Harding Lawson Associates

Groundwater Monitoring Report - 1998
Utility Trailer Manufacturing Company
17300 East Chestnut Street
City of Industry, California

Engineering and Environmental Services

UTM 006449

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Prepared for

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February 10, 1999

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INTRODUCTION

This report presents groundwater depth measurement and groundwater sample analytical data compiled by Harding Lawson Associates (HLA) for the period from January 1 through December 31, 1998, for Utility Trailer Manufacturing Company (UTM), 17300 East Chestnut Street, City of Industry, California (Plate 1). These data are reported annually, as approved by the Regional Water Quality Control Board - Los Angeles Region (RWQCB). Although the RWQCB requires that groundwater sampling at UTM be performed only once per year, HLA performed two groundwater sampling events in 1998.

WORK CONDUCTED IN 1998

Groundwater Depth Measurement

Depth to groundwater was measured at two occasions during 1998 in each onsite monitoring well using an electric well sounder. It should be noted that groundwater depth data from September is not taken into account in this report due to anomalous measurements. All groundwater monitoring wells were re-sounded on November 6, 1998, in order to obtain accurate groundwater depth data for this report. Groundwater depth measurement data collected during 1998 are presented along with historical data in Table 1. Groundwater beneath the site occurs at an average depth of approximately 25 feet below ground surface (bgs), which is equivalent to an approximate elevation of 355 feet above mean sea level. The November 1998 data was used to produce the groundwater elevation contour map presented on Plate 2. The contour map indicates a northwesterly flow direction and a gradient with a magnitude of approximately 0.002 foot per foot. All of the available groundwater elevation data were used to produce the groundwater elevation hydrograph presented on Plate 3. Groundwater elevations had increased at the time of the sampling event in February compared to the last sampling event in 1997. However, at the time of the sampling event in November, groundwater elevations had decreased once again.

Groundwater Sampling

An HLA geologist collected groundwater samples for chemical analysis from site observation Wells MW-02 through MW-06 on February 18 and September 29, 1998. Prior to sampling, wells were purged of approximately four well volumes to remove standing water and to promote the flow of water from the surrounding formation into the well casing. Water was purged from each well by lowering a submersible pump to a depth approximately 5 to 10 feet below the static water level.

The pH, electric conductance, temperature, and turbidity of the purged groundwater were monitored during purging. Wells were purged until at least four well volumes were removed and turbidity measurements were below 5 nephelometric turbidity units (NTU). Well purge data from both sampling events are presented in Appendix A. All equipment was decontaminated prior to each use with Liqui-Nox detergent solution followed by potable and distilled water rinses.

Before any samples were collected, water levels in the well casings were allowed to recover to at least 80 percent of the original static water level observed prior to purging. To minimize agitation/volatilization, the samples were collected by gently lowering a disposable bailer into the groundwater. The collected groundwater was then immediately and carefully transferred into laboratory-prepared 40-milliliter glass volatile organic analysis vials. The vials were immediately sealed with screw caps, labeled, and placed in an iced field cooler for shipment to Del Mar Analytical (DMA), a California state-certified laboratory, in accordance with chain-of-custody protocol.

To check laboratory quality control, duplicate groundwater samples were collected from MW-03 during the February and September 1998 sampling events (labeled as MW-7 and MW-11 respectively). To assess the effectiveness of decontamination procedures, equipment blanks were collected from MW-3 during the February sampling event (labeled as MW-8) and MW-5 during the September sampling event (labeled as MW-10) by running distilled water over a decontaminated pump. Equipment blanks and duplicate samples were submitted for analysis along with original groundwater samples. All samples were analyzed for chlorinated volatile organic compounds (CVOCs) using EPA Method 8010 following RWQCB Well Investigation Program (WIP) requirements.

Groundwater Analytical Results

A summary of groundwater analytical results from the February and September 1998 sampling events is presented in Table 2. Analytical laboratory reports and associated quality assurance/quality control (QA/QC) data are presented in Appendix B. Six CVOCs were detected in the groundwater samples; the maximum concentrations detected in 1998 for four of these compounds are as follows:

- Tetrachloroethene (PCE) - 150 micrograms per liter (µg/l) in upgradient Well MW-03
- Trichloroethene (TCE) - 41 µg/l in upgradient Well MW-03
- 1,1-Dichloroethene (1,1-DCE) - 7.6 µg/l in Well MW-06
- 1,1,1-Trichloroethane (1,1,1-TCA) - 3.9 µg/l in upgradient Well MW-03

The relative percent differences (RPDs) between analytes for the duplicate sample and the original sample are presented in Table 3. RPDs for both sampling events were less than 15 percent. No CVOCs were detected above the reporting limit in either equipment blank sample. Analytical laboratory reports and QA/QC data from the laboratory analysis met acceptance criteria.

DISCUSSION

Plots of CVOC concentration and water elevation versus time for each well are presented on Plates 4 through 8. Isoconcentration contour maps of the average 1998 value for selected analytes at each well are presented on Plates 9 through 11. The following observations can be made regarding trends in individual site wells:

- MW-02 - Historically, PCE has been the predominant Method 8010 analyte detected in Well MW-02. The long-term decline trend of 1,1-DCE and 1,1,1-TCA continued through 1998. The concentrations of TCE in this well increased.

- MW-03 - CVOCs, predominantly PCE and TCE, continue to be detected in upgradient Well MW-03.

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- MW-04 - Concentrations of PCE have decreased in upgradient Well MW-04 during 1998 compared to previous years. TCE and 1,1-DCE concentrations in Well MW-04 had decreased by the February 18, 1998, sampling event and were below reporting limits at the September 29, 1998, sampling event.

- MW-05 - Decreases in CVOC concentrations in Well MW-05 were observed over 1998 when compared to data from 1997 with the exception of PCE, which remained the same.

- MW-06 - CVOC concentrations in samples collected from Well MW-06 remained generally within their historical ranges with the exception of PCE, which showed an increase in concentration.

A review of these data together with data collected from the Puente Valley Steering Committee (PVSC's) groundwater monitoring Well MW6-82, installed in the shallow groundwater system, upgradient of the UTM facility (Plate 1), supports the contention that the elevated concentrations of PCE, TCE, and trichlorofluoromethane (TCFM) observed in UTM Wells MW-03 and MW-02 are from a source upgradient of the UTM facility. Data from Puente Valley Operable Unit (PVOU) Well MW6-82 collected over the period 1995 to 1998 are presented in Table 4 together with the data from MW-02 and MW-03 collected over a corresponding time period. The PVOU well data are essentially the same as data from MW-03.

The downgradient trends of the average concentrations from 1995 to 1998 of the primary products (PCE and TCE), breakdown products (1,1-DCE, cis-1,2-DCE, and 1,1-DCA), and TCFM are presented on Plate 12. Concentrations of PCE+TCE as well as TCFM are higher in the upgradient PVOU well and clearly decrease downgradient across the UTM facility. The concentration of breakdown products, generated by the degradation of the primary products, is observed to increase downgradient of the PVOU well. These trends are consistent and representative of a source of PCE/TCE and TCFM being located upgradient of the UTM facility.

REFERENCES

Harding Lawson Associates. 1997. *Groundwater monitoring - 1996, Utility Trailer Manufacturing Company, 17300 East Chestnut Street, City of Industry, California.*

The Puente Valley Operable Unit. 1995. *Draft remedial investigation report, Puente Valley Operable Unit Interim RI/FS, Camp Dresser and McKee Incorporated*, Table 4-4.

TABLES

TABLES

Table 1. Groundwater Depth Measurement Data
Utility Trailer Manufacturing Company

WELL NUMBER	SURVEYED ELEVATION (FEET MSL)*	DATE	DEPTH TO GROUNDWATER (FEET)**	EQUIVALENT GROUNDWATER ELEVATION (FEET MSL)
MW-02	376.66	6/1/89	22.95	353.71
		8/28/89	23.03	353.63
		9/15/89	23.05	353.61
		10/11/89	23.13	353.53
		11/16/89	23.20	353.46
		12/11/89	23.25	353.41
		1/15/90	23.26	353.40
		2/12/90	23.16	353.50
		3/9/90	23.07	353.59
		4/12/90	22.95	353.71
		5/14/90	23.48	353.18
		6/7/90	23.42	353.24
		7/10/90	23.35	353.31
		8/16/90	23.80	352.86
		9/11/90	23.47	353.19
		1/31/91	24.28	352.38
		2/27/91	24.52	352.14
		3/7/91	23.80	352.86
		4/8/91	23.36	353.30
		5/7/91	23.60	353.06
		6/7/91	23.76	352.90
		7/10/91	24.04	352.62
		8/8/91	24.22	352.44
		9/6/91	24.02	352.64
		10/7/91	23.77	352.89
		11/6/91	24.00	352.66
		12/5/91	24.10	352.56
		4/9/92	23.16	353.50
		5/7/92	23.12	353.54
		6/9/92	22.75	353.91
		7/7/92	22.90	353.76
		8/7/92	23.57	353.09
		9/8/92	23.50	353.16
		10/7/92	23.67	352.99
		11/4/92	23.66	353.00
		12/4/92	23.65	353.01
		1/8/93	22.61	354.05
		2/5/93	21.50	355.16
		3/4/93	20.99	355.67
		4/7/93	21.42	355.24
		5/4/93	21.60	355.06
		6/4/93	21.55	355.11
		7/6/93	21.60	355.06

Table 1. Groundwater Depth Measurement Data
Utility Trailer Manufacturing Company

WELL NUMBER	SURVEYED ELEVATION (FEET MSL)*	DATE	DEPTH TO GROUNDWATER (FEET)**	EQUIVALENT GROUNDWATER ELEVATION (FEET MSL)
MW-02	376.66	8/2/93	21.96	354.70
		9/7/93	21.74	354.92
		10/4/93	21.83	354.83
		11/4/93	21.86	354.80
		12/3/93	22.38	354.28
		1/10/94	22.43	354.23
		2/9/94	22.40	354.26
		3/15/94	22.55	354.11
		4/8/94	22.45	354.21
		5/9/94	22.40	354.26
		6/8/94	22.56	354.10
		7/11/94	22.70	353.96
		8/3/94	22.84	353.82
		9/1/94	23.10	353.56
		10/4/94	23.02	353.64
		11/3/94	22.90	353.76
		12/29/94	22.68	353.98
		1/19/95	22.20	354.46
		3/16/95	21.85	354.81
		6/20/95	22.12	354.54
		7/12/95	22.19	354.47
		9/14/95	22.42	354.24
		12/4/95	22.42	354.24
		3/11/96	22.16	354.50
		6/4/96	22.31	354.35
		9/16/96	22.84	353.82
		12/2/96	22.71	353.95
		3/25/97	22.30	354.36
		6/20/97	22.58	354.08
		9/30/97	22.52	354.14
		12/10/97	22.25	354.41
		2/18/98	21.66	355.00
		*9/29/98	22.08	354.58
		11/6/98	**23.39**	**353.27**

*Due to anomalous groundwater depth measurements obtained on 9/29/98, wells were re-measured on 11/6/98.

Table 1. Groundwater Depth Measurement Data
Utility Trailer Manufacturing Company

WELL NUMBER	SURVEYED ELEVATION (FEET MSL)*	DATE	DEPTH TO GROUNDWATER (FEET)**	EQUIVALENT GROUNDWATER ELEVATION (FEET MSL)
MW-03	378.03	6/1/89	21.77	356.26
		8/28/89	21.82	356.21
		9/15/89	21.88	356.15
		10/11/89	21.95	356.08
		11/16/89	22.02	356.01
		12/11/89	22.04	355.99
		1/15/90	22.04	355.99
		2/12/90	21.94	356.09
		3/9/90	21.77	356.26
		4/12/90	21.74	356.29
		5/14/90	22.15	355.88
		6/7/90	22.10	355.93
		7/10/90	22.09	355.94
		8/16/90	22.39	355.64
		9/11/90	22.16	355.87
		1/31/91	22.74	355.29
		2/27/91	22.92	355.11
		3/7/91	22.33	355.70
		4/8/91	21.93	356.10
		5/7/91	22.15	355.88
		6/7/91	22.46	355.57
		7/10/91	22.54	355.49
		8/8/91	22.67	355.36
		9/6/91	22.55	355.48
		10/7/91	22.37	355.66
		11/6/91	22.40	355.63
		12/5/91	22.61	355.42
		4/9/92	21.83	356.20
		5/7/92	21.97	356.06
		6/9/92	21.41	356.62
		7/7/92	21.51	356.52
		8/7/92	22.22	355.81
		9/8/92	22.16	355.87
		10/7/92	22.29	355.74
		11/4/92	22.30	355.73
		12/4/92	22.30	355.73
		1/8/93	21.54	356.49
		2/5/93	20.48	357.55
		3/4/93	20.05	357.98
		4/7/93	20.35	357.68
		5/14/93	20.55	357.48
		6/4/93	20.54	357.49
		7/6/93	20.55	357.48

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Utility Trailer Manufacturing Company

WELL NUMBER	SURVEYED ELEVATION (FEET MSL)*	DATE	DEPTH TO GROUNDWATER (FEET)**	EQUIVALENT GROUNDWATER ELEVATION (FEET MSL)
MW-03	378.03	8/2/93	20.89	357.14
		9/7/93	20.65	357.38
		10/4/93	20.74	357.29
		11/4/93	20.79	357.24
		12/3/93	21.37	356.66
		1/10/94	21.44	356.59
		2/9/94	21.45	356.58
		3/15/94	21.52	356.51
		4/8/94	21.43	356.60
		5/9/94	21.35	356.68
		6/8/94	21.53	356.50
		7/11/94	21.67	356.36
		8/3/94	21.77	356.26
		9/1/94	22.05	355.98
		10/4/94	21.95	356.08
		11/3/94	21.85	356.18
		12/29/94	21.62	356.41
		1/19/95	21.15	356.88
		3/16/95	20.75	357.28
		6/20/95	21.04	356.99
		7/12/95	21.12	356.91
		9/14/95	21.34	356.69
		12/4/95	21.45	356.58
		3/11/96	21.17	356.86
		6/4/96	21.29	356.74
		9/16/96	21.74	356.29
		12/2/96	21.66	356.37
		3/25/97	21.27	356.76
		6/20/97	21.53	356.50
		9/30/97	21.53	356.50
		12/10/97	21.26	356.77
		2/18/98	20.69	357.34
		*9/29/98	21.07	356.96
		11/6/98	**23.41**	**354.62**

*Due to anomalous groundwater depth measurements obtained on 9/29/98, wells were re-measured on 11/6/98.

Table 1. Groundwater Depth Measurement Data
Utility Trailer Manufacturing Company

WELL NUMBER	SURVEYED ELEVATION (FEET MSL)*	DATE	DEPTH TO GROUNDWATER (FEET)**	EQUIVALENT GROUNDWATER ELEVATION (FEET MSL)
MW-04	383.21	6/1/89	27.34	355.87
		8/28/89	27.41	355.80
		9/15/89	27.43	355.78
		10/11/89	27.49	355.72
		11/16/89	27.58	355.63
		12/11/89	27.65	355.56
		1/15/90	27.68	355.53
		2/12/90	27.61	355.60
		3/9/90	27.47	355.74
		4/12/90	27.56	355.65
		5/14/90	27.89	355.32
		6/7/90	27.94	355.27
		7/10/90	27.93	355.28
		8/16/90	28.14	355.07
		9/11/90	28.06	355.15
		1/31/91	28.56	354.65
		2/27/91	28.77	354.44
		3/7/91	28.19	355.02
		4/8/91	27.70	355.51
		5/7/91	27.94	355.27
		6/7/91	28.27	354.94
		7/10/91	28.39	354.82
		8/8/91	28.48	354.73
		9/6/91	28.52	354.69
		10/7/91	28.37	354.84
		11/6/91	28.44	354.77
		12/5/91	28.56	354.65
		4/9/92	27.61	355.60
		5/7/92	27.78	355.43
		6/9/92	27.33	355.88
		7/7/92	27.53	355.68
		8/7/92	28.09	355.12
		9/8/92	27.99	355.22
		10/7/92	28.14	355.07
		11/4/92	28.20	355.01
		12/4/92	28.18	355.03
		1/8/93	27.19	356.02
		2/5/93	25.88	357.33
		3/4/93	25.35	357.86
		4/7/93	25.75	357.46
		5/14/93	26.00	357.21
		6/4/93	25.96	357.25
		7/6/93	26.02	357.19
		8/2/93	26.23	356.98

Table 1. Groundwater Depth Measurement Data
Utility Trailer Manufacturing Company

WELL NUMBER	SURVEYED ELEVATION (FEET MSL)*	DATE	DEPTH TO GROUNDWATER (FEET)**	EQUIVALENT GROUNDWATER ELEVATION (FEET MSL)
MW-04	383.21	9/7/93	26.22	356.99
		10/4/93	26.35	356.86
		11/4/93	26.90	356.31
		12/3/93	26.82	356.39
		1/10/94	26.90	356.31
		2/9/94	26.92	356.29
		3/15/94	27.04	356.17
		4/8/94	26.89	356.32
		5/9/94	26.93	356.28
		6/8/94	27.16	356.05
		7/11/94	27.22	355.99
		8/3/94	27.36	355.85
		9/1/94	---	---
		10/4/94	27.56	355.65
		11/3/94	26.96	356.25
		12/29/94	27.35	355.86
		1/19/95	26.63	356.58
		3/16/95	26.25	356.96
		6/20/95	26.44	356.77
		7/12/95	26.58	356.63
		9/14/95	26.83	356.38
		12/4/95	26.92	356.29
		3/11/96	26.67	356.54
		6/4/96	26.80	356.41
		9/16/96	27.41	355.80
		12/2/96	27.26	355.95
		3/25/97	26.80	356.41
		6/20/97	27.14	356.07
		9/30/97	27.00	356.21
		12/10/97	26.74	356.47
		2/18/98	26.13	357.08
		*9/29/98	26.46	356.75
		11/6/98	**27.75**	**355.46**

*Due to anomalous groundwater depth measurements obtained on 9/29/98, wells were re-measured on 11/6/98.

Table 1. Groundwater Depth Measurement Data
Utility Trailer Manufacturing Company

WELL NUMBER	SURVEYED ELEVATION (FEET MSL)*	DATE	DEPTH TO GROUNDWATER (FEET)**	EQUIVALENT GROUNDWATER ELEVATION (FEET MSL)
MW-05	380.61	6/1/89	25.71	354.90
		8/28/89	25.68	354.93
		9/15/89	25.72	354.89
		10/11/89	25.76	354.85
		11/16/89	25.87	354.74
		12/11/89	25.96	354.65
		1/15/90	25.98	354.63
		2/12/90	25.92	354.69
		3/9/90	25.81	354.80
		4/12/90	25.88	354.73
		5/14/90	26.25	354.36
		6/7/90	26.31	354.30
		7/10/90	26.28	354.33
		8/16/90	26.58	354.03
		9/11/90	26.40	354.21
		1/31/91	26.97	353.64
		2/27/91	27.17	353.44
		3/7/91	26.54	354.07
		4/8/91	26.11	354.50
		5/7/91	26.29	354.32
		6/7/91	26.62	353.99
		7/10/91	26.75	353.86
		8/8/91	26.60	354.01
		9/6/91	26.90	353.71
		10/7/91	26.77	353.84
		11/6/91	26.83	353.78
		12/5/91	26.92	353.69
		4/9/92	25.90	354.71
		5/7/92	26.08	354.53
		6/9/92	25.42	355.19
		7/7/92	25.63	354.98
		8/7/92	26.43	354.18
		9/8/92	26.31	354.30
		10/7/92	26.44	354.17
		11/4/92	26.53	354.08
		12/4/92	26.49	354.12
		1/8/93	25.43	355.18
		2/5/93	24.09	356.52
		3/4/93	23.54	357.07
		4/7/93	24.03	356.58
		5/14/93	24.27	356.34
		6/4/93	23.98	356.63
		7/6/93	24.33	356.28
		8/2/93	24.60	356.01

Table 1. Groundwater Depth Measurement Data
Utility Trailer Manufacturing Company

WELL NUMBER	SURVEYED ELEVATION (FEET MSL)*	DATE	DEPTH TO GROUNDWATER (FEET)**	EQUIVALENT GROUNDWATER ELEVATION (FEET MSL)
MW-05	380.61	9/7/93	24.28	356.33
		10/4/93	24.42	356.19
		11/4/93	24.48	356.13
		12/3/93	25.06	355.55
		1/10/94	25.16	355.45
		2/9/94	25.18	355.43
		3/15/94	25.29	355.32
		4/8/94	25.15	355.46
		5/9/94	25.50	355.11
		6/8/94	25.42	355.19
		7/11/94	25.49	355.12
		8/3/94	25.64	354.97
		9/1/94	25.93	354.68
		10/4/94	25.85	354.76
		11/3/94	25.86	354.75
		12/29/94	25.59	355.02
		1/19/95	24.80	355.81
		3/16/95	24.45	356.16
		6/20/95	24.70	355.91
		7/12/95	24.85	355.76
		9/14/95	25.06	355.55
		12/4/95	25.15	355.46
		3/11/96	24.81	355.80
		6/4/96	25.02	355.59
		9/16/96	25.62	354.99
		12/2/96	25.48	355.13
		3/25/97	25.04	355.57
		6/20/97	25.36	355.25
		9/30/97	25.20	355.41
		12/10/97	24.92	355.69
		2/18/98	24.35	356.26
		*9/29/98	38.49	342.12
		11/6/98	**25.95**	**354.66**

*Due to anomalous groundwater depth measurements obtained on 9/29/98, wells were re-measured on 11/6/98.

Table 1. Groundwater Depth Measurement Data
Utility Trailer Manufacturing Company

WELL NUMBER	SURVEYED ELEVATION (FEET MSL)*	DATE	DEPTH TO GROUNDWATER (FEET)**	EQUIVALENT GROUNDWATER ELEVATION (FEET MSL)
MW-06	379.79	6/1/89	24.04	355.75
		8/28/89	24.07	355.72
		9/15/89	24.12	355.67
		10/11/89	24.22	355.57
		11/16/89	24.26	355.53
		12/11/89	24.34	355.45
		1/15/90	24.35	355.44
		2/12/90	24.26	355.53
		3/9/90	24.11	355.68
		4/12/90	24.14	355.65
		5/14/90	24.52	355.27
		6/7/90	24.54	355.25
		7/10/90	24.51	355.28
		8/16/90	24.77	355.02
		9/11/90	24.63	355.16
		1/31/91	25.20	354.59
		2/27/91	25.38	354.41
		3/7/91	24.77	355.02
		4/8/91	24.35	355.44
		5/7/91	24.54	355.25
		6/7/91	24.88	354.91
		7/10/91	24.98	354.81
		8/8/91	24.92	354.87
		9/6/91	25.06	354.73
		10/7/91	24.89	354.90
		11/6/91	24.97	354.82
		12/5/91	25.11	354.68
		4/9/92	24.22	355.57
		5/7/92	24.39	355.40
		6/9/92	23.93	355.86
		7/7/92	24.09	355.70
		8/7/92	24.65	355.14
		9/8/92	24.15	355.64
		10/7/92	24.72	355.07
		11/4/92	24.79	355.00
		12/4/92	24.75	355.04
		1/8/93	23.95	355.84
		2/5/93	22.67	357.12
		3/4/93	22.19	357.60
		4/7/93	22.55	357.24
		5/14/93	22.79	357.00
		6/4/93	22.76	357.03
		7/6/93	22.76	357.03
		8/2/93	23.04	356.75
		9/7/93	22.98	356.81

Table 1. Groundwater Depth Measurement Data
Utility Trailer Manufacturing Company

WELL NUMBER	SURVEYED ELEVATION (FEET MSL)*	DATE	DEPTH TO GROUNDWATER (FEET)**	EQUIVALENT GROUNDWATER ELEVATION (FEET MSL)
MW-06	379.79	10/4/93	23.09	356.70
		11/4/93	23.14	356.65
		12/3/93	23.57	356.22
		1/10/94	23.54	356.25
		2/9/94	23.69	356.10
		3/15/94	23.76	356.03
		4/8/94	23.64	356.15
		5/9/94	23.64	356.15
		6/8/94	23.85	355.94
		7/11/94	23.93	355.86
		8/3/94	24.09	355.70
		9/1/94	24.31	355.48
		10/4/94	24.25	355.54
		11/3/94	24.23	355.56
		12/29/94	23.92	355.87
		1/19/95	23.30	356.49
		3/16/95	23.00	356.79
		6/23/95	23.22	356.57
		7/12/95	23.29	356.50
		9/14/95	23.53	356.26
		12/4/95	23.62	356.17
		3/11/96	23.31	356.48
		6/4/96	23.48	356.31
		9/16/96	24.03	355.76
		12/2/96	23.88	355.91
		3/25/97	23.48	356.31
		6/20/97	23.78	356.01
		9/30/97	23.70	356.09
		12/10/97	23.44	356.35
		2/18/98	22.92	356.87
		*9/29/98	36.77	343.02
		11/6/98	**24.71**	**355.08**

*Due to anomalous groundwater depth measurements obtained on 9/29/98, wells were re-measured on 11/6/98.

Table 2. Groundwater Chemical Analytical Data
Utility Trailer Manufacturing Company
EPA Test Method 8010

Well No.	Date	PCE (ug/L)	TCE (ug/L)	1,1-DCE (ug/L)	1,1,1-TCA (ug/L)	1,1,2-TCA (ug/L)	1,1-DCA (ug/L)	1,2-DCA (ug/L)	cis-1,2-DCE (ug/L)	TCFM (ug/L)	Chloroform (ug/L)
MW-02	9/16/96	68	12	3.2	1.5	(0.5)	5.4	(0.5)	5	0.91	(0.5)
MW-02	3/25/97	36	7.3	2	1.2	(0.5)	5.5	(0.5)	3.9	(0.5)	(0.5)
MW-02	9/30/97	45	6.3	1	1	(0.5)	1.9	(0.5)	3.4	(1.0)	(0.5)
MW-02	2/18/98	62	5.3	1.1	0.68	(0.5)	4.8	(0.5)	3.1	(1.0)	(0.5)
MW-02	9/29/98	67	21	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	3.2	(5.0)	(2.5)
MW-03	9/16/96	120	36	7.5	11	(1.0)	(1.0)	(1.0)	7.3	5.3	(1.0)
MW-03	3/25/97	82	21	5.8	7.3	(0.5)	0.66	(0.5)	7	(0.5)	0.78
MW-03 Duplicate	3/25/97	85	20	5.7	6.9	(0.5)	0.66	(0.5)	6.9	(0.5)	0.74
MW-03	9/30/97	140	31	8.2	7.1	(1.0)	(1.0)	(1.0)	8.1	3.5	(1.0)
MW-03	2/18/98	150	22	5.5	3.9	(0.5)	0.6	(0.5)	6.8	4	0.69
MW-03 Duplicate	2/18/98	140	22	6.1	4	(0.5)	0.67	(0.5)	7.4	4.4	0.73
MW-03	9/29/98	63	41	3.6	2.1	(1.0)	(1.0)	(1.0)	3.6	(2.0)	(1.0)
MW-03 Duplicate	9/29/98	68	41	3.5	(2.5)	(2.5)	(2.5)	(2.5)	3.1	(5.0)	(2.5)
MW-04	9/16/96	250	7.1	53	1.25	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	3.4
MW-04 Duplicate	9/16/96	250	6.4	54	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)
MW-04	3/25/97	200	7	22	0.87	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
MW-04	9/30/97	130	3.3	11	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(2.0)	(1.0)
MW-04 Duplicate	9/30/97	140	3.1	9.6	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(2.0)	(1.0)
MW-04	2/18/98	51	1.3	3.1	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(1.0)	(0.5)
MW-04	9/29/98	57	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(2.5)	(5.0)	(2.5)
MW-05	9/16/96	40	4.8	31	7.3	(0.5)	11	(0.5)	(0.5)	(0.5)	(0.5)
MW-05	3/25/97	55	9.6	47	13	(0.5)	20	(0.5)	0.89	(0.5)	(0.5)
MW-05	9/30/97	30	3.7	16	3.8	(0.5)	9.1	(0.5)	0.89	(1.0)	(0.5)
MW-05	2/18/98	25	2.3	4.1	1.2	(0.5)	3.8	(0.5)	(0.5)	(1.0)	(0.5)
MW-05	9/29/98	30	3.1	7.3	1.5	(0.50)	6.7	(0.50)	(0.50)	(1.0)	(0.50)
MW-06	9/16/96	54	8.5	12	8.4	(0.5)	3.3	(0.5)	(0.5)	(0.5)	(0.5)
MW-06	3/25/97	54	9.5	10	5.6	(0.5)	2.7	(0.5)	(0.5)	(0.5)	(0.5)
MW-06	9/30/97	45	6.2	6.5	2.6	(0.5)	1.2	(0.5)	(0.5)	(1.0)	(0.5)
MW-06	2/18/98	64	6.7	5.6	2.1	(0.5)	1.1	(0.5)	(0.5)	(1.0)	(0.5)
MW-06	9/29/98	71	6.5	7.6	2.2	(1.3)	(1.3)	(1.3)	(1.3)	(2.5)	(1.3)
equipment blank	9/16/96	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
equipment blank	3/25/97	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
equipment blank	9/30/97	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(1.0)	(0.5)
equipment blank	2/18/98	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(1.0)	(0.5)
equipment blank	9/29/98	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(1.0)	(0.5)
California MCL		5	5	6	200	32	5	0.5	6	150	100#

( ) indicates compound not detected above enclosed reporting limit.
ug/L=micrograms per liter.
PCE=tetrachloroethene, TCE=trichloroethene, DCE=dichloroethene, TCA=trichloroethane, DCA=dichloroethane, TCFM=trichlorofluoromethane
MCL=maximum contaminant level ; # = for total trihalomethanes

Table 3. Relative Percent Difference of Quality Control Sample
Utility Trailer Manufacturing Company

Well No.	Date	PCE (ug/L)	TCE (ug/L)	1,1-DCE (ug/L)	1,1,1-TCA (ug/L)	1,1,2-TCA (ug/L)	1,1-DCA (ug/L)	1,2-DCA (ug/L)	cis-1,2-DCE (ug/L)	TCFM (ug/L)	Chloroform (ug/L)
MW-03	2/18/98	150	22	5.5	3.9	(0.5)	0.6	(0.5)	6.8	4	0.69
MW-03 Duplicate	2/18/98	140	22	6.1	4	(0.5)	0.67	(0.5)	7.4	4.4	0.73
RPD	**2/18/98**	**6.90%**	**0.00%**	**10.34%**	**2.53%**	**N/A**	**11.02%**	**N/A**	**8.45%**	**N/A**	**5.63%**
MW-03	9/29/98	63	41	3.6	2.1	(1.0)	(1.0)	(1.0)	3.6	(2.0)	(1.0)
MW-03 Duplicate	9/29/98	68	41	3.5	(2.5)	(2.5)	(2.5)	(2.5)	3.1	(5.0)	(2.5)
RPD	**9/29/98**	**7.63%**	**0.00%**	**2.82%**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

( ) indicates compound not detected above enclosed reporting limit.
ug/L=micrograms per liter.
PCE=tetrachloroethene, TCE=trichloroethene, DCE=dichloroethene, TCA=trichloroethane, DCA=dichloroethane
TCFM=trichlorofluoromethane
NA = RPD is not applicable, compound not detected at or above enclosed reporting limit.

Table 4. Groundwater Chemical Analytical Data from PVOU Well MW6-82 and UTM Wells MW-3 and MW-2
Utility Trailer Manufacturing Company

		Primary Products		Combined	Breakdown Products			Combined	
		PCE	TCE	PCE/TCE	1,1-DCA	cis-1,2-DCE	1,1-DCE	DCA/DCE's	TCFM
Well No.	Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW6-82	5/95	160	31	191	0.38	9.1	4.9	14.4	10
MW6-82	8/95	160	39	199	(0.32)	7.9	6.5	14.6	7.6
MW6-82	10/95	88	35	123	0.8	6.8	4.4	12.0	5.6
MW6-82	7/97	130	22	152	0.6	4.9	5.6	11.1	6.7
MW6-82	2/98	98	13	111	0.44	4.5	3.2	8.1	6.0
MW6-82	7/98	92	57	149	1.4	6.1	8.2	15.7	3.7
Average				154				12.6	7
MW-03	7/95	100	58	158	1.3	6.1	5.2	12.6	6.4
MW-03	9/95	87	40	127	1.3	8.4	6.5	16.2	4.7
MW-03	3/96	140	40	180	2.1	6.6	6.0	14.7	4.8
MW-03	3/97	82	21	103	0.66	7.0	5.8	13.5	(0.5)
MW-03	9/97	140	31	171	(1.0)	8.1	8.2	16.8	3.5
MW-03	2/98	150	22	172	0.6	6.8	5.5	12.9	4.0
MW-03	9/98	63	41	104	(1.0)	3.6	3.6	7.7	(2.0)
Average				145				13.5	3.5
MW-02	7/95	97	15	112	19	4.1	10	33	3.1
MW-02	9/95	120	19	139	13	4.0	11	28	2.0
MW-02	3/96	94	17	111	57	5.9	19	82	0.5
MW-02	3/97	36	7.3	43.3	5.5	3.9	2.0	11.4	(0.5)
MW-02	9/97	45	6.3	51.3	1.9	3.4	1.0	6.3	(1.0)
MW-02	2/98	62	5.3	67.3	4.8	3.1	1.1	9.0	(1.0)
MW-02	9/98	67	21	88	(2.5)	3.2	(2.5)	5.7	(5.0)
Average				87				25	1.0

( ) indicates compound not detected above enclosed reporting limit.
ug/L=micrograms per liter.
PCE=tetrachloroethene, TCE=trichloroethene, DCE=dichloroethene, DCA=dichloroethane, TCFM=trichlorofluoromethane

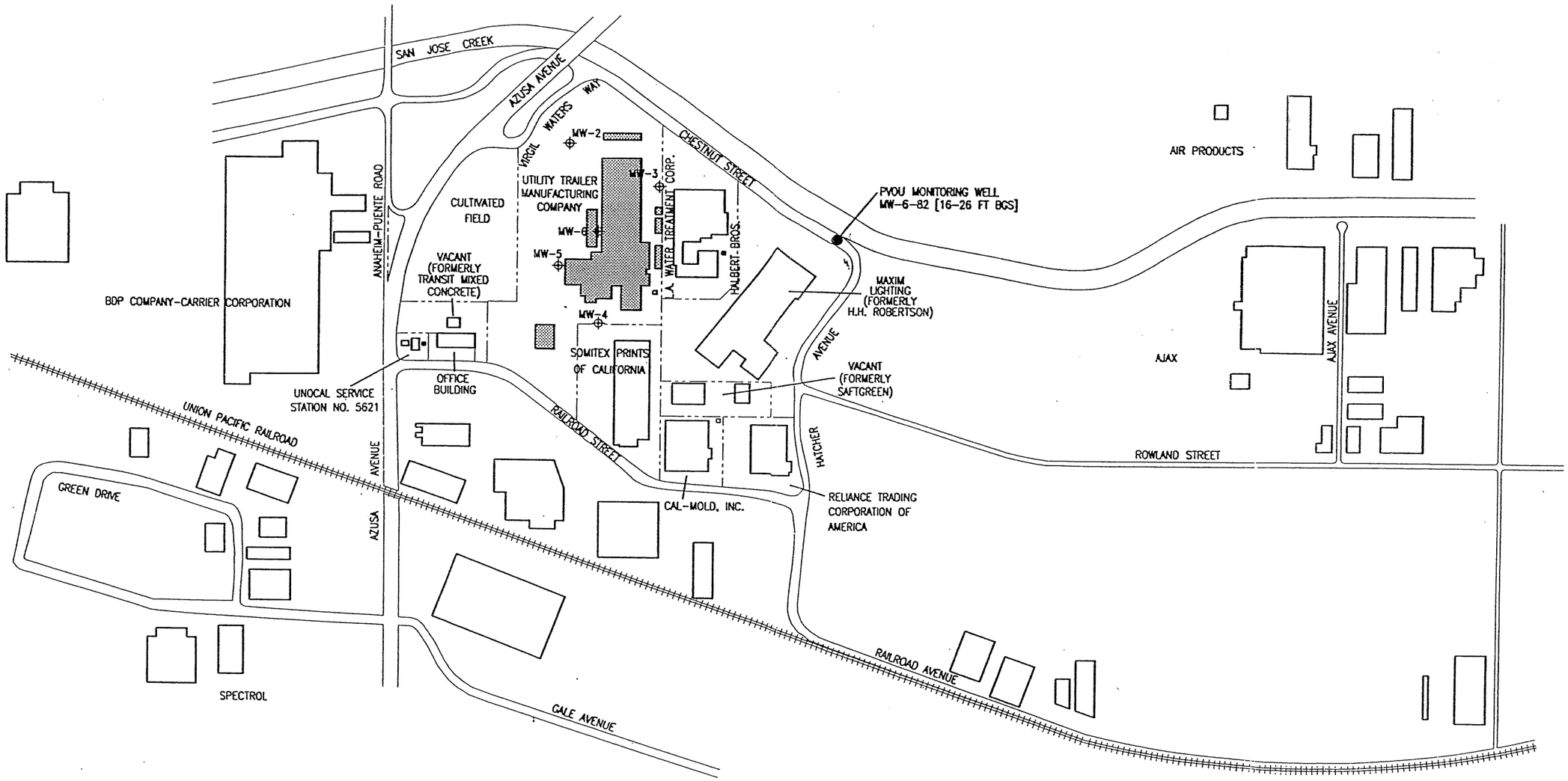
UTM 006472

PLATES

PLATES

R14 PLOT 1 = 1 TO 4MV

30987\4\10HBS1



EXPLANATION

MW-2 ⊕ UTILITY TRAILER GROUNDWATER MONITORING WELL

UTM 006474

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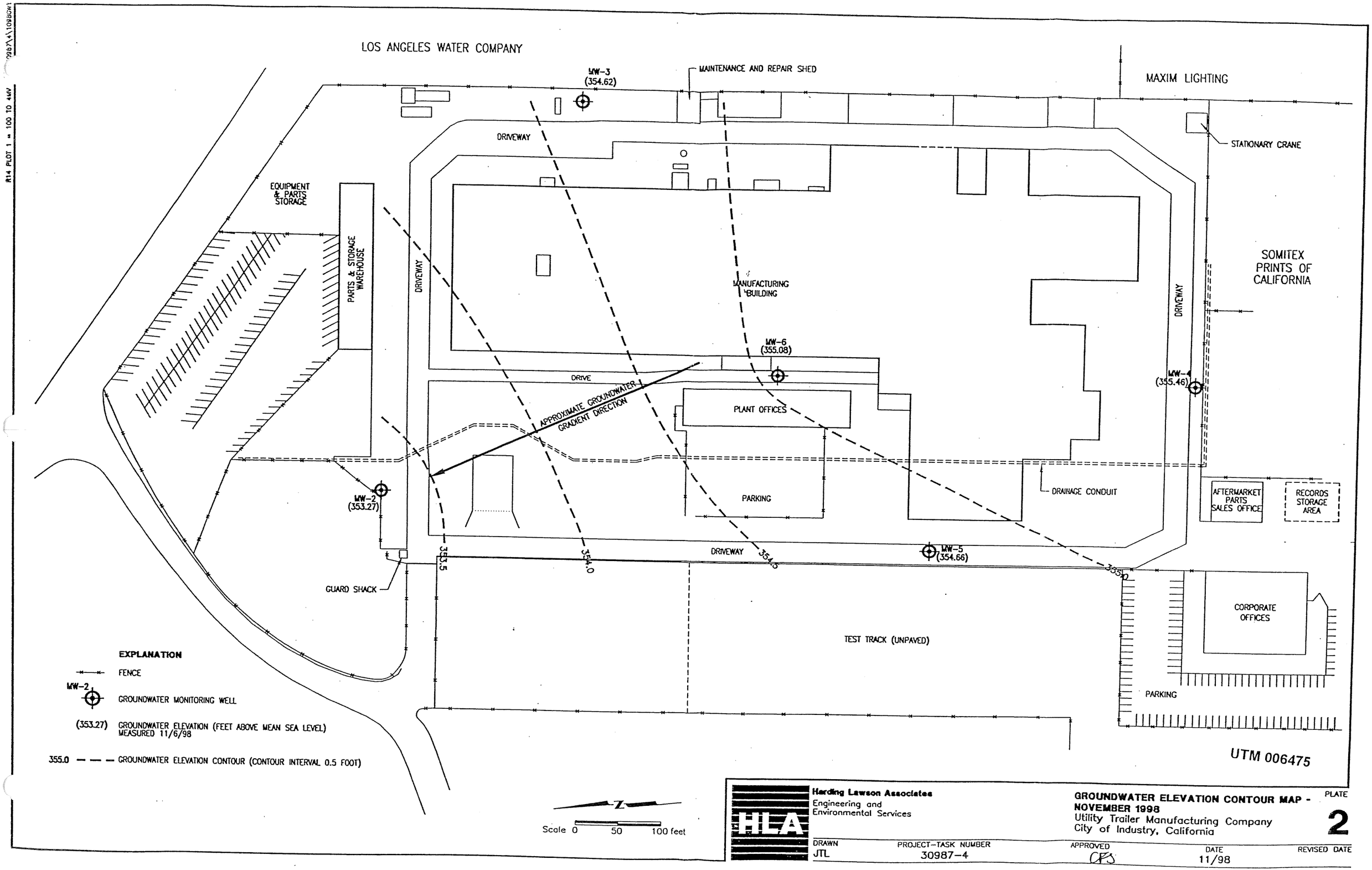
VICINITY MAP
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **1**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987-4	CKS	10/98	



