toxic technology services inc.

August 2, 1990
File No. 90-4

Mr. Jack Worthington
Durham Transportation
3717 North River Avenue
Rosemead, California 91770

Subject: Progress Report #2
Period Covering
July 1, 1990 - July 31, 1990
19984 Meekland Avenue, Hayward, CA

Dear Mr. Worthington:

Enclosed is the second 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
Disposal of Sump Contents
Monthly Monitoring of Groundwater Elevations
Quarterly Monitoring Well Sampling and Analysis
Work Plan Amendment
Summary and Recommendations

After your review of this document, it is recommended that you send a copy to 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.

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.

PROGRESS REPORT #2
EVALUATION OF EXTENT OF CONTAMINATION

PERIOD OF ACTIVITY
JULY 1, 1990 - JULY 31, 1990

19984 MEEKLAND AVENUE
HAYWARD, CALIFORNIA

Prepared For:

Mr. Jack Worthington
Durham Transportation
P.O. Box 948
Rosemead, California 91770

Prepared By:

CTTS, Inc.
Toxic Technology Services
P.O. Box 515
Rodeo, California 94572

August 2, 1990
File No. 90-4

TABLE OF CONTENTS

INTRODUCTION

The following is the second 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. The first progress report is dated July 2, 1990.

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.

DISPOSAL OF SUMP CONTENTS

On July 12, 1990, Erickson, Inc. of Richmond, California was on-site to dispose of the contents of the sump located on the north side of the subject site (Plate 1). The operation was supervised by Lisa Polos of Toxic Technology Services.

Erickson, Inc, is a California licensed hazardous waste hauler. Based on analytical data performed on the sump contents in March, 1990, Erickson arranged for the waste to be sent to Gibson Oil for recycling. The chemical data was reported in Progress Report #1, dated July 2, 1990.

Erickson personnel vacuumed out the sump waste, then pressure cleaned the concrete sump with hot water supplied by the local municipal system and a detergent called Zepride E. The sump and the piping between the concrete stages were cleaned until the rinse water stood clear in both sides of the sump. Approximately 600 gallons of waste and rinse water were hauled away.

The waste oil line/sump leading to the waste oil tank (Plate 1) was also scheduled to be drained and cleaned, however, upon inspection, the piping leading to the waste oil tank excavation was so deteriorated that pressure rinsing could have lead to contaminating the soil around the line and in the waste oil tank excavation. The loose piping was removed and left on-site for proper cleaning and disposal at a later date. The waste oil trap and remaining piping was left in place.

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 three 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 December of 1989 and January of 1990. Measurements have been taken monthly since March of 1990. The data are presented on Table 1. They indicate a very low westward to northwestward gradient. The elevations of groundwater in the three wells are within 0.1 foot 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 is now receding.

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	25.99	26.02
	(O)	(O)	(o)
1/29/90	26.35	26.34	26.43
3/23/90	26.91	26.83	26.90
	(O,S)	(O,-)	(o,-)
4/24/90	26.50	26.37	26.47
	(O,S)	(o,-)	(-,-)
Elevation top of casing	55.18	--	--
	(new collar for casing MW-1 only)		
5/31/90	26.50	26.44	26.52
	(O,S)	(-,-)	(-,-)
6/20/90	26.30	26.24	26.29
	(O,S)	(-,-)	(-,-)
7/12/90	25.78	25.83	25.92
	(O,S)	(O,-)	(-,-)

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

QUARTERLY MONITORING WELL SAMPLING AND ANALYSIS

On July 12, 1990, the three on-site groundwater monitoring wells (Plate 1) were each purged of 5 gallons of water and samples collected using a new, disposable, plastic bailer for each well. Sampling was conducted by Lisa Polos and John Alt, CEG of Toxic Technology Services.

The first sample from each well was retrieved from the surface of the water, and the contents of the bailer were inspected to assess whether or not there was any floating product present. Erickson personnel were on-site while this well was purged and vacuumed the contaminated water into their truck and hauled it away with the sump waste.

The first bailer of water from MW-1 contained 0.05 feet of floating product which smelled strongly of gasoline. Subsequent samples from this well were free of measurable floating product.

Water from MW-3 was free of floating product and had no sheen, but did have a strong odor. Water from MW-4 was free of floating product and had neither sheen nor odor.

Collected samples were put into a cooled ice chest and transported to NET Laboratory in Santa Rosa, California for analysis of Total Petroleum Hydrocarbons as Gasoline and Diesel, BTEX, White Spirits (Stoddard Solvent) and Chlorinated Pesticides/PCBs (EPA Method 8080).

