



CTTS, Inc.
toxic technology services

September 30, 1991
Project No. 91-3

Mr. Dave Delamotte
Durham Transportation
P.O. Box 948
Rosemead, California 91770

Subject: Progress Report #12
Period Covering
July 1, 1991 - September 30, 1991
19984 Meekland Avenue, Hayward, CA

Dear Mr. Delamotte:

Enclosed is the twelfth progress report for the Phase II investigation to evaluate the extent of soil and groundwater contamination at 19984 meekland Avenue in the unincorporated area of Alameda County, near Hayward, California.

This report covers the following topics:

Introduction
Monthly Monitoring of Groundwater Elevations
Quarterly Monitoring Well Sampling and Analysis

After you review of this document, it is recommended that a copy be sent to Ms. Pam Evans of the Alameda County Health Care Services Department, Hazardous Materials Division. An extra copy of this report has been provided to you for this purpose.

At your request, I will speak to Ms. Evans about postponing the submittal of a remediation plan until data has been collected on the offsite monitoring wells.

Thank you for this opportunity to provide Durham Transportation with these environmental services.

Sincerely,

Lisa A. Polos, REA, CHMM
Senior Scientist
Toxic Technology Services
CTTS, Inc.

John N. Alt, CEG #1136
Consulting Geologist
Toxic Technology Services
CTTS, Inc.

Enclosure
LAP/JNA/lap

INTRODUCTION

The following is the twelfth progress report of activities in the evaluation of the lateral and vertical extent of soil and groundwater contamination at 19984 Meekland Avenue, in the unincorporated area of Alameda County, near Hayward, California. This report covers the period of July 1, 1991 - September 30, 1991. The previous progress reports are dated as follows:

- | | |
|-----------------------|----------------------|
| 1. July 2, 1990 | 7. February 25, 1991 |
| 2. August 2, 1990 | 8. April 4, 1991 |
| 3. September 21, 1990 | 9. May 20, 1991 |
| 4. November 12, 1990 | 10. June 3, 1991 |
| 5. December 28, 1990 | 11. June 30, 1991 |
| 6. February 11, 1991 | |

The purpose of this on-going investigation is two fold; to assess the vertical and lateral extent of soil, and groundwater contamination and to characterize the contamination with regards to constituents and concentration. This investigation will result in the preparation of a remediation plan that will recommend appropriate, available technology.

MONTHLY MONITORING OF GROUNDWATER ELEVATIONS

As stated in previous reports, the groundwater gradient at the site is essentially flat. The elevation of the groundwater has been measured in the monitoring wells on-site by surveying the elevation of the top of the casing and measuring the depth to groundwater using an electronic probe. The elevations are based on Alameda County benchmark BLO-MEEK located in the middle of the intersection of Blossom Way and Meekland Avenue. The depth to groundwater was measured in December of 1989, January of 1990, and then monthly since March of 1990.

The data are presented on Table 1. They indicate a very low westward to northwestward gradient. For the most part, the elevations of groundwater in the wells are within 0.1 feet and are about at the level of error in the measuring techniques. Therefore an exact gradient was not calculated.

The data also indicates that the groundwater table rose approximately 0.9 feet over the first four months of measurement, then flattened out. Characteristic with the dry season, the groundwater table receded until November, flattened out and rose significantly with the heavy rains of February and March. The last five months have shown a steady drop in groundwater elevation, characteristic with a relatively dry spring and summer.

