Rec'd May 13, 1991 Pc

CTTS, Inc.
toxic technology services

CTTS, Inc.
toxic technology services

April 2, 1991
Project No. 91-6

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

Subject: Report of Additional
Well Installations
19984 Meekland Avenue
Hayward, California

Dear Mr. Worthington:

Toxic Technology Services (CTTS, Inc) is pleased to present a report on the additional well installations requested by Alameda County for the property located at 19984 Meekland Avenue in the unincorporated area of Alameda County.

This report covers the following topics:

Introduction
Well Installations And Sampling
Groundwater Data
Conclusions and Recommendations

After your 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.

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
Consulting Geologist
Toxic Technology Services
CTTS, Inc.

REGISTERED GEOLOGIST
JOHN N. ALT
Nº 1136
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

LAP/JNA/lap

Enclosure

INTRODUCTION

On January 15, 1991, Lisa Polos and John Alt of Toxic Technology Services and Jack Worthington of Durham Transportation met with Pam Evans of the Alameda County Health Care Services Agency, Hazardous Materials Division. The topic of discussion was the phase II site characterization report dated November 27, 1990 for the subject site. The County and the Water Quality Control Board requires further investigation into the contaminant plume migration.

As a result of this meeting, and to further define the extent of the contaminant plume, two more wells, one up gradient and one down gradient will be installed.

The up gradient well, MW-8, is located at the southeast corner of the subject site (Plate 1). It was originally discussed that the down gradient well would be located off-site, preferably on Meekland Avenue at the site of Hank's Liquors (50 Blossom Way). Mr. Worthington discussed the installation of a well on this property with the property owner and was unable to obtain permission. The well, labeled MW-9, was instead installed on-site at the northwest quadrant of the property (Plate 1).

WELL INSTALLATIONS AND SAMPLING

On February 13, 1991, two groundwater monitoring wells, identified as MW-8 and MW-9, were installed at the subject site by HEW Drilling, Inc., using a CME 75 drill rig with hollow stem augers. Ms. Lisa Polos supervised the installation under the direction of Mr. John Alt, CEG. The locations of the wells are shown on Plate 1. Augers were steam cleaned prior to the drilling of the wells. A standard split barrel sampler with 2-5/8" OD and 2" ID was used for soil sampling. It had the capacity for obtaining an 18 inch sample using three six-inch long brass liners. Prior to obtaining each sample, the disassembled sampler and the brass liners were washed in a solution of TSP in water. Each piece was triple rinsed, with the final rinse being distilled water.

A boring log was prepared for each well. Copies of these logs are presented in Appendix A. Blow counts were recorded for each six inches of penetration of the sampler, and the time at which each sample was taken was noted on the field log. Soil samples were collected at five foot intervals during the drilling. One liner from each depth was retained for any required chemical analysis. The soil exposed in the ends of the tube was quickly noted, and the ends were then sealed with teflon tape and snug-filling plastic caps. The edges of the caps were sealed with

plastic tape. The cap was labeled with the sample number, depth, date, and project name. The soil samples were placed in a chilled ice chest as they were collected, and selected soil samples were marked and sent under chain-of-custody to NET Pacific laboratory, a State certified hazardous waste laboratory for analysis. The second and third samples were inspected and used for the sample description.

Four-inch (ID) Schedule 40 PVC pipe was used for the well casings. Each well was screened with slotted (0.020 inch openings) casings in the lower 15 feet of the well and capped at the bottom with a slip on cap. The 10-inch diameter borings were filled in the annular space between the casing and bore wall with clean #3 sand to a depth of approximately 2 feet above the top of the slotted casing. Above the sand-pack, at least two feet of bentonite pellets was used as a seal, and the remainder of the annulus was filled with cement grout. Monitoring Well Installation Reports with more detailed information on each of the well installations were recorded and are in the files.

The units encountered in the borings for monitoring wells MW-8 and MW-9 are shown on the boring logs (Appendix A). The soil samples collected from MW-8 had no odor above 20 feet. Samples at 20 and 25 feet had an organic, "earthy" odor, but not that of petroleum hydrocarbons. The units encountered were unstained and indicated no obvious signs of contamination.

The soil samples collected from MW-9 had a definite petroleum odor starting at 20 feet. The odor was stronger at 30 feet. The samples collected at 35 and 40 feet had no petroleum odor.

It is our opinion that 20 feet is within the zone of groundwater fluctuation and the contamination in MW-9 was deposited during a period of a higher groundwater level rather than some undiscovered source of contamination.

On February 18, 1991, Mr. John Alt and Ms. Lisa Polos purged the wells by evacuating a minimum of 15 gallons from each well by using a trilock pump. After the wells were purged, groundwater samples were collected using separate three-foot disposable bailers.

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. Groundwater from neither well had odor nor sheen. Sample vials and jars, provided by the laboratory, were filled from the bailer and put into a chilled ice chest.

Chemical data from the soil and groundwater samples is presented in a separate section of this report.

Prior to well installation, a monitoring well installation permit was obtained from Alameda County Zone 7. A copy of this permit is presented under Appendix B.

