



Larry Pavlak Pavlak & Associates PO Box 538 Campbell, CA 95009

January 14, 1988 ANATEC Log No. 1980 (1-10) Series No: 363/022 Client Ref: Proj 87-1054-M

Subject: URGENT Priority Analysis of Ten Composite Samples Identified as "Project #87-1054-M" Received on

January 10, 1988.

Dear Mr. Pavlak:

Analysis of the above referenced samples has completed. This report serves as written confirmation of results verbally transmitted January 13,1988. Samples were analyzed to determine concentrations of volatile organic priority pollutants. Several samples were analyzed as composites; Table 1 describes which samples make up each composite. Analytical results are summarized in Table 2.

To measure volatile organic priority pollutants, slurries were created with weighed portions of each sample and organics-free deionized water. Slurries dosed with internal and surrogate standards were sparged in a closed system using reagent helium. tile compounds purged from the slurry were sorbed on a solid "trap" and later thermally desorbed into a gas chromatograph-mass spectrometer. Compounds entering the mass spectrometer were fragmented by electron-impact ionization and fragmentation patterns analyzed by an HP-1000 computer to obtain qualitative and quantitative results. The technique used was EPA Method No. 8240 as referenced in U.S. EPA Publication SW-846 "Test Methods for Evaluating Soild Waste", Physical/Chemical Methods, Third Edition, November 1986.

Please feel welcome to contact us should you have questions regarding procedures or results.

Submitted by:

Project Chemist

Approved by:

Project Manager

/ml

Enc: Sample Custody Document





TABLE 1. SAMPLE COMPOSITES

Original ANATEC Log No.	Composite ANATEC Log No.	Descriptor		
3407 3408	3426		1/4/88 1/4/88	
3409 3410	3427		1/4/88 1/4/88	
3411 3412	3428		1/4/88 1/4/88	
3413 3414	3429		1/4/88 1/4/88	
3415	a	M-2-1	1/4/88	
3416 3417	3430		1/4/88 1/4/88	
3418	a	M-2-6	1/4/88	
3419 3420	3431		1/5/88 1/5/88	
3421 3422	3432		1/5/88 1/5/88	
3423 3424 3425	3433	M - 3 - 8	1/5/88 1/5/88 1/5/88	

a_{Not} a "composite" sample.



Vinyl chloride

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SUMMARIZED RESULTS FOR ANALYSIS BY EPA METHOD 8240 TABLE 2.

Descriptor, Lab No. & Results (ug/Kg)a Comp. MDLb Comp. M-2-1M-2-6 Comp. (3427)(3428)(3426)(ug/Kg) (3415)(3418)Analyte ND ND ND ND^{C} ND 25 Benzene ND ND ND ND ND 10 Bromodichloromethane ND ND ND ND ND 25 Bromoform ND ND 15 ND ND ND Bromomethane ND ND ND ND 15 ND Carbon tetrachloride ND ND ND ND 25 ND Chlorobenzene ND ND ND ND 15 ND Chloroethane ND ND ND ND ND 2-Chloroethylvinyl ether 35 ND ND ND ND ND 10 Chloroform ND ND ND ND 15 ND Chloromethane ND ND ND ND ND 15 Dibromochloromethane ND ND ND ND 25 ND 1,2-Dichlorobenzene ND ND ND ND 1,3-Dichlorobenzene 25 ND ND ND ND ND 1,4-Dichlorobenzene 25 ND ND ND ND ND 20 ND 1,1-Dichloroethane ND ND ND ND ND 15 1,2-Dichloroethane ND ND ND ND ND 15 1,1-Dichloroethene ND ND ND ND 10 ND trans-1,2-Dichloroethene ND ND ND ND 25 ND 1,2-Dichloropropane ND ND ND ND cis-1,3-Dichloropropene 20 ND ND ND ND ND trans-1,3-Dichloropropene ND 25 ND ND ND ND 30 ND Ethyl benzene ND ND ND ND ND 15 Methylene chloride ND ND ND ND 1,1,2,2-Tetrachloroethane 30 ND 100* ND ND ND Tetrachloroethene 20 ND ND ND ND ND ND 25 Toluene ND ND ND ND 20 ND 1,1,1-Trichloroethane ND ND ND 1,1,2-Trichloroethane 25 ND ND ND ND ND ND Trichloroethene 10 ND ND ND ND ND Trichlorofluoromethane 15 ND ND ND ND ND 15 ND

aData expressed in units of micrograms analyte per kilogram sample, as-received basis. bmpL--Method detection limit.

