.34	117082.56	4.40302	3.00000	1
6	300.0000	2121559.33	208809.71	7.84848	6.00000	1

Calibration Curve : y = (0.056685) + (1.328566)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996546

1,2-DCA

Component Type : Single Peak Component
Retention Time : 16.012 min Search Window: 0.80 s, 1.10 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	39934.51	6172.58	0.14813	0.10000	1
2	10.0000	76029.21	11611.70	0.29337	0.20000	1
3	50.0000	440083.73	63395.80	1.52920	1.00000	1
4	100.0000	864317.44	125529.08	3.04831	2.00000	1
5	150.0000	1288580.94	180905.40	4.64292	3.00000	1
6	300.0000	2396499.36	340064.81	8.86560	6.00000	1

Calibration Curve : y = (0.035149) + (1.486300)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999435

1,1,1-TCA

Component Type : Single Peak Component
Retention Time : 16.307 min Search Window: 0.80 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	52771.49	7047.92	0.19575	0.10000	1
2	10.0000	101512.79	13189.07	0.39170	0.20000	1

3	50.0000	555975.27	56026.07	1.93190	1.00000	1
4	100.0000	1118809.67	128118.88	3.94586	2.00000	1
5	150.0000	1677012.17	194517.76	5.84249	3.00000	1
6	300.0000	3119958.70	363068.64	11.54196	6.00000	1

Calibration Curve : y = (0.034595) - (1.935569)x - (0.000000)x^2 - (0.000000)x^3
R-squared : 0.999456

1,1-DICHLOROPROPENE

Component Type : Single Peak Component
Retention Time : 17.026 min Search Window: 0.70 s, 1.10 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	35754.00	5914.96	0.13263	0.10000	1
2	10.0000	71978.00	11385.09	0.27774	0.20000	1
3	50.0000	394919.99	58316.47	1.37226	1.00000	1
4	100.0000	799177.00	114412.88	2.81857	2.00000	1
5	150.0000	1280359.19	181140.51	4.61330	3.00000	1
6	300.0000	2153912.99	310442.90	7.96817	6.00000	1

Calibration Curve : y = (0.073590) + (1.355085)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.994271

CARBON TETRACHLORIDE

Component Type : Single Peak Component
Retention Time : 17.512 min Search Window: 0.70 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	64014.00	8892.87	0.23745	0.10000	1
2	10.0000	118795.00	16095.18	0.45839	0.20000	1
3	50.0000	589568.50	75008.22	2.04863	1.00000	1
4	100.0000	1215318.00	149018.51	4.28623	2.00000	1
5	150.0000	1921436.50	234183.48	6.92318	3.00000	1
6	300.0000	3271558.00	403182.09	12.10278	6.00000	1

Calibration Curve : y = (0.117685) + (2.051453)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.995231

BR2CH2

Component Type : Single Peak Component
Retention Time : 19.791 min Search Window: 0.50 s, 0.55 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates

1	5.0000	14629.20	2662.89	0.05427	0.10000	1
2	10.0000	30582.38	5659.69	0.11801	0.20000	1
3	50.0000	194906.58	33640.84	0.67726	1.00000	1
4	100.0000	401977.49	67793.72	1.41771	2.00000	1
5	150.0000	665440.12	109257.09	2.39767	3.00000	1
6	300.0000	1258746.85	209387.94	4.65660	6.00000	1

Calibration Curve : y = (-0.045978) + (0.784013)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998537

1,2-DCP

Component Type : Single Peak Component
Retention Time : 19.970 min Search Window: 0.00 s, 0.55 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	43164.78	7489.72	0.16012	0.10000	1
2	10.0000	83816.15	14288.53	0.32342	0.20000	1
3	50.0000	415143.71	67112.58	1.44254	1.00000	1
4	100.0000	797384.12	127545.80	2.81225	2.00000	1
5	150.0000	1283139.96	195860.20	4.62332	3.00000	1
6	300.0000	2417974.27	378877.75	8.94504	6.00000	1

Calibration Curve : y = (-0.012118) + (1.495244)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999154

TCE

Component Type : Single Peak Component
Retention Time : 20.140 min Search Window: 0.60 s, 0.50 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	62403.00	11015.75	0.23148	0.10000	1
2	10.0000	109674.19	19713.63	0.42320	0.20000	1
3	50.0000	572580.22	100387.55	1.98960	1.00000	1
4	100.0000	1020329.36	176441.24	3.59854	2.00000	1
5	150.0000	1552363.12	286762.90	5.59336	3.00000	1
6	300.0000	3059279.24	525704.77	11.31748	6.00000	1

Calibration Curve : y = (0.014535) + (1.874139)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999553