The diesel, White Spirits and Chlorinated Pesticides analyses were newly added to the well monitoring program based on constituents found in the contents of the sump located on the north side of the subject site. White Spirits and Pesticides were none detected in all the monitoring wells and will therefore not be requested analyses in future monitoring.

Table 2, presented below summarizes the positive results from this sampling round.

TABLE 2
POSITIVE RESULTS
JULY 12, 1990 SAMPLING

Constituent	MW-1	MW-3	MW-4
1,2-Dichloroethane	62 ppb	67 ppb	0.90 ppb
Gasoline	27 ppm	7.3 ppm	ND
Benzene	4000 ppb	5200 ppb	ND

Table 2 cont.

Constituent	MW-1	MW-3	MW-4
Toluene	1500 ppb	440 ppb	ND
Xylenes	4400 ppb	480 ppb	ND
Diesel	11 ppm	0.99 ppm	ND

Note: ND = none detected

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 0.001 ppb for Benzene. The recommended drinking water action level for Toluene is 100 ppb.

In summary, all three wells are over the regulatory limit for 1,2-Dichloroethane. MW-1, located next to the gasoline tank excavation, is significantly contaminated with Benzene, Toluene, and Xylene (BTX). MW-3, located in the northwest corner of the subject site, is significantly contaminated with Benzene and Toluene.

WORK PLAN AMENDMENT

Data produced from the soil gas testing in April 1990, the quarterly groundwater monitoring and the shallow trenching activities, have prompted changes to the April 1990 work plan. These changes are presented under separate cover.

SUMMARY AND RECOMMENDATIONS

Groundwater monitoring data has consistently shown significant BTX contamination near the gasoline excavation and in the well representing the general direction of groundwater movement. There is a persistent presence of chlorinated solvents in all three wells and the source is currently unidentified.

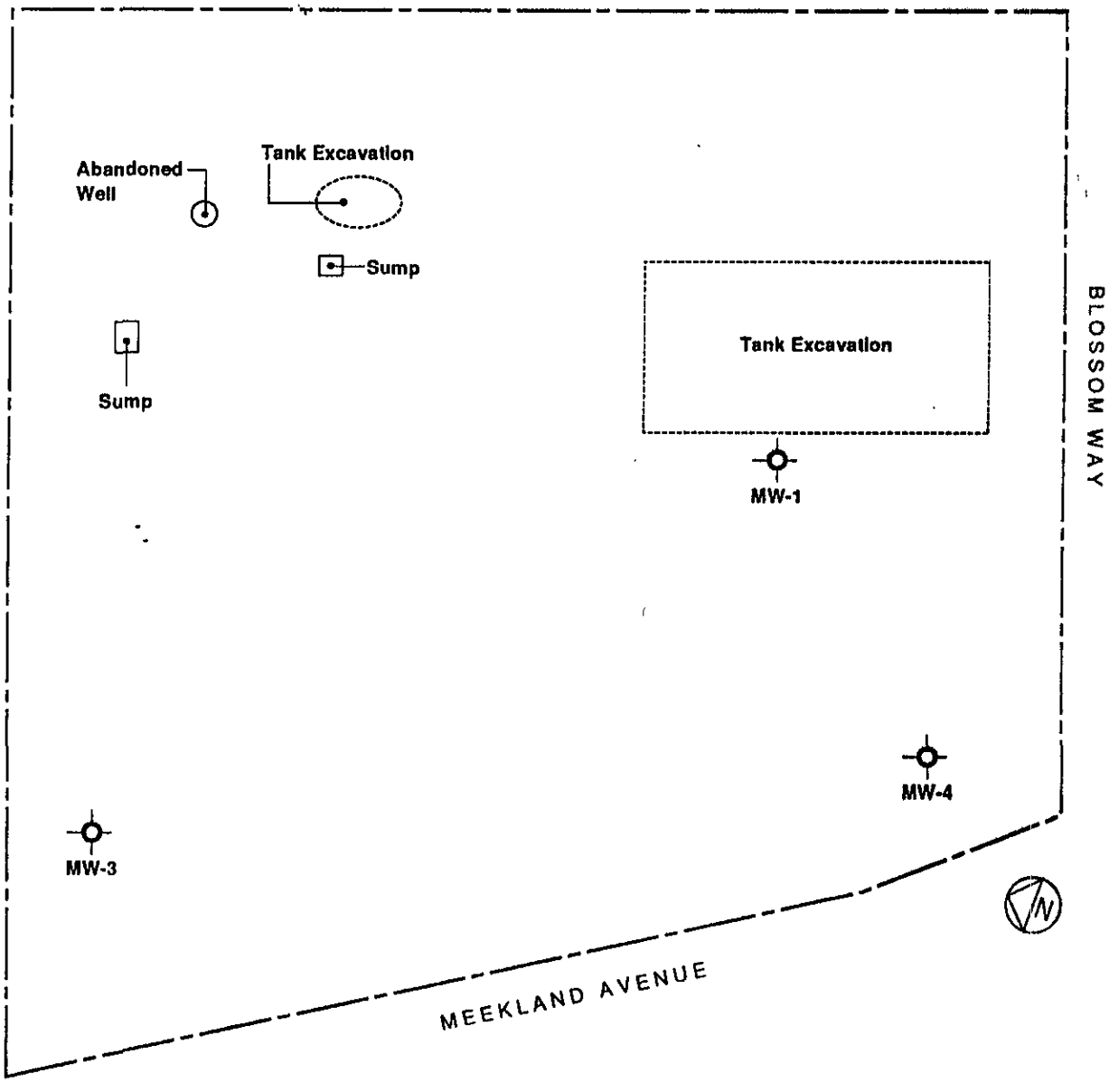
The presence of diesel hydrocarbons is a surprising development as all records indicate that all on-site fuel tanks contained gasoline.

