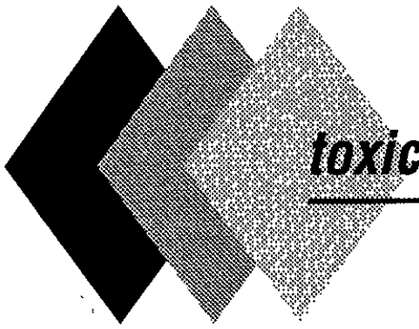

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March 10, 1993
Project No. 93-1

Mr. Dave Delamotte
Durham Transportation
9171 Capitol of Texas Highway, North
Travis Building, Suite 200
Austin, Texas 78759

Subject: Remediation Progress Report 1
Period Covering
December 1, 1992 - January 31, 1993
19984 Meekland Avenue, Hayward, CA

Dear Mr. Delamotte:

Enclosed is the first progress report for the remediation of on site 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
Groundwater Monitoring Well Installation
Groundwater Monitoring Well Abandonment
Summary

After you review this document, it is recommended that copies be sent to Ms. Juliete Shin of the Alameda County Health Care Services Department, Hazardous Materials Division and Mr. Eddy So of the Regional Water Quality Control Board. Extra copies of this report have been provided to you for this purpose.

Thank you for this opportunity to provide Durham Transportation with these environmental services. If you have any questions, please call either of the undersigned at (510) 799-1140.

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 first progress report of activities in the remediation of on site soil and groundwater contamination at 19984 Meekland Avenue, in the unincorporated area of Alameda County, near Hayward, California. This report covers the period of December 1, 1992 through January 31, 1993.

The purpose of this program is to delineate, contain and remediate on site soil and groundwater contamination. The workplan, dated November 1, 1992, and associated amendments, detail upcoming remediation activities.

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 groundwater elevation data are presented on Table 1. Figure 1 is a graph showing monthly variations in the elevation of groundwater at the site over a two year period. In any given month, the groundwater elevation across the site generally varies within 0.1 feet. This variation is roughly within the range of error in the measuring techniques. The data indicate that the water table fluctuates in response to the various seasons of the year. Table 1a presents the monthly odor and sheen observations recorded concurrently with the elevations of groundwater.

Figure 2 is a gradient map depicting the interpolated groundwater gradient for the site over the reporting period. The data indicate that the site is essentially flat with a very low westward to northwestward gradient. This is consistent with the regional gradient.

QUARTERLY MONITORING WELL SAMPLING AND ANALYSIS

On January 28 and 29, 1993, the three two-inch diameter groundwater monitoring wells (Plate 1) were each purged of a minimum of 8 gallons of water and samples collected. The six four-inch diameter wells were each purged of a minimum of 30 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 55 gallon drums.

Sampling was conducted by Lisa Polos, REA, and John Alt, CEG, of Toxic Technology Services.

At the time of sample collection, the contents of the first bailer of water were inspected to assess the presence of any floating product. None of the wells, at the time of sample collection, contained floating product.

MW-12 was installed and samples collected in December 1992. This well was not purged and sampled for this sampling round, but will be included in future quarterly monitoring. This is discussed in the following section.

MW-1 was abandoned in December 1992 and is therefore not included in this sampling round or any future monitoring. The destruction is discussed in a following section.

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 summarizes the results from this sampling round. The NET analytical reports are presented under Appendix A.

GROUNDWATER MONITORING WELL INSTALLATION

On December 14, 1992, one on site groundwater monitoring well was installed by HEW Drilling, under the direction of John Alt, CEG. The well, MW-12 is located at the northeast corner of the site as shown on Plate 1. The well was installed using a CME 75 drill rig with hollow stem augers. 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 MW-12 and is presented as Plate 2. 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-fitting 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.

Two inch (ID) Schedule 40 PVC pipe was used for the well casing of MW-12. The 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 boring was 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. A Monitoring Well Installation Report containing more detailed information on the well installation was recorded and is on file.

← Boring Log

Prior to drilling, a permit for the installation of the monitoring well was obtained from Zone 7 of the Alameda County Flood Control and Water Conservation District. The permit is attached as Appendix B.

The units encountered in the boring from monitoring well MW-12 are shown on the boring log, Plate 2. The soil samples collected had no odor above 20 feet. At twenty feet a slight hydrocarbon odor was detected. The odor was not detected at 25 feet, but a moderate to strong odor was detected at 30 feet. The odor was slight at 35 feet and not detected at 40 feet. No soil staining was noted at any depth. Groundwater was encountered at approximately 32 feet.

Standard Practice —

← At what pt. was this well developed?

It is our opinion that the soils contaminated in this well are a result of groundwater contamination.

hand pump + bailer

On January 21, 1993, MW-12 was purged of approximately 30 gallons of water and sampled. These activities were conducted by Mr. John Alt, CEG and Ms. Lisa Polos using a Triloc pump. After the wells were purged, groundwater samples were collected using a three-foot disposable bailer.

The first sample from the 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 MW-12 exhibited a slight odor, but no sheen. Sample vials and jars, provided by the laboratory, were filled from the bailer and put into a chilled ice chest.

Chemical data from soil and groundwater samples are presented in Table 3. The soil indicates low levels of hydrocarbon contamination at the level of groundwater. The groundwater contains low levels of what appears to be old gasoline. Neither the soil nor the groundwater contained detectable levels of chlorinated hydrocarbons.

The NET Pacific analytical report for soils and water collected from MW-12 is presented under Appendix C.

GROUNDWATER MONITORING WELL ABANDONMENT

MW-1 was the original monitoring well installed on the site (June 1986) prior to the tank excavations and subsequent investigations by Toxic Technology Services. The well was located just west of the existing tank excavation

(Plate 1). In preparation of the proposed over-excavation for the soil remediation, it was necessary to properly abandon the well as the integrity of the well would be impacted by the proposed work. The well was constructed of two inch diameter PVC pipe and reported to be approximately 41.5 ft. deep. A copy of the original well log is presented as Appendix D. The Zone 7 permit number for the well installation is 86154 and the location number is 3S/2W 17C80.

Well destruction permit #92625 (Appendix B) was obtained from Zone 7 prior to the abandonment. The well was abandoned on December 14, 1992, by HEW Drilling under the supervision of the undersigned. The christy box and casing were removed prior to drilling. The grout seal and sand pack were drilled-out using an over-sized (10 in.) hollow-stem auger to below the depth of the well (approximately 43 feet). The hole was then pressure grouted using a grout pump and trimie pipe, grouting from the bottom of the hole upward to displace the water in the hole. The pumping continued until the grout reached the ground surface.

The grout settled and set at a depth of approximately 2-3 feet below the surface. Cuttings from the drilling were placed in drums and left on site to be treated concurrently with the proposed soil remediation.

SUMMARY

The State of California Maximum Contaminant Level (MCL) 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.

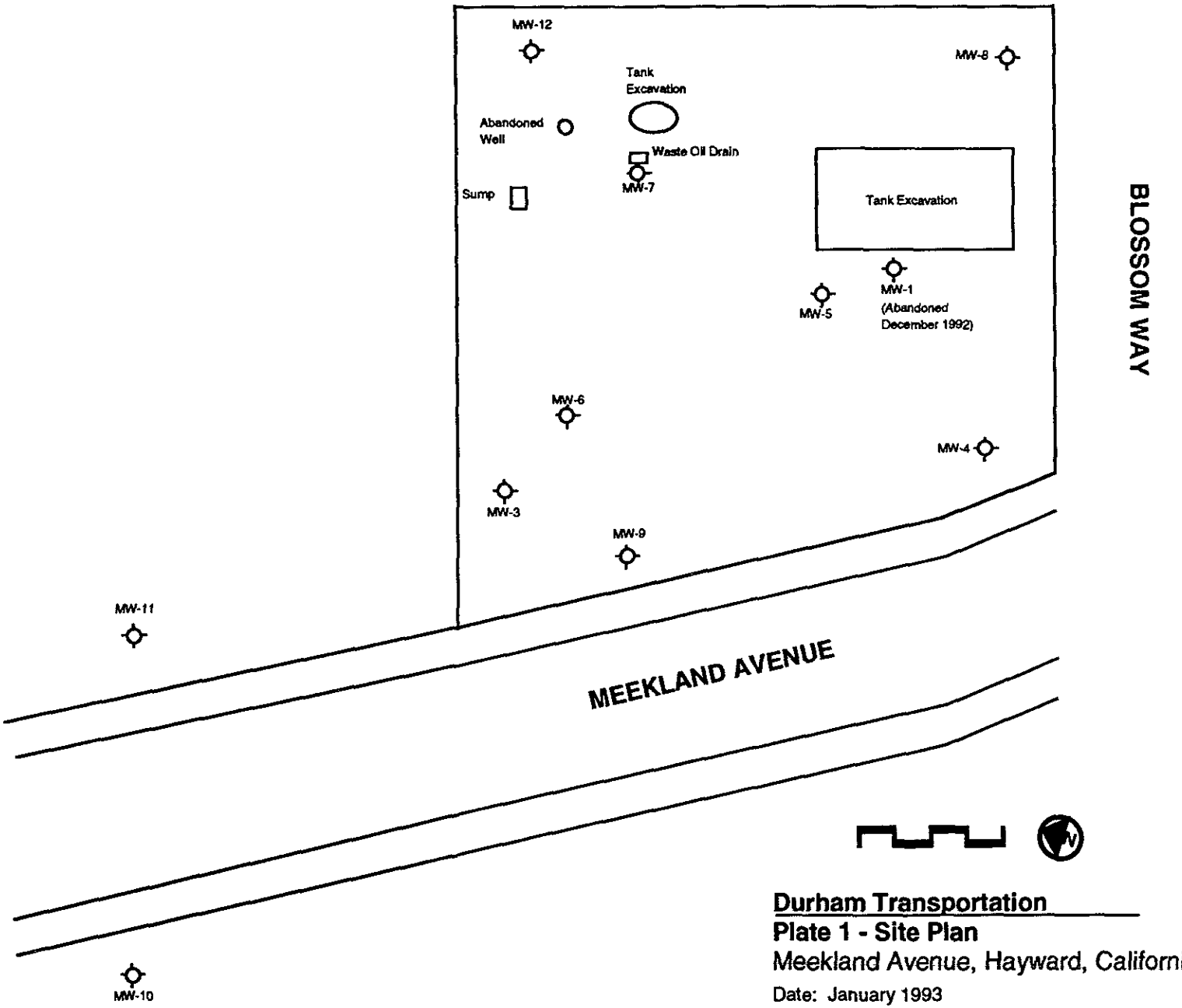
All wells except MW-8, MW-11 and MW-12 are over the MCL in drinking water for 1,2-Dichloroethane. All wells except MW-8 are over the MCL for Benzene. MW-6 is over the MCL for Xylenes. MW-5, MW-6 and MW-9 are over the recommended drinking water action level for Toluene.

