

LOK

Amy Leech
Alameda County Department
of Environmental Health
1131 Harbor Bay Parkway, #250
Alameda CA 94502-6577

ENVIRONMENTAL
PROTECTION
95 JUN 28 PM 1:43

27 June 1996

Project No. P178

Data Submittal
Groundwater Monitoring
21031 Western Boulevard
Hayward CA

Dear Ms. Leech:

Attached is our data submittal documenting analytical results of groundwater monitoring performed on 12 June 1996 for wells MW-1, MW-2, and MW-3 at the subject property (Figures 1 and 2).

Groundwater monitoring activities are summarized in the following tables, figures, and attachments:

- Table 1 presents a chronology of environmental activities.
- Table 2 summarizes groundwater level measurements.
- Table 3 includes groundwater purging and sampling information.
- Table 4 summarizes analytical results of groundwater sampling.
- Figure 2 depicts groundwater elevation data.
- Attachment 1 contains the standard operating procedure we used.
- Attachment 2 contains the groundwater sampling forms.
- Attachment 3 contains the chain-of-custody form.
- Attachment 4 contains the laboratory data report.

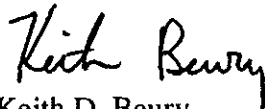
Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline, and benzene, ethylbenzene, toluene, and xylenes. Analytical results revealed nondetectable concentrations.

Purge water was contained in a steel drum. This water will be discharged to the sanitary sewer.

Please call if you have any questions.

Sincerely,

STREAMBORN



Keith D. Beury
Environmental Engineer

Attachments

cc: William and Kathy Florence, Oakland CA
Kevin Graves/San Francisco Bay Regional Water Quality Control Board, Oakland CA

Table 1
Environmental Chronology
21031 Western Boulevard
Hayward CA

Date	Performed By	Description
April 1989	William and Kathy Florence	<ul style="list-style-type: none"> • Property at 21031 Western Boulevard was purchased by William and Kathy Florence. • At the time the property was purchased by the Florences, a 1,000-gallon underground gasoline tank existed near the east side of the onsite building. The tank was installed by a previous owner of the property.
21 August 1989	West Coast Tank Testing	<ul style="list-style-type: none"> • The tank was removed. • Approximately 20 cubic yards of gasoline-contaminated soil were overexcavated and stockpiled onsite. • Two soil samples were collected from the excavation. The sample depths and exact locations were not documented. Analytical results indicated elevated concentrations of TPH-gasoline and BTEX.
22 September 1989	West Coast Tank Testing	<ul style="list-style-type: none"> • Approximately 80 cubic yards of gasoline-contaminated soil were excavated and stockpiled onsite with the previously-excavated 20 cubic yards. The 100 cubic yards of overexcavated soil were apparently aerated onsite. Final disposition of the soil was not documented.
September and October 1989	B&B Associated Services	<ul style="list-style-type: none"> • Several soil samples were collected. The sample depths and exact locations were not documented, but some of the samples were presumably collected from the limits of the excavation. Analytical results indicated elevated concentrations of TPH-gasoline and BTEX.
14 November 1994	Streamborn	<ul style="list-style-type: none"> • Workplan describing soil and groundwater investigation was submitted to Alameda County Department of Environmental Health.
2 December 1994	Alameda County	<ul style="list-style-type: none"> • Comments regarding the workplan were provided by Alameda County Department of Environmental Health.
22 December 1994	Streamborn	<ul style="list-style-type: none"> • Workplan addendum was submitted to Alameda County.
23 January 1995	Alameda County	<ul style="list-style-type: none"> • Alameda County approved the workplan and addendum.
19 and 20 December 1995	Streamborn	<ul style="list-style-type: none"> • Soil borings B-1 and B-2 were drilled adjacent to the former tank excavation. Soil samples collected from the borings revealed nondetectable concentrations of TPH-gasoline and BTEX, and nondetectable or nonelevated concentrations of lead. • Monitoring well MW-1 was installed east of the former tank excavation. Soil samples from the boring revealed nondetectable concentrations of TPH-gasoline and BTEX, and nondetectable or nonelevated concentrations of lead. • Monitoring well MW-2 was installed northwest of the former tank excavation. Soil samples from the boring revealed nondetectable concentrations of TPH-gasoline and BTEX, and nondetectable or nonelevated concentrations of lead. • Monitoring well MW-3 was installed west of the former tank excavation. Soil samples from the boring revealed nondetectable concentrations of TPH-gasoline and BTEX, and nondetectable or nonelevated concentrations of lead. • Level survey of wells performed.
26 December 1995	Streamborn	<ul style="list-style-type: none"> • Monitoring wells MW-1, MW-2, and MW-3 were developed.
27 December 1995	Streamborn	<ul style="list-style-type: none"> • Groundwater samples were collected from wells MW-1, MW-2, and MW-3. Groundwater levels measured. Results revealed nondetectable concentrations of TPH-gasoline, BTEX, and dissolved lead.
22 March 1996	Streamborn	<ul style="list-style-type: none"> • Groundwater samples were collected from wells MW-1, MW-2, and MW-3. Groundwater levels measured. Results revealed nondetectable concentrations of TPH-gasoline and BTEX.
12 June 1996	Streamborn	<ul style="list-style-type: none"> • Groundwater samples were collected from wells MW-1, MW-2, and MW-3. Groundwater levels measured. Results revealed nondetectable concentrations of TPH-gasoline and BTEX.