White Spirits and the chlorinated pesticide, DDT, which were constituents identified in the sump, were not found in the groundwater. This lends credence to the belief that the sump is not a contributing source of groundwater contamination.

It is recommended that diesel is analyzed for quarterly as well

as gasoline, BTEX and halogenated, volatile hydrocarbons. White Spirits and DDT can be eliminated from the analytical list.

PLATE 1



Durham Transportation - Site Plan 1990

Plate No.: *1*
Date: July 90
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 A. Polos
Toxic Technology Services
PO Box 515
Rodeo, CA 94572

Date: 07-27-90
NET Client Acct. No: 707
NET Pacific Log No: 2878
Received: 07-13-90 0800

Client Reference Information

Durham Transportation, Proj: 90-4

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

Enclosure(s)

Client Acct: 707
Client Name: Toxic Technology Services
NET Log No: 2878

Date: 07-27-90
Page: 2

Ref: Durham Transportation, Proj: 90-4

SAMPLE DESCRIPTION: MW-1 07-12-90
LAB Job No: (-57700)

Parameter	Method	Reporting Limit	Results	Units
METHOD 608				
DATE EXTRACTED			07-16-90	
DATE ANALYZED			07-25-90	
DILUTION FACTOR *			10	
Aldrin		0.02	ND	ug/L
alpha-BHC		0.005	ND	ug/L
beta-BHC		0.005	ND	ug/L
delta-BHC		0.005	ND	ug/L
gamma-BHC (Lindane)		0.02	ND	ug/L
Chlordane		0.4	ND	ug/L
4,4'-DDD		0.05	ND	ug/L
4,4'-DDE		0.05	ND	ug/L
4,4'-DDT		0.05	ND	ug/L
Dieldrin		0.05	ND	ug/L
Endosulfan I		0.05	ND	ug/L
Endosulfan II		0.05	ND	ug/L
Endosulfan sulfate		0.05	ND	ug/L
Endrin		0.05	ND	ug/L
Endrin aldehyde		0.05	ND	ug/L
Heptachlor		0.05	ND	ug/L
Heptachlor epoxide		0.05	ND	ug/L
Methoxychlor		0.08	ND	ug/L
Toxaphene		1.0	ND	ug/L
POLYCHLORINATED BIPHENYLS			--	
Aroclor 1016		2.0	ND	ug/L
Aroclor 1221		8.0	ND	ug/L
Aroclor 1232		3.0	ND	ug/L
Aroclor 1242		2.0	ND	ug/L
Aroclor 1248		2.0	ND	ug/L
Aroclor 1254		0.5	ND	ug/L
Aroclor 1260		0.5	ND	ug/L
METHOD 8010				
DATE ANALYZED			07-24-90	
DILUTION FACTOR*			1	
Bromodichloromethane		0.4	ND	ug/L
Bromoform		0.4	ND	ug/L
Bromomethane		0.4	ND	ug/L
Carbon tetrachloride		0.4	ND	ug/L
Chlorobenzene		0.4	ND	ug/L
Chloroethane		0.4	ND	ug/L
2-Chloroethylvinyl ether		1.0	ND	ug/L
Chloroform		0.4	ND	ug/L
Chloromethane		0.4	ND	ug/L
Dibromochloromethane		0.4	ND	ug/L

