

SEACOR

October 15, 1991

SEACOR 10/15/91

Mr. Dennis Byrne  
Alameda County Health Care Services  
Division of Hazardous Materials  
80 Swan Way  
Oakland, CA 94612

**1410 64th Street Site  
Emeryville, California**

Dear Mr. Byrne:

Enclosed is the August quarterly groundwater monitoring report for the above referenced site. The report was prepared by ENSR for Mission Taylor Properties.

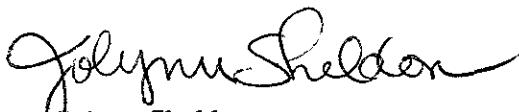
As stated in the enclosed report, results of the quarterly sampling continue to indicate that the contaminants in the shallow groundwater apparently originate from an upgradient source. Fluctuations in groundwater flow directions may also be the result of off site activities. There are no known onsite activities which would result in such fluctuations.

This concludes the quarterly sampling for this site which you requested. No further characterization is warranted at this site and closure is therefore requested on behalf of Mission Taylor Properties.

Although I am no longer with ENSR, I have been retained to continue to handle the closure of this project for Mission Taylor Properties.

I would appreciate your prompt attention to this matter as we would like to receive site closure as soon as possible. Please contact me at (415) 296-7877 if you have any questions.

Sincerely,  
SEACOR



Jolynn Sheldon  
Senior Hydrogeologist

Enclosure

cc: Mission Taylor Properties

100 Pine Street  
Suite 2025  
San Francisco, CA 94111  
(415) 296-7877  
(415) 677-9694 FAX



ENSR Consulting  
and Engineering  
1320 Harbor Bay Parkway  
Alameda, CA 94501  
(510) 865-1888  
(510) 748-6799 FAX

October 9, 1991

Elona Baum, Esq.  
Steeffel, Levitt & Weiss  
One Embarcadero Center, 29th Floor  
San Francisco, California 94111

**Subject:** Results of quarterly groundwater sampling conducted on August 16, 1991 at the 1410 - 64th Street Site in Emeryville, California.

Dear Ms. Baum:

ENSR Consulting and Engineering is pleased to submit this summary report for the quarterly groundwater sampling conducted at the 1410 - 64th Street site in Emeryville, California on August 16, 1991. A summary of the results of all quarterly groundwater monitoring events conducted at this site to date is included. This project was authorized by Steeffel, Levitt & Weiss on behalf of Mission Taylor Properties on March 5, 1991, by acceptance of ENSR's Proposal No. 4682-A01 and its accompanying terms and conditions.

### **August 1991 Quarterly Sampling**

Three monitoring wells are located at this site. The wells are identified as TMW-1, TMW-2, and TMW-3. A site location map and site plan indicating the location of the monitoring wells are included as Figures 1 and 2 in Attachment A. Groundwater samples collected during the August 1991 quarterly monitoring were analyzed by Curtis & Tompkins, Ltd. Analytical Laboratories in Berkeley, California.

Pure product monitoring was conducted for each well by visual inspection using a new, pre-cleaned, disposable polyethylene bailer and polypropylene rope. Depth-to-water measurements were made using an electronic well sounder. Each well was purged of water before sampling. The wells were purged by hand with a PVC bailer and polypropylene rope. The bailer and well sounder were decontaminated before and after their use in each well with TSP detergent and tap water, followed by a tap water rinse and then a distilled water rinse. A new length of rope was used for each well. Groundwater samples were collected from each well with a PVC bailer and rope.

A minimum of five well casing volumes of water were removed from each monitoring well before sampling. Temperature, electrical conductivity, and pH were measured during purging and before sampling. This information is presented in the field survey data form in Attachment B.



October 9, 1991  
Mission Taylor Properties  
Page 2

### **Analytical Results**

Groundwater samples collected from each of the three monitoring wells were analyzed for total volatile hydrocarbons (TVH) as gasoline using EPA Method 8015, and benzene, toluene, ethylbenzene, and total xylene using EPA Method 8020, as described in the California DOHS (Department of Health Services) LUFT Manual (May 1988) and the Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, August 1990.

Laboratory analytical results and chain-of-custody forms can be found in Appendix C. A summary of the results is presented below.

