

4808

**Erler &
Kalinowski, Inc.**

Consulting Engineers and Scientists

1730 So. Amphlett Blvd., Suite 320

San Mateo, California 94402

(415) 578-1172

Fax (415) 578-9131

LETTER OF TRANSMITTAL

TO: William Wick, Esq.
Crosby, Heafey, Roach & May
1999 Harrison Street
Oakland, California 94612-3400

DATE: 4 June 1997
PROJECT NO. 930040.00
SUBJECT: 4200 Alameda Ave.
Oakland, CA

WE ARE SENDING YOU THE FOLLOWING:

One (1) copy of the following:

- Groundwater Sampling Results for January 1997, 4200 Alameda Avenue, Oakland, California, dated 30 May 1997

REMARKS:

Attached is the report summarizing the first semiannual monitoring event for 1997.

COPY TO:

Mike Webster, c/o Amberwick
Barney Chan, ACDEH
Sum Arigala, RWQCB

Very truly yours,

ERLER & KALINOWSKI, INC.



Andrew N. Safford

*If enclosures are not as noted,
please advise us at once.*

97 JUN 5 10 43 AM '97
TWIN CREEK
ENVIRONMENTAL
LABORATORY

Erler & Kalinowski, Inc.

Consulting Engineers and Scientists

1730 So. Amphlett Blvd., Suite 320
San Mateo, California 94402
(415) 578-1172
Fax (415) 578-9131

30 May 1997

Mr. William Wick, Esq.
Crosby, Heafey, Roach & May
1999 Harrison Street
Oakland, California 94612-3400

Subject: Groundwater Sampling Results for January 1997
4200 Alameda Avenue, Oakland, California
(EKI 930040.04)

Dear Mr. Wick:

Erler & Kalinowski, Inc. ("EKI") is pleased to submit this summary of analytical results of groundwater samples collected in January 1997 at the property located at 4200 Alameda Avenue in Oakland, California ("the site"). These analytical results represent the first semiannual monitoring event for 1997. Semiannual monitoring of wells at the site was in response to the request made by the Alameda County Department of Environmental Health in its letter dated 8 February 1996.

GROUNDWATER MONITORING WELL SAMPLING PROCEDURES

EKI sampled the five existing monitoring wells at the site on 24 January 1997. Prior to collecting water samples, EKI measured depths to groundwater, the depths to floating product, if any, and the total depths of wells to determine the casing volume of each well to be purged. Any floating product present was first purged with a peristaltic pump. A hand bailer was then used to purge groundwater from each well. The peristaltic pump tubing and bailer were cleaned in a 55-gallon drum with Alconox® soap and distilled water before use at each well. The wells were purged until three casing volumes were removed or until the well dewatered. Groundwater purge records are included as Attachment A.

EKI used a new disposable polyethylene bailer to collect groundwater samples from each monitoring well. Water samples were collected in 40 mL glass vials and preserved with hydrochloric acid ("HCl") for analysis of volatile organic compounds ("VOCs"), purgeable petroleum hydrocarbons, and benzene, toluene, ethyl benzene, and total xylenes ("BTEX"). Water samples were collected in 1 liter amber glass bottles for analysis of total extractable petroleum hydrocarbons. Collected water samples were

RECEIVED 5-MAY 1997
Environmental
Engineering

30 May 1997
Mr. William Wick, Esq.
Crosby, Heafey, Roach & May
Page 2

placed in a cooled container and transported to Sequoia Analytical Laboratory under chain-of-custody procedures.

On 27 January 1997, three days after the monitoring wells at the site had been purged of measurable quantities of floating product, EKI again measured the depths to floating product, if any, and the depths to groundwater. EKI has also coordinated monthly groundwater elevation measurements with Rust Environment & Infrastructure, consultants for Kmart Corporation. Presented in Table 1 is a compilation of hydrocarbon thickness and groundwater elevation measurements.

SUMMARY OF GROUNDWATER SAMPLING RESULTS FOR JANUARY 1997

Immiscible hydrocarbons were noted in two of the five monitoring wells constructed at the site. Wells MW-4 and MW-5 contained measurable amounts of floating hydrocarbons. An electronic interface probe was used to measure the thickness of floating hydrocarbons in these wells. On 24 January 1997, floating hydrocarbons measured 0.75 feet thick in well MW-4 and 2.21 feet thick in well MW-5. On 27 January 1997, three days after purging the wells, floating hydrocarbons measured 0.03 feet thick in well MW-4 and 0.47 feet thick in well MW-5.

Groundwater samples collected from the five monitoring wells were analyzed for the following compounds:

- Total purgeable petroleum hydrocarbons with BTEX by modified EPA Method 8015 and EPA Method 8020
- Extractable hydrocarbon fuel fingerprint by modified EPA Method 8015
- Halogenated volatile organic compounds by EPA Method 8010

Groundwater sample analytical results are summarized in Tables 2 through 4 and shown on Figures 1 and 2. Copies of laboratory analytical reports are included as Attachment B. Review of these tables and figures indicates that chemical concentrations in groundwater at the site remain essentially unchanged from the results of previous sampling events.

30 May 1997
Mr. William Wick, Esq.
Crosby, Heafey, Roach & May
Page 3

Total Petroleum Hydrocarbons in Groundwater

Total petroleum hydrocarbons ("TPH") in groundwater samples were quantitated against both gasoline and diesel standards. Sequoia Analytical found that the chromatogram patterns of extractable hydrocarbons did not resemble that of a diesel fuel in groundwater samples collected from most of the wells.

Reported concentrations are set forth in Table 2 and shown on Figure 1. However, these results should not be interpreted as the levels of TPH solely dissolved in groundwater. Immiscible hydrocarbons were observed in groundwater samples collected from the monitoring wells. Measured TPH concentrations likely include quantitation of TPH in both immiscible and soluble phases.

BTEX and Halogenated VOCs in Groundwater

BTEX and certain halogenated VOCs were detected in groundwater samples collected from the site. Halogenated VOCs include 1,1-dichloroethane ("1,1-DCA"), chloroethane, cis-1,2-dichloroethene ("c-1,2-DCE"), trans-1,2-dichloroethene ("t-1,2-DCE"), vinyl chloride, 1,2-dichlorobenzene ("1,2-DCB"), 1,3-dichlorobenzene (1,3-DCB"), and 1,4-dichlorobenzene ("1,4-DCB").

The detected concentrations for January 1997 are set forth in Tables 3 and 4 and shown on Figure 2. However, it should be recognized that BTEX and halogenated VOCs can be expected to partition between groundwater and immiscible hydrocarbons. Measured concentrations of these chemicals may be largely associated with immiscible hydrocarbons in groundwater at the site. The actual dissolved concentrations of these chemicals in groundwater are unknown.

QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES

To provide a check on monitoring well sampling techniques, EKI collected duplicate samples from MW-5. Differences in concentrations of VOCs and total petroleum hydrocarbons between duplicate samples indicate that acceptable precision was achieved.

30 May 1997

Mr. William Wick, Esq.

Crosby, Heafey, Roach & May

Page 4

One trip blank was included in the cooler containing groundwater samples transported to the laboratory. No VOCs or purgeable petroleum hydrocarbons were detected in the trip blank sample.

Review of matrix spike, matrix spike duplicate, and laboratory control spike analytical results included with the laboratory reports (Attachment B) indicate that acceptable accuracy and precision were achieved.

Please call if you have questions.

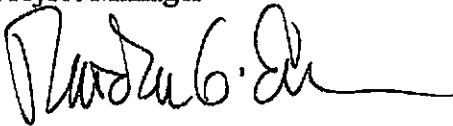
Very truly yours,

ERLER & KALINOWSKI, INC.



Andrew N. Safford, P.E.

Project Manager



Theodore G. Erler, P.E.

President

attachment

TABLE 1
SUMMARY OF WATER LEVEL MEASUREMENTS
 4200 Alameda Avenue, Oakland, California

Well ID	Reference Elevation (ft, msl); (a)	Sample Date	Depth to Hydrocarbon (ft)	Depth to Groundwater (ft)	Thickness of Hydrocarbon (ft)	Groundwater Surface Elevation (ft, msl); (b)
MW-1	15	7/26/95	-	10.07	-	4.93
		8/28/95	-	10.75	-	4.25
		9/12/95	11.03	11.05	0.02	3.97
		1/2/96	-	10.38	-	4.62
		1/3/96	-	10.23	-	4.77
		5/8/96	-	8.77	-	6.09
		6/3/96	-	8.99	-	5.87
		6/24/96	-	9.36	-	5.50
		7/8/96	-	9.76	-	5.10
		8/7/96	10.41	10.42	0.01	4.45
	9/4/96	10.66	10.70	0.04	4.20	
	9/18/96	10.88	10.94	0.06	3.97	
	10/1/96	11.02	11.11	0.09	3.83	
	14.58 (d)	11/7/96	11.75	11.91	0.16	2.82
	12/6/96	11.86	11.93	0.07	2.72	
	1/8/97	12.01	12.17	0.16	2.56	
	1/24/97	-	10.95	-	3.63	
	1/27/97	-	9.57	-	5.01	
	2/4/97	-	9.08	-	5.50	
	3/7/97	-	9.70	-	4.88	
4/8/97	10.80	10.83	0.03	3.78		
5/8/97	11.10	11.12	0.02	3.48		
MW-2	14.10	7/26/95	-	6.39	-	7.71
		8/28/95	-	8.10	-	6.00
		9/12/95	-	8.63	-	5.47
		1/2/96	-	7.89	-	6.21
		1/3/96	-	7.39	-	6.71
		5/8/96	-	6.43	-	7.69
		6/3/96	-	7.04	-	7.08
		6/24/96	-	7.78	-	6.34
		7/8/96	-	7.97	-	6.15
		8/7/96	8.08	8.09	0.01	6.04
	9/4/96	8.64	8.66	0.02	5.48	
	9/18/96	8.76	8.78	0.02	5.36	
	10/1/96	-	8.64	-	5.48	
	11/7/96	8.84	8.87	0.03	5.28	
	12/6/96	8.23	8.26	0.03	5.89	
	1/8/97	-	7.24	-	6.88	
	1/24/97	-	7.12	-	7.00	
	1/27/97	-	7.31	-	6.81	
	2/4/97	-	7.03	-	7.09	
	3/7/97	-	7.01	-	7.11	
4/8/97	8.35	8.38	0.03	5.77		
5/8/97	7.86	7.87	0.01	6.26		

TABLE 1
SUMMARY OF WATER LEVEL MEASUREMENTS
 4200 Alameda Avenue, Oakland, California

Well ID	Reference Elevation (ft, msl); (a)	Sample Date	Depth to Hydrocarbon (ft)	Depth to Groundwater (ft)	Thickness of Hydrocarbon (ft)	Groundwater Surface Elevation (ft, msl); (b)	
MW-3	12.59	7/26/95	-	8.65	-	3.94	
		8/28/95	-	9.27	-	3.32	
		9/12/95	-	9.55	-	3.04	
		1/2/96	-	4.06	-	8.53	
		1/3/96	-	3.83	-	8.76	
		5/8/96	-	5.92	-	6.67	
		6/3/96	-	7.05	-	5.54	
		6/24/96	-	8.62	-	3.97	
		7/8/96	8.85	8.86	0.01	3.74	
		8/7/96	9.28	9.29	0.01	3.31	
		9/4/96	-	9.60	-	2.99	
		9/18/96	-	9.78	-	2.81	
		10/1/96	-	9.78	-	2.81	
		11/7/96	-	7.96	-	4.63	
		12/6/96	-	7.20	-	5.39	
		1/8/97	-	4.34	-	8.25	
		1/24/97	-	3.81	-	8.78	
		1/27/97	-	3.92	-	8.67	
		2/4/97	-	4.84	-	7.75	
		3/7/97	-	6.34	-	6.25	
4/8/97	-	7.81	-	4.78			
5/8/97	-	7.94	-	4.65			
MW-4	13.47	7/26/95	-	9.95	-	3.52	
		8/28/95	10.54	10.75	0.21	2.91	
		9/12/95	10.72	11.13	0.41	2.71	
		1/2/96	10.57	11.29	0.72	2.83	
		1/3/96	11.23	11.23	0.00	2.24	
		13.18 (c)	5/8/96	8.94	9.62	0.02	4.17
			6/3/96	9.14	9.83	0.02	3.97
			6/24/96	9.22	9.68	0.46	3.91
			7/8/96	9.41	9.92	0.51	3.72
			8/7/96	9.91	10.54	0.63	3.21
	9/4/96		10.27	11.06	0.79	2.83	
	9/18/96		10.47	11.42	0.95	2.62	
	10/1/96		10.60	11.57	0.97	2.48	
	11/7/96		10.90	12.35	1.45	2.14	
	12/6/96		10.57	11.72	1.15	2.50	
	1/8/97	8.61	9.46	0.85	4.49		
	1/24/97	8.41	9.16	0.75	4.70		
	1/27/97	8.01	8.04	0.03	5.17		
	2/4/97	8.12	8.35	0.23	5.04		
	3/7/97	9.04	9.43	0.39	4.10		
4/8/97	9.59	10.02	0.43	3.55			
5/8/97	9.86	10.27	0.41	3.28			

TABLE 1
SUMMARY OF WATER LEVEL MEASUREMENTS
 4200 Alameda Avenue, Oakland, California

Well ID	Reference Elevation (ft, msl); (a)	Sample Date	Depth to Hydrocarbon (ft)	Depth to Groundwater (ft)	Thickness of Hydrocarbon (ft)	Groundwater Surface Elevation (ft, msl); (b)
MW-5	13.41	7/25/95	8.83	8.88	0.05	4.58
		8/28/95	9.30	11.32	2.02	3.91
		9/12/95	9.48	11.99	2.51	3.68
		1/2/96	8.63	10.93	2.30	4.55
		1/3/96	11.17	11.17	0.00	2.24
	14.41 (c)	5/8/96	8.10	13.34	0.02	5.79
		6/3/96	8.81	13.89	0.02	5.09
		6/24/96	8.84	11.21	2.37	5.33
		7/8/96	9.33	11.96	0.02	4.82
		8/7/96	9.90	13.10	3.20	4.19
	14.08 (d)	9/4/96	10.35	13.55	3.20	3.74
		9/18/96	10.58	13.74	3.16	3.51
		10/1/96	10.67	16.00	5.33	3.21
		11/7/96	10.70	13.59	2.89	3.09
		12/6/96	10.39	12.66	2.27	3.46
		1/8/97	8.96	10.84	1.88	4.93
		1/24/97	8.71	10.92	2.21	5.15
		1/27/97	8.76	9.23	0.47	5.27
		2/4/97	8.46	9.00	0.54	5.57
		3/7/97	9.01	10.47	1.46	4.93
4/8/97	9.57	11.61	2.04	4.31		
5/8/97	9.65	12.05	2.40	4.19		

Notes:

- (a) Elevations are expressed in feet above mean sea level ("msl").
- (b) Groundwater elevations have been adjusted for effect of floating hydrocarbons, if any, measured in wells. A specific gravity of 0.9 was assumed when compensating for the depression of the groundwater surface due to floating hydrocarbons.
- (c) Reference elevations are based on survey measurements conducted by MacLeod and Associates, Inc. on 20 June 1996 following grading and paving of the site upon completing demolition and excavation activities.
- (d) Monitoring well MW-1 casing was trimmed 0.275 feet and monitoring well MW-5 casing was trimmed 0.328 feet on 1 October 1996 to allow additional clearance for locking seals below surface completion of these wells.

