



HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

September 25, 1997

Ms. Eva Chu
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502 - 6577

10/3/97 Ask for S-I boring log
Gary will send data
w/ opinion of high TDS +
benzene from initial SS
below dispenser

Subject: Transmittal of Quarterly Groundwater Monitoring Report, Third Quarter
1997, Winner Ford, 1650 Park Street, Alameda, California.

can probably close after next
sampling event

Ms. Chu:

At the request of Ms. Michelle Nokes of Winner Ford, Horizon Environmental Inc. (Horizon) is transmitting to you this Quarterly Groundwater Monitoring Report, Third Quarter 1997 for the above-referenced site.

Please call us at 916-939-2170 should you have any questions regarding this site.

Sincerely,
Horizon Environmental Inc.

Gary D. Barker
Senior Project Manager

enclosure: Quarterly Groundwater Monitoring Report, Third Quarter 1997

cc: Ms. Michelle Nokes, Winner Ford



HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

September 22, 1997

Ms. Michelle Nokes, Vice President
Winner Ford
1650 Park Street
Alameda, California 94501

Subject: **Quarterly Groundwater Monitoring Report**
Third Quarter 1997
Winner Ford
1650 Park Street, Alameda, California

Ms. Nokes:

Horizon Environmental (Horizon) has prepared this Quarterly Groundwater Monitoring Report which presents the results of the third quarter 1997 groundwater monitoring for the above-referenced site (Figure 1). This report is intended to comply with the reporting requirements and guidelines set forth by the Alameda County Health Care Services Agency, Department of Environmental Health (ACHCSA-DEH) and the California Regional Water Quality Control Board-San Francisco Bay Region (CRWQCB-SFBR).

Site Description and Background

Winner Ford is an automobile dealership and showroom located on the southeast corner of the intersection of Park Street and Buena Vista Avenue in Alameda, California, as depicted on the Site Vicinity Map (Figure 1). The site is approximately ½-mile south of the Oakland Inner Harbor and approximately 1 mile north of San Leandro Bay, within a primarily commercial area of Alameda. Site facilities include a building with enclosed offices, an automobile showroom, and an automobile storage warehouse. The remaining portion of the property is used to store automobiles. The site is primarily asphalt-paved with some areas of concrete. A former gasoline underground storage tank (UST) was located beneath the sidewalk between the main building and Buena Vista Avenue, and a former waste-oil UST was located beneath the sidewalk between the main building and Park Street. The locations of these facilities and other pertinent site features are shown on the Site Plan (Figure 2). The waste-oil UST had not been used since the commencement of Winner Ford's lease in 1986. The gasoline UST was last used by Winner Ford in 1993 and was precision tested in January 1994, at which time it was certified "tight".

In August 1995, Blymyer Engineers, Inc. (Blymyer) was present on-site to observe the removal of the 500-gallon capacity, single-walled, steel, unleaded gasoline UST, and the 100-gallon capacity, single-walled, steel, waste-oil UST, as well as perform soil sampling

related to removal of the USTs, gasoline dispenser, and associated product lines. Piping connecting a former sump drain to the waste-oil tank was removed during the waste-oil tank removal. Soil samples collected and analyzed from beneath the gasoline UST, gasoline dispenser, and product line removal indicated that soil containing elevated concentrations of gasoline hydrocarbons remained after the excavation. Soil samples collected and analyzed from beneath the former waste-oil UST revealed that the soil containing an elevated concentration of Total Recoverable Petroleum Hydrocarbons (TRPH) remained after the excavation of the waste-oil UST basin to a depth of approximately 6½ feet bsg. A summation of the Blymyer work was presented in earlier reports prepared by Horizon in 1996 and 1997. The approximate locations of the former USTs are depicted on Figure 2.

Blymyer reported the soil type observed in both UST basins to be clayey sand (*Underground Storage Tank Closure* report, November 22, 1995). Blymyer also reported that initial groundwater was encountered in the gasoline-UST basin at a depth of approximately 9 feet below surface grade (bsg). The groundwater flow direction beneath the site was estimated to be northerly based on surficial topographic contours and concurring data obtained from ACHCSA-DEH for an adjacent site, Good Chevrolet, dated October 25, 1995.