BROMODICHLOROMETHAN

Component Type : Single Peak Component
Retention Time : 20.252 min Search Window: 0.50 s, 0.50 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	43096.02	8776.09	0.15986	0.10000	1
2	10.0000	87832.28	17107.13	0.33892	0.20000	1
3	50.0000	464087.49	83288.96	1.61261	1.00000	1
4	100.0000	864430.03	152585.00	3.04871	2.00000	1
5	150.0000	1457301.81	240327.58	5.25084	3.00000	1
6	300.0000	2625996.14	438814.40	9.71460	6.00000	1

Calibration Curve : y = (0.003647) + (1.634147)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997658

2-CVE

Component Type : Single Peak Component
Retention Time : 21.636 min Search Window: 0.30 s, 0.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	5410.00	1342.51	0.02007	0.10000	1
2	10.0000	10935.00	2830.94	0.04219	0.20000	1
3	50.0000	87136.00	20814.91	0.30278	1.00000	1
4	100.0000	191784.50	45294.60	0.67639	2.00000	1
5	150.0000	301495.00	70608.48	1.08632	3.00000	1
6	300.0000	569487.00	133410.31	2.10676	6.00000	1

Calibration Curve : y = (-0.020689) + (0.356044)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999058

C-1,3-DCP

Component Type : Single Peak Component
Retention Time : 21.959 min Search Window: 0.80 s, 0.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	36631.50	9487.24	0.13588	0.10000	1
2	10.0000	67032.50	17120.09	0.25866	0.20000	1
3	50.0000	383683.50	93977.75	1.33322	1.00000	1
4	100.0000	764553.00	183181.58	2.69646	2.00000	1
5	150.0000	1165380.00	278648.73	4.19901	3.00000	1
6	300.0000	2016820.00	478583.14	7.46101	6.00000	1

Calibration Curve : y = (0.079951) + (1.262161)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996201

T-1,3-DCP

Component Type : Single Peak Component
Retention Time : 22.851 min Search Window: 0.50 s, 0.50 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1

Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	28561.24	7957.32	0.10595	0.10000	1
2	10.0000	52967.33	14250.85	0.20438	0.20000	1
3	50.0000	313168.84	85931.22	1.08820	1.00000	1
4	100.0000	597201.24	162426.66	2.10623	2.00000	1
5	150.0000	917903.84	253464.61	3.30732	3.00000	1
6	300.0000	1723795.86	476450.81	6.37700	6.00000	1

Calibration Curve : y = (0.008136) + (1.067653)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999611

1,1,2-TCA

Component Type : Single Peak Component
Retention Time : 23.054 min Search Window: 0.50 s, 0.50 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	47467.76	13149.61	0.17608	0.10000	1
2	10.0000	91118.37	24510.42	0.35160	0.20000	1
3	50.0000	465312.66	124156.25	1.61686	1.00000	1
4	100.0000	849683.07	224249.68	2.99670	2.00000	1
5	150.0000	1245054.03	325918.19	4.48609	3.00000	1
6	300.0000	2262245.39	593347.03	8.36894	6.00000	1

Calibration Curve : y = (0.114844) + (1.397752)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998405

1CL2BRPRPN

Component Type : Single Peak Component
Retention Time : 23.334 min Search Window: 0.40 s, 0.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard :
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	269584.09	68805.28	1.00000	1.00000	1
2	50.0000	259156.63	66190.43	1.00000	1.00000	1
3	50.0000	287787.10	73824.65	1.00000	1.00000	1
4	50.0000	283539.83	71421.87	1.00000	1.00000	1
5	50.0000	277536.69	69305.37	1.00000	1.00000	1
6	50.0000	270314.53	65694.63	1.00000	1.00000	1

Calibration Curve : y = (0.000000) + (1.000000)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.000000

1,3-DCP

Component Type : Single Peak Component
Retention Time : 23.481 min Search Window: 0.60 s, 0.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression

Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	44468.91	12147.38	0.16495	0.10000	1
2	10.0000	80286.67	22160.43	0.30980	0.20000	1
3	50.0000	375351.40	104793.72	1.30427	1.00000	1
4	100.0000	692493.86	191266.35	2.44232	2.00000	1
5	150.0000	994800.95	276742.11	3.58439	3.00000	1
6	300.0000	1830946.22	510197.97	6.77339	6.00000	1

Calibration Curve : y = (0.102764) + (1.126811)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998761

DIBROMOCHLOROMETHAN

Component Type : Single Peak Component
Retention Time : 23.830 min Search Window: 0.50 s, 0.50 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	28667.50	8408.99	0.10634	0.10000	1
2	10.0000	59037.00	16896.07	0.22780	0.20000	1
3	50.0000	290314.00	81008.67	1.00878	1.00000	1
4	100.0000	598366.00	164862.53	2.11034	2.00000	1
5	150.0000	868424.00	235143.39	3.12904	3.00000	1
6	300.0000	1634895.00	440155.43	6.04812	6.00000	1

Calibration Curve : y = (0.026758) + (1.011636)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999568