TABLE 1
GROUNDWATER ELEVATION

Date	MW-1	MW-3	MW-4
Elevation top of casing	55.13	54.34	54.61
12/19/89	26.06 (O)	25.99 (O)	26.02 (o)
1/29/90	26.35	26.34	26.43
3/23/90	26.91 (O,S)	26.83 (O,-)	26.90 (o,-)
4/24/90	26.50 (O,S)	26.37 (o,-)	26.47 (-,-)
Elevation top of casing	55.18	--	--
	(new collar for casing MW-1, only)		
5/31/90	26.50 (O,S)	26.44 (-,-)	26.52 (-,-)
6/20/90	26.30 (O,S)	26.24 (-,-)	26.29 (-,-)
7/12/90	25.78 (O,S)	25.83 (O,-)	25.92 (-,-)
8/30/90	25.37 (O,S)	25.37 (-,-)	25.47 (-,-)
9/28/90	25.03 (O,S)	25.10 (-,-)	25.20 (-,-)
10/12/90	24.87 (O,S)	25.06 (-,-)	25.17 (-,-)
11/30/90	25.09 (O,S)	25.00 (-,-)	25.08 (-,-)
12/19/90	25.24 (O,S)	25.18 (-,-)	25.27 (-,-)
1/24/91	25.18 (O,S)	25.16 (-,-)	25.22 (-,-)
2/18/91	25.44 (O,S)	25.38 (-,-)	25.45 (-,-)
3/27/91	27.48	27.45	29.56*
	Odor and Sheen not taken		
4/17/91	28.15 (O,-)	28.09 (-,-)	27.99 (-,S)

Note: All measurements are in feet.
(O) = strong odor; (o) = slight odor; (S) = sheen;
(-) = non-detectable
* = suspect measurement

TABLE 1 (cont.)
GROUNDWATER ELEVATION

Date	MW-1	MW-3	MW-4
Elevation top of casing	55.18	54.34	54.61
5/23/91	27.18 (-, -)	27.12 (-, -)	27.16 (-, -)
6/18/91	26.54 (o, -)	26.45 (-, -)	26.56 (-, -)
7/17/91	26.12 (O, S)	26.04 (-, -)	26.05 (-, -)
8/20/91	25.59 (O, S)	25.49 (o, -)	25.62 (o, -)
9/21/91	25.15 (O, S)	25.18 (-, -)	25.18 (-, -)

Note: All measurements are in feet.
(O) = strong odor; (o) = slight odor; (S) = sheen;
(-) = non-detectable

TABLE 1 (cont.)
GROUNDWATER ELEVATION

Date	MW-5	MW-6	MW-7	MW-8	MW-9
Elevation top of casing	54.95	54.92	55.57	55.07	54.12
9/28/90	25.27 (O,-)	25.21 (O,S)	Not Installed		
10/12/90	25.16 (O,-)	25.07 (O,-)	25.11 (O,S)		
11/30/90	25.12 (-, -)	25.01 (-, -)	25.54 (o,-)		
12/19/90	25.15 (O,-)	25.22 (o,-)	25.14 (O,-)		
1/24/91	25.54 (-, -)	25.16 (o,-)	25.21 (o,-)		
2/18/91	25.39 (o,-)	25.40 (o,-)	25.46 (-, -)	25.48 (-, -)	25.40 (o,-)
3/27/91	26.62	27.46	27.50	27.40	27.40
	Odor and Sheen not taken				
4/17/91	28.04 (-, -)	28.00 (-, -)	28.02 (-, -)	28.06 (-, -)	27.99 (-, -)
5/23/91	27.17 (o,-)	27.11 (-, -)	27.19 (-, -)	27.19 (-, -)	27.13 (-, -)
6/18/91	26.77 (o,-)	26.46 (-, -)	26.53 (-, -)	26.57 (-, -)	26.58 (-, -)
7/17/91	26.13 (-, -)	26.04 (o,-)	26.10 (-, -)	26.13 (-, -)	26.04 (-, -)
8/20/91	25.37 (o,-)	25.50 (o,-)	25.59 (o,-)	25.60 (-, -)	25.52 (-, -)
9/21/91	25.49 (o,-)	25.06 (o,-)	25.16 (-, -)	25.18 (-, -)	25.15 (-, -)

Note: All measurements are in feet.

(O) = strong odor; (o) = slight odor; (S) = sheen;

(-) = non-detectable

QUARTERLY MONITORING WELL SAMPLING AND ANALYSIS

On July 22, 1991, the three, two inch diameter onsite groundwater monitoring wells (Plate 1) were each purged of 5 gallons of water and samples collected. The five, four inch diameter wells were each purged of twenty gallons of water and samples collected. Bailing was conducted starting with the least contaminated well moving to wells that have historically shown the greatest levels of contamination, using a PVC Triloc Pump. The pump was rinsed between wells with tap water. Samples were collected using a new, disposable, plastic bailer for each well. Purged water was contained in a 55 gallon drum.