GROUNDWATER DATA

The elevation of the groundwater has been measured in the newly installed monitoring wells 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 on February 18, 1991. Table 1 presents the groundwater elevations for MW-8 and MW-9.

TABLE 1
GROUNDWATER ELEVATION

Date	MW-8	MW-9
Elevation top of casing	55.07	54.12
2/18/91	25.48 (-,-)	25.40 (o,-)

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

Chemical data from samples collected from MW-8 and MW-9 indicate that MW-8 is clean and that MW-9 is contaminated, but not at as high a level of contamination as has been found in MW-1 and MW-3.

MW-8 represents the up gradient quadrant of the site. Data indicates some minor soil contamination by Toluene, but not at levels that would indicate an off-site source of petroleum hydrocarbon contamination.

MW-9 is in the down gradient direction and soil contains low levels of contamination and water contains moderate levels of contamination. The soil contamination is at the depth of the capillary fringe and is thought to be caused by migration of groundwater contamination.

Tables 2 and 3 present summaries of results. Appendix C presents full analytical reports from NET Pacific.

TABLE 2
ANALYTICAL SUMMARY OF SOIL BORING SAMPLES

MW-8			
25':	Toluene	3.3	ug/Kg
35':	Toluene	28	ug/Kg
MW-9			
20':	1,2-Dichloroethane	7.9	ug/Kg
	Gasoline	2.2	mg/Kg
	Benzene	150	ug/Kg
	Ethylbenzene	29	ug/Kg
	Toluene	66	ug/Kg
	Xylenes	67	ug/Kg
30':	1,2-Dichloroethane	11	ug/Kg
	Gasoline	39	mg/Kg
	Benzene	180	ug/Kg
	Ethylbenzene	230	ug/Kg
	Toluene	340	ug/Kg
	Xylenes	1000	ug/Kg
	Diesel	6.0	mg/Kg
40':	Toluene	11	ug/Kg
	Xylenes	8.2	ug/Kg

TABLE 3
SUMMARY OF GROUNDWATER DATA February 1991

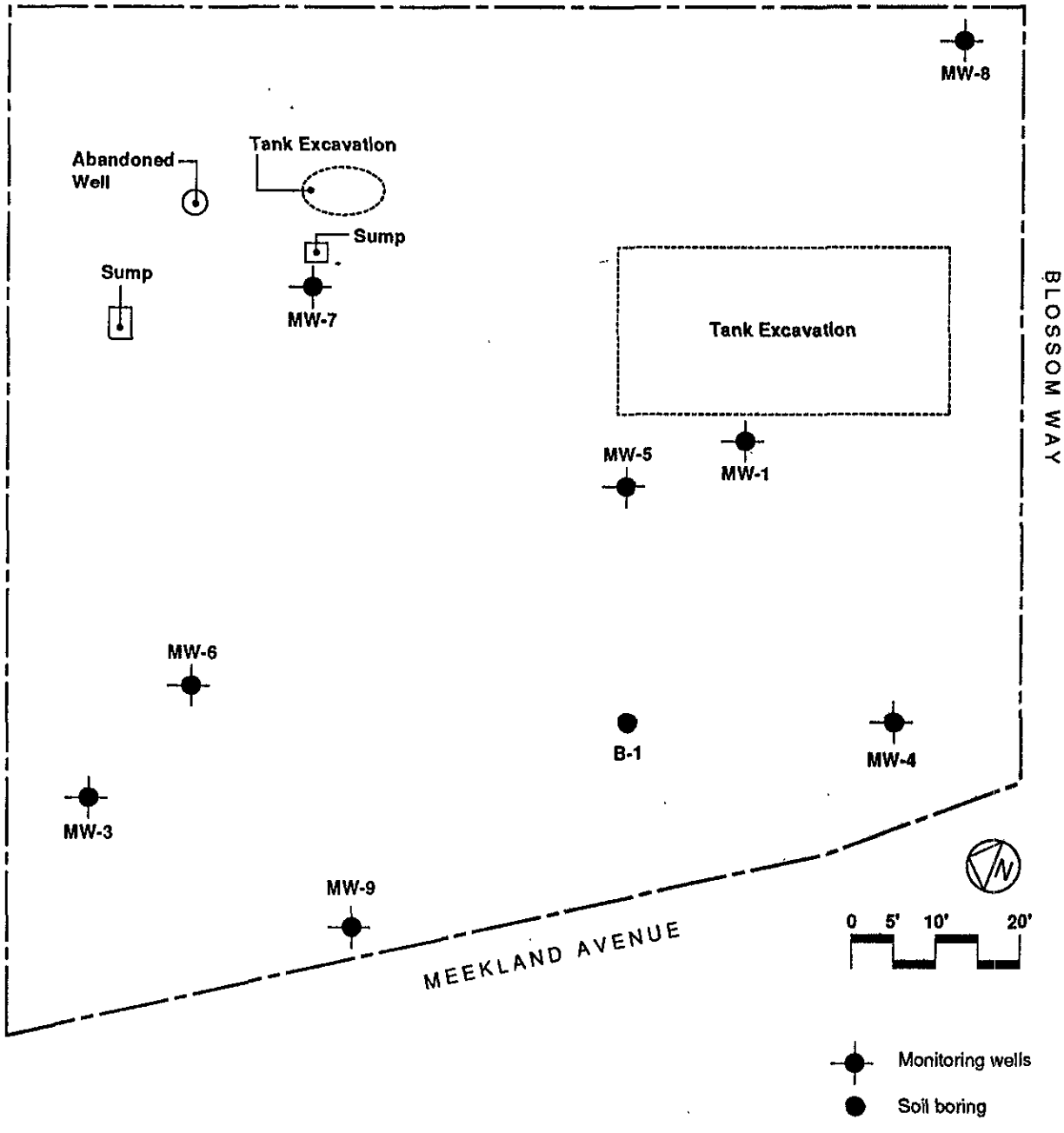
Constituent	MW-8	MW-9	
1,2-Dichloroethane	ND	13	ug/L
Gasoline	ND	6.0	mg/L
Benzene	ND	180	ug/L
Ethylbenzene	ND	19	ug/L
Toluene	ND	170	ug/L
Xylenes	ND	200	ug/L
Diesel	ND	1.6	mg/L