TABLE 2
TOTAL PETROLEUM HYDROCARBON (TPH) ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
4200 Alameda Avenue, Oakland, California

Well ID	Sample Date	TPH (as gasoline) Concentration (a)		TPH (as diesel) Concentration (a)	
		(ug/L)	Description of Chromatogram Pattern	(ug/L)	Description of Chromatogram Pattern
MW-1	7/26/95	11,000	Pattern characteristic of gasoline	29,000	Unidentifiable pattern of hydrocarbons in C ₉ -C ₃₀ range
	6/24/96	7,800	Pattern characteristic of gasoline	39,000	Pattern characteristic of diesel in the C ₉ -C ₁₄ range
	1/24/97	7,900	Pattern characteristic of gasoline	30,000	Unidentifiable pattern of hydrocarbons in C ₉ -C ₂₄ range
MW-2	7/26/95	3,600	Pattern characteristic of gasoline	22,000	Unidentifiable pattern of hydrocarbons in C ₉ -C ₃₉ range
	6/24/96	2,700	Pattern characteristic of gasoline	12,000	Unidentifiable pattern of hydrocarbons in C ₉ -C ₃₉ range
	1/24/97	4,300	Pattern characteristic of gasoline	7,200	Pattern characteristic of weathered diesel or unidentified hydrocarbons in C ₉ -C ₂₄ range
MW-3	7/25/95	200	Pattern characteristic of gasoline and unidentified hydrocarbons greater than C ₈	5,600	Unidentified pattern of hydrocarbons in C ₉ -C ₃₈ range
	7/25/95 dup	180	Pattern characteristic of gasoline and unidentified hydrocarbons greater than C ₁₀	7,000	Unidentified pattern of hydrocarbons in C ₉ -C ₃₈ range
	6/24/96	57	Pattern characteristic of gasoline	4,900	Unidentified pattern of hydrocarbons in C ₉ -C ₃₈ range
	1/24/97	170	Pattern characteristic of gasoline and unidentified hydrocarbons greater than C ₈	2,100	Pattern characteristic of weathered diesel or unidentified hydrocarbons in C ₉ -C ₂₄ range
MW-4	7/25/95	1,400	Pattern characteristic of gasoline	24,000	Pattern characteristic of crude oil
	6/24/96	5,500	Pattern characteristic of gasoline and unidentified hydrocarbons greater than C ₁₁	850,000	Unidentified pattern of hydrocarbons in C ₉ -C ₄₀ range
	1/24/97	3,500	Pattern characteristic of gasoline and unidentified hydrocarbons greater than C ₈	33,000	Pattern characteristic of weathered diesel or unidentified hydrocarbons in C ₉ -C ₂₄ range
MW-5	7/26/95	4,800	Pattern characteristic of gasoline and unidentified hydrocarbons greater than C ₁₀	7,500	Unidentified pattern of hydrocarbons in C ₉ -C ₃₄ range
	6/24/96	2,000	Pattern characteristic of gasoline	520,000	Unidentified pattern of hydrocarbons in C ₉ -C ₄₀ range
	6/24/96 dup	2,200	Pattern characteristic of gasoline	360,000	Unidentified pattern of hydrocarbons in C ₉ -C ₄₀ range
	1/24/97	2,700	Pattern characteristic of gasoline and unidentified hydrocarbons greater than C ₈	89,000	Pattern characteristic of weathered diesel or unidentified hydrocarbons in C ₉ -C ₂₄ range
	1/24/97 dup	4,200	Pattern characteristic of gasoline and unidentified hydrocarbons greater than C ₈	25,000	Pattern characteristic of weathered diesel or unidentified hydrocarbons in C ₉ -C ₂₄ range

Notes:

(a) Immiscible hydrocarbons present in groundwater samples. Measured constituents likely include quantitation of constituents in both immiscible and soluble phases.

TABLE 3
BENZENE, TOLUENE, ETHYL BENZENE, TOTAL XYLENES (BTEX)
ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
 4200 Alameda Avenue, Oakland, California

Well ID	Sample Date	BTEX Concentration (ug/L); (b)			
		Benzene	Toluene	Ethyl Benzene	Total Xylenes
MW-1	7/26/95	630	1,300	140	870
	6/24/96	530	1,000	130	860
	1/24/97	470	540	130	830
MW-2	7/26/95	36	37	130	660
	6/24/96	19	< 10	170	340
	1/24/97	31	11	120	250
MW-3	7/25/95	6.2	<0.5 (a)	<0.5	<0.5
	7/25/95 dup	6.2	<0.5	<0.5	<0.5
	6/24/96	6.3	<0.5	<0.5	<0.5
	1/24/97	5.2	0.59	<0.5	1.0
MW-4	7/25/95	64	12	28	49
	6/24/96	140	13	87	150
	1/24/97	170	25	60	100
MW-5	7/26/95	78	160	56	190
	6/24/96	97	160	48	150
	6/24/96 dup	95	150	50	160
	1/24/97	100	190	62	190
	1/24/97 dup	99	190	63	200

Notes:

(a) Less than symbol ("<") denotes that compound was not present above the detection limit shown.

(b) Immiscible hydrocarbons present in groundwater samples. Measured constituents likely include quantitation of constituents in both immiscible and soluble phases.

TABLE 4
HALOGENATED VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
 4200 Alameda Avenue, Oakland, California

Well ID	Sample Date	Halogenated Volatile Organic Compound Concentration (ug/L); (b)											
		Chlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	1,1,1-trichloroethane	1,1-dichloroethane	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-dichloroethene	trans-1,2-dichloroethene	Vinyl Chloride
MW-1	7/26/95	<50	<50	<50	<50	<50	130	<100	<50	<50	2,300	91	3,100
	6/24/96	<50	<50	<50	<50	<50	88	<100	<50	<50	2,800	110	3,100
	1/24/97	41	43	<20	66	<20	68	31	<20	<20	750	68	1,100
MW-2	7/26/95	7.3	48	1.5	8	<1.3	4.8	5.8	<1.3	<1.3	<1.3	<1.3	<2.5
	6/24/96	7.4	88	4.0	18	<2.5	15	6.2	<2.5	3.8	20	<2.5	4.1
	1/24/97	<1.2	79	4.5	19	<1.2	7.9	11	<1.2	<1.2	2.0	<1.2	<2.5
MW-3	7/25/95	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5
	7/25/95 dup	<0.5	1.6	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5
	6/24/96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	<0.5
	1/24/97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
MW-4	7/25/95	<50	<50	<50	<50	<50	<50	<50	<50	<50	2,000	50	3,500
	6/24/96	<100	<100	<100	<100	<100	<100	<100	<100	<100	3,100	<100	4,200
	1/24/97	28	29	<25	<25	<25	42	43	<25	<25	1,500	49	2,000
MW-5	7/26/95	<100	<100	<100	<100	<100	160	<200	<100	<100	3,700	130	5,200
	6/24/96	<100	<100	<100	<100	<100	150	<100	<100	<100	2,800	160	4,200
	6/24/96 dup	<100	<100	<100	<100	<100	140	<100	<100	<100	2,800	170	4,100
	1/24/97	<100	<100	<100	<100	<100	190	<100	<100	<100	670	220	4,300
	1/24/1997 dup	<100	<100	<100	<100	<100	230	<100	<100	<100	840	260	4,900

Notes:

(a) Less than symbol (" $<$ ") denotes that compound was not present above the detection limit shown.

(b) Immiscible hydrocarbons present in groundwater samples. Measured constituents likely include quantitation of constituents in both immiscible and soluble phases.

American National
Can Company (ANCC)
Site

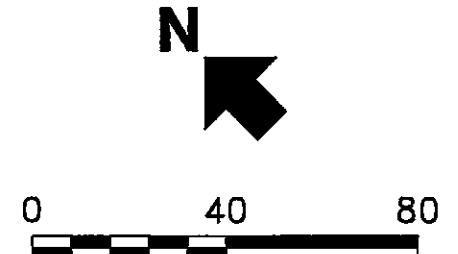
MW-2 (3)			
Date	7/26/95	6/24/96	1/24/97
TPHd	22,000	12,000	7,200
TPHg	3,600	2,700	4,300
Benzene	36	19	31
Toluene	37	<10	11
Ethyl Benzene	130	170	120
Total Xylenes	680	340	250

MW-1 (3)			
Date	7/26/95	6/24/96	1/24/97
TPHd	29,000	39,000	30,000
TPHg	11,000	7,800	7,900
Benzene	630	530	470
Toluene	1,300	1,000	540
Ethyl Benzene	140	130	130
Total Xylenes	870	860	830

MW-4 (3)			
Date	7/26/95	6/24/96	1/24/97
TPHd	24,000	850,000	33,000
TPHg	1,400	5,500	3,500
Benzene	64	140	170
Toluene	12	13	25
Ethyl Benzene	28	87	60
Total Xylenes	49	150	100

MW-3 (3)			
Date	7/26/95	6/24/96	1/24/97
TPHd	5,600	4,900	2,100
TPHg	200	57	170
Benzene	6.2	6.3	5.2
Toluene	<0.5	<0.5	0.59
Ethyl Benzene	<0.5	<0.5	<0.5
Total Xylenes	<0.5	<0.5	1.0

MW-5 (3)			
Date	7/26/95	6/24/96	1/24/97
TPHd	7,500	520,000	89,000
TPHg	4,800	2,000	4,200
Benzene	78	97	100
Toluene	160	160	190
Ethyl Benzene	56	48	63
Total Xylenes	190	150	200



(Approximate Scale in Feet)

LEGEND

--- Site Boundary

⊕ Monitoring Well

Abbreviations

TPHd Total Petroleum Hydrocarbons as Diesel Fuel

TPHmo Total Petroleum Hydrocarbons as Motor Oil

TPHg Total Petroleum Hydrocarbons as Gasoline

Notes:

1. All locations are approximate.
2. Concentrations in ug/L (ppb).
3. Immiscible hydrocarbons present in groundwater samples. Measured concentrations likely include quantitation of constituents in both the immiscible and soluble phases.

Erler & Kalinowski, Inc.

Petroleum Hydrocarbons and BTEX
in Groundwater

4200 Alameda Avenue
Oakland, CA

May 1997

EKI 930040.04

Figure 1

American National
Can Company (ANCC)
Site

MW-2 (3)			
Date	7/26/95	6/24/96	1/24/97
Chlorobenzene	7.3	7.4	<1.2
1,2-DCB	48	88	79
1,3-DCB	1.5	4.0	4.5
1,4-DCB	8	18	19
1,1-DCA	4.8	15	7.9
Chloroethane	5.8	6.2	11
cis-1,2-DCE	<1.3	20	2.0
trans-1,2-DCE	<1.3	<2.5	<1.2
Vinyl Chloride	<2.5	4.1	<2.5

MW-1 (3)			
Date	7/26/95	6/24/96	1/24/97
Chlorobenzene	<50	<50	41
1,2-DCB	<50	<50	43
1,3-DCB	<50	<50	<20
1,4-DCB	<50	<50	66
1,1-DCA	130	88	7.9
Chloroethane	<100	<50	11
cis-1,2-DCE	2,300	2,800	750
trans-1,2-DCE	91	110	68
Vinyl Chloride	3,100	3,100	1,100

MW-3 (3)			
Date	7/26/95	6/24/96	1/24/97
Chlorobenzene	<0.5	<0.5	<0.5
1,2-DCB	1.7	<0.5	<0.5
1,3-DCB	<0.5	<0.5	<0.5
1,4-DCB	<0.5	<0.5	<0.5
1,1-DCA	<0.5	<0.5	<0.5
Chloroethane	1.2	1.0	<0.5
cis-1,2-DCE	<0.5	<0.5	<0.5
trans-1,2-DCE	<0.5	<0.5	<0.5
Vinyl Chloride	<0.5	<0.5	<1.0

MW-5 (3)			
Date	7/26/95	6/24/96	1/24/97
Chlorobenzene	<100	<100	<100
1,2-DCB	<100	<100	<100
1,3-DCB	<100	<100	<100
1,4-DCB	<100	<100	<100
1,1-DCA	160	150	230
Chloroethane	<200	<100	<100
cis-1,2-DCE	3,700	2,800	840
trans-1,2-DCE	130	160	260
Vinyl Chloride	5,200	4,200	4,900

MW-4 (3)			
Date	7/26/95	6/24/96	1/24/97
Chlorobenzene	<50	<100	28
1,2-DCB	<50	<100	29
1,3-DCB	<50	<100	<25
1,4-DCB	<50	<100	<25
1,1-DCA	<50	<100	42
Chloroethane	<50	<100	43
cis-1,2-DCE	2,000	3,100	1,500
trans-1,2-DCE	50	<100	49
Vinyl Chloride	3,500	4,200	2,000



(Approximate Scale in Feet)

LEGEND

--- Site Boundary

⊕ Monitoring Well

Abbreviations

- 1,2-DCB
- 1,3-DCB
- 1,4-DCB
- 1,1-DCA
- cis-1,2-DCE
- trans-1,2-DCE
- 1,2-dichlorobenzene
- 1,3-dichlorobenzene
- 1,4-dichlorobenzene
- 1,1-dichloroethane
- cis-1,2-dichloroethene
- trans-1,2-dichloroethane

Notes:

1. All locations are approximate.
2. Concentrations in ug/L (ppb).
3. Immiscible hydrocarbons present in groundwater samples. Measured concentrations likely include quantitation of constituents in both the immiscible and soluble phases.

**Erlar &
Kalinowski, Inc.**

Halogenated Volatile Organic
Compounds in Groundwater

4200 Alameda Avenue
Oakland, CA
May 1997
EKI 930040.04

Figure 2

Daily Inspection Report No. _____

Sheet: 1 of 1

Date: 1/24/97

Project: Ekotele

EKI Job No.: 93004004

Contractor: _____

EKI Staff On-site: Roger Lion, David Umezaki

Weather: cloudy Morning / Rain Afternoon

Temperature: _____ F Max _____ F Min

Work Hours: 10 to 3:30p Memos Issued: _____

Photos: _____

Special Conditions, Delays, Changes: _____

Accidents, Damage: _____

Sampling, Testing: Groundwater sampling

Visitors to Site: _____

Work Report (Work done, Personnel/Equipment working): _____

9:40 Roger arrives on site, opens wells
10:00 David arrives after picking up drums at Diversified Well Products - H+S meeting
David checks product and water measurements while Roger
purges MW-5 product using peristaltic pump
10:40 David begins purging MW-3, MW-2, and MW-1 using PVC bailer
11:30 Roger leaves site to pick up disposable bailers
David samples MW-3 using disposable bailer
12:15 Roger returns to site w/ Disposable bailers, David samples ^{MW-2 and} MW-1 w/ disposable
bailer while Roger purges product from MW-4
using peristaltic pump and water from MW-5 using PVC
bailer. David then samples MW-5 w/ disposable bailer while
Roger purges water from MW-4 using PVC bailer
2:30p Roger leaves site after decon and disposing of ~~PPE~~ ^{PPE} in drums
David samples MW-4 and closes wells.
3:30 David leaves site after decon and disposing of PPE in drums

Distribution: Project Inspection File (orig)
Project Manager

By: C. D. [Signature]

GROUNDWATER LEVEL SURVEY

Erler &
Kalinowski, Inc.