1. Benzene was detected in TMW-1 and TMW-2 at concentrations of 0.0048 parts per million (ppm) and 0.0077 ppm, respectively.
2. Gasoline was detected in TMW-1 and TMW-2 at concentrations of 0.15 ppm and 0.13 ppm, respectively.
3. Ethylbenzene was detected in TMW-1 and TMW-2 at 0.0037 ppm and 0.0013 ppm, respectively.
4. Total xylene was detected in TMW-1 and TMW-2 at 0.0026 ppm and 0.0011 ppm, respectively.
5. No contaminants were detected in TMW-3 at concentrations at or above the reporting limits.

No visible pure product or surface sheen was observed in any of the wells. A strong odor was encountered in MW-1, but not in the other two wells. The groundwater analytical results for the August 1991 quarterly sampling and the previous samplings are tabulated in Table 1 and included in Attachment D.

Part of the field activities conducted during the August 1991 quarterly monitoring event included sampling water from two 55-gallon drums containing development and purge water that was generated during the November 1990 and April 1991 quarterly sampling. The water samples were analyzed for total volatile hydrocarbons as gasoline (EPA Method 8015), as well as benzene, toluene, ethylbenzene, and total xylenes (EPA Method 8020). None of these constituents were detected in the water samples at levels at or above the reporting limits.



October 9, 1991  
Mission Taylor Properties  
Page 3

### **Groundwater Flow Direction**

During the latest sampling episode, groundwater was calculated to be flowing to the southwest. This is in contrast to the April 1991 observation, when the groundwater was flowing to the northwest. The southwest flow direction is similar to that of April 1990, when Dames and Moore measured the groundwater flow to be to the south. The cause of the changes in groundwater flow direction are not known at this time. Groundwater elevations are summarized in Table 2 in Attachment D.

### **Conclusion**

In upgradient well TMW-1, gasoline, benzene, ethylbenzene, and xylene were detected at higher levels in August 1991 than in April 1991. In TMW-2, gasoline, benzene, and ethylbenzene were lower and xylene was slightly higher in August than April. This well is downgradient from TMW-1 and upgradient from TMW-3. No constituents were detected in downgradient well TMW-3. Because of the increase in benzene, ethylbenzene, and xylene in upgradient well TMW-1, and because no constituents have been detected in downgradient well TMW-3 throughout the monitoring program, ENSR concludes that the contaminants in wells TMW-1 and TMW-2 originate from a source that is upgradient from the subject property. The contaminants in the groundwater do not appear to originate from the site of the former tank excavation. As a result, ENSR believes that no further action at this site is warranted.

Sincerely,

*Bryon Ho*  
for Jolynn Sheldon  
Senior Project Manager

*Paul Hilbelink*  
Paul Hilbelink, C.E.G.  
Manager, Geological Sciences

JS:PH/hmt  
Attachments  
Reference No. 4682-002-300 (L-2)



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 08/16/91

DATE REPORTED: 08/28/91


LABORATORY NUMBER: 104869

CLIENT: ENSR CORPORATION

PROJECT ID: 4682-001-300

LOCATION: MISSION TAYLOR

RESULTS: SEE ATTACHED

  
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QA/QC Approval

  
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Final Approval

Berkeley

Wilmington

Los Angeles

LABORATORY NUMBER: 104869  
 CLIENT: ENSR CORPORATION  
 PROJECT ID: 4682-001-300  
 LOCATION: MISSION TAYLOR

DATE RECEIVED: 08/16/91  
 DATE ANALYZED: 08/26/91  
 DATE REPORTED: 08/28/91

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions  
 TVH by California DOHS Method/LUFT Manual October 1989  
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
104869-1	MW-1	150	4.8	ND(0.5)	3.7	2.6
104869-2	MW-2	130	7.7	ND(0.5)	1.3	1.1
104869-3	MW-3	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
104869-4	D4-91	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit  
 indicated in parentheses.