General Notes

- (a) Alameda County = Alameda County Department of Environmental Health.
- (b) TPH-gasoline = total petroleum hydrocarbons as gasoline.
- (c) BTEX = benzene, toluene, ethylbenzene, and xylenes.

**Table 2
Groundwater Level Measurements**

**21031 Western Boulevard
Hayward CA**

Location		MW-1		MW-2		MW-3	
Measuring Point		Top of PVC Casing-North Side, Elevation 999.63 (Ground Surface-North Side, Elevation 1,000.09)		Top of PVC Casing-North Side, Elevation 999.40 (Ground Surface-North Side, Elevation 999.81)		Top of PVC Casing-North Side, Elevation 999.72 (Ground Surface-North Side, Elevation 1,000.16)	
Measured By	Parameter or Date	Depth	Elevation	Depth	Elevation	Depth	Elevation
Streamborn	27 December 1995	25.13	974.50	24.73	974.67	25.27	974.45
Streamborn	22 March 1996	19.02	980.61	18.66	980.74	19.13	980.59
Streamborn	12 June 1996	21.56	978.53	21.17	978.64	21.73	978.43
Streamborn	Total Depth (last measurement)	34.9	-	34.8	-	35.0	-

General Notes

- (a) Measurements in units of feet.
- (b) Groundwater elevations referenced to site-specific datum = bench mark at surface of concrete slab, south side of roll up door.
Assumed elevation = 1,000.00 feet.

Table 3
Monitoring Well Purging and Sampling Information
21031 Western Boulevard
Hayward CA

Sample Location	Sample Identification	Sample Date	Sample Time	Type of Sample	ORP (mV)	pH	Specific Conductance ($\mu\text{mho}/\text{cm}^2$ at field temperature)	Dissolved Oxygen (mg/L)	Temperature (degrees C)	Purge Method	Purge Duration (minutes)	Volume Purged (gallons)	Purged Dry ?	Static Casing Volumes Removed	Turbidity
MW-1	MW-1(27Dec95)	27 December 1995	13:55	Grab (bailer)	115	6.8	NM	4.6	17.7	Bailer	20	5	No	±3.2	Translucent, Brown
	MW-1(22Mar96)	22 March 1996	11:05	Grab (bailer)	10	6.7	970	2.7	19.3	Bailer	35	9	No	±3.5	Translucent, Brown
	MW-1(12Jun96)	12 June 1996	12:25	Grab (bailer)	55	6.7	1,120	2.2	19.1	Bailer	25	7	No	±3.3	Translucent, Brown
MW-2	MW-2(27Dec95)	27 December 1995	13:25	Grab (bailer)	90	6.8	NM	5.7	18.3	Bailer	20	5	No	±3.1	Opaque, Brown
	MW-2(22Mar96)	22 March 1996	12:55	Grab (bailer)	60	6.5	850	3.0	16.9	Bailer	35	9	No	±3.5	Translucent, Brown
	MW-2(12Jun96)	12 June 1996	11:25	Grab (bailer)	70	6.5	1,010	3.2	19.0	Bailer	25	7	No	±3.2	Opaque, Brown
MW-3	MW-3(27Dec95)	27 December 1995	14:20	Grab (bailer)	85	6.6	NM	4.3	17.9	Bailer	20	5	No	±3.2	Translucent, Brown
	MW-3(22Mar96)	22 March 1996	14:45	Grab (bailer)	50	6.4	960	2.5	16.6	Bailer	35	9	No	±3.6	Translucent, Brown
	MW-3(12Jun96)	12 June 1996	13:40	Grab (bailer)	80	6.5	1,160	2.1	18.2	Bailer	30	9	No	±4.2	Translucent, Brown

General Notes

- (a) ORP = oxidation-reduction potential.
- (b) NM = not measured.
- (c) Sampling conducted by Streamborn (Berkeley CA).