Job Name: EROTER

Date: 1/24/97

EKI Job No.: 930040.04

Personnel: R. Dixon CD. Um...

Well Number:	MW-1	MW-2	MW-3	MW-4	MW-5					
Condition of well:										
Type of Cover		FLUSH	BOLTED							
Covered?	YES	Y	Y	Y	Y					
Locked?	YES	Y	Y	Y	Y					
Sealed?	YES STRONG POS. PRESSURE	YES	Y	Y	Y					
Standing water?	No	No	No	No	No					
Dia. of casing	4"	4"	4"	4"	4"					
Measuring point		black mark	black mark							
Elevation of well										
Time opened	9:50	9:47	9:43	9:55	9:53					
Time of measurement	10:15	10:14	10:10	10:17	10:20					
Depth probe used										
Depth to water	10.95 H ₂ O	7.12 H ₂ O	3.81 H ₂ O	5.41 Prod 9.16 H ₂ O	8.71 Prod 10.92 H ₂ O					
Depth THICKNESS of well Product				0.75	2.21					
Conductivity vs. Depth, mhos/cm										
Temperature vs. Depth Deg. C.										
COMMENTS:										

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: EROTEK DATE: 1/24/97
 PROJECT NUMBER: 930040.01 WELL NUMBER: MW-1 PERSONNEL: RDL/CDU

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)	Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
<u>16.30</u>	<u>10.95</u>	<u>= 5.35</u>	<u>* 0.64</u>	<u>= 3.424</u>

Mult. for casing diam. = 2-inch=0.16; 4-inch=0.64; 6-inch=1.44 gals/ft.

No. of bailers prior to start of purge: _____
 PURGE METHOD: 3 1/2" PVC BAILER
 PURGE DEPTH: VARIABLE - TO BOTTOM
 START TIME: 11:27 END TIME: 11:36
 TOTAL GALLONS PURGED: _____

INSTRUMENT CALIBRATION
 Field Standard
Instrument measure measure
 Conductivity
 pH
 pH
 Turbidity
 Temperature
 Depth Probe

SAMPLES: Field I.D. Time Collected Containers & Preservation

COMMENTS:

Time	<u>11:36</u>						
Volume Purged (gallons)	<u>10.5</u>						
Temperature (degrees F or C)	<u>-</u>						
pH	<u>-</u>						
Specific Conductivity (millimhos)	<u>-</u>						
Turbidity/Color (NTU)	<u>THESID</u>						
Odor	<u>-</u>						
Depth to Water during purge (feet)	<u>16.10</u>						
Number of Casing Volumes removed	<u>3.07</u>						
Purge Rate (gallons/minute)							

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: _____ DATE: 1/24/97
 PROJECT NUMBER: _____ WELL NUMBER: MW-2 PERSONNEL: PDL/CDU

WELL VOLUME CALCULATION:
 Depth of Well (ft.) 16.36 - Depth to Water (ft.) 7.12 = Water Column (ft.) 9.24 * Multiplier (below) 0.64 = Casing Vol. (gallons) 5.91
 Mult. for casing diam. = 2-inch=0.16; 4-inch=0.64; 6-inch=1.44 gals/ft.

No. of bailers prior to start of purge: _____
 PURGE METHOD: 3 1/2" BAILER
 PURGE DEPTH: _____
 START TIME: 10:35 END TIME: 11:00
 TOTAL GALLONS PURGED: 9 gallons

INSTRUMENT CALIBRATION
 Field Standard
Instrument measure measure
 Conductivity
 pH
 pH
 Turbidity
 Temperature
 Depth Probe

SAMPLES: Field I.D. Time Collected Containers & Preservation

COMMENTS:

Time		10:40	10:47	10:56				
Volume Purged (gallons)		2	6	9				
Temperature (degrees F or C)		-						
pH		-						
Specific Conductivity (millimhos)		-						
Turbidity/Color (NTU)		-						
Odor		FLOATING PRODUCT						
Depth to Water during purge (feet)								
Number of Casing Volumes removed			1.	1.52	Purged dry			
Purge Rate (gallons/minute)								

GROUNDWATER PURGE SAMPLE FORM

Erler &
Kalinowski, Inc.

PROJECT NAME: EXOTEK DATE: 1/21/97
 PROJECT NUMBER: 930040.04 WELL NUMBER: mw3 PERSONNEL: Polun

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)	Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
<u>12.70</u>	<u>3.81</u>	= <u>8.89</u>	* <u>0.64</u>	= <u>5.69</u>

Mult. for casing diam. = 2-inch=0.16; 4-inch=0.64; 6-inch=1.44 gals/ft.

No. of bailers prior to start of purge: _____

PURGE METHOD: 3 1/2" PVC BAILER

PURGE DEPTH: -BOTTOM

START TIME: 11:00 END TIME: 11:21

TOTAL GALLONS PURGED: _____

INSTRUMENT CALIBRATION

Field Standard

Instrument measure measure

Conductivity

pH

pH

Turbidity

Temperature

Depth Probe

SAMPLES: Field I.D. Time Collected Containers & Preservation

COMMENTS:

Time	<u>11:21</u>						
Volume Purged (gallons)	<u>12</u>						
Temperature (degrees F or C)	<u>-</u>						
pH	<u>-</u>						
Specific Conductivity (millimhos)	<u>-</u>						
Turbidity/Color (NTU)	<u>TURBID</u>						
Odor	<u>-</u>						
Depth to Water during purge (feet)	<u>12.3ft</u>						
Number of Casing Volumes removed	<u>2.11</u>						
Purge Rate (gallons/minute)							

GROUNDWATER PURGE SAMPLE FORM

Erler &
Kalinowski, Inc.

PROJECT NAME: EKO T&F DATE: 1/24/97
 PROJECT NUMBER: 930040.04 WELL NUMBER: MW-4 PERSONNEL: Robson/CDL

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)	Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
<u>14.76</u>	<u>8.41</u>	<u>6.35</u>	<u>* 0.64</u>	<u>= 4.06</u>

Mult. for casing diam. = 2-inch=0.16; 4-inch=0.64; 6-inch=1.44 gals/ft.

No. of bailers prior to start of purge: _____

PURGE METHOD: Peristaltic Pump for Product / 3/2" bailer

PURGE DEPTH: _____

START TIME: 1:30 END TIME: 1:50p

TOTAL GALLONS PURGED: 14

INSTRUMENT CALIBRATION

Field Standard

Instrument measure measure

Conductivity

pH

pH

Turbidity

Temperature

Depth Probe

SAMPLES: Field I.D. Time Collected Containers & Preservation

COMMENTS:

Time	<u>1:50p</u>						
Volume Purged (gallons)	<u>14</u>						
Temperature (degrees F or C)	<u>-</u>						
pH	<u>-</u>						
Specific Conductivity (millimhos)	<u>-</u>						
Turbidity/Color (NTU)	<u>-</u>						
Odor	<u>-</u>						
Depth to Water during purge (feet)	<u>-</u>						
Number of Casing Volumes removed	<u>3.44</u>						
Purge Rate (gallons/minute)							

GROUNDWATER PURGE SAMPLE FORM

Erlar &
Kalinowski, Inc.

PROJECT NAME: EXOTER DATE: 1/24
 PROJECT NUMBER: 930040.04 WELL NUMBER: MW-5 PERSONNEL: RDL/CDM

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)	Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
<u>15.99</u>	<u>8.71</u>	<u>7.28</u>	<u>0.64</u>	<u>4.659</u>
Mult. for casing diam. = 2-inch=0.16; 4-inch=0.64; 6-inch=1.44 gals/ft.				

No. of bailers prior to start of purge: _____

PURGE METHOD: PERISTALTIC Pump to PRODUCT / 3 1/2" bailer

PURGE DEPTH: _____

START TIME: 10:30 END TIME: 1:23p

TOTAL GALLONS PURGED: 17

INSTRUMENT CALIBRATION

Field Standard

Instrument measure measure

Conductivity

pH

pH

Turbidity

Temperature

Depth Probe

SAMPLES: Field I.D. Time Collected Containers & Preservation

COMMENTS:

Time	<u>1:23p - 5/12</u>						
Volume Purged (gallons)	<u>17</u>						
Temperature (degrees F or C)							
pH							
Specific Conductivity (millimhos)							
Turbidity/Color (NTU)							
Odor							
Depth to Water during purge (feet)							
Number of Casing Volumes removed	<u>3.65</u>						
Purge Rate (gallons/minute)							

Daily Inspection Report No. _____

Sheet: 1 of 1
Date: 11/27/97
Project: EKOTEK
EKI Job No.: 93004204

Contractor: _____

EKI Staff On-site: Dave Umezaki

Weather: Cloudy

Temperature: _____ F Max _____ F Min

Work Hours: 9:30 to 10:40 Memos Issued: _____

Photos: _____

Special Conditions, Delays, Changes: _____

Accidents, Damage: _____

Sampling, Testing: _____

Visitors to Site: _____

Work Report (Work done, Personnel/Equipment working): _____

9:30 EKI arrives at site, Prepare equipment, put on PPE, and
open wells
9:50 Measure levels at wells MW-1 through MW-5
10:10 Close wells, decon probe, put used PPE and decon
water in drums
10:40 EKI leaves site

Distribution: Project Inspection File (orig)
Project Manager

By: C.D. [Signature]

GROUNDWATER LEVEL SURVEY

Erler &
Kalinowski, Inc.

Job Name: Flotek

Date: 1/27/97

EKI Job No.: 930040.04

Personnel: CDU

Well Number:	MW-1	MW-2	MW-3	MW-4	MW-5					
Condition of well:										
Type of Cover										
Covered?										
Locked?	See Previous									
Sealed?	Sheet									
Standing water?										
Dia. of casing										
Measuring point										
Elevation of well										
Time opened	9:43	9:37	9:35	9:45	9:47					
Time of measurement	9:57	9:55	9:52	10:00	10:05					
Depth probe used	9.57 water	7.39 water	3.92 water	8.01 pad 8.04 water	8.76 pad 9.23 water					
Depth Thickness to water probe				0.03	0.47					
Depth of well										
Conductivity vs. Depth, mhos/cm										
Temperature vs. Depth Deg. C.										
COMMENTS:										



Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-3 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9701E09-01	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/29/97 Reported: 02/05/97
---	--	---

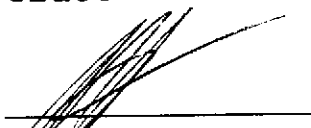
QC Batch Number: GC012997801008A
Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	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	5.0	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	0.50	N.D.
Vinyl chloride	1.0	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	92

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9701E09-01	Sampled: 01/24/97 Received: 01/24/97 Extracted: 01/29/97 Analyzed: 01/31/97 Reported: 02/05/97
---	--	--


QC Batch Number: GC0129970HBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	2100
Chromatogram Pattern: Unidentified HC		C9-C24
Weathered Diesel		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	173 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701E09-01	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/30/97 Reported: 02/05/97
---	--	---

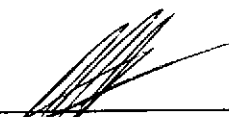
QC Batch Number: GC013097BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	170
Benzene	0.50	5.2
Toluene	0.50	0.59
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	1.0
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	154 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Eler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-2 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9701E09-02	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/29/97 Reported: 02/05/97
--	--	---

QC Batch Number: GC012997801008A
Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.2	N.D.
Bromoform	1.2	N.D.
Bromomethane	2.5	N.D.
Carbon Tetrachloride	1.2	N.D.
Chlorobenzene	1.2	N.D.
Chloroethane	2.5	11
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	1.2	N.D.
Chloromethane	2.5	N.D.
Dibromochloromethane	1.2	N.D.
1,2-Dichlorobenzene	1.2	79
1,3-Dichlorobenzene	1.2	4.5
1,4-Dichlorobenzene	1.2	19
1,1-Dichloroethane	1.2	7.5
1,2-Dichloroethane	1.2	N.D.
1,1-Dichloroethene	1.2	N.D.
cis-1,2-Dichloroethene	1.2	2.0
trans-1,2-Dichloroethene	1.2	N.D.
1,2-Dichloropropane	1.2	N.D.
cis-1,3-Dichloropropene	1.2	N.D.
trans-1,3-Dichloropropene	1.2	N.D.
Methylene chloride	12	N.D.
1,1,2,2-Tetrachloroethane	1.2	N.D.
Tetrachloroethene	1.2	N.D.
1,1,1-Trichloroethane	1.2	N.D.
1,1,2-Trichloroethane	1.2	N.D.
Trichloroethene	1.2	N.D.
Trichlorofluoromethane	1.2	N.D.
Vinyl chloride	2.5	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	92

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-2 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9701E09-02	Sampled: 01/24/97 Received: 01/24/97 Extracted: 01/29/97 Analyzed: 01/31/97 Reported: 02/05/97
Attention: Roger D. Lion		

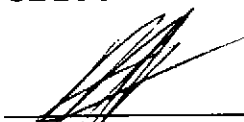
QC Batch Number: GC0129970HBPEXA
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	250	7200
Chromatogram Pattern:		
Unidentified HC		C9-C24
Weathered Diesel		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	357 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701E09-02	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/30/97 Reported: 02/05/97
---	--	---


QC Batch Number: GC013097BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	4300
Benzene	5.0	31
Toluene	5.0	11
Ethyl Benzene	5.0	120
Xylenes (Total)	5.0	250
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	125

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-1 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9701E09-03	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/28/97 Reported: 02/05/97
---	--	---

QC Batch Number: GC012897801008A
Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	20	N.D.
Bromoform	20	N.D.
Bromomethane	40	N.D.
Carbon Tetrachloride	20	N.D.
Chlorobenzene	20	41
Chloroethane	40	31
2-Chloroethylvinyl ether	40	N.D.
Chloroform	20	N.D.
Chloromethane	40	N.D.
Dibromochloromethane	20	N.D.
1,2-Dichlorobenzene	20	43
1,3-Dichlorobenzene	20	N.D.
1,4-Dichlorobenzene	20	66
1,1-Dichloroethane	20	68
1,2-Dichloroethane	20	N.D.
1,1-Dichloroethene	20	N.D.
cis-1,2-Dichloroethene	20	750
trans-1,2-Dichloroethene	20	68
1,2-Dichloropropane	20	N.D.
cis-1,3-Dichloropropene	20	N.D.
trans-1,3-Dichloropropene	20	N.D.
Methylene chloride	200	N.D.
1,1,2,2-Tetrachloroethane	20	N.D.
Tetrachloroethene	20	N.D.
1,1,1-Trichloroethane	20	N.D.
1,1,2-Trichloroethane	20	N.D.
Trichloroethene	20	N.D.
Trichlorofluoromethane	20	N.D.
Vinyl chloride	40	1100
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	122