EDB

Component Type : Single Peak Component
Retention Time : 24.197 min Search Window: 0.50 s, 0.50 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	14499.00	4308.99	0.05378	0.10000	1
2	10.0000	29547.50	8756.66	0.11401	0.20000	1
3	50.0000	176476.00	50385.39	0.61322	1.00000	1
4	100.0000	363448.00	100863.94	1.28182	2.00000	1
5	150.0000	528827.00	143982.74	1.90543	3.00000	1
6	300.0000	1039821.00	292405.45	3.84671	6.00000	1

Calibration Curve : y = (-0.012458) + (0.642454)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999945

TETRACHLOROETHENE

Component Type : Single Peak Component
Retention Time : 24.488 min Search Window: 0.50 s, 0.50 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin

Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	58556.50	18613.91	0.21721	0.10000	1
2	10.0000	119062.00	36979.42	0.45942	0.20000	1
3	50.0000	529347.00	160887.08	1.83937	1.00000	1
4	100.0000	1053841.50	315148.25	3.71673	2.00000	1
5	150.0000	1536221.00	458192.56	5.53520	3.00000	1
6	300.0000	2697189.00	782021.70	9.97797	6.00000	1

Calibration Curve : y = (0.162294) + (1.675597)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996777

CFB

Component Type : Single Peak Component
Retention Time : 24.992 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	150266.50	49075.48	0.55740	1.00000	1
2	50.0000	145350.50	47043.32	0.56086	1.00000	1
3	50.0000	156074.00	48888.95	0.54232	1.00000	1
4	50.0000	161891.50	51363.91	0.57097	1.00000	1
5	50.0000	154415.08	49521.72	0.55638	1.00000	1
6	50.0000	150761.65	49640.88	0.55773	1.00000	1

Calibration Curve : y = (0.000000) + (0.557609)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998411

1,1,1,2-TCA

Component Type : Single Peak Component
Retention Time : 25.326 min Search Window: 0.50 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	63799.71	20356.80	0.23666	0.10000	1
2	10.0000	111390.58	36666.92	0.42982	0.20000	1
3	50.0000	539250.24	167349.74	1.87378	1.00000	1
4	100.0000	1058796.22	327240.06	3.73421	2.00000	1
5	150.0000	1550632.33	478619.08	5.58713	3.00000	1
6	300.0000	2598532.97	810294.33	9.61300	6.00000	1

Calibration Curve : y = (0.215722) + (1.623133)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.993071

CHLOROBNZN

Component Type : Single Peak Component
Retention Time : 25.417 min Search Window: 0.30 s, 0.20 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit

Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	20072.29	7140.67	0.07446	0.10000	1
2	10.0000	41429.42	13345.62	0.15986	0.20000	1
3	50.0000	215483.76	69644.48	0.74876	1.00000	1
4	100.0000	423754.28	137886.98	1.49451	2.00000	1
5	150.0000	605015.67	198357.77	2.17995	3.00000	1
6	300.0000	1258741.03	366287.29	4.65658	6.00000	1

Calibration Curve : y = (-0.022021) + (0.769778)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998975

BROMOFORM
Component Type : Single Peak Component
Retention Time : 26.017 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	17076.00	5422.86	0.06334	0.10000	1
2	10.0000	32248.00	10217.24	0.12443	0.20000	1
3	50.0000	195440.50	61008.35	0.67911	1.00000	1
4	100.0000	378462.00	113728.06	1.33478	2.00000	1
5	150.0000	581003.50	171426.25	2.09343	3.00000	1
6	300.0000	1034179.50	309069.30	3.82584	6.00000	1

Calibration Curve : y = (0.026554) + (0.645127)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997873

1,1,2,2-TCA
Component Type : Single Peak Component
Retention Time : 26.417 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	33126.90	10817.78	0.12288	0.10000	1
2	10.0000	58774.80	19684.25	0.22679	0.20000	1
3	50.0000	305471.41	103335.60	1.06145	1.00000	1
4	100.0000	553771.45	184083.24	1.95306	2.00000	1
5	150.0000	843796.97	278171.83	3.04031	3.00000	1
6	300.0000	1486482.26	488234.29	5.49908	6.00000	1

Calibration Curve : y = (0.080097) + (0.922187)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997314

1,2,3-TCP
Component Type : Single Peak Component
Retention Time : 26.578 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN

Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	24048.10	8045.87	0.08920	0.10000	1
2	10.0000	43344.70	14610.20	0.16725	0.20000	1
3	50.0000	243399.59	77630.77	0.84576	1.00000	1
4	100.0000	432983.05	138725.15	1.52706	2.00000	1
5	150.0000	668078.03	222159.26	2.40717	3.00000	1
6	300.0000	1195374.74	394181.58	4.42216	6.00000	1

Calibration Curve : y = (0.048899) + (0.741165)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998010