On July 11, 1996, a Horizon geologist observed the drilling of two exploratory soil borings completed as monitoring wells MW-1 and MW-2 (Figure 2). Soil boring SB-1 was hand-augered to the soil-water interface at 7 feet bsg where a soil sample was collected from the auger (Table 2). Groundwater was encountered in the boring for MW-1 at 6.25 feet bsg. In the boring for MW-2, groundwater was encountered at 14.2 feet bsg. After the wells were developed, groundwater samples were collected on July 16 and July 29, 1996 (Table 1). Results of laboratory analyses of the groundwater samples revealed detectable levels of total petroleum hydrocarbons as gasoline (TPHg), the volatile aromatics benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) in groundwater from well MW-1, and very low levels of benzene and xylenes in groundwater from well MW-2 (Horizon, *Monitoring Well Completion and Preliminary Subsurface Assessment Report at Winner Ford, 1650 Park Street, Alameda, California*, November 11, 1996).

On April 29, 1997, Horizon began performing quarterly groundwater monitoring at the site. Results of laboratory analyses of the groundwater samples confirmed detectable levels of TPHg, BTEX, and MTBE in groundwater from well MW-1, and a very low level of benzene in groundwater from well MW-2 (Horizon, *Quarterly Groundwater Monitoring Report, Second Quarter 1997, Winner Ford, 1650 Park Street, Alameda, California*, July 8, 1997).

Current Groundwater Monitoring

On August 20, 1997, Horizon personnel were onsite to perform groundwater monitoring following Horizon's Field Methods and Procedures (Attachment A). Prior to sampling, monitoring wells MW-1 and MW-2 were measured for their respective total depths and

depths-to-water. Utilizing an electronic interface probe, Horizon personnel intercepted the groundwater surface at an average depth of 7.69 feet below the well casing-tops (Table 1 & Attachment B).

After collecting groundwater samples from wells MW-1 and MW-2, each container was properly labeled in the field, placed in an ice chest, and transported to Exelchem Environmental Labs in Roseville, California (Certificate No. 1760). Analyses performed were for TPHg, BTEX, and MTBE by U.S. Environmental Protection Agency (EPA) Methods 8015 / 602. In addition, the groundwater samples from MW-2 were analyzed for Total Oil & Grease (TOG) by EPA Method 5520-B.

The analytical results are summarized in Table 1, which also includes the historical groundwater data since the July 1996 well installation. The laboratory analytical reports and the chain-of-custody (COC) are included as Attachment C.

The groundwater gradient could not be calculated as there are only two wells. ACHCSA-DEH had previously authorized the installation of only two wells, indicating that neighboring wells could be used to evaluate groundwater flow. The adjacent Good Chevrolet site reported to ACHCSA-DEH a gradient direction towards the west on their Gradient Plan Map dated January 1997 by GeoPlexus Inc.

Summary

On August 20, 1997, monitoring wells MW-1 and MW-2 were sounded and sampled for the third quarter of 1997.

- **Water Levels:** The average depth to the water table was 7.69 feet bsg. This is approximately one foot lower than when the wells were installed in July 1996, and approximately one foot lower than the water levels measured in the previous quarterly event in April 1997.
- **TPHg:** The samples collected from wells MW-1 & MW-2 contained TPHg concentrations of 65 parts per billion (ppb) and <50 ppb, respectively. This quantification indicates decreased TPHg concentrations since July 1996 and the last quarterly monitoring event in April 1997.
- **BTEX:** Benzene: MW-1 and MW-2 contained benzene concentrations of 18 and <0.5 ppb, respectively. Toluene: MW-1 and MW-2 contained 1.3 and <0.5 ppb, respectively. Ethylbenzene: MW-1 and MW-2 contained 1.6 and <0.5 ppb, respectively. Xylenes: MW-1 and MW-2 contained 2.5 and 0.5 ppb, respectively. All BTEX concentrations indicate a decrease in concentrations since July 1996 and the last quarterly monitoring event in April 1997. A Benzene Isoconcentration Map is included as Figure 3.