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc.
1730 South Amphlett, Ste 320
San Mateo, CA 94402

Attention: Roger D. Lion

Client Proj. ID: 930040.04/ Ekotek
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9701E09-03

Sampled: 01/24/97
Received: 01/24/97
Extracted: 01/29/97
Analyzed: 01/31/97
Reported: 02/05/97

QC Batch Number: GC0129970HBPEXA
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	1000	30000
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	410 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erlar & Kalinowski, Inc.	Client Proj. ID: 930040.04/ Ekotek	Sampled: 01/24/97
1730 South Amphlett, Ste 320	Sample Descript: MW-1	Received: 01/24/97
San Mateo, CA 94402	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 01/30/97
Attention: Roger D. Lion	Lab Number: 9701E09-03	Reported: 02/05/97

QC Batch Number: GC013097BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	7900
Benzene	10	470
Toluene	10	540
Ethyl Benzene	10	130
Xylenes (Total)	10	830
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	126

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Roger D. Lion	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-5 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9701E09-04	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/29/97 Reported: 02/05/97
---	--	---

QC Batch Number: GC012997801008A
Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	200	N.D.
Carbon Tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	200	N.D.
2-Chloroethylvinyl ether	200	N.D.
Chloroform	100	N.D.
Chloromethane	200	N.D.
Dibromochloromethane	100	N.D.
1,2-Dichlorobenzene	100	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,1-Dichloroethane	100	190
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	670
trans-1,2-Dichloroethene	100	220
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Methylene chloride	1000	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl chloride	200	4300
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	96

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-5 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9701E09-04	Sampled: 01/24/97 Received: 01/24/97 Extracted: 01/29/97 Analyzed: 01/31/97 Reported: 02/05/97
---	--	--


QC Batch Number: GC0129970HBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	5000	89000
Chromatogram Pattern: Unidentified HC		C9-C24
Weathered Diesel		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc.	Client Proj. ID: 930040.04/ Ekotek	Sampled: 01/24/97
1730 South Amphlett, Ste 320	Sample Descript: MW-5	Received: 01/24/97
San Mateo, CA 94402	Matrix: LIQUID	
Attention: Roger D. Lion	Analysis Method: 8015Mod/8020	Analyzed: 01/30/97
	Lab Number: 9701E09-04	Reported: 02/05/97

QC Batch Number: GC013097BTEX18A
Instrument ID: GCHP18


Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	2700
Benzene	10	100
Toluene	10	190
Ethyl Benzene	10	62
Xylenes (Total)	10	190
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	109

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



 Mike Gregory
 Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-4 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9701E09-05	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/29/97 Reported: 02/05/97
---	--	---

QC Batch Number: GC012997801008A
Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	25	N.D.
Bromoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
Chlorobenzene	25	28
Chloroethane	50	43
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
Chloromethane	50	N.D.
Dibromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	29
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
1,1-Dichloroethane	25	42
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
cis-1,2-Dichloroethene	25	1500
trans-1,2-Dichloroethene	25	49
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
trans-1,3-Dichloropropene	25	N.D.
Methylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
1,1,1-Trichloroethane	25	N.D.
1,1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
Vinyl chloride	50	2000
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	112

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



 Mike Gregory
 Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-4 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9701E09-05	Sampled: 01/24/97 Received: 01/24/97 Extracted: 01/29/97 Analyzed: 01/31/97 Reported: 02/05/97
---	--	--

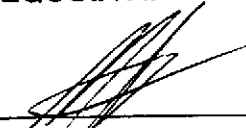
QC Batch Number: GC0129970HBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	2500	33000
Chromatogram Pattern: Unidentified HC		C9-C24
Weathered Diesel		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701E09-05	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/30/97 Reported: 02/05/97
---	--	---


QC Batch Number: GC013097BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	3500
Benzene	10	170
Toluene	10	25
Ethyl Benzene	10	60
Xylenes (Total)	10	100
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	107

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erlar & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: TB #1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701E09-06	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/29/97 Reported: 02/05/97
Attention: Roger D. Lion		


QC Batch Number: GC012997BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	89

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erler & Kallnowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: TB #1 Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9701E09-06	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/29/97 Reported: 02/05/97
---	---	---


QC Batch Number: GC012997801008A
Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	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	5.0	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	0.50	N.D.
Vinyl chloride	1.0	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	113

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-5D Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9701E09-07	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/29/97 Reported: 02/05/97
---	---	---

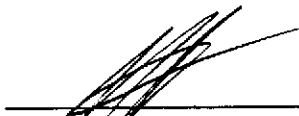
QC Batch Number: GC012997801008A
Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	200	N.D.
Carbon Tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	200	N.D.
2-Chloroethylvinyl ether	200	N.D.
Chloroform	100	N.D.
Chloromethane	200	N.D.
Dibromochloromethane	100	N.D.
1,2-Dichlorobenzene	100	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,1-Dichloroethane	100	230
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	840
trans-1,2-Dichloroethene	100	260
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Methylene chloride	1000	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl chloride	200	4900
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-5D Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9701E09-07	Sampled: 01/24/97 Received: 01/24/97 Extracted: 01/29/97 Analyzed: 01/31/97 Reported: 02/05/97
---	---	--

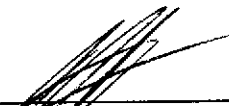
QC Batch Number: GC0129970HBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	1000	25000
Chromatogram Pattern: Unidentified HC		C9-C24
Weathered Diesel		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	875 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



 Mike Gregory
 Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: MW-5D Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701E09-07	Sampled: 01/24/97 Received: 01/24/97 Analyzed: 01/30/97 Reported: 02/05/97
---	---	---

QC Batch Number: GC013097BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	4200
Benzene	10	99
Toluene	10	190
Ethyl Benzene	10	63
Xylenes (Total)	10	200
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	106

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04 / Ekotek Sample Descript: Method Blank Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701E09-08	Sampled: Received: 01/24/97 Analyzed: 01/30/97 Reported: 02/05/97
Attention: Roger D. Lion		


QC Batch Number: GC013097BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	91

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



 Mike Gregory
 Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9701E09-08	Sampled: Received: 01/24/97 Extracted: 01/29/97 Analyzed: 01/30/97 Reported: 02/05/97
Attention: Roger D. Lion		

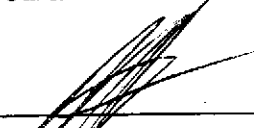
QC Batch Number: GC0129970HBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	101

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9701E09-08	Sampled: Received: 01/24/97 Analyzed: 01/29/97 Reported: 02/05/97
---	--	--


QC Batch Number: GC012997801008A
 Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	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	5.0	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	0.50	N.D.
Vinyl chloride	1.0	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	109

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



 Mike Gregory
 Project Manager





Erter & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04 / Ekotek Sample Descript: Method Blank Matrix: LIQUID Analysis Method: EPA 8010 Lab Number: 9701E09-09	Sampled: Received: 01/24/97 Analyzed: 01/28/97 Reported: 02/05/97
---	---	--

QC Batch Number: GC012897801008A
Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	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	5.0	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	0.50	N.D.
Vinyl chloride	1.0	N.D.
Surrogates	Control Limits %	% Recovery
1-Chloro-2-fluorobenzene	70 130	101

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402	Client Proj. ID: 930040.04/ Ekotek Sample Descript: Method Blank Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701E09-09	Sampled: Received: 01/24/97 Analyzed: 01/29/97 Reported: 02/05/97
---	--	--


QC Batch Number: GC012997BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	104

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Erlar & Kalinowski, Inc.
1730 South Amphlett, Ste 320
San Mateo, CA 94402
Attention: Roger D. Lion

Client Proj. ID: 930040.04/ Ekotek

Received: 01/24/97

Lab Proj. ID: 9701E09

Reported: 02/05/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 47 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

Q - Surrogate diluted out.
#Q - Surrogate coelution was confirmed.

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager

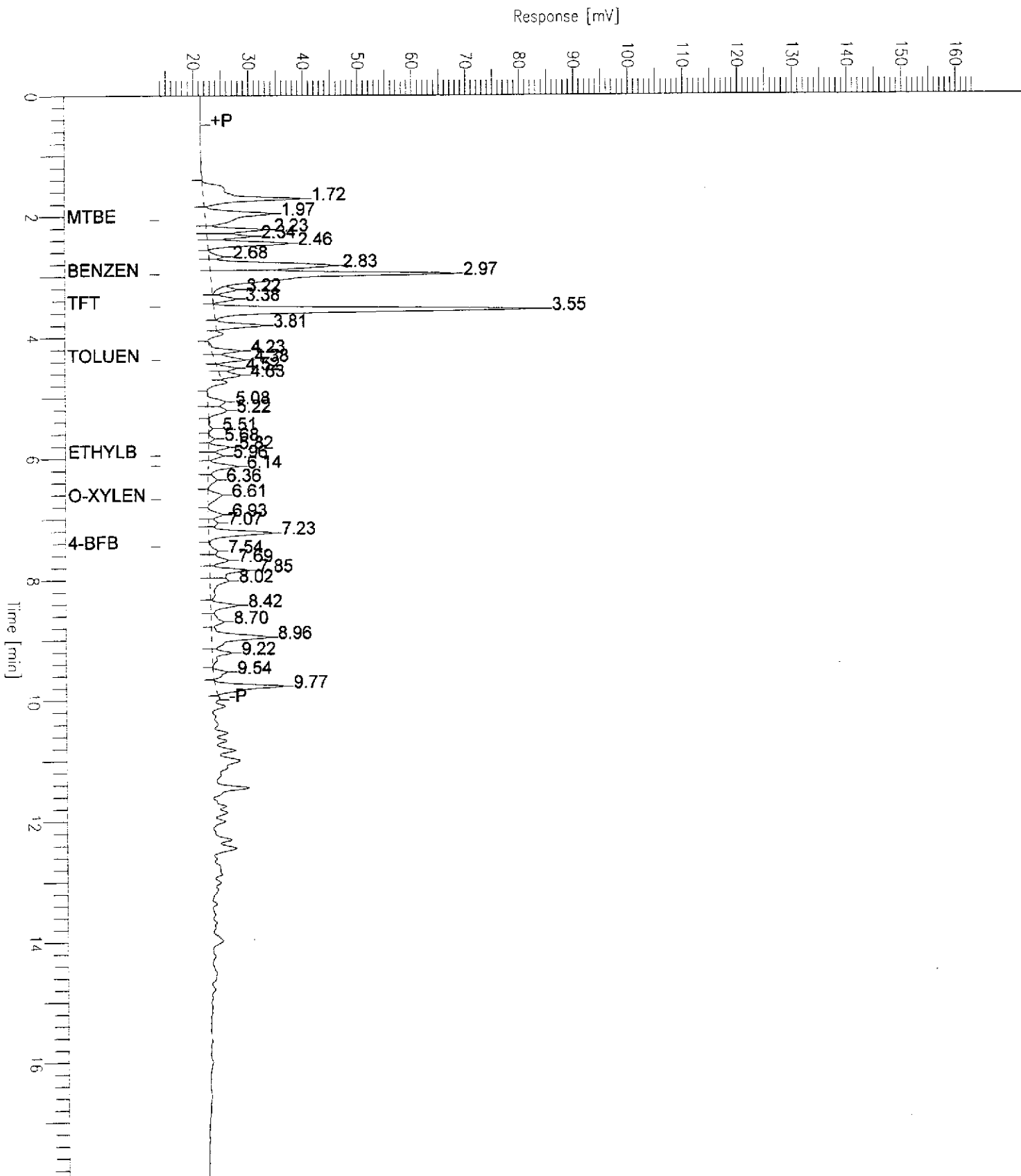
Page: 1



Chromatogram

Sample Name : GW9701E09-1
FileName : S:\GHP_18\0202\130B007.raw
Method : TPH
Start Time : 0.00 min
Scale Factor : -1.0

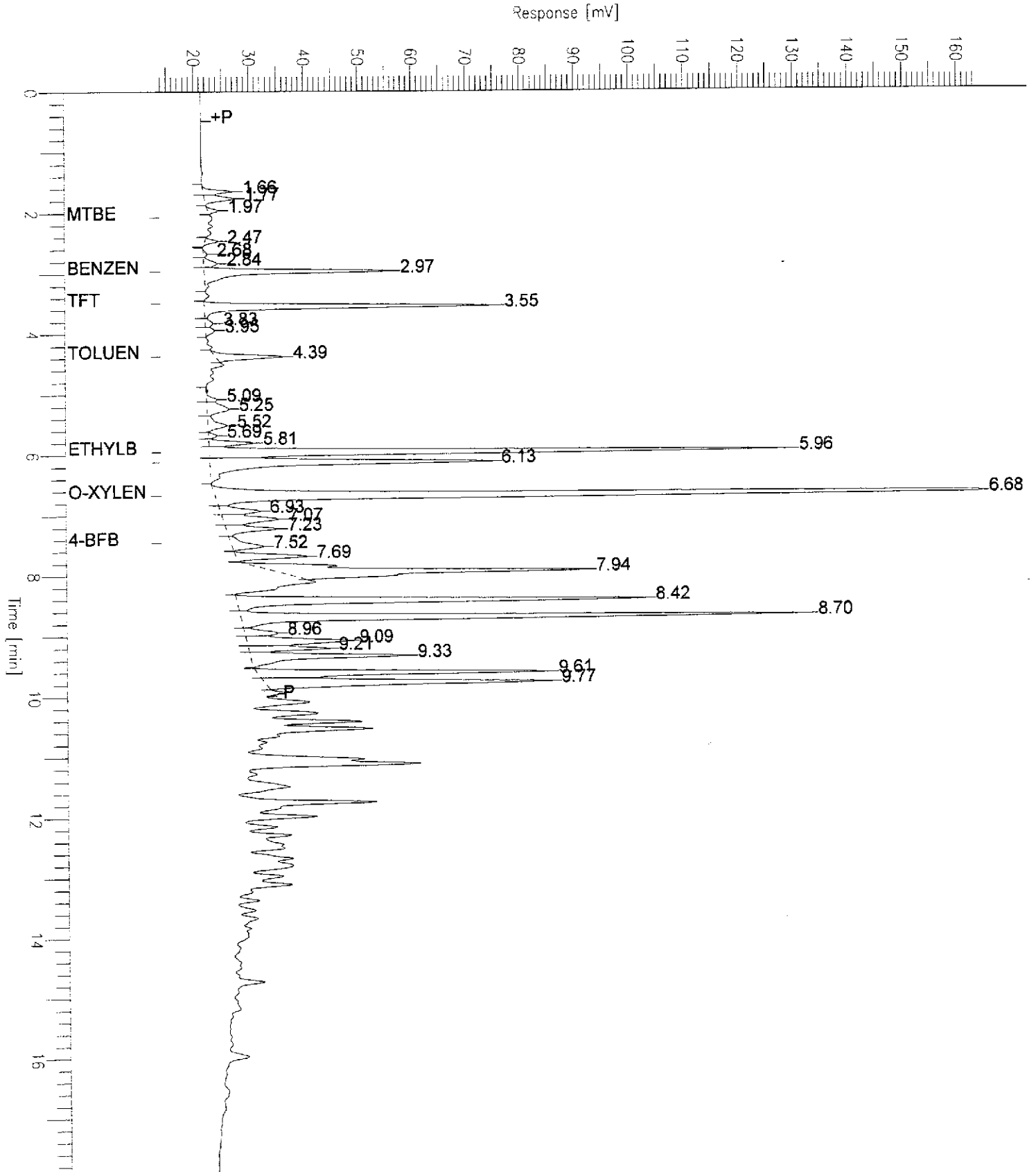
Sample #: MW3
Date : 1/31/97 08:09
Time of Injection: 1/30/97 11:34
Low Point : 13.86 mV
High Point : 163.86 mV
End Time : 17.93 min
Plot Offset: 14 mV
Plot Scale: 150.0 mV