Trace levels of Tetrachloroethane were found in MW-7 and MW-8. The highest level of gasoline was found in MW-5. MW-5 is now the closest well to the fuel tank excavation.

Petroleum hydrocarbons heavier than gasoline, but lighter than diesel, were found in every well except MW-8. This seems to indicate the presence of very old gasoline.

MW-8, the on site up gradient well, contains trace levels of Tetrachloroethene. This is consistent with previous sampling rounds. Levels of contamination in MW-8, when present, are substantially lower than in the rest of the wells and still seem to indicate that the source of contamination was located on site.

The most recently installed well, MW-12, indicates that there are low levels of contamination located at the northeast corner of the site. The contamination appears to be old gasoline.



Durham Transportation

Plate 1 - Site Plan

Meekland Avenue, Hayward, California

Date: January 1993

Scale: 1 inch = 30 feet

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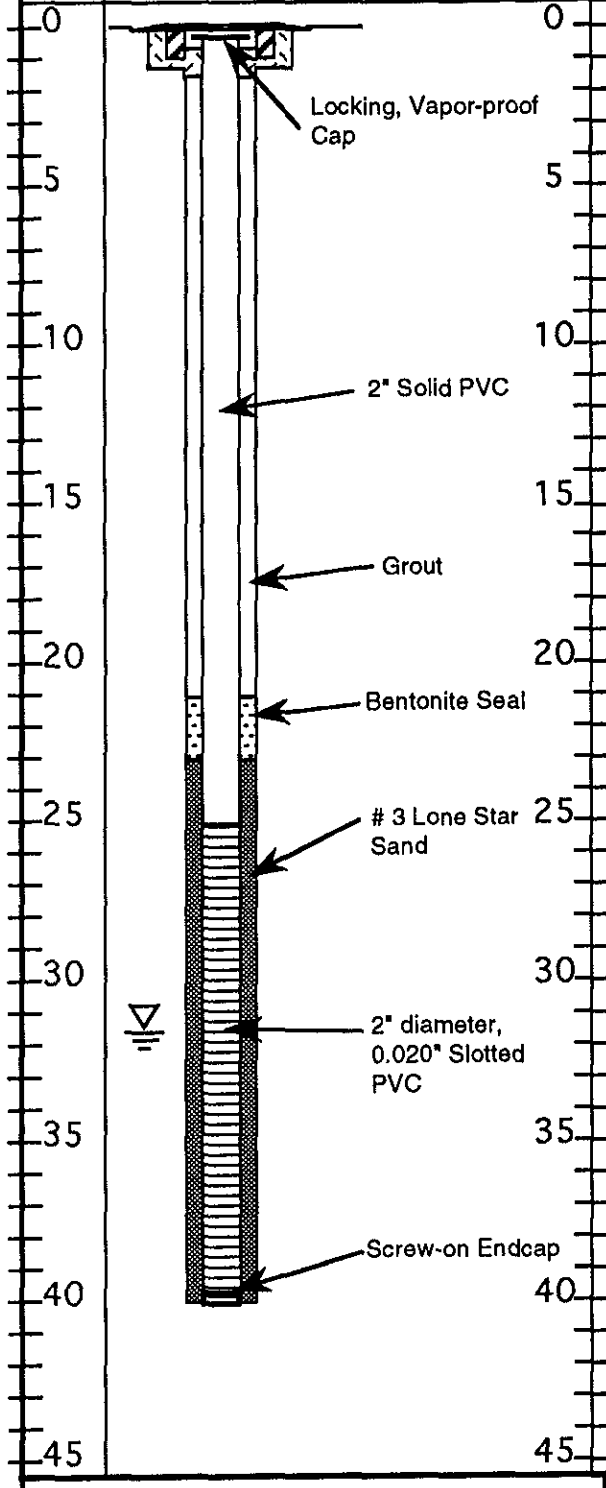
BORING LOG AND RECORD OF MONITORING WELL INSTALLATION

Plate 2
MW-12



N-VALUE	SAMPLE #	DESCRIPTION
		4" Asphalt
		Fill, Brown sand
		Dark brown clay, Organic, Dry, Locally silty
22/23/18	1	Reddish brown clayey silt, Dry, Grading to yellowish brown silt
6/7/8	2	Brown clayey silt, Dry
4/5/7	3	Brown clayey silt, Dry, Tan mottling, locally with very fine sand
3/3/4	4	Gray silty clay with reddish brown mottling, Moist, Plastic
5/6/9	5	Brownish gray clay with reddish brown mottling, Moist, Plastic Mottling is oxidation along small root zones
5/6/8	6	Brownish gray clay with blue green mottling, Moist to wet, Plastic
5/6/9	7	Brown clay with reddish brown oxidation, Wet, Plastic
4/6/8	8	Grayish brown silty to sandy clay with reddish brown mottling, Wet, Grading to clayey silt
		End of Boring

CTTS , Inc.
toxic technology services
P.O. Box 515 • Rodeo, California 94572
(510) 799-1140

Project	Durham Transportation	Hole/well #	10
Location	19984 Meekland Ave	Diameter of Drill Hole	10"
Job #		Total Depth of Hole	40'
Geologist/Engineer	J. N. Alt	Date Started	12/14/92
Driller	HEW	Date Completed	12/14/92

TABLE 1

GROUNDWATER ELEVATIONS (feet above MSL)
DURHAM TRANSPORTATION--MEEKLAND PROJECT

DATE	MW3	MW4	MW5	MW6	MW7	MW8	MW9	MW10	MW11	MW12
Jan-91	25.16	25.22	25.54	25.16	25.21	.	.	.	.	.
Feb-91	25.38	25.45	25.39	25.40	25.46	25.48	25.40	.	.	.
Mar-91	27.45	29.56	26.62	27.46	27.50	27.40	27.40	.	.	.
Apr-91	28.09	27.99	28.04	28.00	28.02	28.06	27.99	.	.	.
May-91	27.12	27.16	27.17	27.11	27.19	27.19	27.13	.	.	.
Jun-91	26.45	26.56	26.77	26.46	26.53	26.57	26.58	.	.	.
Jul-91	26.04	26.05	26.13	26.04	26.10	26.13	26.04	.	.	.
Aug-91	25.49	25.62	25.37	25.50	25.59	25.60	25.52	.	.	.
Sep-91	25.18	25.18	25.49	25.06	25.16	25.18	25.15	.	.	.
Oct-91	24.86	24.92	25.00	24.82	24.97	24.94	24.84	.	.	.
Nov-91	24.90	24.97	24.94	24.87	24.94	24.96	24.89	.	.	.
Dec-91	24.69	24.78	24.89	24.67	24.76	24.79	24.70	.	.	.
Jan-92	25.31	25.28	25.48	25.31	25.37	25.37	25.32	25.16	25.90	.
Feb-92	28.23	28.22	28.24	28.15	28.24	28.26	28.19	28.37	28.18	.
Mar-92	28.54	28.46	28.49	28.40	28.46	28.59	28.42	28.32	28.41	.
Apr-92	28.43	28.48	28.39	28.43	28.49	28.51	28.44	28.32	28.44	.
May-92	27.76	27.75	27.79	27.56	27.75	27.79	27.70	27.67	27.68	.
Jun-92	26.92	26.87	26.88	26.81	26.87	26.92	26.81	26.64	26.76	.
Jul-92	26.40	26.47	26.49	26.41	28.16	26.53	26.41	26.23	26.37	.
Aug-92	25.88	25.85	25.81	25.76	25.83	25.88	25.79	25.26	26.07	.
Sep-92	25.68	25.64	25.60	25.56	25.61	25.67	25.56	25.39	25.54	.
Oct-92	25.30	25.27	25.29	25.17	25.23	25.32	25.19	25.00	25.14	.
Nov-92	25.17	25.25	25.25	25.17	25.25	25.29	25.19	25.01	25.13	.
Dec-92	26.10	26.06	26.03	26.02	26.05	26.10	26.02	25.92	26.08	26.35
Jan-93	30.74	30.76	30.72	30.73	30.82	30.82	30.74	30.65	30.74	30.82

MW-1 abandoned December 14, 1992. Consult previous reports for MW-1 data.

TABLE 1a

GROUNDWATER ODOR AND SHEEN OBSERVATIONS
DURHAM TRANSPORTATION--MEEKLAND PROJECT

	MW3		MW4		MW5		MW6		MW7		MW8		MW9		MW10		MW11		MW12	
Jan-91	-	-	-	-	-	-	o	-	o	-	.	.	.	.	.	.	.	.	.	.
Feb-91	-	-	-	-	o	-	o	-	-	-	-	-	o	-	.	.	.	.	.	.
Mar-91	X	X	X	X	X	X	X	X	X	X	X	X	X	X	.	.	.	.	.	.
Apr-91	-	-	-	S	-	-	-	-	-	-	-	-	-	-	.	.	.	.	.	.
May-91	-	-	-	-	o	-	-	-	-	-	-	-	-	-	.	.	.	.	.	.
Jun-91	-	-	-	-	o	-	-	-	-	-	-	-	-	-	.	.	.	.	.	.
Jul-91	-	-	-	-	-	-	o	-	-	-	-	-	-	-	.	.	.	.	.	.
Aug-91	-	-	o	-	o	-	o	-	o	-	-	-	-	-	.	.	.	.	.	.
Sep-91	-	-	-	-	o	-	o	-	-	-	-	-	-	-	.	.	.	.	.	.
Oct-91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.	.	.	.	.	.
Nov-91	-	-	-	-	o	-	o	-	-	-	-	-	-	-	.	.	.	.	.	.
Dec-91	o	-	-	-	o	-	o	-	-	-	-	-	-	-	.	.	.	.	.	.
Jan-92	o	-	-	-	o	-	o	-	-	-	-	-	o	-	o	-	o	-	.	.
Feb-92	-	-	-	-	o	-	-	-	-	-	-	-	-	-	O	-	-	-	.	.
Mar-92	-	-	-	-	o	S	-	-	-	-	-	-	o	-	o	-	-	-	.	.
Apr-92	o	-	-	-	o	-	o	-	-	-	-	-	-	-	o	-	-	-	.	.
May-92	o	-	-	-	o	-	-	-	o	-	-	-	-	-	o	-	o	-	.	.
Jun-92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	-	-	-	.	.
Jul-92	-	-	-	-	o	-	-	-	-	-	-	-	-	-	-	-	-	-	.	.
Aug-92	-	-	-	-	o	-	-	-	-	-	-	-	-	-	-	-	-	-	.	.
Sep-92	-	-	-	-	o	-	-	-	-	-	-	-	-	-	o	-	-	-	.	.
Oct-92	-	-	-	-	o	-	o	-	-	-	-	-	-	-	O	-	-	-	.	.
Nov-92	-	-	-	-	o	-	o	-	-	-	-	-	o	-	o	-	o	-	.	.
Dec-92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o	-
Jan-93	o	-	-	-	O	-	-	-	-	-	-	-	o	-	-	-	-	-	-	-

O=Strong Odor **o**=Slight Odor **S**=Sheen -=None Present **X**= No Observation Made

MW-1 abandoned December 14, 1992. Consult previous reports for MW-1 data.