SUMMARY AND RECOMMENDATIONS

The data thus far indicates that the groundwater is the main source of contamination on-site. The up gradient well did not contain contamination and thus eliminates the need for additional up gradient data points. In the down gradient direction, the groundwater contamination has reached the boundary of the subject site. In order to define the contamination plume, an off-site well will be necessary.

It is the opinion of Toxic Technology Services that this off-site well should be located across the street near the apartment complex on Meekland Avenue.

PLATE 1



Durham Transportation - Site Plan

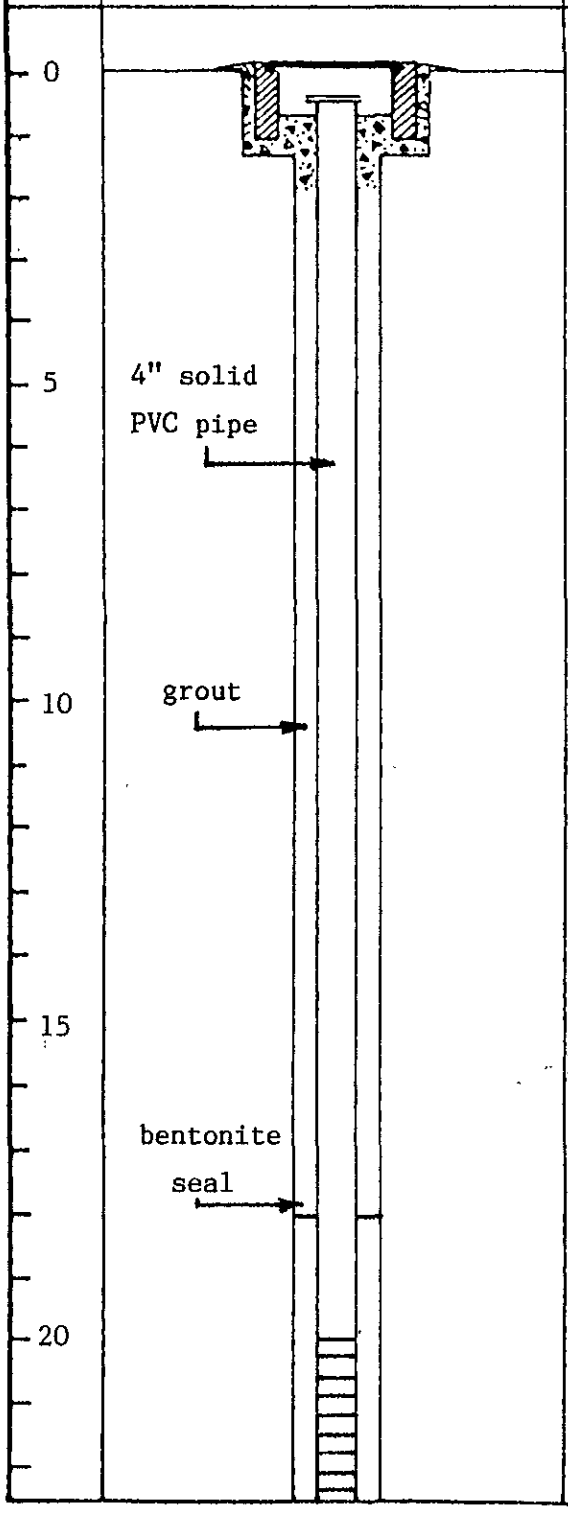
Plate No.: 1
Date: February 1991
Scale: 1" = 20'-0"
CTTS, Inc. - Toxic Technology Services

APPENDIX A

BORING LOG

Project: Durham Transportation
Location: see location map
Job #: 91-6
Geologist/Engineer: J. Alt
Drill Agency: HEW Drilling