Under the direction of Jack Alt, CEG, sampling was conducted by Lisa Polos, REA and Alejandro Zarantonello of Toxic Technology Services.

At the time of sample collection, the contents of the first bailer of water were inspected to assess whether or not there was any floating product present. None of the wells, at the time of sample collection, contained floating product.

Collected samples were put into a cooled ice chest and transported to NET Pacific Laboratory in Santa Rosa, California for analysis of Total Petroleum Hydrocarbons as Gasoline and Diesel, BTEX and Volatile Halogenated Hydrocarbons.

Table 2, presented below summarizes the results from this sampling round. The complete NET analytical report is presented under Appendix A.

The State of California Maximum Contaminate Level in drinking water is 0.5 ppb for 1,2-Dichloroethane, 1750 ppb for Xylenes and 1 ppb for Benzene. The recommended drinking water action level for Toluene is 100 ppb.

In summary, all wells, except MW-8, are over the Maximum Contaminant Level (MCL) in drinking water for Benzene and 1,2-Dichloroethane. MW-1 is over the MCL in drinking water for Xylenes and MW-1, MW-3, MW-5 and MW-6 are over the recommended drinking water action level for Toluene.

Trace levels of Tetrachloroethene were found in MW-7, MW-8 and MW-9. Levels of the same constituent were found in MW-7 and MW-8 during the July 1991 sampling. It appears that these levels are not phantom numbers and appear more prominently when the water table is at a low level.

MW-8, the onsite upgradient well, contains trace levels (2.0 ppb) of Toluene. This is below the recommended drinking water action level. Levels of contamination in MW-8 are substantially lower than in the rest of the wells and still seems to indicate that the source of contamination was located on-site.

MW-9, the on-site downgradient well, continues to indicate contamination, however, at levels lower than MW-1, MW-3 and MW-5.