Chromatogram

Sample Name : GW9701E09-2
FileName : S:\GHP_18\0202\130B008.raw
Method : TPH
Start Time : 0.00 min
Scale Factor : -1.0

Sample #: MW2
Date : 1/31/97 08:10
Time of Injection: 1/30/97 12:09
Low Point : 13.86 mV
High Point : 163.86 mV
End Time : 17.93 min
Plot Offset: 14 mV
Plot Scale: 150.0 mV

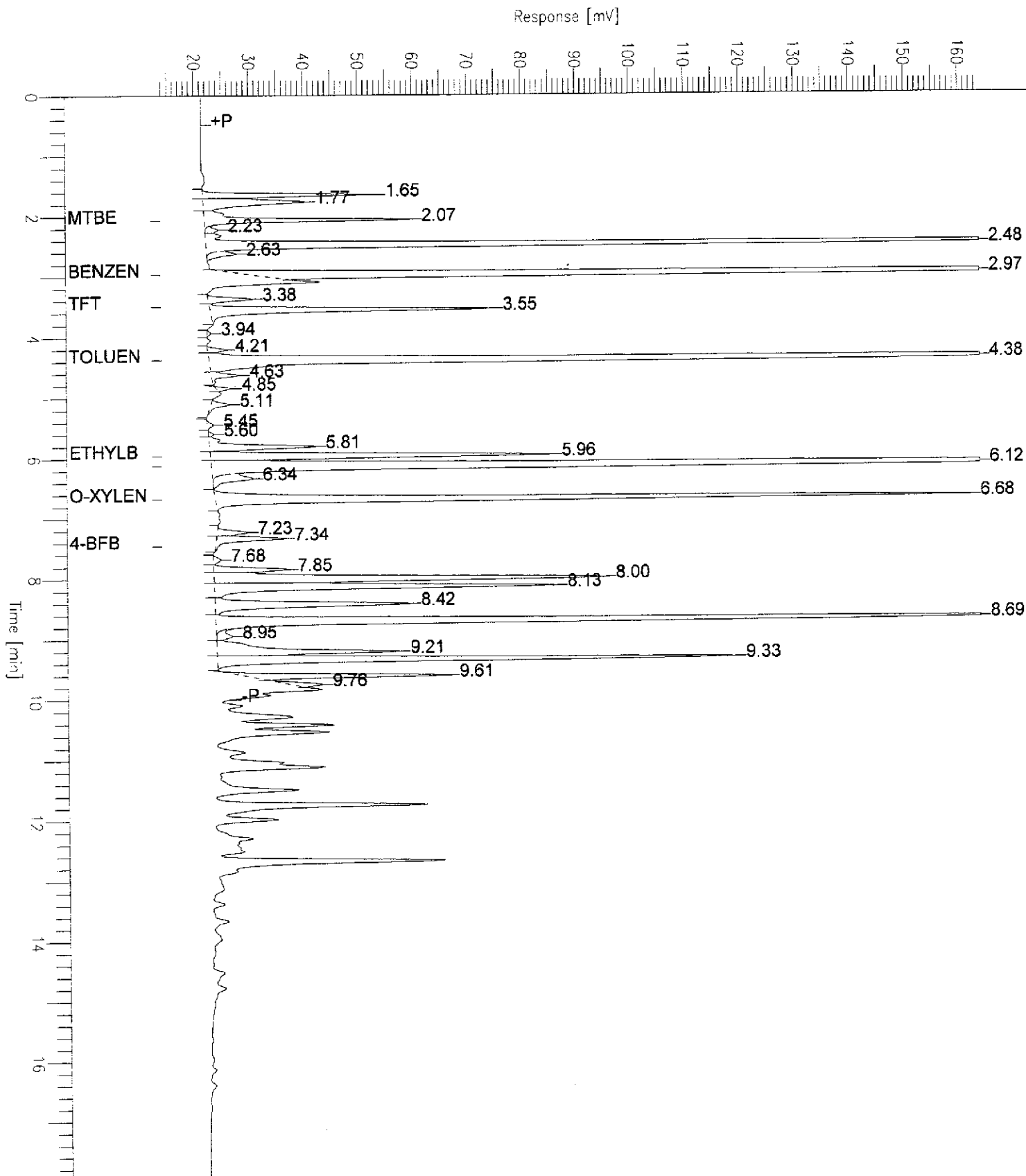


Chromatogram

Sample Name : GW9701E09-3
FileName : S:\GHP_18\0202\130B009.raw
Method : TPH
Start Time : 0.00 min
Scale Factor : -1.0

End Time : 17.93 min
Plot Offset : 14 mV

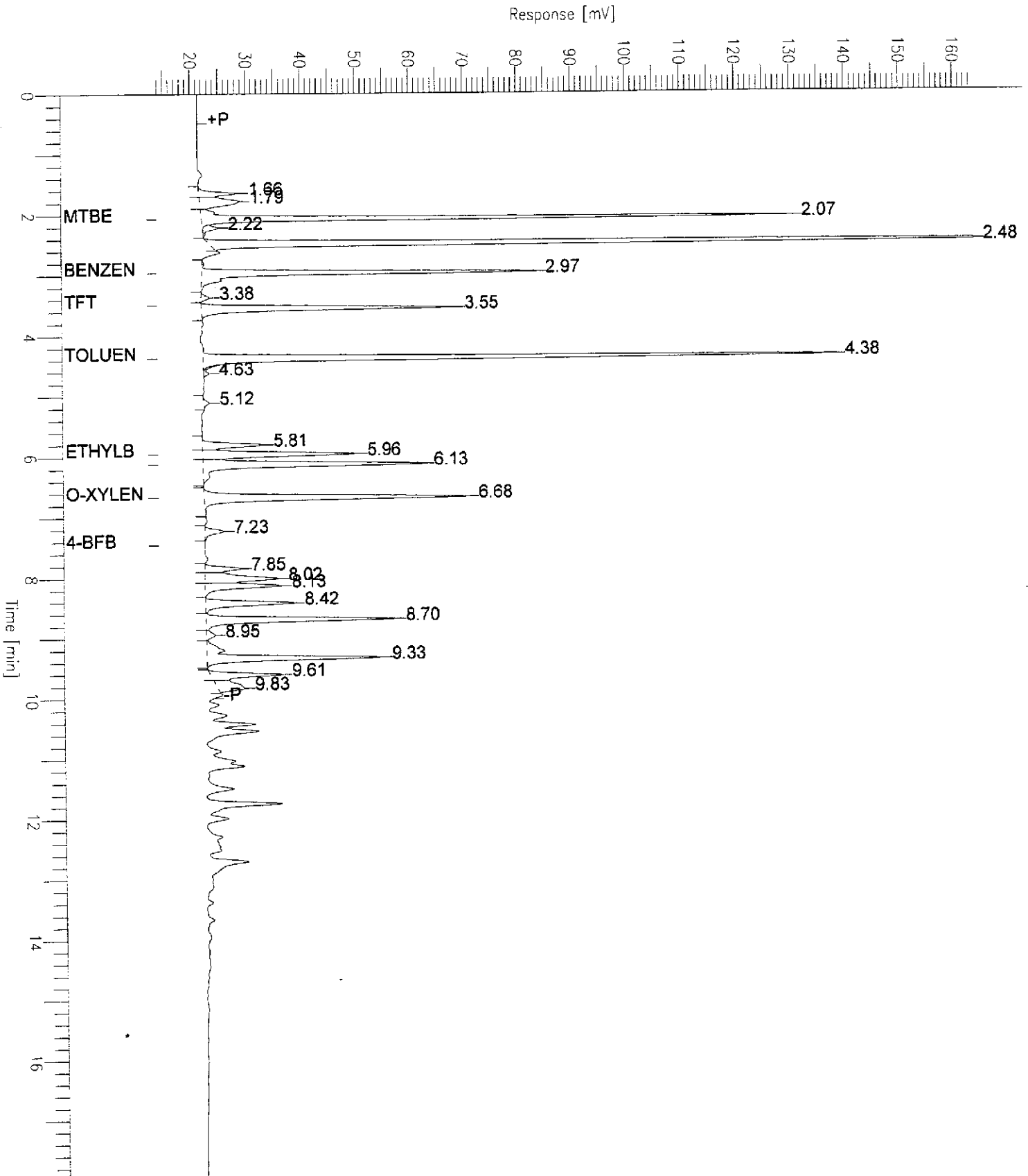
Sample #: MW1
Date : 1/31/97 08:10
Time of Injection: 1/30/97 12:45
Low Point : 13.86 mV
Plot Scale: 150.0 mV
High Point : 163.86 mV



Chromatogram

Sample Name : GW9701E09-4
FileName : S:\GHP_18\0202\130B010.raw
Method : TPH
Start Time : 0.00 min
Scale Factor: -1.0

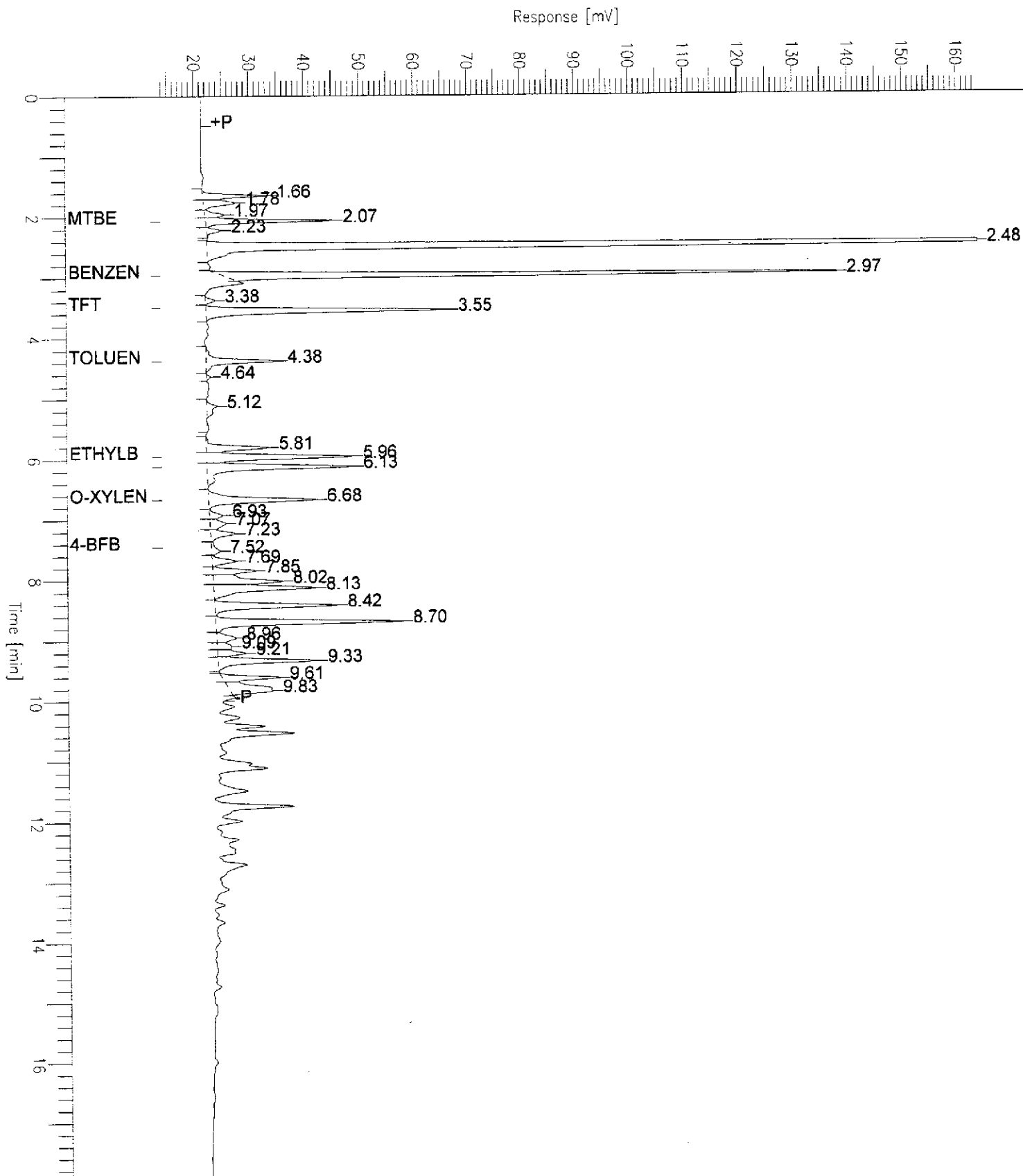
Sample #: MW5
Date : 1/31/97 08:10
Time of Injection: 1/30/97 13:20
Low Point : 13.86 mV
High Point : 163.86 mV
End Time : 17.93 min
Plot Offset: 14 mV
Plot Scale: 150.0 mV



Chromatogram

Sample Name : GW9701E09-5
FileName : S:\GHP_18\0202\130B011.raw
Method : TPH
Start Time : 0.00 min
Scale Factor: -1.0
End Time : 17.93 min
Plot Offset: 14 mV

Sample #: MW4
Date : 1/31/97 08:10
Time of Injection: 1/30/97 13:56
Low Point : 13.86 mV
Plot Scale: 150.0 mV
High Point : 163.86 mV