TABLE 2

GROUNDWATER CHEMICAL DATA--JANUARY 1993
DURHAM TRANSPORTATION--MEEKLAND PROJECT

PARAMETER	UNITS	MW-3	MW-4	MW-5	MW-5 DUP	MW-6	MW-7
Gasoline	mg/L	2.3	0.96	18	19	13	2.1
Diesel	mg/L	0.68	0.24	1.9	2.1	2.1	0.66
Benzene	ug/L	630	200	5800	4600	2500	390
Ethylbenzene	ug/L	180	41	560	370	370	100
Toluene	ug/L	31	4.6	1900	1600	540	21
Xylenes	ug/L	330	9.4	1600	1400	2400	270
1,2-Dichloroethane	ug/L	13	1.0	110	120	36	3.7
Tetrachloroethene	ug/L	ND	ND	ND	ND	ND	0.60

		MW-8	MW-9	MW-10	MW-11	BLANK
Gasoline	mg/L	ND	8.5	7.5	0.78	ND
Diesel	mg/L	ND	0.74	2.2	0.37	ND
Benzene	ug/L	ND	2400	130	10	ND
Ethylbenzene	ug/L	ND	390	170	2.1	ND
Toluene	ug/L	ND	620	20	ND	ND
Xylenes	ug/L	ND	1500	710	39	ND
1,2-Dichloroethane	ug/L	ND	29	18	ND	ND
Tetrachloroethene	ug/L	0.80	ND	ND	ND	ND

• The positive result for the Petroleum Hydrocarbon as Diesel analysis on this sample appears to be a lighter hydrocarbon than Diesel.

TABLE 3

MONITORING WELL INSTALLATION -- DECEMBER 1992
SOIL AND GROUNDWATER CHEMICAL DATA

DURHAM TRANSPORTATION--MEEKLAND PROJECT

MW-12

WATER
Sampled 12/21/92

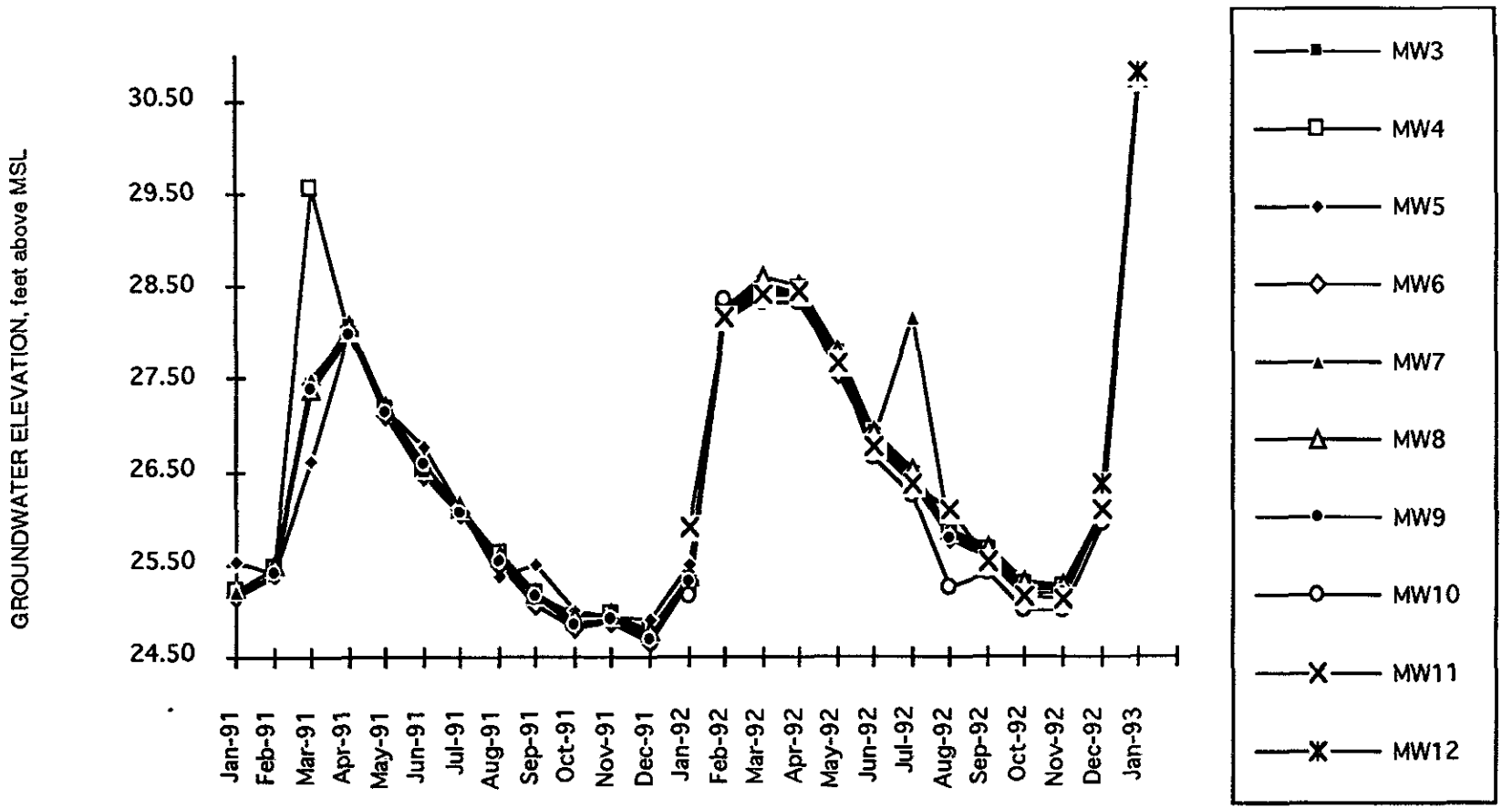
Gasoline	mg/L	2.8
Diesel	mg/L	*1.7
Benzene	ug/L	14
Ethylbenzene	ug/L	ND
Toluene	ug/L	ND
Xylenes	ug/L	29
1,2-Dichloroethane	ug/L	ND
Tetrachloroethene	ug/L	ND

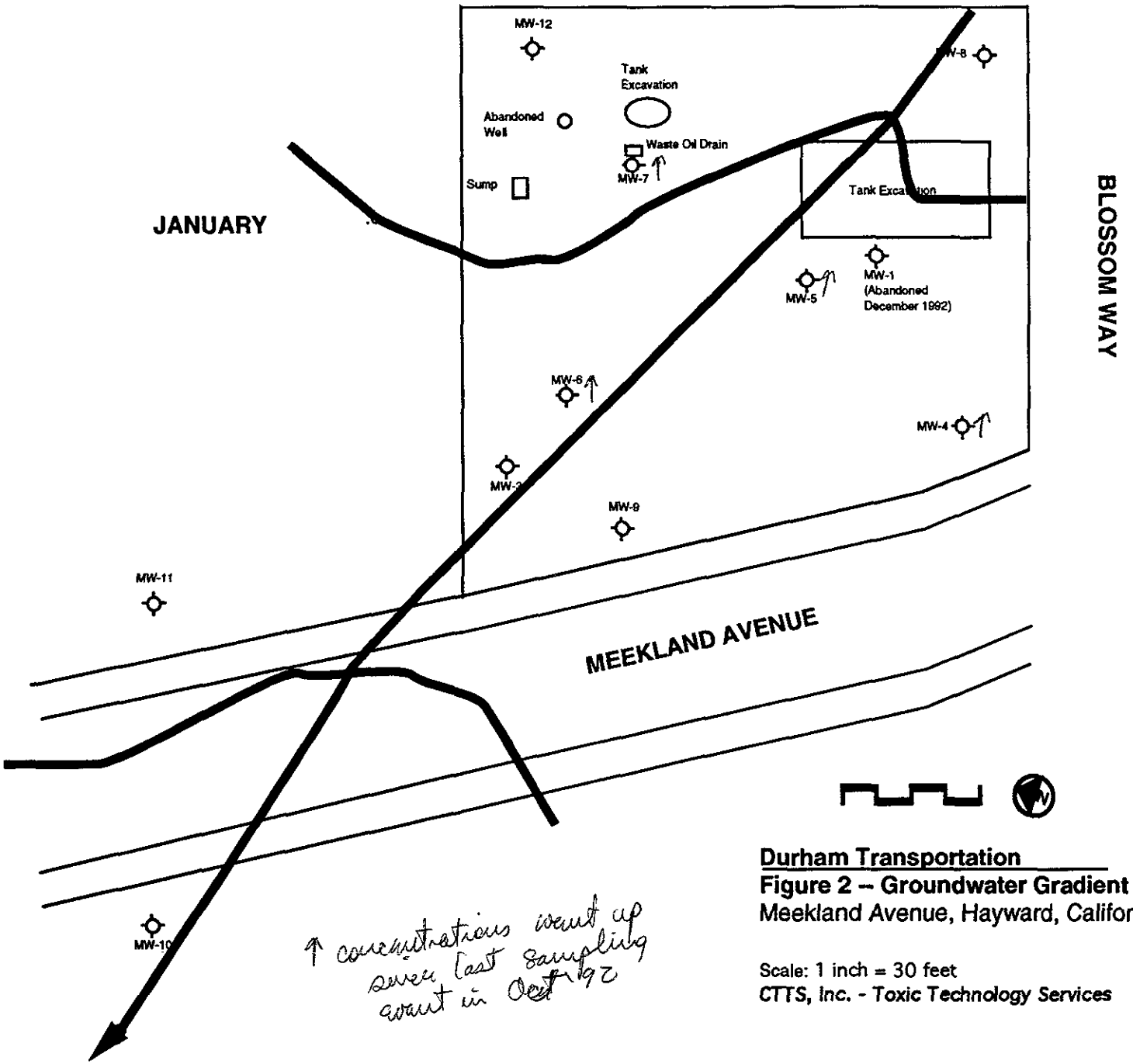
SOIL
Sampled 12/14/92

DEPTH		20'	30'	40'
Gasoline	mg/Kg	ND	29	ND
Diesel	mg/Kg	ND	*11	ND
Benzene	ug/Kg	ND	78	ND
Ethylbenzene	ug/Kg	ND	100	ND
Toluene	ug/Kg	ND	ND	ND
Xylenes	ug/Kg	ND	160	ND

* The positive result for the Petroleum Hydrocarbon as Diesel analysis on this sample appears to be a lighter hydrocarbon than Diesel.