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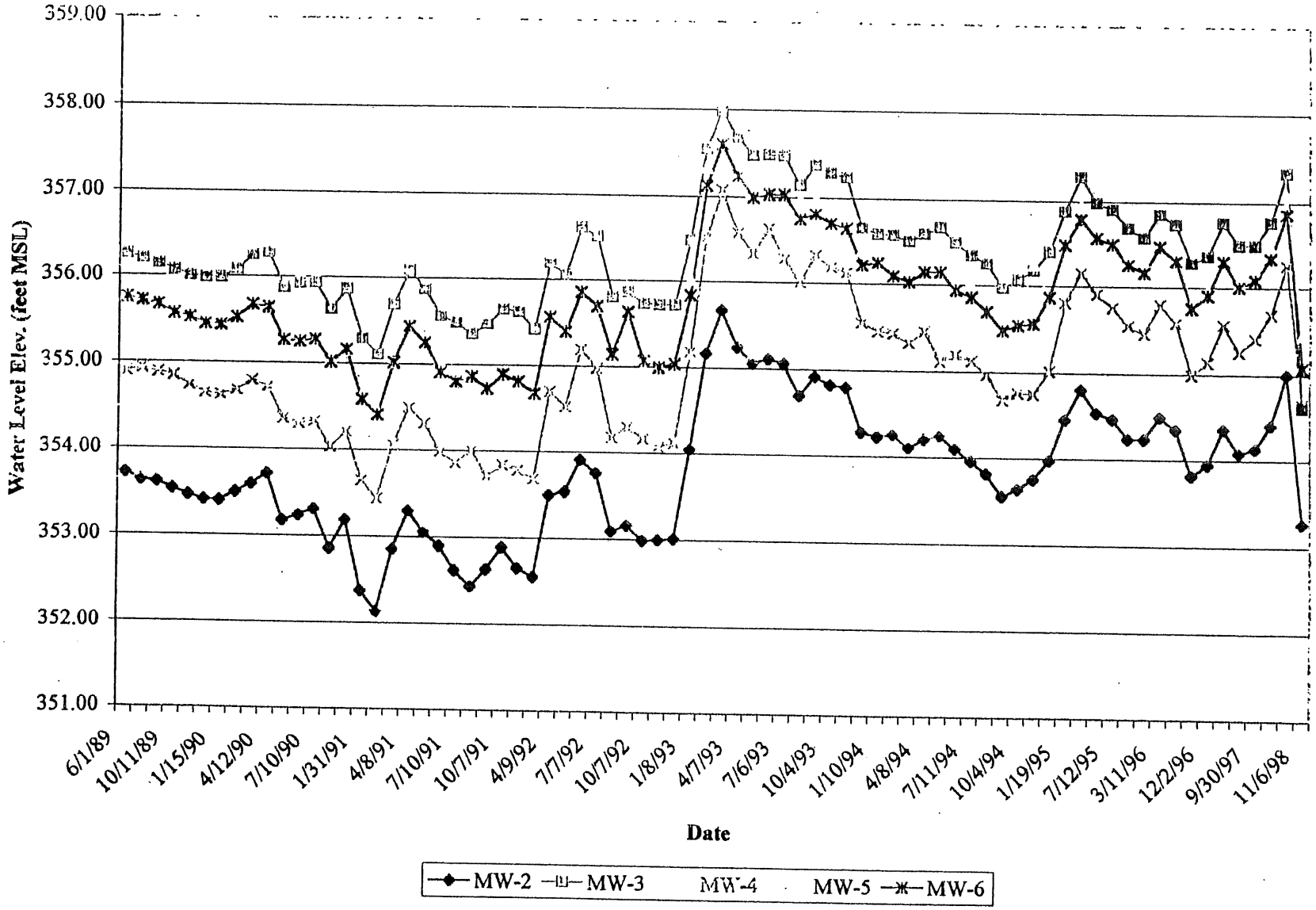
GROUNDWATER ELEVATION CONTOUR MAP - NOVEMBER 1998
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **2**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987-4	CFS	11/98	

R14 PLOT 1 = 1 TO 4MV HDT\30987\4\GRAPH3



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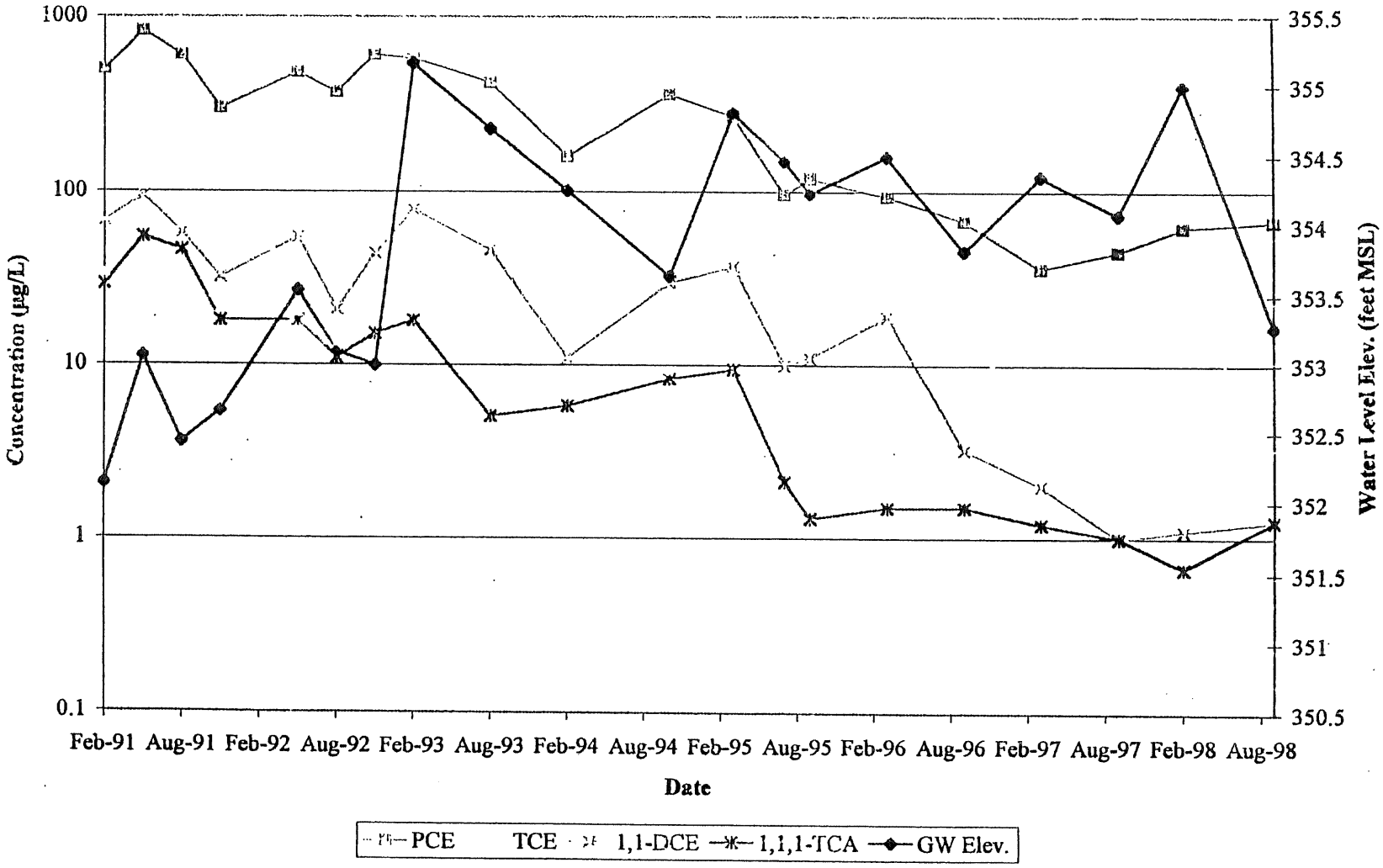
GROUNDWATER ELEVATION HYDROGRAPH
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **3**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987-4		2/98	

MW-2



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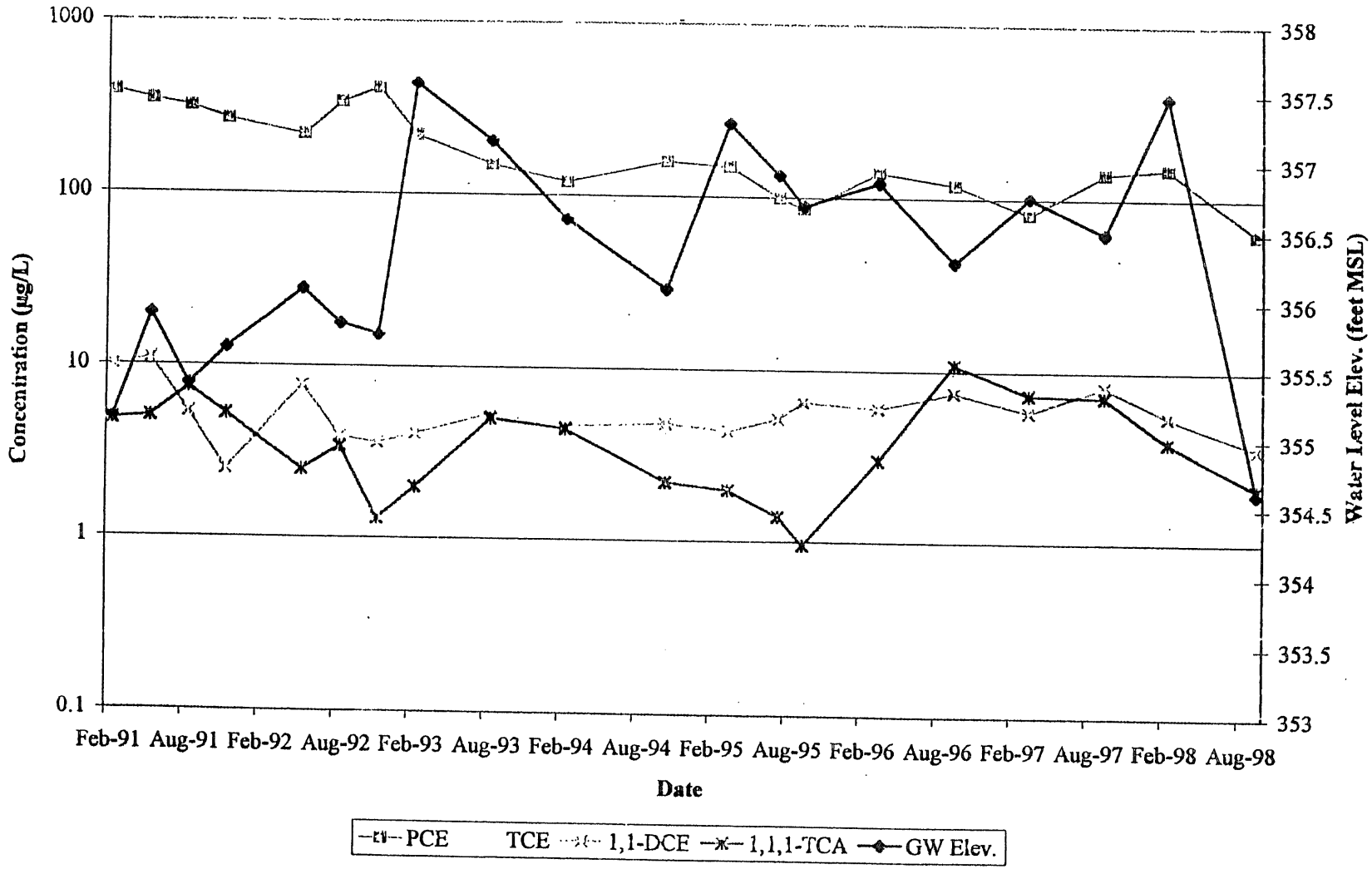
CONCENTRATION AND GROUNDWATER ELEVATION VERSUS TIME - MW-02
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **4**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987-4		2/98	

MW-3



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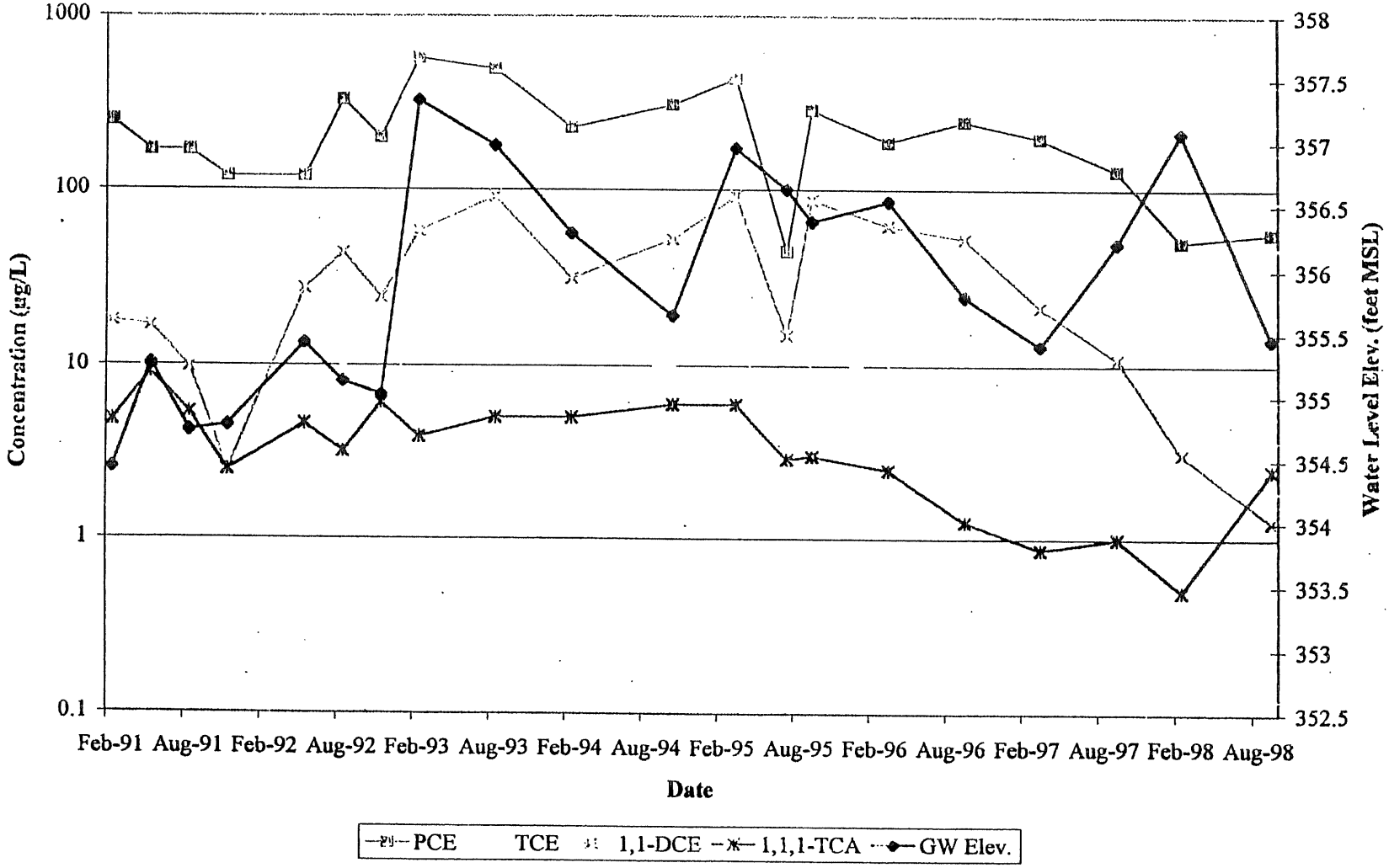
CONCENTRATION AND GROUNDWATER ELEVATION VERSUS TIME - MW-03
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **5**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987-4		2/98	

R14 PLOT 1 = 1 TO 4MV HDT\30987\4\GRAPH3

MW-4



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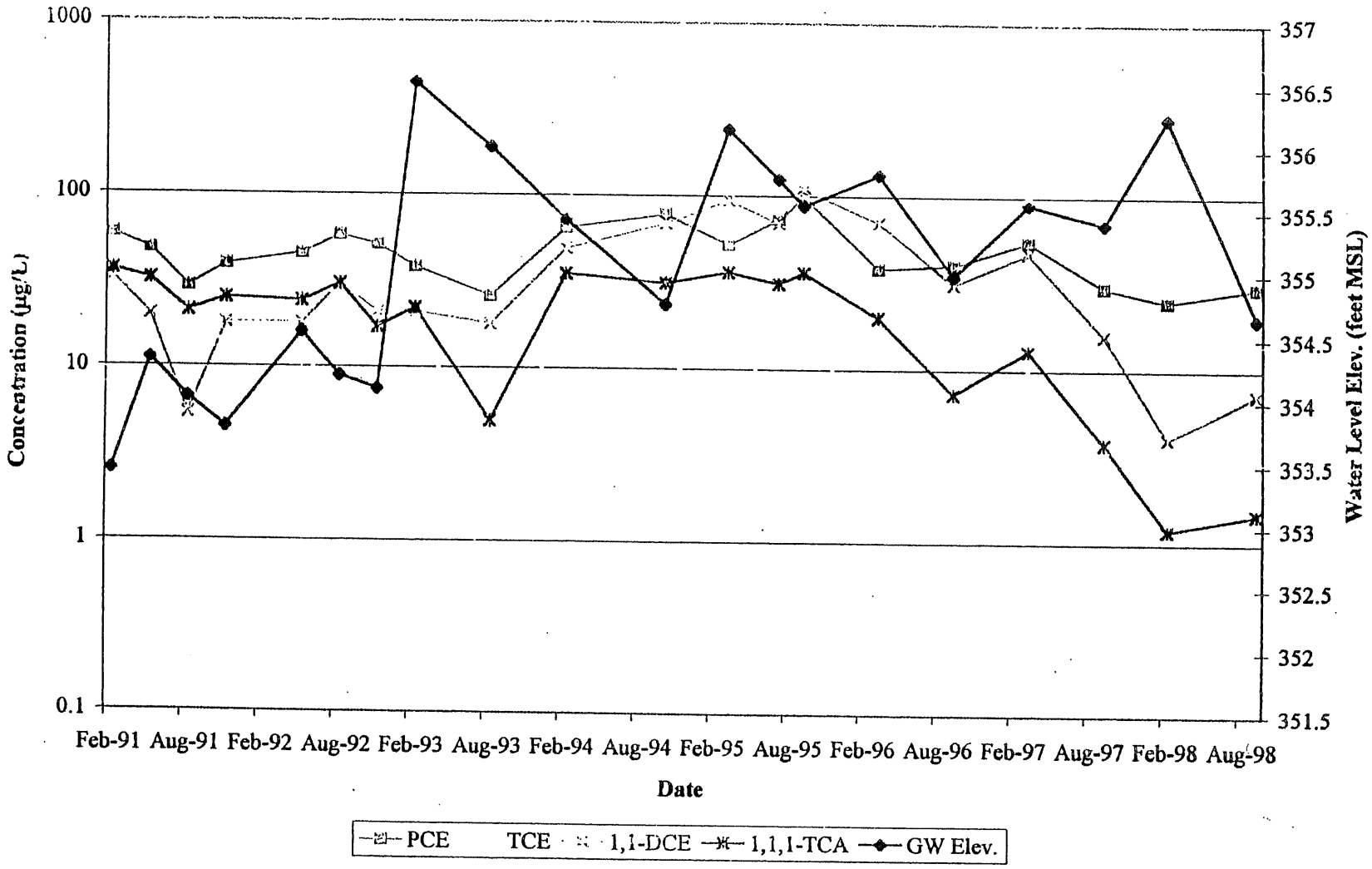
CONCENTRATION AND GROUNDWATER ELEVATION VERSUS TIME - MW-04
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **6**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987-4		2/98	

R14 PLOT 1 = 1 TO 4MV HDT\30987\4\GRAPH3

MW-5



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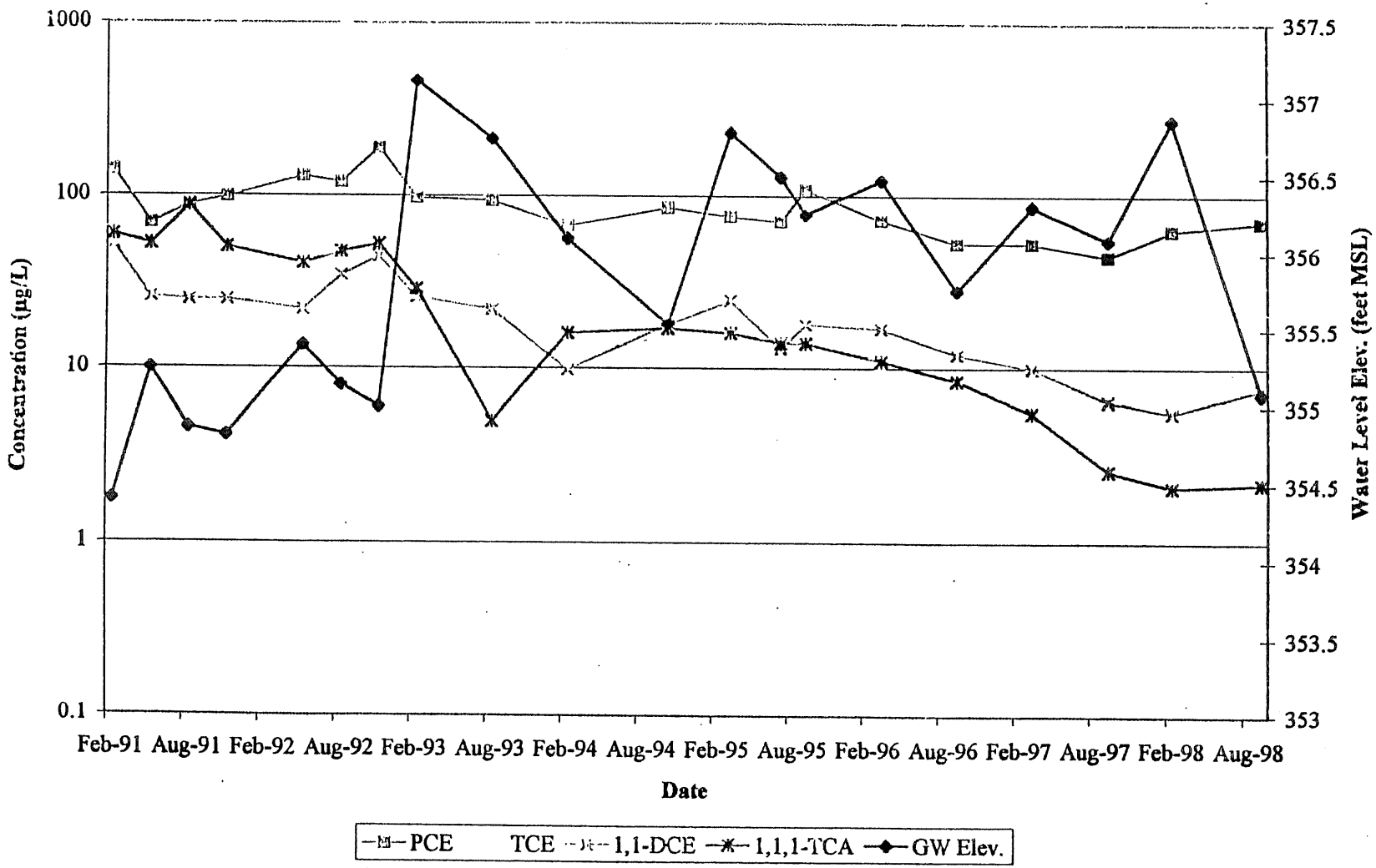
CONCENTRATION AND GROUNDWATER ELEVATION VERSUS TIME - MW-05
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **7**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987-4		2/98	

MW-6



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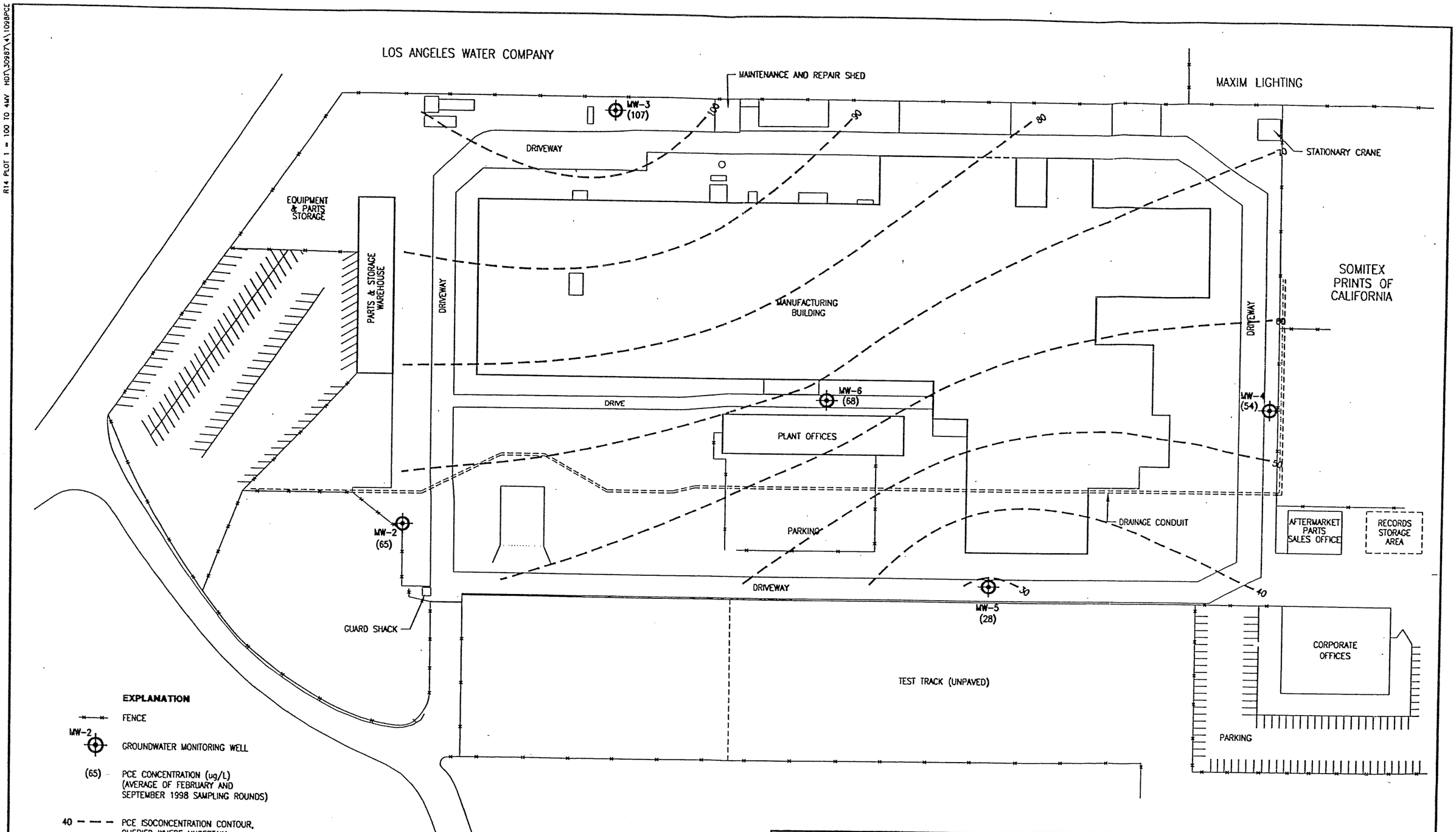
CONCENTRATION AND GROUNDWATER ELEVATION VERSUS TIME - MW-06
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **8**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987-4		2/98	

R14 PLOT 1 = 100 TO 4MY HOT\30987\4\1098PCE



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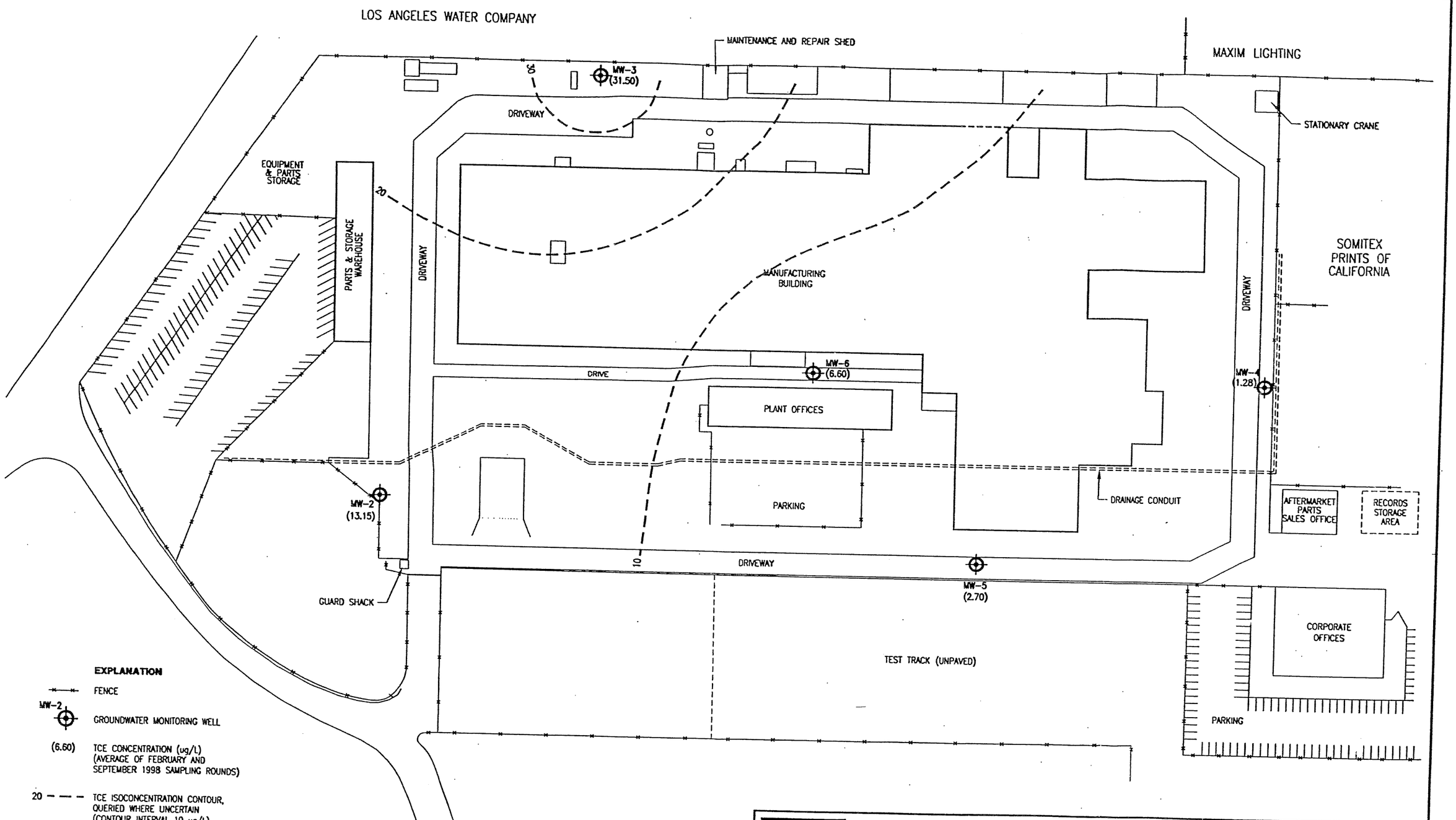
AVERAGE PCE ISOCONCENTRATION CONTOUR MAP 1998
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **9**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987-4		10/98	

UTM 006482

R14 PLOT 1 = 100 TO 4MV HDT\30987\4\1098TCE



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Engineering and Environmental Services

HLA

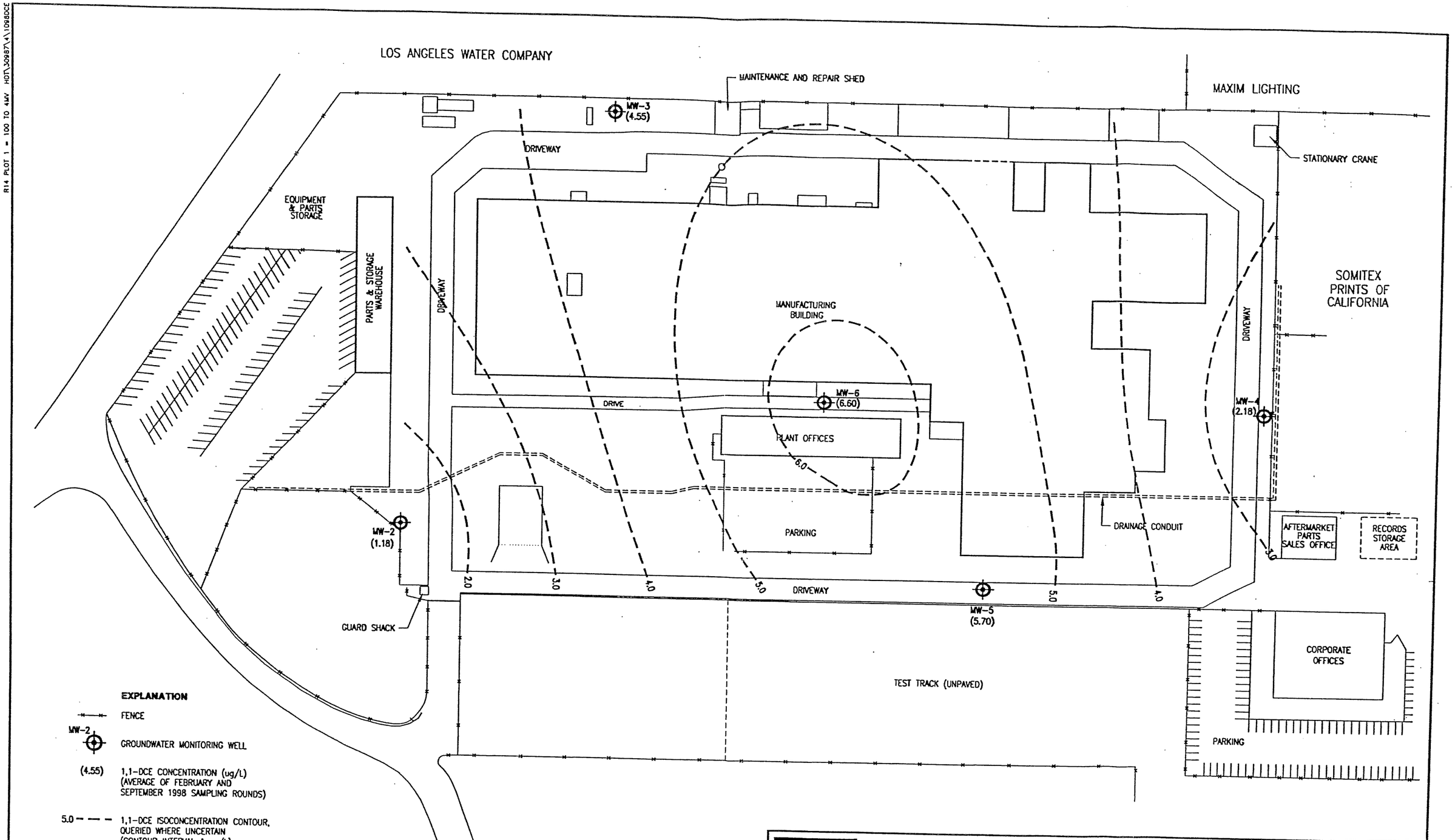
AVERAGE TCE ISOCONCENTRATION CONTOUR MAP 1998
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **10**

DRAWN	PROJECT–TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987–4		10/98	

UTM 006483

R14 PLOT 1 = 100 TO 4MV HDT\30987\4\1098DCE



Harding Lawson Associates
Engineering and Environmental Services

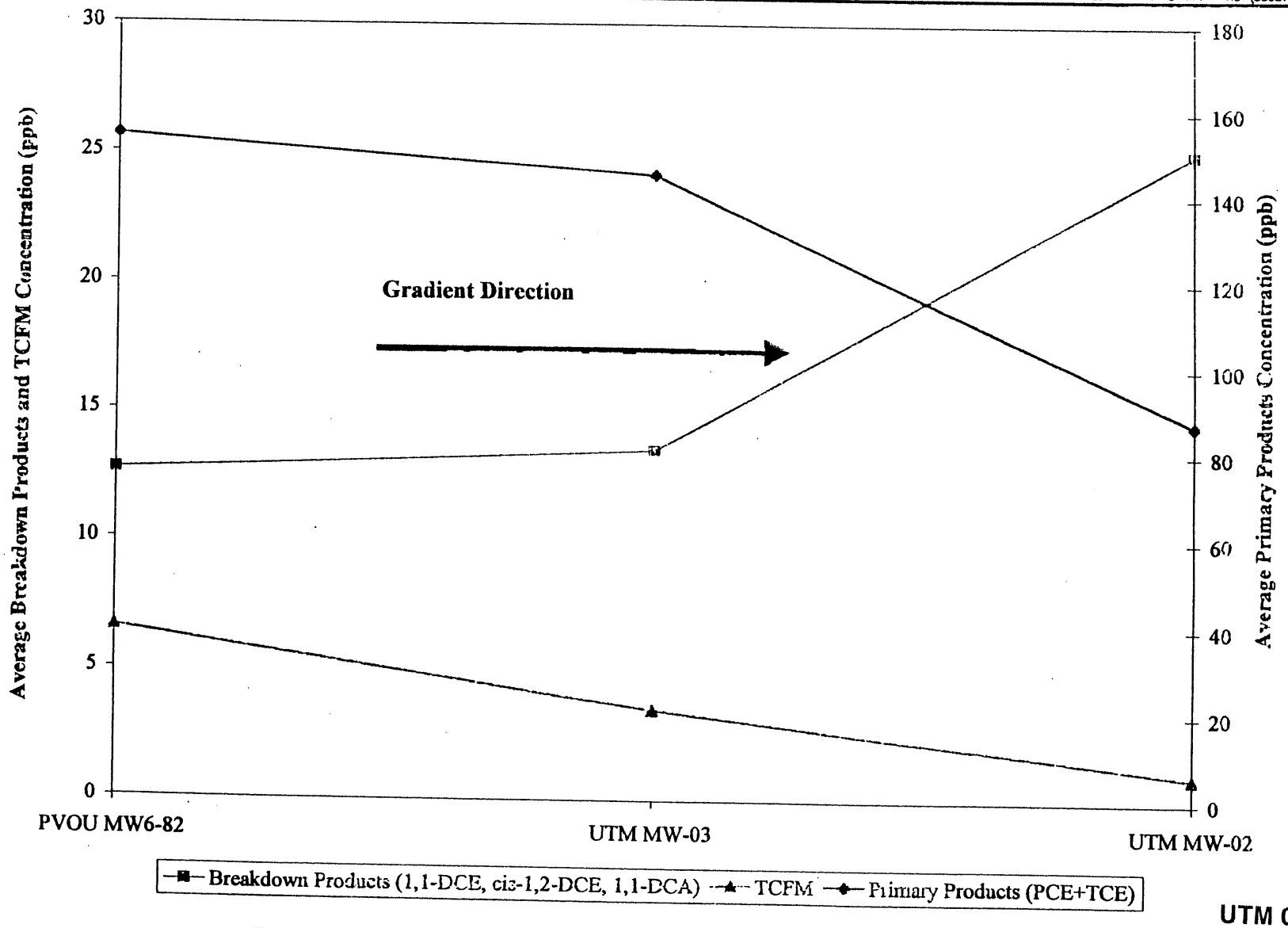
AVERAGE 1,1-DCE ISOCONCENTRATION CONTOUR MAP 1998
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **11**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987-4		10/98	

UTM 006484

R14 PLOT 1 = 1 TO 4MV H01\30987\4\GRAPH2



UTM 006485

Harding Lawson Associates
Engineering and
Environmental Services

GROUNDWATER ELEVATION HYDROGRAPH
Utility Trailer Manufacturing Company
City of Industry, California

PLATE **12**

DRAWN	PROJECT–TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	30987–4		2/99	

APPENDIX A

APPENDIX A

WELL PURGING DATA

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name: UTM
Job Number: 30987-2
Recorded by: [signature] (Signature)

Well No.: MW-02
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date: 2-18-98 Time: 0830
Sampled by: BJH / MP (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other P
Total Depth of Casing (TD in feet BTOC): BELOW
Water Level Depth (WL in feet BTOC):
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☒ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

(42.90 - 21.66) x 4 ^{2} x 4 X 0.0408 = 56 gallons
TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume

PURGE TIME

0903 Start 0913 Stop 40 Elapsed

PURGE RATE

Initial 3 gpm Final 1.5 gpm

ACTUAL PURGE VOLUME

~~35~~ 105 gallons
MP.