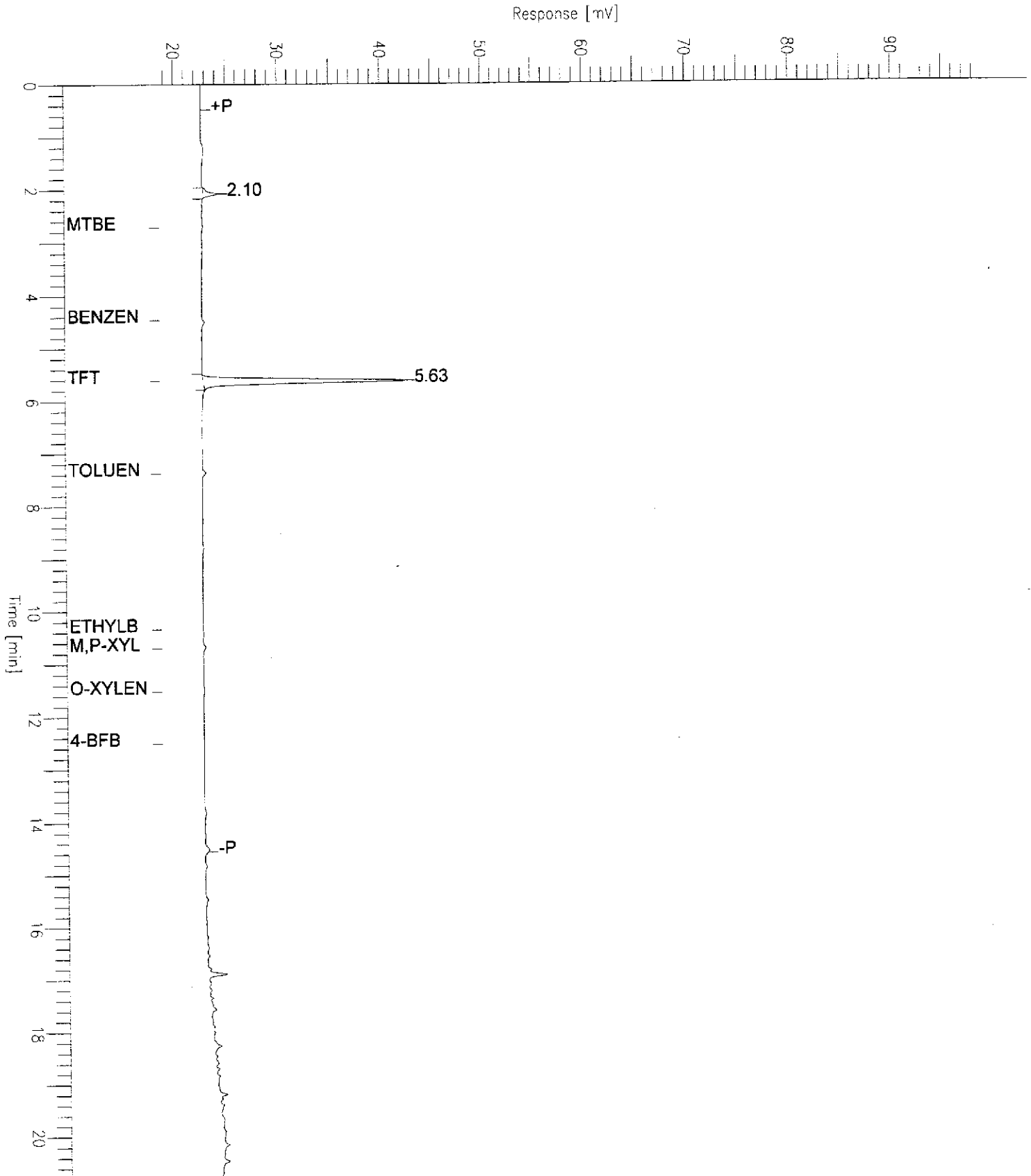


Chromatogram

Sample Name : GW9701E09-06
FileName : S:\GHP_07\0202\129B025.raw
Method : TPH
Start Time : 0.00 min
Scale Factor: -1.0

Sample #: TB #1
Date : 1/31/97 08:09
Time of Injection: 1/29/97 19:33
Low Point : 18.61 mV
Plot Scale: 80.0 mV

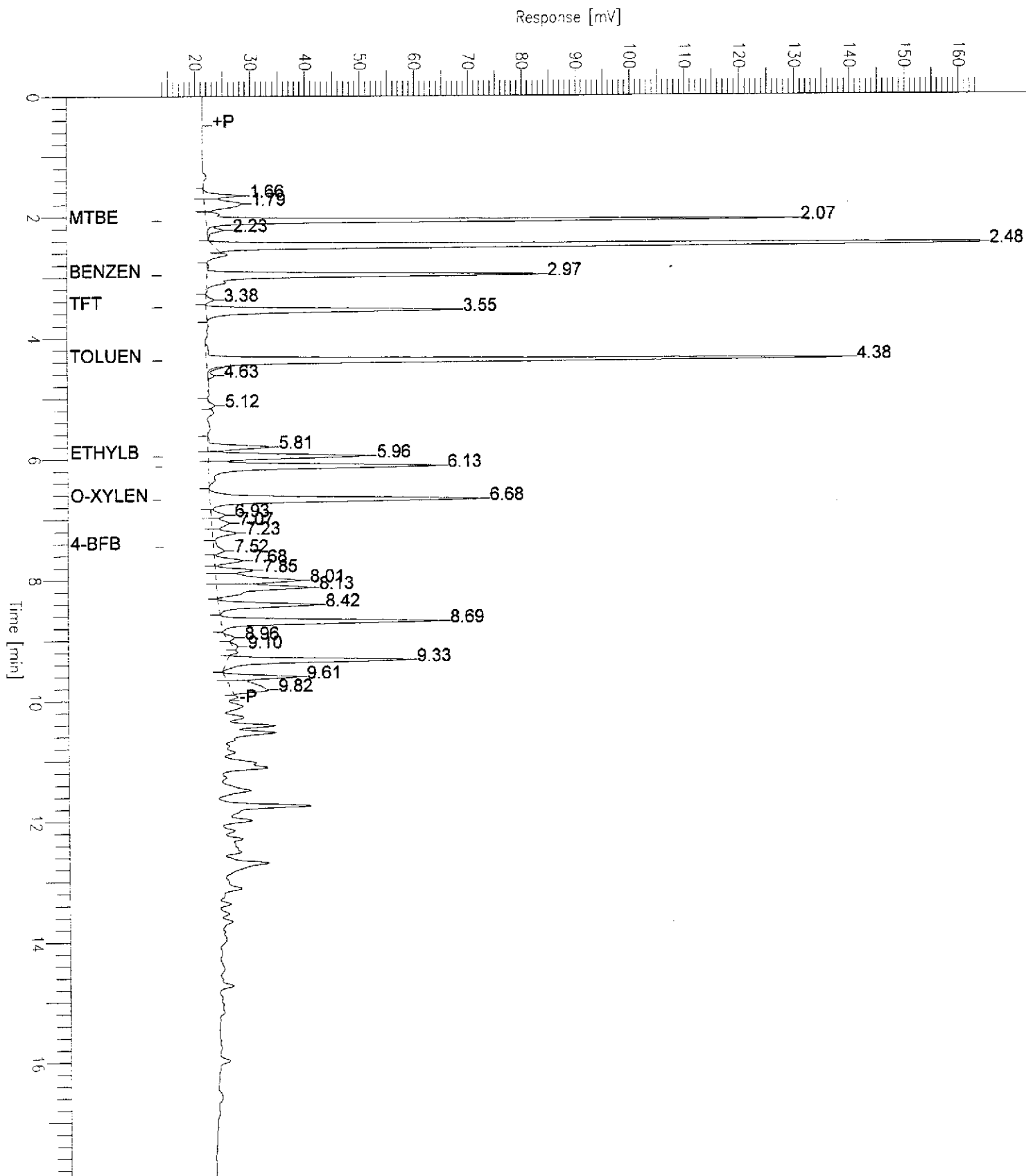
Page 1 of 1



Chromatogram

Sample Name : GW9701E09-4
FileName : S:\GHP_18\0202\130B012.raw
Method : TPH
Start Time : 0.00 min
Scale Factor : -1.0
End Time : 17.93 min
Plot Offset : 14 mV

Sample #: MWSD
Date : 1/31/97 08:10
Time of Injection: 1/30/97 14:31
Low Point : 13.86 mV
Plot Scale: 150.0 mV
High Point : 163.86 mV

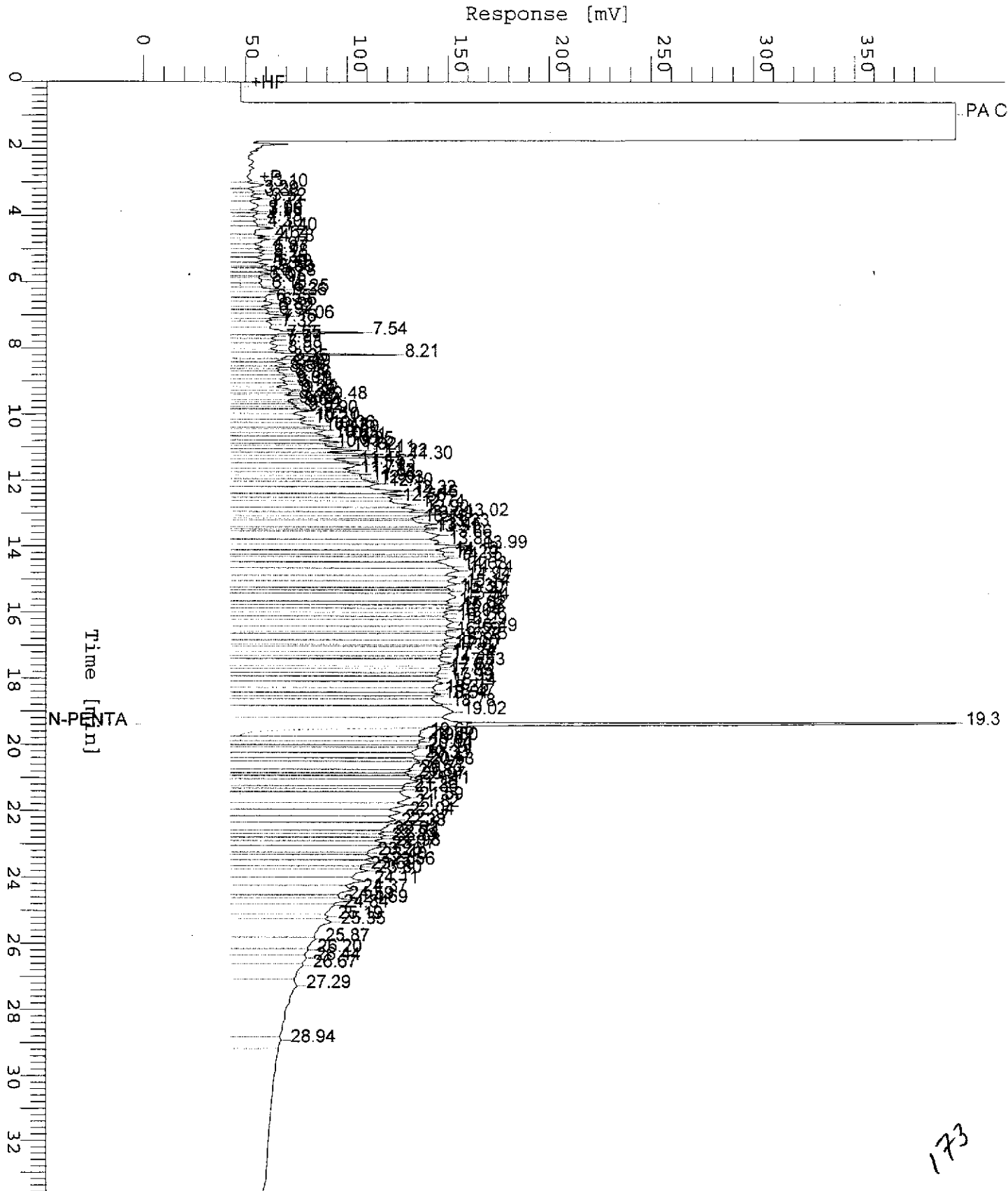


Chromatogram

Sample Name : DW9701E09-1 (500:1)
FileName : S:\GHP_04\0202\130B021.raw
Method : TPH04A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: MW-3
Date : 1/31/97 06:58
Time of Injection: 1/31/97 03:02
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV

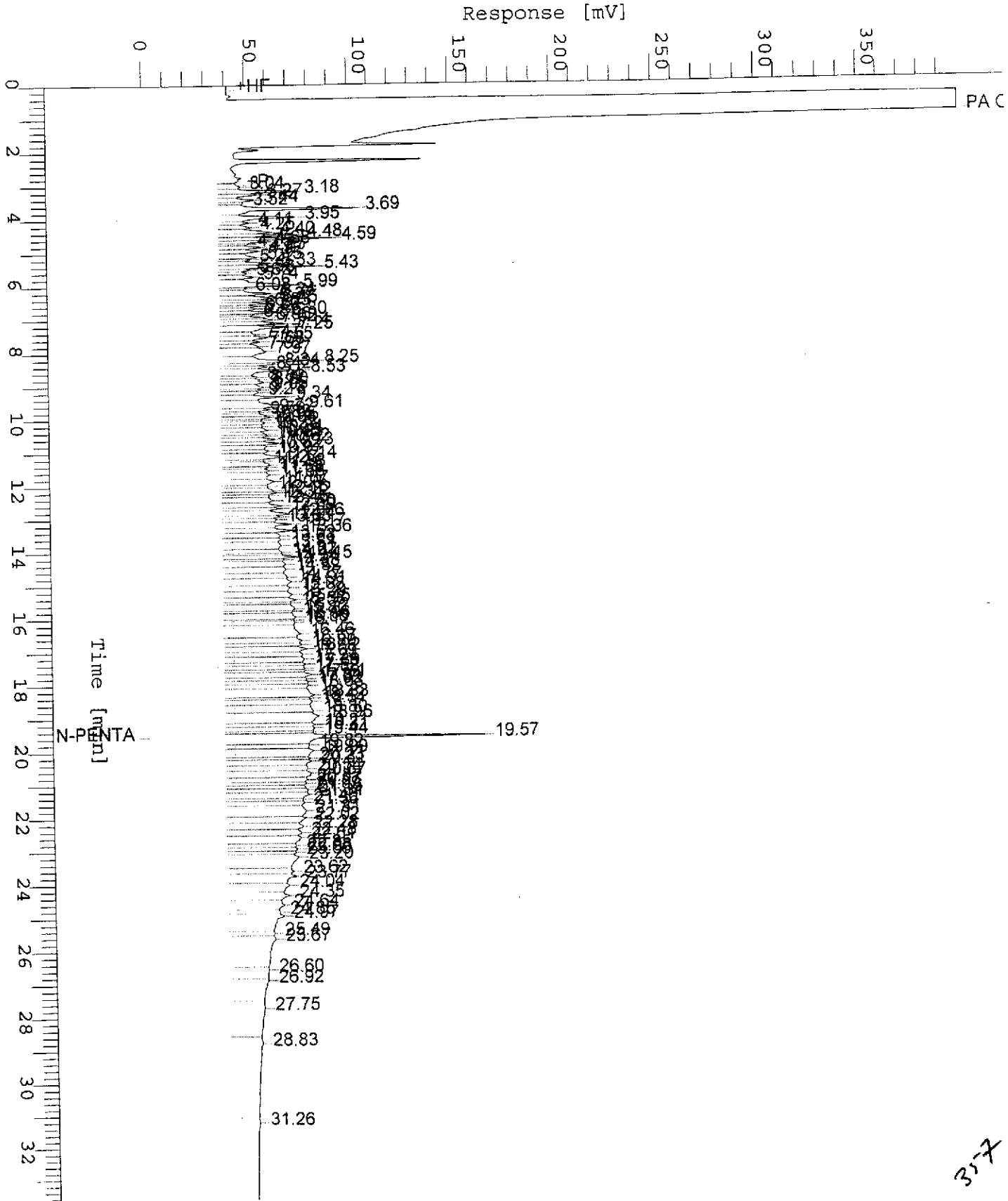


173

Chromatogram

Sample Name : DW9701E09-2 (500:1*5) RS1
FileName : S:\GHP_04\0202\130A030.raw
Method : TPH04A
Start Time : 0.00 min
Scale Factor: 0.0