FIGURE 1
DURHAM TRANSPORTATION – MEEKLAND PROJECT
GROUNDWATER ELEVATIONS, feet above MSL





Durham Transportation

Figure 2 -- Groundwater Gradient Map

Meekland Avenue, Hayward, California

Scale: 1 inch = 30 feet

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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: 02/17/1993
NET Client Acct No: 70700
NET Pacific Job No: 93.00315
Received: 01/30/1993

Client Reference Information

Durham-Meekland Ave/93-1MZ

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

JS:rct
Enclosure(s)

Ref: Durham-Meekland Ave/93-1MZ

Descriptor, Lab No. and Results

Parameter	MW-3 01/28/1993 150066	MW-4 01/28/1993 150067	Reporting Limit	Units	Method
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)	--	--			
DATE ANALYZED	02-04-93	02-03-93			
DILUTION FACTOR*	10	1			
as Gasoline	2.3	0.96	0.05	mg/L	5030
METHOD 8020 (GC,Liquid)	--	--			
DATE ANALYZED	02-04-93	02-03-93			
DILUTION FACTOR*	10	1			
Benzene	630	200	0.5	ug/L	8020
Ethylbenzene	180	41	0.5	ug/L	8020
Toluene	31	4.6	0.5	ug/L	8020
Xylenes (Total)	330	9.4	0.5	ug/L	8020
SURROGATE RESULTS	--	--			
Bromofluorobenzene	94	94		% Rec.	5030
METHOD 3510 (GC,FID)					
DILUTION FACTOR*	1	1			
DATE EXTRACTED	02-04-93	02-04-93			
DATE ANALYZED	02-08-93	02-08-93			
as Diesel	0.68**	0.24**	0.05	mg/L	3510

** The positive result for Petroleum Hydrocarbons as Diesel appears to be due to the presence of lighter hydrocarbons rather than Diesel.

Ref: Durham-Meekland Ave/93-1MZ

Descriptor, Lab No. and Results

Parameter	MW-3 01/28/1993 150066	MW-4 01/28/1993 150067	Reporting Limit	Units	Method
METHOD 601 (GC,Liquid)					
DATE ANALYZED	02-09-93	02-09-93			
DILUTION FACTOR*	1	1			
Bromodichloromethane	ND	ND	0.4	ug/L	601
Bromoform	ND	ND	0.4	ug/L	601
Bromomethane	ND	ND	0.4	ug/L	601
Carbon tetrachloride	ND	ND	0.4	ug/L	601
Chlorobenzene	ND	ND	0.4	ug/L	601
Chloroethane	ND	ND	0.4	ug/L	601
2-Chloroethylvinyl ether	ND	ND	1.0	ug/L	601
Chloroform	ND	ND	0.4	ug/L	601
Chloromethane	ND	ND	0.4	ug/L	601
Dibromochloromethane	ND	ND	0.4	ug/L	601
1,2-Dichlorobenzene	ND	ND	0.4	ug/L	601
1,3-Dichlorobenzene	ND	ND	0.4	ug/L	601
1,4-Dichlorobenzene	ND	ND	0.4	ug/L	601
Dichlorodifluoromethane	ND	ND	0.4	ug/L	601
1,1-Dichloroethane	ND	ND	0.4	ug/L	601
1,2-Dichloroethane	13	1.0	0.4	ug/L	601
1,1-Dichloroethene	ND	ND	0.4	ug/L	601
trans-1,2-Dichloroethene	ND	ND	0.4	ug/L	601
1,2-Dichloropropane	ND	ND	0.4	ug/L	601
cis-1,3-Dichloropropene	ND	ND	0.4	ug/L	601
trans-1,3-Dichloropropene	ND	ND	0.4	ug/L	601
Methylene chloride	ND	ND	10	ug/L	601
1,1,2,2-Tetrachloroethane	ND	ND	0.4	ug/L	601
Tetrachloroethene	ND	ND	0.4	ug/L	601
1,1,1-Trichloroethane	ND	ND	0.4	ug/L	601
1,1,2-Trichloroethane	ND	ND	0.4	ug/L	601
Trichloroethene	ND	ND	0.4	ug/L	601
Trichlorofluoromethane	ND	ND	0.4	ug/L	601
Vinyl chloride	ND	ND	0.4	ug/L	601
SURROGATE RESULTS	--	--			
1,4-Difluorobenzene	79	91		% Rec.	601
1,4-Dichlorobutane	86	98		% Rec.	601

Ref: Durham-Meekland Ave/93-1MZ

Descriptor, Lab No. and Results

Parameter	MW-11 01/28/1993 150068	MW-5 01/29/1993 150069	Reporting Limit	Units	Method
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)	--	--			
DATE ANALYZED	02-03-93	02-06-93			
DILUTION FACTOR*	1	100			
as Gasoline	0.78	18	0.05	mg/L	5030
METHOD 8020 (GC,Liquid)	--	--			
DATE ANALYZED	02-03-93	02-06-93			
DILUTION FACTOR*	1	1,000			
Benzene	10	5,800	0.5	ug/L	8020
Ethylbenzene	2.1	560	0.5	ug/L	8020
Toluene	ND	1,900	0.5	ug/L	8020
Xylenes (Total)	39	1,600	0.5	ug/L	8020
SURROGATE RESULTS	--	--			
Bromofluorobenzene	97	83		% Rec.	5030
METHOD 3510 (GC,FID)					
DILUTION FACTOR*	1	1			
DATE EXTRACTED	02-04-93	02-04-93			
DATE ANALYZED	02-08-93	02-08-93			
as Diesel	0.37**	1.9**	0.05	mg/L	3510

** The positive result for Petroleum Hydrocarbons as Diesel appears to be due to the presence of lighter hydrocarbons rather than Diesel.

Ref: Durham-Meekland Ave/93-1MZ

Descriptor, Lab No. and Results

Parameter	MW-11 01/28/1993 150068	MW-5 01/29/1993 150069	Reporting Limit	Units	Method
METHOD 601 (GC,Liquid)					
DATE ANALYZED	02-09-93	02-09-93			
DILUTION FACTOR*	1	1			
Bromodichloromethane	ND	ND	0.4	ug/L	601
Bromoform	ND	ND	0.4	ug/L	601
Bromomethane	ND	ND	0.4	ug/L	601
Carbon tetrachloride	ND	ND	0.4	ug/L	601
Chlorobenzene	ND	ND	0.4	ug/L	601
Chloroethane	ND	ND	0.4	ug/L	601
2-Chloroethylvinyl ether	ND	ND	1.0	ug/L	601
Chloroform	ND	ND	0.4	ug/L	601
Chloromethane	ND	ND	0.4	ug/L	601
Dibromochloromethane	ND	ND	0.4	ug/L	601
1,2-Dichlorobenzene	ND	ND	0.4	ug/L	601
1,3-Dichlorobenzene	ND	ND	0.4	ug/L	601
1,4-Dichlorobenzene	ND	ND	0.4	ug/L	601
Dichlorodifluoromethane	ND	ND	0.4	ug/L	601
1,1-Dichloroethane	ND	ND	0.4	ug/L	601
1,2-Dichloroethane	ND	110	0.4	ug/L	601
1,1-Dichloroethene	ND	ND	0.4	ug/L	601
trans-1,2-Dichloroethene	ND	ND	0.4	ug/L	601
1,2-Dichloropropane	ND	ND	0.4	ug/L	601
cis-1,3-Dichloropropene	ND	ND	0.4	ug/L	601
trans-1,3-Dichloropropene	ND	ND	0.4	ug/L	601
Methylene chloride	ND	ND	10	ug/L	601
1,1,2,2-Tetrachloroethane	ND	ND	0.4	ug/L	601
Tetrachloroethene	ND	ND	0.4	ug/L	601
1,1,1-Trichloroethane	ND	ND	0.4	ug/L	601
1,1,2-Trichloroethane	ND	ND	0.4	ug/L	601
Trichloroethene	ND	ND	0.4	ug/L	601
Trichlorofluoromethane	ND	ND	0.4	ug/L	601
Vinyl chloride	ND	ND	0.4	ug/L	601
SURROGATE RESULTS	--	--			
1,4-Difluorobenzene	104	48		% Rec.	601
1,4-Dichlorobutane	115	129		% Rec.	601

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Descriptor, Lab No. and Results

Parameter	MW-6 01/29/1993 150070	MW-7 01/29/1993 150071	Reporting Limit	Units	Method
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)	--	--			
DATE ANALYZED	02-04-93	02-04-93			
DILUTION FACTOR*	10	1			
as Gasoline	13	2.1	0.05	mg/L	5030
METHOD 8020 (GC,Liquid)	--	--			
DATE ANALYZED	02-04-93	02-04-93			
DILUTION FACTOR*	10	1			
Benzene	2,500	390	0.5	ug/L	8020
Ethylbenzene	370	100	0.5	ug/L	8020
Toluene	540	21	0.5	ug/L	8020
Xylenes (Total)	2,400	270	0.5	ug/L	8020
SURROGATE RESULTS	--	--			
Bromofluorobenzene	91	95		% Rec.	5030
METHOD 3510 (GC,FID)					
DILUTION FACTOR*	1	1			
DATE EXTRACTED	02-04-93	02-04-93			
DATE ANALYZED	02-08-93	02-08-93			
as Diesel	2.1**	0.66**	0.05	mg/L	3510

** The positive result for Petroleum Hydrocarbons as Diesel appears to be due to the presence of lighter hydrocarbons rather than Diesel.