CND--Not detected at the listed method detection limit.



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Table 2, (cont.)

		Descriptor, Lab No. & Results (ug/Kg)a				
Analyte	MDLb (ug/Kg)	Comp. (3429)	Comp. (3430)	Comp. (3431)	Comp. (3432)	Comp. (3433)
Benzene	25	NDC	ND	ND	ND	ND
Bromodichloromethane	10	ND	ND	ND	ND	ND
Bromoform	25	ND	ND	ND	ND	ND
Bromomethane	15	ND	ND	ND	ND	ND
Carbon tetrachloride	15	ND	ND	ND	ND	ND
Chlorobenzene	25	ND	ND	ND	ND	ND
Chloroethane	15	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	35	ND	ND	ND	ND	ND
Chloroform	10	ND	ND	ND	ND	ND
Chloromethane	15	ND	ND	ND	ND	ND
Dibromochloromethane	15	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	25	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	25	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	25	ND	ND	ND	ND	ND
1,1-Dichloroethane	20	ND	ND	ND	ND	ND
1,2-Dichloroethane	15	ND	ND	ND	ND	ND
1,1-Dichloroethene	15	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	10	ND	ND	ND	ND	ND
1,2-Dichloropropane	25	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	20	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	25	ND	ND	ND	ND	ND
Ethyl benzene	30	ND	ND	ND	ND	ND
Methylene chloride	15	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	30	ND	ND	ND	ND	ND
Tetrachloroethene	20	ND	ND	ND	ND	ND
Toluene	25	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	20	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	25	ND	ND	ND	ND	ND
Trichloroethene	10	ND	ND	ND	ND	ND
Trichlorofluoromethane	15	ND	ND	ND	ND	ND
Vinyl chloride	15	ND	ND	ND	ND	ND

^aData expressed in units of micrograms analyte per kilogram sample, as-received basis. ^bMDL--Method detection limit.

 $c_{\mbox{\scriptsize ND--Not}}$ detected at the listed method detection limit.

ORGANIC COMPOUNDS WY EPA METHOD 8240. ONE WEEK TURNARCUND.

PAVLAK & Associates

COMPOSIT SEVERAL OF THE SAMPLES AS SHOWN BELOW AND ON THE NEXT PAGE, THIS WILL RESULT IN A TOTAL OF TEN ANALYSES.

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P.O. Box 538 • Campbell, California 95009 • 408/371-7850

Received by Courier Auc o

PROJECT NO. 87- 1054-M

CHAIN OF CUSTODY RECORD Field Record Contract Laboratory Record Sample Type 5014 Laboratory Record Container Type ARASS LINER Lab No. Laboratory Name Condition Date Condition Received By Sample ID Sampled By Date Received By Date 1-4.88 m-1-3 m-1-4 M-1-5 m-1-6 M-1-7 M-1-8 M-1-9 M-2-M - 2 - 3Released To Lab by Released to Courier By Field Personnel Released to Lab by Courier med (1-6-38)

Received by Lab

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Received by Lab Kremo

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PROJECT NO. 67-1054- 12

CHAIN OF CUSTODY RECORD

		ratory Record			Contract Laboratory Recor Laboratory Name		
Sampled By Date 1-2-6 1-3-1 1-3-2 1-3-3 1-3-7 1-3-9 1-1-9	Received By	Date	Condition	Received By	Date	Condition	
Released to Courier By Field Lover (1-6-59) Received by Courier	many photos appropriate and a second	BC	Lab by Couries	- Guz	by Lab_	y Courier 6-88 1955 Femple	