- **MTBE:** MW-1 contained 331 ppb by Method 602. MW-2 contained <5.0 ppb.
- **TOG:** MW-2 continues to be below the laboratory detection level of 10 ppm.

The overall hydrocarbon concentration in the groundwater has decreased since July 1996 when monitoring wells MW-1 and MW-2 were installed and initially sampled, as well as since the the last quarterly monitoring event performed in April 1997.

Report Distribution

We recommend a copy of this report be forwarded to:

Ms. Eva Chu
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Mr. Kevin Graves
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Limitations

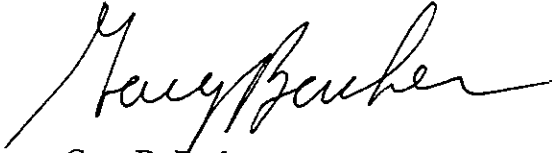
This report was prepared in accordance with the methods and procedures described in the attached field methods, and generally accepted standards for the practice of the environmental and geological sciences in California at the time of the investigation. The investigation was conducted solely for the purpose of evaluating environmental conditions of the soil and groundwater with respect to gasoline- and waste oil-related hydrocarbons at the site.

No soil engineering or geotechnical references are implied, nor should any be inferred. Evaluation of the geological conditions at the site for the purpose of this investigation is made from a limited number of observation points. Subsurface conditions may vary away from the available data points. This report is the property of Horizon Environmental Inc. and Winner Ford for their use and distribution.

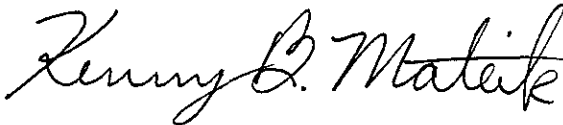
If you have any questions, please contact us at (916) 939-2170.

Sincerely,

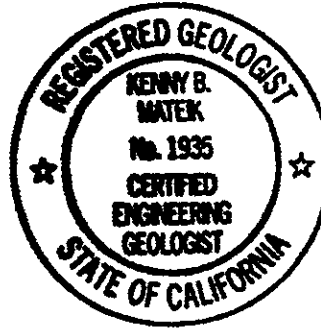
HORIZON ENVIRONMENTAL INC.