TABLE 2
SUMMARY OF RESULTS
JULY 22, 1991 SAMPLING

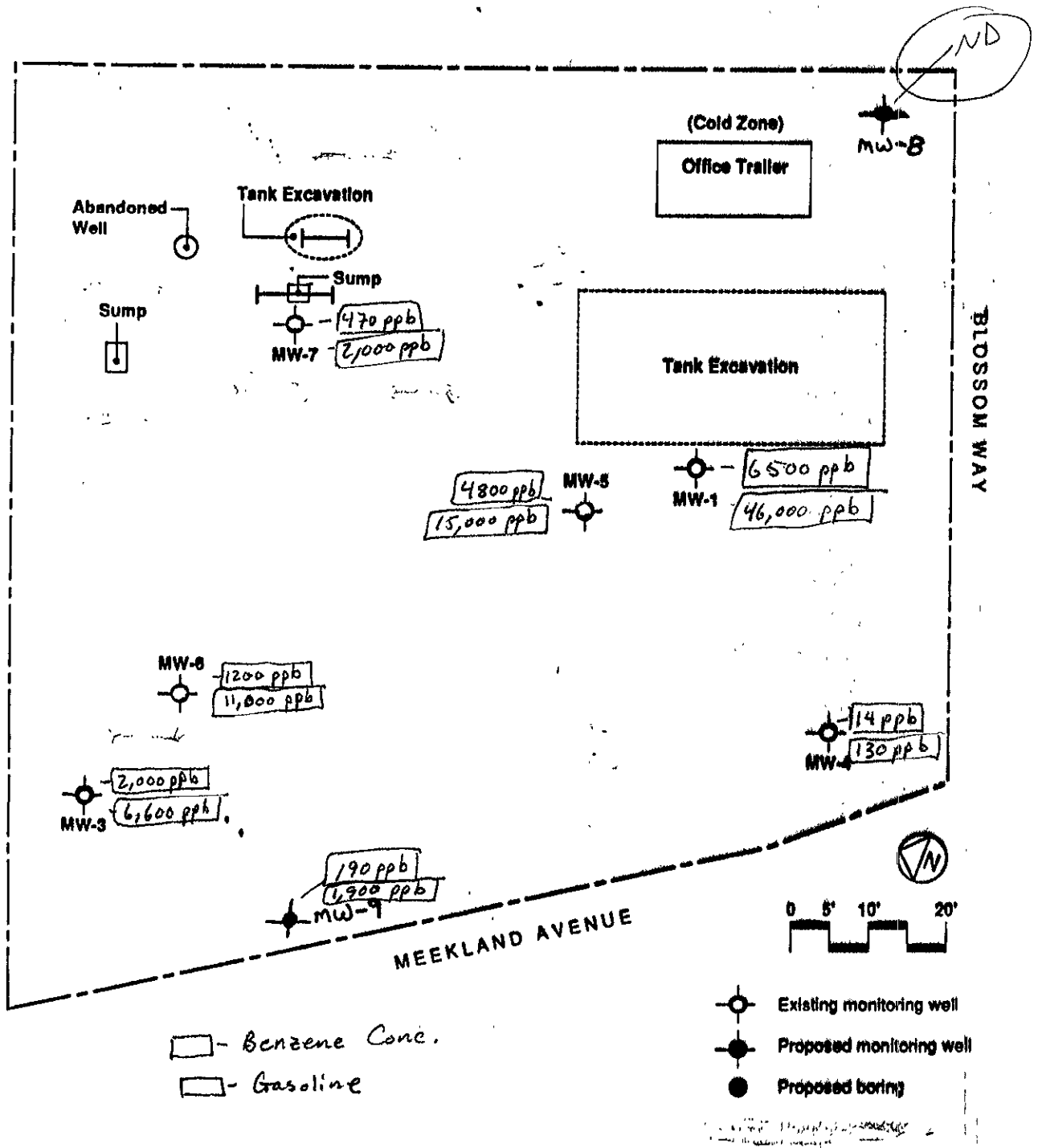
Constituent	MW-1		MW-3		MW-4	
1,2-Dichloroethane	64	ppb	29	ppb	0.81	ppb
Tetrachloroethene	ND		ND		ND	
Gasoline	46	ppm	6.6	ppm	0.13	ppm
Benzene	6500	ppb	2000	ppb	14	ppb
Ethylbenzene	830	ppb	250	ppb	3.3	ppb
Toluene	2900	ppb	230	ppb	9.7	ppb
Xylenes	3700	ppb	380	ppb	ND	
Diesel	* 4.3	ppm	* 0.89	ppm		

Constituent	MW-5		MW-6		MW-7	
1,2-Dichloroethane	62	ppb	29	ppb	9.7	ppb
Tetrachloroethene	ND		ND		1.3	ppb
Gasoline	15	ppm	11	ppm	2.0	ppm
Benzene	4800	ppb	1200	ppb	470	ppb
Ethylbenzene	610	ppb	ND		ND	
Toluene	1100	ppb	380	ppb	24	ppb
Xylenes	760	ppb	750	ppb	88	ppb
Diesel	* 2.2	ppm	* 1.4	ppm	* 0.91	ppm

Constituent	MW-8		MW-9	
1,2-Dichloroethane	ND		12	ppb
Tetrachloroethene	1.2	ppb	6.5	ppb
Gasoline	ND		1.9	ppm
Benzene	ND		190	ppb
Ethylbenzene	ND		12	ppb
Toluene	2.0	ppb	52	ppb
Xylenes	ND		77	ppb
Diesel	ND		* 0.18	ppm

Note: ND = none detected

* = The positive results for the Petroleum Hydrocarbons as Diesel analyses on these samples are lighter hydrocarbons than diesel.