BROMOBN

Component Type : Single Peak Component
Retention Time : 27.080 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	9405.00	3070.50	0.03489	0.10000	1
2	10.0000	22000.00	7329.23	0.08489	0.20000	1
3	50.0000	134613.00	43397.52	0.46775	1.00000	1
4	100.0000	275001.50	88323.77	0.96989	2.00000	1
5	150.0000	428098.00	140051.60	1.54249	3.00000	1
6	300.0000	775949.00	258852.87	2.87054	6.00000	1

Calibration Curve : y = (0.000969) + (0.484851)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998531

2-CHLOROTOLUENE

Component Type : Single Peak Component
Retention Time : 27.401 min Search Window: 0.15 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	16083.97	5454.82	0.05966	0.10000	1
2	10.0000	30395.00	11284.31	0.11728	0.20000	1
3	50.0000	173065.35	63762.79	0.60137	1.00000	1
4	100.0000	317086.00	116647.87	1.11831	2.00000	1
5	150.0000	491712.31	176502.75	1.77170	3.00000	1
6	300.0000	891163.77	319959.69	3.29677	6.00000	1

Calibration Curve : y = (0.023393) + (0.552955)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998633

4-CHLOROTOLUENE

Component Type : Single Peak Component
Retention Time : 27.486 min Search Window: 1.10 s, 0.10 %
Reference Component:
Find Largest Peak in Window

Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	13025.03	4778.43	0.04832	0.10000	1
2	10.0000	28844.00	9919.99	0.11130	0.20000	1
3	50.0000	161044.65	57298.02	0.55960	1.00000	1
4	100.0000	340057.50	116522.01	1.19933	2.00000	1
5	150.0000	531955.43	179806.17	1.91670	3.00000	1
6	300.0000	928757.79	318798.85	3.43584	6.00000	1

Calibration Curve : y = (0.014602) + (0.582835)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996663

1,3-DCB
Component Type : Single Peak Component
Retention Time : 28.201 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	24498.24	8293.60	0.09087	0.10000	1
2	10.0000	49970.50	16694.69	0.19282	0.20000	1
3	50.0000	233856.13	89814.96	0.81260	1.00000	1
4	100.0000	507029.27	178256.53	1.78821	2.00000	1
5	150.0000	803516.75	279411.42	2.89517	3.00000	1
6	300.0000	1412682.07	491177.23	5.22607	6.00000	1

Calibration Curve : y = (0.018843) + (0.884053)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996929

1,4-DCB
Component Type : Single Peak Component
Retention Time : 28.273 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	26256.76	8355.68	0.09740	0.10000	1
2	10.0000	47819.00	16320.02	0.18452	0.20000	1
3	50.0000	264544.87	86686.44	0.91924	1.00000	1
4	100.0000	524610.73	186892.37	1.85022	2.00000	1
5	150.0000	810064.25	293708.91	2.91876	3.00000	1
6	300.0000	1412949.93	514207.48	5.22706	6.00000	1

Calibration Curve : y = (0.048049) + (0.882996)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996844

1,2-DCB
Component Type : Single Peak Component
Retention Time : 28.650 min Search Window: 0.20 s, 0.30 %
Reference Component:

Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	25963.00	8208.34	0.09631	0.10000	1
2	10.0000	50980.00	17087.43	0.19672	0.20000	1
3	50.0000	253659.00	86871.21	0.88141	1.00000	1
4	100.0000	524177.00	176626.84	1.84869	2.00000	1
5	150.0000	808620.00	275619.45	2.91356	3.00000	1
6	300.0000	1408977.00	481560.38	5.21236	6.00000	1

Calibration Curve : y = (0.044738) + (0.880966)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996719

1,2-DIBROMO-3-CHLOR
Component Type : Single Peak Component
Retention Time : 29.176 min Search Window: 0.20 s, 0.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	3497.00	1036.05	0.01297	0.10000	1
2	10.0000	7751.00	2420.80	0.02991	0.20000	1
3	50.0000	50977.00	15137.45	0.17713	1.00000	1
4	100.0000	111657.00	33648.47	0.39380	2.00000	1
5	150.0000	169589.00	50458.74	0.61105	3.00000	1
6	300.0000	334550.50	97777.32	1.23763	6.00000	1

Calibration Curve : y = (-0.013026) + (0.207616)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999510

1,2,4-TCB
Component Type : Single Peak Component
Retention Time : 30.901 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	14253.00	3476.22	0.05287	0.10000	1
2	10.0000	22196.00	6018.58	0.08565	0.20000	1
3	50.0000	163017.00	46617.56	0.56645	1.00000	1
4	100.0000	403600.60	114657.98	1.42344	2.00000	1
5	150.0000	611227.32	175938.47	2.20233	3.00000	1
6	300.0000	1231347.69	351611.10	4.55524	6.00000	1

Calibration Curve : y = (-0.075150) + (0.765205)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998410

HEXACHLOROBUTADIENE
Component Type : Single Peak Component
Retention Time : 31.355 min Search Window: 0.30 s, 0.30 %

Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	64003.60	15652.29	0.23742	0.10000	1
2	10.0000	97724.59	25059.10	0.37709	0.20000	1
3	50.0000	423180.48	110821.55	1.47046	1.00000	1
4	100.0000	907241.83	234202.49	3.19970	2.00000	1
5	150.0000	1221622.84	314318.81	4.40166	3.00000	1
6	300.0000	2319041.57	589417.61	8.57905	6.00000	1

Calibration Curve : y = (0.103527) + (1.426072)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998603

1,2,3-TCB
Component Type : Single Peak Component
Retention Time : 31.568 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Calibrating Area Ratio versus Amount Ratio Using a 1st Order Fit
Curve Will Include The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	17269.40	4328.54	0.06406	0.10000	1
2	10.0000	26673.91	7099.74	0.10293	0.20000	1
3	50.0000	156748.02	44502.86	0.54467	1.00000	1
4	100.0000	378867.57	104677.00	1.33621	2.00000	1
5	150.0000	545254.84	151410.29	1.96462	3.00000	1
6	300.0000	1054742.24	291373.70	3.90191	6.00000	1

Calibration Curve : y = (-0.021312) + (0.655575)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999056

alibration Replicate Lists:
omponent: DICHLORODIFLUOROMETH

Level : 1

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
8242.00	1423.22	5.0000	0.0306	0.1000	6/9/97	10:01 AM	R06D011.

Level : 2

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
23094.00	3954.98	10.0000	0.0891	0.2000	6/9/97	10:01 AM	R06D012.

Level : 3

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
137377.28	22031.96	50.0000	0.4774	1.0000	6/9/97	10:01 AM	R06D013.

Level : 4

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
270564.26	41826.00	100.0000	0.9542	2.0000	6/9/97	10:01 AM	R06D016.

Software Version: 3.3 <4B11>

Sample Name : MP1W 10PPB
Sample Number:
Operator :

Time : 7/3/97 02:31 PM
Study : 601/602-502.2

Instrument : OI-1/GC10A
AutoSampler : NONE
Rack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 2156575020 Data Acquisition Time: 7/3/97 07:23 AM
Delay Time : 0.00 min.
End Time : 32.00 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : H:\DATA\GC10A\S03C001.RAW
Result File : H:\DATA\GC10A\S03C001.RST
Instrument File: H:\DATA\GC10A\GC10A
Process File : H:\DATA\GC10A\PID-10A.prc
Sample File : H:\DATA\GC10A\PC9706A.smp
Sequence File : h:\data\gc10a\s03.seq

Inj. Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 1000.000000
Dilution Factor : 1.00

PID-GC#10A

Peak #	Component Name	Time [min]	Area [uV*sec]	RA*2 (%R)	Raw Amount	Adjusted Amount	Cal. Range
5	CIS-1,2-DCE	12.754	57021.00	87	43.620	8.724	
7	BENZENE	17.699	135376.50	92	45.775	9.155	
8	FB	18.629	85818.50	0	0.000	0.000	
9	TCE.	20.127	75947.00	91	45.503	9.101	
10	AAA-TFT	21.032	44596.00	104	51.955	10.391	+
14	TOLUENE	23.374	124884.00	92	45.778	9.156	
17	CFB	24.980	81048.00	97	48.745	9.749	
18	CHLOROBENZENE	25.402	122982.00	89	44.485	8.897	
19	ETHYLBENZENE	25.697	106670.00	92	45.751	9.150	
20	M,P-XYLENES	25.949	246047.00	184	91.981	18.396	
21	STYRENE	26.326	118922.59	87	43.591	8.718	
22	O-XYLENE	26.404	110916.41	92	45.842	9.168	
23	ISOPROPYLBENZENE	26.826	90324.00	93	46.345	9.269	
24	BROMOBENZENE	27.053	115588.50	86	43.169	8.634	
25	n-PROPYLBENZENE	27.299	91731.00	86	42.822	8.564	
26	2-CL-TOLUENE	27.381	107508.50	91	45.739	9.148	
27	4-CLOROTOLUENE	27.466	104959.50	89	44.738	8.948	
28	1,3,5-TRIMETHYLBE	27.617	142279.00	92	46.037	9.207	
29	t-BUTYLBENZENE	27.892	82726.36	93	46.720	9.344	
30	1,2,4-TRIMETHYLBE	28.014	105209.65	90	45.124	9.025	
31	sec-BUTYLBENZENE	28.117	90874.12	95	47.474	9.495	
32	1,3-DCBE	28.178	89930.46	84	41.757	8.351	
33	1,4-DCBE	28.251	88270.27	84	42.007	8.401	
34	p-ISOPROPYLTOLUEN	28.314	80975.64	88	43.849	8.770	
35	1,2-DCBE	28.623	77799.89	87	43.297	8.659	
36	n-BUTYLBENZENE	28.747	76636.11	82	41.218	8.244	
37	1,2,4-TCBE	30.870	27593.00	65	32.412	6.482	
38	CL6BUTADIENE	31.240	30793.28	68	34.191	6.838	
39	NAPHTHALENE	31.324	46036.72	83	41.481	8.296	
40	1,2,3 TCBE	31.537	28218.50	68	33.970	6.794	