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Other TURB
INITIAL	6.73	1.66	20.7	256
9	6.80	1.94	22.1	274
12	6.80	1.94	22.2	161
15	6.81	1.95	22.3	119
~~MP~~ 19	6.80	1.95	22.4	79

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Other TURB
25	6.79	1.96	22.1	31
30	6.80	1.94	21.9	17
35	6.81	1.93	22.0	14
40	6.79	1.91	22.0	2
Meter Nos.				

Flow 1.5

Observations During Purging (Well Condition, Turbidity, Color, Odor): RE-CALIBRATED TURB. METER @ 35 MIN
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other ON-SITE DRUMS IN COMPOUND

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-02	4x 40mL	8010	HCL	DEL MAR	T@ 0955

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

RL004 Office Copy - White Field Copy - Canary 0746

UTM 006488

Harding Lawson Associates
Engineering and Environmental Services

GROUND-WATER SAMPLING FORM

Job Name: UTM
Job Number: 30987-2
Recorded by: (Signature)

Well No.: MW-03
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date: 2-18-98 Time: 1500
Sampled by: BJH (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): BELOW
Water Level Depth (WL in feet BTOC):
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☒ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

(37.42 TD (feet) - 20.69 WL (feet)) X 4 D (inches)^2 X 4 # Vols X 0.0408 = 43.7 gallons Calculated Purge Volume

PURGE TIME

1523 Start 1607 Stop 44 Elapsed

PURGE RATE

Initial 1.0 gpm Final 1.0 gpm

ACTUAL PURGE VOLUME

44.0 gallons

FIELD PARAMETER MEASUREMENT

W.L.	Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Turb Other	D.O.
20.69	INITIAL	6.71	2.03	21.6	387	1.57
23.17	10	6.72	2.25	21.9	151	1.56
24.62	20	6.69	2.25	22.1	37	1.49
24.81	30	6.70	2.25	22.1	6	1.53
25.08	40	6.70	2.24	22.1	2	1.54

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Turb Other	D.O.	W.L.
44	6.70	2.24	22.1	1	1.54	25.1
Meter Nos.						

Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☐ Other

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-03	4 X 40 ml	8010	HCL	DEL MAR	T @ 1615

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.
MW-03	MW-07 @ 1515 (ACTUAL @ 1615)

Blank Samples

Type	Sample No.
EQUIP	MW-08 @ 1310 (ACTUAL @ 1620)

Other Samples

Type	Sample No.

RL004 OFFICE COPY - WHITE FIELD COPY - CANARY 0746

UTM 006489

Harding Lawson Associates
Engineering and Environmental Services

GROUND-WATER SAMPLING FORM

Job Name: UTM
Job Number: 30987-2
Recorded by: [signature] (Signature)

Well No.: MW-04
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date: 2-18-98 Time: 1320
Sampled by: BJH (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): BELOW
Water Level Depth (WL in feet BTOC):
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☒ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

(53.40 − 26.13) × 4² × 4 × 0.0408 = 71.2 gallons
TD (feet) − WL (feet) × D (inches)² × # Vols × 0.0408 = Calculated Purge Volume

PURGE TIME

1336 Start 1400 Stop 24 Elapsed

PURGE RATE

Initial 3.0 gpm Final 3.0 gpm

ACTUAL PURGE VOLUME

72.0 gallons

FIELD PARAMETER MEASUREMENT

W.L	Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Turb Other	D.O.
26.13	INITIAL	6.92	2.24	21.8	23	4.50
27.32	6	6.91	1.96	21.1	9	1.42
7.32	12	6.90	1.78	20.9	0	1.06
"	18	6.89	1.76	20.9	0	0.90
"	24	6.90	1.74	20.9	0	0.86

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Turb Other	D.O.	W.L.
Meter Nos.						

Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☐ Other

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-04	4 x 40ml	8010	HCL	DAL MAR	T @ 1410

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name U.T.M.
Job Number 30987-2
Recorded by Mike E Palm (Signature)

Well No. MW-05
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 2-18-98 Time 1105
Sampled by MP / BJH (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): BELOW
Water Level Depth (WL in feet BTOC):
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☒ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

(44.17 TD (feet) - 24.35 WL (feet)) x 4 D (inches)^2 x 4 # Vols x 0.0408 = 51.75 gallons Calculated Purge Volume

PURGE TIME

1135 Start 1211 Stop 36 Elapsed

PURGE RATE

Initial ~~3~~ 1.5 gpm Final 1.5 gpm

ACTUAL PURGE VOLUME

52 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Turb Other	W.L.
INITIAL	6.78	1.03	20.4	479	24.35
~~9~~ 18	6.91	1.81	20.8	28	24.99
~~12~~ 24	6.91	1.81	20.8	4	24.99
~~15~~ 30	6.90	1.81	20.4	0	↓
~~18~~ 36	6.90	1.81	20.5	0	↓

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Turb Other	W.L.
Meter Nos.					

Observations During Purging (Well Condition, Turbidity, Color, Odor):
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other ON-SITE DRUMS IN COMPOUND.

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-~~05~~ 05	4x40ml	8010	HCL	DEL MAR	TB 1220

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

UTM 006491

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name U.T.M.
Job Number 30987-2
Recorded by [signature] (Signature)

Well No. MW-06
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 2-18-98 Time 1005
Sampled by MP/BJH (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): BELOW
Water Level Depth (WL in feet BTOC):
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☒ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

(39.15 − 22.92) × 4² × 4 × 0.0408 = 42.3 GAL. gallons

TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume

PURGE TIME

1036 Start 1051 Stop 15 Elapsed

PURGE RATE

Initial 3 gpm Final 3 gpm

ACTUAL PURGE VOLUME

45 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒°C ☐°F	Other TURB
INITIAL	6.89	1.63	20.8	112
6	6.85	1.82	20.9	1
9	6.85	1.82	21.0	4
12	6.86	1.82	20.9	1
15	6.86	1.81	20.9	1

J.L.
23.15

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒°C ☐°F	Other TURB
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other ON-SITE DRUMS IN COMPOUND.

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-06	4x 40ml	8010	HCL	DEL MAR	T@ 1100

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

UTM 006492

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name U.T.M.
Job Number 30987-2
Recorded by [signature] (Signature)

Well No. MW-02
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 9-29-98 Time 1250
Sampled by MIKE PALMER (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 42.82
Water Level Depth (WL in feet BTOC): 22.08
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: WHALE

PUMP INTAKE SETTING

☐ Near Bottom ☒ Near Top ☐ Other
Depth in feet (BTOC): 30 Screen Interval in Feet (BTOC) from ____ to ____

PURGE VOLUME CALCULATION:

$(42.82 - 22.08) \times 4^2 \times 4 \times 0.0408 = 54.2$ gallons

TD (feet) − WL (feet) × D (inches)² × # Vols × 0.0408 = Calculated Purge Volume

PURGE TIME

1255 Start 1313 Stop 18 Elapsed

PURGE RATE

Initial 3.0 gpm Final 3.0 gpm

ACTUAL PURGE VOLUME

55 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other TURB
INITIAL	7.18	1.84	73.5	CLOUDY
5	6.97	1.81	72.9	CLEAR
10	7.01	1.85	72.8	"
14	7.06	1.86	72.6	"
18	7.09	1.85	72.5	"

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other 55 GAL. DRUMS.

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-02	2/40ml	8010	HCL	DEL MAR	TIME=1315

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

UTM 006493

Harding Lawson Associates
Engineering and Environmental Services

GROUND-WATER SAMPLING FORM

Job Name U.T.M.
Job Number 30987-2
Recorded by [signature] (Signature)

Well No. MW-03
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 9-29-98 Time 1400
Sampled by MIKE PALMER (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 37.41
Water Level Depth (WL in feet BTOC): 21.07
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: WHALE

PUMP INTAKE SETTING

☐ Near Bottom ☒ Near Top ☐ Other
Depth in feet (BTOC): 30'
Screen Interval in Feet (BTOC) from ____ to ____

PURGE VOLUME CALCULATION:

(37.41 TD (feet) - 21.07 WL (feet)) x 4 D (inches)^2 x 4 # Vols x 0.0408 = 42.7 gallons Calculated Purge Volume

PURGE TIME

1410 Start 1424 Stop 14 Elapsed

PURGE RATE

Initial 3 gpm Final 3 gpm

ACTUAL PURGE VOLUME

43. gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other TVB
INITIAL	7.29	1.86	73.2	CLOUDY
6	7.16	1.77	72.7	CLEAR
10	6.69	1.76	72.6	"
12	6.64	1.77	72.6	"
14	6.60	1.77	72.5	"

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other ____
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor):
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other 55 GAL. DRUM

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-03	2/40ml	8010	HCL	DEL MAR	TIME=1425
* DUPLICATE TAKEN					

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.
MW-03	MW-11
AT	1430

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and Environmental Services

GROUND-WATER SAMPLING FORM

Job Name U.T.M.
Job Number 30987.2
Recorded by [signature] (Signature)

Well No. MW-04
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 9-29-98 Time 1145
Sampled by MIKE PALMER (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 53.38
Water Level Depth (WL in feet BTOC): 26.46
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: WHALE

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): 40' Screen Interval in Feet (BTOC) from ____ to ____

PURGE VOLUME CALCULATION:

(53.38 - 26.46) x 4 ^{2} x 4 x 0.0408 = 70.3 gallons

TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume

PURGE TIME

1155 Start 1218 Stop 23 Elapsed

PURGE RATE

Initial 3.0 gpm Final 3.0 gpm

ACTUAL PURGE VOLUME

71 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other TURB
INITIAL	6.63	1.90	71.0	SILTY
5	6.84	1.61	71.6	CLEAR
10	6.81	1.54	70.7	"
15	6.86	1.52	70.4	"
20	6.85	1.52	70.3	"

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other TURB
23	6.88	1.52	70.3	"
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other 55 GAL. DRUMS.

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-04	2/40ml	8010	HCL	DEL MAR.	TIME= 1220

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

UTM 006495

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name U.T.M.
Job Number 30987-2
Recorded by [signature] (Signature)

Well No. MW-5
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 9-29-98 Time 1120
Sampled by MIKE PALMER (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 38.49
Water Level Depth (WL in feet BTOC): 44.04
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: WHALE

PUMP INTAKE SETTING

☒ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): 44'
Screen Interval in Feet (BTOC) from ____ to ____

PURGE VOLUME CALCULATION:

(44.04 - 38.49) x 4 ^{2} x 4 x 0.0408 = 14.4 gallons

TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume

PURGE TIME

1128 Start 1133 Stop 5 Elapsed

PURGE RATE

Initial 3.0 gpm Final 3.0 gpm

ACTUAL PURGE VOLUME

15.0 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other TURB
INITIAL	7.36	1.58	72.6	CLOUDY
2	6.98	1.54	71.4	CLEAR
3	6.53	1.54	71.3	"
4	6.55	1.54	71.3	"
5	6.49	1.54	71.2	"

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other ____
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other 55 GAL. DRUMS.

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-05	2/40ml	8010	HCL	DEL MAR	TIME=1135

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
EQUIPMENT	MW-10
AT	1130

Other Samples

Type	Sample No.

UTM 006496

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name U.T.M.
Job Number 30987-2
Recorded by [signature] (Signature)

Well No. MW-06
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 9-29-98 Time 1335
Sampled by MEKR PALMER (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 39.09
Water Level Depth (WL in feet BTOC): 36.77
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: WHALE

PUMP INTAKE SETTING

☒ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): 39.'
Screen Interval in Feet (BTOC) from ____ to ____

PURGE VOLUME CALCULATION:

(39.09 - 36.77) x 4 ^{2} x 4 X 0.0408 = 6.1 gallons
TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume

PURGE TIME

1340 Start 1342 Stop 2 Elapsed

PURGE RATE

Initial 3 gpm Final 3 gpm

ACTUAL PURGE VOLUME

7 gallons

FIELD PARAMETER MEASUREMENT

~~Minutes~~ GALLONS Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other TURB
INITIAL	7.51	1.60	72.5	
2	7.43	1.58	71.4	
4	7.36	1.58	70.9	
6	7.35	1.55	70.8	
7	7.32	1.56	70.8	

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other ____
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other 55 GAL. DRUMS

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: DISPOSABLE
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-06	2/40ml	8010	HCL	DEL MAR	TIME = 1345

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

UTM 006497

Harding Lawson Associates

WATER LEVEL DATA SHEET

INSTRUMENT/MODEL # : Solinst/

NAME: Beth Wilcox

PROJECT: UTM

DATE: 11/6/98

JOB NUMBER:

SHEET 1 OF 1

WELL NUMBER	TIME	DEPTH TO WATER 1st READING	DEPTH TO WATER 2nd READING	DEPTH TO WATER 3rd READING	COMMENTS SECTION
MW-2	07:43	23.39			
MW-3	07:22	23.41			
MW-4	07:29	27.75			
MW-5	07:37	25.95			
MW-6	07:40	24.71			

APPENDIX B

APPENDIX B

SUPPORTING LABORATORY DOCUMENTATION

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) 968-3401

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-02	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02107	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	**0.50**	**4.8**
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	**0.50**	**1.1**
cis-1,2-Dichloroethene	**0.50**	**3.1**
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	**0.50**	**46***
1,1,1-Trichloroethane	**0.50**	**0.68**
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	**0.50**	**5.3**
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

*Result is above calibration range therefore semi-quantitative and non-reproducible.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	103%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3401

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-02	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02107	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	2.5	N.D.
Bromoform	2.5	N.D.
Bromomethane	5.0	N.D.
Carbon tetrachloride	2.5	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	13	N.D.
Chloroform	2.5	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	2.5	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
Dichlorodifluoromethane	5.0	N.D.
1,1-Dichloroethane	**2.5**	**4.5**
1,2-Dichloroethane	2.5	N.D.
1,1-Dichloroethene	2.5	N.D.
cis-1,2-Dichloroethene	**2.5**	**2.7**
trans-1,2-Dichloroethene	2.5	N.D.
1,2-Dichloropropane	2.5	N.D.
cis-1,3-Dichloropropene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
Methylene chloride	50	N.D.
1,1,1,2-Tetrachloroethane	2.5	N.D.
1,1,2,2-Tetrachloroethane	2.5	N.D.
Tetrachloroethene	**2.5**	**62**
1,1,1-Trichloroethane	2.5	N.D.
1,1,2-Trichloroethane	2.5	N.D.
Trichloroethene	**2.5**	**5.8**
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	102%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3401

Del Mar Analytical

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-03	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02111	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	**0.50**	**0.69**
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	**0.50**	**0.60**
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	**0.50**	**5.5**
cis-1,2-Dichloroethene	**0.50**	**6.8**
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	**0.50**	**69***
1,1,1-Trichloroethane	**0.50**	**3.9**
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	**0.50**	**22**
Trichlorofluoromethane	**1.0**	**4.0**
Vinyl Chloride	1.0	N.D.

*Result is above calibration range therefore semi-quantitative and non-reproducible.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	109%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3401

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-03	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02111	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	10	N.D.
Chloroethane	25	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
Dichlorodifluoromethane	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	**5.0**	**5.2**
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	100	N.D.
1,1,1,2-Tetrachloroethane	5.0	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	**5.0**	**150**
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	**5.0**	**23**
Trichlorofluoromethane	10	N.D.
Vinyl Chloride	10	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	97%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-340

Del Mar Analytical

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-04	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02110	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	2.5	N.D.
Bromoform	2.5	N.D.
Bromomethane	5.0	N.D.
Carbon tetrachloride	2.5	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	13	N.D.
Chloroform	2.5	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	2.5	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
Dichlorodifluoromethane	5.0	N.D.
1,1-Dichloroethane	2.5	N.D.
1,2-Dichloroethane	2.5	N.D.
1,1-Dichloroethene	**2.5**	**2.8**
cis-1,2-Dichloroethene	2.5	N.D.
trans-1,2-Dichloroethene	2.5	N.D.
1,2-Dichloropropane	2.5	N.D.
cis-1,3-Dichloropropene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
Methylene chloride	50	N.D.
1,1,1,2-Tetrachloroethane	2.5	N.D.
1,1,2,2-Tetrachloroethane	2.5	N.D.
Tetrachloroethene	**2.5**	**51**
1,1,1-Trichloroethane	2.5	N.D.
1,1,2-Trichloroethane	2.5	N.D.
Trichloroethene	2.5	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	101%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3401

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-04	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02110	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	**0.50**	**3.1**
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	**0.50**	**42***
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	**0.50**	**1.3**
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

*Result is above calibration range therefore semi-quantitative and non-reproducible.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	99%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3407

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-05	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02109	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	**0.50**	**3.8**
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	**0.50**	**4.1**
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	**0.50**	**25**
1,1,1-Trichloroethane	**0.50**	**1.2**
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	**0.50**	**2.3**
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	96%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3401

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-06	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02108	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	**0.50**	**1.1**
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	**0.50**	**5.6**
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	**0.50**	**46***
1,1,1-Trichloroethane	**0.50**	**2.1**
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	**0.50**	**6.7**
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

*Result is above calibration range therefore semi-quantitative and non-reproducible.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	99%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3401

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-06	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02108	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	2.5	N.D.
Bromoform	2.5	N.D.
Bromomethane	5.0	N.D.
Carbon tetrachloride	2.5	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	13	N.D.
Chloroform	2.5	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	2.5	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
Dichlorodifluoromethane	5.0	N.D.
1,1-Dichloroethane	2.5	N.D.
1,2-Dichloroethane	2.5	N.D.
1,1-Dichloroethene	**2.5**	**5.3**
cis-1,2-Dichloroethene	2.5	N.D.
trans-1,2-Dichloroethene	2.5	N.D.
1,2-Dichloropropane	2.5	N.D.
cis-1,3-Dichloropropene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
Methylene chloride	50	N.D.
1,1,1,2-Tetrachloroethane	2.5	N.D.
1,1,2,2-Tetrachloroethane	2.5	N.D.
Tetrachloroethene	**2.5**	**64**
1,1,1-Trichloroethane	2.5	N.D.
1,1,2-Trichloroethane	2.5	N.D.
Trichloroethene	**2.5**	**6.4**
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	102%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3401

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-07	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02112	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	**0.50**	**0.73**
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	**0.50**	**0.67**
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	**0.50**	**6.1**
cis-1,2-Dichloroethene	**0.50**	**7.4**
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	**0.50**	**70***
1,1,1-Trichloroethane	**0.50**	**4.0**
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	**0.50**	**22**
Trichlorofluoromethane	**1.0**	**4.4**
Vinyl Chloride	1.0	N.D.

*Result is above calibration range therefore semi-quantitative and non-reproducible.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	111%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-340

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-07	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02112	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	10	N.D.
Chloroethane	25	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
Dichlorodifluoromethane	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	**5.0**	**5.7**
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	100	N.D.
1,1,1,2-Tetrachloroethane	5.0	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	**5.0**	**140**
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	**5.0**	**22**
Trichlorofluoromethane	10	N.D.
Vinyl Chloride	10	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	95%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-3401

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Feb 18, 1998
30 Corporate Park, Suite 400	UTM City Of Industry	Received:	Feb 18, 1998
Irvine, CA 92606	Sample Descript: Water, MW-08	Extracted:	Feb 24, 1998
Attention: Kevin Trout	Lab Number: HB02113	Analyzed:	Feb 24, 1998
		Reported:	Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	100%

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Kevin Trout

Method Blank

Extracted: Feb 24, 1998
Analyzed: Feb 24, 1998
Reported: Feb 25, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	20	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Rick DiMaio
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene (80-120).	99%

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MS/MSD DATA REPORT

EPA Method 601/602

Matrix: Water

Date: 02/24/98

Sample #: HB02113

Batch #: HB24101W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Mean PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	Mean PR
Benzene	0	10	9.8	9.9	98	99	0.20	99	≤30	39 - 150
Chloroform	0	10	10	11	104	105	1.3	104	≤30	49 - 133
1,1-Dichloroethane	0	10	11	11	110	106	3.1	108	≤30	47 - 132
1,2-Dichloroethane	0	10	11	9.8	106	98	8.1	102	≤30	51 - 147
1,1-Dichloroethene	0	10	11	10	109	103	5.3	106	≤30	28 - 167
Tetrachloroethene	0	10	12	10	120	100	18	110	≤30	26 - 162
Toluene	0.087	10	10	10	100	101	0.42	100	≤30	46 - 148
Trichloroethene	0	10	11	10	111	102	8.0	107	≤30	35 - 146

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by EPA Method 601/602

Del Mar Analytical

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92714
(714) 260-1800

CHAIN OF CUSTODY FORM

Lab: DGC MAR

Job Number: 30987-2

Name/Location: UTM / CITY OF IND.

Project Manager: KEVIN TROUT

Samplers: BRYAN J. HAWES
MIKE PALMER

Recorder: (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCL	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH
23	X							4				98	02	18	0955	MW-02	X					
															1005	MW-06						
															1220	MW-05						
															1410	MW-04						
															1615	MW-03						
															1515	MW-07						
															1310	MW-08						

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
						- W.I.P. PROTOCAL REQUIRED
						- NORMAL W.I.P. T.A.T.
						- NEED MULTIPLE DILUTIONS
						Intact & cooler

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
1648 2-18-98		2/18/98 1640
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
		2/18/98 1730
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME 2/18/98 1730

METHOD OF SHIPMENT: DELMAR carier

Laboratory Copy White | Project Office Copy Yellow | Field or Office Copy Pink

6533

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

PREPARED FOR HARDING LAWSON ASSOCIATES
PROJECT: 30987-2; UTM CITY OF INDUSTRY
SAMPLED: 2/18/98

ATTENTION: KEVIN TROUT

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) Scott C. Hoatson, Quality Assurance Officer

Signature, Date: 3/12/98

Client Name: Harding Lawson Associates

Project No.: 30987-2; UTM City of Industry

Date(s) Sampled: 2/18/98 To

Date(s) Received: 2/18/98 To

Date(s) Reported: 2/25/98 To

Chain of Custody received: Yes X No

Comments: Sample results marked with an asterisk (*) are semiquantitative and not reproducible.

(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 8010	7	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:

(RWQCB LabForm; Ver 12/94)

PROJECT NO: 30987-2 (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: EPA 8010 **REPORTING UNIT:** µg/L

		DATE ANALYZED	2/24/98	2/24/98	2/24/98	2/24/98
		DATE EXTRACTED	2/24/98	2/24/98	2/24/98	2/24/98
		LAB SAMPLE ID	Method Blank	HB02107	HB02107	HB02108
		SAMPLE ID	n/a	MW-2	MW-2	MW-06
		EXTRACTION SOLVENT	n/a	n/a	n/a	n/a
		EXTRACTION METHOD	5030	5030	5030	5030
		DILUTION FACTOR	1	1	5	1
COMPOUND		**CRDL**				
Bromodichloromethane		0.50	< 0.50	< 0.50	< 2.5	< 0.50
Bromoform		0.50	< 0.50	< 0.50	< 2.5	< 0.50
Bromomethane		1.0	< 1.0	< 1.0	< 5.0	< 1.0
Carbon tetrachloride		0.50	< 0.50	< 0.50	< 2.5	< 0.50
Chlorobenzene		1.0	< 1.0	< 1.0	< 5.0	< 1.0
Chloroethane		1.0	< 1.0	< 1.0	< 5.0	< 1.0
Chloroform		0.50	< 0.50	< 0.50	< 2.5	< 0.50
Chloromethane		1.0	< 1.0	< 1.0	< 5.0	< 1.0
Dibromochloromethane		0.50	< 0.50	< 0.50	< 5.0	< 0.50
1,2-Dichlorobenzene		1.0	< 1.0	< 1.0	< 5.0	< 1.0
1,3-Dichlorobenzene		1.0	< 1.0	< 1.0	< 5.0	< 1.0
1,4-Dichlorobenzene		1.0	< 1.0	< 1.0	< 5.0	< 1.0
Dichlorodifluoromethane		1.0	< 1.0	< 1.0	< 5.0	< 1.0
1,1-Dichloroethane		0.50	< 0.50	**4.8**	**4.5**	**1.1**
1,2-Dichloroethane		0.50	< 0.50	< 0.50	< 2.5	< 0.50
1,1-Dichloroethene		0.50	< 0.50	**1.1**	< 2.5	**5.6**
cis-1,2-Dichloroethene		0.50	< 0.50	**3.1**	**2.7**	< 0.50
trans-1,2-Dichloroethene		0.50	< 0.50	< 0.50	< 2.5	< 0.50
1,2-Dichloropropane		0.50	< 0.50	< 0.50	< 2.5	< 0.50
cis-1,3-Dichloropropene		0.50	< 0.50	< 0.50	< 2.5	< 0.50
trans-1,3-Dichloropropene		0.50	< 0.50	< 0.50	< 2.5	< 0.50
Methylene chloride		10	< 10	< 10	< 50	< 10
1,1,1,2-Tetrachloroethane		0.50	< 0.50	< 0.50	< 2.5	< 0.50
1,1,2,2-Tetrachloroethane		0.50	< 0.50	< 0.50	< 2.5	< 0.50
Tetrachloroethene		0.50	< 0.50	**46***	**62**	**46***
1,1,1-Trichloroethane		0.50	< 0.50	**0.68**	< 2.5	**2.1**
1,1,2-Trichloroethane		0.50	< 0.50	< 0.50	< 2.5	< 0.50
Trichloroethene		0.50	< 0.50	**5.3**	**5.8**	**6.7**
Trichlorofluoromethane		1.0	< 1.0	< 1.0	< 5.0	< 1.0
Vinyl Chloride		0.50	< 0.50	< 0.50	< 2.5	< 0.50
SURROGATE	SPIKE CONC	ACCEPT LIMITS %	% RECOVERY	% RECOVERY	% RECOVERY	% RECOVERY
1-Chloro-3-fluorobenzene	10	80-120	99	103	102	99

PROJECT NO: 30987-2 (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: EPA 8010 **REPORTING UNIT:** µg/L

		DATE ANALYZED	2/24/98	2/24/98	2/24/98	2/24/98
		DATE EXTRACTED	2/24/98	2/24/98	2/24/98	2/24/98
		LAB SAMPLE ID	HB02108	HB02109	HB02110	HB02110
		SAMPLE ID	MW-06	MW-05	MW-04	MW-04
		EXTRACTION SOLVENT	n/a	n/a	n/a	n/a
		EXTRACTION METHOD	5030	5030	5030	5030
		DILUTION FACTOR	5	1	1	5
COMPOUND		**CRDL**				
Bromodichloromethane		0.50	< 2.5	< 0.50	< 0.50	< 2.5
Bromoform		0.50	< 2.5	< 0.50	< 0.50	< 2.5
Bromomethane		1.0	< 5.0	< 1.0	< 1.0	< 5.0
Carbon tetrachloride		0.50	< 2.5	< 0.50	< 0.50	< 2.5
Chlorobenzene		1.0	< 5.0	< 1.0	< 1.0	< 5.0
Chloroethane		1.0	< 5.0	< 1.0	< 1.0	< 5.0
Chloroform		0.50	< 2.5	< 0.50	< 0.50	< 2.5
Chloromethane		1.0	< 5.0	< 1.0	< 1.0	< 5.0
Dibromochloromethane		0.50	< 2.5	< 0.50	< 0.50	< 2.5
1,2-Dichlorobenzene		1.0	< 5.0	< 1.0	< 1.0	< 5.0
1,3-Dichlorobenzene		1.0	< 5.0	< 1.0	< 1.0	< 5.0
1,4-Dichlorobenzene		1.0	< 5.0	< 1.0	< 1.0	< 5.0
Dichlorodifluoromethane		1.0	< 5.0	< 1.0	< 1.0	< 5.0
1,1-Dichloroethane		0.50	< 2.5	**3.8**	< 0.50	< 2.5
1,2-Dichloroethane		0.50	< 2.5	< 0.50	< 0.50	< 2.5
1,1-Dichloroethene		0.50	**5.3**	**4.1**	**3.1**	**2.8**
cis-1,2-Dichloroethene		0.50	< 2.5	< 0.50	< 0.50	< 2.5
trans-1,2-Dichloroethene		0.50	< 2.5	< 0.50	< 0.50	< 2.5
1,2-Dichloropropane		0.50	< 2.5	< 0.50	< 0.50	< 2.5
cis-1,3-Dichloropropene		0.50	< 2.5	< 0.50	< 0.50	< 2.5
trans-1,3-Dichloropropene		0.50	< 2.5	< 0.50	< 0.50	< 2.5
Methylene chloride		10	< 50	< 10	< 10	< 50
1,1,1,2-Tetrachloroethane		0.50	< 2.5	< 0.50	< 0.50	< 2.5
1,1,2,2-Tetrachloroethane		0.50	< 2.5	< 0.50	< 0.50	< 2.5
Tetrachloroethene		0.50	**64**	**25**	**42***	**51**
1,1,1-Trichloroethane		0.50	< 2.5	**1.2**	< 0.50	< 2.5
1,1,2-Trichloroethane		0.50	< 2.5	< 0.50	< 0.50	< 2.5
Trichloroethene		0.50	**6.4**	**2.3**	**1.3**	< 2.5
Trichlorofluoromethane		1.0	< 5.0	< 1.0	< 1.0	< 5.0
Vinyl Chloride		0.50	< 2.5	< 0.50	< 0.50	< 2.5
SURROGATE	**SPIKE CONC**	**ACCEPT LIMITS %**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**
1-Chloro-3-fluorobenzene	10	80-120	102	96	99	101

PROJECT NO: 30987-2 (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: EPA 8010 **REPORTING UNIT:** µg/L

		DATE ANALYZED	2/24/98	2/24/98	2/24/98	2/24/98
		DATE EXTRACTED	2/24/98	2/24/98	2/24/98	2/24/98
		LAB SAMPLE ID	HB02111	HB02111	HB02112	HB02112
		SAMPLE ID	MW-03	MW-03	MW-07	MW-07
		EXTRACTION SOLVENT	n/a	n/a	n/a	n/a
		EXTRACTION METHOD	5030	5030	5030	5030
		DILUTION FACTOR	1	10	1	10
COMPOUND		**CRDL**				
Bromodichloromethane		0.50	< 0.50	< 5.0	< 0.50	< 5.0
Bromoform		0.50	< 0.50	< 5.0	< 0.50	< 5.0
Bromomethane		1.0	< 1.0	< 10	< 1.0	< 10
Carbon tetrachloride		0.50	< 0.50	< 5.0	< 0.50	< 5.0
Chlorobenzene		1.0	< 1.0	< 10	< 1.0	< 10
Chloroethane		1.0	< 1.0	< 10	< 1.0	< 10
Chloroform		0.50	**0.69**	< 5.0	**0.73**	< 5.0
Chloromethane		1.0	< 1.0	< 10	< 1.0	< 10
Dibromochloromethane		0.50	< 0.50	< 5.0	< 0.50	< 5.0
1,2-Dichlorobenzene		1.0	< 1.0	< 10	< 1.0	< 10
1,3-Dichlorobenzene		1.0	< 1.0	< 10	< 1.0	< 10
1,4-Dichlorobenzene		1.0	< 1.0	< 10	< 1.0	< 10
Dichlorodifluoromethane		1.0	< 1.0	< 10	< 1.0	< 10
1,1-Dichloroethane		0.50	**0.60**	< 5.0	**0.67**	< 5.0
1,2-Dichloroethane		0.50	< 0.50	< 5.0	< 0.50	< 5.0
1,1-Dichloroethene		0.50	**5.5**	< 5.0	**6.1**	< 5.0
cis-1,2-Dichloroethene		0.50	**6.8**	**5.2**	**7.4**	**5.7**
trans-1,2-Dichloroethene		0.50	< 0.50	< 5.0	< 0.50	< 5.0
1,2-Dichloropropane		0.50	< 0.50	< 5.0	< 0.50	< 5.0
cis-1,3-Dichloropropene		0.50	< 0.50	< 5.0	< 0.50	< 5.0
trans-1,3-Dichloropropene		0.50	< 0.50	< 5.0	< 0.50	< 5.0
Methylene chloride		10	< 10	< 100	< 10	< 100
1,1,1,2-Tetrachloroethane		0.50	< 0.50	< 5.0	< 0.50	< 5.0
1,1,2,2-Tetrachloroethane		0.50	< 0.50	< 5.0	< 0.50	< 5.0
Tetrachloroethene		0.50	**69***	**150**	**70***	**140**
1,1,1-Trichloroethane		0.50	**3.9**	< 5.0	**4.0**	< 5.0
1,1,2-Trichloroethane		0.50	< 0.50	< 5.0	< 0.50	< 5.0
Trichloroethene		0.50	**22**	**23**	**22**	**22**
Trichlorofluoromethane		1.0	**4.0**	< 10	**4.4**	< 10
Vinyl Chloride		0.50	< 0.50	< 5.0	< 0.50	< 5.0
SURROGATE	**SPIKE CONC**	**ACCEPT LIMITS %**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**
1-Chloro-3-fluorobenzene	10	80-120	109	97	111	95

PROJECT NO: 30987-2 (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: EPA 8010 **REPORTING UNIT:** µg/L

		DATE ANALYZED	2/24/98			
		DATE EXTRACTED	2/24/98			
		LAB SAMPLE ID	HB02113			
		SAMPLE ID	MW-08			
		EXTRACTION SOLVENT	n/a			
		EXTRACTION METHOD	5030			
		DILUTION FACTOR	1			
COMPOUND		CRDL				
Bromodichloromethane		0.50	< 0.50			
Bromoform		0.50	< 0.50			
Bromomethane		1.0	< 1.0			
Carbon tetrachloride		0.50	< 0.50			
Chlorobenzene		1.0	< 1.0			
Chloroethane		1.0	< 1.0			
Chloroform		0.50	< 0.50			
Chloromethane		1.0	< 1.0			
Dibromochloromethane		0.50	< 0.50			
1,2-Dichlorobenzene		1.0	< 1.0			
1,3-Dichlorobenzene		1.0	< 1.0			
1,4-Dichlorobenzene		1.0	< 1.0			
Dichlorodifluoromethane		1.0	< 1.0			
1,1-Dichloroethane		0.50	< 0.50			
1,2-Dichloroethane		0.50	< 0.50			
1,1-Dichloroethene		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			
cis-1,3-Dichloropropene		0.50	< 0.50			
trans-1,3-Dichloropropene		0.50	< 0.50			
Methylene chloride		10	< 10			
1,1,1,2-Tetrachloroethane		0.50	< 0.50			
1,1,2,2-Tetrachloroethane		0.50	< 0.50			
Tetrachloroethene		0.50	< 0.50			
1,1,1-Trichloroethane		0.50	< 0.50			
1,1,2-Trichloroethane		0.50	< 0.50			
Trichloroethene		0.50	< 0.50			
Trichlorofluoromethane		1.0	< 1.0			
Vinyl Chloride		0.50	< 0.50			
SURROGATE	SPIKE CONC	ACCEPT LIMITS %	% RECOVERY	% RECOVERY	% RECOVERY	% RECOVERY
1-Chloro-3-fluorobenzene	10	80-120	100			

PROJECT NO: 30987-2 (RWQCB LabForm 10A; Ver12/94)

QA/QC REPORT

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

Date Performed: 2/24/98
Batch Number: HB24101W
Lab Sample I.D.: HB02113
Analytical Method: EPA 8010
Reporting Unit: µg/L

Analyte	Sample Result	Spike Conc	MS	% MS	Spike Conc (Dup)	MSD	%MSD	RPD	MS/MSD Limit	RPD Limit
Chloroform	0	10	10	100%	10	11	110%	9.5%	80-125	≤ 20
1,1-Dichloroethane	0	10	11	110%	10	11	110%	0.0%	80-120	≤ 20
1,2-Dichloroethane	0	10	11	110%	10	9.8	98%	11.5%	80-125	≤ 20
1,1-Dichloroethene	0	10	11	110%	10	10	100%	9.5%	75-120	≤ 25
Tetrachloroethene	0	10	12	120%	10	10	100%	18.2%	70-130	≤ 20
Trichloroethene	0	10	11	110%	10	10	100%	9.5%	50-140	≤ 30

III. LABORATORY QUALITY CONTROL CHECK SAMPLE (LCS)

Date Performed: 2/24/98
Supply Source: Supelco
Lot Number: LA67790
Date of Source: 12/9/97
Analytical Method: EPA 8010
Reporting Unit: µg/L
Lab LCS I.D.: LCS

Analyte	Spike Concentration	Result	% Recovery	Acceptance % Recovery Limit
Chloroform	10	10	100%	80-120
1,1-Dichloroethane	10	10	100%	80-120
1,2-Dichloroethane	10	10	100%	80-120
1,1-Dichloroethene	10	9	90%	80-120
Tetrachloroethene	10	11	110%	80-120
Trichloroethene	10	10	100%	80-120

Sample File : H:\DATA\GC10A\P9802A.smp
Created by : on : 1/25/95 12:46 PM
Edited by : on : 2/3/98 2:22 PM
Number Of Times Edited : 284

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 : 12.842 min Search Window: 1.40 s, 1.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	3822.00 ✓	522.96	0.03205	0.05000	1
2	5.0000	8080.00 ✓	1078.87	0.06895	0.10000	1
3	10.0000	16485.50 ✓	2151.97	0.14123	0.20000	1
4	50.0000	86341.00 ✓	10864.37	0.74346	1.00000	1
5	100.0000	171634.00 ✓	21400.80	1.44411	2.00000	1
6	150.0000	273298.00 ✓	33961.58	2.25250	3.00000	1
7	300.0000	526609.65 ✓	63879.39	4.57703	6.00000	1

Average Calibration Factor = 0.7165 (%RSD = 5.87)

BENZENE

Component Type : Single Peak Component
Retention Time : 17.653 min Search Window: 1.00 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	9728.50	1465.29	0.08158	0.05000	1
2	5.0000	20043.00	2962.40	0.17104	0.10000	1
3	10.0000	36958.00	5532.22	0.31661	0.20000	1
4	50.0000	191244.00	28009.30	1.64675	1.00000	1
5	100.0000	381891.00	55754.95	3.21319	2.00000	1
6	150.0000	608787.64	89447.52	5.01758	3.00000	1
7	300.0000	1137605.27	166053.67	9.88749	6.00000	1

Average Calibration Factor = 1.6427 (%RSD = 2.55)

FB

Component Type : Single Peak Component
Retention Time : 18.677 min Search Window: 1.00 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard :

Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	119258.00	16440.49	1.00000	1.00000	1
2	50.0000	117184.00	16297.43	1.00000	1.00000	1
3	50.0000	116729.00	16208.93	1.00000	1.00000	1
4	50.0000	116134.00	16262.14	1.00000	1.00000	1
5	50.0000	118851.00	16590.87	1.00000	1.00000	1
6	50.0000	121331.00	17063.42	1.00000	1.00000	1
7	50.0000	115055.00	16094.39	1.00000	1.00000	1

Average Calibration Factor = 1.0000 (%RSD = 0.00)

TCE.