Durham Transportation

Plate No.: 1
 Date: ~~February 91~~ July 22, '91 Sampling Event
 Scale: 1" = 20'-0"
 CTTS, Inc. - Toxic Technology Services

APPENDIX A



**NATIONAL
ENVIRONMENTAL
TESTING, INC.**

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Lisa Polos
Toxic Tech
PO Box 515
Rodeo, CA 94572

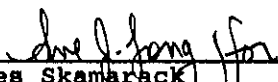
Date: 08-12-91
NET Client Acct No: 699
NET Pacific Log No: 8787
Received: 07-23-91 1548

Client Reference Information

Durham Transportation

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:



Jules Skamarack
Laboratory Manager

cc: Durham Transportation, Inc.
2713 N. River Ave.
Rosemead, CA 91770

Enclosure(s)



NET Pacific, Inc

Client Acct: 699
Client Name: Durham Transportation, Inc
NET Log No: 8787

Date: 08-12-91
Page: 2

Ref: Durham Transportation

Descriptor, Lab No. and Results

Parameter	Reporting Limit	MW-1	MW-3	Units
		07-22-91	07-22-91	
		92598	92599	
METHOD 601				
DATE ANALYZED		08-02-91	08-02-91	
DILUTION FACTOR*		1	1	
Bromodichloromethane	0.4	ND	ND	ug/L
Bromoform	0.4	ND	ND	ug/L
Bromomethane	0.4	ND	ND	ug/L
Carbon tetrachloride	0.4	ND	ND	ug/L
Chlorobenzene	0.4	ND	ND	ug/L
Chloroethane	0.4	ND	ND	ug/L
2-Chloroethylvinyl ether	1.0	ND	ND	ug/L
Chloroform	0.4	ND	ND	ug/L
Chloromethane	0.4	ND	ND	ug/L
Dibromochloromethane	0.4	ND	ND	ug/L
1,2-Dichlorobenzene	0.4	ND	ND	ug/L
1,3-Dichlorobenzene	0.4	ND	ND	ug/L
1,4-Dichlorobenzene	0.4	ND	ND	ug/L
Dichlorodifluoromethane	0.4	ND	ND	ug/L
1,1-Dichloroethane	0.4	ND	ND	ug/L
1,2-Dichloroethane	0.4	64	29	ug/L
1,1-Dichloroethene	0.4	ND	ND	ug/L
trans-1,2-Dichloroethene	0.4	ND	ND	ug/L
1,2-Dichloropropane	0.4	ND	ND	ug/L
cis-1,3-Dichloropropene	0.4	ND	ND	ug/L
trans-1,3-Dichloropropene	0.4	ND	ND	ug/L
Methylene Chloride	10	ND	ND	ug/L
1,1,2,2-Tetrachloroethane	0.4	ND	ND	ug/L
Tetrachloroethene	0.4	ND	ND	ug/L
1,1,1-Trichloroethane	0.4	ND	ND	ug/L
1,1,2-Trichloroethane	0.4	ND	ND	ug/L
Trichloroethene	0.4	ND	ND	ug/L
Trichlorofluoromethane	0.4	ND	ND	ug/L
Vinyl chloride	2.0	ND	ND	ug/L



NET Pacific, Inc

Client Acct: 699
 Client Name: Durham Transportation, Inc
 NET Log No: 8787

Date: 08-12-91
 Page: 3

Ref: Durham Transportation

Parameter	Reporting Limit	Descriptor, Lab No. and Results		Units
		MW-1 07-22-91	MW-3 07-22-91	
		92598	92599	
PETROLEUM HYDROCARBONS		--	--	
VOLATILE (WATER)		--	--	
DILUTION FACTOR *		100	10	
DATE ANALYZED		07-31-91	07-31-91	
METHOD GC FID/5030		--	--	
as Gasoline	0.05	46	6.6	mg/L
METHOD 602		--	--	
DILUTION FACTOR *		100	10	
DATE ANALYZED		07-31-91	07-31-91	
Benzene	0.5	6,500	2,000	ug/L
Ethylbenzene	0.5	830	250	ug/L
Toluene	0.5	2,900	230	ug/L
Xylenes, total	0.5	3,700	380	ug/L
PETROLEUM HYDROCARBONS		--	--	
EXTRACTABLE (WATER)		--	--	
DILUTION FACTOR *		5	1	
DATE EXTRACTED		07-26-91	07-26-91	
DATE ANALYZED		07-29-91	07-29-91	
METHOD GC FID/3510		--	--	
as Diesel	0.05	4.3 a	0.89 a	mg/L
as Motor Oil	0.5	ND	ND	mg/L

a: Petroleum hydrocarbons quantified as diesel appear to be lighter than diesel.