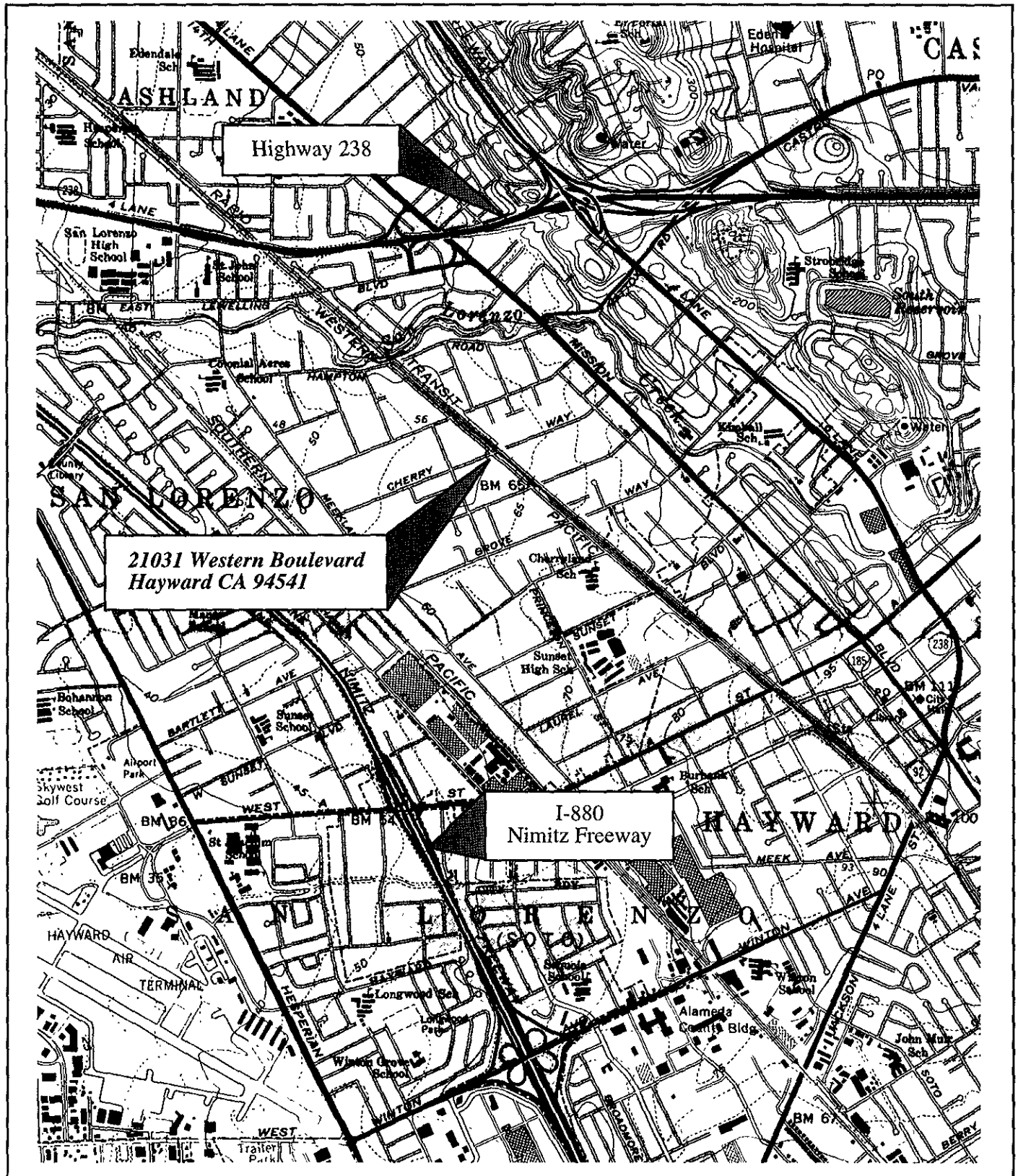
Table 4
Groundwater Analytical Results

21031 Western Boulevard
Hayward CA

Monitoring Well	Sample Date	Sample Identification	Sample Type	Sampled By	TPH-Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Dissolved Lead (µg/L)
MW-1	27 December 1995	MW-1 (27Dec95)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	<5
	22 March 1996	MW-1 (22Mar96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured
	12 June 1996	MW-1 (12Jun96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured
MW-2	27 December 1995	MW-2 (27Dec95)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	<5
	22 March 1996	MW-2 (22Mar96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured
	12 June 1996	MW-2 (12Jun96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured
MW-3	27 December 1995	MW-3 (27Dec95)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	<5
	22 March 1996	MW-3 (22Mar96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured
	12 June 1996	MW-3 (12Jun96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured

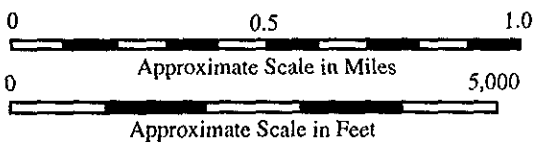
General Notes

- (a) TPH-Gasoline = total petroleum hydrocarbons as gasoline.
- (b) < denotes less than detection limit (shaded values).
- (c) Laboratory analysis performed by Chromalab, Pleasanton CA.