Ref: Durham-Meekland Ave/93-1MZ

Descriptor, Lab No. and Results

Parameter	MW-6 01/29/1993 150070	MW-7 01/29/1993 150071	Reporting Limit	Units	Method
METHOD 601 (GC,Liquid)					
DATE ANALYZED	02-09-93	02-09-93			
DILUTION FACTOR*	1	1			
Bromodichloromethane	ND	ND	0.4	ug/L	601
Bromoform	ND	ND	0.4	ug/L	601
Bromomethane	ND	ND	0.4	ug/L	601
Carbon tetrachloride	ND	ND	0.4	ug/L	601
Chlorobenzene	ND	ND	0.4	ug/L	601
Chloroethane	ND	ND	0.4	ug/L	601
2-Chloroethylvinyl ether	ND	ND	1.0	ug/L	601
Chloroform	ND	ND	0.4	ug/L	601
Chloromethane	ND	ND	0.4	ug/L	601
Dibromochloromethane	ND	ND	0.4	ug/L	601
1,2-Dichlorobenzene	ND	ND	0.4	ug/L	601
1,3-Dichlorobenzene	ND	ND	0.4	ug/L	601
1,4-Dichlorobenzene	ND	ND	0.4	ug/L	601
Dichlorodifluoromethane	ND	ND	0.4	ug/L	601
1,1-Dichloroethane	ND	ND	0.4	ug/L	601
1,2-Dichloroethane	36	3.7	0.4	ug/L	601
1,1-Dichloroethene	ND	ND	0.4	ug/L	601
trans-1,2-Dichloroethene	ND	ND	0.4	ug/L	601
1,2-Dichloropropane	ND	ND	0.4	ug/L	601
cis-1,3-Dichloropropene	ND	ND	0.4	ug/L	601
trans-1,3-Dichloropropene	ND	ND	0.4	ug/L	601
Methylene chloride	ND	ND	10	ug/L	601
1,1,2,2-Tetrachloroethane	ND	ND	0.4	ug/L	601
Tetrachloroethene	ND	0.6	0.4	ug/L	601
1,1,1-Trichloroethane	ND	ND	0.4	ug/L	601
1,1,2-Trichloroethane	ND	ND	0.4	ug/L	601
Trichloroethene	ND	ND	0.4	ug/L	601
Trichlorofluoromethane	ND	ND	0.4	ug/L	601
Vinyl chloride	ND	ND	0.4	ug/L	601
SURROGATE RESULTS	--	--			
1,4-Difluorobenzene	63	87		% Rec.	601
1,4-Dichlorobutane	112	102		% Rec.	601

Ref: Durham-Meekland Ave/93-1MZ

Descriptor, Lab No. and Results

Parameter	MW-8 01/29/1993 150072	MW-9 01/29/1993 150073	Reporting Limit	Units	Method
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)	--	--			
DATE ANALYZED	02-04-93	02-04-93			
DILUTION FACTOR*	1	10			
as Gasoline	ND	8.5	0.05	mg/L	5030
METHOD 8020 (GC,Liquid)	--	--			
DATE ANALYZED	02-04-93	02-04-93			
DILUTION FACTOR*	1	10			
Benzene	ND	2,400	0.5	ug/L	8020
Ethylbenzene	ND	390	0.5	ug/L	8020
Toluene	ND	620	0.5	ug/L	8020
Xylenes (Total)	ND	1,500	0.5	ug/L	8020
SURROGATE RESULTS	--	--			
Bromofluorobenzene	92	89		% Rec.	5030
METHOD 3510 (GC,FID)					
DILUTION FACTOR*	1	1			
DATE EXTRACTED	02-04-93	02-04-93			
DATE ANALYZED	02-08-93	02-08-93			
as Diesel	ND	0.74**	0.05	mg/L	3510

** The positive result for Petroleum Hydrocarbons as Diesel appears to be due to the presence of lighter hydrocarbons rather than Diesel.

Ref: Durham-Meekland Ave/93-1MZ

Descriptor, Lab No. and Results

Parameter	MW-8 01/29/1993 150072	MW-9 01/29/1993 150073	Reporting Limit	Units	Method
METHOD 601 (GC,Liquid)					
DATE ANALYZED	02-09-93	02-09-93			
DILUTION FACTOR*	1	1			
Bromodichloromethane	ND	ND	0.4	ug/L	601
Bromoform	ND	ND	0.4	ug/L	601
Bromomethane	ND	ND	0.4	ug/L	601
Carbon tetrachloride	ND	ND	0.4	ug/L	601
Chlorobenzene	ND	ND	0.4	ug/L	601
Chloroethane	ND	ND	0.4	ug/L	601
2-Chloroethylvinyl ether	ND	ND	1.0	ug/L	601
Chloroform	ND	ND	0.4	ug/L	601
Chloromethane	ND	ND	0.4	ug/L	601
Dibromochloromethane	ND	ND	0.4	ug/L	601
1,2-Dichlorobenzene	ND	ND	0.4	ug/L	601
1,3-Dichlorobenzene	ND	ND	0.4	ug/L	601
1,4-Dichlorobenzene	ND	ND	0.4	ug/L	601
Dichlorodifluoromethane	ND	ND	0.4	ug/L	601
1,1-Dichloroethane	ND	ND	0.4	ug/L	601
1,2-Dichloroethane	ND	29	0.4	ug/L	601
1,1-Dichloroethene	ND	ND	0.4	ug/L	601
trans-1,2-Dichloroethene	ND	ND	0.4	ug/L	601
1,2-Dichloropropane	ND	ND	0.4	ug/L	601
cis-1,3-Dichloropropene	ND	ND	0.4	ug/L	601
trans-1,3-Dichloropropene	ND	ND	0.4	ug/L	601
Methylene chloride	ND	ND	10	ug/L	601
1,1,2,2-Tetrachloroethane	ND	ND	0.4	ug/L	601
Tetrachloroethene	0.8	ND	0.4	ug/L	601
1,1,1-Trichloroethane	ND	ND	0.4	ug/L	601
1,1,2-Trichloroethane	ND	ND	0.4	ug/L	601
Trichloroethene	ND	ND	0.4	ug/L	601
Trichlorofluoromethane	ND	ND	0.4	ug/L	601
Vinyl chloride	ND	ND	0.4	ug/L	601
SURROGATE RESULTS	--	--			
1,4-Difluorobenzene	105	69		% Rec.	601
1,4-Dichlorobutane	104	107		% Rec.	601

Ref: Durham-Meekland Ave/93-1MZ

Descriptor, Lab No. and Results

Parameter	MW-10 01/29/1993 150074	MW-5D 01/29/1993 150075	Reporting Limit	Units	Method
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)	--	--			
DATE ANALYZED	02-04-93	02-04-93			
DILUTION FACTOR*	10	10			
as Gasoline	7.5	19	0.05	mg/L	5030
METHOD 8020 (GC,Liquid)	--	--			
DATE ANALYZED	02-04-93	02-04-93			
DILUTION FACTOR*	10	1			
Benzene	130	4,600	0.5	ug/L	8020
Ethylbenzene	170	370	0.5	ug/L	8020
Toluene	20	1,600	0.5	ug/L	8020
Xylenes (Total)	710	1,400	0.5	ug/L	8020
SURROGATE RESULTS	--	--			
Bromofluorobenzene	91	83		% Rec.	5030
METHOD 3510 (GC,FID)					
DILUTION FACTOR*	1	1			
DATE EXTRACTED	02-04-93	02-04-93			
DATE ANALYZED	02-08-93	02-08-93			
as Diesel	2.2**	2.1**	0.05	mg/L	3510

** The positive result for Petroleum Hydrocarbons as Diesel appears to be due to the presence of lighter hydrocarbons rather than Diesel.

Ref: Durham-Meekland Ave/93-1MZ

Descriptor, Lab No. and Results

Parameter	MW-10 01/29/1993 150074	MW-5D 01/29/1993 150075	Reporting Limit	Units	Method
METHOD 601 (GC,Liquid)					
DATE ANALYZED	02-09-93	02-09-93			
DILUTION FACTOR*	1	1			
Bromodichloromethane	ND	ND	0.4	ug/L	601
Bromoform	ND	ND	0.4	ug/L	601
Bromomethane	ND	ND	0.4	ug/L	601
Carbon tetrachloride	ND	ND	0.4	ug/L	601
Chlorobenzene	ND	ND	0.4	ug/L	601
Chloroethane	ND	ND	0.4	ug/L	601
2-Chloroethylvinyl ether	ND	ND	1.0	ug/L	601
Chloroform	ND	ND	0.4	ug/L	601
Chloromethane	ND	ND	0.4	ug/L	601
Dibromochloromethane	ND	ND	0.4	ug/L	601
1,2-Dichlorobenzene	ND	ND	0.4	ug/L	601
1,3-Dichlorobenzene	ND	ND	0.4	ug/L	601
1,4-Dichlorobenzene	ND	ND	0.4	ug/L	601
Dichlorodifluoromethane	ND	ND	0.4	ug/L	601
1,1-Dichloroethane	ND	ND	0.4	ug/L	601
1,2-Dichloroethane	18	120	0.4	ug/L	601
1,1-Dichloroethene	ND	ND	0.4	ug/L	601
trans-1,2-Dichloroethene	ND	ND	0.4	ug/L	601
1,2-Dichloropropane	ND	ND	0.4	ug/L	601
cis-1,3-Dichloropropene	ND	ND	0.4	ug/L	601
trans-1,3-Dichloropropene	ND	ND	0.4	ug/L	601
Methylene chloride	ND	ND	10	ug/L	601
1,1,2,2-Tetrachloroethane	ND	ND	0.4	ug/L	601
Tetrachloroethene	ND	ND	0.4	ug/L	601
1,1,1-Trichloroethane	ND	ND	0.4	ug/L	601
1,1,2-Trichloroethane	ND	ND	0.4	ug/L	601
Trichloroethene	ND	ND	0.4	ug/L	601
Trichlorofluoromethane	ND	ND	0.4	ug/L	601
Vinyl chloride	ND	ND	0.4	ug/L	601
SURROGATE RESULTS	--	--			
1,4-Difluorobenzene	112	222		% Rec.	601
1,4-Dichlorobutane	98	107		% Rec.	601

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B-1 Soil

01/29/1993

Parameter	150076	Reporting Limit	Units	Method
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)	--			
DATE ANALYZED	02-04-93			
DILUTION FACTOR*	1			
as Gasoline	ND	0.05	mg/L	5030
METHOD 8020 (GC,Liquid)	--			
DATE ANALYZED	02-04-93			
DILUTION FACTOR*	1			
Benzene	ND	0.5	ug/L	8020
Ethylbenzene	ND	0.5	ug/L	8020
Toluene	ND	0.5	ug/L	8020
Xylenes (Total)	ND	0.5	ug/L	8020
SURROGATE RESULTS	--			
Bromofluorobenzene	96		% Rec.	5030
METHOD 3510 (GC,FID)				
DILUTION FACTOR*	1			
DATE EXTRACTED	02-04-93			
DATE ANALYZED	02-08-93			
as Diesel	ND	0.05	mg/L	3510