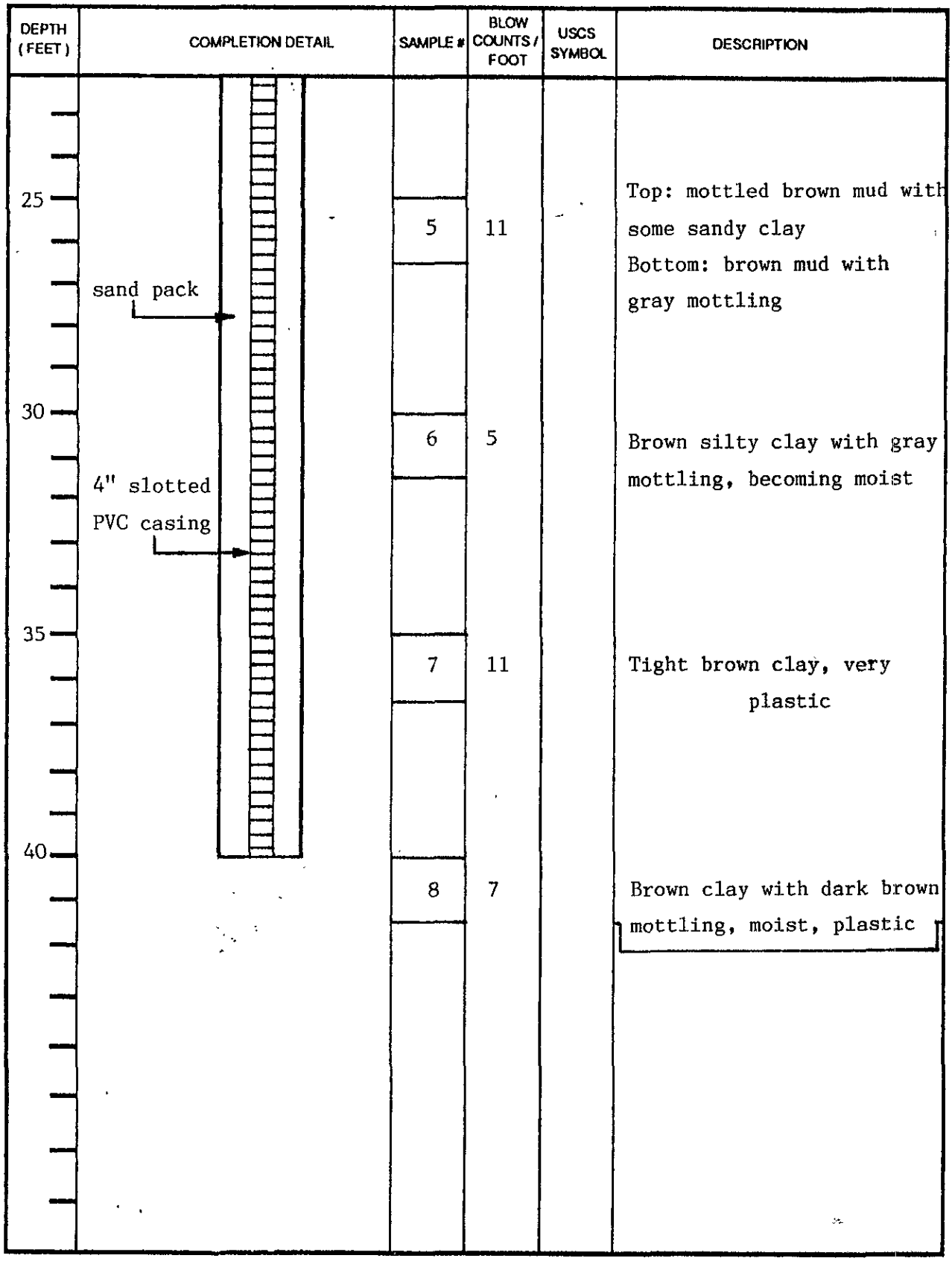
Hole/Well #: MW-8
Diameter of Drill Hole: 10"
Total Depth of Hole: 40'
Date Started: Feb. 13, 1991
Date Completed: Feb. 13, 1991



BORING LOG

PROJECT: Durham Transportation
JOB NUMBER: 91-6

HOLE / WELL #: MW-8
PAGE: 2 OF 2



BORING LOG

Project: Durham Transportation
Location: see location map
Job #: 91-6
Geologist/Engineer: J. Alt
Drill Agency: HEW Drilling