**21031 Western Boulevard
Hayward CA 94541**

**I-880
Nimitz Freeway**

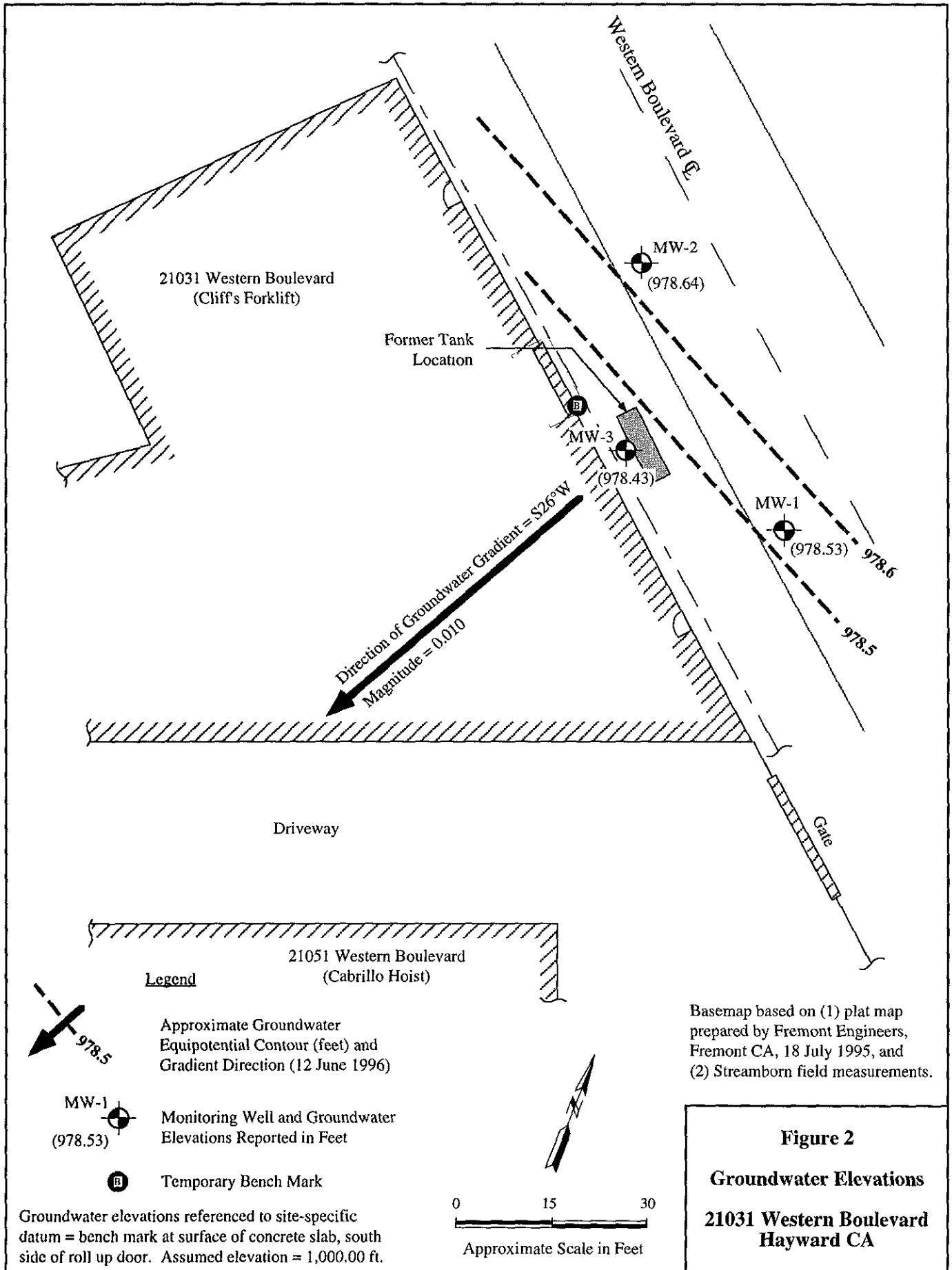


Basemap:
U.S. Geological Survey,
7.5 Minute Quadrangle,
Hayward CA, 1959
(Photorevised 1980)