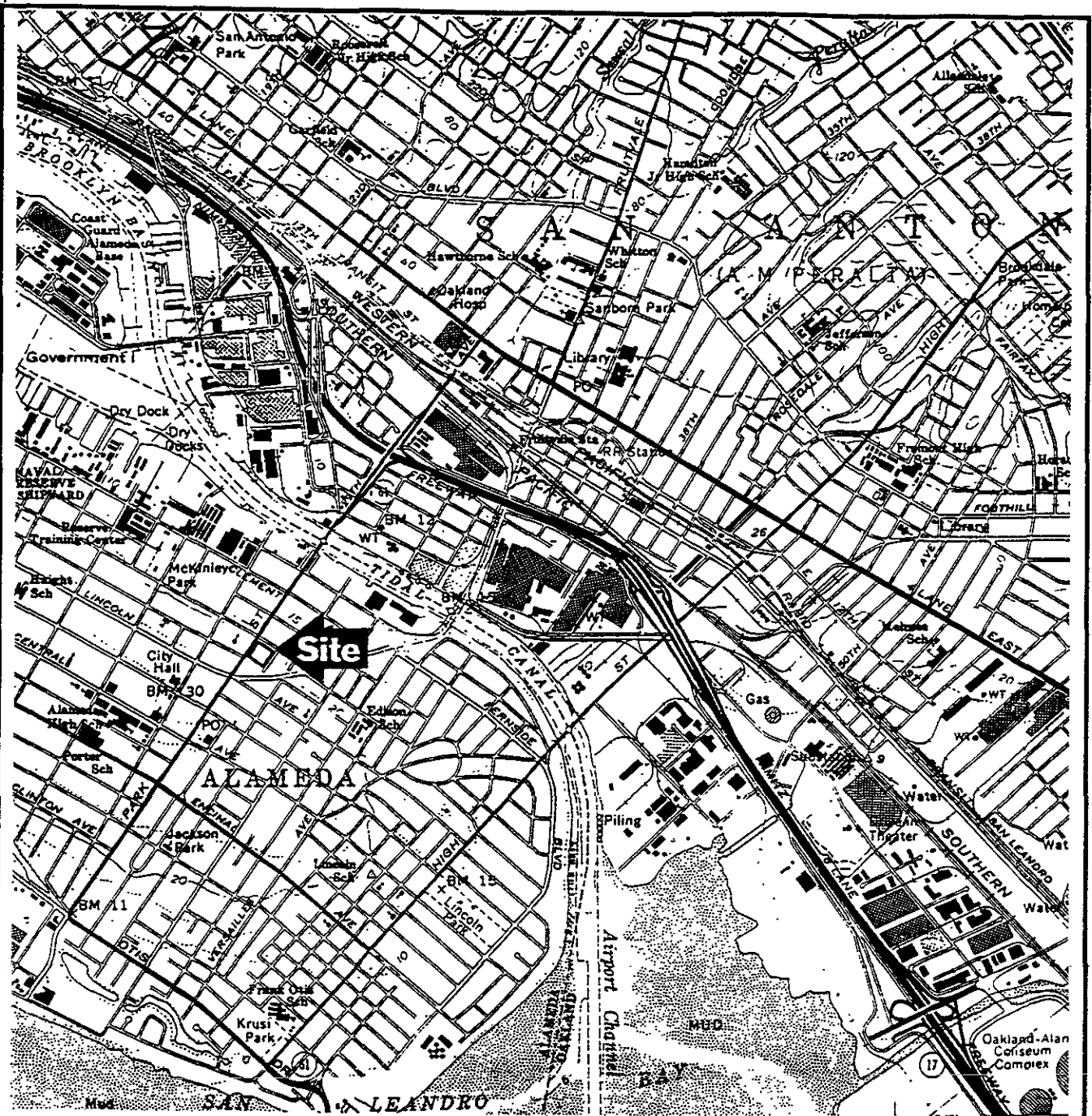
Gary D. Barker
Senior Project Manager



Kenny B. Mateik
Registered Geologist
C.E.G. No. 1935



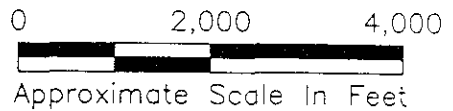
Attachments:	Figure 1	Site Vicinity Map
	Figure 2	Site Plan Map
	Figure 3	Benzene Isoconcentration Map
	Table 1	Groundwater Data
	Attachment A	Horizon Field Methods and Procedures
	Attachment B	Horizon Field Data Sheets
	Attachment C	Laboratory Analytical Reports and Chain-of-Custody



QUADRANGLE LOCATION



Source: U.S.G.S. 7-1/2 Minute Topographic Map
 Oakland East, California
 Photorevised 1980



HORIZON ENVIRONMENTAL INC.