QA/QC SUMMARY

RPD, %	3
RECOVERY, %	109

104869

10/1/91

1 of 1

### CHAIN OF CUSTODY RECORD

Client/Project Name <b>Mission Taylor</b>			Project Location <b>Emeryville</b>			ANALYSES						
Project No. <b>4682-001-300</b>			Field Logbook No.									
Sampler: (Signature) <b>Brian Ho</b>			Chain of Custody Tape No.									
Sample No./ Identification	Date	Time	Lab Sample Number	Type of Sample	REMARKS							
MW-1	8-16-91			Water	X						} Normal Turnaround	
MW-2					X							
MW-3					X							
D4-91					X						Rush!! 24-48 hr Turnaround for D11-90 only.	
D11-90					X							
Relinquished by: (Signature) <b>Brian Ho</b>				Date	Time	Received by: (Signature)				Date	Time	
				8-16-91	4:53							
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time	
Relinquished by: (Signature)				Date	Time	Received for Laboratory: (Signature)				Date	Time	
						<b>Nancy White</b>				8/16/91	4:53	
Sample Disposal Method:				Disposed of by: (Signature)				Date	Time			
SAMPLE COLLECTOR <b>Brian Ho</b> ENSR 1320 Harbor Bay Parkway Alameda, CA 865-1888				ANALYTICAL LABORATORY <b>Curtis &amp; Tompkins, Ltd.</b> Berkeley, CA				<b>ENSR</b>				

TYH as Gasoline + BTXE (8015/8020)

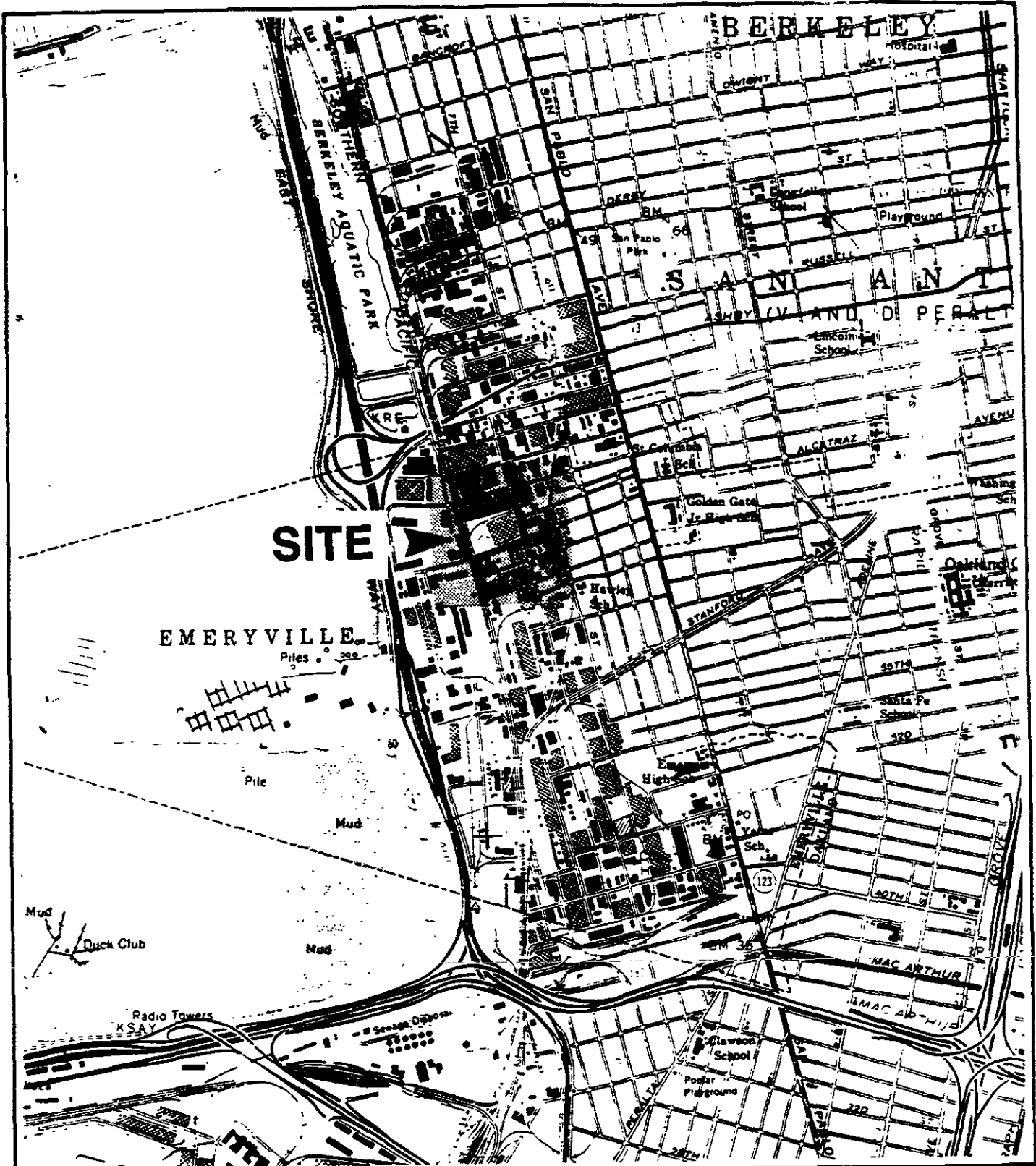
1  
2  
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4  
1