Ref: Durham Transportation, Proj: 90-4

SAMPLE DESCRIPTION: MW-1 07-12-90
LAB Job No: (-57700)

Parameter	Method	Reporting Limit	Results	Units
1,2-Dichlorobenzene		0.4	ND	ug/L
1,3-Dichlorobenzene		0.4	ND	ug/L
1,4-Dichlorobenzene		0.4	ND	ug/L
Dichlorodifluoromethane		0.4	ND	ug/L
1,1-Dichloroethane		0.4	ND	ug/L
1,2-Dichloroethane		0.4	62	ug/L
1,1-Dichloroethene		0.4	ND	ug/L
trans-1,2-Dichloroethene		0.4	ND	ug/L
1,2-Dichloropropane		0.4	ND	ug/L
cis-1,3-Dichloropropene		0.4	ND	ug/L
trans-1,3-Dichloropropene		0.4	ND	ug/L
Methylene Chloride		10	ND	ug/L
1,1,2,2-Tetrachloroethane		0.4	ND	ug/L
Tetrachloroethene		0.4	ND	ug/L
1,1,1-Trichloroethane		0.4	ND	ug/L
1,1,2-Trichloroethane		0.4	ND	ug/L
Trichloroethene		0.4	ND	ug/L
Trichlorofluoromethane		0.4	ND	ug/L
Vinyl chloride		2.0	ND	ug/L
PETROLEUM HYDROCARBONS			--	
VOLATILE (WATER)			--	
DILUTION FACTOR *			100	
DATE ANALYZED			07-23-90	
METHOD GC FID/5030			--	
as Gasoline		0.05	27	mg/L
METHOD 602			--	
DILUTION FACTOR *			100	
DATE ANALYZED			07-23-90	
Benzene		0.5	4,000	ug/L
Ethylbenzene		0.5	ND	ug/L
Toluene		0.5	1,500	ug/L
Xylenes, total		0.5	4,400	ug/L
PETROLEUM HYDROCARBONS			--	
EXTRACTABLE (WATER)			--	
DILUTION FACTOR *			20	
DATE EXTRACTED			07-19-90	
DATE ANALYZED			07-19-90	
METHOD GC FID/3510			--	
as Diesel		0.05	11	mg/L
as Motor Oil		0.5	ND	mg/L
as Stoddard Solvent		0.05	ND	mg/L

Ref: Durham Transportation, Proj: 90-4

SAMPLE DESCRIPTION: MW-3 07-12-90
LAB Job No: (-57701)

Parameter	Method	Reporting Limit	Results	Units
METHOD 608				
DATE EXTRACTED			07-16-90	
DATE ANALYZED			07-25-90	
DILUTION FACTOR *			2	
Aldrin		0.02	ND	ug/L
alpha-BHC		0.005	ND	ug/L
beta-BHC		0.005	ND	ug/L
delta-BHC		0.005	ND	ug/L
gamma-BHC (Lindane)		0.02	ND	ug/L
Chlordane		0.4	ND	ug/L
4,4'-DDD		0.05	ND	ug/L
4,4'-DDE		0.05	ND	ug/L
4,4'-DDT		0.05	ND	ug/L
Dieldrin		0.05	ND	ug/L
Endosulfan I		0.05	ND	ug/L
Endosulfan II		0.05	ND	ug/L
Endosulfan sulfate		0.05	ND	ug/L
Endrin		0.05	ND	ug/L
Endrin aldehyde		0.05	ND	ug/L
Heptachlor		0.05	ND	ug/L
Heptachlor epoxide		0.05	ND	ug/L
Methoxychlor		0.08	ND	ug/L
Toxaphene		1.0	ND	ug/L
POLYCHLORINATED BIPHENYLS			--	
Aroclor 1016		2.0	ND	ug/L
Aroclor 1221		8.0	ND	ug/L
Aroclor 1232		3.0	ND	ug/L
Aroclor 1242		2.0	ND	ug/L
Aroclor 1248		2.0	ND	ug/L
Aroclor 1254		0.5	ND	ug/L
Aroclor 1260		0.5	ND	ug/L
METHOD 8010				
DATE ANALYZED			07-24-90	
DILUTION FACTOR*			1	
Bromodichloromethane		0.4	ND	ug/L
Bromoform		0.4	ND	ug/L
Bromomethane		0.4	ND	ug/L
Carbon tetrachloride		0.4	ND	ug/L
Chlorobenzene		0.4	ND	ug/L
Chloroethane		0.4	ND	ug/L
2-Chloroethylvinyl ether		1.0	ND	ug/L
Chloroform		0.4	ND	ug/L
Chloromethane		0.4	ND	ug/L
Dibromochloromethane		0.4	ND	ug/L