Component Type : Single Peak Component
Retention Time : 20.070 min Search Window: 0.90 s, 0.90 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	5623.00	1070.75	0.04715	0.05000	1
2	5.0000	10945.50	2046.93	0.09340	0.10000	1
3	10.0000	20426.50	3845.91	0.17499	0.20000	1
4	50.0000	105892.00	19622.28	0.91181	1.00000	1
5	100.0000	214946.20	39462.29	1.80854	2.00000	1
6	150.0000	335555.66	62123.60	2.76562	3.00000	1
7	300.0000	634266.81	116969.54	5.51273	6.00000	1

Average Calibration Factor = 0.9155 (%RSD = 2.42)

AAA-TFT

Component Type : Single Peak Component
Retention Time : 20.973 min Search Window: 0.90 s, 1.40 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	60560.00	12615.90	0.50781	1.00000	1
2	50.0000	58686.00	12292.27	0.50080	1.00000	1
3	50.0000	57170.00	12029.75	0.48977	1.00000	1
4	50.0000	57965.00	12183.58	0.49912	1.00000	1
5	50.0000	60151.50	12529.09	0.50611	1.00000	1
6	50.0000	61145.50	12714.36	0.50396	1.00000	1
7	50.0000	56349.00	11606.32	0.48976	1.00000	1

Average Calibration Factor = 0.4996 (%RSD = 1.47)

TOLUENE

Component Type : Single Peak Component
Retention Time : 23.350 min Search Window: 1.00 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	9397.04	3149.59	0.07880	0.05000	1
2	5.0000	17385.82	5982.16	0.14836	0.10000	1
3	10.0000	37326.95	11366.33	0.31977	0.20000	1
4	50.0000	170373.00	56184.88	1.46704	1.00000	1
5	100.0000	333411.38	112285.76	2.80529	2.00000	1
6	150.0000	494144.96	175784.78	4.07270	3.00000	1
7	300.0000	1016753.97	322171.93	8.83711	6.00000	1

Average Calibration Factor = 1.4798 (%RSD = 5.82)

CFB

Component Type : Single Peak Component
Retention Time : 24.916 min Search Window: 0.80 s, 0.50 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	115637.50	40042.71	0.96964	1.00000	1
2	50.0000	115424.50	40489.01	0.98499	1.00000	1
3	50.0000	115383.00	40422.39	0.98847	1.00000	1
4	50.0000	112723.00	40729.04	0.97063	1.00000	1
5	50.0000	117566.00	42219.28	0.98919	1.00000	1
6	50.0000	120560.00	43643.69	0.99365	1.00000	1
7	50.0000	110890.00	40526.93	0.96380	1.00000	1

Average Calibration Factor = 0.9801 (%RSD = 1.20)

CHLOROBENZENE

Component Type : Single Peak Component
Retention Time : 25.372 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	9112.00	3263.60	0.07641	0.05000	1
2	5.0000	18444.00	6507.89	0.15739	0.10000	1
3	10.0000	36707.00	13073.19	0.31446	0.20000	1
4	50.0000	181481.50	66258.92	1.56269	1.00000	1
5	100.0000	357055.00	130257.80	3.00422	2.00000	1
6	150.0000	563462.05	210073.36	4.64401	3.00000	1
7	300.0000	1051490.00	404439.12	9.13902	6.00000	1

Average Calibration Factor = 1.5443 (%RSD = 1.77)

ETHYLBENZENE

Component Type : Single Peak Component
Retention Time : 25.666 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	8200.50	3142.36	0.06876	0.05000	1
2	5.0000	16460.00	6202.44	0.14046	0.10000	1
3	10.0000	31969.50	11765.45	0.27388	0.20000	1
4	50.0000	158558.00	59160.07	1.36530	1.00000	1
5	100.0000	314154.50	120607.41	2.64326	2.00000	1
6	150.0000	497399.00	194394.48	4.09952	3.00000	1
7	300.0000	913257.00	353840.02	7.93757	6.00000	1

Average Calibration Factor = 1.3608 (%RSD = 2.17)

M,P-XYLENES

Component Type : Single Peak Component
Retention Time : 25.917 min Search Window: 0.20 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB

Average Calibration Factor = 1.1394 (%RSD = 2.65)

BROMOBENZENE

Component Type : Single Peak Component
Retention Time : 27.020 min Search Window: 0.30 s, 0.25 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	8934.00	3247.80	0.07491	0.05000	1
2	5.0000	18111.50	6690.87	0.15456	0.10000	1
3	10.0000	35594.50	13972.89	0.30493	0.20000	1
4	50.0000	179898.00	71748.98	1.54906	1.00000	1
5	100.0000	354031.00	138040.58	2.97878	2.00000	1
6	150.0000	558642.00	223475.13	4.60428	3.00000	1
7	300.0000	1051638.00	444329.22	9.14031	6.00000	1

Average Calibration Factor = 1.5236 (%RSD = 1.48)

n-PROPYLBENZENE

Component Type : Single Peak Component
Retention Time : 27.269 min Search Window: 0.20 s, 0.22 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	7646.95	2894.72	0.06412	0.05000	1
2	5.0000	14859.63	5729.37	0.12681	0.10000	1
3	10.0000	28109.57	11771.29	0.24081	0.20000	1
4	50.0000	141665.15	58881.10	1.21984	1.00000	1
5	100.0000	286599.21	114055.61	2.41142	2.00000	1
6	150.0000	458371.70	186937.22	3.77786	3.00000	1
7	300.0000	858290.99	356324.71	7.45983	6.00000	1

Average Calibration Factor = 1.2404 (%RSD = 2.52)

2-CL-TOLUENE

Component Type : Single Peak Component
Retention Time : 27.350 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	8654.24	3419.67	0.07257	0.05000	1
2	5.0000	16766.66	6747.69	0.14308	0.10000	1
3	10.0000	33012.57	13158.42	0.28281	0.20000	1
4	50.0000	161211.63	63876.59	1.38815	1.00000	1
5	100.0000	318300.31	130258.03	2.67815	2.00000	1
6	150.0000	499358.94	211564.52	4.11567	3.00000	1
7	300.0000	915087.94	396256.54	7.95348	6.00000	1

Average Calibration Factor = 1.3887 (%RSD = 3.36)

4-CLOROTOLUENE

Component Type : Single Peak Component
Retention Time : 27.435 min Search Window: 0.15 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB

Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	8523.32	3197.21	0.07147	0.05000	1
2	5.0000	16769.21	6464.47	0.14310	0.10000	1
3	10.0000	35463.43	13603.94	0.30381	0.20000	1
4	50.0000	171988.66	68121.46	1.48095	1.00000	1
5	100.0000	338992.77	134504.65	2.85225	2.00000	1
6	150.0000	529426.35	221967.46	4.36349	3.00000	1
7	300.0000	960585.76	426316.79	8.34893	6.00000	1

Average Calibration Factor = 1.4475 (%RSD = 2.89)

1,3,5-TRIMETHYLBENZE
Component Type : Single Peak Component
Retention Time : 27.586 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	11204.50	4462.83	0.09395	0.05000	1
2	5.0000	22268.00	8861.94	0.19003	0.10000	1
3	10.0000	46628.43	18553.24	0.39946	0.20000	1
4	50.0000	226751.59	90482.43	1.95250	1.00000	1
5	100.0000	445403.16	174195.17	3.74758	2.00000	1
6	150.0000	700477.35	278227.00	5.77328	3.00000	1
7	300.0000	1275884.04	532543.27	11.08934	6.00000	1

Average Calibration Factor = 1.9108 (%RSD = 2.69)

t-BUTYLBENZENE
Component Type : Single Peak Component
Retention Time : 27.862 min Search Window: 0.15 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	6269.25	2474.00	0.05257	0.05000	1
2	5.0000	12501.34	4968.64	0.10668	0.10000	1
3	10.0000	23997.57	9257.23	0.20558	0.20000	1
4	50.0000	120556.93	47284.36	1.03808	1.00000	1
5	100.0000	238120.39	96019.20	2.00352	2.00000	1
6	150.0000	375174.03	150280.08	3.09215	3.00000	1
7	300.0000	695494.51	271123.98	6.04489	6.00000	1

Average Calibration Factor = 1.0320 (%RSD = 2.22)

1,2,4-TRIMETHYLBENZE
Component Type : Single Peak Component
Retention Time : 27.983 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	7931.64	3393.33	0.06651	0.05000	1
2	5.0000	16820.45	6985.53	0.14354	0.10000	1
3	10.0000	31865.89	13092.23	0.27299	0.20000	1
4	50.0000	164373.54	64732.80	1.41538	1.00000	1
5	100.0000	325914.30	135972.64	2.74221	2.00000	1
6	150.0000	505679.11	219262.20	4.16777	3.00000	1
7	300.0000	932753.55	407798.78	8.10702	6.00000	1

Average Calibration Factor = 1.3796 (%RSD = 2.65)

sec-BUTYLBENZENE

Component Type : Single Peak Component
Retention Time : 28.086 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	6052.00	2411.50	0.05075	0.05000	1
2	5.0000	12413.38	4781.99	0.10593	0.10000	1
3	10.0000	26828.80	9917.12	0.22984	0.20000	1
4	50.0000	144348.01	49902.13	1.24294	1.00000	1
5	100.0000	245880.26	96201.10	2.06881	2.00000	1
6	150.0000	404093.44	154775.53	3.33050	3.00000	1
7	300.0000	771305.03	295439.99	6.70379	6.00000	1

Average Calibration Factor = 1.1040 (%RSD = 7.05)

1,3-DCBE

Component Type : Single Peak Component
Retention Time : 28.148 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	6926.11	2862.57	0.05808	0.05000	1
2	5.0000	14682.35	6040.87	0.12529	0.10000	1
3	10.0000	27476.32	11363.56	0.23539	0.20000	1
4	50.0000	140762.56	60723.18	1.21207	1.00000	1
5	100.0000	300719.90	128830.22	2.53023	2.00000	1
6	150.0000	470666.86	206482.90	3.87920	3.00000	1
7	300.0000	859348.10	378825.81	7.46902	6.00000	1

Average Calibration Factor = 1.2295 (%RSD = 3.90)

1,4-DCBE

Component Type : Single Peak Component
Retention Time : 28.220 min Search Window: 0.15 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	6608.22	2518.60	0.05541	0.05000	1
2	5.0000	14010.32	5479.97	0.11956	0.10000	1
3	10.0000	28370.74	11383.99	0.24305	0.20000	1
4	50.0000	151790.92	60883.89	1.30703	1.00000	1
5	100.0000	291897.53	118467.52	2.45600	2.00000	1
6	150.0000	465339.70	191076.73	3.83529	3.00000	1
7	300.0000	882483.20	379077.33	7.67010	6.00000	1

Average Calibration Factor = 1.2301 (%RSD = 5.44)

p-ISOPROPYLTOLUENE

Component Type : Single Peak Component
Retention Time : 28.283 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB

Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	6804.78	2598.61	0.05706	0.05000	1
2	5.0000	14119.66	5204.77	0.12049	0.10000	1
3	10.0000	25210.68	10174.39	0.21598	0.20000	1
4	50.0000	132289.04	50802.19	1.13911	1.00000	1
5	100.0000	283524.23	102629.93	2.38554	2.00000	1
6	150.0000	435424.62	165796.60	3.58873	3.00000	1
7	300.0000	758584.86	305830.24	6.59324	6.00000	1

Average Calibration Factor = 1.1504 (%RSD = 4.30)

1,2-DCBE

Component Type : Single Peak Component
Retention Time : 28.595 min Search Window: 0.40 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	5812.76	2197.94	0.04874	0.05000	1
2	5.0000	12302.89	4759.40	0.10499	0.10000	1
3	10.0000	23488.00	8712.76	0.20122	0.20000	1
4	50.0000	120926.91	47148.01	1.04127	1.00000	1
5	100.0000	239789.37	96760.23	2.01756	2.00000	1
6	150.0000	377826.14	149194.56	3.11401	3.00000	1
7	300.0000	718110.99	275854.46	6.24146	6.00000	1

Average Calibration Factor = 1.0227 (%RSD = 2.64)

n-BUTYLBENZENE

Component Type : Single Peak Component
Retention Time : 28.716 min Search Window: 0.60 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	6147.24	2349.35	0.05155	0.05000	1
2	5.0000	12525.11	4739.15	0.10688	0.10000	1
3	10.0000	24409.00	9355.54	0.20911	0.20000	1
4	50.0000	136689.56	48794.11	1.17700	1.00000	1
5	100.0000	272899.06	103137.21	2.29614	2.00000	1
6	150.0000	431785.76	166816.23	3.55874	3.00000	1
7	300.0000	786497.92	303627.43	6.83584	6.00000	1

Average Calibration Factor = 1.1137 (%RSD = 5.75)

1,2,4-TCBE

Component Type : Single Peak Component
Retention Time : 30.837 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 Be Forced Through 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	2.5000	1829.00	580.51	0.01534	0.05000	1
2	5.0000	5037.00	1538.81	0.04298	0.10000	1
3	10.0000	11247.50	3333.19	0.09636	0.20000	1

4	50.0000	69010.00	20922.63	0.59423	1.00000	1
5	100.0000	150017.00	44616.90	1.26223	2.00000	1
6	150.0000	236384.20	69982.38	1.94826	3.00000	1
7	300.0000	440269.00	135428.84	3.82660	6.00000	1

Calibration Curve : y = (0.000000) + (0.638277)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999577

NAPHTHALENE

Component Type : Single Peak Component
Retention Time : 31.206 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 Be Forced Through 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	2.5000	1475.60	470.80	0.01237	0.05000	1
2	5.0000	4890.52	1464.42	0.04173	0.10000	1
3	10.0000	11728.47	3280.79	0.10048	0.20000	1
4	50.0000	79568.89	22734.00	0.68515	1.00000	1
5	100.0000	156730.55	47620.62	1.31871	2.00000	1
6	150.0000	212546.07	61989.83	1.75179	3.00000	1
7	300.0000	452677.68	143012.51	3.93445	6.00000	1

Calibration Curve : y = (0.000000) + (0.643514)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996512

CL6BUTADIENE

Component Type : Single Peak Component
Retention Time : 31.287 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	3795.40	1018.73	0.03183	0.05000	1
2	5.0000	8043.05	2138.50	0.06864	0.10000	1
3	10.0000	14735.33	4113.91	0.12624	0.20000	1
4	50.0000	65912.11	20110.58	0.56755	1.00000	1
5	100.0000	145854.43	39969.39	1.22720	2.00000	1
6	150.0000	210791.75	60262.37	1.73733	3.00000	1
7	300.0000	394112.27	108837.35	3.42542	6.00000	1

Average Calibration Factor = 0.6122 (%RSD = 7.07)

1,2,3 TCBE

Component Type : Single Peak Component
Retention Time : 31.502 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 Be Forced Through 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	2.5000	1968.00	546.98	0.01650	0.05000	1
2	5.0000	5071.93	1425.47	0.04328	0.10000	1
3	10.0000	10823.20	3116.39	0.09272	0.20000	1
4	50.0000	64719.50	19223.58	0.55728	1.00000	1

5	100.0000	144752.52	40801.53	1.21793	2.00000	1
6	150.0000	211134.98	60797.47	1.74016	3.00000	1
7	300.0000	399674.04	116443.41	3.47377	6.00000	1

Calibration Curve : y = (0.000000) + (0.580988)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999503

Calibration Replicate Lists:

Component: CIS-1,2-DCE

Level : 1

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
3822.00	522.96	2.5000	0.0320	0.0500	2/3/98	2:18 PM	Y30C001.

Level : 2

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
8080.00	1078.87	5.0000	0.0690	0.1000	2/3/98	2:18 PM	Y30C002.

Level : 3

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
16485.50	2151.97	10.0000	0.1412	0.2000	2/3/98	2:18 PM	Y30C003.

Level : 4

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
86341.00	10864.37	50.0000	0.7435	1.0000	2/3/98	2:18 PM	Y30C004.

Level : 5

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
171634.00	21400.80	100.0000	1.4441	2.0000	2/3/98	2:18 PM	Y30C006.

Level : 6

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
273298.00	33961.58	150.0000	2.2525	3.0000	2/3/98	2:18 PM	Y30C008.

Level : 7

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
526609.65	63879.39	300.0000	4.5770	6.0000	2/3/98	2:18 PM	Y30C014.

Component: BENZENE

Level : 1

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
9728.50	1465.29	2.5000	0.0816	0.0500	2/3/98	2:18 PM	Y30C001.

Level : 2

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
20043.00	2962.40	5.0000	0.1710	0.1000	2/3/98	2:18 PM	Y30C002.

Level : 3

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File

Sample File : H:\DATA\GC10A\E9802A.smp
Created by : on : 1/23/91 8:42 AM
Edited by : SS/NA on : 2/3/98 11:56 AM
Number Of Times Edited : 972

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 : 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

Component Information :

DICHLORODIFLUOROMETH

Component Type : Single Peak Component
Retention Time : 3.670 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 Be Forced Through 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	2.5000	8327.16 ✓	1338.80	0.01530	0.05000	1
2	5.0000	20910.33 ✓	3181.25	0.03850	0.10000	1
3	10.0000	46418.10 ✓	6848.22	0.08364	0.20000	1
4	50.0000	268551.68 ✓	39089.48	0.48010	1.00000	1
5	100.0000	561282.27 ✓	77370.39	0.98190	2.00000	1
6	150.0000	890088.45 ✓	122604.88	1.54447	3.00000	1
7	300.0000	1565516.25 ✓	222442.80	2.73905	6.00000	1

Calibration Curve : y = (0.000000) + (0.470165)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.995650

CHLOROMETHANE

Component Type : Single Peak Component
Retention Time : 3.855 min Search Window: 2.50 s, 1.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	21488.84	5480.04	0.03948	0.05000	1
2	5.0000	47203.67	11504.10	0.08690	0.10000	1
3	10.0000	97384.40	23105.11	0.17547	0.20000	1
4	50.0000	499915.82	116292.24	0.89372	1.00000	1
5	100.0000	947213.73	223595.95	1.65705	2.00000	1
6	150.0000	1476807.62	341945.63	2.56253	3.00000	1
7	300.0000	2549847.99	574549.36	4.46125	6.00000	1

Average Calibration Factor = 0.8366 (%RSD = 6.40)

VINYL CHLORIDE

Component Type : Single Peak Component
Retention Time : 4.159 min Search Window: 2.00 s, 1.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	19249.00	4790.15	0.03536	0.05000	1
2	5.0000	40686.00	9634.61	0.07490	0.10000	1
3	10.0000	85595.00	19680.38	0.15423	0.20000	1
4	50.0000	438001.50	91609.77	0.78303	1.00000	1
5	100.0000	856016.00	159330.37	1.49751	2.00000	1
6	150.0000	1353771.43	269641.83	2.34904	3.00000	1
7	300.0000	2361156.76	453583.74	4.13111	6.00000	1

Average Calibration Factor = 0.7473 (%RSD = 4.94)

BROMOMETHANE
Component Type : Single Peak Component
Retention Time : 4.821 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 Be Forced Through 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	2.5000	9541.50	2092.69	0.01753	0.05000	1
2	5.0000	22201.00	4744.12	0.04087	0.10000	1
3	10.0000	49784.82	10193.94	0.08971	0.20000	1
4	50.0000	272871.43	52829.15	0.48782	1.00000	1
5	100.0000	548111.57	102761.62	0.95886	2.00000	1
6	150.0000	897649.13	160373.51	1.55759	3.00000	1
7	300.0000	1590215.44	279371.33	2.78226	6.00000	1

Calibration Curve : y = (0.000000) + (0.475397)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996428

CHLOROETHANE
Component Type : Single Peak Component
Retention Time : 5.116 min Search Window: 1.20 s, 1.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	18602.00	3606.75	0.03418	0.05000	1
2	5.0000	40875.00	7873.25	0.07525	0.10000	1
3	10.0000	85534.18	15914.69	0.15412	0.20000	1
4	50.0000	448219.07	79448.86	0.80130	1.00000	1
5	100.0000	892518.43	149458.78	1.56137	2.00000	1
6	150.0000	1387335.87	236658.20	2.40728	3.00000	1
7	300.0000	2450166.56	403605.44	4.28684	6.00000	1

Average Calibration Factor = 0.7579 (%RSD = 5.90)

TRICHLOROFLUOROMETH
Component Type : Single Peak Component
Retention Time : 6.153 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 Be Forced Through 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	2.5000	7746.50	1392.88	0.01423	0.05000	1
2	5.0000	18221.00	2984.65	0.03354	0.10000	1
3	10.0000	43748.14	6570.02	0.07883	0.20000	1
4	50.0000	271599.40	35407.65	0.48555	1.00000	1
5	100.0000	617448.74	73377.37	1.08016	2.00000	1
6	150.0000	1005112.24	112277.41	1.74405	3.00000	1
7	300.0000	1907579.08	190448.06	3.33753	6.00000	1

Calibration Curve : y = (0.000000) + (0.557875)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998527

1,1-DCE
Component Type : Single Peak Component
Retention Time : 7.327 min Search Window: 1.40 s, 2.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	37590.50	5891.43	0.06906	0.05000	1
2	5.0000	84235.50	12728.09	0.15507	0.10000	1
3	10.0000	171266.00	25238.13	0.30860	0.20000	1
4	50.0000	863386.00	121633.74	1.54350	1.00000	1
5	100.0000	1743732.94	232730.77	3.05048	2.00000	1
6	150.0000	2572111.00	344309.03	4.46308	3.00000	1
7	300.0000	4423879.74	574257.22	7.74008	6.00000	1

Average Calibration Factor = 1.4745 (%RSD = 6.82)

MECL2
Component Type : Single Peak Component
Retention Time : 7.790 min Search Window: 2.00 s, 1.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	48842.81	7571.59	0.08973	0.05000	1
2	5.0000	105847.24	15438.69	0.19486	0.10000	1
3	10.0000	219050.45	31339.44	0.39470	0.20000	1
4	50.0000	1036810.00	143069.59	1.85354	1.00000	1
5	100.0000	1965399.66	267039.07	3.43826	2.00000	1
6	150.0000	3003460.78	391079.12	5.21156	3.00000	1
7	300.0000	5154419.98	654873.56	9.01824	6.00000	1

Average Calibration Factor = 1.7900 (%RSD = 8.92)

FREON 113
Component Type : Single Peak Component
Retention Time : 7.990 min Search Window: 1.00 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

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

1	2.5000	34131.19	3809.11	0.06271	0.05000	1
2	5.0000	73324.26	7985.79	0.13499	0.10000	1
3	10.0000	156716.05	16837.32	0.28238	0.20000	1
4	50.0000	793112.00	80518.75	1.41787	1.00000	1
5	100.0000	1608836.40	157856.58	2.81449	2.00000	1
6	150.0000	2306620.22	233313.51	4.00241	3.00000	1
7	300.0000	4117960.78	393504.65	7.20484	6.00000	1

Average Calibration Factor = 1.3394 (%RSD = 6.29)

T-1,2-DCE

Component Type : Single Peak Component
Retention Time : 9.641 min Search Window: 2.00 s, 1.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	41393.00	6682.87	0.07605	0.05000	1
2	5.0000	92143.50	14142.60	0.16963	0.10000	1
3	10.0000	196148.00	29231.11	0.35343	0.20000	1
4	50.0000	963117.00	135855.84	1.72180	1.00000	1
5	100.0000	1880328.00	261520.04	3.28943	2.00000	1
6	150.0000	2785896.50	381541.93	4.83404	3.00000	1
7	300.0000	4807325.00	646485.85	8.41096	6.00000	1

Average Calibration Factor = 1.6234 (%RSD = 7.79)

1,1-DCA

Component Type : Single Peak Component
Retention Time : 10.565 min Search Window: 1.60 s, 1.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	40132.00	5349.75	0.07373	0.05000	1
2	5.0000	92338.00	11786.48	0.16999	0.10000	1
3	10.0000	192536.00	23876.28	0.34692	0.20000	1
4	50.0000	947175.00	111649.23	1.69330	1.00000	1
5	100.0000	1830521.00	212434.94	3.20230	2.00000	1
6	150.0000	2735070.00	311867.08	4.74585	3.00000	1
7	300.0000	4776877.00	534901.30	8.35769	6.00000	1

Average Calibration Factor = 1.5969 (%RSD = 7.91)

CIS-1,2-DCE

Component Type : Single Peak Component
Retention Time : 12.728 min Search Window: 1.00 s, 1.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	40246.50	5532.43	0.07394	0.05000	1
2	5.0000	89997.00	11947.90	0.16568	0.10000	1
3	10.0000	189033.00	24274.24	0.34061	0.20000	1
4	50.0000	942764.00	116287.72	1.68541	1.00000	1
5	100.0000	1801917.00	218067.83	3.15226	2.00000	1
6	150.0000	2708629.67	318729.32	4.69997	3.00000	1
7	300.0000	4754900.91	550669.88	8.31924	6.00000	1

Average Calibration Factor = 1.5791 (%RSD = 7.31)

BROMOCHLOROMETHAN

Component Type : Single Peak Component
Retention Time : 13.423 min Search Window: 1.00 s, 1.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	26955.04	3976.87	0.04952	0.05000	1
2	5.0000	61665.58	8733.06	0.11352	0.10000	1
3	10.0000	131508.09	18094.29	0.23696	0.20000	1
4	50.0000	677996.10	90340.61	1.21208	1.00000	1
5	100.0000	1284672.95	169193.53	2.24740	2.00000	1
6	150.0000	2002600.57	254371.85	3.47488	3.00000	1
7	300.0000	3564524.72	448861.17	6.23654	6.00000	1

Average Calibration Factor = 1.1206 (%RSD = 7.07)

CHLOROFORM

Component Type : Single Peak Component
Retention Time : 13.704 min Search Window: 1.00 s, 1.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	57816.40	7613.24	0.10622	0.05000	1
2	5.0000	123958.28	15850.70	0.22820	0.10000	1
3	10.0000	253486.73	31581.95	0.45675	0.20000	1
4	50.0000	1186012.88	147542.31	2.12028	1.00000	1
5	100.0000	2279985.88	272675.34	3.98859	2.00000	1
6	150.0000	3326583.86	400177.54	5.77223	3.00000	1
7	300.0000	5953624.53	692664.28	10.41654	6.00000	1

Average Calibration Factor = 2.0664 (%RSD = 9.57)

2,2-DCP

Component Type : Single Peak Component
Retention Time : 13.925 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 Be Forced Through 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	2.5000	25586.56	2928.95	0.04701	0.05000	1
2	5.0000	64851.14	7084.84	0.11939	0.10000	1
3	10.0000	133819.18	14449.67	0.24112	0.20000	1
4	50.0000	679426.52	68846.01	1.21463	1.00000	1
5	100.0000	1166724.17	122017.45	2.04106	2.00000	1
6	150.0000	1969797.90	192451.77	3.41796	3.00000	1

Calibration Curve : y = (0.000000) + (1.111059)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.994337

1,2-DCA

Component Type : Single Peak Component
Retention Time : 16.056 min Search Window: 0.80 s, 1.10 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN

Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	36258.97	6180.99	0.07029	0.05000	1
2	5.0000	86727.20	13524.60	0.15966	0.10000	1
3	10.0000	175093.00	26900.28	0.31549	0.20000	1
4	50.0000	857041.00	129520.09	1.53216	1.00000	1
5	100.0000	1577861.61	233766.54	2.76030	2.00000	1
6	150.0000	2342899.00	344292.00	4.06536	3.00000	1
7	300.0000	4214224.85	611780.42	7.37326	6.00000	1

Average Calibration Factor = 1.4395 (%RSD = 9.34)

1,1,1-TCA

Component Type : Single Peak Component
Retention Time : 16.338 min Search Window: 0.80 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	48005.03	6310.65	0.08819	0.05000	1
2	5.0000	107878.80	13531.73	0.19860	0.10000	1
3	10.0000	222552.00	27094.59	0.40101	0.20000	1
4	50.0000	1097573.50	128615.60	1.96217	1.00000	1
5	100.0000	2051137.40	233325.10	3.58825	2.00000	1
6	150.0000	3068176.00	350589.01	5.32385	3.00000	1
7	300.0000	5459106.07	599138.87	9.55133	6.00000	1

Average Calibration Factor = 1.8397 (%RSD = 8.22)

1,1-DICHLOROPROPENE

Component Type : Single Peak Component
Retention Time : 16.984 min Search Window: 0.70 s, 1.10 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	36874.00	5914.57	0.06774	0.05000	1
2	5.0000	78216.00	12115.50	0.14399	0.10000	1
3	10.0000	166652.41	25100.04	0.30029	0.20000	1
4	50.0000	806539.00	119205.19	1.44188	1.00000	1
5	100.0000	1550622.39	224726.78	2.71265	2.00000	1
6	150.0000	2212489.00	320133.96	3.83907	3.00000	1
7	300.0000	4163177.14	575350.42	7.28395	6.00000	1

Average Calibration Factor = 1.3697 (%RSD = 7.32)

CARBON TETRACHLORIDE

Component Type : Single Peak Component
Retention Time : 17.538 min Search Window: 0.70 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	53899.00	7445.15	0.09902	0.05000	1
2	5.0000	118115.00	15791.64	0.21745	0.10000	1
3	10.0000	243088.50	31719.27	0.43801	0.20000	1
4	50.0000	1172886.50	148975.91	2.09681	1.00000	1
5	100.0000	2258352.00	275897.53	3.95075	2.00000	1
6	150.0000	3265420.00	399987.03	5.66610	3.00000	1
7	300.0000	6278987.07	736355.37	10.98580	6.00000	1

Average Calibration Factor = 2.0195 (%RSD = 6.86)

BR2CH2

Component Type : Single Peak Component
Retention Time : 19.811 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 Be Forced Through 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	2.5000	14597.84	2815.66	0.02682	0.05000	1
2	5.0000	37381.40	6870.70	0.06882	0.10000	1
3	10.0000	80036.01	14254.55	0.14421	0.20000	1
4	50.0000	438177.83	74529.81	0.78335	1.00000	1
5	100.0000	857256.97	144281.65	1.49968	2.00000	1
6	150.0000	1246803.85	216185.50	2.16343	3.00000	1
7	300.0000	2444154.67	409379.08	4.27633	6.00000	1

Calibration Curve : y = (0.000000) + (0.718606)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999340

1,2-DCP

Component Type : Single Peak Component
Retention Time : 19.989 min Search Window: 0.20 s, 0.45 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	37793.00	6646.15	0.06943	0.05000	1
2	5.0000	86597.34	14265.91	0.15942	0.10000	1
3	10.0000	172322.44	28047.14	0.31050	0.20000	1
4	50.0000	804199.17	133728.64	1.43769	1.00000	1
5	100.0000	1623840.26	255085.00	2.84074	2.00000	1
6	150.0000	2345198.95	374809.54	4.06935	3.00000	1
7	300.0000	4403198.04	685822.96	7.70389	6.00000	1

Average Calibration Factor = 1.4334 (%RSD = 7.56)

TCE

Component Type : Single Peak Component
Retention Time : 20.154 min Search Window: 0.60 s, 0.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	58828.00	10813.64	0.10808	0.05000	1
2	5.0000	115098.47	21586.90	0.21189	0.10000	1
3	10.0000	220962.57	41430.20	0.39814	0.20000	1
4	50.0000	1090354.88	193244.97	1.94926	1.00000	1
5	100.0000	2031291.97	369738.43	3.55353	2.00000	1
6	150.0000	3048543.70	528367.50	5.28978	3.00000	1
7	300.0000	5567765.96	908240.32	9.74144	6.00000	1

Average Calibration Factor = 1.9120 (%RSD = 10.38)

BROMODICHLOROMETHAN

Component Type : Single Peak Component
Retention Time : 20.270 min Search Window: 0.50 s, 0.40 %

Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	39825.16	7780.64	0.07317	0.05000	1
2	5.0000	89162.79	16842.32	0.16415	0.10000	1
3	10.0000	183368.48	33014.71	0.33041	0.20000	1
4	50.0000	871805.12	156244.46	1.55856	1.00000	1
5	100.0000	1760096.30	301012.55	3.07910	2.00000	1
6	150.0000	2475520.50	436478.46	4.29548	3.00000	1
7	300.0000	4474451.33	787382.72	7.82856	6.00000	1

Average Calibration Factor = 1.5131 (%RSD = 8.14)

2-CVE
Component Type : Single Peak Component
Retention Time : 21.593 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 Be Forced Through 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	2.5000	3263.00	960.65	0.00599	0.05000	1
2	5.0000	11608.00	3188.59	0.02137	0.10000	1
3	10.0000	27177.50	7067.47	0.04897	0.20000	1
4	50.0000	168989.00	41909.25	0.30211	1.00000	1
5	100.0000	325733.50	79283.97	0.56984	2.00000	1
6	150.0000	535256.00	131334.44	0.92877	3.00000	1
7	300.0000	1049958.00	256058.78	1.83702	6.00000	1

Calibration Curve : y = (0.000000) + (0.304929)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999191

C-1,3-DCP
Component Type : Single Peak Component
Retention Time : 21.951 min Search Window: 0.80 s, 0.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	33343.50	9018.41	0.06126	0.05000	1
2	5.0000	75888.50	20020.26	0.13971	0.10000	1
3	10.0000	152078.50	39183.83	0.27402	0.20000	1
4	50.0000	745933.50	186982.36	1.33353	1.00000	1
5	100.0000	1461711.00	360649.47	2.55711	2.00000	1
6	150.0000	2160375.00	525574.89	3.74865	3.00000	1
7	300.0000	3798703.00	894005.35	6.64626	6.00000	1

Average Calibration Factor = 1.2802 (%RSD = 7.70)

T-1,3-DCP
Component Type : Single Peak Component
Retention Time : 22.833 min Search Window: 0.50 s, 0.50 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)

Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	27817.00	8064.50	0.05111	0.05000	1
2	5.0000	64434.42	18525.13	0.11862	0.10000	1
3	10.0000	132780.20	37597.50	0.23925	0.20000	1
4	50.0000	652030.34	185219.52	1.16566	1.00000	1
5	100.0000	1258848.94	354815.27	2.20222	2.00000	1
6	150.0000	1876429.33	521666.10	3.25595	3.00000	1
7	300.0000	3274024.45	885942.24	5.72828	6.00000	1

Average Calibration Factor = 1.1016 (%RSD = 8.15)

1,1,2-TCA

Component Type : Single Peak Component
Retention Time : 23.036 min Search Window: 0.50 s, 0.50 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	40828.00	11715.22	0.07501	0.05000	1
2	5.0000	91757.58	25690.61	0.16892	0.10000	1
3	10.0000	181574.00	50322.82	0.32717	0.20000	1
4	50.0000	857539.41	231374.95	1.53305	1.00000	1
5	100.0000	1614509.31	433836.44	2.82441	2.00000	1
6	150.0000	2359872.74	626745.42	4.09481	3.00000	1

Average Calibration Factor = 1.5226 (%RSD = 8.22)

1CL2BRPRPN

Component Type : Single Peak Component
Retention Time : 23.310 min Search Window: 0.40 s, 0.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard :
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	544306.00	137768.46	1.00000	1.00000	1
2	50.0000	543192.78	141123.76	1.00000	1.00000	1
3	50.0000	554980.60	143451.25	1.00000	1.00000	1
4	50.0000	559367.28	142112.21	1.00000	1.00000	1
5	50.0000	571626.58	148506.74	1.00000	1.00000	1
6	50.0000	576307.91	149999.40	1.00000	1.00000	1
7	50.0000	571554.82	146760.99	1.00000	1.00000	1

Average Calibration Factor = 1.0000 (%RSD = 0.00)