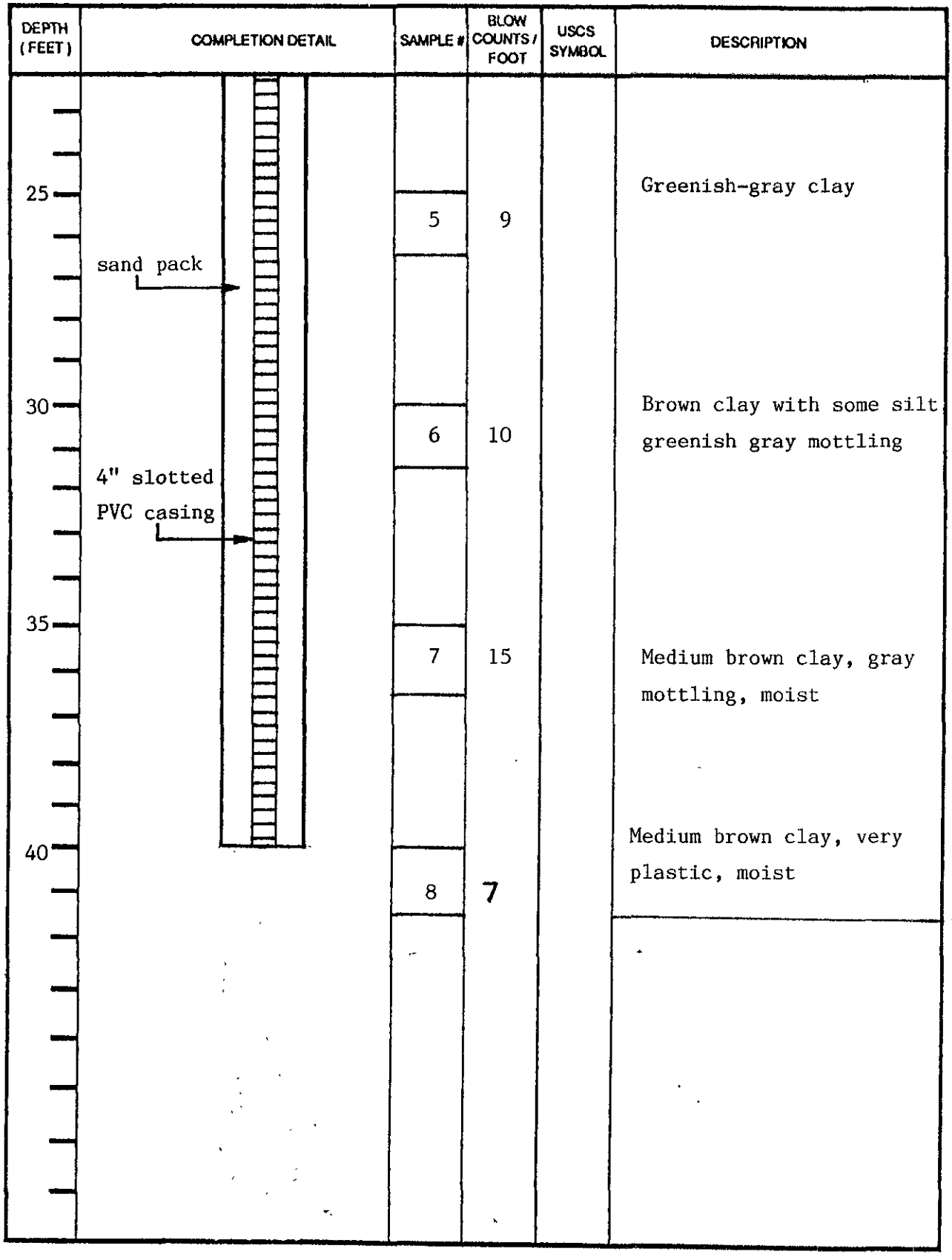
Hole/Well #: MW-9
Diameter of Drill Hole: 10"
Total Depth of Hole: 40'
Date Started: Feb. 13, 1991
Date Completed: Feb. 13, 1991

DEPTH IN FEET	WELL CONSTRUCTION DETAIL	N-VALUE	SAMPLE	GRAPHIC SYMBOL	DESCRIPTION
0					
5	4" solid PVC pipe	15	1		Medium brown clayey silt, somewhat plastic, some small angular rock fragments, dry
10	grout	8	2		Same as above
15		12	3		Brown clayey silt, locally sandy, moderated to low plasticity, grading to fine grain sand, loose, moist
	bentonite seal				
20		6	4		Brown sandy clay, gray mottling

BORING LOG

PROJECT: Durham Transportation
JOB NUMBER: 91-6

HOLE / WELL #: MW-9
PAGE: 2 OF 2



APPENDIX B

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE ♦ PLEASANTON, CALIFORNIA 94566 ♦ (415) 484-2600

GROUNDWATER PROTECTION ORDINANCE PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 19984 Meekland Ave, Hayward, CA

CLIENT
Name Durham Transportation
Address 2713 North River Ave Phone (818) 571-7020
City Rosemead, CA Zip 91770

APPLICANT
Name Toxic Technology Services
Address PO Box 515 Phone (415) 799-1140
City Reddo, CA Zip 94572

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	___	General	___
Water Supply	___	Contamination	___
Monitoring	X	Well Destruction	___

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger X
Cable ___ Other ___

DRILLER'S LICENSE NO. 384167

WELL PROJECTS
Drill Hole Diameter 10 in. Maximum
Casing Diameter 4 in. Depth 40 ft.
Surface Seal Depth 21 ft. Number 2

GEOTECHNICAL PROJECTS
Number of Borings ___ Maximum
Hole Diameter ___ in. Depth ___ ft.