Column: DBVRX 75m X .45mm ID X 2.55um film

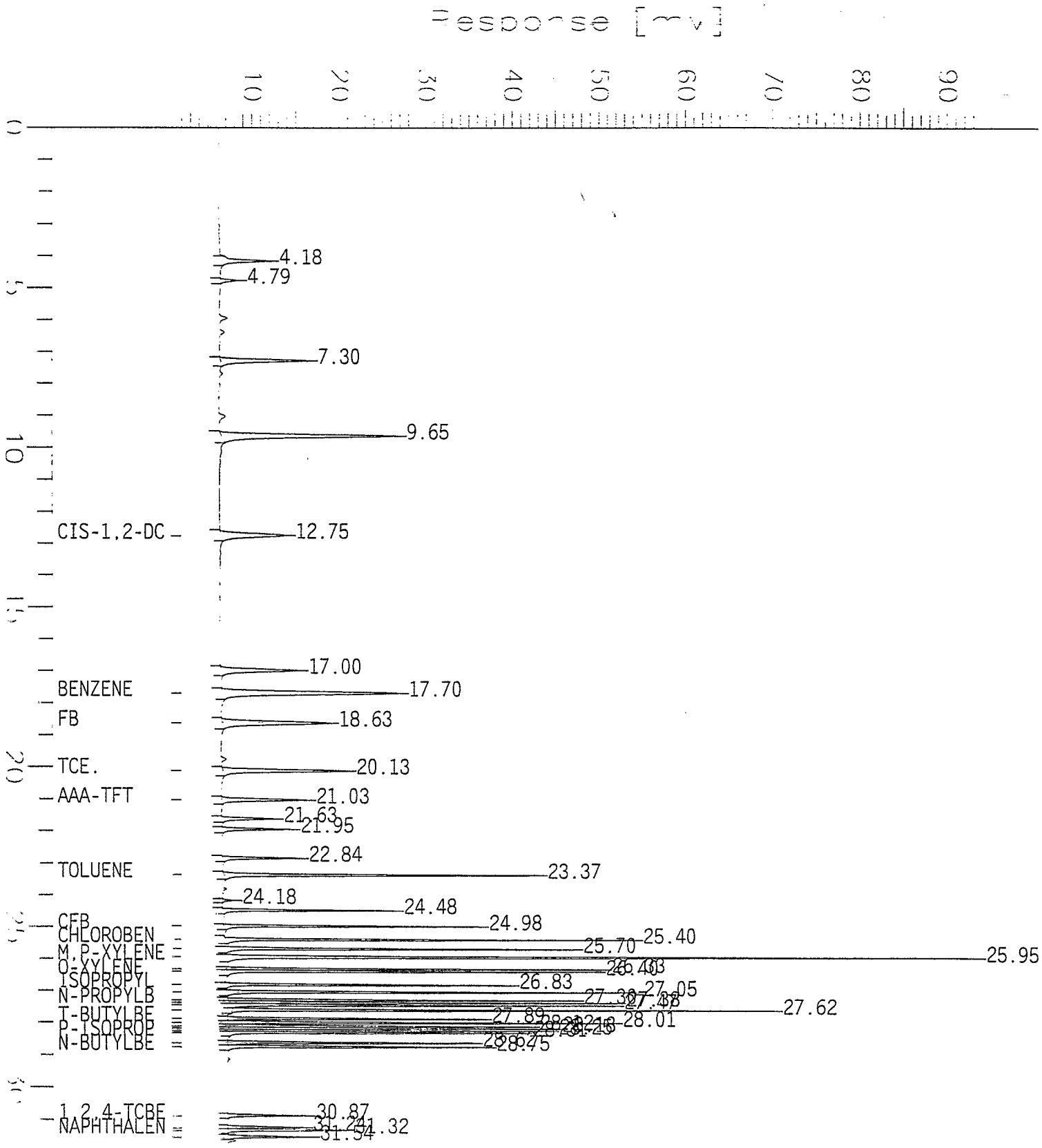
TEMP program:
5oC12min,5oC 60oC 2min,16oC 200oC 3.49min,30oc 220oC .5min

==========

AROMATICS

Sample Name : MP1W 10PPB
FileName : h:\data\gc10a\S03C001.raw
Method : GC10A
Start Time : 0.00 min End Time : 32.00 min
Scale Factor: 1.0 Plot Offset: 2 mV

Sample #: Page 1 of
Date : 7/3/97 02:31 PM
Time of Injection: 7/3/97 07:23 AM
Low Point : 1.85 mV High Point : 93.
Plot Scale: 91.2 mV



==========

Software Version: 3.3 <4B11>

Sample Name : MP1W 10PPB Time : 7/3/97 02:31 PM

Sample Number: Study : 601/602-502.2

Operator :

Instrument : OI-1/GC10A Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 2156575020 Data Acquisition Time: 7/3/97 07:23 AM

Delay Time : 0.00 min.