Ref: Durham Transportation, Proj: 90-4

SAMPLE DESCRIPTION: MW-3 07-12-90
LAB Job No: (-57701)

Parameter	Method	Reporting Limit	Results	Units
1,2-Dichlorobenzene		0.4	ND	ug/L
1,3-Dichlorobenzene		0.4	ND	ug/L
1,4-Dichlorobenzene		0.4	ND	ug/L
Dichlorodifluoromethane		0.4	ND	ug/L
1,1-Dichloroethane		0.4	ND	ug/L
1,2-Dichloroethane		0.4	67	ug/L
1,1-Dichloroethene		0.4	ND	ug/L
trans-1,2-Dichloroethene		0.4	ND	ug/L
1,2-Dichloropropane		0.4	ND	ug/L
cis-1,3-Dichloropropene		0.4	ND	ug/L
trans-1,3-Dichloropropene		0.4	ND	ug/L
Methylene Chloride		10	ND	ug/L
1,1,2,2-Tetrachloroethane		0.4	ND	ug/L
Tetrachloroethene		0.4	ND	ug/L
1,1,1-Trichloroethane		0.4	ND	ug/L
1,1,2-Trichloroethane		0.4	ND	ug/L
Trichloroethene		0.4	ND	ug/L
Trichlorofluoromethane		0.4	ND	ug/L
Vinyl chloride		2.0	ND	ug/L
PETROLEUM HYDROCARBONS			--	
VOLATILE (WATER)			--	
DILUTION FACTOR *			10	
DATE ANALYZED			07-24-90	
METHOD GC FID/5030			--	
as Gasoline		0.05	7.3	mg/L
METHOD 602			--	
DILUTION FACTOR *			100	
DATE ANALYZED			07-24-90	
Benzene		0.5	5,200	ug/L
Ethylbenzene		0.5	ND	ug/L
Toluene		0.5	440	ug/L
Xylenes, total		0.5	480	ug/L
PETROLEUM HYDROCARBONS			--	
EXTRACTABLE (WATER)			--	
DILUTION FACTOR *			1	
DATE EXTRACTED			07-19-90	
DATE ANALYZED			07-19-90	
METHOD GC FID/3510			--	
as Diesel		0.05	0.99	mg/L
as Motor Oil		0.5	ND	mg/L
as Stoddard Solvent		0.05	ND	mg/L

Ref: Durham Transportation, Proj: 90-4

SAMPLE DESCRIPTION: MW-4 07-12-90
LAB Job No: (-57702)

Parameter	Method	Reporting Limit	Results	Units
METHOD 608				
DATE EXTRACTED			07-16-90	
DATE ANALYZED			07-25-90	
DILUTION FACTOR *			1	
Aldrin		0.02	ND	ug/L
alpha-BHC		0.005	ND	ug/L
beta-BHC		0.005	ND	ug/L
delta-BHC		0.005	ND	ug/L
gamma-BHC (Lindane)		0.02	ND	ug/L
Chlordane		0.4	ND	ug/L
4,4'-DDD		0.05	ND	ug/L
4,4'-DDE		0.05	ND	ug/L
4,4'-DDT		0.05	ND	ug/L
Dieldrin		0.05	ND	ug/L
Endosulfan I		0.05	ND	ug/L
Endosulfan II		0.05	ND	ug/L
Endosulfan sulfate		0.05	ND	ug/L
Endrin		0.05	ND	ug/L
Endrin aldehyde		0.05	ND	ug/L
Heptachlor		0.05	ND	ug/L
Heptachlor epoxide		0.05	ND	ug/L
Methoxychlor		0.08	ND	ug/L
Toxaphene		1.0	ND	ug/L
POLYCHLORINATED BIPHENYLS			--	
Aroclor 1016		2.0	ND	ug/L
Aroclor 1221		8.0	ND	ug/L
Aroclor 1232		3.0	ND	ug/L
Aroclor 1242		2.0	ND	ug/L
Aroclor 1248		2.0	ND	ug/L
Aroclor 1254		0.5	ND	ug/L
Aroclor 1260		0.5	ND	ug/L
METHOD 8010				
DATE ANALYZED			07-24-90	
DILUTION FACTOR*			1	
Bromodichloromethane		0.4	ND	ug/L
Bromoform		0.4	ND	ug/L
Bromomethane		0.4	ND	ug/L
Carbon tetrachloride		0.4	ND	ug/L
Chlorobenzene		0.4	ND	ug/L
Chloroethane		0.4	ND	ug/L
2-Chloroethylvinyl ether		1.0	ND	ug/L
Chloroform		0.4	ND	ug/L
Chloromethane		0.4	ND	ug/L
Dibromochloromethane		0.4	ND	ug/L