**ENSR**

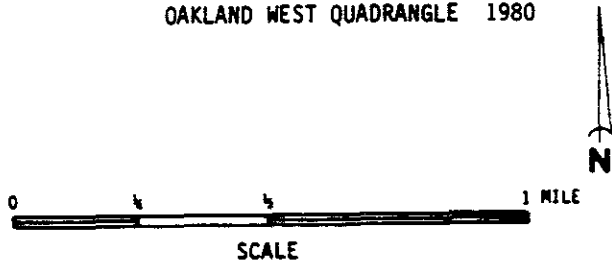
ATTACHMENT A

Site Location Map and Site Plan





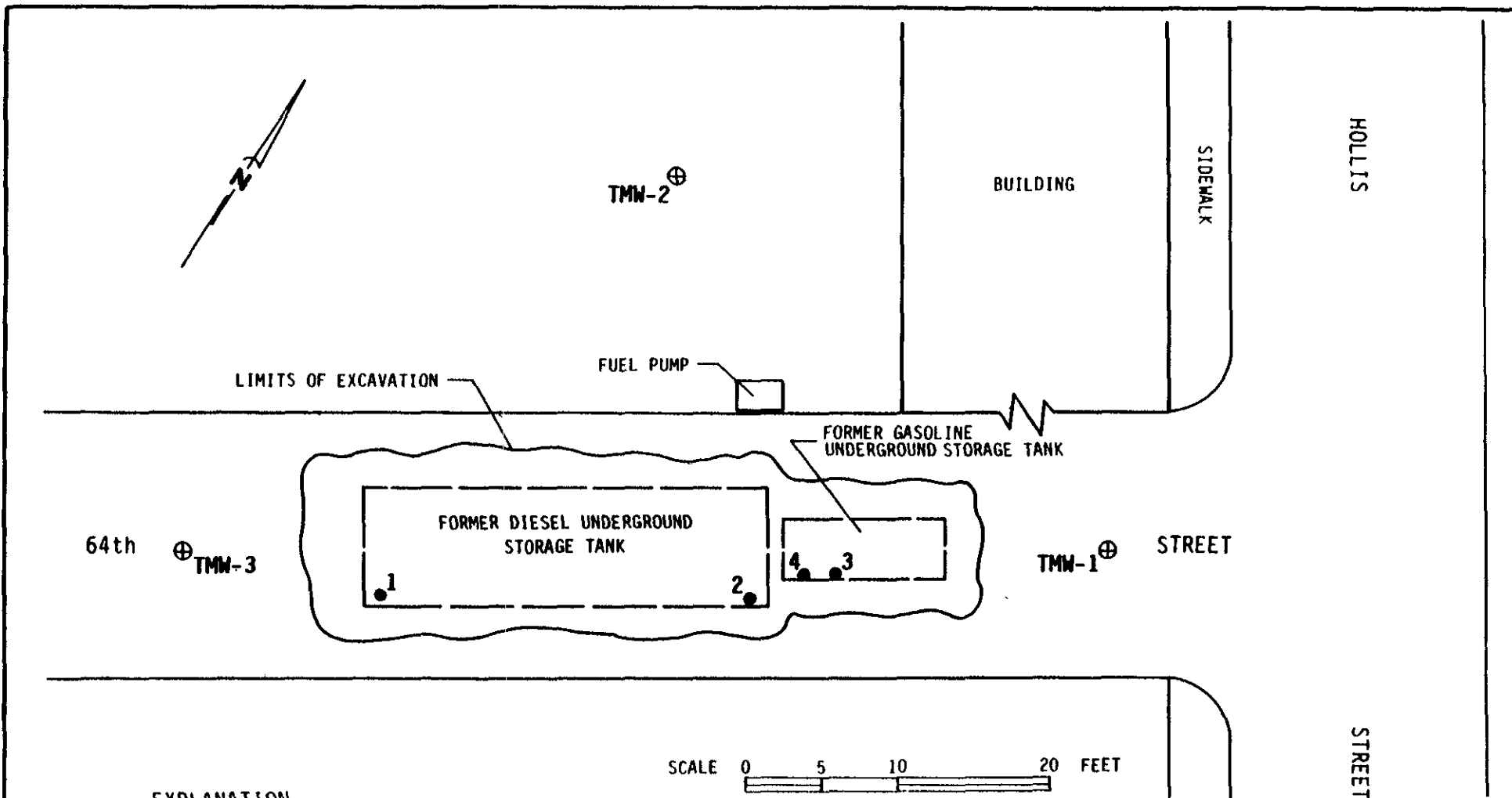
REFERENCE: USGS 7.5 MINUTE SERIES  
OAKLAND WEST QUADRANGLE 1980



**ENSR**

SITE LOCATION MAP  
MISSION TAYLOR PROPERTIES  
1410 64th STREET  
EMERYVILLE, CALIFORNIA

DRAWN BY <i>ML</i>	DATE 0110 91	PROJECT NO. 4682-001
CHK'D BY <i>CS</i>	REVISED	DWG. NO. FIGURE 1



EXPLANATION

- 4 SOIL SAMPLE LOCATION
- ⊕ TMW-3 SOIL BORINGS/MONITORING WELLS

**ENSR**<sup>TM</sup>

SITE PLAN  
 MISSION TAYLOR PROPERTIES  
 1410 64th STREET  
 EMERYVILLE, CALIFORNIA

DRAWN BY: <i>MTL</i>	DATE: 01/10/91	PROJECT NO. 4682-001
CHK'D BY: <i>CS</i>	REVISED:	DWG NO.: FIGURE 2



## ATTACHMENT B

### Field Survey Data Form



# ENSR Consulting and Engineering

## Water Sampling Field Survey Form

Job No.: 4682-002.300 Site: Mission Taylor Date: 8-16-91

Well No.: MW-1 Sampling Team: Brian Ho / Helena Kiebasinski

Sampling Method: PVC Bailer

Field Conditions: Partially Cloudy, Warm

Describe equipment D-Con before sampling this well: Wash w/TSP and tap water, Triple rinse w/ DI water

Total depth of well: 14.61 feet Time: 13:21

Depth to water before pumping: 3.61 feet

		Diameter					
		2-in.	4-in.		Volume	Purge Factor	Volume ToPurge
Height of Water Column:	<u>11</u> feet	* 0.16	0.65		= 1.76 gal.	* <u>5</u>	= <u>9 gals.</u>