Project Number 3002 11
 Prepared By G Barker
 Reviewed By

Drawn By: D Alston
 Date 2/96
 Revised Date

SITE VICINITY MAP

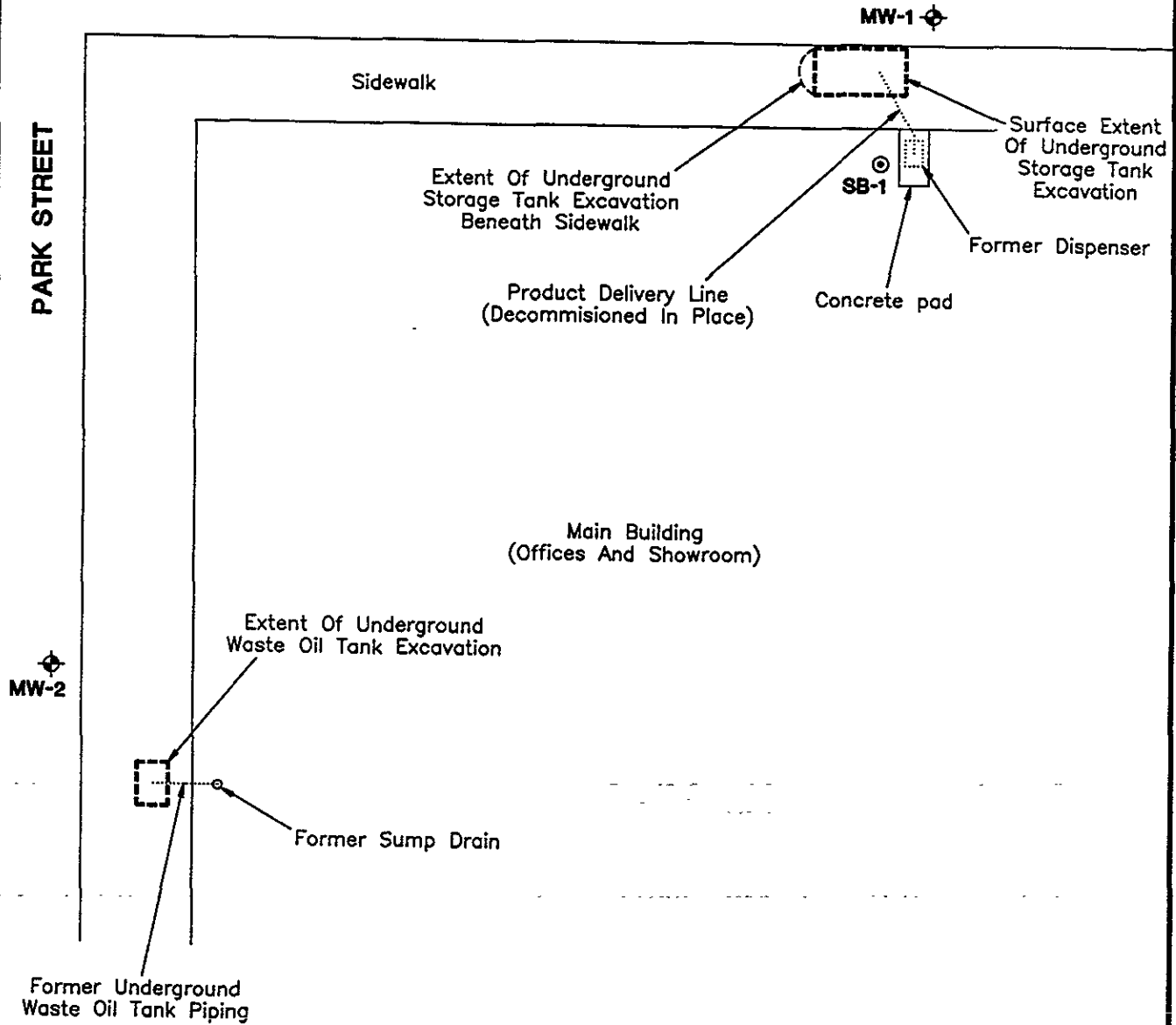
WINNER FORD
 1650 PARK STREET
 ALAMEDA, CALIFORNIA

FIGURE



1

BUENA VISTA AVENUE

PARK STREET




EXPLANATION:

- MW-2**  Groundwater Monitoring Well
- SB-1**  Hand-Augered Soil Boring



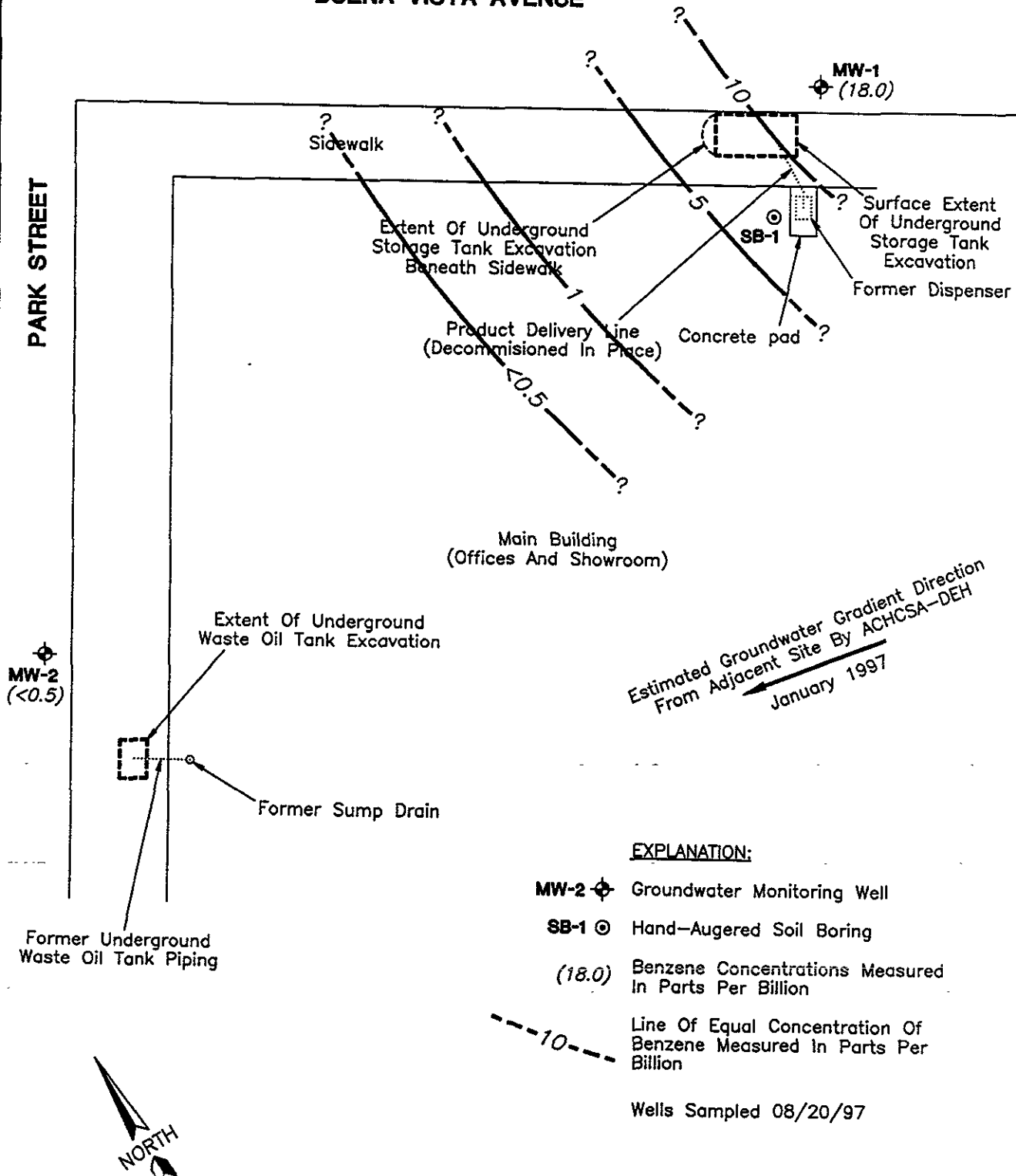
Approximate Scale in Feet

Source: Figure Modified From Drawing Provided By Blymer Engineers, Inc.

 HORIZON ENVIRONMENTAL INC.		SITE PLAN WINNER FORD 1650 PARK STREET ALAMEDA, CALIFORNIA	FIGURE 2

BUENA VISTA AVENUE

PARK STREET



EXPLANATION:

- MW-2 Groundwater Monitoring Well
- SB-1 Hand-Augered Soil Boring
- (18.0) Benzene Concentrations Measured In Parts Per Billion
- Line Of Equal Concentration Of Benzene Measured In Parts Per Billion

Wells Sampled 08/20/97

Source: Figure Modified From Drawing Provided By Blymer Engineers, Inc.

0 20

 Approximate Scale In Feet



HORIZON ENVIRONMENTAL INC.