End Time : 32.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : H:\DATA\GC10A\S03D001.RAW

Result File : H:\DATA\GC10A\S03D001.RST

Instrument File: H:\DATA\GC10A\GC10A

Process File : H:\DATA\GC10A\ELCD-10A.prc

Sample File : H:\DATA\GC10A\EC9706A.smp

Sequence File : h:\data\gc10a\s03.seq

Inj. Volume : 1 ul Area Reject : 1000.000000

Sample Amount : 1.0000 Dilution Factor : 1.00

==========

ELCD-GC#10A

==========

==========

Peak #	Component Name	Time [min]	Area [uV*sec]	RA*2 (%R)	Raw Amount	Adjusted Amount	Cal. Range
1	DICHLORODIFLUOROME	3.676	123099.49	100	50.080	10.016	
2	CHLOROMETHANE	3.860	351880.07	103	51.488	10.298	
3	VINYL CHLORIDE	4.189	266571.44	107	53.447	10.689	
4	BROMOMETHANE	4.802	165356.63	100	49.825	9.965	
5	CHLOROETHANE	5.061	272845.37	103	51.341	10.268	
6	TRICHLOROFLUOROMET	6.139	314188.00	102	51.141	10.228	
7	1,1-DCE	7.307	422513.00	106	52.981	10.596	
8	MECL2	7.723	535355.00	105	52.650	10.530	
9	T-1,2-DCE	9.660	473026.00	104	52.231	10.446	
10	1,1-DCA	10.487	438814.50	104	51.903	10.381	
11	CIS-1,2-DCE	12.768	385582.00	100	50.005	10.001	
12	BROMOCHLOROMETHAN	13.350	284865.50	96	47.808	9.562	
13	CHLOROFORM	13.625	561209.00	103	51.502	10.300	
14	2,2-DCP	13.866	364944.50	105	52.609	10.522	
15	1,2-DCA	16.000	367437.28	96	48.085	9.617	
16	1,1,1-TCA	16.294	522770.61	106	52.931	10.586	
18	1,1-DICHLOROPROPEN	17.013	374434.02	105	52.351	10.470	
19	CARBON TETRACHLORI	17.500	567269.50	104	52.239	10.448	
20	BR2CH2	19.791	165467.04	90	44.992	8.998	
21	1,2-DCP	19.969	379384.99	102	50.970	10.194	
22	TCE	20.137	492537.08	104	51.986	10.397	
23	BROMODICHLOROMETHA	20.253	417562.89	102	50.811	10.162	
25	2-CVE	21.639	60074.50	73	36.531	7.306	
26	C-1,3-DCP	21.962	313730.00	93	46.369	9.274	
27	T-1,3-DCP	22.854	233943.28	87	43.287	8.657	
28	1,1,2-TCA	23.057	393879.01	104	52.050	10.410	
29	1CL2BRPRPN	23.336	250894.23	0	0.000	0.000	
30	1,3-DCP	23.483	317966.98	103	51.676	10.335	
31	DIBROMOCHLOROMETHA	23.832	259409.00	100	49.780	9.956	
32	EDB	24.199	147923.00	94	46.855	9.371	
33	TETRACHLOROETHENE	24.487	503569.00	110	55.049	11.010	
34	CFB	24.989	154336.00	110	55.159	11.032	+
35	1,1,1,2-TCA	25.322	491177.38	107	53.661	10.732	
36	CHLOROBNZN	25.413	196264.62	104	52.241	10.448	
37	BROMOFORM	26.013	159981.00	95	47.362	9.472	

Peak #	Component Name	Time [min]	Area [uV*sec]	RA*2 %R)	Raw Amount	Adjusted Amount	Cal. Range
38	1,1,2,2-TCA	26.409	248264.19	99	49.308	9.862	
39	1,2,3-TCP	26.569	192113.31	97	48.357	9.671	
40	BROMOBN	27.071	112007.00	92	45.938	9.188	
41	2-CHLOROTOLUENE	27.390	147289.67	102	50.969	10.194	
42	4-CHLOROTOLUENE	27.476	152138.33	102	50.768	10.154	
44	1,3-DCB	28.188	224248.75	99	49.485	9.897	
45	1,4-DCB	28.262	214812.25	92	45.761	9.152	
46	1,2-DCB	28.635	226042.00	97	48.595	9.719	
47	1,2-DIBROMO-3-CHLO	29.163	42120.00	87	43.567	8.713	
48	1,2,4-TCB	30.883	123015.50	74	36.948	7.390	
50	HEXACHLOROBUTADIEN	31.335	388560.68	101	50.670	10.134	
51	1,2,3-TCB	31.550	125778.82	80	39.861	7.972	