Figure 1

Location Map

**21031 Western Boulevard
Hayward CA**



ATTACHMENT 1

Standard Operating Procedures

STANDARD OPERATING PROCEDURE (SOP) 16A WELL PURGING AND SAMPLING ASSOCIATED WITH UNDERGROUND TANK RELEASES

1.0 INTRODUCTION AND SUMMARY

This SOP describes procedures to purge and sample wells that have been properly installed and developed for the investigation of potential or confirmed releases from underground tanks. Typically, this SOP will be used for sampling monitoring wells with 2- or 4-inch diameter casing. The sampling described herein is appropriate for groundwater analyses typically required for underground tank release investigations, including: volatile and semivolatile organic compounds. For newly installed and developed wells, the purging and sampling described in this SOP is typically performed at least 7 days after well development to allow ambient groundwater conditions to re-establish in the vicinity of the well.

The procedures described in this SOP should be modified for domestic wells or wells with dedicated sampling equipment. The procedures should also be modified if product is observed in the well.

Typical well sampling and purging activities include decontaminating the purging and sampling equipment, purging the stagnant water from the well casing and filter pack by bailing, measuring field parameters and volume of evacuated groundwater during purging, terminating the purging process when field parameters stabilize, collecting groundwater samples by bailing, and labeling and preserving the collected samples.

2.0 EQUIPMENT AND MATERIALS

- Water sampling log
- Buckets and bristle brushes for decontamination
- Low residue, organic free soap such as Liquinox or Alconox
- If sampling is to be performed for metals, dilute (10%) reagent-grade nitric acid (for decontamination)
- Tap water (for decontamination)
- Distilled water (for decontamination and potential quality control blank samples)
- Cooler with ice (do not use blue ice or dry ice)
- Ziplock bags of size to accommodate sample containers
- Steel, 55-gallon, open-top drums, DOT 17H
- Field organic vapor monitor. The make, model, and calibration information of the field organic vapor monitor (including compound and concentration of calibration gas) should be documented.
- Laboratory-cleaned containers of proper type and size for the analytical parameters (refer to Table 1)
- Glass beaker, ± 250 milliliter for measurement of field parameters. A similar flow-through cell may also be used.
- Water level meter

- pH, temperature, and specific conductivity instruments, including pH and specific conductivity standards approximating or spanning the natural groundwater parameters. Oxidation-reduction potential (ORP) or dissolved oxygen meters may also be required.
- Purging equipment consisting of the following:
PVC, Teflon, or stainless steel bailer with dedicated or new bailer rope.
- Sampling device consisting of the following:
Teflon or stainless steel bailer with dedicated or new bailer rope. If samples are collected for volatile organic compound analysis, bailer should also be fitted with bottom-emptying device.

As specified in the Site Safety Plan, additional safety and personnel decontamination equipment and materials may be needed.

3.0 TYPICAL PROCEDURES

The following procedures are intended to cover the majority of purging and sampling conditions. However, normal field practice requires re-evaluation of these procedures and implementation of alternate procedures upon encountering unusual or unexpected conditions. Deviations from the following procedures may be expected and should be documented.

1. Remove top cap and perform field organic vapor monitoring of well casing. Also observe odor. Record measurement and observation on water sampling log.
2. Measure static water level and total depth and compare to historic measurements. Re-measure if discrepancies are noted with historic data. Document observations of product, if appropriate. Calculate volume of standing water in casing. Water quality samples are not generally considered representative in the presence of product. Accordingly, it may be appropriate to abandon sampling efforts if product is discovered.
3. Decontaminate purging and sampling equipment.
4. Begin purging and if possible, adjust purge rate to expose as little of the screened interval as possible (subject to reasonable time constraints). Record the following observations on the water sampling log at the beginning of purge, periodically during purge, and during sampling:
 - Purge volume and time
 - pH, temperature, and specific conductivity
 - Turbidity (clarity and color)
 - Approximate drawdown and well yield during purge
 - Whether well was purged dry
 - Other observations (such as presence of product) as appropriate
5. Terminate purging when one of the following conditions is observed:
Quick Recharge Wells: Stabilized field parameters and at least 3 casing volumes of standing water have been removed - ready for sampling. If field parameters have not stabilized after removal of 5 casing volumes of

standing water, terminate purging anyway. Wells should be allowed to recover to at least 1/2 the original standing water depth prior to sampling.