Ref: Durham-Meekland Ave/93-1MZ

Descriptor, Lab No. and Results

B-1

01/29/1993

Parameter	150076	Reporting Limit	Units	Method
METHOD 601 (GC,Liquid)				
DATE ANALYZED	02-09-93			
DILUTION FACTOR*	1			
Bromodichloromethane	ND	0.4	ug/L	601
Bromoform	ND	0.4	ug/L	601
Bromomethane	ND	0.4	ug/L	601
Carbon tetrachloride	ND	0.4	ug/L	601
Chlorobenzene	ND	0.4	ug/L	601
Chloroethane	ND	0.4	ug/L	601
2-Chloroethylvinyl ether	ND	1.0	ug/L	601
Chloroform	ND	0.4	ug/L	601
Chloromethane	ND	0.4	ug/L	601
Dibromochloromethane	ND	0.4	ug/L	601
1,2-Dichlorobenzene	ND	0.4	ug/L	601
1,3-Dichlorobenzene	ND	0.4	ug/L	601
1,4-Dichlorobenzene	ND	0.4	ug/L	601
Dichlorodifluoromethane	ND	0.4	ug/L	601
1,1-Dichloroethane	ND	0.4	ug/L	601
1,2-Dichloroethane	ND	0.4	ug/L	601
1,1-Dichloroethene	ND	0.4	ug/L	601
trans-1,2-Dichloroethene	ND	0.4	ug/L	601
1,2-Dichloropropane	ND	0.4	ug/L	601
cis-1,3-Dichloropropene	ND	0.4	ug/L	601
trans-1,3-Dichloropropene	ND	0.4	ug/L	601
Methylene chloride	ND	10	ug/L	601
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	601
Tetrachloroethene	ND	0.4	ug/L	601
1,1,1-Trichloroethane	ND	0.4	ug/L	601
1,1,2-Trichloroethane	ND	0.4	ug/L	601
Trichloroethene	ND	0.4	ug/L	601
Trichlorofluoromethane	ND	0.4	ug/L	601
Vinyl chloride	ND	0.4	ug/L	601
SURROGATE RESULTS	--			
1,4-Difluorobenzene	105		% Rec.	601
1,4-Dichlorobutane	129		% Rec.	601

Ref: Durham-Meekland Ave/93-1MZ

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	0.05	mg/L	116	ND	79	80	1.3
Motor Oil	0.5	mg/L	82	ND	N/A	N/A	N/A
Gasoline	0.05	mg/L	103	ND	99	102	3.0
Benzene	0.5	ug/L	95	ND	95	99	3.6
Toluene	0.5	ug/L	92	ND	95	97	1.9
Gasoline	0.05	mg/L	107	ND	101	103	2.0
Benzene	0.5	ug/L	100	ND	101	105	3.0
Toluene	0.5	ug/L	97	ND	98	98	<1
Gasoline	0.05	mg/L	109	ND	100	104	4.0
Benzene	0.5	ug/L	101	ND	95	95	<1
Toluene	0.5	ug/L	103	ND	93	94	<1

COMMENT: Blank Results were ND on other analytes tested.

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Benzene	0.5	ug/L	104	ND	116	117	<1
Toluene	0.5	ug/L	90	ND	112	117	1.3
1,1-Dichloroethene	0.4	ug/L	76	ND	88	93	5.5
Trichloroethene	0.4	ug/L	85	ND	98	103	5.5
Chlorobenzene	0.4	ug/L	84	ND	86	109	24

COMMENT: Blank Results were ND on other analytes tested.

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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 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 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.

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CHAIN OF CUSTODY RECORD

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1889

SAMPLED BY Lisa Ploss (PRINT NAME) Lisa Ploss (SIGNATURE)
(PRINT NAME) (SIGNATURE)

TURNAROUND TIME 14 DAY (S)

DATE	TIME	SAMPLE ID/DESCRIPTION	GRAB	COMP	# OF CONTAINERS	MATRIX	PRESERVED Y/N	ANALYSES: TPH-G	BTEX	601/8010 VOC	TPH-D	COMMENTS
1/28/93		MW-3	X		5	Aq		X	X	X	X	
↓	↓	MW-4	X		5	↓		↓	↓	↓	↓	
↓	↓	MW-11	X		5	↓		↓	↓	↓	↓	
1/29/93		MW-5	X		5	↓		↓	↓	↓	↓	
↓	↓	MW-6	X		5	↓		↓	↓	↓	↓	
		MW-7	X		5	↓		↓	↓	↓	↓	
		MW-8	X		5	↓		↓	↓	↓	↓	
		MW-9	X		5	↓		↓	↓	↓	↓	
		MW-10	X		5	↓		↓	↓	↓	↓	
		MW-5D	X		5	↓		↓	↓	↓	↓	
↓	↓	B-1	X		5	↓		↓	↓	↓	↓	

RESULTS TO: Lisa Ploss

INVOICE TO: Lisa Ploss

RELINQUISHED BY	DATE/TIME	RECEIVED BY:	RELINQUISHED BY	DATE/TIME	RECEIVED BY:
Lisa Ploss	1/29/93 1600	Kurt Holman	K Holman	1/29/93 1900	
RELINQUISHED BY	DATE/TIME	RECEIVED BY:	RELINQUISHED BY	DATE/TIME 1/30/93 1100	RECEIVED FOR LABORATORY BY

METHOD OF SHIPMENT

REMARKS:

PT 1 - ORIGINAL - WHITE PT 2 - NET PROJECT MANAGER - YELLOW PT 3 - CUSTOMER COPY - PINK

APPENDIX B

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
5997 PARKSIDE DRIVE ♦ PLEASANTON, CALIFORNIA 94588 ♦ (510) 484-2600

7 December 1992

Toxic Technology Services
P.O. Box 515
Rodeo, CA 94572

Gentlemen:

Enclosed is drilling permit 92624 for a monitoring well construction project at 19984 Meekland Avenue in Hayward for Durham Transportation.

Please note that permit condition A-2 requires that a well construction report be submitted after completion of the work. The report should include drilling and completion logs, location sketch, and permit number.

If you have any questions, please contact Wyman Hong or me at 484-2600.

Very truly yours,

Craig A. Mayfield

Craig A. Mayfield
Water Resources Engineer III

WH:mm
Enc.

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE • PLEASANTON, CALIFORNIA 94588 • (510) 484-2600

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 19984 Meekland Ave. Hayward

CLIENT
Name Durham Transportation
Address 9171 Capitol of Texas Phone (512) 343-6292
City Austin, TX Zip 78759

APPLICANT Highway North, Travis Bld, Suite 200
Name Toxic Technolog Services
Address P.O. Box 515 Phone (510) 799-1140
City Rodeo, 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. 604987

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 40 ft.
Surface Seal Depth 21 ft. Number 1

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

ESTIMATED STARTING DATE 12-14-92.
ESTIMATED COMPLETION DATE 12-14-92

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

APPLICANT'S SIGNATURE Lisa A. Ross Date 12/3/92

FOR OFFICE USE

PERMIT NUMBER 92624
LOCATION NUMBER ___

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

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

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

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

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 3 Dec 92
Wyman Hong

51991

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
5997 PARKSIDE DRIVE • PLEASANTON, CALIFORNIA 94588 • (510) 484-2600

8 December 1992

Toxic Technology Services
P.O. Box 515
Rodeo, CA 94572

Gentlemen:

Enclosed is drilling permit 92625 for the destruction of well 3S/2W 17C80 at 19984 Meekland Avenue in Hayward for Durham Transportation.

Please note that permit condition A-2 requires that a well destruction report be submitted after completion of the work. The report should include a description of methods and materials used to destroy the well, location sketch, date of destruction and permit number.

If you have any questions, please contact Wyman Hong or me at 484-2600.

Very truly yours,

Craig A. Mayfield
Water Resources Engineer III

WH:mm
Enc.

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE ♦ PLEASANTON, CALIFORNIA 94588 ♦ (510) 484-2600

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 19984 Mookland Ave. Hayward

CLIENT
Name Durham Transportation
Address * Phone (512) 343-6292
City Austin, TX Zip 78759
* 9171 Capitol of Texas Highway North
APPLICANT Travis Bldg, Suite 200
Name Toxic Technology Services

Address P.O. Box 515 Phone (510) 799-1140
City Rodeo, CA Zip 94572

TYPE OF PROJECT

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

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

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

DRILLER'S LICENSE NO. 604987

WELL PROJECTS
Drill Hole Diameter ___ In. Maximum
Casing Diameter ___ In. Depth ___ ft.
Surface Seal Depth ___ ft. Number ___

GEOTECHNICAL PROJECTS
Number of Borings 1 Maximum
Hole Diameter 8 In. Depth 43 ft.

ESTIMATED STARTING DATE 12-14-92
ESTIMATED COMPLETION DATE 12-14-92

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

APPLICANT'S SIGNATURE Lisa Bloss Date 12-3-92

FOR OFFICE USE

PERMIT NUMBER 92625
LOCATION NUMBER 3S/2W.17C80

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

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

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

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

(E.) WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 3 Dec 92

* Well to be destroyed is 2" PVC & is 41.5' deep. We will overbore with an 8" boring to 43'. We will then use a Tremie Pipe & fill

51991

7 December 1992

ZONE 7
WATER RESOURCES ENGINEERING
DRILLING ORDINANCE

DURHAM TRANSPORTATION
19984 MEEKLAND AVENUE
HAYWARD
WELL 3S/2W 17C80
PERMIT 92625

Destruction Requirements:

1 Drill out the well so that the casing, seal, and gravel pack are removed to the bottom of the well.

2. Using a tremie pipe, fill the hole to 2 feet below the lower of finished grade or original ground with neat cement.

3. After seal has set, backfill the remaining hole with compacted material.

These destruction requirements as proposed by Lisa Polos of Toxic Technology Services meet or exceed the Zone 7 minimum requirements.

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
PO Box 515
Rodeo, CA 94572

Date: 12/30/1992
NET Client Acct. No: 70700
NET Pacific Job No: 92.49816
Received: 12/15/1992

Client Reference Information

19984 Meekland Ave.

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:

for:
Jules Skamarack
Laboratory Manager

Enclosure(s)

Ref: 19984 Meekland Ave.

SAMPLE DESCRIPTION: MW-12-20-4 soil
Date Taken: 12/14/1992
Time Taken:
LAB Job No: (-147308)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Solid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			12-16-92	
DILUTION FACTOR*			1	
as Gasoline	5030	1	ND	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			12-16-92	
DILUTION FACTOR*			1	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	ND	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	ND	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		101	% Rec.
METHOD 3550 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			12-18-92	
DATE ANALYZED			12-18-92	
as Diesel	3550	1	ND	mg/Kg
as Motor Oil	3550	10	ND	mg/Kg

Ref: 19984 Meekland Ave.