ESTIMATED STARTING DATE 2/13/91
ESTIMATED COMPLETION DATE 2/13/91

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Linda Blair Date 2/7/91

FOR OFFICE USE

PERMIT NUMBER 91073
LOCATION NUMBER ___

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as arrive at the Zone 7 office five days prior proposed starting date.
2. Submit to Zone 7 within 60 days after comple of permitted work the original Department Water Resources Water Well Drillers Report equivalent for well projects, or drilling and location sketch for geotechnical projects.
3. Permit is void if project not begun within days of approval date.

(B.) WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal industrial wells or 20 feet for domestic irrigation wells unless a lesser depth specially approved. Minimum seal depth monitoring wells is the maximum depth practic or 20 feet.

C. GEOTECHNICAL. Backfill bore hole with compacted tings or heavy bentonite and upper two feet with pacted material. In areas of known or suspe contamination, tremied cement grout shall be use place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with conc placed by tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 7 Feb
Wyman Hong

1219

APPENDIX C

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
P.O. Box 515
Rodeo, CA 94572

Date: 03-01-91
NET Client Acct No: 699
NET Pacific Log No: 6100
Received: 02-14-91 0800

Client Reference Information

Durham Transportation, Project: 91-6

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

JS:rct
Enclosure(s)

NET Pacific, Inc

Client No: 699 Date: 03-01-91
Client Name: Durham Transportation, Inc
NET Log No: 6100 Page: 2

Ref: Durham Transportation, Project: 91-6

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-8 @ 25' 02-13-91 76493	 MW-8 @ 35' 02-13-91 76494	Units
METHOD 8010					
DATE ANALYZED			02-20-91	02-20-91	
DILUTION FACTOR*			1	1	
Bromodichloromethane		2.0	ND	ND	ug/Kg
Bromoform		2.0	ND	ND	ug/Kg
Bromomethane		2.0	ND	ND	ug/Kg
Carbon tetrachloride		2.0	ND	ND	ug/Kg
Chlorobenzene		2.0	ND	ND	ug/Kg
Chloroethane		2.0	ND	ND	ug/Kg
2-Chloroethylvinyl ether		5.0	ND	ND	ug/Kg
Chloroform		2.0	ND	ND	ug/Kg
Chloromethane		2.0	ND	ND	ug/Kg
Dibromochloromethane		2.0	ND	ND	ug/Kg
1,2-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,3-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,4-Dichlorobenzene		2.0	ND	ND	ug/Kg
Dichlorodifluoromethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethane		2.0	ND	ND	ug/Kg
1,2-Dichloroethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethene		2.0	ND	ND	ug/Kg
trans-1,2-Dichloroethene		2.0	ND	ND	ug/Kg
1,2-Dichloropropane		2.0	ND	ND	ug/Kg
cis-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
trans-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
Methylene Chloride		50	ND	ND	ug/Kg
1,1,2,2-Tetrachloroethane		2.0	ND	ND	ug/Kg
Tetrachloroethene		2.0	ND	ND	ug/Kg
1,1,1-Trichloroethane		2.0	ND	ND	ug/Kg
1,1,2-Trichloroethane		2.0	ND	ND	ug/Kg
Trichloroethene		2.0	ND	ND	ug/Kg
Trichlorofluoromethane		2.0	ND	ND	ug/Kg
Vinyl chloride		2.0	ND	ND	ug/Kg

NET Pacific, Inc.

Client No: 699 Date: 03-01-91
Client Name: Durham Transportation, Inc
NET Log No: 6100 Page: 3

Ref: Durham Transportation, Project: 91-6

			Descriptor, Lab No. and Results		
			MW-8 @ 25' 02-13-91	MW-8 @ 35' 02-13-91	
Parameter	Method	Reporting Limit	76493	76494	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (SOIL)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-24-91	02-24-91	
METHOD GC FID/5030			--	--	
as Gasoline		1	ND	ND	mg/Kg
METHOD 8020			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-24-91	02-24-91	
Benzene		2.5	ND	ND	ug/Kg
Ethylbenzene		2.5	ND	ND	ug/Kg
Toluene		2.5	3.3	28	ug/Kg
Xylenes, total		2.5	ND	ND	ug/Kg
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (SOIL)			--	--	
DILUTION FACTOR *			1	1	
DATE EXTRACTED			02-23-91	02-23-91	
DATE ANALYZED			02-25-91	02-25-91	
METHOD GC FID/3550			--	--	
as Diesel		1	ND	ND	mg/Kg
as Motor Oil		10	ND	ND	mg/Kg

NET Pacific, Inc.