==========

Column: DB-VRX 75m X .45mm ID X 2.55um film

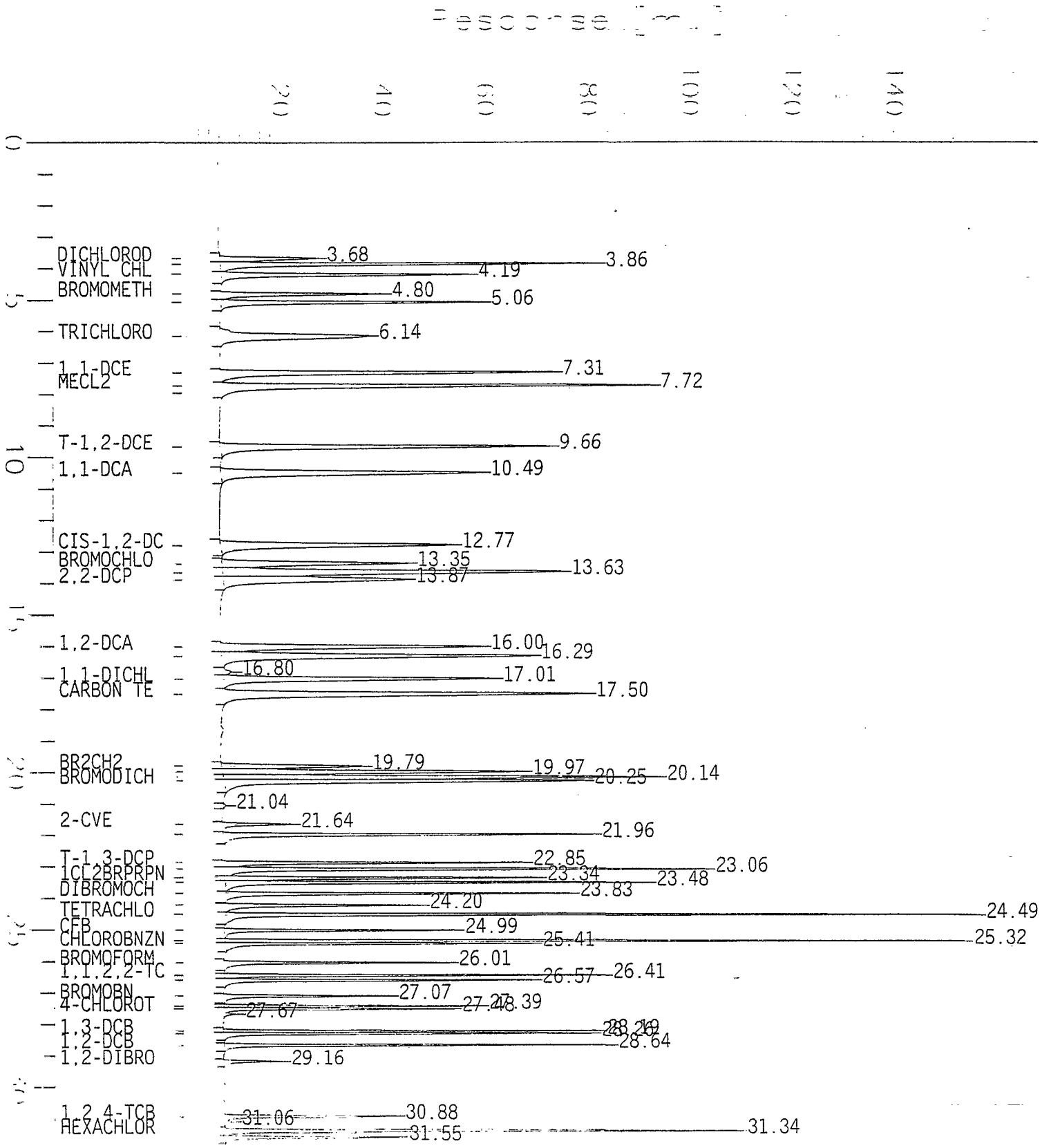
Temp Program:
35oC12min,5oC 60oC 2min,16oC 200oC 3.49min,30oC 220oC.5min

==========

Halogenated Volatile Organics

Sample Name : MP1W 10PPB
leName . h:\data\gc10a\S03D001.raw
thod : GC10A
Start Time : 0.00 min End Time : 32.00 min
Scale Factor: 1.0 Plot Offset: 0 mV

Sample #:
Date : 7/3/97 02:31 PM
Time of Injection: 7/3/97 07:23 AM
Low Point : 0.34 mV High Point : 155
Plot Scale: 155.1 mV



ATTACHMENT C

LEVEL III
QUALITY ASSURANCE/QUALITY CONTROL DOCUMENTATION

ATTACHMENT C

LEVEL III
QUALITY ASSURANCE/QUALITY CONTROL DOCUMENTATION
(Will be available upon request)