SAMPLE DESCRIPTION: MW-12-20-4 Soil
Date Taken: 12/14/1992
Time Taken:
LAB Job No: (-147308)

Parameter	Method	Reporting Limit	Results	Units
METHOD 8010 (GC,Solid)				
DATE ANALYZED			12-23-92	
DILUTION FACTOR*			1	
Bromodichloromethane	8010	2.0	ND	ug/Kg
Bromoform	8010	2.0	ND	ug/Kg
Bromomethane	8010	2.0	ND	ug/Kg
Carbon tetrachloride	8010	2.0	ND	ug/Kg
Chlorobenzene	8010	2.0	ND	ug/Kg
Chloroethane	8010	2.0	ND	ug/Kg
2-Chloroethylvinyl ether	8010	5.0	ND	ug/Kg
Chloroform	8010	2.0	ND	ug/Kg
Chloromethane	8010	2.0	ND	ug/Kg
Dibromochloromethane	8010	2.0	ND	ug/Kg
1,2-Dichlorobenzene	8010	2.0	ND	ug/Kg
1,3-Dichlorobenzene	8010	2.0	ND	ug/Kg
1,4-Dichlorobenzene	8010	2.0	ND	ug/Kg
Dichlorodifluoromethane	8010	2.0	ND	ug/Kg
1,1-Dichloroethane	8010	2.0	ND	ug/Kg
1,2-Dichloroethane	8010	2.0	ND	ug/Kg
1,1-Dichloroethene	8010	2.0	ND	ug/Kg
trans-1,2-Dichloroethene	8010	2.0	ND	ug/Kg
1,2-Dichloropropane	8010	2.0	ND	ug/Kg
cis-1,3-Dichloropropene	8010	2.0	ND	ug/Kg
trans-1,3-Dichloropropene	8010	2.0	ND	ug/Kg
Methylene chloride	8010	50	ND	ug/Kg
1,1,2,2-Tetrachloroethane	8010	2.0	ND	ug/Kg
Tetrachloroethene	8010	2.0	ND	ug/Kg
1,1,1-Trichloroethane	8010	2.0	ND	ug/Kg
1,1,2-Trichloroethane	8010	2.0	ND	ug/Kg
Trichloroethene	8010	2.0	ND	ug/Kg
Trichlorofluoromethane	8010	2.0	ND	ug/Kg
Vinyl chloride	8010	2.0	ND	ug/Kg
SURROGATE RESULTS			--	
1,4-Difluorobenzene			97	% Rec.
Bromochloromethane			86	% Rec.

Ref: 19984 Meekland Ave.

SAMPLE DESCRIPTION: MW-12-30-6
Date Taken: 12/14/1992
Time Taken:
LAB Job No: (-147309)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Solid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			12-16-92	
DILUTION FACTOR*			10	
as Gasoline	5030	1	29	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			12-16-92	
DILUTION FACTOR*			10	
Benzene	8020	2.5	78	ug/Kg
Ethylbenzene	8020	2.5	100	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	160	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		94	% Rec.
METHOD 3550 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			12-18-92	
DATE ANALYZED			12-18-92	
as Diesel	3550	1	11**	mg/Kg
as Motor Oil	3550	10	ND	mg/Kg

** The positive result for Petroleum Hydrocarbons as Diesel appears to be due to the presence of lighter hydrocarbon rather than Diesel.

Ref: 19984 Meekland Ave.

SAMPLE DESCRIPTION: MW-12-30-6
Date Taken: 12/14/1992
Time Taken:
LAB Job No: (-147309)

Parameter	Method	Reporting Limit	Results	Units
METHOD 8010 (GC,Solid)				
DATE ANALYZED			12-23-92	
DILUTION FACTOR*			1	
Bromodichloromethane	8010	2.0	ND	ug/Kg
Bromoform	8010	2.0	ND	ug/Kg
Bromomethane	8010	2.0	ND	ug/Kg
Carbon tetrachloride	8010	2.0	ND	ug/Kg
Chlorobenzene	8010	2.0	ND	ug/Kg
Chloroethane	8010	2.0	ND	ug/Kg
2-Chloroethylvinyl ether	8010	5.0	ND	ug/Kg
Chloroform	8010	2.0	ND	ug/Kg
Chloromethane	8010	2.0	ND	ug/Kg
Dibromochloromethane	8010	2.0	ND	ug/Kg
1,2-Dichlorobenzene	8010	2.0	ND	ug/Kg
1,3-Dichlorobenzene	8010	2.0	ND	ug/Kg
1,4-Dichlorobenzene	8010	2.0	ND	ug/Kg
Dichlorodifluoromethane	8010	2.0	ND	ug/Kg
1,1-Dichloroethane	8010	2.0	ND	ug/Kg
1,2-Dichloroethane	8010	2.0	ND	ug/Kg
1,1-Dichloroethene	8010	2.0	ND	ug/Kg
trans-1,2-Dichloroethene	8010	2.0	ND	ug/Kg
1,2-Dichloropropane	8010	2.0	ND	ug/Kg
cis-1,3-Dichloropropene	8010	2.0	ND	ug/Kg
trans-1,3-Dichloropropene	8010	2.0	ND	ug/Kg
Methylene chloride	8010	50	ND	ug/Kg
1,1,2,2-Tetrachloroethane	8010	2.0	ND	ug/Kg
Tetrachloroethene	8010	2.0	ND	ug/Kg
1,1,1-Trichloroethane	8010	2.0	ND	ug/Kg
1,1,2-Trichloroethane	8010	2.0	ND	ug/Kg
Trichloroethene	8010	2.0	ND	ug/Kg
Trichlorofluoromethane	8010	2.0	ND	ug/Kg
Vinyl chloride	8010	2.0	ND	ug/Kg
SURROGATE RESULTS			--	
1,4-Difluorobenzene			112	% Rec.
Bromochloromethane			66	% Rec.

Ref: 19984 Meekland Ave.

SAMPLE DESCRIPTION: MW-12-40-8
Date Taken: 12/14/1992
Time Taken:
LAB Job No: (-147310)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Solid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			12-16-92	
DILUTION FACTOR*			1	
as Gasoline	5030	1	ND	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			12-16-92	
DILUTION FACTOR*			1	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	ND	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	ND	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		98	% Rec.
METHOD 3550 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			12-18-92	
DATE ANALYZED			12-18-92	
as Diesel	3550	1	ND	mg/Kg
as Motor Oil	3550	10	ND	mg/Kg

Ref: 19984 Meekland Ave.

SAMPLE DESCRIPTION: MW-12-40-8
Date Taken: 12/14/1992
Time Taken:
LAB Job No: (-147310)

Parameter	Method	Reporting Limit	Results	Units
METHOD 8010 (GC,Solid)				
DATE ANALYZED			12-23-92	
DILUTION FACTOR*			1	
Bromodichloromethane	8010	2.0	ND	ug/Kg
Bromoform	8010	2.0	ND	ug/Kg
Bromomethane	8010	2.0	ND	ug/Kg
Carbon tetrachloride	8010	2.0	ND	ug/Kg
Chlorobenzene	8010	2.0	ND	ug/Kg
Chloroethane	8010	2.0	ND	ug/Kg
2-Chloroethylvinyl ether	8010	5.0	ND	ug/Kg
Chloroform	8010	2.0	ND	ug/Kg
Chloromethane	8010	2.0	ND	ug/Kg
Dibromochloromethane	8010	2.0	ND	ug/Kg
1,2-Dichlorobenzene	8010	2.0	ND	ug/Kg
1,3-Dichlorobenzene	8010	2.0	ND	ug/Kg
1,4-Dichlorobenzene	8010	2.0	ND	ug/Kg
Dichlorodifluoromethane	8010	2.0	ND	ug/Kg
1,1-Dichloroethane	8010	2.0	ND	ug/Kg
1,2-Dichloroethane	8010	2.0	ND	ug/Kg
1,1-Dichloroethene	8010	2.0	ND	ug/Kg
trans-1,2-Dichloroethene	8010	2.0	ND	ug/Kg
1,2-Dichloropropane	8010	2.0	ND	ug/Kg
cis-1,3-Dichloropropene	8010	2.0	ND	ug/Kg
trans-1,3-Dichloropropene	8010	2.0	ND	ug/Kg
Methylene chloride	8010	50	ND	ug/Kg
1,1,2,2-Tetrachloroethane	8010	2.0	ND	ug/Kg
Tetrachloroethene	8010	2.0	ND	ug/Kg
1,1,1-Trichloroethane	8010	2.0	ND	ug/Kg
1,1,2-Trichloroethane	8010	2.0	ND	ug/Kg
Trichloroethene	8010	2.0	ND	ug/Kg
Trichlorofluoromethane	8010	2.0	ND	ug/Kg
Vinyl chloride	8010	2.0	ND	ug/Kg
SURROGATE RESULTS			--	
1,4-Difluorobenzene			95	% Rec.
Bromochloromethane			41	% Rec.

Ref: 19984 Meekland Ave.

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	1	mg/Kg	107	ND	92	98	6.3
Gasoline	1	mg/Kg	121	ND	93	87	7.3
Benzene	2.5	ug/Kg	84	ND	97	89	8.6
Toluene	2.5	ug/Kg	94	ND	99	94	4.7

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Benzene	2.5	ug/Kg	87	ND	97	99	2.0
Toluene	2.5	ug/Kg	89	ND	96	91	5.3
1,1-Dichloroethene	2.0	ug/Kg	100	ND	108	135	22
Trichloroethene	2.0	ug/Kg	117	ND	101	112	10
Chlorobenzene	2.0	ug/Kg	86	ND	90	92	2.2

COMMENT: Blank Results were ND on other analytes tested.

NET®

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 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 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.

NET NATIONAL ENVIRONMENTAL TESTING, INC.

1291

CHAIN OF CUSTODY RECORD

SANTA ROSA DIVISION, 435 TESCONI CIRCLE, SANTA ROSA, CA 95401
(707) 526-7200 PHONE (707) 526-9623 FAX

COMPANY Toxic Technology Assoc.
ADDRESS P.O. Box 515
PHONE (510) 799-1140 FAX same
PROJECT NAME/LOCATION 1984 Mecklend Ave.
PROJECT NUMBER [redacted]
PROJECT MANAGER Lisa Polos

Lisa Polos, Jack Alt

SAMPLED BY Lisa Polos (PRINT NAME) Lisa Polos SIGNATURE

(PRINT NAME) SIGNATURE

Standard TURNAROUND TIME ___ DAY (S)

DATE	TIME	SAMPLE ID/DESCRIPTION	GRAB	COMP	# OF CONTAINERS	MATRIX	PRESERVED Y/N	ANALYSES: TPH-G	BTEX	TPH-D*	Volatile Chlor (601)	COMMENTS
12-14-92		MW-12-25-4	X		1	Soil	N	X	X	X	X	* Please extend range to include Motor Oil
		MW-12-30-6	X		1			X	X	X	X	
↓		MW-12-40-8	X		1	↓	↓	X	X	X	X	

checked in for 8010 since it is a soil. A-L - 12/15/92.

CUSTODY SEALED 12/14/92 @ 1400 MWT seals intact - A-L.