Client No: 699 Date: 03-01-91
Client Name: Durham Transportation, Inc
NET Log No: 6100 Page: 4

Ref: Durham Transportation, Project: 91-6

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-9 @ 20' 02-13-91 76495	 MW-9 @ 30' 02-13-91 76496	Units
METHOD 8010					
DATE ANALYZED			02-20-91	02-20-91	
DILUTION FACTOR*			1	1	
Bromodichloromethane		2.0	ND	ND	ug/Kg
Bromoform		2.0	ND	ND	ug/Kg
Bromomethane		2.0	ND	ND	ug/Kg
Carbon tetrachloride		2.0	ND	ND	ug/Kg
Chlorobenzene		2.0	ND	ND	ug/Kg
Chloroethane		2.0	ND	ND	ug/Kg
2-Chloroethylvinyl ether		5.0	ND	ND	ug/Kg
Chloroform		2.0	ND	ND	ug/Kg
Chloromethane		2.0	ND	ND	ug/Kg
Dibromochloromethane		2.0	ND	ND	ug/Kg
1,2-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,3-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,4-Dichlorobenzene		2.0	ND	ND	ug/Kg
Dichlorodifluoromethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethane		2.0	ND	ND	ug/Kg
1,2-Dichloroethane		2.0	7.9	11	ug/Kg
1,1-Dichloroethene		2.0	ND	ND	ug/Kg
trans-1,2-Dichloroethene		2.0	ND	ND	ug/Kg
1,2-Dichloropropane		2.0	ND	ND	ug/Kg
cis-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
trans-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
Methylene Chloride		50	ND	ND	ug/Kg
1,1,2,2-Tetrachloroethane		2.0	ND	ND	ug/Kg
Tetrachloroethene		2.0	ND	ND	ug/Kg
1,1,1-Trichloroethane		2.0	ND	ND	ug/Kg
1,1,2-Trichloroethane		2.0	ND	ND	ug/Kg
Trichloroethene		2.0	ND	ND	ug/Kg
Trichlorofluoromethane		2.0	ND	ND	ug/Kg
Vinyl chloride		2.0	ND	ND	ug/Kg

NET Pacific, Inc.

Client No: 699 Date: 03-01-91
Client Name: Durham Transportation, Inc
NET Log No: 6100 Page: 5

Ref: Durham Transportation, Project: 91-6

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-9 @ 20' 02-13-91 76495	 MW-9 @ 30' 02-13-91 76496	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (SOIL)			--	--	
DILUTION FACTOR *			1	10	
DATE ANALYZED			02-24-91	02-24-91	
METHOD GC FID/5030			--	--	
as Gasoline		1	2.2	39	mg/Kg
METHOD 8020			--	--	
DILUTION FACTOR *			1	10	
DATE ANALYZED			02-24-91	02-24-91	
Benzene		2.5	150	180	ug/Kg
Ethylbenzene		2.5	29	230	ug/Kg
Toluene		2.5	66	340	ug/Kg
Xylenes, total		2.5	67	1000	ug/Kg
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (SOIL)			--	--	
DILUTION FACTOR *			1	1	
DATE EXTRACTED			02-23-91	02-23-91	
DATE ANALYZED			02-25-91	02-25-91	
METHOD GC FID/3550			--	--	
as Diesel		1	ND	6.0	mg/Kg
as Motor Oil		10	ND	ND	mg/Kg

NET Pacific, Inc

Client No: 699 Date: 03-01-91
Client Name: Durham Transportation, Inc
NET Log No: 6100 Page: 6

Ref: Durham Transportation, Project: 91-6

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-9 @ 40' 02-13-91 76497	Units
METHOD 8010				
DATE ANALYZED			02-20-91	
DILUTION FACTOR*			1	
Bromodichloromethane		2.0	ND	ug/Kg
Bromoform		2.0	ND	ug/Kg
Bromomethane		2.0	ND	ug/Kg
Carbon tetrachloride		2.0	ND	ug/Kg
Chlorobenzene		2.0	ND	ug/Kg
Chloroethane		2.0	ND	ug/Kg
2-Chloroethylvinyl ether		5.0	ND	ug/Kg
Chloroform		2.0	ND	ug/Kg
Chloromethane		2.0	ND	ug/Kg
Dibromochloromethane		2.0	ND	ug/Kg
1,2-Dichlorobenzene		2.0	ND	ug/Kg
1,3-Dichlorobenzene		2.0	ND	ug/Kg
1,4-Dichlorobenzene		2.0	ND	ug/Kg
Dichlorodifluoromethane		2.0	ND	ug/Kg
1,1-Dichloroethane		2.0	ND	ug/Kg
1,2-Dichloroethane		2.0	ND	ug/Kg
1,1-Dichloroethene		2.0	ND	ug/Kg
trans-1,2-Dichloroethene		2.0	ND	ug/Kg
1,2-Dichloropropane		2.0	ND	ug/Kg
cis-1,3-Dichloropropene		2.0	ND	ug/Kg
trans-1,3-Dichloropropene		2.0	ND	ug/Kg
Methylene Chloride		50	ND	ug/Kg
1,1,2,2-Tetrachloroethane		2.0	ND	ug/Kg
Tetrachloroethene		2.0	ND	ug/Kg
1,1,1-Trichloroethane		2.0	ND	ug/Kg
1,1,2-Trichloroethane		2.0	ND	ug/Kg
Trichloroethene		2.0	ND	ug/Kg
Trichlorofluoromethane		2.0	ND	ug/Kg
Vinyl chloride		2.0	ND	ug/Kg

NET Pacific, Inc.