Ref: Durham Transportation, Proj: 90-4

SAMPLE DESCRIPTION: MW-4 07-12-90
LAB Job No: (-57702)

Parameter	Method	Reporting Limit	Results	Units
1,2-Dichlorobenzene		0.4	ND	ug/L
1,3-Dichlorobenzene		0.4	ND	ug/L
1,4-Dichlorobenzene		0.4	ND	ug/L
Dichlorodifluoromethane		0.4	ND	ug/L
1,1-Dichloroethane		0.4	ND	ug/L
1,2-Dichloroethane		0.4	0.90	ug/L
1,1-Dichloroethene		0.4	ND	ug/L
trans-1,2-Dichloroethene		0.4	ND	ug/L
1,2-Dichloropropane		0.4	ND	ug/L
cis-1,3-Dichloropropene		0.4	ND	ug/L
trans-1,3-Dichloropropene		0.4	ND	ug/L
Methylene Chloride		10	ND	ug/L
1,1,2,2-Tetrachloroethane		0.4	ND	ug/L
Tetrachloroethene		0.4	ND	ug/L
1,1,1-Trichloroethane		0.4	ND	ug/L
1,1,2-Trichloroethane		0.4	ND	ug/L
Trichloroethene		0.4	ND	ug/L
Trichlorofluoromethane		0.4	ND	ug/L
Vinyl chloride		2.0	ND	ug/L
PETROLEUM HYDROCARBONS			--	
VOLATILE (WATER)			--	
DILUTION FACTOR *			1	
DATE ANALYZED			07-24-90	
METHOD GC FID/5030			--	
as Gasoline		0.05	ND	mg/L
METHOD 602			--	
DILUTION FACTOR *			1	
DATE ANALYZED			07-24-90	
Benzene		0.5	ND	ug/L
Ethylbenzene		0.5	ND	ug/L
Toluene		0.5	ND	ug/L
Xylenes, total		0.5	ND	ug/L
PETROLEUM HYDROCARBONS			--	
EXTRACTABLE (WATER)			--	
DILUTION FACTOR *			1	
DATE EXTRACTED			07-19-90	
DATE ANALYZED			07-19-90	
METHOD GC FID/3510			--	
as Diesel		0.05	ND	mg/L
as Motor Oil		0.5	ND	mg/L
as Stoddard Solvent		0.05	ND	mg/L

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following, which supercedes the listed reporting limit.
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg (ppm)	:	Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (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 [Value 1 - Value 2]/mean value.
SNA	:	Standard not available.
ug/Kg (ppb)	:	Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	:	Micromhos per centimeter.

Method References

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.

* 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.

2030 Wright Avenue
Richmond, California 94804
(415) 235-2633
(FAX) 910-382-8132

NET

~~UWA~~ NET

~~Thermo Analytical Inc.~~

CHAIN OF CUSTODY RECORD

Toxic Technology Services
PO BOX 515
Rodeo, CA 94572
(415) 799-1140

PROJ. NO.	PROJECT NAME
90-4	Durham Transportation

(Signature) Lisa A. Polos

DATE	LOC.	NO. OF CONTAINERS	analyses: TPHG/BTEX	TPH-D	White Spirits*	Pesticides (8080 PCBs)	8010	REMARKS
7/12/90	MW-1	10	X	X	X	X		X	
7/12/90	MW-3	10	X	X	X	X		X	
7/12/90	MW-4	10	X	X	X	X		X	

*white spirits are defined as Stoddard Solvent

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Lisa A. Polos	7/12/90 5:20 P	James Green	James Green		

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
		D Temple	7/13/90 0800	

*CUSTODY SEAL APPLIED 7/12/90 6:30p custody seal intact 7/13