RESULTS TO: Lisa Polos

INVOICE TO: Lisa Polos

RELINQUISHED BY	DATE/TIME	RECEIVED BY	RELINQUISHED BY	DATE/TIME	RECEIVED BY
Lisa Polos	12/14/92 10:30	Mike Tavani	Mike Tavani	12/14/92 1900	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	RELINQUISHED BY	DATE/TIME	RECEIVED FOR LABORATORY BY
				12/15/92 0800	A. Lopez

METHOD OF SHIPMENT

REMARKS:

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: 01/13/1993
NET Client Acct. No: 70700
NET Pacific Job No: 92.49931
Received: 12/22/1992

Client Reference Information

Durham

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)

Ref: Durham

SAMPLE DESCRIPTION: MW-12
Date Taken: 12/21/1992
Time Taken: 10:30
LAB Job No: (-147847)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			12-31-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	2.8	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			12-31-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	14	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	ND	ug/L
Xylenes (Total)	8020	0.5	29	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		78	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			12-23-92	
DATE ANALYZED			12-28-92	
as Diesel	3510	0.05	1.7**	mg/L

** The positive result for Petroleum Hydrocarbons as Diesel appears to be due to the presence of lighter hydrocarbon rather than Diesel.

Ref: Durham

SAMPLE DESCRIPTION: MW-12
Date Taken: 12/21/1992
Time Taken: 10:30
LAB Job No: (-147847)

Parameter	Method	Reporting Limit	Results	Units
METHOD 601 (GC,Liquid)				
DATE ANALYZED			12-31-92	
DILUTION FACTOR*			1	
Bromodichloromethane	601	0.4	ND	ug/L
Bromoform	601	0.4	ND	ug/L
Bromomethane	601	0.4	ND	ug/L
Carbon tetrachloride	601	0.4	ND	ug/L
Chlorobenzene	601	0.4	ND	ug/L
Chloroethane	601	0.4	ND	ug/L
2-Chloroethylvinyl ether	601	1.0	ND	ug/L
Chloroform	601	0.4	ND	ug/L
Chloromethane	601	0.4	ND	ug/L
Dibromochloromethane	601	0.4	ND	ug/L
1,2-Dichlorobenzene	601	0.4	ND	ug/L
1,3-Dichlorobenzene	601	0.4	ND	ug/L
1,4-Dichlorobenzene	601	0.4	ND	ug/L
Dichlorodifluoromethane	601	0.4	ND	ug/L
1,1-Dichloroethane	601	0.4	ND	ug/L
1,2-Dichloroethane	601	0.4	ND	ug/L
1,1-Dichloroethene	601	0.4	ND	ug/L
trans-1,2-Dichloroethene	601	0.4	ND	ug/L
1,2-Dichloropropane	601	0.4	ND	ug/L
cis-1,3-Dichloropropene	601	0.4	ND	ug/L
trans-1,3-Dichloropropene	601	0.4	ND	ug/L
Methylene chloride	601	10	ND	ug/L
1,1,2,2-Tetrachloroethane	601	0.4	ND	ug/L
Tetrachloroethene	601	0.4	ND	ug/L
1,1,1-Trichloroethane	601	0.4	ND	ug/L
1,1,2-Trichloroethane	601	0.4	ND	ug/L
Trichloroethene	601	0.4	ND	ug/L
Trichlorofluoromethane	601	0.4	ND	ug/L
Vinyl chloride	601	0.4	ND	ug/L
SURROGATE RESULTS			--	
1,4-Difluorobenzene	601		78	% Rec.
1,4-Dichlorobutane	601		76	% Rec.

Ref: Durham

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	0.05	mg/L	107	ND**	81	79	1.6
Motor Oil	0.5	mg/L	98	ND	N/A	N/A	N/A
Gasoline	0.05	mg/L	100	ND	108	109	<1
Benzene	0.5	ug/L	106	ND	110	108	3.0
Toluene	0.5	ug/L	106	ND	112	110	1.0

COMMENT: Blank Results were ND on other analytes tested.

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Benzene	0.5	ug/L	93	ND	96	83	15
Toluene	0.5	ug/L	94	ND	99	85	15
1,1-Dichloroethene	0.4	ug/L	67	ND	68	58	16
Trichloroethene	0.4	ug/L	83	ND	84	72	15
Chlorobenzene	0.4	ug/L	85	ND	85	73	15

COMMENT: Blank Results were ND on other analytes tested.

** Blank contained interference at 1.7 mg/L when quantitated versus diesel fuel. The interference present does not match diesel or any other fuel pattern.

NET®

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 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 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.

NET NATIONAL ENVIRONMENTAL TESTING, INC.

SANTA ROSA DIVISION, 435 TESCONI CIRCLE, SANTA ROSA, CA 95401
(707) 526-7200 PHONE (707) 526-9623 FAX

1408

CHAIN OF CUSTODY RECORD

COMPANY Toxic Technology Services
ADDRESS PO Box 515 Rodeo CA 94572
PHONE (510) 799-1140 FAX Same
PROJECT NAME/LOCATION Durham
PROJECT NUMBER 9391
PROJECT MANAGER Lisa Flores

Lisa Flores

SAMPLED BY Lisa Flores (PRINT NAME) _____ (PRINT NAME)

SIGNATURE _____ SIGNATURE _____

TURNAROUND TIME 14 DAY (S)

DATE	TIME	SAMPLE ID/DESCRIPTION	GRAB	COMP	# OF CONTAINERS	MATRIX	PRESERVED Y/N	ANALYSES: TPH-G	TPH-D	601	BTEX	COMMENTS
12/21/92	10:30 AM	MW-12	X		5	H_2O		X	X	X	X	1 VOA for 601 w/headspace. A.L. 12/22/92

CUSTODY SEALED 12/21/92 @ 1400 MST seals intact. A.L.

RESULTS TO: Lisa Flores

INVOICE TO: Same

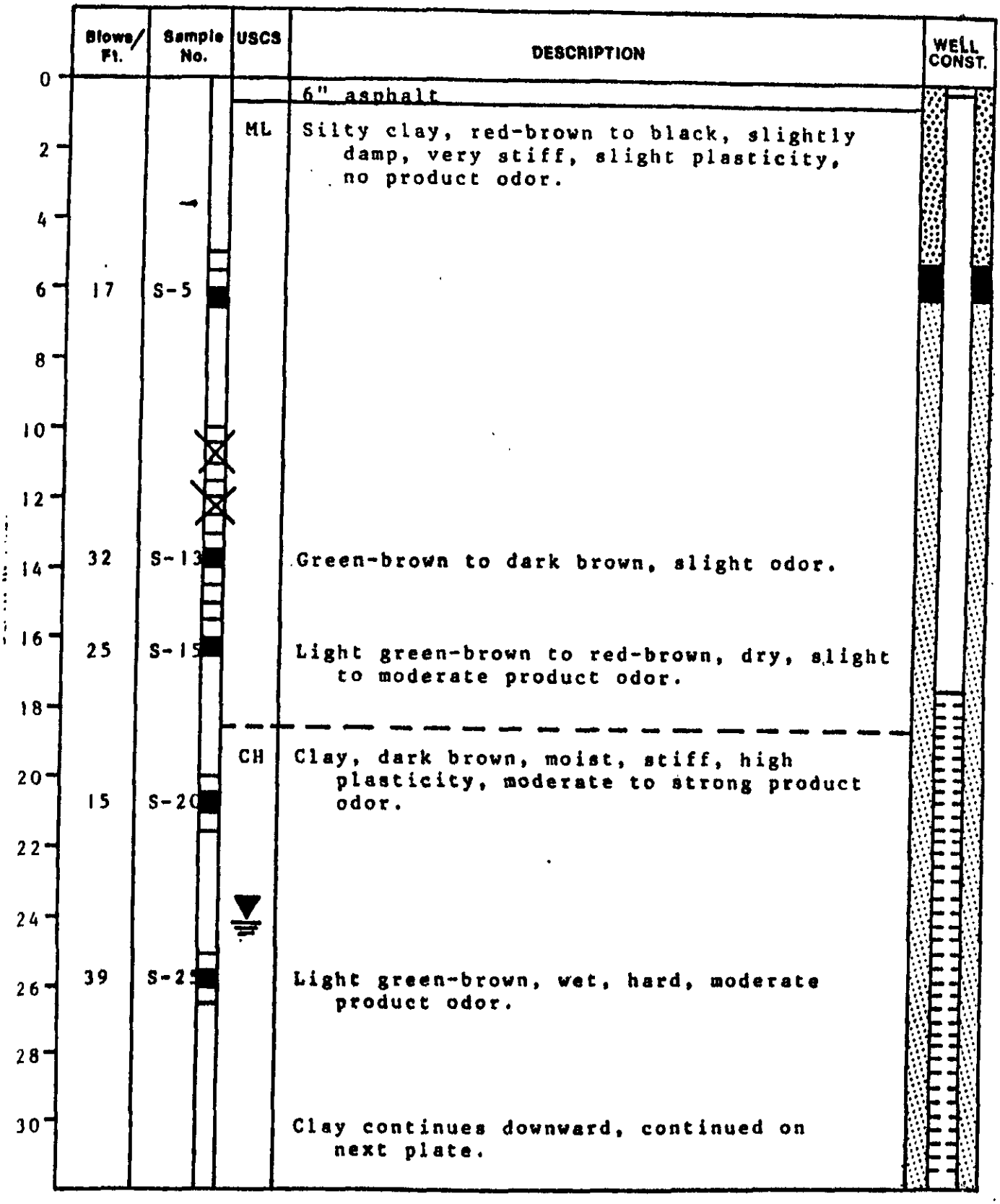
RELINQUISHED BY	DATE/TIME	RECEIVED BY	RELINQUISHED BY	DATE/TIME	RECEIVED BY:
Lisa Flores	12/21/92 11:30	Mike Tuccini	Mike Tuccini	12/21/92 1400	
RELINQUISHED BY	DATE/TIME	RECEIVED BY	RELINQUISHED BY	DATE/TIME	RECEIVED FOR LABORATORY BY
				12/22/92 0800	L. Lopez

METHOD OF SHIPMENT

REMARKS:

PT 1 - ORIGINAL - WHITE PT 2 - NET PROJECT MANAGER - YELLOW PT 3 - CUSTOMER COPY - PINK

APPENDIX D



Applied GeoSystems

LOG OF BORING B1/MW-1

Harbert Transportation
Hayward, California

PLATE

P-4

PROJECT NO. 8660-1

Blows/ Ft.	Sample No.	USCS	DESCRIPTION	WELL CONST.
		CH	Clay, light green-brown, wet, hard, high plasticity, moderate product odor.	
18	S-30		Dark green-brown, very stiff.	
38	S-35		Red-brown, hard, slight product odor.	
				CAVED
			Total depth = 41.5 feet.	

30
32
34
36
38
40
42

Applied GeoSystems

LOG OF BORING B-1/MW-1

Harbert Transportation
Hayward, California

PLATE

P-5

PROJECT NO. 8660-1