1,3-DCP

Component Type : Single Peak Component
Retention Time : 23.453 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 Be Forced Through 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	2.5000	37415.00	11639.88	0.06874	0.05000	1
2	5.0000	94485.22	24249.10	0.17394	0.10000	1
3	10.0000	162476.20	44796.17	0.29276	0.20000	1
4	50.0000	693436.97	196570.85	1.23968	1.00000	1
5	100.0000	1321269.17	374045.57	2.31142	2.00000	1

6	150.0000	1923547.53	548127.90	3.33771	3.00000	1

Calibration Curve : y = (0.000000) + (1.135387)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997172

DIBROMOCHLOROMETHAN

Component Type : Single Peak Component
Retention Time : 23.802 min Search Window: 0.50 s, 0.50 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	26644.50	7876.12	0.04895	0.05000	1
2	5.0000	58319.00	17268.38	0.10736	0.10000	1
3	10.0000	119313.00	34433.36	0.21499	0.20000	1
4	50.0000	594622.50	166527.43	1.06303	1.00000	1
5	100.0000	1155181.00	320317.90	2.02087	2.00000	1
6	150.0000	1747707.00	477099.49	3.03259	3.00000	1
7	300.0000	3065962.00	818866.37	5.36425	6.00000	1

Average Calibration Factor = 1.0151 (%RSD = 6.40)

EDB

Component Type : Single Peak Component
Retention Time : 24.167 min Search Window: 0.50 s, 0.50 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	13692.00	4334.60	0.02515	0.05000	1
2	5.0000	33192.00	10261.78	0.06111	0.10000	1
3	10.0000	71668.00	21322.67	0.12914	0.20000	1
4	50.0000	371132.00	109295.59	0.66349	1.00000	1
5	100.0000	736720.00	210502.38	1.28881	2.00000	1
6	150.0000	1145372.00	320137.90	1.98743	3.00000	1
7	300.0000	2041973.50	587856.42	3.57266	6.00000	1

Average Calibration Factor = 0.6179 (%RSD = 9.17)

TETRACHLOROETHENE

Component Type : Single Peak Component
Retention Time : 24.455 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 Be Forced Through 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	2.5000	59659.00	19357.65	0.10961	0.05000	1
2	5.0000	117029.00	37532.62	0.21545	0.10000	1
3	10.0000	233740.50	73577.76	0.42117	0.20000	1
4	50.0000	1056581.00	318921.78	1.88889	1.00000	1
5	100.0000	2036415.50	614895.48	3.56249	2.00000	1
6	150.0000	2878852.00	849867.32	4.99534	3.00000	1

Calibration Curve : y = (0.000000) + (1.715790)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996169

CFB

Component Type : Single Peak Component
Retention Time : 24.921 min Search Window: 0.30 s, 0.60 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	338031.50	106741.75	0.62103	1.00000	1
2	50.0000	334970.00	107849.47	0.61667	1.00000	1
3	50.0000	344593.00	108727.25	0.62091	1.00000	1
4	50.0000	340156.00	109187.43	0.60811	1.00000	1
5	50.0000	353265.00	115684.18	0.61800	1.00000	1
6	50.0000	356799.50	118880.23	0.61911	1.00000	1
7	50.0000	336322.26	114127.56	0.58843	1.00000	1

Average Calibration Factor = 0.6132 (%RSD = 1.92)

1,1,1,2-TCA
Component Type : Single Peak Component
Retention Time : 25.287 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 Be Forced Through 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	2.5000	59161.19	18935.31	0.10869	0.05000	1
2	5.0000	118783.18	38079.96	0.21868	0.10000	1
3	10.0000	228384.11	72234.18	0.41152	0.20000	1
4	50.0000	1019691.08	319110.00	1.82294	1.00000	1
5	100.0000	1947196.48	600306.74	3.40641	2.00000	1
6	150.0000	2681629.00	840000.79	4.65312	3.00000	1

Calibration Curve : y = (0.000000) + (1.615707)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.993165

CHLOROBNZN
Component Type : Single Peak Component
Retention Time : 25.380 min Search Window: 0.30 s, 0.20 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	21803.31	7356.26	0.04006	0.05000	1
2	5.0000	44239.82	15194.56	0.08144	0.10000	1
3	10.0000	84785.89	30130.67	0.15277	0.20000	1
4	50.0000	426485.92	142858.57	0.76244	1.00000	1
5	100.0000	809033.52	279576.12	1.41532	2.00000	1
6	150.0000	1298374.00	404081.38	2.25292	3.00000	1
7	300.0000	2260936.00	703741.16	3.95576	6.00000	1

Average Calibration Factor = 0.7514 (%RSD = 7.11)

BROMOFORM
Component Type : Single Peak Component
Retention Time : 25.976 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN

Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	13583.00	4635.32	0.02495	0.05000	1
2	5.0000	35511.00	11615.01	0.06537	0.10000	1
3	10.0000	70852.00	22935.45	0.12767	0.20000	1
4	50.0000	383480.50	117045.28	0.68556	1.00000	1
5	100.0000	743230.00	221898.86	1.30020	2.00000	1
6	150.0000	1145748.00	346194.02	1.98808	3.00000	1
7	300.0000	2115244.00	643399.55	3.70086	6.00000	1

Average Calibration Factor = 0.6295 (%RSD = 9.73)

1,1,2,2-TCA

Component Type : Single Peak Component
Retention Time : 26.345 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 Be Forced Through 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	2.5000	23195.00	7992.94	0.04261	0.05000	1
2	5.0000	68207.55	22904.89	0.12557	0.10000	1
3	10.0000	119903.91	41193.32	0.21605	0.20000	1
4	50.0000	573018.43	194787.61	1.02440	1.00000	1
5	100.0000	1040415.72	351148.07	1.82010	2.00000	1
6	150.0000	1574259.30	514799.72	2.73163	3.00000	1

Calibration Curve : y = (0.000000) + (0.919223)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997611

1,2,3-TCP

Component Type : Single Peak Component
Retention Time : 26.504 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 Be Forced Through 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	2.5000	19001.00	6716.67	0.03491	0.05000	1
2	5.0000	50430.45	17335.18	0.09284	0.10000	1
3	10.0000	93530.09	30801.17	0.16853	0.20000	1
4	50.0000	460295.57	152194.92	0.82289	1.00000	1
5	100.0000	847546.28	287764.59	1.48269	2.00000	1
6	150.0000	1278896.70	430906.28	2.21912	3.00000	1
7	300.0000	2292334.32	751744.96	4.01070	6.00000	1

Calibration Curve : y = (0.000000) + (0.690366)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.994629

BROMOBN

Component Type : Single Peak Component
Retention Time : 27.033 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)

Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	10143.00	3780.46	0.01863	0.05000	1
2	5.0000	24833.00	9005.02	0.04572	0.10000	1
3	10.0000	50947.00	17292.95	0.09180	0.20000	1
4	50.0000	275002.00	92793.00	0.49163	1.00000	1
5	100.0000	568612.00	191714.56	0.99473	2.00000	1
6	150.0000	862259.00	291687.01	1.49618	3.00000	1
7	300.0000	1603071.00	518663.62	2.80475	6.00000	1

Average Calibration Factor = 0.4634 (%RSD = 9.45)

2-CHLOROTOLUENE

Component Type : Single Peak Component
Retention Time : 27.357 min Search Window: 0.15 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	15994.00	6106.97	0.02938	0.05000	1
2	5.0000	34457.25	13100.05	0.06343	0.10000	1
3	10.0000	71037.52	26754.78	0.12800	0.20000	1
4	50.0000	356109.17	131097.14	0.63663	1.00000	1
5	100.0000	677029.14	255173.86	1.18439	2.00000	1
6	150.0000	1001351.62	363185.13	1.73753	3.00000	1
7	300.0000	1817767.73	666357.76	3.18039	6.00000	1

Average Calibration Factor = 0.6000 (%RSD = 6.69)

4-CHLOROTOLUENE

Component Type : Single Peak Component
Retention Time : 27.442 min Search Window: 1.10 s, 0.10 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	15532.50	5703.45	0.02854	0.05000	1
2	5.0000	34256.75	12422.29	0.06307	0.10000	1
3	10.0000	68185.20	25123.09	0.12286	0.20000	1
4	50.0000	337116.00	127682.22	0.60267	1.00000	1
5	100.0000	709519.39	255093.80	1.24123	2.00000	1
6	150.0000	1033625.86	362728.09	1.79353	3.00000	1
7	300.0000	1840818.45	654116.11	3.22072	6.00000	1

Average Calibration Factor = 0.5962 (%RSD = 5.45)

1,3-DCB

Component Type : Single Peak Component
Retention Time : 28.154 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	25210.60	8808.13	0.04632	0.05000	1
2	5.0000	56078.06	19519.76	0.10324	0.10000	1
3	10.0000	106280.00	40494.94	0.19150	0.20000	1
4	50.0000	531200.43	194896.75	0.94965	1.00000	1
5	100.0000	1060373.57	366331.87	1.85501	2.00000	1
6	150.0000	1620287.29	557356.57	2.81150	3.00000	1
7	300.0000	2482612.83	896217.53	4.34361	6.00000	1

Average Calibration Factor = 0.9221 (%RSD = 10.26)

1,4-DCB

Component Type : Single Peak Component
Retention Time : 28.228 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	24427.40	9183.51	0.04488	0.05000	1
2	5.0000	56169.94	20583.83	0.10341	0.10000	1
3	10.0000	115494.00	39728.88	0.20810	0.20000	1
4	50.0000	573318.57	200922.80	1.02494	1.00000	1
5	100.0000	1070623.43	392499.83	1.87294	2.00000	1
6	150.0000	1548316.71	570522.71	2.68661	3.00000	1
7	300.0000	2786150.67	890219.15	4.87469	6.00000	1

Average Calibration Factor = 0.9488 (%RSD = 9.20)

1,2-DCB

Component Type : Single Peak Component
Retention Time : 28.601 min Search Window: 0.20 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	24738.00	8776.72	0.04545	0.05000	1
2	5.0000	57398.00	19913.40	0.10567	0.10000	1
3	10.0000	111804.00	38776.34	0.20146	0.20000	1
4	50.0000	548105.50	183819.55	0.97987	1.00000	1
5	100.0000	1053589.00	361806.32	1.84314	2.00000	1
6	150.0000	1546920.50	531745.14	2.68419	3.00000	1
7	300.0000	2673151.00	877232.13	4.67698	6.00000	1

Average Calibration Factor = 0.9355 (%RSD = 9.63)

1,2-DIBROMO-3-CHLOR

Component Type : Single Peak Component
Retention Time : 29.127 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 Be Forced Through 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	2.5000	2396.00	886.35	0.00440	0.05000	1
2	5.0000	11632.00	3939.56	0.02141	0.10000	1
3	10.0000	20912.00	6934.57	0.03768	0.20000	1
4	50.0000	128199.00	40120.35	0.22919	1.00000	1
5	100.0000	238833.50	73443.56	0.41781	2.00000	1
6	150.0000	360442.00	107671.99	0.62543	3.00000	1
7	300.0000	684664.00	210604.74	1.19790	6.00000	1

Calibration Curve : y = (0.000000) + (0.202555)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998653

1,2,4-TCB

Component Type : Single Peak Component
Retention Time : 30.845 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 Be Forced Through 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	2.5000	10805.00	3319.44	0.01985	0.05000	1
2	5.0000	35187.00	10062.73	0.06478	0.10000	1
3	10.0000	76016.00	21850.60	0.13697	0.20000	1
4	50.0000	502826.60	137627.48	0.89892	1.00000	1
5	100.0000	994900.51	276925.89	1.74047	2.00000	1
6	150.0000	1450486.78	395162.53	2.51686	3.00000	1
7	300.0000	2626147.97	729253.01	4.59474	6.00000	1

Calibration Curve : y = (0.000000) + (0.789846)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.995245

HEXACHLOROBUTADIENE
Component Type : Single Peak Component
Retention Time : 31.295 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	44520.50	12065.49	0.08179	0.05000	1
2	5.0000	96337.11	25743.45	0.17735	0.10000	1
3	10.0000	188371.38	49223.61	0.33942	0.20000	1
4	50.0000	896758.88	228536.65	1.60317	1.00000	1
5	100.0000	1644518.72	420900.38	2.87691	2.00000	1
6	150.0000	2348004.02	592502.62	4.07422	3.00000	1

Average Calibration Factor = 1.5844 (%RSD = 9.94)

1,2,3-TCB
Component Type : Single Peak Component
Retention Time : 31.509 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 Be Forced Through 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	2.5000	10626.50	2952.66	0.01952	0.05000	1
2	5.0000	33284.39	9105.58	0.06128	0.10000	1
3	10.0000	75302.12	20103.57	0.13568	0.20000	1
4	50.0000	470943.02	122699.98	0.84192	1.00000	1
5	100.0000	924776.77	242318.05	1.61780	2.00000	1
6	150.0000	1281090.20	328057.08	2.22293	3.00000	1
7	300.0000	2317744.38	614499.86	4.05516	6.00000	1

Calibration Curve : y = (0.000000) + (0.701493)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.992177

Calibration Replicate Lists:
Component: DICHLORODIFLUOROMETH
Level : 1

Software Version: 3.3 <4B11>
Sample Name : MP1W 10PPB
Sample Number:
Operator : SS

Time : 2/25/98 06:50 AM
Study : 8000/500/600

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

Channel : A A/D mV Range : 1000

Interface Serial # : 2156575020 Data Acquisition Time: 2/24/98 08:28 AM
Delay Time : 0.00 min.
End Time : 32.12 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : H:\DATA\GC10A\Z24C002.RAW
Result File : H:\DATA\GC10A\Z24C002.RST
Instrument File: H:\DATA\GC10A\GC10A
Process File : H:\DATA\GC10A\PID-10A.prc
Sample File : H:\DATA\GC10A\P9802A.smp
Sequence File : h:\data\gc10a\z24.seq

Inj. Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 300.000000
Dilution Factor : 1.00

PID-GC#10A

Peak #	Component Name	Time [min]	Area [uV*sec]	RA*2 (%R)	Raw Amount	Adjusted Amount	Cal. Range
9	CIS-1,2-DCE	12.734	82457.00	97	48.416	9.683	
1	BENZENE	17.655	184463.00	94	47.245	9.449	
13	FB	18.579	118842.00	0	0.000	0.000	
15	TCE.	20.070	104838.00	96	48.178	9.636	
16	AAA-TFT	20.977	60689.00	102	51.106	10.221	
21	TOLUENE	23.298	172906.36	98	49.160	9.832	
25	CFB	24.899	114351.50	98	49.090	9.818	
27	CHLOROBENZENE	25.322	173420.45	94	47.245	9.449	
28	ETHYLBENZENE	25.616	152980.50	95	47.298	9.460	
29	M,P-XYLENES	25.869	358456.00	188	93.992	18.798	
30	STYRENE	26.247	179717.08	93	46.687	9.337	
31	O-XYLENE	26.325	166519.92	96	48.061	9.612	
32	ISOPROPYLBENZENE	26.745	127498.00	94	47.080	9.416	
33	BROMOBENZENE	26.970	170191.50	94	46.997	9.399	
35	n-PROPYLBENZENE	27.301	156395.83	106	53.048	10.610	
36	2-CL-TOLUENE	27.386	162226.23	98	49.149	9.830	
37	1,3,5-TRIMETHYLBE	27.538	216601.00	95	47.692	9.538	
38	t-BUTYLBENZENE	27.814	116446.60	95	47.472	9.494	
40	sec-BUTYLBENZENE	28.037	127355.74	97	48.533	9.707	
41	1,3-DCBE	28.098	165438.28	113	56.612	11.322	
43	1,4-DCBE	28.233	104734.94	72	35.821	7.164	
44	1,2-DCBE	28.541	114835.45	94	47.241	9.448	
45	n-BUTYLBENZENE	28.665	130155.51	98	49.169	9.834	
48	NAPHTHALENE	31.137	66074.20	86	43.199	8.640	
49	CL6BUTADIENE	31.218	65278.29	90	44.864	8.973	
50	1,2,3 TCBE	31.435	59562.51	86	43.133	8.627	

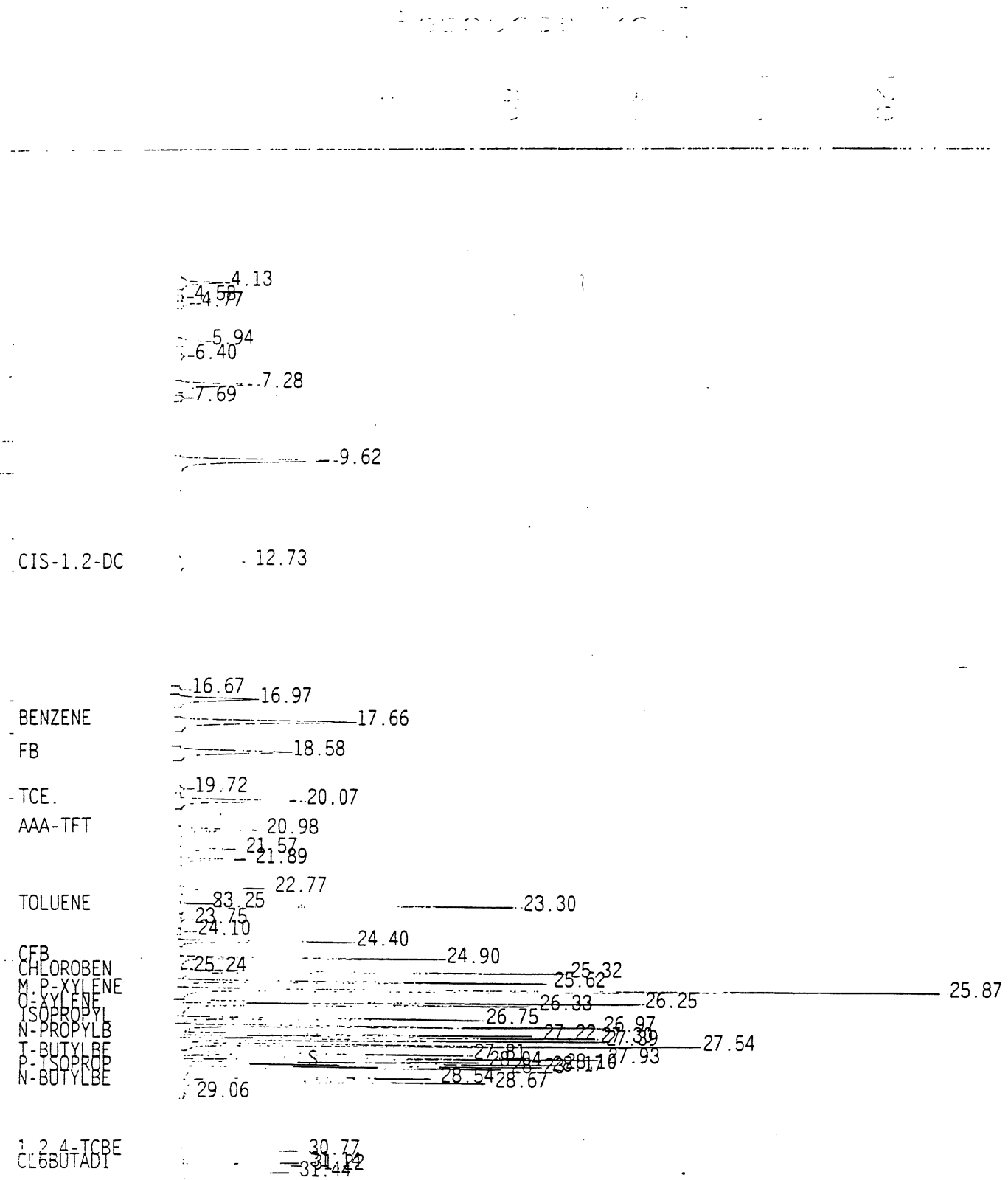
Column: DBVRX 75m X .45mm ID X 2.55um film

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

AROMATICS

Sample Name : MP1W 10PPB
FileName : h:\data\gc10a\Z24C002.raw
Method : GC10A
Start Time : 0.00 min End Time : 32.12 min
Scale Factor: 1.0 Plot Offset: 1 mV

Sample #: Page 1 of
Date : 2/25/98 06:50 AM
Time of Injection: 2/24/98 08:28 AM
Low Point : 0.93 mV High Point : 129
Plot Scale: 128.4 mV



UTM 006550

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Software Version: 3.3 <4B11>

Sample Name : MP1W 10PPB
Sample Number:
Operator : SS

Time : 2/25/98 06:50 AM
Study : 8000/500/600

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

Channel : B A/D mV Range : 1000

Interface Serial # : 2156575020 Data Acquisition Time: 2/24/98 08:28 AM
Delay Time : 0.00 min.
End Time : 32.12 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : H:\DATA\GC10A\Z24D002.RAW
Result File : H:\DATA\GC10A\Z24D002.RST
Instrument File: H:\DATA\GC10A\GC10A
Process File : H:\DATA\GC10A\ELCD-10A.prc
Sample File : H:\DATA\GC10A\E9802A.smp
Sequence File : h:\data\gc10a\z24.seq

Inj. Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 1000.000000
Dilution Factor : 1.00

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ELCD-GC#10A

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Peak #	Component Name	Time [min]	Area [uV*sec]	RA*2 (%R)	Raw Amount	Adjusted Amount	Cal. Range
1	DICHLORODIFLUOROME	3.635	241996.62	108	54.077	10.815	
2	CHLOROMETHANE	3.830	406880.38	102	51.100	10.220	
3	VINYL CHLORIDE	4.135	368602.00	104	51.825	10.365	
4	BROMOMETHANE	4.781	232292.92	103	51.337	10.267	
5	CHLOROETHANE	5.051	382186.58	106	52.979	10.596	
7	TRICHLOROFLUOROMET	6.121	362487.00	137	68.267	13.653	
8	1,1-DCE	7.289	712204.50	101	50.748	10.150	
9	MECL2	7.699	827641.00	97	48.579	9.716	
10	FREON 113	7.920	638332.00	100	50.070	10.014	
11	T-1,2-DCE	9.630	785695.00	102	50.847	10.169	
12	1,1-DCA	10.463	771190.00	101	50.738	10.148	
13	CIS-1,2-DCE	12.740	761841.36	101	50.690	10.138	
14	BROMOCHLOROMETHAN	13.317	522491.75	98	48.989	9.798	
15	CHLOROFORM	13.600	961920.42	98	48.907	9.781	
16	2,2-DCP	13.822	534830.46	101	50.575	10.115	
17	1,2-DCA	15.966	668388.48	98	48.785	9.757	
18	1,1,1-TCA	16.245	903137.25	103	51.578	10.316	
20	1,1-DICHLOROPROPEN	16.971	676495.52	104	51.890	10.378	
21	CARBON TETRACHLORI	17.446	985214.00	103	51.254	10.251	
22	BR2CH2	19.723	316073.40	92	46.212	9.242	
23	1,2-DCP	19.907	712566.20	104	52.228	10.446	
24	TCE	20.077	879386.47	97	48.322	9.664	
25	BROMODICHLOROMETHA	20.194	753871.93	105	52.347	10.469	
26	2-CVE	21.574	126426.00	87	43.560	8.712	
27	C-1,3-DCP	21.895	617286.00	101	50.658	10.132	
28	T-1,3-DCP	22.782	524133.33	100	49.987	9.997	
29	1,1,2-TCA	22.984	691669.17	95	47.728	9.546	
30	1CL2BRPRPN	23.255	475901.45	0	0.000	0.000	
31	1,3-DCP	23.402	566261.05	105	52.399	10.480	
32	DIBROMOCHLOROMETHA	23.749	465464.00	96	48.174	9.635	
33	EDB	24.114	281241.50	96	47.817	9.563	
34	TETRACHLOROETHENE	24.403	928510.50	114	56.856	11.371	
35	CFB	24.904	304321.00	104	52.143	10.429	
36	1,1,1,2-TCA	25.237	845800.13	110	54.999	11.000	
37	CHLOROBNZN	25.329	388791.87	109	54.362	10.872	

Peak #	Component Name	Time [min]	Area [uV*sec]	RA*2 (%R)	Raw Amount	Adjusted Amount	Cal. Range
38	BROMOFORM	25.925	283320.00	95	47.288	9.458	
39	1,1,2,2-TCA	26.326	421138.67	96	48.135	9.627	
40	1,2,3-TCP	26.485	343795.33	105	52.321	10.464	
41	BROMOBN	26.983	224046.00	102	50.793	10.159	
42	2-CHLOROTOLUENE	27.308	292209.25	102	51.167	10.233	
43	4-CHLOROTOLUENE	27.394	302980.75	107	53.389	10.678	
45	1,3-DCB	28.103	432286.10	99	49.256	9.851	
46	1,4-DCB	28.177	511908.40	113	56.686	11.337	
47	1,2-DCB	28.549	454063.50	102	50.994	10.199	
48	1,2-DIBROMO-3-CHLO	29.070	83286.00	86	43.200	8.640	
51	1,2,4-TCB	30.778	389752.50	104	51.844	10.369	
53	HEXACHLOROBUTADIEN	31.226	724969.00	96	48.075	9.615	
54	1,2,3-TCB	31.442	349318.50	105	52.318	10.464	

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

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

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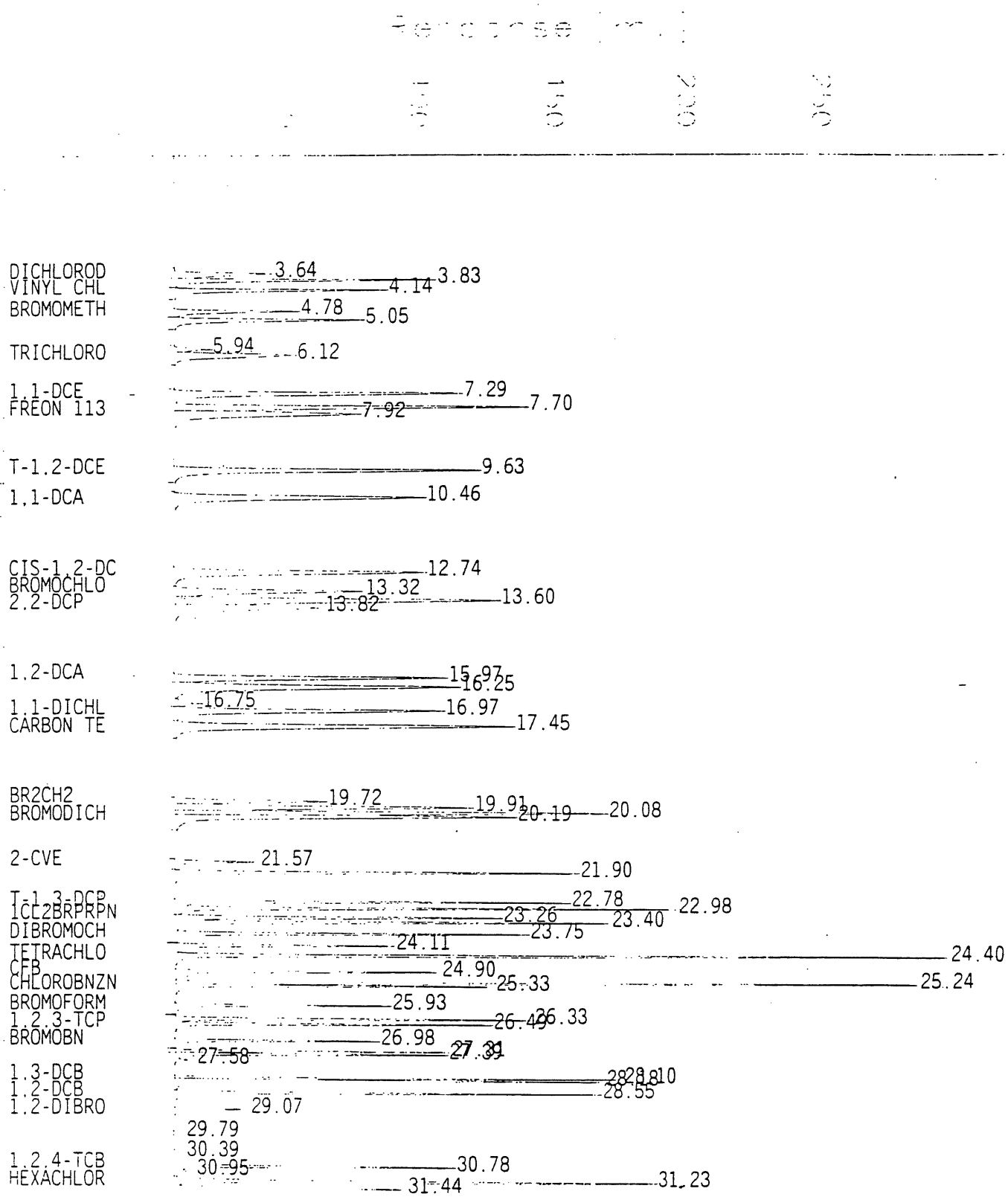
Halogenated Volatile Organics

Sample Name : MP1W 10PPB
FileName : h:\data\gc10a\Z24D002.raw
Method : GC10A
Start Time : 0.00 min End Time : 32.12 min
Scale Factor: 1.0 Plot Offset: -6 mV

Sample #: Page 1 of
Date : 2/25/98 06:50 AM
Time of Injection: 2/24/98 08:28 AM
Low Point : -6.44 mV High Point : 295
Plot Scale: 301.6 mV



UTM 006553

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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Sep 29, 1998
30 Corporate Park, Suite 400	UTM	Received:	Sep 30, 1998
Irvine, CA 92606	Sample Descript: Water, MW-02	Extracted:	Oct 2, 1998
Attention: Ed Stewart	Lab Number: HI03810	Analyzed:	Oct 2, 1998
	QC Batch: HJ02101W	Reported:	Oct 6, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	2.5	N.D.
Bromoform	2.5	N.D.
Bromomethane	5.0	N.D.
Carbon tetrachloride	2.5	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	13	N.D.
Chloroform	2.5	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	2.5	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
Dichlorodifluoromethane	5.0	N.D.
1,1-Dichloroethane	2.5	N.D.
1,2-Dichloroethane	2.5	N.D.
1,1-Dichloroethene	2.5	N.D.
cis-1,2-Dichloroethene	**2.5**	**3.2**
trans-1,2-Dichloroethene	2.5	N.D.
1,2-Dichloropropane	2.5	N.D.
cis-1,3-Dichloropropene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
Methylene chloride	50	N.D.
1,1,1,2-Tetrachloroethane	2.5	N.D.
1,1,2,2-Tetrachloroethane	2.5	N.D.
Tetrachloroethene	**2.5**	**67**
1,1,1-Trichloroethane	2.5	N.D.
1,1,2-Trichloroethane	2.5	N.D.
Trichloroethene	**2.5**	**21**
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL (ELAP #1197)

Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	103%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Sep 29, 1998
30 Corporate Park, Suite 400	UTM	Received:	Sep 30, 1998
Irvine, CA 92606	Sample Descript: Water, MW-03	Extracted:	Oct 3, 1998
Attention: Ed Stewart	Lab Number: HI03811	Analyzed:	Oct 3, 1998
	QC Batch: HJ03101W	Reported:	Oct 6, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	1.0	N.D.
Bromoform	1.0	N.D.
Bromomethane	2.0	N.D.
Carbon tetrachloride	1.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	5.0	N.D.
Chloroform	1.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	1.0	N.D.
1,2-Dichloroethane	1.0	N.D.
1,1-Dichloroethene	**1.0**	**3.6**
cis-1,2-Dichloroethene	**1.0**	**3.6**
trans-1,2-Dichloroethene	1.0	N.D.
1,2-Dichloropropane	1.0	N.D.
cis-1,3-Dichloropropene	1.0	N.D.
trans-1,3-Dichloropropene	1.0	N.D.
Methylene chloride	20	N.D.
1,1,1,2-Tetrachloroethane	1.0	N.D.
1,1,2,2-Tetrachloroethane	1.0	N.D.
Tetrachloroethene	**1.0**	**63**
1,1,1-Trichloroethane	**1.0**	**2.1**
1,1,2-Trichloroethane	1.0	N.D.
Trichloroethene	**1.0**	**41**
Trichlorofluoromethane	2.0	N.D.
Vinyl Chloride	2.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

DEL MAR ANALYTICAL (ELAP #1197)

Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	115%

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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID:	30987-2	Sampled: Sep 29, 1998
30 Corporate Park, Suite 400		UTM	Received: Sep 30, 1998
Irvine, CA 92606	Sample Descript:	Water, MW-04	Extracted: Oct 2, 1998
Attention: Ed Stewart	Lab Number:	HI03812	Analyzed: Oct 2, 1998
	QC Batch:	HJ02101W	Reported: Oct 6, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	2.5	N.D.
Bromoform	2.5	N.D.
Bromomethane	5.0	N.D.
Carbon tetrachloride	2.5	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	13	N.D.
Chloroform	2.5	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	2.5	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
Dichlorodifluoromethane	5.0	N.D.
1,1-Dichloroethane	2.5	N.D.
1,2-Dichloroethane	2.5	N.D.
1,1-Dichloroethene	2.5	N.D.
cis-1,2-Dichloroethene	2.5	N.D.
trans-1,2-Dichloroethene	2.5	N.D.
1,2-Dichloropropane	2.5	N.D.
cis-1,3-Dichloropropene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
Methylene chloride	50	N.D.
1,1,1,2-Tetrachloroethane	2.5	N.D.
1,1,2,2-Tetrachloroethane	2.5	N.D.
Tetrachloroethene	**2.5**	**57**
1,1,1-Trichloroethane	2.5	N.D.
1,1,2-Trichloroethane	2.5	N.D.
Trichloroethene	2.5	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL (ELAP #1197)

Michele Harper
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	103%

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Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Sep 29, 1998
30 Corporate Park, Suite 400	UTM	Received:	Sep 30, 1998
Irvine, CA 92606	Sample Descript: Water, MW-05	Extracted:	Oct 2, 1998
Attention: Ed Stewart	Lab Number: HI03813	Analyzed:	Oct 2, 1998
	QC Batch: HJ02101W	Reported:	Oct 6, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	**0.50**	**6.7**
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	**0.50**	**7.3**
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	**0.50**	**30**
1,1,1-Trichloroethane	**0.50**	**1.5**
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	**0.50**	**3.1**
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Michelle Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	105%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID:	30987-2	Sampled:	Sep 29, 1998
30 Corporate Park, Suite 400		UTM	Received:	Sep 30, 1998
Irvine, CA 92606	Sample Descript:	Water, MW-06	Extracted:	Oct 2, 1998
Attention: Ed Stewart	Lab Number:	HI03814	Analyzed:	Oct 2, 1998
	QC Batch:	HJ02101W	Reported:	Oct 6, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	1.3	N.D.
Bromoform	1.3	N.D.
Bromomethane	2.5	N.D.
Carbon tetrachloride	1.3	N.D.
Chlorobenzene	2.5	N.D.
Chloroethane	6.3	N.D.
Chloroform	1.3	N.D.
Chloromethane	2.5	N.D.
Dibromochloromethane	1.3	N.D.
1,2-Dichlorobenzene	2.5	N.D.
1,3-Dichlorobenzene	2.5	N.D.
1,4-Dichlorobenzene	2.5	N.D.
Dichlorodifluoromethane	2.5	N.D.
1,1-Dichloroethane	1.3	N.D.
1,2-Dichloroethane	1.3	N.D.
1,1-Dichloroethene	**1.3**	**7.6**
cis-1,2-Dichloroethene	1.3	N.D.
trans-1,2-Dichloroethene	1.3	N.D.
1,2-Dichloropropane	1.3	N.D.
cis-1,3-Dichloropropene	1.3	N.D.
trans-1,3-Dichloropropene	1.3	N.D.
Methylene chloride	25	N.D.
1,1,1,2-Tetrachloroethane	1.3	N.D.
1,1,2,2-Tetrachloroethane	1.3	N.D.
Tetrachloroethene	**1.3**	**71**
1,1,1-Trichloroethane	**1.3**	**2.2**
1,1,2-Trichloroethane	1.3	N.D.
Trichloroethene	**1.3**	**6.5**
Trichlorofluoromethane	2.5	N.D.
Vinyl Chloride	2.5	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.5.