Depth purging from: \_\_\_\_\_ feet Time purging begins: 13:50  
 $\pi * r^2 * L * 7.48 =$  \_\_\_\_\_ gallons

Time	Volume Purged (In Gallons)	pH (Units)	Conductivity (µmhos/cm@25°C)	T (°C)	Notes
<u>13:50</u>	<u>0 (initial)</u>	<u>9.8</u>	<u>0.776</u>	<u>20.0</u>	<u>gray w/silt</u>
<u>13:56</u>	<u>3</u>	<u>8.9</u>	<u>0.804</u>	<u>20.0</u>	<u>odor &amp; silty</u>
<u>14:01</u>	<u>6</u>	<u>8.7</u>	<u>0.811</u>	<u>19.8</u>	<u>" "</u>
<u>14:08</u>	<u>10</u>	<u>8.6</u>	<u>0.810</u>	<u>19.9</u>	<u>" "</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Time field parameter measurement begins: 14:10

	Rep No. 1	Rep No. 2	Rep No. 3	Rep No. 4
pH (Units)	<u>8.4</u>	<u>8.4</u>	<u>8.3</u>	<u>8.3</u>
Conductivity ( $\mu$ mhos/cm @ 25 °C)	<u>0.811</u>	<u>0.816</u>	<u>0.813</u>	<u>0.818</u>
T (°C)	<u>19.7</u>	<u>19.8</u>	<u>19.7</u>	<u>19.5</u>

Pre-sample collection gallons purged: 11

Time sample collection begins: 14:30

Time sample collection ends: 14:31

Total gallons purged: 11.5

Comments: No visible sheen or ~~or~~ floating product



# ENSR Consulting and Engineering

## Water Sampling Field Survey Form

Job No.: 4682-002.300 Site: Mission Taylor Date: 8-16-91

Well No.: MW-2 Sampling Team: B. Ho / H. Kiebossinski

Sampling Method: PVC Bailor

Field Conditions: Partially cloudy, warm

Describe equipment D-Con before sampling this well: Wash w/ TSP & Tap Water, triple rinse w/ DI water