NET Pacific, Inc

Client Acct: 699
Client Name: Durham Transportation, Inc
NET Log No: 8787

Date: 08-12-91
Page: 4

Ref: Durham Transportation

Descriptor, Lab No. and Results

Parameter	Reporting Limit	MW-4	MW-5	Units
		07-22-91	07-22-91	
		92600	92601	
METHOD 601				
DATE ANALYZED		08-02-91	08-02-91	
DILUTION FACTOR*		1	1	
Bromodichloromethane	0.4	ND	ND	ug/L
Bromoform	0.4	ND	ND	ug/L
Bromomethane	0.4	ND	ND	ug/L
Carbon tetrachloride	0.4	ND	ND	ug/L
Chlorobenzene	0.4	ND	ND	ug/L
Chloroethane	0.4	ND	ND	ug/L
2-Chloroethylvinyl ether	1.0	ND	ND	ug/L
Chloroform	0.4	ND	ND	ug/L
Chloromethane	0.4	ND	ND	ug/L
Dibromochloromethane	0.4	ND	ND	ug/L
1,2-Dichlorobenzene	0.4	ND	ND	ug/L
1,3-Dichlorobenzene	0.4	ND	ND	ug/L
1,4-Dichlorobenzene	0.4	ND	ND	ug/L
Dichlorodifluoromethane	0.4	ND	ND	ug/L
1,1-Dichloroethane	0.4	ND	ND	ug/L
1,2-Dichloroethane	0.4	0.81	62	ug/L
1,1-Dichloroethene	0.4	ND	ND	ug/L
trans-1,2-Dichloroethene	0.4	ND	ND	ug/L
1,2-Dichloropropane	0.4	ND	ND	ug/L
cis-1,3-Dichloropropene	0.4	ND	ND	ug/L
trans-1,3-Dichloropropene	0.4	ND	ND	ug/L
Methylene Chloride	10	ND	ND	ug/L
1,1,2,2-Tetrachloroethane	0.4	ND	ND	ug/L
Tetrachloroethene	0.4	ND	ND	ug/L
1,1,1-Trichloroethane	0.4	ND	ND	ug/L
1,1,2-Trichloroethane	0.4	ND	ND	ug/L
Trichloroethene	0.4	ND	ND	ug/L
Trichlorofluoromethane	0.4	ND	ND	ug/L
Vinyl chloride	2.0	ND	ND	ug/L



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Client Acct: 699
Client Name: Durham Transportation, Inc
NET Log No: 8787

Date: 08-12-91
Page: 5

Ref: Durham Transportation

Parameter	Reporting Limit	Descriptor, Lab No. and Results		Units
		MW-4 07-22-91	MW-5 07-22-91	
PETROLEUM HYDROCARBONS		--	--	
VOLATILE (WATER)		--	--	
DILUTION FACTOR *		1	10	
DATE ANALYZED		08-01-91	07-31-91	
METHOD GC FID/5030		--	--	
as Gasoline	0.05	0.13	15	mg/L
METHOD 602		--	--	
DILUTION FACTOR *		1	100	
DATE ANALYZED		08-01-91	08-01-91	
Benzene	0.5	14	4,800	ug/L
Ethylbenzene	0.5	3.3	610	ug/L
Toluene	0.5	9.7	1,100	ug/L
Xylenes, total	0.5	ND	760	ug/L
PETROLEUM HYDROCARBONS		--	--	
EXTRACTABLE (WATER)		--	--	
DILUTION FACTOR *		1	1	
DATE EXTRACTED		07-26-91	07-26-91	
DATE ANALYZED		07-29-91	07-29-91	
METHOD GC FID/3510		--	--	
as Diesel	0.05	ND	2.2 a	mg/L
as Motor Oil	0.5	ND	ND	mg/L

a: Petroleum hydrocarbons quantified as diesel appear to be lighter than diesel.



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@Client Name: Durham Transportation, Inc
NET Log No: 8787

Date: 08-12-91
Page: 6

Ref: Durham Transportation

Descriptor, Lab No. and Results

Table with columns: Parameter, Reporting Limit, MW-6 07-22-91 (Lab No. 92602), MW-7 07-22-91 (Lab No. 92603), Units. Includes sub-section 'METHOD 601' listing various chemical compounds and their concentrations.