DEL MAR ANALYTICAL (ELAP #1197)

Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	105%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Sep 29, 1998
30 Corporate Park, Suite 400	UTM	Received:	Sep 30, 1998
Irvine, CA 92606	Sample Descript: Water, MW-10	Extracted:	Oct 2, 1998
Attention: Ed Stewart	Lab Number: HI03815	Analyzed:	Oct 2, 1998
	QC Batch: HJ02101W	Reported:	Oct 6, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	103%

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Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Sep 29, 1998
30 Corporate Park, Suite 400	UTM	Received:	Sep 30, 1998
Irvine, CA 92606	Sample Descript: Water, MW-11	Extracted:	Oct 2, 1998
Attention: Ed Stewart	Lab Number: HI03816	Analyzed:	Oct 2, 1998
	QC Batch: HJ02101W	Reported:	Oct 6, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	2.5	N.D.
Bromoform	2.5	N.D.
Bromomethane	5.0	N.D.
Carbon tetrachloride	2.5	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	13	N.D.
Chloroform	2.5	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	2.5	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
Dichlorodifluoromethane	5.0	N.D.
1,1-Dichloroethane	2.5	N.D.
1,2-Dichloroethane	2.5	N.D.
1,1-Dichloroethene	**2.5**	**3.5**
cis-1,2-Dichloroethene	**2.5**	**3.1**
trans-1,2-Dichloroethene	2.5	N.D.
1,2-Dichloropropane	2.5	N.D.
cis-1,3-Dichloropropene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
Methylene chloride	50	N.D.
1,1,1,2-Tetrachloroethane	2.5	N.D.
1,1,2,2-Tetrachloroethane	2.5	N.D.
Tetrachloroethene	**2.5**	**68**
1,1,1-Trichloroethane	2.5	N.D.
1,1,2-Trichloroethane	2.5	N.D.
Trichloroethene	**2.5**	**41**
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL (ELAP #1197)

Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	103%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 30987-2	Sampled:	Sep 29, 1998
30 Corporate Park, Suite 400	UTM	Received:	Sep 30, 1998
Irvine, CA 92606	Sample Descript: Water, Trip Blank	Extracted:	Oct 2, 1998
Attention: Ed Stewart	Lab Number: HI03817	Analyzed:	Oct 2, 1998
	QC Batch: HJ02101W	Reported:	Oct 6, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	102%

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Ed Stewart

Method Blank

QC Batch: HJ02101W

Extracted: Oct 2, 1998
Analyzed: Oct 2, 1998
Reported: Oct 6, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	104%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Ed Stewart

Method Blank

QC Batch: HJ03101W

Extracted: Oct 3, 1998
Analyzed: Oct 3, 1998
Reported: Oct 6, 1998

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)

Michelle Harper
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	105%

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MS/MSD DATA REPORT

EPA Method 8010/8020

Matrix: Water

Date: 10/03/98

Sample #: HJ00098

Batch #: HJ03101W

Analyte	R1 ppb	Sp ppb	MS ppb	MSD ppb	PR1 %	PR2 %	RPD %	Mean PR %	Acceptance Limits RPD	Acceptance Limits Mean PR
Benzene	0	10	10	10	100	102	2.3	101	≤30	75 - 115
Chloroform	0.12	10	11	12	113	115	1.3	114	≤30	80 - 125
1,1-Dichloroethane	0	10	10	10	101	103	2.1	102	≤30	80 - 120
1,2-Dichloroethane	0	10	11	11	107	110	3.0	108	≤30	80 - 125
1,1-Dichloroethene	0	10	8.1	7.8	81	78	3.7	79	≤30	75 - 120
Tetrachloroethene	0.034	10	10	11	104	107	2.6	106	≤30	70 - 130
Toluene	0.36	10	9.7	9.9	94	95	1.4	94	≤30	70 - 130
Trichloroethene	0.092	10	9.9	11	98	106	7.8	102	≤30	50 - 140

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by EPA Method 8010/8020

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LCS DATA REPORT

EPA Method 8010/8020

Matrix: Water

Date: 10/03/98

Batch #: HJ03101W

Analyte	Spike Conc.	Result	% Recovery	ACP
Benzene	10	10	102	85 - 115
Chloroform	10	12	118	85 - 125
1,1-Dichloroethane	10	11	108	85 - 125
1,2-Dichloroethane	10	11	113	80 - 125
1,1-Dichloroethene	10	9.3	93	70 - 120
Tetrachloroethene	10	11	106	85 - 135
Toluene	10	10	105	80 - 120
Trichloroethene	10	11	107	85 - 125

Definition of Terms

LCS ..... Laboratory Control Sample
Spike Conc ..... Result of Sample Analysis
Result ..... Result of Laboratory Control Sample Analysis
%Recovery ..... Percent Recovery of LCS; ((Result - Spike Conc.) / Spike Conc.) X 100
ACP ..... Acceptance Limits for Percent Recovery by EPA Method 8010/8020

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MS/MSD DATA REPORT

EPA Method 8010/8020

Matrix: Water

Date: 10/02/98

Sample #: HI03576

Batch #: HJ02101W

Analyte	R1 ppb	Sp ppb	MS ppb	MSD ppb	PR1 %	PR2 %	RPD %	Mean PR %	Acceptance Limits RPD	Acceptance Limits Mean PR
Benzene	0	10	11	10	107	101	5.1	104	≤30	75 - 115
Chloroform	0	10	12	12	118	117	0.97	118	≤30	80 - 125
1,1-Dichloroethane	0.37	10	11	11	105	107	1.4	106	≤30	80 - 120
1,2-Dichloroethane	0	10	11	12	110	116	5.2	113	≤30	80 - 125
1,1-Dichloroethene	0	10	8.8	8.8	88	88	0.13	88	≤30	75 - 120
Tetrachloroethene	0	10	11	11	109	109	0.21	109	≤30	70 - 130
Toluene	0.41	10	11	11	107	102	5.2	104	≤30	70 - 130
Trichloroethene	0	10	11	11	108	106	1.7	107	≤30	50 - 140

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by EPA Method 8010/8020

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LCS DATA REPORT

EPA Method 8010/8020

Matrix: Water

Date: 10/02/98

Batch #: HJ02101W

Analyte	Spike Conc.	Result	% Recovery	ACP
Benzene	10	11	105	85 - 115
Chloroform	10	12	115	85 - 125
1,1-Dichloroethane	10	10	104	85 - 125
1,2-Dichloroethane	10	11	112	80 - 125
1,1-Dichloroethene	10	9.5	95	70 - 120
Tetrachloroethene	10	11	114	85 - 135
Toluene	10	11	112	80 - 120
Trichloroethene	10	11	111	85 - 125

Definition of Terms

LCS ..... Laboratory Control Sample
Spike Conc ..... Result of Sample Analysis
Result ..... Result of Laboratory Control Sample Analysis
%Recovery ..... Percent Recovery of LCS; ((Result - Spike Conc.) / Spike Conc.) X 100
ACP ..... Acceptance Limits for Percent Recovery by EPA Method 8010/8020

Del Mar Analytical

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92714
(714) 260-1800

CHAIN OF CUSTODY FORM

Lab: DEL MAR

Samplers: MIKE PALMER

Job Number: 30987-2

Name/Location: U.T.M.

Project Manager: RO STEWART

Recorder: (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCL	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH
23	X							2				98	09	29	1315	MW-02	X					
23	X							2				98	09	29	1400	MW-03	X					
23	X							2				98	09	29	1220	MW-04	X					
23	X							2				98	09	29	1135	MW-05	X					
23	X							2				98	09	29	1345	MW-06	X					
23	X							2				98	09	29	1130	MW-10	X					
23	X							2				98	09	29	1430	MW-11	X					
~~23~~	X							2				98	09	29	—	TRIP BLANK	X					

ANALYSIS REQUESTED

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
						W.I.P. FORMAT
						NORMAL T.A.T.
						FOR WRP. PROGRAM

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) 9-30-98 0955	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME 9/29/98 10:00
METHOD OF SHIPMENT intact on ice		30 MC

6533

Laboratory Copy White | Project Office Copy Yellow | Field or Office Copy Pink

DISTRIBUTION

Groundwater Monitoring Report - 1998
Utility Trailer Manufacturing Company
17300 East Chestnut Street
City of Industry, California

January 26, 1999

Copies 1-3:	Mr. Julio Lara California Regional Water Quality Control Board Los Angeles Region 101 Centre Plaza Drive Monterey Park, California 91754-2156
Copy 4:	Mr. Robert Griffis Utility Trailer Manufacturing Company 17295 East Railroad Street P.O. Box 1299 City of Industry, California 91749
Copy 5:	Project File
Copy 6:	HLA Library

Quality Control Reviewer:

_____

Donald A. Pape
Principal Hydrogeologist

N:\UTILITY\98GWRPT.DOC

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 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
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
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 HARDING LAWSON ASSOCIATES
PROJECT: 30987-2 UTM
SAMPLED: 9/29/98
LABORATORY NUMBER: HI03810.HLA

ATTENTION: ED STEWART

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, 2000

Authorized Signature:
Name, Title (print) Scott C. Hoatson, Quality Assurance Officer

Signature, Date: Scott C. Hoatson 10/22/98

Client Name: Harding Lawson Associates

Project No.: 30987-2 UTM

Date(s) Sampled: 9/29/98 To

Date(s) Received: 9/30/98 To

Date(s) Reported: 10/6/98 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 8010	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:

(RWQCB LabForm; Ver 12/94)

PROJECT NO: 30987-2 UTM (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: EPA 8010 **REPORTING UNIT:** µg/L

		DATE ANALYZED	10/2/98	10/2/98	10/2/98	10/2/98
		DATE EXTRACTED	10/2/98	10/2/98	10/2/98	10/2/98
		LAB SAMPLE ID	Method Blank	HI03810	HI03812	HI03813
		SAMPLE ID	HI02101W	MW-02	MW-04	MW-05
		EXTRACTION SOLVENT	n/a	n/a	n/a	n/a
		EXTRACTION METHOD	5030	5030	5030	5030
		DILUTION FACTOR	1	5	5	1
COMPOUND		**CRDL**				
Bromodichloromethane		0.50	< 0.50	< 2.5	< 2.5	< 0.50
Bromoform		0.50	< 0.50	< 2.5	< 2.5	< 0.50
Bromomethane		1.0	< 1.0	< 5.0	< 5.0	< 1.0
Carbon tetrachloride		0.50	< 0.50	< 2.5	< 2.5	< 0.50
Chlorobenzene		1.0	< 1.0	< 5.0	< 5.0	< 1.0
Chloroethane		2.5	< 2.5	< 13	< 13	< 2.5
Chloroform		0.50	< 0.50	< 2.5	< 2.5	< 0.50
Chloromethane		1.0	< 1.0	< 5.0	< 5.0	< 1.0
Dibromochloromethane		0.50	< 0.50	< 2.5	< 2.5	< 0.50
1,2-Dichlorobenzene		1.0	< 1.0	< 5.0	< 5.0	< 1.0
1,3-Dichlorobenzene		1.0	< 1.0	< 5.0	< 5.0	< 1.0
1,4-Dichlorobenzene		1.0	< 1.0	< 5.0	< 5.0	< 1.0
Dichlorodifluoromethane		1.0	< 1.0	< 5.0	< 5.0	< 1.0
1,1-Dichloroethane		0.50	< 0.50	< 2.5	< 2.5	**6.7**
1,2-Dichloroethane		0.50	< 0.50	< 2.5	< 2.5	< 0.50
1,1-Dichloroethene		0.50	< 0.50	< 2.5	< 2.5	**7.3**
cis-1,2-Dichloroethene		0.50	< 0.50	**3.2**	< 2.5	< 0.50
trans-1,2-Dichloroethene		0.50	< 0.50	< 2.5	< 2.5	< 0.50
1,2-Dichloropropane		0.50	< 0.50	< 2.5	< 2.5	< 0.50
cis-1,3-Dichloropropene		0.50	< 0.50	< 2.5	< 2.5	< 0.50
trans-1,3-Dichloropropene		0.50	< 0.50	< 2.5	< 2.5	< 0.50
Methylene chloride		10	< 10	< 50	< 50	< 10
1,1,1,2-Tetrachloroethane		0.50	< 0.50	< 2.5	< 2.5	< 0.50
1,1,2,2-Tetrachloroethane		0.50	< 0.50	< 2.5	< 2.5	< 0.50
Tetrachloroethene		0.50	< 0.50	**67**	**57**	**30**
1,1,1-Trichloroethane		0.50	< 0.50	< 2.5	< 2.5	**1.5**
1,1,2-Trichloroethane		0.50	< 0.50	< 2.5	< 2.5	< 0.50
Trichloroethene		0.50	< 0.50	**21**	< 2.5	**3.1**
Trichlorofluoromethane		1.0	< 1.0	< 5.0	< 5.0	< 1.0
Vinyl Chloride		1.0	< 1.0	< 5.0	< 5.0	< 1.0
SURROGATE	**SPIKE CONC**	**ACCEPT LIMITS %**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**
1-Chloro-3-fluorobenzene	10	80-120	104	103	103	105

PROJECT NO: 30987-2 UTM (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: EPA 8010 **REPORTING UNIT:** µg/L

		DATE ANALYZED	10/2/98	10/2/98	10/2/98	10/2/98
		DATE EXTRACTED	10/2/98	10/2/98	10/2/98	10/2/98
		LAB SAMPLE ID	HI03814	HI03815	HI03816	HI03817
		SAMPLE ID	MW-06	MW-10	MW-11	Trip Blank
		EXTRACTION SOLVENT	n/a	n/a	n/a	n/a
		EXTRACTION METHOD	5030	5030	5030	5030
		DILUTION FACTOR	2.5	1	5	1
COMPOUND		**CRDL**				
Bromodichloromethane		0.50	< 1.3	< 0.50	< 2.5	< 0.50
Bromoform		0.50	< 1.3	< 0.50	< 2.5	< 0.50
Bromomethane		1.0	< 2.5	< 1.0	< 5.0	< 1.0
Carbon tetrachloride		0.50	< 1.3	< 0.50	< 2.5	< 0.50
Chlorobenzene		1.0	< 2.5	< 1.0	< 5.0	< 1.0
Chloroethane		2.5	< 6.3	< 2.5	< 13	< 2.5
Chloroform		0.50	< 1.3	< 0.50	< 2.5	< 0.50
Chloromethane		1.0	< 2.5	< 1.0	< 5.0	< 1.0
Dibromochloromethane		0.50	< 1.3	< 0.50	< 2.5	< 0.50
1,2-Dichlorobenzene		1.0	< 2.5	< 1.0	< 5.0	< 1.0
1,3-Dichlorobenzene		1.0	< 2.5	< 1.0	< 5.0	< 1.0
1,4-Dichlorobenzene		1.0	< 2.5	< 1.0	< 5.0	< 1.0
Dichlorodifluoromethane		1.0	< 2.5	< 1.0	< 5.0	< 1.0
1,1-Dichloroethane		0.50	< 1.3	< 0.50	< 2.5	< 0.50
1,2-Dichloroethane		0.50	< 1.3	< 0.50	< 2.5	< 0.50
1,1-Dichloroethene		0.50	**7.6**	< 0.50	**3.5**	< 0.50
cis-1,2-Dichloroethene		0.50	< 1.3	< 0.50	**3.1**	< 0.50
trans-1,2-Dichloroethene		0.50	< 1.3	< 0.50	< 2.5	< 0.50
1,2-Dichloropropane		0.50	< 1.3	< 0.50	< 2.5	< 0.50
cis-1,3-Dichloropropene		0.50	< 1.3	< 0.50	< 2.5	< 0.50
trans-1,3-Dichloropropene		0.50	< 1.3	< 0.50	< 2.5	< 0.50
Methylene chloride		10	< 25	< 10	< 50	< 10
1,1,1,2-Tetrachloroethane		0.50	< 1.3	< 0.50	< 2.5	< 0.50
1,1,2,2-Tetrachloroethane		0.50	< 1.3	< 0.50	< 2.5	< 0.50
Tetrachloroethene		0.50	**71**	< 0.50	**68**	< 0.50
1,1,1-Trichloroethane		0.50	**2.2**	< 0.50	< 2.5	< 0.50
1,1,2-Trichloroethane		0.50	< 1.3	< 0.50	< 2.5	< 0.50
Trichloroethene		0.50	**6.5**	< 0.50	**41**	< 0.50
Trichlorofluoromethane		1.0	< 2.5	< 1.0	< 5.0	< 1.0
Vinyl Chloride		1.0	< 2.5	< 1.0	< 5.0	< 1.0
SURROGATE	**SPIKE CONC**	**ACCEPT LIMITS %**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**	**% RECOVERY**
1-Chloro-3-fluorobenzene	10	80-120	105	103	103	102

PROJECT NO: 30987-2 UTM (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: EPA 8010 **REPORTING UNIT:** µg/L

		DATE ANALYZED	10/3/98	10/3/98		
		DATE EXTRACTED	10/3/98	10/3/98		
		LAB SAMPLE ID	Method Blank	HI03811		
		SAMPLE ID	HJ03101W	MW-03		
		EXTRACTION SOLVENT	n/a	n/a		
		EXTRACTION METHOD	5030	5030		
		DILUTION FACTOR	1	2		
COMPOUND		**CRDL**				
Bromodichloromethane		0.50	< 0.50	< 1.0		
Bromoform		0.50	< 0.50	< 1.0		
Bromomethane		1.0	< 1.0	< 2.0		
Carbon tetrachloride		0.50	< 0.50	< 1.0		
Chlorobenzene		1.0	< 1.0	< 2.0		
Chloroethane		2.5	< 2.5	< 5.0		
Chloroform		0.50	< 0.50	< 1.0		
Chloromethane		1.0	< 1.0	< 2.0		
Dibromochloromethane		0.50	< 0.50	< 1.0		
1,2-Dichlorobenzene		1.0	< 1.0	< 2.0		
1,3-Dichlorobenzene		1.0	< 1.0	< 2.0		
1,4-Dichlorobenzene		1.0	< 1.0	< 2.0		
Dichlorodifluoromethane		1.0	< 1.0	< 2.0		
1,1-Dichloroethane		0.50	< 0.50	< 1.0		
1,2-Dichloroethane		0.50	< 0.50	< 1.0		
1,1-Dichloroethene		0.50	< 0.50	**3.6**		
cis-1,2-Dichloroethene		0.50	< 0.50	**3.6**		
trans-1,2-Dichloroethene		0.50	< 0.50	< 1.0		
1,2-Dichloropropane		0.50	< 0.50	< 1.0		
cis-1,3-Dichloropropene		0.50	< 0.50	< 1.0		
trans-1,3-Dichloropropene		0.50	< 0.50	< 1.0		
Methylene chloride		10	< 10	< 20		
1,1,1,2-Tetrachloroethane		0.50	< 0.50	< 1.0		
1,1,2,2-Tetrachloroethane		0.50	< 0.50	< 1.0		
Tetrachloroethene		0.50	< 0.50	**63**		
1,1,1-Trichloroethane		0.50	< 0.50	**2.1**		
1,1,2-Trichloroethane		0.50	< 0.50	< 1.0		
Trichloroethene		0.50	< 0.50	**41**		
Trichlorofluoromethane		1.0	< 1.0	< 2.0		
Vinyl Chloride		1.0	< 1.0	< 2.0		
SURROGATE	**SPIKE CONC**	**ACCEPT LIMITS %**	**% RECOVERY**	**% RECOVERY**		
1-Chloro-3-fluorobenzene	10	80-120	105	115		

Project Number: 30987-2 UTM (RWQCB LabForm 10A; Ver12/94)

QA/QC REPORT

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

Date Performed: 10/02/98
Batch Number: HJ02101W
Lab Sample I.D.: HI03576

Analytical Method: EPA 601/602
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	11	107	10	10	101	5.1	80-120	≤ 20
Chloroform	0	10	12	118	10	12	117	0.97	80-120	≤ 20
1,1-Dichloroethane	0.37	10	11	105	10	11	107	1.4	80-120	≤ 20
1,2-Dichloroethane	0	10	11	110	10	12	116	5.2	80-120	≤ 20
1,1-Dichloroethene	0	10	8.8	88	10	8.8	88	0.13	80-120	≤ 20
Tetrachloroethene	0	10	11	109	10	11	109	0.21	80-120	≤ 20
Toluene	0.41	10	11	107	10	11	102	5.2	80-120	≤ 20
Trichloroethene	0	10	11	108	10	11	106	1.7	80-120	≤ 20

III. LABORATORY QUALITY CONTROL CHECK SAMPLE (LCS)

Date Performed: 10/02/98
Supply Source: AccuStandard
Lot Number: 085-307
Date of Source: 1/2/97

Analytical Method: EPA 601/602
Reporting Unit: µg/L
Lab LCS I.D.: LCS

Analyte	Spike Concentration	Result	% Recovery	Acceptance % Recovery Limit
Benzene	10	11	110	80-120
Chloroform	10	12	120	80-120
1,1-Dichloroethane	10	10	100	80-120
1,2-Dichloroethane	10	11	110	80-120
1,1-Dichloroethene	10	9.5	95	80-120
Tetrachloroethene	10	11	110	80-120
Toluene	10	11	110	80-120
Trichloroethene	10	11	110	80-120

Project Number: 30987-2 UTM (RWQCB LabForm 10A; Ver12/94)

QA/QC REPORT

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

Date Performed: 10/03/98
Batch Number: HJ03101W
Lab Sample I.D.: HJ00098

Analytical Method: EPA 601/602
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	10	100	10	10	102	2.3	80-120	≤ 20
Chloroform	0.12	10	11	113	10	12	115	1.3	80-120	≤ 20
1,1-Dichloroethane	0	10	10	101	10	10	103	2.1	80-120	≤ 20
1,2-Dichloroethane	0	10	11	107	10	11	110	3.0	80-120	≤ 20
1,1-Dichloroethene	0	10	8.1	81	10	7.8	78	3.7	80-120	≤ 20
Tetrachloroethene	0.034	10	10	104	10	11	107	2.6	80-120	≤ 20
Toluene	0.36	10	9.7	94	10	9.9	95	1.4	80-120	≤ 20
Trichloroethene	0.092	10	9.9	98	10	11	106	7.8	80-120	≤ 20

III. LABORATORY QUALITY CONTROL CHECK SAMPLE (LCS)

Date Performed: 10/03/98
Supply Source: AccuStandard
Lot Number: 085-307
Date of Source: 1/2/97

Analytical Method: EPA 601/602
Reporting Unit: µg/L
Lab LCS I.D.: LCS

Analyte	Spike Concentration	Result	% Recovery	Acceptance % Recovery Limit
Benzene	10	10	100	80-120
Chloroform	10	12	120	80-120
1,1-Dichloroethane	10	11	110	80-120
1,2-Dichloroethane	10	11	110	80-120
1,1-Dichloroethene	10	9.3	93	80-120
Tetrachloroethene	10	11	110	80-120
Toluene	10	10	100	80-120
Trichloroethene	10	11	110	80-120

Sample File : H:\DATA\GC10A\PP9809A.smp
Created by : on : 1/25/95 12:46 PM
Edited by : on : 9/29/98 11:43 AM
Number Of Times Edited : 402

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 :

1,1-DCE
Component Type : Single Peak Component
Retention Time : 7.261 min Search Window: 1.40 s, 3.00 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	10757.00	1648.55	0.02566	0.05000	1
2	5.0000	27621.50	3528.12	0.06770	0.10000	1
3	10.0000	48271.00	6553.93	0.11698	0.20000	1
4	50.0000	266554.00	34337.92	0.64404	1.00000	1
5	100.0000	528718.00	70190.85	1.30244	2.00000	1
6	200.0000	994625.00	127103.51	2.59406	4.00000	1
7	300.0000	1577724.00	194292.63	3.76744	6.00000	1

Average Calibration Factor = 0.6210 (%RSD = 8.89)

T-1,2-DCE
Component Type : Single Peak Component
Retention Time : 9.591 min Search Window: 1.40 s, 3.00 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	29060.00	4240.50	0.06933	0.05000	1
2	5.0000	59516.50	8634.00	0.14587	0.10000	1
3	10.0000	110654.50	15341.99	0.26815	0.20000	1
4	50.0000	575456.00	82313.83	1.39039	1.00000	1
5	100.0000	1138670.50	166676.33	2.80500	2.00000	1
6	200.0000	2292879.00	312827.47	5.98000	4.00000	1
7	300.0000	3563754.00	498408.37	8.50987	6.00000	1

Average Calibration Factor = 1.4132 (%RSD = 3.58)

C-1,2-DCE
Component Type : Single Peak Component
Retention Time : 12.704 min Search Window: 1.40 s, 1.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	14361.50	1780.73	0.03426	0.05000	1

2	5.0000	29913.00	3701.06	0.07331	0.10000	1
3	10.0000	53123.50	6583.94	0.12874	0.20000	1
4	50.0000	305208.00	35905.66	0.73743	1.00000	1
5	100.0000	612553.50	72729.82	1.50896	2.00000	1
6	200.0000	1171737.00	135089.20	3.05598	4.00000	1
7	300.0000	1809390.50	219368.78	4.32063	6.00000	1

Average Calibration Factor = 0.7197 (%RSD = 5.85)

BENZENE

Component Type : Single Peak Component
Retention Time : 17.646 min Search Window: 1.00 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	32015.00	4648.41	0.07638	0.05000	1
2	5.0000	65841.50	9540.53	0.16137	0.10000	1
3	10.0000	120431.00	16990.58	0.29184	0.20000	1
4	50.0000	656270.00	91111.72	1.58565	1.00000	1
5	100.0000	1295391.00	184483.65	3.19107	2.00000	1
6	200.0000	2458597.00	354112.22	6.41221	4.00000	1
7	300.0000	3928120.00	561882.97	9.37994	6.00000	1

Average Calibration Factor = 1.5640 (%RSD = 3.48)

FB

Component Type : Single Peak Component
Retention Time : 18.565 min Search Window: 1.00 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard :
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	419157.00	55450.73	1.00000	1.00000	1
2	50.0000	408012.00	54369.88	1.00000	1.00000	1
3	50.0000	412657.00	54457.00	1.00000	1.00000	1
4	50.0000	413880.50	54701.04	1.00000	1.00000	1
5	50.0000	405943.00	53810.57	1.00000	1.00000	1
6	50.0000	383424.50	52817.29	1.00000	1.00000	1
7	50.0000	418779.00	56043.69	1.00000	1.00000	1

Average Calibration Factor = 1.0000 (%RSD = 0.00)

TCE.

Component Type : Single Peak Component
Retention Time : 20.060 min Search Window: 0.90 s, 0.90 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	18926.00	3311.18	0.04515	0.05000	1
2	5.0000	38225.50	6720.04	0.09369	0.10000	1
3	10.0000	67448.50	11934.29	0.16345	0.20000	1
4	50.0000	375262.63	64311.73	0.90669	1.00000	1
5	100.0000	755020.00	135004.28	1.85992	2.00000	1
6	200.0000	1423097.84	251901.57	3.71155	4.00000	1
7	300.0000	2275456.81	400611.05	5.43355	6.00000	1

Average Calibration Factor = 0.9039 (%RSD = 4.49)

AAA-TFT

Component Type : Single Peak Component
Retention Time : 20.967 min Search Window: 0.90 s, 1.40 %

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 Be Forced Through 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	2.5000	8183.50	1662.22	0.01952	0.05000	1
2	5.0000	19048.00	3821.45	0.04668	0.10000	1
3	10.0000	40439.50	8059.10	0.09800	0.20000	1
4	50.0000	194707.00	38851.98	0.47044	1.00000	1
5	100.0000	426729.00	85020.85	1.05120	2.00000	1
6	200.0000	883021.50	176816.84	2.30299	4.00000	1
7	300.0000	1304568.00	263656.11	3.11517	6.00000	1

Calibration Curve : y = (0.000000) + (0.534614)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.995595

TOLUENE
Component Type : Single Peak Component
Retention Time : 23.291 min Search Window: 1.00 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 Be Forced Through 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	2.5000	53628.00	10202.93	0.12794	0.05000	1
2	5.0000	85498.00	19818.69	0.20955	0.10000	1
3	10.0000	134100.50	33864.04	0.32497	0.20000	1
4	50.0000	615685.50	182310.86	1.48759	1.00000	1
5	100.0000	1219293.24	368935.21	3.00361	2.00000	1
6	200.0000	2274873.75	700864.12	5.93304	4.00000	1
7	300.0000	3482133.38	990788.61	8.31497	6.00000	1

Calibration Curve : y = (0.000000) + (1.423410)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997640

PCE
Component Type : Single Peak Component
Retention Time : 24.392 min Search Window: 0.80 s, 0.40 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	17322.00	5637.33	0.04133	0.05000	1
2	5.0000	29196.50	9668.95	0.07156	0.10000	1
3	10.0000	52634.00	17306.44	0.12755	0.20000	1
4	50.0000	284857.00	94119.17	0.68826	1.00000	1
5	100.0000	558024.00	186475.07	1.37464	2.00000	1
6	200.0000	1040731.00	360951.32	2.71430	4.00000	1
7	300.0000	1660584.00	577767.72	3.96530	6.00000	1

Average Calibration Factor = 0.6993 (%RSD = 8.74)

CFB
Component Type : Single Peak Component
Retention Time : 24.895 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 Be Forced Through 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	2.5000	15259.00	5145.15	0.03640	0.05000	1
2	5.0000	37888.00	12980.57	0.09286	0.10000	1
3	10.0000	84073.00	27845.76	0.20374	0.20000	1
4	50.0000	381183.00	137418.87	0.92100	1.00000	1
5	100.0000	812039.50	293751.34	2.00038	2.00000	1
6	200.0000	1626579.00	599174.45	4.24224	4.00000	1
7	300.0000	2467063.50	909136.20	5.89109	6.00000	1

Calibration Curve : y = (0.000000) + (1.004147)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997623

CHLOROBENZENE
Component Type : Single Peak Component
Retention Time : 25.319 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	31294.94	10159.74	0.07466	0.05000	1
2	5.0000	63448.00	21139.76	0.15551	0.10000	1
3	10.0000	114683.00	38595.08	0.27791	0.20000	1
4	50.0000	613428.00	216833.95	1.48214	1.00000	1
5	100.0000	1232501.00	440511.31	3.03614	2.00000	1
6	200.0000	2324365.00	871214.63	6.06212	4.00000	1
7	300.0000	3211024.00	1.021e+06	7.66759	6.00000	1

Average Calibration Factor = 1.4616 (%RSD = 6.56)

ETHYLBENZENE
Component Type : Single Peak Component
Retention Time : 25.615 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	26441.06	9104.00	0.06308	0.05000	1
2	5.0000	53612.50	18746.85	0.13140	0.10000	1
3	10.0000	97334.50	35544.19	0.23587	0.20000	1
4	50.0000	523209.50	192762.91	1.26416	1.00000	1
5	100.0000	1031269.00	389338.91	2.54043	2.00000	1
6	200.0000	1946145.00	716974.77	5.07569	4.00000	1
7	300.0000	2933124.00	1.045e+06	7.00399	6.00000	1

Average Calibration Factor = 1.2465 (%RSD = 4.26)

M,P-XYLENES
Component Type : Single Peak Component
Retention Time : 25.867 min Search Window: 0.20 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	5.0000	62426.00	19252.24	0.14893	0.10000	1
2	10.0000	124833.50	39535.92	0.30596	0.20000	1
3	20.0000	229809.00	74971.10	0.55690	0.40000	1
4	100.0000	1230951.00	403499.23	2.97417	2.00000	1
5	200.0000	2403481.50	814691.24	5.92074	4.00000	1

6	400.0000	3669317.50	1.050e+06	[illegible]	[illegible]	[illegible]

Average Calibration Factor = 1.4302 (%RSD = 8.41)

STYRENE

Component Type : Single Peak Component
Retention Time : 26.245 min Search Window: 0.20 s, 0.17 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	30488.43	10676.97	0.07274	0.05000	1
2	5.0000	62022.03	22951.46	0.15201	0.10000	1
3	10.0000	107503.60	43400.46	0.26052	0.20000	1
4	50.0000	651928.10	257111.70	1.57516	1.00000	1
5	100.0000	1247894.25	534915.72	3.07406	2.00000	1
6	200.0000	2486084.75	996171.16	6.48390	4.00000	1
7	300.0000	3201051.02	1.017e+06	7.64377	6.00000	1

Average Calibration Factor = 1.4692 (%RSD = 9.11)

O-XYLENE

Component Type : Single Peak Component
Retention Time : 26.322 min Search Window: 0.70 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	28039.57	10399.94	0.06690	0.05000	1
2	5.0000	55857.47	21469.63	0.13690	0.10000	1
3	10.0000	109379.40	37825.35	0.26506	0.20000	1
4	50.0000	546690.90	217337.68	1.32089	1.00000	1
5	100.0000	1135109.75	428736.94	2.79623	2.00000	1
6	200.0000	2033706.25	823720.94	5.30406	4.00000	1
7	300.0000	2854070.98	986411.57	6.81522	6.00000	1

Average Calibration Factor = 1.3162 (%RSD = 6.41)

ISOPROPYLBENZENE

Component Type : Single Peak Component
Retention Time : 26.743 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	22095.50	8299.54	0.05271	0.05000	1
2	5.0000	43229.00	16296.66	0.10595	0.10000	1
3	10.0000	81239.00	30419.59	0.19687	0.20000	1
4	50.0000	426964.00	167687.10	1.03161	1.00000	1
5	100.0000	843254.00	335820.47	2.07727	2.00000	1
6	200.0000	1580951.00	630364.42	4.12324	4.00000	1
7	300.0000	2504424.00	991345.97	5.98030	6.00000	1

Average Calibration Factor = 1.0280 (%RSD = 2.72)

BROMOBENZENE

Component Type : Single Peak Component
Retention Time : 26.969 min Search Window: 0.30 s, 0.25 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)

Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	29939.00	10204.27	0.07143	0.05000	1
2	5.0000	60968.50	21534.63	0.14943	0.10000	1
3	10.0000	110278.50	39527.40	0.26724	0.20000	1
4	50.0000	603820.00	237417.37	1.45892	1.00000	1
5	100.0000	1220837.50	470808.29	3.00741	2.00000	1
6	200.0000	2298324.00	959482.88	5.99420	4.00000	1
7	300.0000	3026904.50	1.006e+06	7.22793	6.00000	1

Average Calibration Factor = 1.4178 (%RSD = 7.81)

n-PROPYLBENZENE

Component Type : Single Peak Component
Retention Time : 27.219 min Search Window: 0.20 s, 0.22 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	26693.31	9094.64	0.06368	0.05000	1
2	5.0000	43792.80	17059.16	0.10733	0.10000	1
3	10.0000	88821.55	33611.84	0.21524	0.20000	1
4	50.0000	460565.59	189289.55	1.11280	1.00000	1
5	100.0000	921777.92	366787.32	2.27071	2.00000	1
6	200.0000	1715729.13	732901.70	4.47475	4.00000	1
7	300.0000	2581992.50	997876.06	6.16553	6.00000	1

Average Calibration Factor = 1.1168 (%RSD = 6.98)

2-CL-TOLUENE

Component Type : Single Peak Component
Retention Time : 27.300 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	30066.21	10833.45	0.07173	0.05000	1
2	5.0000	53197.75	19919.07	0.13038	0.10000	1
3	10.0000	100745.11	39813.52	0.24414	0.20000	1
4	50.0000	532313.66	209321.47	1.28615	1.00000	1
5	100.0000	1050433.12	422490.25	2.58764	2.00000	1
6	200.0000	1987069.70	812321.91	5.18243	4.00000	1
7	300.0000	2809874.11	1.036e+06	6.70968	6.00000	1

Average Calibration Factor = 1.2790 (%RSD = 7.46)

4-CLOROTOLUENE

Component Type : Single Peak Component
Retention Time : 27.386 min Search Window: 0.15 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	30470.19	10013.82	0.07269	0.05000	1
2	5.0000	53283.45	19922.45	0.13059	0.10000	1
3	10.0000	105187.01	38133.19	0.25490	0.20000	1
4	50.0000	575915.04	226017.21	1.39150	1.00000	1
5	100.0000	1124601.81	435478.21	2.77034	2.00000	1
6	200.0000	2165795.53	895654.72	5.64856	4.00000	1
7	300.0000	2913690.36	1.009e+06	6.95758	6.00000	1

Average Calibration Factor = 1.3404 (%RSD = 7.51)

1,3,5-TRIMETHYLBENZE

Component Type : Single Peak Component
Retention Time : 27.538 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Peak Closest to Expected RT in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	39979.79	14239.13	0.09538	0.05000	1
2	5.0000	62456.00	26264.60	0.15307	0.10000	1
3	10.0000	140791.59	51197.82	0.34118	0.20000	1
4	50.0000	729035.59	293867.54	1.76146	1.00000	1
5	100.0000	1436716.10	568001.79	3.53921	2.00000	1
6	200.0000	2543786.89	986182.46	6.63439	4.00000	1

Average Calibration Factor = 1.7223 (%RSD = 7.30)

t-BUTYLBENZENE

Component Type : Single Peak Component
Retention Time : 27.814 min Search Window: 0.15 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	21574.00	8127.11	0.05147	0.05000	1
2	5.0000	38931.82	14768.94	0.09542	0.10000	1
3	10.0000	77930.86	29674.45	0.18885	0.20000	1
4	50.0000	398953.07	150518.48	0.96393	1.00000	1
5	100.0000	781925.29	312018.01	1.92619	2.00000	1
6	200.0000	1456691.13	557985.31	3.79916	4.00000	1
7	300.0000	2322751.73	911732.58	5.54649	6.00000	1

Average Calibration Factor = 0.9613 (%RSD = 3.42)

1,2,4-TRIMETHYLBENZE

Component Type : Single Peak Component
Retention Time : 27.934 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	27078.12	10400.75	0.06460	0.05000	1
2	5.0000	54034.71	19427.17	0.13243	0.10000	1
3	10.0000	100779.39	39649.83	0.24422	0.20000	1
4	50.0000	528285.84	214736.28	1.27642	1.00000	1
5	100.0000	1062231.49	426303.28	2.61670	2.00000	1
6	200.0000	1982625.42	838591.97	5.17084	4.00000	1
7	300.0000	2801830.86	1.025e+06	6.69048	6.00000	1

Average Calibration Factor = 1.2614 (%RSD = 5.73)

sec-BUTYLBENZENE

Component Type : Single Peak Component
Retention Time : 28.038 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	20275.00	7883.81	0.04837	0.05000	1
2	5.0000	35879.99	14265.41	0.08794	0.10000	1

3	10.0000	74338.15	26571.46	0.16015	0.20000	1
4	50.0000	449410.38	160706.95	1.08585	1.00000	1
5	100.0000	777806.86	313123.20	1.91605	2.00000	1
6	200.0000	1642362.11	600574.48	4.28340	4.00000	1
7	300.0000	2713036.59	971110.16	6.47844	6.00000	1

Average Calibration Factor = 0.9917 (%RSD = 8.78)

1,3-DCB

Component Type : Single Peak Component
Retention Time : 28.099 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	26615.88	9270.78	0.06350	0.05000	1
2	5.0000	51368.84	17970.53	0.12590	0.10000	1
3	10.0000	100781.13	36192.04	0.24422	0.20000	1
4	50.0000	477168.09	198206.39	1.15291	1.00000	1
5	100.0000	1116396.73	424665.25	2.75013	2.00000	1
6	200.0000	1869865.02	798027.77	4.87675	4.00000	1
7	300.0000	2592711.38	1.053e+06	6.19112	6.00000	1

Average Calibration Factor = 1.2184 (%RSD = 8.73)

1,4-DCB

Component Type : Single Peak Component
Retention Time : 28.171 min Search Window: 0.15 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	24741.00	8691.75	0.05903	0.05000	1
2	5.0000	47701.15	17561.79	0.11691	0.10000	1
3	10.0000	93370.25	33446.99	0:22627	0.20000	1
4	50.0000	508660.83	205847.78	1.22900	1.00000	1
5	100.0000	1039978.71	409356.27	2.56188	2.00000	1
6	200.0000	1985770.25	839817.51	5.17904	4.00000	1
7	300.0000	2830111.16	986896.64	6.75801	6.00000	1

Average Calibration Factor = 1.2017 (%RSD = 5.67)

p-ISOPROPYLTOLUENE

Component Type : Single Peak Component
Retention Time : 28.234 min Search Window: 0.20 s, 0.15 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	21266.00	8477.50	0.05074	0.05000	1
2	5.0000	40073.70	14941.65	0.09822	0.10000	1
3	10.0000	80885.36	31184.03	0.19601	0.20000	1
4	50.0000	435449.50	165993.42	1.05211	1.00000	1
5	100.0000	786477.56	319937.32	1.93741	2.00000	1
6	200.0000	1539900.30	616033.21	4.01618	4.00000	1
7	300.0000	2426316.45	982102.56	5.79379	6.00000	1

Average Calibration Factor = 0.9953 (%RSD = 3.09)

1,2-DCB

Component Type : Single Peak Component
Retention Time : 28.545 min Search Window: 0.40 s, 0.20 %
Reference Component:

Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	20889.24	7311.69	0.04984	0.05000	1
2	5.0000	39374.80	14398.36	0.09650	0.10000	1
3	10.0000	74023.79	27425.51	0.17938	0.20000	1
4	50.0000	404076.08	155588.17	0.97631	1.00000	1
5	100.0000	825958.53	328565.43	2.03467	2.00000	1
6	200.0000	1582573.03	626203.20	4.12747	4.00000	1
7	300.0000	2539033.91	999111.78	6.06294	6.00000	1

Average Calibration Factor = 0.9850 (%RSD = 4.59)

n-BUTYLBENZENE
Component Type : Single Peak Component
Retention Time : 28.666 min Search Window: 0.60 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	22482.26	8000.44	0.05364	0.05000	1
2	5.0000	40314.49	13060.45	0.09881	0.10000	1
3	10.0000	83781.32	28942.89	0.20303	0.20000	1
4	50.0000	450432.31	155918.32	1.08831	1.00000	1
5	100.0000	876955.85	319402.67	2.16029	2.00000	1
6	200.0000	1636368.60	595848.38	4.26777	4.00000	1
7	300.0000	2668202.81	965670.59	6.37139	6.00000	1

Average Calibration Factor = 1.0533 (%RSD = 3.53)

1,2,4-TCB
Component Type : Single Peak Component
Retention Time : 30.781 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 Be Forced Through 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	2.5000	10810.00	3045.41	0.02579	0.05000	1
2	5.0000	18069.31	4884.53	0.04429	0.10000	1
3	10.0000	39841.00	10971.52	0.09655	0.20000	1
4	50.0000	251782.20	69018.73	0.60835	1.00000	1
5	100.0000	509520.13	144345.28	1.25515	2.00000	1
6	200.0000	989223.00	294881.77	2.57997	4.00000	1
7	300.0000	1633403.00	496794.98	3.90039	6.00000	1

Calibration Curve : $y = (0.000000) + (0.646175)x + (0.000000)x^2 + (0.000000)x^3$
R-squared : 0.999636

NAPHTHALENE
Component Type : Single Peak Component
Retention Time : 31.149 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 Be Forced Through 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	2.5000	11073.71	3374.49	0.02642	0.05000	1
2	5.0000	17305.97	5322.75	0.04242	0.10000	1
3	10.0000	42615.81	11380.72	0.10327	0.20000	1
4	50.0000	262409.64	75946.69	0.63402	1.00000	1
5	100.0000	548506.56	157996.01	1.35119	2.00000	1
6	200.0000	1071933.67	317643.89	2.79568	4.00000	1
7	300.0000	1705120.74	509226.94	4.07165	6.00000	1

Calibration Curve : y = (0.000000) + (0.683147)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999386

CL6BUTADIENE
Component Type : Single Peak Component
Retention Time : 31.229 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	14569.29	3932.38	0.03476	0.05000	1
2	5.0000	24311.74	5987.08	0.05959	0.10000	1
3	10.0000	44579.19	13048.82	0.10803	0.20000	1
4	50.0000	249146.21	67526.03	0.60198	1.00000	1
5	100.0000	472222.00	131708.63	1.16327	2.00000	1
6	200.0000	840916.25	236570.50	2.19317	4.00000	1
7	300.0000	1321511.12	379979.07	3.15563	6.00000	1

Average Calibration Factor = 0.5841 (%RSD = 9.73)

1,2,3 TCB
Component Type : Single Peak Component
Retention Time : 31.447 min Search Window: 0.60 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : FB
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	11809.50	3167.34	0.02817	0.05000	1
2	5.0000	18829.29	4971.31	0.04615	0.10000	1
3	10.0000	40924.14	10656.45	0.09917	0.20000	1
4	50.0000	240063.45	64707.62	0.58003	1.00000	1
5	100.0000	484910.31	130974.57	1.19453	2.00000	1
6	200.0000	910337.08	257909.21	2.37423	4.00000	1
7	300.0000	1464226.14	427644.18	3.49642	6.00000	1

Average Calibration Factor = 0.5535 (%RSD = 9.61)

Calibration Replicate Lists:

Component: 1,1-DCE

Level : 1

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
10757.00	1648.55	2.5000	0.0257	0.0500	9/29/98	11:26 AM	G26C001.