Slow Recharge Wells: Wells that are initially purged dry, and do not recover to 1/2 the original standing water depth within 4 hours, should be purged dry again and then sampled when sufficient recovery has occurred to sample. Generally, 1-foot of recovery may be considered sufficient recovery.

6. If recharge has submerged the entire screened interval, sample from mid-depth of screened interval. Otherwise, sample from mid-depth of water column at time of sampling.
7. Fill sample containers directly and preserve according to the requirements of Table 1. Containers should generally filled to capacity. Containers for volatile organic compound analysis should be filled from the bottom using a bottom-emptying device fitted into the bailer. Containers for volatile organic compound analysis should not have headspace.
8. Label sample containers, place in ziplock bag, and place on ice in cooler.
9. Log samples onto chain-of-custody form and maintain sample custody until shipped to or picked up by laboratory.
10. Containerize purge water and excess sample in steel drum(s). Label drum(s) with hazardous waste label, contents, and well number from which waste originated.

4.0 QUALITY ASSURANCE AND QUALITY CONTROL

Field quality control samples are not mandatory. Optional field quality control samples may include:

- Duplicate samples at a frequency of 1 per 10 natural samples.
- Cross-contamination blank (also known as a sampler rinsate blank) at a frequency of 1 per 10 natural samples. Cross-contamination blanks are prepared by passing deionized water over and through decontaminated sampling equipment (including sample filter if used).
- If volatile organic compound analyses are specified, travel blanks should also be included at a frequency of 1 per day of sampling.
- Standard reference materials and natural matrix spikes.

Meters for measurement of field parameters should be calibrated at least once per day. Calibration standards should generally approximate or span natural groundwater characteristics. Recalibration may be appropriate if unusual measurements are noticed.

5.0 DOCUMENTATION

The following information should be collected prior to sampling and taken into the field for reference:

- Well completion schematic

- Summary of historic water level, total depth, and field parameter measurements

Observations, measurements, and other documentation of the purging and sampling effort should be recorded on the following:

- Daily Report
- Field Notebook
- Water Sampling Log
- Chain-of-Custody

Documentation should include any deviations from this SOP, as well as documentation of the containerization and disposition/disposal of investigation-derived waste.

6.0 DECONTAMINATION

Prior to sampling each well, down-well equipment and equipment that will contact the sample (except sample containers) should be decontaminated according to the following procedure:

- Wash with soap
- Rinse with tap water
- Double rinse with distilled water

Prior to leaving the site, purging and sampling equipment should be cleaned.

7.0 INVESTIGATION-DERIVED WASTE

Purge water and excess sample should be containerized in steel drums. Drums should be labeled with waste labels, identifying: type of waste (purge water), well of origin, generator's name, and accumulation date. Wastes from different wells may be combined, but wastes that are anticipated to contain chemicals should not be mixed with waste that is believed to be uncontaminated.

Decontamination wastewater may be discharged to the sanitary sewer or at the ground surface.

8.0 SAFETY

Primary chemical hazards during well purging and sampling are associated with inhalation and dermal exposure. Acids used for decontamination and sample preservation may also present chemical hazards. Primary protection against inhalation exposure includes avoidance and respiratory protection. Primary protection against dermal exposure includes avoidance and splash protection and gloves. Special chemical hazards may be associated with the presence of product, if discovered during sampling.

Other specific site safety guidance is provided in the Site Safety Plan.

9.0 REFERENCES

Aller, L., T.W. Bennett, G. Hackett, R.J. Petty, J.H. Lehr, H. Sedoris, and D.M. Nielsen, 1989. Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells. National Water Well Association, Dublin, OH. 1989.

U.S. Environmental Protection Agency, 1989. A Compendium of Superfund Field Operations Methods, EPA/540/P-87/001, OSWER Directive 9355.0-14. USEPA, Office of Emergency and Remedial Response, Washington, DC. December 1989.