Sample #: MW-2
Date : 1/31/97 09:48
Time of Injection: 1/31/97 09:14
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV



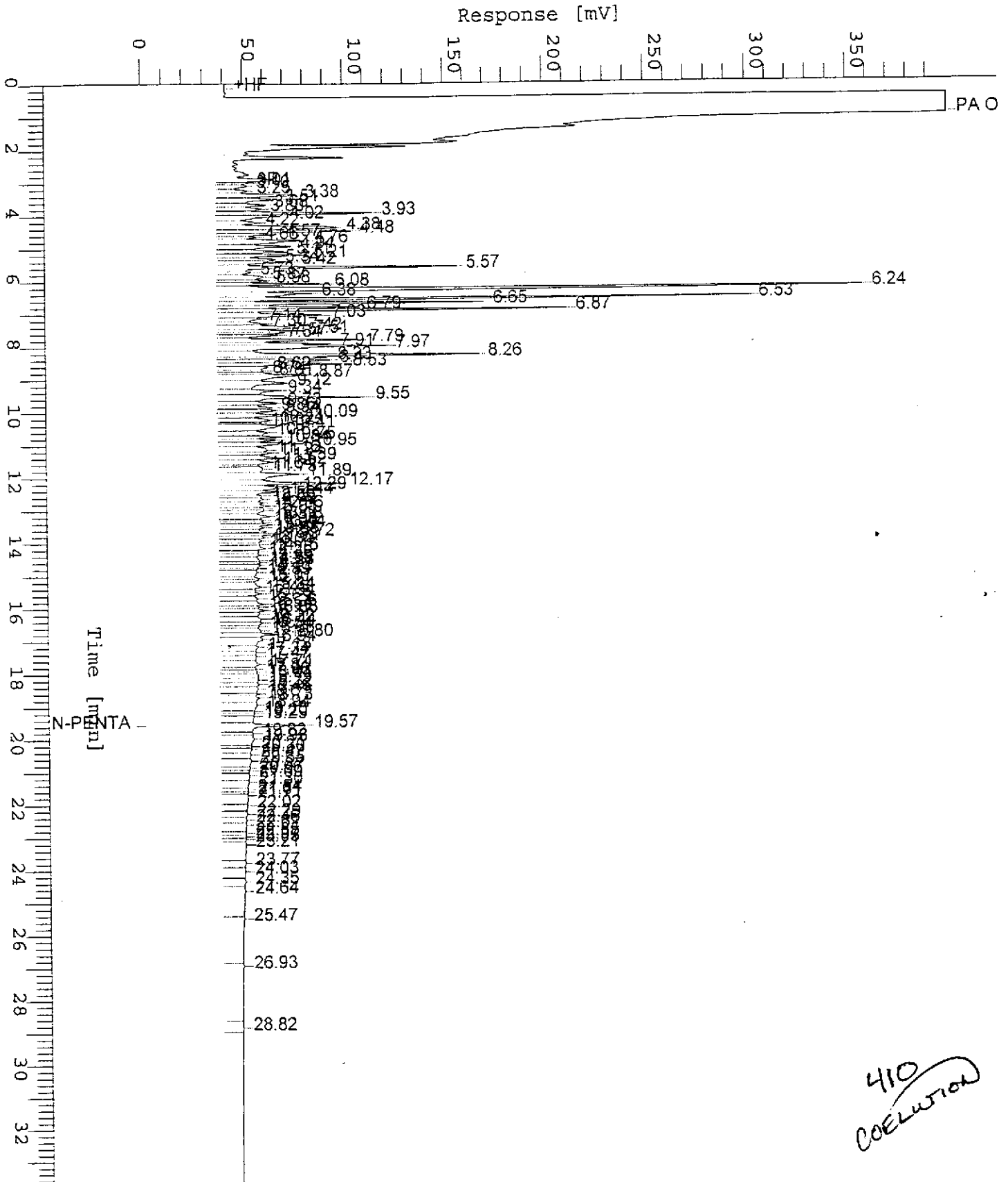
377

Chromatogram

Sample Name : DW9701E09-3 (500:1*20) RS1
FileName : S:\GHP_04\0202\130A033.raw
Method : TPH04A
Start Time : 0.00 min
Scale Factor: 0.0

Sample #: MW-1
Date : 1/31/97 12:24
Time of Injection: 1/31/97 11:50
Low Point : 0.00 mV
Plot Scale: 400.0 mV

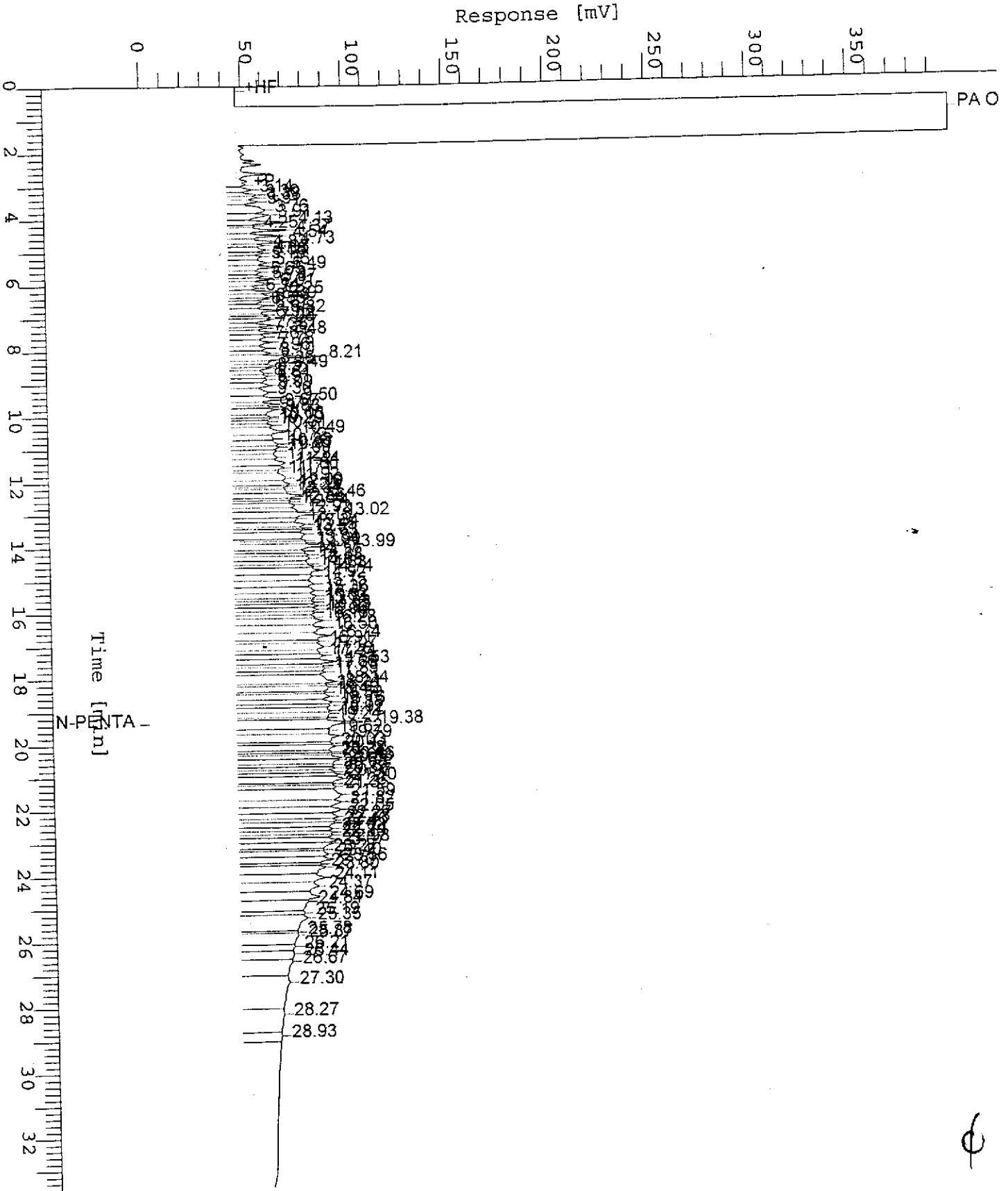
Page 1 of 1



Chromatogram

Sample Name : DW9701E09-4 (500:1*100) RS1
 FileName : S:\GHP_04\0202\130B043.raw
 Method : TPH04A
 Start Time : 0.00 min
 Scale Factor: 0.0
 End Time : 33.65 min
 Plot Offset: 0 mV

Sample #: MW-5
 Date : 1/31/97 19:16
 Time of Injection: 1/31/97 18:42
 Low Point : 0.00 mV
 Plot Scale: 400.0 mV
 High Point : 400.00 mV



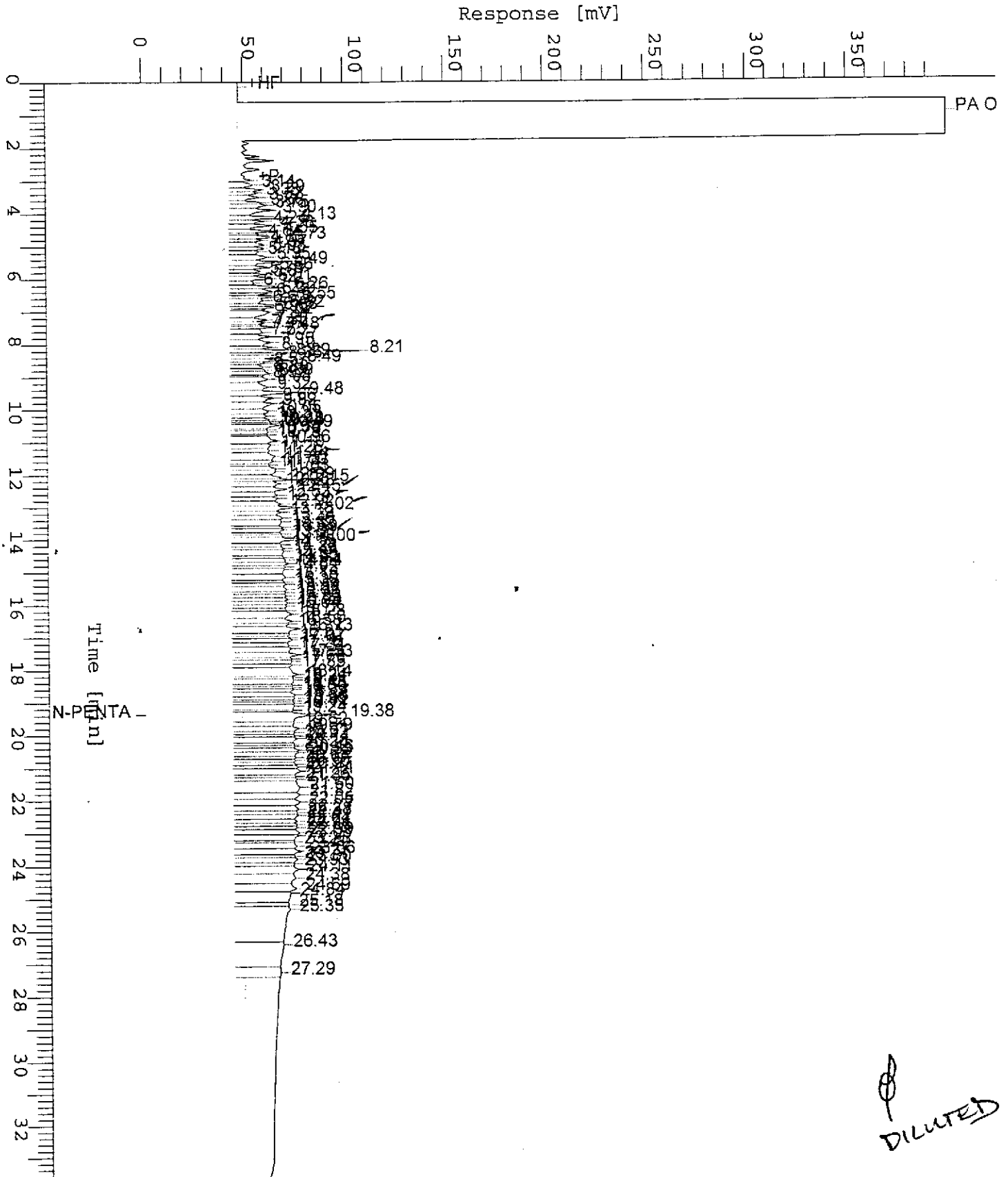
⊕

Chromatogram

Sample Name : DW9701E09-5 (500:1+50) RS1
FileName : S:\GHP_04\0202\1308032.raw
Method : TPH04A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: MW-4
Date : 1/31/97 11:43
Time of Injection: 1/31/97 11:09
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV



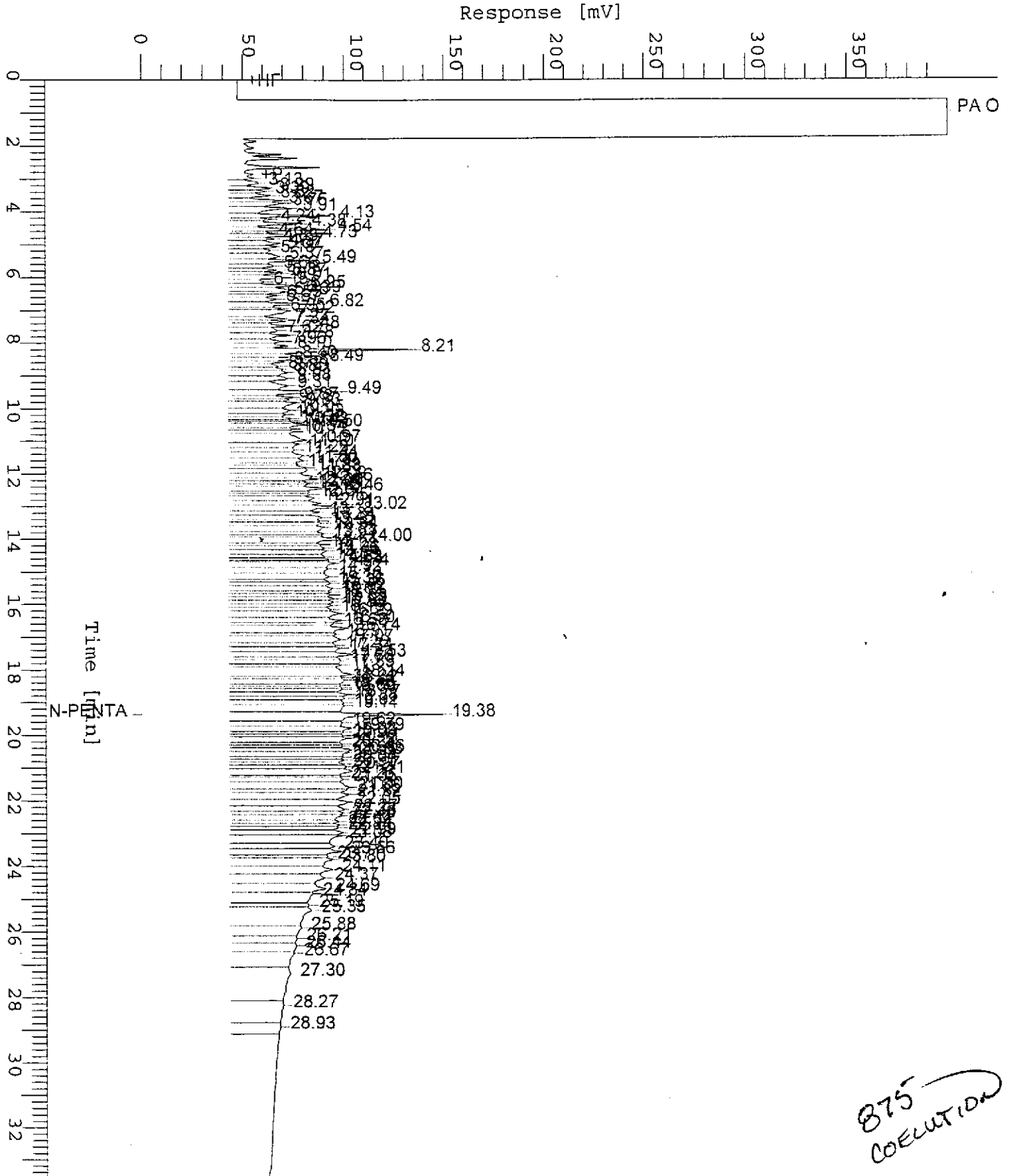
DILUTED

Chromatogram

Sample Name : DW9701E09-7 (500:1*20) RS1
FileName : S:\GHP_04\0202\130B033.raw
Method : TPH04A
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 33.65 min
Plot Offset: 0 mV

Sample #: MW-SD
Date : 1/31/97 12:24
Time of Injection: 1/31/97 11:50
Low Point : 0.00 mV
Plot Scale: 400.0 mV
High Point : 400.00 mV



B75
COELUTION



**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Erler & Kalinowski, Inc.
1730 So. Amphlett Blvd., Suite 320
San Mateo, CA 94402
Attention: Roger D. Lion

Client Project ID: 930040.04/Ekotek
Matrix: LIQUID
Sample Descrip: XSD
Work Order #: 9701E09 -01-05, 07, 08

Reported: Feb 10, 1997

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0129970HBPEXA
Analy. Method: EPA 8015M
Prep. Method: EPA 3510

Analyst: B. Sullivan
MS/MSD #: 9701E07-01-XSD
Sample Conc.: 1200
Prepared Date: 01/29/97
Analyzed Date: 01/30/97
Instrument I.D.#: GCHP4B
Conc. Spiked: 1000 µg/L

Result: 2800
MS % Recovery: 160

Dup. Result: 2800
MSD % Recov.: 160

RPD: 0.0
RPD Limit: 0-50

LCS #: LCS012997-LCS

Prepared Date: 01/29/97
Analyzed Date: 01/30/97
Instrument I.D.#: GCHP4B
Conc. Spiked: 1000 µg/L

LCS Result: 1200
LCS % Recov.: 120

MS/MSD 50-150
LCS 60-140
Control Limits

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9701E09.ERL <1>





Sequoia Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
 404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Erler & Kalinowski, Inc. Client Project ID: 930040.04/Ekotek
 1730 So. Amphlett Blvd., Suite 320 Matrix: LIQUID
 San Mateo, CA 94402 Sample Descrip: MW-3
 Attention: Roger D. Lion Work Order #: 9701E09 -01-05, 07, 08 Reported: Feb 10, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC013097BTEX18A	GC013097BTEX18A	GC013097BTEX18A	GC013097BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	9701E09-01-MSD	9701E09-01-MSD	9701E09-01-MSD	9701E09-01-MSD
Sample Conc.:	5.2	0.59	N.D.	1.0
Prepared Date:	01/30/97	01/30/97	01/30/97	01/30/97
Analyzed Date:	01/30/97	01/30/97	01/30/97	01/30/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	15	11	9.7	29
MS % Recovery:	98	104	97	93
Dup. Result:	14	9.0	8.6	25
MSD % Recov.:	88	84	86	80
RPD:	6.9	20	12	7.4
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	LCS013097-LCS	LCS013097-LCS	LCS013097-LCS	LCS013097-LCS
Prepared Date:	01/30/97	01/30/97	01/30/97	01/30/97
Analyzed Date:	01/30/97	01/30/97	01/30/97	01/30/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.4	9.3	9.1	27
LCS % Recov.:	94	93	91	90

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

SEQUOIA ANALYTICAL

Mike Gregory
 Mike Gregory
 Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9701E09.ERL <2>





Sequoia Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
 404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Erler & Kalinowski, Inc. Client Project ID: 930040.04/Ekotek
 1730 So. Amphlett Blvd., Suite 320 Matrix: LIQUID
 San Mateo, CA 94402 Sample Descrip: XSD
 Attention: Roger D. Lion Work Order #: 9701E09 -06, 09 Reported: Feb 10, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC012997BTEX07A	GC012997BTEX07A	GC012997BTEX07A	GC012997BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9701D50-02-XSD	9701D50-02-XSD	9701D50-02-XSD	9701D50-02-XSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	01/29/97	01/29/97	01/29/97	01/29/97
Analyzed Date:	01/29/97	01/29/97	01/29/97	01/29/97
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	11	11	33
MS % Recovery:	110	110	110	110
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	9.5	9.5	9.5	6.3
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	LCS012997-LCS	LCS012997-LCS	LCS012997-LCS	LCS012997-LCS
Prepared Date:	01/29/97	01/29/97	01/29/97	01/29/97
Analyzed Date:	01/29/97	01/29/97	01/29/97	01/29/97
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	11	32
LCS % Recov.:	100	100	110	107

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Mike Gregory
 Mike Gregory
 Project Manager

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9701E09.ERL <3>





Sequoia Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
 404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Erler & Kalinowski, Inc. Client Project ID: 930040.04/Ekotech
 1730 So. Amphlett Blvd., Suite 320 Matrix: LIQUID
 San Mateo, CA 94402 Sample Descrip: MW-3
 Attention: Roger D. Lion Work Order #: 9701E09 -01, 02, 04, 08 Reported: Feb 10, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-Benzene
QC Batch#:	GC012997801008A	GC012997801008A	GC012997801008A
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	E. Cunanan	E. Cunanan	E. Cunanan
MS/MSD #:	9701E09-01-MSD	9701E09-01-MSD	9701E09-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	01/28/97	01/28/97	01/28/97
Analyzed Date:	01/29/97	01/29/97	01/29/97
Instrument I.D.#:	GCHP08	GCHP08	GCHP08
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L

Result:	29	27	31
MS % Recovery:	116	108	124
Dup. Result:	27	28	29
MSD % Recov.:	108	112	116
RPD:	7.1	3.6	6.7
RPD Limit:	0-25	0-25	0-25

LCS #:	LCS012997-LCS	LCS012997-LCS	LCS012997-LCS
Prepared Date:	01/29/97	01/29/97	01/29/97
Analyzed Date:	01/29/97	01/29/97	01/29/97
Instrument I.D.#:	GCHP08	GCHP08	GCHP08
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	26	24	27
LCS % Recov.:	104	96	108

MS/MSD	60-140	60-140	60-140
LCS	65-135	70-130	70-130
Control Limits			

SEQUOIA ANALYTICAL

[Signature]
 Mike Gregory
 Project Manager

Please Note:
 The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9701E09.ERL <4>





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Erler & Kalinowski, Inc.
1730 So. Amphlett Blvd., Suite 320
San Mateo, CA 94402
Attention: Roger D. Lion

Client Project ID: 930040.04/Ekotech
Matrix: LIQUID
Sample Descrip: MW-3
Work Order #: 9701E09 -06, 08

Reported: Feb 10, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-Benzene
QC Batch#:	GC012997801008A	GC012997801008A	GC012997801008A
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	E. Cunanan	E. Cunanan	E. Cunanan
MS/MSD #:	9701E09-01-MSD	9701E09-01-MSD	9701E09-01-MSD
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	01/28/97	01/28/97	01/28/97
Analyzed Date:	01/29/97	01/29/97	01/29/97
Instrument I.D.#:	GCHP08	GCHP08	GCHP08
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L

Result:	29	27	31
MS % Recovery:	116	108	124

Dup. Result:	27	28	29
MSD % Recov.:	108	112	116

RPD:	7.1	3.6	6.7
RPD Limit:	0-25	0-25	0-25

LCS #:	LCS013097-LCS	LCS013097-LCS	LCS013097-LCS
Prepared Date:	01/30/97	01/30/97	01/30/97
Analyzed Date:	01/30/97	01/30/97	01/30/97
Instrument I.D.#:	GCHP08	GCHP08	GCHP08
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	26	24	27
LCS % Recov.:	104	96	108

MS/MSD	60-140	60-140	60-140
LCS	65-135	70-130	70-130
Control Limits			

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9701E09.ERL <5>





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Erler & Kalinowski, Inc.
1730 So. Amphlett Blvd., Suite 320
San Mateo, CA 94402
Attention: Roger D. Lion

Client Project ID: 930040.04/Ekotech
Matrix: LIQUID
Sample Descrip: XSD
Work Order #: 9701E09 -03, 09

Reported: Feb 10, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-Benzene
QC Batch#:	GC012797801008A	GC012797801008A	GC012797801008A
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

	T. Costello	T. Costello	T. Costello
Analyst:	T. Costello	T. Costello	T. Costello
MS/MSD #:	9701C07-02-XSD	9701C07-02-XSD	9701C07-02-XSD
Sample Conc.:	5.3	4.2	N.D.
Prepared Date:	01/27/97	01/27/97	01/27/97
Analyzed Date:	01/27/97	01/27/97	01/27/97
Instrument I.D.#:	GCHP08	GCHP08	GCHP08
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Dilution Factor:	5	5	5
Result:	140	130	140
MS % Recovery:	108	101	112
Dup. Result:	140	130	140
MSD % Recov.:	108	101	112
RPD:	0.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25

LCS #:	LCS012897-LCS	LCS012897-LCS	LCS012897-LCS
Prepared Date:	01/28/97	01/28/97	01/28/97
Analyzed Date:	01/28/97	01/28/97	01/28/97
Instrument I.D.#:	GCHP08	GCHP08	GCHP08
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	24	23	26
LCS % Recov.:	96	92	104

MS/MSD	60-140	60-140	60-140
LCS	65-135	70-130	70-130
Control Limits			

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9701E09.ERL <6>



CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: EKI 930040.04

Page 1 of 2

Date Sampled: 1/24/97

Project Name: EKOTEK

Sampled By: Roger D. Lion / David Umezaki

Source of Samples: GW monitoring wells

Report Results To: Roger D. Lion

Location: 4200 Alameda Avenue, Oakland, CA

Phone Number: 415) 578-1172

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
1	MW-3	Water	1 each-1 L. Amber	12:15p	EPA 8015 mod TPH-diesel	standard
	MW-3	Water	6-40 ml. VOA w/ HCl	12:15p	EPA 8010 & 8015M/8020 (note 1)	standard
2	MW-2	Water	1 each-1 L. Amber	12:58p	EPA 8015 mod TPH-diesel	standard
	MW-2	Water	6-40 ml. VOA w/ HCl	12:58p	EPA 8010 & 8015M/8020 (note 1)	standard
3	MW-1	Water	1 each-1 L. Amber	1:22p	EPA 8015 mod TPH-diesel	standard
	MW-1	Water	6-40 ml. VOA w/ HCl	1:22p	EPA 8010 & 8015M/8020 (note 1)	standard
4	MW-5	Water	1 each-1 L. Amber	2:15p	EPA 8015 mod TPH-diesel	standard
	MW-5	Water	6-40 ml. VOA w/ HCl	2:15p	EPA 8010 & 8015M/8020 (note 1)	standard
5	MW-4	Water	1 each-1 L. Amber	2:40p	EPA 8015 mod TPH-diesel	standard
	MW-4	Water	6-40 ml. VOA w/ HCl	2:40p	EPA 8010 & 8015M/8020 (note 1)	standard
6	TB #1	Water	4-40 ml VOA w/ HCl		EPA 8010 & 8015M/8020 (note 1)	standard

9701E09

Special Instructions:

Note 1: EPA 8010 HVOCs and EPA 8015M/8020 Fuel Fingerprint w/ BTEX

Relinquished By:

Name / Signature / Affiliation

Date Time

Received By:

Name / Signature / Affiliation

C. David Umezaki / C. D. [Signature] / EKI	1/24	17:40		
	1/24/97	1740	R. Harding / [Signature] / Sequoia	

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.

Analytical Laboratory: Sequoia Analytical

Project Number: EKI 930040.04

Page 2 of 2

Date Sampled: 1/24/97

Project Name: EKOTEK

Sampled By: Roger D. Lion / David Umezaki

Source of Samples: GW monitoring wells

Report Results To: Roger D. Lion

Location: 4200 Alameda Avenue, Oakland, CA

Phone Number: 415) 578-1172

Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
7	MW-5D	Water	1 each-1 L. Amber	2:20p	EPA 8015 mod TPH-diesel	standard
	MW-5D	Water	6-40 ml. VOA w/ HCl	2:20p	EPA 8010 & 8015M/8020 (note 1)	standard
	MB	Water	1 each-1 L. Amber		EPA 8015 mod TPH-diesel	standard
	MB	Water	6-40 ml. VOA w/ HCl		EPA 8010 & 8015M/8020 (note 1)	standard
		Water	1 each-1 L. Amber		EPA 8015 mod TPH-diesel	standard
		Water	6-40 ml. VOA w/ HCl		EPA 8010 & 8015M/8020 (note 1)	standard
		Water	1 each-1 L. Amber		EPA 8015 mod TPH-diesel	standard
		Water	6-40 ml. VOA w/ HCl		EPA 8010 & 8015M/8020 (note 1)	standard
		Water	1 each-1 L. Amber		EPA 8015 mod TPH-diesel	standard
		Water	6-40 ml. VOA w/ HCl		EPA 8010 & 8015M/8020 (note 1)	standard

9701E09 Results Required By

Special Instructions:

Note 1: EPA 8010 HVOCs and EPA 8015M/8020 Fuel Fingerprint w/ BTEX

Relinquished By:

Received By:

Name / Signature / Affiliation

Date Time

Name / Signature / Affiliation

c. David Umezaki / C. Umezaki / EKI	1/24	17:40	
	1/24/97	1740	R. Herling / R. Herling / Sequoia