Level : 2

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
27621.50	3528.12	5.0000	0.0677	0.1000	9/29/98	11:28 AM	G26C003.

Level : 3

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
48271.00	6553.93	10.0000	0.1170	0.2000	9/29/98	11:30 AM	G26C004.

Sample File : H:\DATA\GC10A\EE9809A.smp
Created by : on : 1/23/91 08:42 AM
Edited by : on : 9/30/98 11:16 AM
Number Of Times Edited : 1165

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 : 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

Component Information :

DICHLORODIFLUOROMETH
Component Type : Single Peak Component
Retention Time : 3.624 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 Be Forced Through 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	2.5000	3194.27	536.92	0.01286	0.05000	1
2	5.0000	11291.58	1666.44	0.04204	0.10000	1
3	10.0000	24559.73	3581.54	0.08545	0.20000	1
4	50.0000	163667.72	22845.46	0.56746	1.00000	1
5	100.0000	310515.09	42065.88	1.14346	2.00000	1
6	200.0000	658694.85	86804.59	2.14149	4.00000	1
7	300.0000	1045373.66	136937.20	3.56411	6.00000	1

Calibration Curve : y = (0.000000) + (0.575382)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996323

CHLOROMETHANE
Component Type : Single Peak Component
Retention Time : 3.840 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 Be Forced Through 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	2.5000	5429.00	1214.20	0.02186	0.05000	1
2	5.0000	16557.42	3229.68	0.06164	0.10000	1
3	10.0000	33564.77	6200.16	0.11678	0.20000	1
4	50.0000	202492.28	35197.67	0.70207	1.00000	1
5	100.0000	366945.36	62863.67	1.35127	2.00000	1
6	200.0000	766093.23	127081.57	2.49066	4.00000	1
7	300.0000	1196976.50	195405.75	4.08099	6.00000	1

Calibration Curve : y = (0.000000) + (0.664016)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997218

VINYL CHLORIDE

Component Type : Single Peak Component
Retention Time : 4.178 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 Be Forced Through 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	2.5000	7044.50	1321.72	0.02837	0.05000	1
2	5.0000	20957.00	3538.49	0.07802	0.10000	1
3	10.0000	41524.00	6786.70	0.14448	0.20000	1
4	50.0000	251329.00	35807.58	0.87140	1.00000	1
5	100.0000	486163.55	62541.43	1.79028	2.00000	1
6	200.0000	982108.92	99718.25	3.19295	4.00000	1
7	300.0000	1502535.50	192518.45	5.12276	6.00000	1

Calibration Curve : y = (0.000000) + (0.841304)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997833

BROMOMETHANE
Component Type : Single Peak Component
Retention Time : 4.777 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 Be Forced Through 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	2.5000	2082.00	421.69	0.00838	0.05000	1
2	5.0000	10704.20	1744.43	0.03985	0.10000	1
3	10.0000	22910.76	3637.80	0.07971	0.20000	1
4	50.0000	152926.33	22854.95	0.53022	1.00000	1
5	100.0000	310649.48	46186.50	1.14396	2.00000	1
6	200.0000	623326.07	87618.26	2.02651	4.00000	1
7	300.0000	951871.26	131608.60	3.24532	6.00000	1

Calibration Curve : y = (0.000000) + (0.533131)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997723

CHLOROETHANE
Component Type : Single Peak Component
Retention Time : 5.040 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 Be Forced Through 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	2.5000	6008.00	1057.44	0.02420	0.05000	1
2	5.0000	19314.30	3042.72	0.07190	0.10000	1
3	10.0000	38959.24	6043.68	0.13555	0.20000	1
4	50.0000	241812.68	35399.58	0.83840	1.00000	1
5	100.0000	458676.02	67871.35	1.68906	2.00000	1
6	200.0000	954122.43	137068.62	3.10196	4.00000	1
7	300.0000	1491099.09	206651.72	5.08377	6.00000	1

Calibration Curve : y = (0.000000) + (0.826651)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997268

TRICHLOROFLUOROMETH

Component Type : Single Peak Component
Retention Time : 6.147 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 Be Forced Through 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	2.5000	4060.50	554.18	0.01635	0.05000	1
2	5.0000	20785.00	2211.90	0.07738	0.10000	1
3	10.0000	44878.00	4397.60	0.15615	0.20000	1
4	50.0000	297612.29	26261.93	1.03187	1.00000	1
5	100.0000	561268.24	48535.98	2.06686	2.00000	1
6	200.0000	1226424.54	98711.22	3.98725	4.00000	1
7	300.0000	1766478.86	138599.36	6.02266	6.00000	1

Calibration Curve : y = (0.000000) + (1.004168)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999727

1,1-DCE

Component Type : Single Peak Component
Retention Time : 7.286 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 2nd Order Fit
Curve Will Be Forced Through 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	2.5000	14738.00	2003.46	0.05935	0.05000	1
2	5.0000	37178.00	4642.90	0.13841	0.10000	1
3	10.0000	77423.62	9620.85	0.26938	0.20000	1
4	50.0000	451221.00	52251.79	1.56446	1.00000	1
5	100.0000	804563.62	96349.84	2.96278	2.00000	1
6	200.0000	1629723.00	184228.67	5.29842	4.00000	1
7	300.0000	2172506.61	233580.29	7.40697	6.00000	1

Calibration Curve : y = (0.000000) + (1.569321)x + (-0.056529)x^2 + (0.000000)x^3
R-squared : 0.999720

MECL2

Component Type : Single Peak Component
Retention Time : 7.687 min Search Window: 2.00 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 Be Forced Through 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	2.5000	33873.33	4214.47	0.13641	0.05000	1
2	5.0000	65805.25	7212.47	0.24498	0.10000	1
3	10.0000	120050.84	13655.08	0.41770	0.20000	1
4	50.0000	572202.00	65926.31	1.98392	1.00000	1
5	100.0000	1071605.89	127657.42	3.94616	2.00000	1
6	200.0000	2067436.56	234523.05	6.72148	4.00000	1
7	300.0000	2994612.73	325870.24	10.20987	6.00000	1

Calibration Curve : y = (0.000000) + (1.720104)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.995781

FREON 113

Component Type : Single Peak Component
Retention Time : 7.909 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 Be Forced Through 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	2.5000	12093.67	1399.42	0.04870	0.05000	1
2	5.0000	29707.75	3218.22	0.11060	0.10000	1
3	10.0000	59592.54	6514.36	0.20734	0.20000	1
4	50.0000	370709.00	35651.23	1.28531	1.00000	1
5	100.0000	634883.49	62882.33	2.33794	2.00000	1
6	200.0000	1370444.44	125012.24	4.45548	4.00000	1
7	300.0000	1870860.16	173971.26	6.37854	6.00000	1

Calibration Curve : y = (0.000000) + (1.088634)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997293

T-1,2-DCE

Component Type : Single Peak Component
Retention Time : 9.606 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 Be Forced Through 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	2.5000	15996.50	2324.55	0.06442	0.05000	1
2	5.0000	40104.00	5488.69	0.14930	0.10000	1
3	10.0000	85021.00	11266.44	0.29582	0.20000	1
4	50.0000	507750.00	62529.85	1.76045	1.00000	1
5	100.0000	878341.00	108064.03	3.23447	2.00000	1
6	200.0000	1895809.00	223713.04	6.16350	4.00000	1
7	300.0000	2679044.00	315023.03	9.13397	6.00000	1

Calibration Curve : y = (0.000000) + (1.538311)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998855

1,1-DCA

Component Type : Single Peak Component
Retention Time : 10.440 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 Be Forced Through 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	2.5000	14718.00	1819.62	0.05927	0.05000	1
2	5.0000	38746.00	4573.66	0.14425	0.10000	1
3	10.0000	83421.00	9426.95	0.29025	0.20000	1
4	50.0000	478798.00	51231.05	1.66007	1.00000	1
5	100.0000	896926.00	93944.90	3.30291	2.00000	1
6	200.0000	1889475.00	191247.34	6.14290	4.00000	1
7	300.0000	2657153.00	267622.98	9.05933	6.00000	1

Calibration Curve : y = (0.000000) + (1.529625)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998738

CIS-1,2-DCE

Component Type : Single Peak Component
Retention Time : 12.725 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 Be Forced Through 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	2.5000	13797.00	1808.86	0.05556	0.05000	1
2	5.0000	41481.00	4990.89	0.15443	0.10000	1
3	10.0000	72254.00	8509.11	0.25140	0.20000	1
4	50.0000	493758.61	52172.36	1.71194	1.00000	1
5	100.0000	953311.09	100769.04	3.51054	2.00000	1
6	200.0000	1892110.19	197723.10	6.15147	4.00000	1
7	300.0000	2673523.43	278269.04	9.11515	6.00000	1

Calibration Curve : y = (0.000000) + (1.544162)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996829

BROMOCHLOROMETHAN

Component Type : Single Peak Component
Retention Time : 13.305 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 Be Forced Through 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	2.5000	8258.34	1133.08	0.03326	0.05000	1
2	5.0000	27440.19	3416.76	0.10216	0.10000	1
3	10.0000	51975.33	6290.65	0.18084	0.20000	1
4	50.0000	345181.41	40663.56	1.19680	1.00000	1
5	100.0000	650673.46	76228.30	2.39609	2.00000	1
6	200.0000	1354096.48	154482.94	4.40233	4.00000	1
7	300.0000	1900357.19	218923.02	6.47910	6.00000	1

Calibration Curve : y = (0.000000) + (1.095849)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998298

CHLOROFORM

Component Type : Single Peak Component
Retention Time : 13.590 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 Be Forced Through 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	2.5000	21330.03	2574.45	0.08590	0.05000	1
2	5.0000	61104.00	6811.61	0.22748	0.10000	1
3	10.0000	116647.62	12813.89	0.40586	0.20000	1
4	50.0000	643277.59	70465.15	2.23035	1.00000	1
5	100.0000	1197348.60	130965.90	4.40920	2.00000	1
6	200.0000	2369223.94	253065.86	7.70262	4.00000	1
7	300.0000	3263323.79	349989.49	11.12602	6.00000	1

Calibration Curve : y = (0.000000) + (1.905676)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.994843

2,2-DCP

Component Type : Single Peak Component
Retention Time : 13.814 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 Be Forced Through 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	2.5000	9284.62	1111.81	0.03739	0.05000	1
2	5.0000	33545.81	3512.87	0.12489	0.10000	1
3	10.0000	70561.05	7010.11	0.24551	0.20000	1
4	50.0000	447704.39	39552.16	1.55226	1.00000	1
5	100.0000	784457.35	68472.16	2.88874	2.00000	1
6	200.0000	1536659.89	137181.81	4.99586	4.00000	1
7	300.0000	2210512.59	189870.78	7.53655	6.00000	1

Calibration Curve : y = (0.000000) + (1.272441)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.995635

1,2-DCA

Component Type : Single Peak Component
Retention Time : 15.965 min Search Window: 0.80 s, 1.10 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	14382.06	2069.51	0.05792	0.05000	1
2	5.0000	39602.92	5396.11	0.14744	0.10000	1
3	10.0000	76218.67	10195.75	0.26519	0.20000	1
4	50.0000	443038.55	58916.46	1.53609	1.00000	1
5	100.0000	818320.91	107592.69	3.01344	2.00000	1
6	200.0000	1661816.88	214516.97	5.40276	4.00000	1
7	300.0000	2338926.57	303414.60	7.97437	6.00000	1

Average Calibration Factor = 1.3830 (%RSD = 9.55)

1,1,1-TCA

Component Type : Single Peak Component
Retention Time : 16.242 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 Be Forced Through 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	2.5000	18313.94	2271.61	0.07375	0.05000	1
2	5.0000	52270.58	6062.76	0.19460	0.10000	1
3	10.0000	105343.33	11649.80	0.36653	0.20000	1
4	50.0000	618810.45	63983.94	2.14552	1.00000	1
5	100.0000	1049806.09	110696.45	3.86588	2.00000	1
6	200.0000	2223844.10	220513.74	7.22998	4.00000	1
7	300.0000	3160783.62	306389.60	10.77642	6.00000	1

Calibration Curve : y = (0.000000) + (1.815033)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998232

1,1-DICHLOROPROPENE

Component Type : Single Peak Component
Retention Time : 16.972 min Search Window: 0.70 s, 1.10 %

Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	14587.00	2148.75	0.05874	0.05000	1
2	5.0000	35021.00	4892.20	0.13038	0.10000	1
3	10.0000	76171.00	9936.76	0.26503	0.20000	1
4	50.0000	455656.54	58071.14	1.57984	1.00000	1
5	100.0000	817015.51	103563.81	3.00864	2.00000	1
6	200.0000	1643475.24	202115.65	5.34313	4.00000	1
7	300.0000	2321221.16	284656.43	7.91400	6.00000	1

Average Calibration Factor = 1.3632 (%RSD = 9.93)

CARBON TETRACHLORIDE
Component Type : Single Peak Component
Retention Time : 17.444 min Search Window: 0.70 s, 1.00 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	22879.00	2882.98	0.09214	0.05000	1
2	5.0000	53265.00	6506.97	0.19830	0.10000	1
3	10.0000	112416.00	13316.77	0.39113	0.20000	1
4	50.0000	668326.46	73925.89	2.31720	1.00000	1
5	100.0000	1204759.49	132479.97	4.43649	2.00000	1
6	200.0000	2400610.78	259434.18	7.80467	4.00000	1
7	300.0000	3359349.65	357206.05	11.45341	6.00000	1

Average Calibration Factor = 2.0253 (%RSD = 8.59)

BR2CH2
Component Type : Single Peak Component
Retention Time : 19.725 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 Be Forced Through 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	2.5000	3501.00	609.98	0.01410	0.05000	1
2	5.0000	13611.74	2168.77	0.05067	0.10000	1
3	10.0000	28039.22	4440.15	0.09756	0.20000	1
4	50.0000	213087.41	31713.07	0.73881	1.00000	1
5	100.0000	402051.89	61879.38	1.48055	2.00000	1
6	200.0000	807921.00	123532.49	2.62665	4.00000	1
7	300.0000	1218952.08	181974.82	4.15591	6.00000	1

Calibration Curve : y = (0.000000) + (0.686512)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997841

1,2-DCP
Component Type : Single Peak Component
Retention Time : 19.910 min Search Window: 0.20 s, 0.45 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

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

1	2.5000	15106.00	2203.49	0.06084	0.05000	1
2	5.0000	41017.23	5955.54	0.15270	0.10000	1
3	10.0000	76001.86	11010.74	0.26444	0.20000	1
4	50.0000	454586.24	63325.65	1.57612	1.00000	1
5	100.0000	804662.48	114111.15	2.96315	2.00000	1
6	200.0000	1616118.96	228282.45	5.25419	4.00000	1
7	300.0000	2353216.41	325605.46	8.02309	6.00000	1

Average Calibration Factor = 1.3963 (%RSD = 9.46)

TCE

Component Type : Single Peak Component
Retention Time : 20.079 min Search Window: 0.60 s, 0.50 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	22999.00	3611.40	0.09262	0.05000	1
2	5.0000	57137.87	8985.75	0.21272	0.10000	1
3	10.0000	102330.96	15926.27	0.35605	0.20000	1
4	50.0000	593603.00	90836.33	2.05812	1.00000	1
5	100.0000	1061531.43	163600.75	3.90906	2.00000	1
6	200.0000	2062115.89	319962.30	6.70418	4.00000	1
7	300.0000	3080658.21	465266.20	10.50324	6.00000	1

Average Calibration Factor = 1.8856 (%RSD = 8.85)

BROMODICHLOROMETHAN

Component Type : Single Peak Component
Retention Time : 20.193 min Search Window: 0.50 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 Be Forced Through 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	2.5000	14770.00	2658.93	0.05948	0.05000	1
2	5.0000	44409.15	7101.54	0.16533	0.10000	1
3	10.0000	84433.96	13167.12	0.29378	0.20000	1
4	50.0000	463551.36	72677.70	1.60721	1.00000	1
5	100.0000	906836.21	137760.91	3.33940	2.00000	1
6	200.0000	1887213.14	273292.65	6.13555	4.00000	1
7	300.0000	2686982.30	404938.14	9.16103	6.00000	1

Calibration Curve : y = (0.000000) + (1.540207)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998926

2-CVE

Component Type : Single Peak Component
Retention Time : 21.577 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 Be Forced Through 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	2.5000	1843.00	424.16	0.00742	0.05000	1
2	5.0000	7901.00	1587.68	0.02941	0.10000	1
3	10.0000	17686.00	3507.16	0.06154	0.20000	1
4	50.0000	124122.67	23611.35	0.43035	1.00000	1
5	100.0000	248250.18	47198.62	0.91417	2.00000	1

6	200.0000	516420.30	98320.45	1.67894	4.00000	1
7	300.0000	735104.24	139028.87	2.50627	6.00000	1

Calibration Curve : y = (0.000000) + (0.421151)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998827

C-1,3-DCP
Component Type : Single Peak Component
Retention Time : 21.897 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 Be Forced Through 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	2.5000	12591.00	2633.44	0.05071	0.05000	1
2	5.0000	36064.00	7200.69	0.13426	0.10000	1
3	10.0000	71690.00	14044.71	0.24943	0.20000	1
4	50.0000	398832.33	77767.02	1.38282	1.00000	1
5	100.0000	762686.32	146989.66	2.80857	2.00000	1
6	200.0000	1508808.20	290987.65	4.90531	4.00000	1
7	300.0000	2166482.76	417479.28	7.38644	6.00000	1

Calibration Curve : y = (0.000000) + (1.244567)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.997202

T-1,3-DCP
Component Type : Single Peak Component
Retention Time : 22.785 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 Be Forced Through 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	2.5000	10899.43	2301.43	0.04389	0.05000	1
2	5.0000	30738.23	6346.71	0.11443	0.10000	1
3	10.0000	60144.51	12429.99	0.20926	0.20000	1
4	50.0000	337409.80	72650.18	1.16985	1.00000	1
5	100.0000	648235.52	140465.93	2.38711	2.00000	1
6	200.0000	1319265.17	282843.67	4.28909	4.00000	1
7	300.0000	1884252.59	409722.76	6.42420	6.00000	1

Calibration Curve : y = (0.000000) + (1.081479)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998237

1,1,2-TCA
Component Type : Single Peak Component
Retention Time : 22.987 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 Be Forced Through 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	2.5000	16773.07	3612.07	0.06755	0.05000	1
2	5.0000	47344.38	9543.40	0.17626	0.10000	1
3	10.0000	89172.32	17938.66	0.31026	0.20000	1
4	50.0000	467791.08	96041.07	1.62191	1.00000	1

5	100.0000	871903.48	176792.23	3.21076	2.00000	1
6	200.0000	1702868.76	345005.44	5.53623	4.00000	1
7	300.0000	2403726.17	488489.84	8.19530	6.00000	1

Calibration Curve : y = (0.000000) + (1.392457)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.995518

1CL2BRPRPN

Component Type : Single Peak Component
Retention Time : 23.259 min Search Window: 0.40 s, 0.40 %
Reference Component:
Find Largest Peak in Window
Internal Standard :
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	50.0000	248311.00	49721.25	1.00000	1.00000	1
2	50.0000	268611.78	53517.90	1.00000	1.00000	1
3	50.0000	287409.80	56755.16	1.00000	1.00000	1
4	50.0000	288420.29	58504.40	1.00000	1.00000	1
5	50.0000	271556.66	55057.37	1.00000	1.00000	1
6	50.0000	307586.59	62080.35	1.00000	1.00000	1
7	50.0000	293305.58	58605.21	1.00000	1.00000	1

Average Calibration Factor = 1.0000 (%RSD = 0.00)

1,3-DCP

Component Type : Single Peak Component
Retention Time : 23.390 min Search Window: 0.40 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 Be Forced Through 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	2.5000	24412.00	5541.03	0.09831	0.05000	1
2	5.0000	60848.90	10856.36	0.22653	0.10000	1
3	10.0000	88016.87	17798.28	0.30624	0.20000	1
4	50.0000	387511.83	79638.11	1.34357	1.00000	1
5	100.0000	683106.34	146248.54	2.51552	2.00000	1
6	200.0000	1383013.47	299471.13	4.49634	4.00000	1
7	300.0000	1954526.66	423516.77	6.66379	6.00000	1

Calibration Curve : y = (0.000000) + (1.129337)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996149

DIBROMOCHLOROMETHAN

Component Type : Single Peak Component
Retention Time : 23.753 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 Be Forced Through 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	2.5000	8747.00	1917.20	0.03523	0.05000	1
2	5.0000	27272.70	5538.64	0.10153	0.10000	1
3	10.0000	51316.00	10342.72	0.17855	0.20000	1
4	50.0000	302406.00	62556.17	1.04849	1.00000	1
5	100.0000	552430.50	116795.04	2.03431	2.00000	1
6	200.0000	1169856.00	239818.62	3.80334	4.00000	1
7	300.0000	1741720.00	358978.27	5.93824	6.00000	1

Calibration Curve : y = (0.000000) + (0.981664)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999092

EDB

Component Type : Single Peak Component
Retention Time : 24.118 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 Be Forced Through 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	2.5000	2815.00	744.45	0.01134	0.05000	1
2	5.0000	14671.00	2888.77	0.05462	0.10000	1
3	10.0000	30909.00	6041.15	0.10754	0.20000	1
4	50.0000	185471.80	38792.54	0.64306	1.00000	1
5	100.0000	341886.56	72569.68	1.25899	2.00000	1
6	200.0000	744566.18	154811.79	2.42067	4.00000	1
7	300.0000	1114285.93	237784.37	3.79906	6.00000	1

Calibration Curve : y = (0.000000) + (0.625137)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999209

TETRACHLOROETHENE

Component Type : Single Peak Component
Retention Time : 24.407 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 2nd Order Fit
Curve Will Be Forced Through 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	2.5000	29256.00	6951.17	0.11782	0.05000	1
2	5.0000	59220.00	13697.94	0.22047	0.10000	1
3	10.0000	108697.00	24801.38	0:37820	0.20000	1
4	50.0000	574839.20	130437.68	1.99306	1.00000	1
5	100.0000	994252.44	225675.43	3.66131	2.00000	1
6	200.0000	2049646.32	460711.38	6.66364	4.00000	1
7	300.0000	2850837.57	627155.42	9.71968	6.00000	1

Calibration Curve : y = (0.000000) + (1.894568)x + (-0.047396)x^2 + (0.000000)x^3
R-squared : 0.999340

CFB

Component Type : Single Peak Component
Retention Time : 24.909 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 Be Forced Through 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	2.5000	4375.00	1146.39	0.01762	0.05000	1
2	5.0000	13726.00	3395.80	0.05110	0.10000	1
3	10.0000	34709.50	8186.78	0.12077	0.20000	1
4	50.0000	182995.00	43324.34	0.63447	1.00000	1
5	100.0000	341718.00	81560.14	1.25837	2.00000	1
6	200.0000	761211.00	182878.32	2.47479	4.00000	1
7	300.0000	1046767.00	249609.00	3.56886	6.00000	1

Calibration Curve : y = (0.000000) + (0.604595)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999109

1,1,1,2-TCA

Component Type : Single Peak Component
Retention Time : 25.242 min Search Window: 0.50 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	24171.41	5999.98	0.09734	0.05000	1
2	5.0000	54298.97	13100.06	0.20215	0.10000	1
3	10.0000	96805.73	24577.95	0.33682	0.20000	1
4	50.0000	505541.00	131429.90	1.75279	1.00000	1
5	100.0000	937174.56	242709.44	3.45112	2.00000	1
6	200.0000	1985324.64	474449.46	6.45452	4.00000	1

Average Calibration Factor = 1.7907 (%RSD = 8.87)

CHLOROBNZN

Component Type : Single Peak Component
Retention Time : 25.331 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 Be Forced Through 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	2.5000	8909.59	2518.13	0.03588	0.05000	1
2	5.0000	20481.53	5819.80	0.07625	0.10000	1
3	10.0000	50153.27	11794.56	0.17450	0.20000	1
4	50.0000	285608.00	64320.67	0.99025	1.00000	1
5	100.0000	520144.94	121038.73	1.91542	2.00000	1
6	200.0000	895289.36	241372.80	2.91069	4.00000	1
7	300.0000	1510122.95	345612.14	5.14863	6.00000	1

Calibration Curve : y = (0.000000) + (0.830813)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.986702

BROMOFORM

Component Type : Single Peak Component
Retention Time : 25.933 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 Be Forced Through 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	2.5000	3333.50	845.64	0.01342	0.05000	1
2	5.0000	11868.00	2605.67	0.04418	0.10000	1
3	10.0000	27850.00	6026.75	0.09690	0.20000	1
4	50.0000	197132.80	40690.88	0.68349	1.00000	1
5	100.0000	365384.00	78667.00	1.34552	2.00000	1
6	200.0000	761773.40	160474.68	2.47661	4.00000	1
7	300.0000	1087398.61	239667.25	3.70739	6.00000	1

Calibration Curve : y = (0.000000) + (0.623107)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998673

1,1,2,2-TCA

Component Type : Single Peak Component
Retention Time : 26.333 min Search Window: 0.30 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	11560.00	2795.07	0.04655	0.05000	1
2	5.0000	28447.54	6689.71	0.10591	0.10000	1
3	10.0000	57512.12	13771.69	0.20010	0.20000	1
4	50.0000	322105.57	78082.43	1.11679	1.00000	1
5	100.0000	537533.00	133369.58	1.97945	2.00000	1
6	200.0000	1087381.70	263937.50	3.53521	4.00000	1
7	300.0000	1561165.08	378875.02	5.32266	6.00000	1

Average Calibration Factor = 0.9812 (%RSD = 8.90)

1,2,3-TCP
Component Type : Single Peak Component
Retention Time : 26.492 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 Be Forced Through 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	2.5000	7798.00	1974.13	0.03140	0.05000	1
2	5.0000	21551.46	5188.16	0.08023	0.10000	1
3	10.0000	45125.88	10537.47	0.15701	0.20000	1
4	50.0000	258660.63	60196.59	0.89682	1.00000	1
5	100.0000	444283.00	108180.03	1.63606	2.00000	1
6	200.0000	891139.90	213684.10	2.89720	4.00000	1
7	300.0000	1299527.30	314184.44	4.43063	6.00000	1

Calibration Curve : y = (0.000000) + (0.742868)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.996880

BROMOBN
Component Type : Single Peak Component
Retention Time : 26.988 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 Be Forced Through 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	2.5000	2792.00	722.80	0.01124	0.05000	1
2	5.0000	9781.00	2254.68	0.03641	0.10000	1
3	10.0000	21771.00	4858.84	0.07575	0.20000	1
4	50.0000	151624.00	34007.26	0.52571	1.00000	1
5	100.0000	268542.00	62886.06	0:98890	2.00000	1
6	200.0000	575521.00	136385.87	1.87109	4.00000	1
7	300.0000	828448.00	197095.26	2.82452	6.00000	1

Calibration Curve : y = (0.000000) + (0.472448)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999166

2-CHLOROTOLUENE
Component Type : Single Peak Component
Retention Time : 27.316 min Search Window: 0.15 s, 0.15 %
Reference Component:

Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	6086.80	1778.01	0.02451	0.05000	1
2	5.0000	14711.82	4273.60	0.05477	0.10000	1
3	10.0000	30784.25	8768.13	0.10711	0.20000	1
4	50.0000	171740.00	50330.66	0.59545	1.00000	1
5	100.0000	313035.88	90592.13	1.15275	2.00000	1
6	200.0000	611704.00	176824.80	1.98872	4.00000	1
7	300.0000	874771.00	256101.86	2.98246	6.00000	1

Average Calibration Factor = 0.5342 (%RSD = 7.79)

4-CHLOROTOLUENE
Component Type : Single Peak Component
Retention Time : 27.400 min Search Window: 1.10 s, 0.10 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	6831.20	1757.39	0.02751	0.05000	1
2	5.0000	17841.68	4311.16	0.06642	0.10000	1
3	10.0000	35023.75	8996.55	0.12186	0.20000	1
4	50.0000	207708.00	51603.68	0.72016	1.00000	1
5	100.0000	383647.12	95257.67	1.41277	2.00000	1
6	200.0000	748332.00	189403.57	2.43291	4.00000	1
7	300.0000	1071543.00	272560.79	3.65333	6.00000	1

Average Calibration Factor = 0.6382 (%RSD = 9.57)

1,3-DCB
Component Type : Single Peak Component
Retention Time : 28.114 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 Be Forced Through 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	2.5000	7847.50	2504.57	0.03160	0.05000	1
2	5.0000	19552.33	6273.93	0.07279	0.10000	1
3	10.0000	41558.82	12939.42	0.14460	0.20000	1
4	50.0000	284531.00	76861.33	0.98652	1.00000	1
5	100.0000	439520.95	136895.09	1.61852	2.00000	1
6	200.0000	1055885.83	287446.83	3.43281	4.00000	1
7	300.0000	1313512.30	423996.57	4.47831	6.00000	1

Calibration Curve : y = (0.000000) + (0.786336)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.990345

1,4-DCB
Component Type : Single Peak Component
Retention Time : 28.185 min Search Window: 0.20 s, 0.20 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	12173.50	2892.70	0.04903	0.05000	1
2	5.0000	32090.67	7179.33	0.11947	0.10000	1

3	10.0000	63727.18	14709.52	0.22173	0.20000	1
4	50.0000	334124.00	86182.05	1.15846	1.00000	1
5	100.0000	647916.05	154263.46	2:38593	2.00000	1
6	200.0000	1224366.17	323629.08	3.98056	4.00000	1
7	300.0000	2040987.70	474898.94	6.95857	6.00000	1

Average Calibration Factor = 1.1129 (%RSD = 8.10)

1,2-DCB

Component Type : Single Peak Component
Retention Time : 28.558 min Search Window: 0.20 s, 0.30 %
Reference Component:
Find Largest Peak in Window
Internal Standard : 1CL2BRPRPN
Use Average Calibration Factor (Area Ratio / Amount Ratio)
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
1	2.5000	11882.00	2803.89	0.04785	0.05000	1
2	5.0000	26204.00	6378.85	0.09755	0.10000	1
3	10.0000	52472.00	12619.24	0.18257	0.20000	1
4	50.0000	306582.00	75156.20	1.06297	1.00000	1
5	100.0000	538852.00	132421.72	1.98431	2.00000	1
6	200.0000	1135942.50	282635.95	3.69308	4.00000	1
7	300.0000	1662501.00	412150.75	5.66815	6.00000	1

Average Calibration Factor = 0.9669 (%RSD = 5.23)

1,2-DIBROMO-3-CHLOR

Component Type : Single Peak Component
Retention Time : 29.084 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 Be Forced Through 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	2.5000	1228.00	306.38	0.00495	0.05000	1
2	5.0000	2909.50	710.22	0.01083	0.10000	1
3	10.0000	7576.00	1737.50	0.02636	0.20000	1
4	50.0000	62683.50	13314.93	0.21733	1.00000	1
5	100.0000	115007.50	24914.47	0.42351	2.00000	1
6	200.0000	262837.50	55820.49	0.85452	4.00000	1
7	300.0000	370237.00	82032.28	1.26229	6.00000	1

Calibration Curve : y = (0.000000) + (0.211433)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.999620

1,2,4-TCB

Component Type : Single Peak Component
Retention Time : 30.797 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 Be Forced Through 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	2.5000	8186.00	1742.75	0.03297	0.05000	1
2	5.0000	15093.00	3195.46	0.05619	0.10000	1
3	10.0000	36320.00	7699.08	0.12637	0.20000	1
4	50.0000	276383.22	53216.94	0.95827	1.00000	1
5	100.0000	522605.61	102872.41	1.92448	2.00000	1
6	200.0000	1114552.04	225433.54	3.62354	4.00000	1
7	300.0000	1568023.53	318631.99	5.34604	6.00000	1

Calibration Curve : y = (0.000000) + (0.901103)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998965

HEXACHLOROBUTADIENE
Component Type : Single Peak Component
Retention Time : 31.247 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 2nd Order Fit
Curve Will Be Forced Through 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	2.5000	20675.50	4391.15	0.08326	0.05000	1
2	5.0000	33156.33	6981.93	0.12344	0.10000	1
3	10.0000	84962.00	17733.88	0.29561	0.20000	1
4	50.0000	455954.39	93033.20	1.58087	1.00000	1
5	100.0000	821096.00	166847.82	3.02366	2.00000	1
6	200.0000	1562827.88	316389.29	5.08094	4.00000	1
7	300.0000	2197684.82	445792.03	7.49282	6.00000	1

Calibration Curve : y = (0.000000) + (1.520046)x + (-0.047535)x^2 + (0.000000)x^3
R-squared : 0.997823

1,2,3-TCB
Component Type : Single Peak Component
Retention Time : 31.464 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 Be Forced Through 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	2.5000	8206.00	1754.22	0.03305	0.05000	1
2	5.0000	15166.67	3113.65	0.05646	0.10000	1
3	10.0000	39157.00	7877.51	0.13624	0.20000	1
4	50.0000	250930.40	50391.83	0.87002	1.00000	1
5	100.0000	464138.39	92412.49	1.70918	2.00000	1
6	200.0000	958599.58	193763.24	3.11652	4.00000	1
7	300.0000	1353674.65	273405.78	4.61524	6.00000	1

Calibration Curve : y = (0.000000) + (0.779640)x + (0.000000)x^2 + (0.000000)x^3
R-squared : 0.998120

Calibration Replicate Lists:
Component: DICHLORODIFLUOROMETH

Level : 1

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
3194.27	536.92	2.5000	0.0129	0.0500	9/29/98	10:09 AM	G26D001.

Level : 2

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
11291.58	1666.44	5.0000	0.0420	0.1000	9/29/98	10:12 AM	G26D003.