NET Pacific, Inc

Client Acct: 699
Client Name: Durham Transportation, Inc
NET Log No: 8787

Date: 08-12-91
Page: 7

Ref: Durham Transportation

Parameter	Reporting Limit	Descriptor, Lab No. and Results		Units
		MW-6 07-22-91	MW-7 07-22-91	
	92602	92603		
PETROLEUM HYDROCARBONS		--	--	
VOLATILE (WATER)		--	--	
DILUTION FACTOR *		100	10	
DATE ANALYZED		08-01-91	08-02-91	
METHOD GC FID/5030		--	--	
as Gasoline	0.05	11	2.0	mg/L
METHOD 602		--	--	
DILUTION FACTOR *		100	10	
DATE ANALYZED		08-01-91	08-02-91	
Benzene	0.5	1,200	470	ug/L
Ethylbenzene	0.5	ND	ND	ug/L
Toluene	0.5	380	24	ug/L
Xylenes, total	0.5	750	88	ug/L
PETROLEUM HYDROCARBONS		--	--	
EXTRACTABLE (WATER)		--	--	
DILUTION FACTOR *		1	1	
DATE EXTRACTED		07-26-91	07-26-91	
DATE ANALYZED		07-29-91	07-29-91	
METHOD GC FID/3510		--	--	
as Diesel	0.05	1.4 a	0.91 a	mg/L
as Motor Oil	0.5	ND	ND	mg/L

a: Petroleum hydrocarbons quantified as diesel appear to be lighter than diesel.



NET Pacific, Inc

Client Acct: 699
Client Name: Durham Transportation, Inc
NET Log No: 8787

Date: 08-12-91
Page: 8

Ref: Durham Transportation

Descriptor, Lab No. and Results

Parameter	Reporting Limit	MW-8	MW-9	Units
		07-22-91	07-22-91	
		92604	92605	
METHOD 601				
DATE ANALYZED		08-02-91	08-02-91	
DILUTION FACTOR*		1	1	
Bromodichloromethane	0.4	ND	ND	ug/L
Bromoform	0.4	ND	ND	ug/L
Bromomethane	0.4	ND	ND	ug/L
Carbon tetrachloride	0.4	ND	ND	ug/L
Chlorobenzene	0.4	ND	ND	ug/L
Chloroethane	0.4	ND	ND	ug/L
2-Chloroethylvinyl ether	1.0	ND	ND	ug/L
Chloroform	0.4	ND	ND	ug/L
Chloromethane	0.4	ND	ND	ug/L
Dibromochloromethane	0.4	ND	ND	ug/L
1,2-Dichlorobenzene	0.4	ND	ND	ug/L
1,3-Dichlorobenzene	0.4	ND	ND	ug/L
1,4-Dichlorobenzene	0.4	ND	ND	ug/L
Dichlorodifluoromethane	0.4	ND	ND	ug/L
1,1-Dichloroethane	0.4	ND	ND	ug/L
1,2-Dichloroethane	0.4	ND	12	ug/L
1,1-Dichloroethene	0.4	ND	ND	ug/L
trans-1,2-Dichloroethene	0.4	ND	ND	ug/L
1,2-Dichloropropane	0.4	ND	ND	ug/L
cis-1,3-Dichloropropene	0.4	ND	ND	ug/L
trans-1,3-Dichloropropene	0.4	ND	ND	ug/L
Methylene Chloride	10	ND	ND	ug/L
1,1,2,2-Tetrachloroethane	0.4	ND	ND	ug/L
Tetrachloroethene	0.4	1.2	6.5	ug/L
1,1,1-Trichloroethane	0.4	ND	ND	ug/L
1,1,2-Trichloroethane	0.4	ND	ND	ug/L
Trichloroethene	0.4	ND	ND	ug/L
Trichlorofluoromethane	0.4	ND	ND	ug/L
Vinyl chloride	2.0	ND	ND	ug/L