Total depth of well: 15.42 feet Time: 13:26

Depth to water before pumping: 2.71 feet

	Diameter				
	2-in.	4-in.	Volume	Purge Factor	Volume To Purge
Height of Water Column: <u>12.71 feet</u>	* 0.16	0.65	= <u>2.0 gal.</u>	* <u>5</u>	= <u>10 gallons</u>

Depth purging from: \_\_\_\_\_ feet Time purging begins: 14:40

$\pi * r^2 * L * 7.48 =$  \_\_\_\_\_ gallons

Time	Volume Purged (In Gallons)	pH (Units)	Conductivity ( $\mu$ mhos/cm@ 25°C)	T (°C)	Notes
<u>14:40</u>	<u>0 (initial)</u>	<u>8.2</u>	<u>0.842</u>	<u>19.7</u>	<u>silty, cloudy, no odor</u>
<u>14:46</u>	<u>3</u>	<u>8.1</u>	<u>0.845</u>	<u>19.5</u>	<u>"</u>
<u>14:51</u>	<u>6</u>	<u>8.1</u>	<u>0.834</u>	<u>19.4</u>	<u>"</u>
<u>14:59</u>	<u>10</u>	<u>8.1</u>	<u>0.850</u>	<u>20.0</u>	<u>"</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Time field parameter measurement begins: 15:01

	Rep No. 1	Rep No. 2	Rep No. 3	Rep No. 4
pH (Units)	<u>9.0</u>	<u>8.0</u>	<u>7.9</u>	<u>7.9</u>
Conductivity ( $\mu$ mhos/cm @ 25 °C)	<u>0.849</u>	<u>0.842</u>	<u>0.842</u>	<u>0.839</u>
T (°C)	<u>19.3</u>	<u>19.3</u>	<u>19.3</u>	<u>19.3</u>

Pre-sample collection gallons purged: 11  
Time sample collection begins: 15:05  
Time sample collection ends: 15:06  
Total gallons purged: 11.5

Comments: No visible sheen or floating product



# ENSR Consulting and Engineering

## Water Sampling Field Survey Form

Job No.: 4682-002.300 Site: Mission Taylor Date: 8-16-91

Well No.: MW-3 Sampling Team: B.Ho / H Kiebasinski

Sampling Method: PVC Bailer

Field Conditions: Sunny - Warm

Describe equipment D-Con before sampling this well: \_\_\_\_\_  
\_\_\_\_\_

Total depth of well: 15.52 feet Time: 13:30

Depth to water before pumping: 2.61 feet

		Diameter					
		2-in.	4-in.		Volume	Purge Factor	Volume To Purge
Height of Water Column:	<u>12.91</u> feet	<u>* 0.16</u>	<u>0.65</u>		= <u>2.1</u> gal.	* <u>5</u>	= <u>10.5</u>

Depth purging from: \_\_\_\_\_ feet Time purging begins: 15:16  
 $\pi * r^2 * L * 7.48 =$  \_\_\_\_\_ gallons

Time	Volume Purged (In Gallons)	pH (Units)	Conductivity ( $\mu$ mhos/cm@ 25°C)	T (°C)	Notes
<u>15:16</u>	<u>0 (initial)</u>	<u>8.1</u>	<u>0.898</u>	<u>21.1</u>	<u>silty, cloudy, no odor</u>
<u>15:21</u>	<u>3</u>	<u>8.0</u>	<u>0.906</u>	<u>21.8</u>	<u>"</u>
<u>15:26</u>	<u>6</u>	<u>7.9</u>	<u>0.910</u>	<u>21.4</u>	<u>"</u>
<u>15:32</u>	<u>11</u>	<u>7.9</u>	<u>0.901</u>	<u>21.2</u>	<u>"</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



Time field parameter measurement begins: 15:33

	Rep No. 1	Rep No. 2	Rep No. 3	Rep No. 4
pH (Units)	<u>7.8</u>	<u>7.8</u>	<u>7.8</u>	<u>7.8</u>
Conductivity ( $\mu$ mhos/cm @ 25 °C)	<u>0.901</u>	<u>0.899</u>	<u>0.893</u>	<u>0.897</u>
T (°C)	<u>21.2</u>	<u>21.0</u>	<u>21.1</u>	<u>21.2</u>