Level : 3

Area	Height	Amount	ISTD Response	ISTD Amount	Date/Time		File
24559.73	3581.54	10.0000	0.0855	0.2000	9/29/98	10:14 AM	G26D004.

oftware Version: 3.3 <4B11>
ample Name : MP1W 10PPB
ple Number:
erator : RA/DF

Time : 10/2/98 09:22 AM
Study : 8000/500/600

Instrument : OI-1/GC10A
utoSampler : NONE
ack/Vial : 0/0

Channel : A A/D mV Range : 1000

Interface Serial # : 2156575020 Data Acquisition Time: 10/2/98 06:36 AM
elay Time : 0.00 min.
nd Time : 32.12 min.
Sampling Rate : 1.0000 pts/sec

aw Data File : H:\DATA\GC10A\H02C001.RAW
Result File : H:\DATA\GC10A\H02C001.RST
nstrument File: H:\DATA\GC10A\GC10A
rocess File : H:\DATA\GC10A\PID-10A.prc
ample File : H:\DATA\GC10A\PP9809A.smp
Sequence File : h:\data\gc10a\h02.seq

nj. Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 300.000000
Dilution Factor : 1.00

PID-GC#10A

k	Component Name	Time [min]	Area [uV*sec]	RA*2 (%R)	Raw Amount	Adjusted Amount	Cal. Range
8	1,1-DCE	7.240	295301.42	107	53.502	10.700	
11	T-1,2-DCE	9.587	663183.00	106	52.797	10.559	
12	C-1,2-DCE	12.708	335623.00	105	52.464	10.493	
15	BENZENE	17.641	721168.00	104	51.877	10.375	
16	FB	18.564	444420.00	0	0.000	0.000	
18	TCE.	20.061	407527.00	101	50.724	10.145	
19	AAA-TFT	20.969	232838.00	98	48.999	9.800	
23	TOLUENE	23.294	674999.50	107	53.352	10.670	
27	PCE	24.394	319615.00	103	51.423	10.285	
28	CFB	24.896	424927.00	95	47.609	9.522	
29	CHLOROBENZENE	25.320	649630.50	100	50.004	10.001	
30	ETHYLBENZENE	25.616	580160.50	105	52.363	10.473	
31	M,P-XYLENES	25.867	1373427.50	216	108.038	21.608	
32	STYRENE	26.246	696339.79	107	53.322	10.664	
33	O-XYLENE	26.322	633187.21	108	54.125	10.825	
34	ISOPROPYLBENZENE	26.743	478270.00	105	52.343	10.469	
35	BROMOBENZENE	26.969	665952.50	106	52.844	10.569	
36	n-PROPYLBENZENE	27.219	542717.63	109	54.673	10.935	
37	2-CL-TOLUENE	27.300	583124.66	103	51.294	10.259	
38	4-CLOROTOLUENE	27.386	598466.21	100	50.233	10.047	
39	1,3,5-TRIMETHYLBE	27.538	773646.00	101	50.536	10.107	
40	t-BUTYLBENZENE	27.814	441921.81	103	51.721	10.344	
41	1,2,4-TRIMETHYLBE	27.935	595811.77	106	53.140	10.628	
42	sec-BUTYLBENZENE	28.038	478276.12	109	54.259	10.852	
43	1,3-DCB	28.099	559570.38	103	51.668	10.334	
44	1,4-DCB	28.171	561521.00	105	52.570	10.514	
45	p-ISOPROPYLTOLUEN	28.234	517228.12	117	58.463	11.693	
46	1,2-DCB	28.545	458634.08	105	52.387	10.477	
47	n-BUTYLBENZENE	28.666	508773.15	109	54.342	10.868	
54	1,2,4-TCB	30.782	299600.89	104	52.164	10.433	
55	NAPHTHALENE	31.150	286295.55	94	47.149	9.430	
56	CL6BUTADIENE	31.230	293848.05	113	56.595	11.319	
57	1,2,3 TCB	31.448	264401.50	107	53.744	10.749	

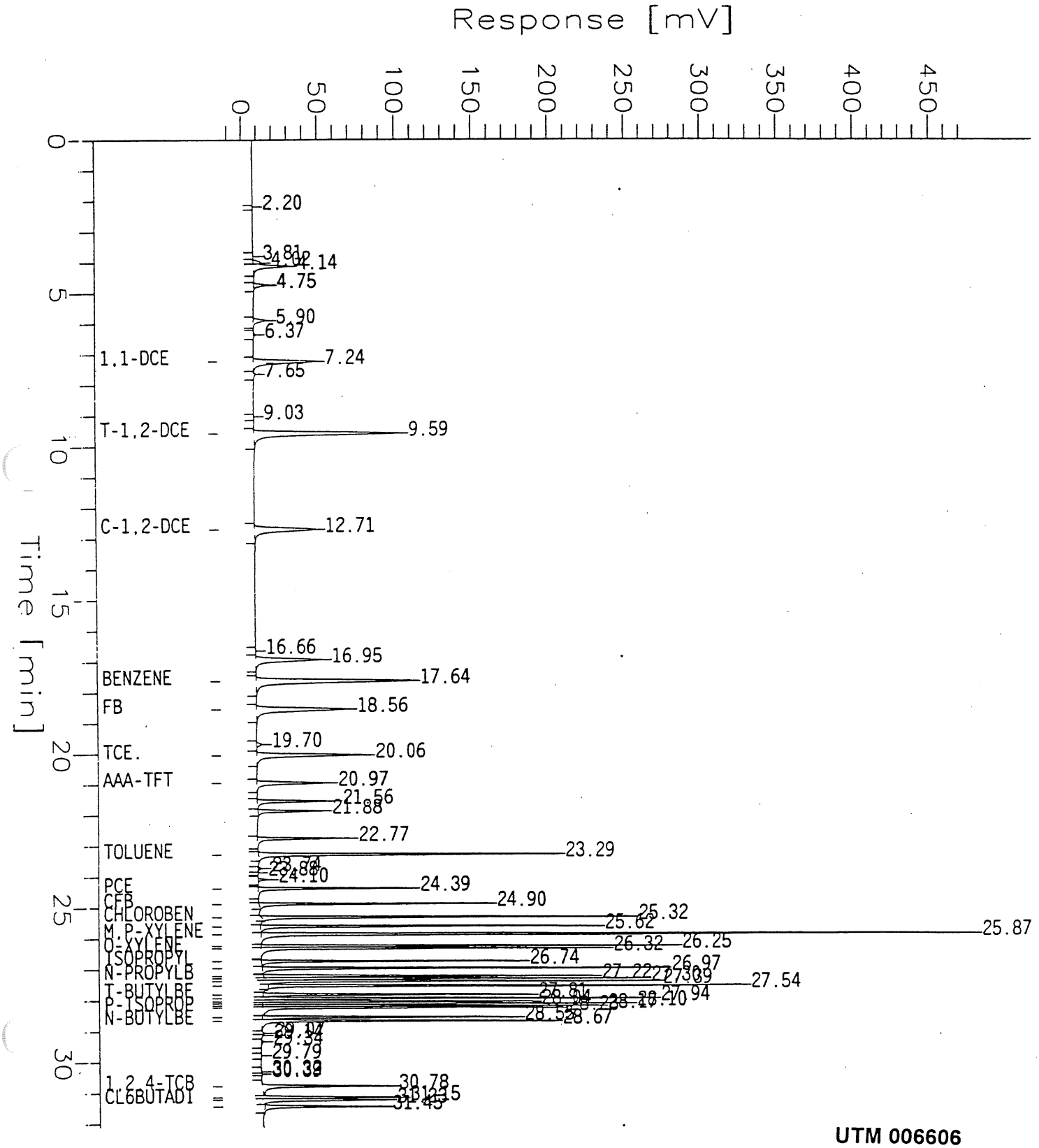
Column: DBVRX 75m X .45mm ID X 2.55um film

.EMP program:
[illegible]oC12min,5oC 60oC 2min,16oC 200oC 3.49min,30oc 220oC .5min
==========

AROMATICS

Sample Name : MP1W 10PPB
Name : h:\data\gc10a\H02C001.raw
Mod : GC10A
Start Time : 0.00 min End Time : 32.12 min
Scale Factor: 1.0 Plot Offset: -16 mV

Sample #: Page 1 of
Date : 10/2/98 09:22 AM
Time of Injection: 10/2/98 06:36 AM
Low Point : -16.02 mV High Point : 478
Plot Scale: 494.8 mV



UTM 006606

Software Version: 3.3 <4B11>
Sample Name : MP1W 10PPB
Sample Number:
Operator : RA/DF

Time : 10/2/98 09:22 AM
Study : 8000/500/600

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

Channel : B A/D mV Range : 1000

Interface Serial # : 2156575020 Data Acquisition Time: 10/2/98 06:36 AM
Delay Time : 0.00 min.
End Time : 32.12 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : H:\DATA\GC10A\H02D001.RAW
Result File : H:\DATA\GC10A\H02D001.RST
Instrument File: H:\DATA\GC10A\GC10A
Process File : H:\DATA\GC10A\ELCD-10A.prc
Sample File : H:\DATA\GC10A\EE9809A.smp
Sequence File : h:\data\gc10a\h02.seq

Inj. Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 1000.000000
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	3.610	140088.30	83	41.597	8.319	
2	CHLOROMETHANE	3.825	214232.70	110	55.122	11.024	
3	VINYL CHLORIDE	4.159	244592.00	99	49.671	9.934	
4	BROMOMETHANE	4.767	150362.76	96	48.186	9.637	
5	CHLOROETHANE	5.036	251548.24	104	51.990	10.398	
7	TRICHLOROFLUOROMET	6.122	302087.79	103	51.398	10.280	
8	1,1-DCE	7.265	455990.04	103	51.558	10.312	
9	MECL2	7.673	561338.36	112	55.755	11.151	
10	FREON 113	7.902	373085.60	117	58.552	11.710	
11	T-1,2-DCE	9.608	515885.00	115	57.296	11.459	
12	1,1-DCA	10.444	502771.50	112	56.157	11.231	
13	CIS-1,2-DCE	12.731	482397.79	107	53.374	10.675	
14	BROMOCHLOROMETHAN	13.310	327840.97	102	51.113	10.223	
15	CHLOROFORM	13.594	615916.01	110	55.219	11.044	
16	2,2-DCP	13.817	389444.23	105	52.291	10.458	
17	1,2-DCA	15.965	415321.39	103	51.306	10.261	
18	1,1,1-TCA	16.244	565574.61	106	53.238	10.648	
19	1,1-DICHLOROPROPEN	16.971	426091.96	107	53.401	10.680	
20	CARBON TETRACHLORI	17.445	620522.54	105	52.347	10.469	
21	BR2CH2	19.727	203206.81	101	50.572	10.114	
22	1,2-DCP	19.911	431643.97	106	52.815	10.563	
23	TCE	20.079	582260.50	106	52.758	10.552	
24	BROMODICHLOROMETHA	20.194	459292.21	102	50.948	10.190	
26	2-CVE	21.581	126481.10	103	51.310	10.262	
27	C-1,3-DCP	21.900	403352.40	111	55.371	11.074	
28	T-1,3-DCP	22.787	350486.97	111	55.370	11.074	
29	1,1,2-TCA	22.989	476408.03	117	58.454	11.691	
30	1CL2BRPRPN	23.263	292652.69	0	0.000	0.000	
	1,3-DCP	23.408	391732.31	119	59.263	11.853	
	DIBROMOCHLOROMETHA	23.755	303619.50	106	52.842	10.568	
33	EDB	24.120	186519.52	102	50.976	10.195	
34	TETRACHLOROETHENE	24.408	598631.98	111	55.527	11.105	
35	CFB	24.911	191230.00	108	54.039	10.808	
36	1,1,1,2-TCA	25.244	528402.04	101	50.414	10.083	
37	CHLOROBNZN	25.332	273802.46	113	56.306	11.261	

:ak #	Component Name	Time [min]	Area [uV*sec]	RA*2 (%R)	Raw Amount	Adjusted Amount	Cal. Range
.	OMOFORM	25.935	180595.00	99	49.518	9.904	
19	1,1,2,2-TCA	26.334	298088.33	104	51.907	10.381	
10	1,2,3-TCP	26.492	241622.17	111	55.570	11.114	
41	BROMOBN	26.988	138175.00	100	49.968	9.994	
42	2-CHLOROTOLUENE	27.316	179020.44	115	57.253	11.451	
13	4-CHLOROTOLUENE	27.400	186165.56	100	49.838	9.968	
15	1,3-DCB	28.115	257889.00	112	56.033	11.207	
46	1,4-DCB	28.185	345087.00	106	52.978	10.596	
47	1,2-DCB	28.559	295684.00	104	52.246	10.449	
18	1,2-DIBROMO-3-CHLO	29.084	59217.00	96	47.851	9.570	
19	1,2,4-TCB	30.798	306361.22	116	58.087	11.617	
50	HEXACHLOROBUTADIEN	31.249	492613.00	115	57.432	11.486	
51	1,2,3-TCB	31.465	275436.78	121	60.359	12.072	

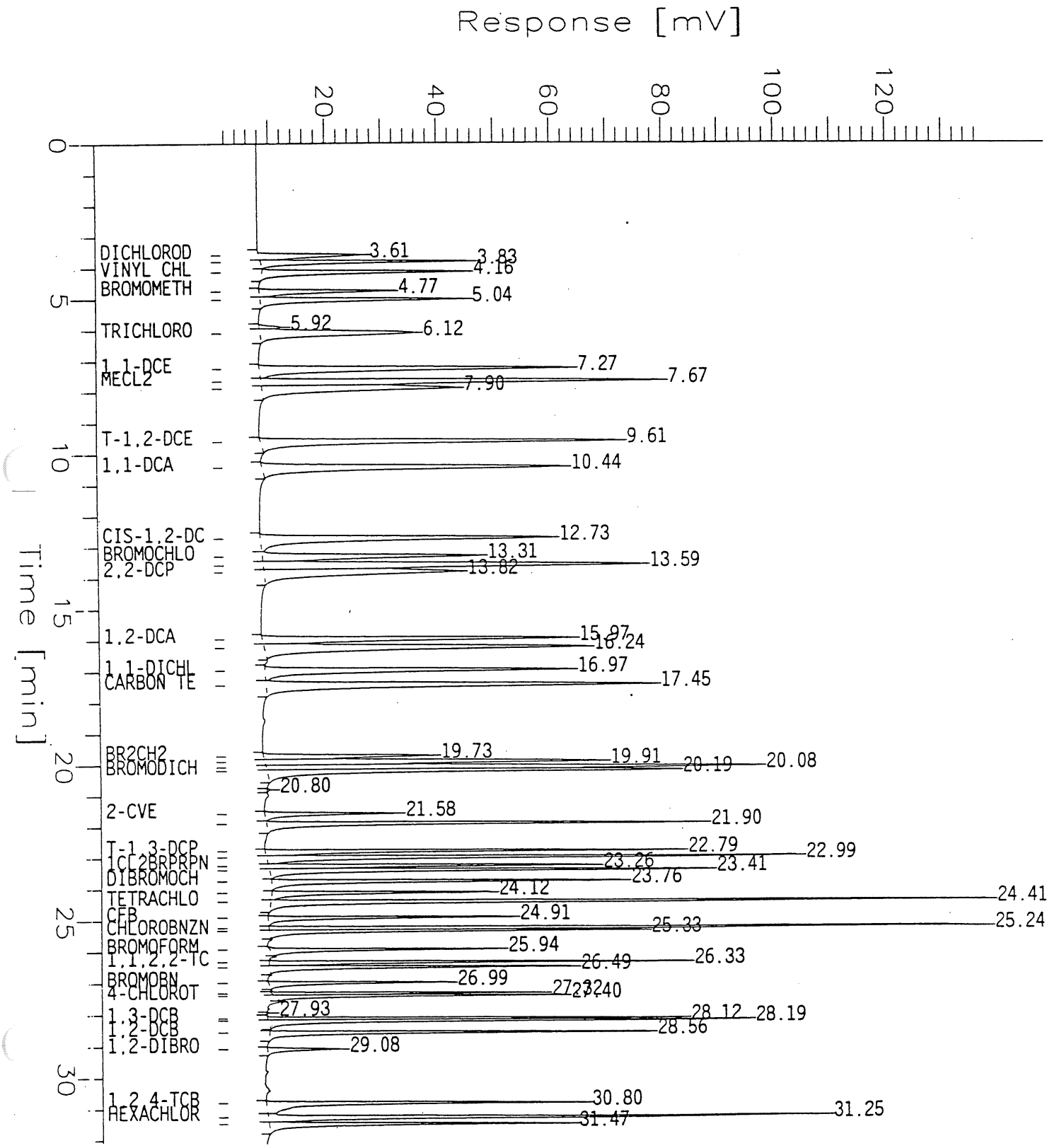
:olumn: DB-VRX 75m X .45mm ID X 2.55um film

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

Halogenated Volatile Organics

le Name : MP1W 10PPB
ame : h:\data\gc10a\H02D001.raw
ethod : GC10A
tart Time : 0.00 min End Time : 32.12 min
Scale Factor: 1.0 Plot Offset: 1 mV

Sample #: Page 1 of
Date : 10/2/98 09:22 AM
Time of Injection: 10/2/98 06:36 AM
Low Point : 1.43 mV High Point : 137
Plot Scale: 136.1 mV



UTM 006609

Software Version: 3.3 <4B11>

Sample Name : MP1W 10PPB
Sample Number:
Operator : RA

Time : 10/3/98 09:35 AM
Study : 8000/500/600

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

Channel : A A/D mV Range : 1000

Interface Serial # : 2156575020
Delay Time : 0.00 min.
End Time : 32.12 min.
Sampling Rate : 1.0000 pts/sec

Data Acquisition Time: 10/3/98 08:33 AM

Raw Data File : H:\DATA\GC10A\H03C001.RAW
Result File : H:\DATA\GC10A\H03C001.RST
Instrument File: H:\DATA\GC10A\GC10A.ins
Process File : H:\DATA\GC10A\PID-10A.prc
Sample File : H:\DATA\GC10A\PP9809A.smp
Sequence File : H:\DATA\GC10A\H03.SEQ

Inj. Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 300.000000
Dilution Factor : 1.00

PID-GC#10A

Peak #	Component Name	Time [min]	Area [uV*sec]	RA*2 (%R)	Raw Amount	Adjusted Amount	Cal. Range
10	1,1-DCE	7.234	284097.00	102	50.846	10.169	
13	T-1,2-DCE	9.569	626031.00	98	49.234	9.847	
15	C-1,2-DCE	12.680	321552.50	99	49.654	9.931	
18	BENZENE	17.618	670833.00	95	47.669	9.534	
19	FB	18.542	449888.00	0	0.000	0.000	
22	TCE.	20.045	392721.50	97	48.287	9.657	
23	AAA-TFT	20.956	222843.00	93	46.326	9.265	
27	TOLUENE	23.285	663217.71	104	51.784	10.357	
31	PCE	24.385	307709.00	98	48.906	9.781	
32	CFB	24.886	422495.00	94	46.762	9.352	
33	CHLOROBENZENE	25.313	642895.50	98	48.884	9.777	
34	ETHYLBENZENE	25.605	553197.00	99	49.323	9.865	
35	M,P-XYLENES	25.858	1308988.00	203	101.718	20.344	
36	STYRENE	26.235	701915.03	106	53.096	10.619	
37	O-XYLENE	26.314	568854.97	96	48.035	9.607	
38	ISOPROPYLBENZENE	26.733	456935.00	99	49.401	9.880	
39	BROMOBENZENE	26.960	637328.00	100	49.958	9.992	
40	n-PROPYLBENZENE	27.210	508461.59	101	50.600	10.120	
41	2-CL-TOLUENE	27.288	571393.27	99	49.651	9.930	
42	4-CLOROTOLUENE	27.375	608111.63	101	50.422	10.084	
43	1,3,5-TRIMETHYLBE	27.529	781941.28	101	50.457	10.091	
44	t-BUTYLBENZENE	27.801	419983.65	97	48.556	9.711	
45	1,2,4-TRIMETHYLBE	27.922	574314.34	101	50.600	10.120	
46	sec-BUTYLBENZENE	28.027	426545.43	96	47.802	9.560	
47	1,3-DCB	28.085	542128.85	99	49.450	9.890	Reprocessed
48	1,4-DCB	28.160	529501.27	98	48.970	9.794	
49	p-ISOPROPYLTOLUEN	28.220	499559.70	112	55.780	11.156	
50	1,2-DCB	28.530	429513.20	97	48.465	9.693	
51	n-BUTYLBENZENE	28.651	458883.80	97	48.418	9.684	
58	1,2,4-TCB	30.758	277500.91	95	47.729	9.546	
59	NAPHTHALENE	31.126	274959.64	89	44.732	8.946	
60	CL6BUTADIENE	31.206	266169.77	101	50.641	10.128	
61	1,2,3 TCB	31.424	260268.60	105	52.261	10.452	

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

Result File : H03C001.RST, Printed On 10/3/98 09:35 AM

TEMP program:
35oC12min,5oC 60oC 2min,16oC 200oC 3.49min,30oc 220oC .5min

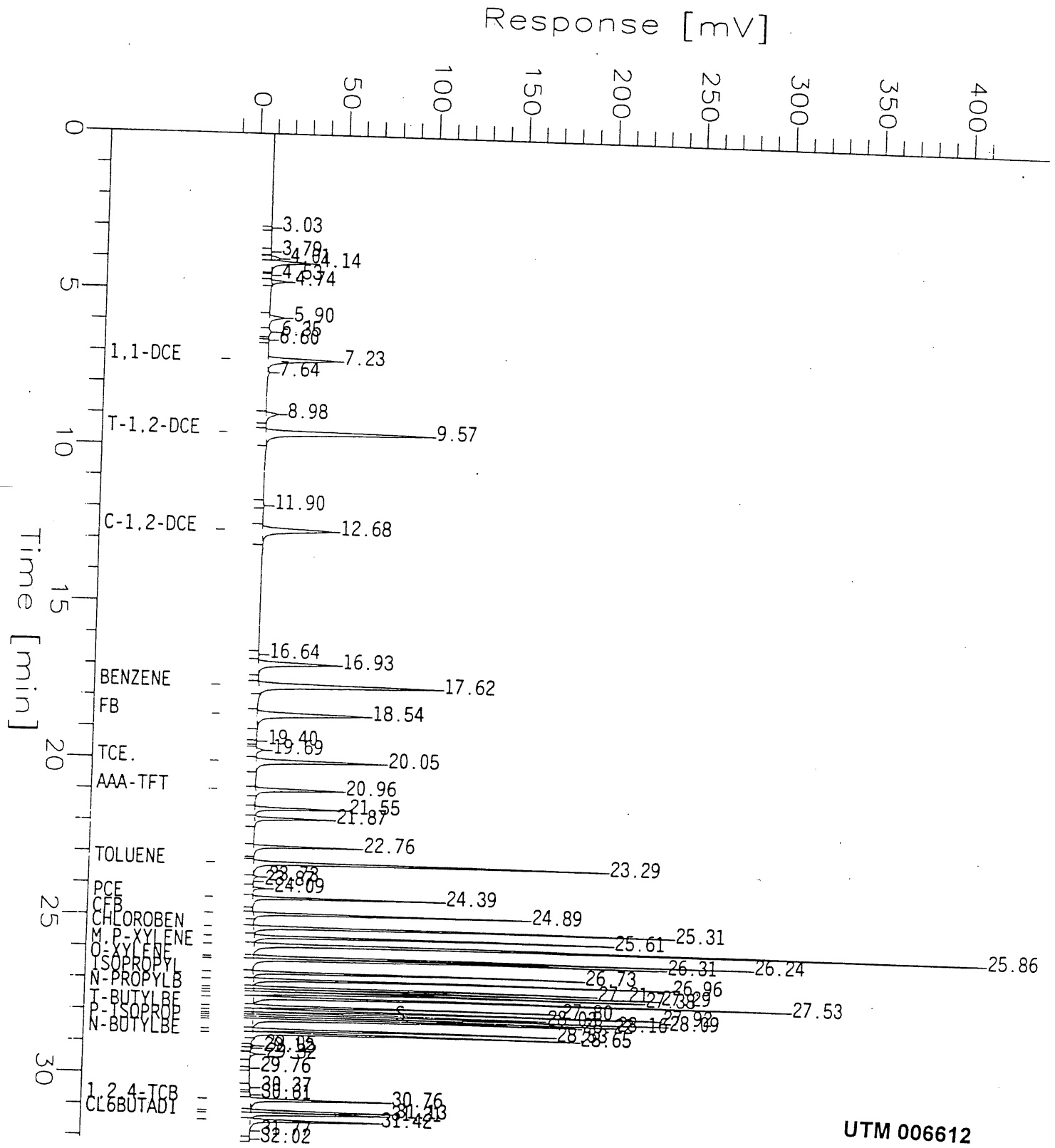
AROMATICS

Sample Name : MP1W 10PPB
FileName : H:\DATA\GC10A\H03C001.RAW
Method : GC10A.ins
Start Time : 0.00 min
Scale Factor: 1.0

End Time : 32.12 min
Plot Offset: -13 mV

Sample #:
Date : 10/3/98 09:35 AM
Time of Injection: 10/3/98 08:33 AM
Low Point : -12.94 mV
Plot Scale: 430.0 mV

High Point : 4



UTM 006612

Software Version: 3.3 <4B11>

Sample Name : MP1W 10PPB
ample Number:
perator : RA

Time : 10/3/98 09:06 AM
Study : 8000/500/600

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

Channel : A A/D mV Range : 1000

Interface Serial # : 2156575020 Data Acquisition Time: 10/3/98 08:33 AM
Delay Time : 0.00 min.
End Time : 32.12 min.
Sampling Rate : 1.0000 pts/sec

Raw Data File : H:\DATA\GC10A\H03C001.RAW
Result File : H:\DATA\GC10A\H03C001.RST
Instrument File: H:\DATA\GC10A\GC10A
Process File : H:\DATA\GC10A\PID-10A.prc
Sample File : H:\DATA\GC10A\PP9809A.smp
Sequence File : h:\data\gc10a\h03.seq

Inj. Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 300.000000
Dilution Factor : 1.00

PID-GC#10A

k	Component Name	Time [min]	Area [uV*sec]	RA*2 (%R)	Raw Amount	Adjusted Amount	Cal. Range
10	1,1-DCE	7.234	284097.00	102	50.846	10.169	
13	T-1,2-DCE	9.569	626031.00	98	49.234	9.847	
15	C-1,2-DCE	12.680	321552.50	99	49.654	9.931	
18	BENZENE	17.618	670833.00	95	47.669	9.534	
19	FB	18.542	449888.00	0	0.000	0.000	
22	TCE.	20.045	392721.50	97	48.287	9.657	
23	AAA-TFT	20.956	222843.00	93	46.326	9.265	
27	TOLUENE	23.285	663217.71	104	51.784	10.357	
31	PCE	24.385	307709.00	98	48.906	9.781	
32	CFB	24.886	422495.00	94	46.762	9.352	
33	CHLOROBENZENE	25.313	642895.50	98	48.884	9.777	
34	ETHYLBENZENE	25.605	553197.00	99	49.323	9.865	
35	M,P-XYLENES	25.858	1308988.00	203	101.718	20.344	
36	STYRENE	26.235	701915.03	106	53.096	10.619	
37	O-XYLENE	26.314	568854.97	96	48.035	9.607	
38	ISOPROPYLBENZENE	26.733	456935.00	99	49.401	9.880	
39	BROMOBENZENE	26.960	637328.00	100	49.958	9.992	
40	n-PROPYLBENZENE	27.210	508399.83	101	50.593	10.119	
41	2-CL-TOLUENE	27.288	571247.43	99	49.639	9.928	
42	4-CLOROTOLUENE	27.375	607699.86	101	50.388	10.078	
43	1,3,5-TRIMETHYLBE	27.529	780458.89	101	50.362	10.072	
44	t-BUTYLBENZENE	27.801	405724.00	94	46.907	9.381	
45	1,2,4-TRIMETHYLBE	27.922	524911.00	92	46.247	9.249	
46	sec-BUTYLBENZENE	28.027	257645.00	58	28.874	5.775	Reprocess
47	1,4-DCB	28.160	262174.00	48	24.247	4.849	
48	1,2-DCB	28.530	429513.20	97	48.465	9.693	
49	n-BUTYLBENZENE	28.651	458883.80	97	48.418	9.684	
56	1,2,4-TCB	30.758	277500.91	95	47.729	9.546	
57	NAPHTHALENE	31.126	274959.64	89	44.732	8.946	
58	CL6BUTADIENE	31.206	266169.77	101	50.641	10.128	
59	1,2,3 TCB	31.424	260268.60	105	52.261	10.452	

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

TEMP program:
35oC12min,5oC 60oC 2min,16oC 200oC 3.49min,30oc 220oC .5min

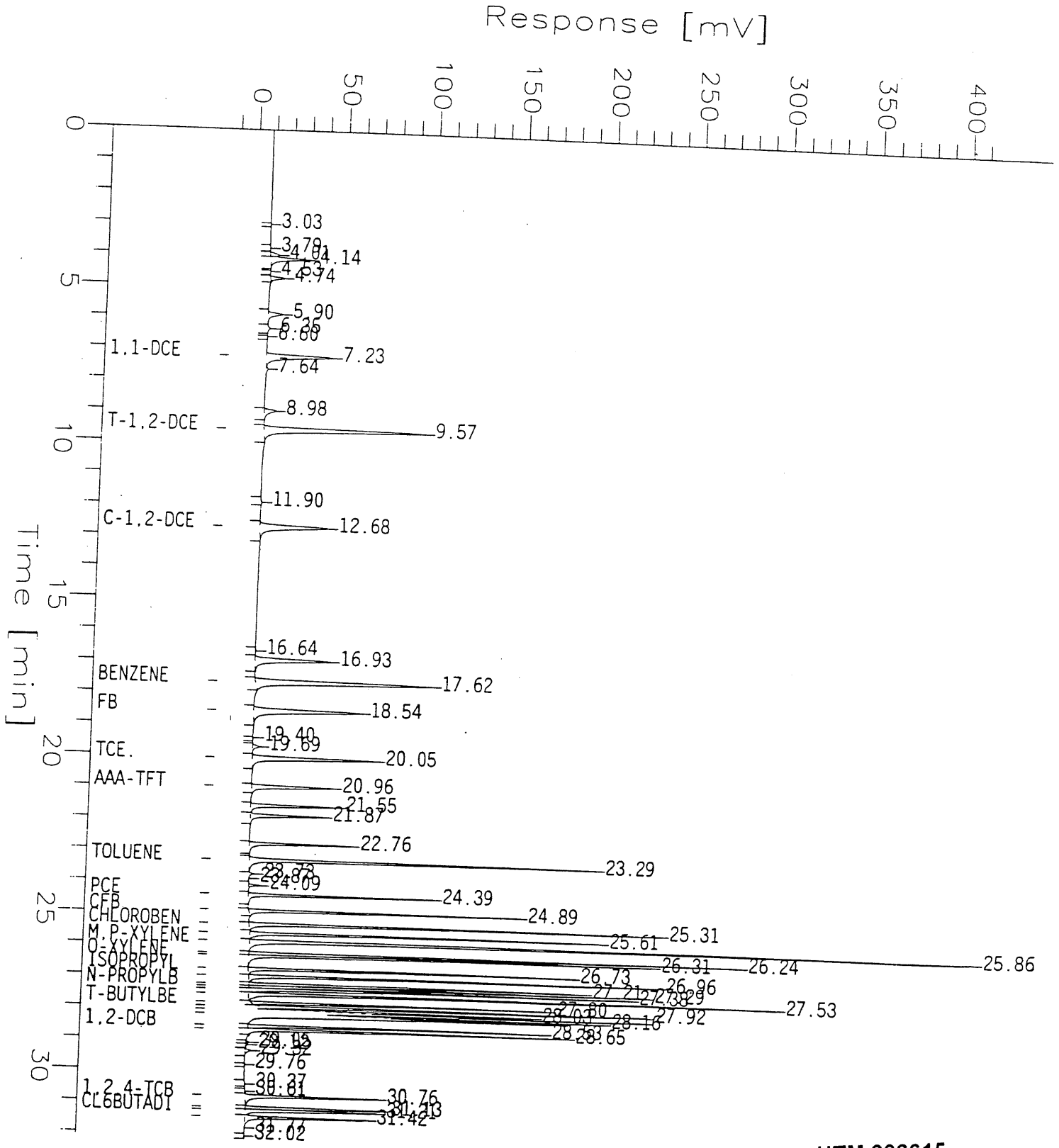
AROMATICS

Sample Name : MP1W 10PPB
FileName : h:\data\gc10a\H03C001.raw
Method : GC10A
Start Time : 0.00 min
Scale Factor: 1.0

End Time : 32.12 min
Plot Offset: -13 mV

Sample #:
Date : 10/3/98 09:06 AM
Time of Injection: 10/3/98 08:33 AM
Low Point : -12.94 mV
Plot Scale: 430.0 mV

High Point : 41



Software Version: 3.3 <4B11>

Sample Name : MP1W 10PPB
Sample Number:
Operator : RA

Time : 10/3/98 09:06 AM
Study : 8000/500/600

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

Channel : B A/D mV Range : 1000

Interface Serial # : 2156575020
Delay Time : 0.00 min.
End Time : 32.12 min.
Sampling Rate : 1.0000 pts/sec

Data Acquisition Time: 10/3/98 08:33 AM

Raw Data File : H:\DATA\GC10A\H03D001.RAW
Result File : H:\DATA\GC10A\H03D001.RST
Instrument File: H:\DATA\GC10A\GC10A
Process File : H:\DATA\GC10A\ELCD-10A.prc
Sample File : H:\DATA\GC10A\EE9809A.smp
Sequence File : h:\data\gc10a\h03.seq

Inj. Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 1000.000000
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	3.605	129689.78	79	39.601	7.920	
2	CHLOROMETHANE	3.822	194834.22	103	51.552	10.310	
3	VINYL CHLORIDE	4.156	228370.00	95	47.692	9.538	
4	BROMOMETHANE	4.764	144573.26	95	47.645	9.529	
5	CHLOROETHANE	5.032	235559.24	100	50.066	10.013	
7	TRICHLOROFLUOROMET	6.120	278349.12	97	48.702	9.740	
8	1,1-DCE	7.258	415835.30	96	48.231	9.646	
9	MECL2	7.661	531809.35	109	54.320	10.864	
10	FREON 113	7.895	330758.35	107	53.381	10.676	
11	T-1,2-DCE	9.590	479659.00	110	54.783	10.957	
12	1,1-DCA	10.423	475649.00	109	54.634	10.927	
13	CIS-1,2-DCE	12.702	472323.00	107	53.741	10.748	
14	BROMOCHLOROMETHAN	13.283	325427.78	104	52.175	10.435	
15	CHLOROFORM	13.566	621793.00	115	57.327	11.465	
16	2,2-DCP	13.789	361621.22	100	49.932	9.986	
17	1,2-DCA	15.939	416379.38	106	52.895	10.579	
18	1,1,1-TCA	16.220	561661.62	109	54.369	10.874	
19	1,1-DICHLOROPROPEN	16.948	423868.00	109	54.628	10.926	
20	CARBON TETRACHLORI	17.421	617069.00	107	53.532	10.706	
21	BR2CH2	19.709	185508.64	95	47.476	9.495	
22	1,2-DCP	19.894	436323.29	110	54.901	10.980	
23	TCE	20.064	558498.00	104	52.040	10.408	
24	BROMODICHLOROMETHA	20.179	453523.07	103	51.735	10.347	
25	2-CVE	21.570	115571.42	96	48.214	9.643	
26	C-1,3-DCP	21.889	381006.58	108	53.787	10.757	
27	T-1,3-DCP	22.780	324271.65	105	52.681	10.536	
28	1,1,2-TCA	22.982	441372.19	111	55.691	11.138	
29	1CL2BRPRPN	23.254	284583.03	0	0.000	0.000	
	1,3-DCP	23.401	372151.63	116	57.897	11.579	
	DIBROMOCHLOROMETHA	23.747	288343.00	103	51.606	10.321	
	EDB	24.113	177355.12	100	49.846	9.969	
33	TETRACHLOROETHENE	24.401	570458.88	109	54.382	10.876	
34	CFB	24.902	186016.00	108	54.056	10.811	
35	1,1,1,2-TCA	25.235	488791.68	96	47.957	9.591	
36	CHLOROBNZN	25.321	266024.32	113	56.257	11.251	

Result File : H03D001.RST, Printed On 10/3/98 09:06 AM

Peak #	Component Name	Time [min]	Area [uV*sec]	RA*2 (%R)	Raw Amount	Adjusted Amount	Cal. Range
37	BROMOFORM	25.924	178528.00	101	50.339	10.068	
38	1,1,2,2-TCA	26.323	284160.00	102	50.884	10.177	
39	1,2,3-TCP	26.483	229647.00	109	54.314	10.863	
40	BROMOBN	26.979	141628.50	105	52.669	10.534	
41	2-CHLOROTOLUENE	27.304	167853.34	110	55.203	11.041	
42	4-CHLOROTOLUENE	27.388	189600.16	104	52.197	10.439	
44	1,3-DCB	28.101	241449.54	108	53.949	10.790	
45	1,4-DCB	28.171	350904.46	111	55.399	11.080	
46	1,2-DCB	28.545	289827.00	105	52.663	10.533	
47	1,2-DIBROMO-3-CHLO	29.068	55532.00	92	46.146	9.229	
48	1,2,4-TCB	30.775	299396.27	117	58.376	11.675	
49	HEXACHLOROBUTADIEN	31.224	464005.54	111	55.563	11.113	
50	1,2,3-TCB	31.441	252586.19	114	56.922	11.384	

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

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

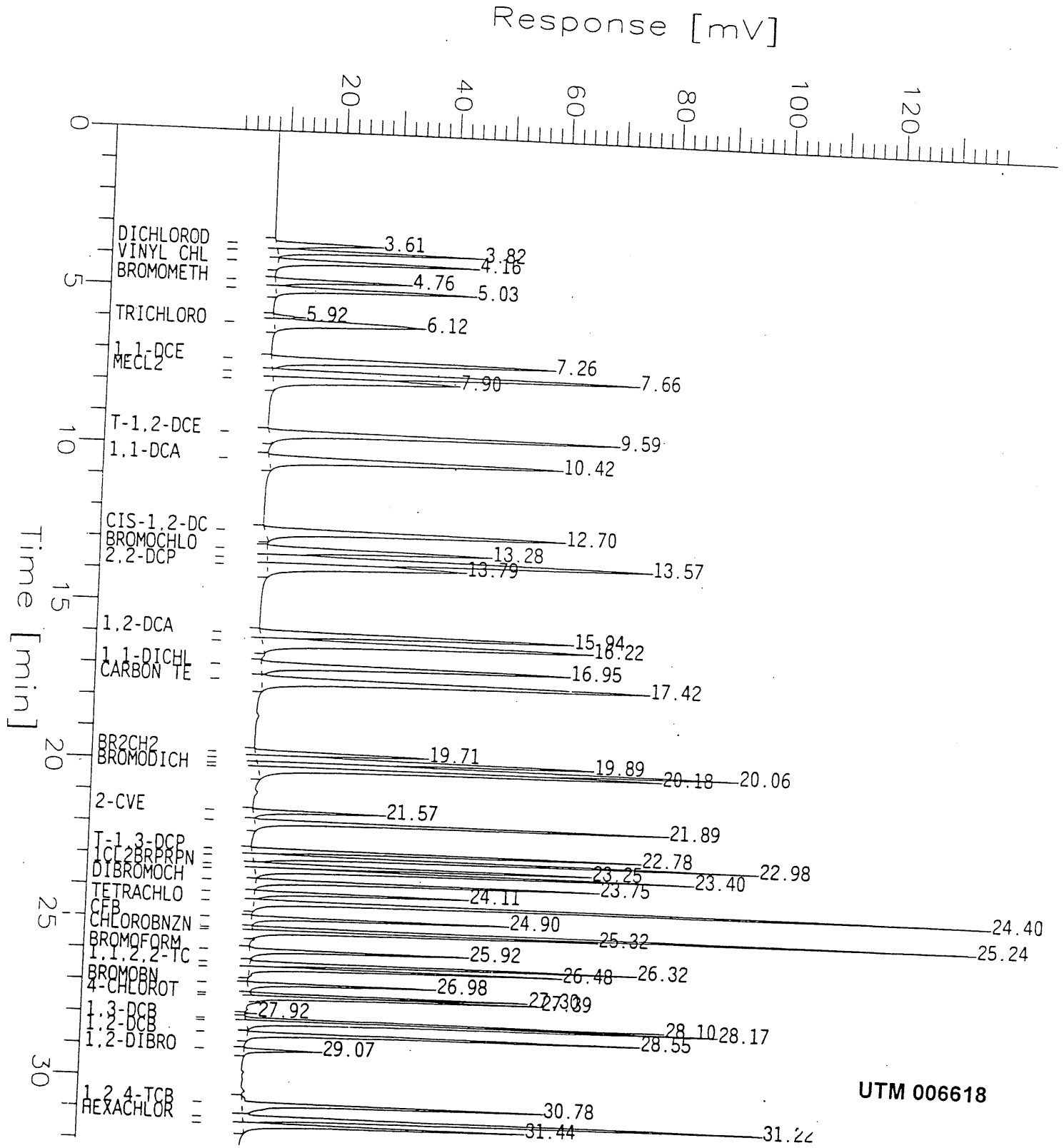
Halogenated Volatile Organics

Sample Name : MP1W 10PPB
FileName : h:\data\gc10a\H03D001.raw
Method : GC10A
Start Time : 0.00 min
Scale Factor: 1.0

End Time : 32.12 min
Plot Offset: 1 mV

Sample #:
Date : 10/3/98 09:06 AM
Time of Injection: 10/3/98 08:33 AM
Low Point : 1.31 mV
Plot Scale: 138.0 mV

High Point : 1:



UTM 006618

DISTRIBUTION

Groundwater Monitoring Report - 1998
Utility Trailer Manufacturing Company
17300 East Chestnut Street
City of Industry, California

February 10, 1999

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Quality Control Reviewer:

Donald A. Pape
Principal Hydrogeologist