BENZENE ISOCONCENTRATION MAP

FIGURE

Project Number: 3002.41
 Prepared By: G. Barker
 Reviewed By:

Drawn By: D. Alston
 Date: 09/97
 Revised Date:

WINNER FORD
 1650 PARK STREET
 ALAMEDA, CALIFORNIA

3

TABLE 1

**GROUNDWATER DATA
Winner Ford
1650 Park Street, Alameda, California**

Well No.	Date Sampled	Total Depth (ft.)	Depth to Water (ft.)	TPHg (ppb)	MTBE† (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-Benzene (ppb)	Xylenes (ppb)	TOG (ppm)
MW-1	07/16/96	---	---	222	267	62.8	34.3	5.75	32.1	NA
	04/29/97	22.75	5.89	145	312/260*	53.5	6.1	4.2	9.2	NA
	08/20/97	22.69	7.13	65	331	18.0	1.3	1.6	2.5	NA
MW-2	07/16/96	---	---	< 50	NA	1.1	<0.5	<0.5	1.05	NA
	07/29/96	---	---	NA	NA	NA	NA	NA	NA	<10
	04/29/97	24.77	7.62	< 50	< 5.0	0.6	<0.5	<0.5	<0.5	<10
	08/20/97	24.74	8.26	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<10

TPHg = Total Petroleum Hydrocarbons as gasoline
ppb – parts per billion
ppm – parts per million

MTBE† = Methyl Tertiary-Butyl Ether, * (by 602 / by 8260)
NA = Not Analyzed

ATTACHMENT A

HORIZON ENVIRONMENTAL INC.

FIELD METHODS AND PROCEDURES

The following section describes field procedures utilized by Horizon Environmental Inc. (Horizon) personnel in performance of the tasks involved with this project.

1.0 HEALTH AND SAFETY PLAN

Field work performed by Horizon and subcontractors at the site will be conducted according to guidelines established in a Site Health and Safety Plan (SHSP). The SHSP is a document that describes the hazards that may be encountered in the field and specifies protective equipment, work procedures, and emergency information. A copy of the SHSP will be at the site and available for reference by appropriate parties during work at the site.

2.0 GROUNDWATER DEPTH EVALUATION

Each monitoring well is opened and allowed to equilibrate to atmospheric pressure prior to measuring depth to groundwater. Depth to groundwater will be measured to the nearest 0.01 foot using an electronic, hand-held, water-level indicator. Depth to groundwater will be measured from the surveyed point on the top of the well casing. The tip of the probe will be examined to assist in the evaluation of the possible presence of a product sheen.

3.0 MONITORING WELL PURGING AND SAMPLING

Prior to purging, a clean, transparent bailer is lowered into the well and a sample of groundwater is hoisted to the surface. The contents are inspected for the presence of product floating on the surface of the sample. Groundwater sampling events conducted subsequent to the initial well development and sampling event will be preceded by purging three to four well-volumes by hand-bailing or use of an electrical purge pump. Purge water will be monitored for the parameters of temperature, pH, and electrical conductivity until stabilized. A well is allowed to recharge to at least 80% of its prepurge volume prior to sampling. If a well dewateres, it will be allowed to recharge for a minimum of one to two hours prior to sampling. After the water level within the well has stabilized, a sample is collected within a dedicated, clean, disposable, plastic bailer lowered into the well and hoisted when filled.

4.0 SAMPLE PREPARATION FOR LABORATORY ANALYSIS

The sample fluid is transferred from the bailer to one or more airtight vials and chilled on ice for transport to a state-certified analytical laboratory. Groundwater samples are analyzed within the EPA-specified holding time for requested analyses.

Each sample container submitted for analysis is appropriately labeled to identify the job number, sample date, time of sample collection, and an individual number unique to that sample.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at a California DoHS-certified laboratory. When the sample is shipped, the responsible technician or geologist relinquishes it by signing the chain-of-custody form, also listing the date and time.

The sample control officer at the laboratory:

- verifies sample integrity;
- confirms use of the proper holding container;
- recognizes that an adequate volume of fluid has been collected for the required analysis;
- identifies the method of preservation; and
- accepts custody for the laboratory when these conditions have been satisfied.