Pre-sample collection gallons purged: 11

Time sample collection begins: 15:39

Time sample collection ends: 15:40

Total gallons purged: 12

Comments: No visible sheen or floating product

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ATTACHMENT C

Laboratory Report



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 08/16/91

DATE REPORTED: 08/19/91

LABORATORY NUMBER: 104866

CLIENT: ENSR

PROJECT ID: 4682-001-300

LOCATION: MISSION TAYLOR, EMERYVILLE

RESULTS: SEE ATTACHED

  
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QA/QC Approval

  
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Final Approval

Berkeley

Wilmington

Los Angeles

LABORATORY NUMBER: 104866  
 CLIENT: ENSR  
 PROJECT ID: 4682-001-300  
 LOCATION: MISSION TAYLOR

DATE RECEIVED: 08/16/91  
 DATE ANALYZED: 08/19/91  
 DATE REPORTED: 08/19/91

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions  
 TVH by California DOHS Method/LUFT Manual October 1989  
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
104866-1	D11-90	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, % 2  
 RECOVERY, % 101

CHAIN OF CUSTODY RECORD

104866-4ca.  
D1-90 Wash.

1 04 1

Client/Project Name <b>Mission Taylor</b>			Project Location <b>Emeryville</b>			ANALYSES											
Project No. <b>4682-001-300</b>			Field Logbook No.									TYP 95 Gasoline + BTXE (8015/8020)					
Sampler: (Signature) <b>Brian Ho</b>			Chain of Custody Tape No.														
Sample No./ Identification	Date	Time	Lab Sample Number	Type of Sample							REMARKS						
MW-1	8-16-91			Water	X							} Normal Turnaround					
MW-2	/			/	X												
MW-3	/			/	X												
D4-91	/			/	X												
D11-90					(X)							Rush!! 24-48 hr Turnaround for D11-90 only.					
Relinquished by: (Signature) <b>Brian Ho</b>				Date 8-16-91	Time 4:53	Received by: (Signature)				Date	Time						
Relinquished by: (Signature)				Date	Time	Received by: (Signature)				Date	Time						
Relinquished by: (Signature)				Date	Time	Received for Laboratory: (Signature) <b>Thomas White</b>				Date 8/16/91	Time 11:53						
Sample Disposal Method:				Disposed of by: (Signature)				Date	Time								
SAMPLE COLLECTOR <b>Brian Ho</b> ENSR 1320 Harbor Bay Parkway Alameda, CA 865-1888				ANALYTICAL LABORATORY <b>Curtis &amp; Tompkins, Ltd.</b> Berkeley, CA				<b>ENSR</b>									



## ATTACHMENT D

### Summary of Groundwater Analytical Results and Groundwater Elevations

**TABLE 1**  
**Analytical Results at 1410 - 64th Street**  
**Emeryville, California**

Chemical Parameter	Chemical Concentrations - Parts Per Million (ppm)											
	Monitoring Well TMW-1				Monitoring Well TMW-2				Monitoring Well TMW-3			
	04/13/90	11/30/90	04/12/91	08/16/91	04/13/90	11/30/90	04/12/91	08/16/91	04/13/90	11/30/90	04/12/91	08/16/91
Gasoline	0.56	ND	0.15	0.15	0.14	ND	0.16	0.13	ND	ND	ND	ND
Diesel	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA
Benzene	0.01	0.0032	0.0032	0.0048	0.001	0.0038	0.016	0.0077	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.01	0.0032	0.002	0.0037	0.002	ND	0.0017	0.0013	ND	ND	ND	ND
Total xylene	0.03	ND	ND	0.0026	0.007	ND	ND	0.0011	ND	ND	ND	ND

ND = Not detected at or above the reporting limit  
 NA = Not analyzed

**TABLE 2**

**Summary of Groundwater Elevations at 1410 - 64th Street  
Emeryville, California**

Monitoring Well	Well Depth <sup>(1)</sup> (Top of PVC)	Elevation (Top of PVC)	Depth-to-Water				Water Elevation			
			04/25/90	11/30/90	04/29/91	08/16/91	04/25/90	11/30/90	04/29/91	08/16/91
TMW-1	14.69	16.34	3.48	3.57	3.41	3.61	12.86	12.77	12.93	12.73
TMW-2	16.35	15.36	2.59	2.57	2.78	2.71	12.77	12.79	12.58	12.65
TMW-3	15.53	15.14	2.54	2.27	2.36	2.61	12.60	12.87	12.78	12.53

<sup>(1)</sup> All depths and elevations recorded in feet.