Client No: 699 Date: 03-01-91
Client Name: Durham Transportation, Inc
NET Log No: 6100 Page: 7

Ref: Durham Transportation, Project: 91-6

			Descriptor, Lab No. and Results	
			MW-9 @ 40' 02-13-91	
Parameter	Method	Reporting Limit	76497	Units
PETROLEUM HYDROCARBONS			--	
VOLATILE (SOIL)			--	
DILUTION FACTOR *			1	
DATE ANALYZED			02-24-91	
METHOD GC FID/5030			--	
as Gasoline		1	ND	mg/Kg
METHOD 8020			--	
DILUTION FACTOR *			1	
DATE ANALYZED			02-24-91	
Benzene		2.5	ND	ug/Kg
Ethylbenzene		2.5	ND	ug/Kg
Toluene		2.5	11	ug/Kg
Xylenes, total		2.5	8.2	ug/Kg
PETROLEUM HYDROCARBONS			--	
EXTRACTABLE (SOIL)			--	
DILUTION FACTOR *			1	
DATE EXTRACTED			02-23-91	
DATE ANALYZED			02-25-91	
METHOD GC FID/3550			--	
as Diesel		1	ND	mg/Kg
as Motor Oil		10	ND	mg/Kg

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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, 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 millliliters 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 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, 16th Edition, APHA, 1985.

NATIONAL ENVIRONMENTAL TESTING, INC. NET Laboratory Group

435 Tesconi Circle, Santa Rosa, CA 95401

Lisa Polos (415)799-1140
Toxic Technology Services
P.O. Box 515
Pacheco, CA 94572

(6100)

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
91-6	Durham Transportation

SAMPLERS: (Signature) Lisa A. Polos

STA. NO	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TPH-G	TPH-D	BTEX	8010 chlorinated Hydrocarbons		REMARKS
MW-8	2/13/91				MW-8 @ 25'	1	X	X	X	X		odor (organic matter)
MW-8					MW-8 @ 35'	1	X	X	X	X		no odor
MW-9					MW-9 @ 20'	1	X	X	X	X		Strong petroleum Hydro odor
MW-9					MW-9 @ 30'	1	X	X	X	X		Strong petroleum Hydro odor
MW-9					MW-9 @ 40	1	X	X	X	X		no odor

Report to Lisa Polos
Toxic Technology
Bill to Durham Transportation

CUSTODY SEALED 2/13/91 @ 1900 MWS initials

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Lisa A. Polos	2/13/91 1435 PM	Mike Tavares 2/13/91	Mike Tavares	2/13/91	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature) (VIA NLS)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

NET 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
P.O. Box 515
Rodeo, CA 94572

Date: 03-05-91
NET Client Acct No: 699
NET Pacific Log No: 6156
Received: 02-20-91 0800

Client Reference Information

Durham Transportation, Project: 91-6

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

JS:rct
Enclosure(s)

NET Pacific, Inc

Client No: 699 Date: 03-05-91
Client Name: Durham Transportation, Inc
NET Log No: 6156 Page: 2

Ref: Durham Transportation, Project: 91-6

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-8 02-18-91 1515 77459	 MW-9 02-18-91 1540 77460	Units
METHOD 8010					
DATE ANALYZED			02-22-91	02-22-91	
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	13	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 No: 699 Date: 03-05-91
Client Name: Durham Transportation, Inc
NET Log No: 6156 Page: 3

Ref: Durham Transportation, Project: 91-6

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-8 02-18-91 1515 77459	 MW-9 02-18-91 1540 77460	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	50	
DATE ANALYZED			02-28-91	03-01-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	6.0	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			1	50	
DATE ANALYZED			02-28-91	03-01-91	
Benzene		0.5	ND	180	ug/L
Ethylbenzene		0.5	ND	19	ug/L
Toluene		0.5	ND	170	ug/L
Xylenes, total		0.5	ND	200	ug/L
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE EXTRACTED			02-24-91	02-24-91	
DATE ANALYZED			02-25-91	02-25-91	
METHOD GC FID/3510			--	--	
as Diesel		0.05	ND	1.6	mg/L
as Motor Oil		0.5	ND	ND	mg/L

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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.
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NATIONAL ENVIRONMENTAL TESTING, INC. NET Laboratory Group

6156

435 Tesconi Circle, Santa Rosa, CA 95401

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
91-6	Durham Transportation

SAMPLERS: (Signature) Lisa C. Blos

STA. NO	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TPH-D	TPH-G	BTEX	8010 Halogenated Volatile Organics	Purgeable Aromatics	REMARKS
	2/18/91	15:15		X	MW-8	6	X	X	X	X	X	
	↓	15:40		X	MW-9	6	X	X	X	X	X	

Please:
Report to Lisa Blos
Bill to Durham Trans.
Thanks,
Norm x TA

CUSTODY SEALED 2-19-91 @ 7:00 pm Initials

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Lisa C. Blos	2/18/91 15:30	Lana Bennett	Lana M. Bennett	2-19-91 7:00pm	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature) (VIA NCS)	Date / Time	Received for Laboratory by: (Signature) K Temple	Date / Time 2/20/91 0800	Remarks Samples from Toxic Technologies	