Table 1
Sampling and Preservation for Groundwater Samples

Parameter	Analytical Method	Container	Preservation	Maximum Holding Time
Purgeable Halocarbons by GC	EPA 8010	Two 40-ml glass vials	Place on ice in a cooler (Cool to 4° C)	14 days after collection
Purgeable Aromatics by GC (including Benzene, Toluene, Ethylbenzene, and Xylenes)	EPA 8020	Two 40-ml glass vials	Place on ice in a cooler (Cool to 4° C)	14 days after collection
Volatile Organic Compounds by GC/MS	EPA 8240	Two 40-ml glass vials	Place on ice in a cooler (Cool to 4° C)	14 days after collection
Semivolatile Organic Compounds by GC/MS (Base/Neutral/Acid Extractable Organics)	EPA 8270	Two 1-liter amber glass bottles	Place on ice in a cooler (Cool to 4° C)	Extract 7 days after collection Analyze 40 days after extraction
Total Petroleum Hydrocarbons as Motor Oil	Extract by EPA 3510 and analyze by GCFID	Two 1-liter amber glass bottles	Place on ice in a cooler (Cool to 4° C)	Extract 7 days after collection Analyze 7 days after extraction
Total Petroleum Hydrocarbons as Diesel	Extract by EPA 3510 and analyze by GCFID	Two 1-liter amber glass bottles	Place on ice in a cooler (Cool to 4° C)	Extract 7 days after collection Analyze 7 days after extraction
Total Petroleum Hydrocarbons as Gasoline	Extract by EPA 5030 and analyze by GCFID	Two 40-ml glass vials	Place on ice in a cooler (Cool to 4° C)	Extract 7 days after collection Analyze 7 days after extraction
Oil & Grease	SM 5520	One 1-liter amber glass bottles	Place on ice in a cooler (Cool to 4° C)	28 days after collection

ATTACHMENT 2

Groundwater Sampling Forms

STREAMBORN MONITORING WELL PURGE DATA

Project Name/Number: 21031 Western Blvd	Logged By: Keith Beury
Property Location: 21031 Western Blvd, Hayward CA	Date: 12 June 1996
Well Number: MW- 1	Sample Type: Grab
Sampling Equipment: Bailer	Depth to Water: 21.56 ^{Final:} 21.58
Measuring Point: Top of Casing - North Side	Total Depth: 34.9
Free Product: None	Odor: None
Comments:	Sample Number: MW-1 (12 JUN 96)

Note obstructions, well damage, or other compromising features under comments. Record depth in feet.

Total Depth (feet)	-	Depth to Water (feet)	x	0.16 gallons/foot for 2-inch well 0.65 gallons/foot for 4-inch well 1.47 gallons/foot for 6-inch well	=	1 Casing Volume (gallons)	x 3 =	3 Casing Volumes (gallons)
34.9	-	21.6	x	0.16	=	2.13	x 3 =	6.4

Purge Volume (gallons)	Time	Dissolved Oxygen (mg/L)	pH	Specific Conductivity (µmhos/cm ²)	Temp (°C)	ORP (mV)	Turbidity	Color	Purged Dry?	Comments
0	12:00									Start purge
1	12:05	2.4	6.78	1,130	19.2	70	Opaque	Brown	"	
3	12:07	2.0	6.93	1,150	19.0	60	"	"	"	
5	12:16	1.9	6.71	1,140	19.0	55	Trans	"	"	
7	12:25	2.2	6.68	1,120	19.1	55	"	"	"	
										Collect sample 12:25

Note observations of odor, sheen, and other signs of contamination under comments. Record turbidity as clear, translucent, opaque, cloudy, or turbid.

STREAMBORN MONITORING WELL PURGE DATA

Project Name/Number: 21031 Western Blvd	Logged By: Keith Beury
Property Location: 21031 Western Blvd, Hayward CA	Date: 12 June 1996
Well Number: MW-2	Sample Type: Grab
Sampling Equipment: Bailer	Depth to Water: 21.17 Final: 21.19
Measuring Point: Top of Casing - North Side	Total Depth: 34.8
Free Product: None	Odor: None
Comments:	Sample Number: mw-2(12JUN96)

Note obstructions, well damage, or other compromising features under comments. Record depth in feet.

Total Depth (feet)	-	Depth to Water (feet)	x	0.16 gallons/foot for 2-inch well 0.65 gallons/foot for 4-inch well 1.47 gallons/foot for 6-inch well	=	1 Casing Volume (gallons)		3 Casing Volumes (gallons)
34.8	-	21.2	x	0.16	=	2.18	x 3 =	6.6

Purge Volume (gallons)	Time	Dissolved Oxygen (mg/L)	pH	Specific Conductivity ($\mu\text{mhos}/\text{cm}^2$)	Temp ($^{\circ}\text{C}$)	ORP (mV)	Turbidity	Color	Purged Dry?	Comments
0	11:00									Start purge
1	11:04	3.0	6.41	1,140	21.5	90	Cloudy	Brown	No	
3	11:07	4.3	6.52	990	19.9	65	Opaque	"	"	
5	11:15	4.0	6.57	1,000	17.3	70	"	"	"	
7	11:25	3.2	6.57	1,010	19.0	70	"	"	"	
									"	
										Collect sample 11:25

Note observations of odor, sheen, and other signs of contamination under comments. Record turbidity as clear, translucent, opaque, cloudy, or turbid.