NET Pacific, Inc

Client Acct: 699
Client Name: Durham Transportation, Inc
NET Log No: 8787

Date: 08-12-91
Page: 9

Ref: Durham Transportation

Descriptor, Lab No. and Results

Parameter	Reporting Limit	Descriptor, Lab No. and Results		Units
		MW-8 07-22-91	MW-9 07-22-91	
		92604	92605	
PETROLEUM HYDROCARBONS		--	--	
VOLATILE (WATER)		--	--	
DILUTION FACTOR *		1	10	
DATE ANALYZED		08-01-91	08-01-91	
METHOD GC FID/5030		--	--	
as Gasoline	0.05	ND	1.9	mg/L
METHOD 602		--	--	
DILUTION FACTOR *		1	10	
DATE ANALYZED		08-01-91	08-01-91	
Benzene	0.5	ND	190	ug/L
Ethylbenzene	0.5	ND	12	ug/L
Toluene	0.5	2.0	52	ug/L
Xylenes, total	0.5	ND	77	ug/L
PETROLEUM HYDROCARBONS		--	--	
EXTRACTABLE (WATER)		--	--	
DILUTION FACTOR *		1	1	
DATE EXTRACTED		07-26-91	07-26-91	
DATE ANALYZED		07-29-91	07-29-91	
METHOD GC FID/3510		--	--	
as Diesel	0.05	ND	0.18 a	mg/L
as Motor Oil	0.5	ND	ND	mg/L

a: Petroleum hydrocarbons quantified as diesel appear to be lighter than diesel.



NET Pacific, Inc

Client Acct: 699
Client Name: Durham Transportation, Inc
NET Log No: 8787

Date: 08-09-91
Page: 10

Ref: Durham Transportation

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	0.05	mg/L	101	ND	74	81	9.3
Motor Oil	0.5	mg/L	75	ND	N/A	N/A	N/A
Gasoline	0.05	mg/L	111	ND	104	104	< 1
Toluene	0.5	ug/L	103	ND	93	95	2.6
Benzene	0.5	ug/L	94	ND	97	107	9.4
Gasoline	0.05	mg/L	109	ND	107	113	6.1
Toluene	0.5	ug/L	95	ND	99	104	5.0
Gasoline	0.05	mg/L	116	ND	115	107	7.8
Toluene	0.5	ug/L	100	ND	100	94	6.2
Chlorobenzene	0.4	ug/L	121	ND	126	122	2.8
1,1-Dce	0.4	ug/L	100	ND	105	101	3.1
Tce	0.4	ug/L	100	ND	84	86	1.5

COMMENT: Blank Results were ND on other analytes tested.



NET Pacific, Inc.

KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- * : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference, $100 \text{ [Value 1 - Value 2] / mean value}$.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.



435 Tesconi Circle, Santa Rosa, CA 95401

CHAIN OF CUSTODY RECORD

8787 Report to:
Lise Polos
Toxic Technology, Inc.
PO Box 515
Petaluma, CA 94972

PROJ. NO.		PROJECT NAME				NO. OF CONTAINERS	<div style="border: 1px solid black; padding: 5px; transform: rotate(-45deg); display: inline-block;"> TPH-G TPH-D BTEX Volatile HAPs - 601 </div>					
91-3		Durham Transportation										
SAMPLERS: (Signature): Lise de Polos												
STA. NO	DATE	TIME	COMP.	GRAB	STATION LOCATION	REMARKS						
	7/22/91			X	MW-1	Normal TA - Look at sampling date! (415) 799-1140 run all samples per Lise Polos to Norma 7/24/91						
				X	MW-3							
				X	MW-4							
				X	MW-5							
				X	MW-6							
				X	MW-7							
				X	MW-8							
				X	MW-9							

Relinquished by: (Signature) Lise de Polos	Date / Time 7/23/91 1250pm	Received by: (Signature) Michele Tavano	Relinquished by: (Signature) Michele Tavano	Date / Time 7/23/91 410	Received by: (Signature) Ken Temple
Relinquished by: (Signature) Ken Temple	Date / Time 7/23/91 1548	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature) Ken Temple	Date / Time 7/23/91 1548	Received for Laboratory by: (Signature) Ken Temple	Date / Time 7/23/91 1548	Remarks	