STREAMBORN MONITORING WELL PURGE DATA

Project Name/Number: 21031 Western Blvd	Logged By: Keith Beury
Property Location: 21031 Western Blvd, Hayward CA	Date: 12 June 1996
Well Number: MW-3	Sample Type: Grab
Sampling Equipment: Bailer	Depth to Water: 21.73 Final = 21.75
Measuring Point: Top of Casing - North Side	Total Depth: 35.0
Free Product: None	Odor: None
Comments:	Sample Number: MW-3(12 JUN 96)

Note obstructions, well damage, or other compromising features under comments. Record depth in feet.

Total Depth (feet)	-	Depth to Water (feet)	x	0.16 gallons/foot for 2-inch well 0.65 gallons/foot for 4-inch well 1.47 gallons/foot for 6-inch well	=	1 Casing Volume (gallons)		3 Casing Volumes (gallons)
35.0	-	21.7	x	0.16	=	2.13	x 3 =	6.4

Purge Volume (gallons)	Time	Dissolved Oxygen (mg/L)	pH	Specific Conductivity (µmhos/cm ²)	Temp (°C)	ORP (mV)	Turbidity	Color	Purged Dry?	Comments
0	1:10									Start purge
1	1:14	3.2	6.63	1,120	18.5	110	Trans	Brown	No	
3	1:20	2.4	6.60	1,180	18.6	110	"	"	"	
5	1:25	1.8	6.55	1,180	18.4	90	"	"	"	
7	1:35	2.0	6.50	1,150	18.5	80	"	"	"	
9	1:40	2.1	6.50	1,160	18.2	80	"	"	"	
										Collect sample 1:40

Note observations of odor, sheen, and other signs of contamination under comments. Record turbidity as clear, translucent, opaque, cloudy, or turbid.

ATTACHMENT 3

Chain-of-Custody Form

692/88230-88232

STREAMBORN CHAIN-OF-CUSTODY FORM

28298

Project Name: 21031 Western Blvd.	Project Location: 21031 Western Blvd., Hayward CA	Project Number: P178
Sampler: Keith Beury	Laboratory: Chromalab	Laboratory Number:

SUBM #: 9606692 REP: MV
 CLIENT: STREAM
 DUE: 06/27/96
 REF #: 28298

Sample Designation	Date	Time	Matrix			Type		Containers		Preservative	Filtration	Turnaround		Analyses				Sampler Comments	Laboratory Comments	
			Soil	Water	Vapor	Grab	Composite	Quantity	Type			10-Working Days		TPH-gasoline/BTEX						
MW-1 (12Jun96)	12 June 1996	12:25		X		X		3	VOA	No	No	X			X					
MW-2 (12Jun96)	12 June 1996	11:25		X		X		3	VOA	No	No	X			X					
MW-3 (12Jun96)	12 June 1996	13:40		X		X		3	VOA	No	No	X			X					

Note: Sampler and laboratory to observe preservative, condition, integrity, etc. of samples and record (under "Comments") any exceptions from standard protocols.

Relinquished By: <i>Keith Beury</i>	Received By: <i>[Signature]</i>	Date: 6/13/96	Time: 1230
Relinquished By: <i>[Signature]</i>	Received By: <i>[Signature]</i>	Date: 6/13/96	Time: 1735

STREAMBORN Mail: PO Box 83304, Berkeley CA 94707-8330 Office: 900 Santa Fe Ave, Albany CA 94706 510/528-4234 Fax: 528-2613

ATTACHMENT 4

Laboratory Report

CHROMALAB, INC.

Environmental Services (SDB)

June 25, 1996

Submission #: 9606692

STREAMBORN

Atten: Keith Buery

Project: 21031 WESTERN BLVD.
Received: June 13, 1996

Project#: P178

re: 3 samples for Gasoline and BTEX compounds analysis.
Method: EPA 5030/8015M/8020

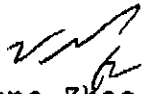
Sampled: June 12, 1996 Matrix: WATER Run#: 1857 Analyzed: June 22, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
88232	MW-3 (12JUN96)	N.D.	N.D.	N.D.	N.D.	N.D.


Sampled: June 12, 1996 Matrix: WATER Run#: 1861 Analyzed: June 22, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
88230	MW-1 (12JUN96)	N.D.	N.D.	N.D.	N.D.	N.D.
88231	MW-2 (12JUN96)	N.D.	N.D.	N.D.	N.D.	N.D.

Reporting Limits	50	0.50	0.50	0.50	0.50
Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	93.0	107	112	116	116



June Zhao
Chemist



Marianne Alexander
Gas/BTEX Supervisor