ATTACHMENT B

HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

MONITORING WELL DATA

Station No. <u>002</u>	Location <u>ALAMEDA</u>
Address <u>1650 PARK ST.</u>	Job No. <u>3002.</u>
Well No. <u>MW-1</u>	Date <u>8/20/97</u>

T.D. - D.T.W. x Well Diameter x *VF = Casing Volume				
<u>22.69</u>	<u>- 7.13</u>	<u>x .17</u>	<u>* 2.64 x 4</u>	<u>= 10.58</u>

*VF= gal./ft.	2" x 0.17 3" x 0.38	4" x 0.66 6" x 1.50
------------------	------------------------	------------------------

Gals. Purged	<u>2.75</u>	<u>5.5</u>	<u>8.25</u>	<u>11</u>			
Conduct.	<u>3.15</u>	<u>3.03</u>	<u>2.87</u>	<u>2.93</u>			
P/H	<u>9.07</u>	<u>9.03</u>	<u>9.51</u>	<u>9.32</u>			
Temp (°F)	<u>67.5</u>	<u>68.1</u>	<u>68.0</u>	<u>67.5</u>			
Turbid	<u>NO</u>	<u>NO</u>	<u>slight</u>	<u>yes</u>			
Product/Sheen	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>			
Time	<u>7:54</u>	<u>7:56</u>	<u>7:58</u>	<u>8:10</u>			

ODOR yes yes yes yes

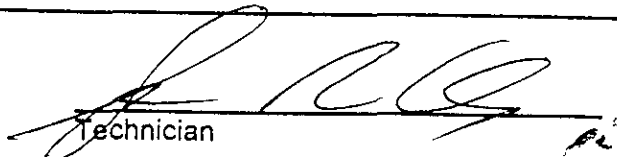
Total Volumes Purged: 4 Purging Equipment: 2 stage ~~gears~~ pump

Total Gallons Purged: 11

Sample Containers: 2 Sampling Equipment: DISPOSABLE BAUER

H₂O Stored?
11 gallons

Comments:
DTW after purge - 11.06. Water gradually got more turbid. There was no sheen but there was an odor throughout purging.


Technician

HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

MONITORING WELL DATA

Station No. <u>002</u>	Location <u>Alameda</u>
Address <u>1650 Park St.</u>	Job No. <u>3002.</u>
Well No. <u>MW-2</u>	Date <u>8/20/97</u>

T.D. - D.T.W. x Well Diameter x *VF = Casing Volume				
<u>24.74</u>	- <u>8.26</u>	x <u>.17</u>	= <u>2.80 x 4</u>	= <u>11.20</u>

*VF= gal./ft.	2" x 0.17 3" x 0.38	4" x 0.66 6" x 1.50
------------------	------------------------	------------------------

Gals. Purged	<u>3</u>	<u>6</u>	<u>9</u>	<u>12</u>			
Conduct.	<u>6.52</u>	<u>6.64</u>	<u>6.77</u>	<u>6.83</u>			
P/H	<u>8.98</u>	<u>8.98</u>	<u>8.94</u>	<u>8.86</u>			
Temp (°F)	<u>68.3</u>	<u>68.6</u>	<u>67.5</u>	<u>66.8</u>			
Turbid	<u>very slight</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>			
Product/Sheen	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>			
Time	<u>8:32</u>	<u>8:35</u>	<u>8:38</u>	<u>8:42</u>			

odor NO NO NO NO

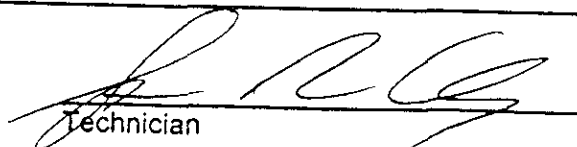
Total Volumes Purged: _____ Purging Equipment: 2 stage pump

Total Gallons Purged: _____

Sample Containers: 3 Sampling Equipment: disposable Bailen

H₂O Stored? 12 gallons

Comments: DTW after purge - 20.10. Water started off slightly turbid but quickly cleared. Water has no sheen & no odor.


Technician

ATTACHMENT C

**EXCELCHEM
ENVIRONMENTAL LABS**



500 Giuseppe Court, Suite 9
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784

ANALYSIS REPORT

Attention:	Mr. Rich Johnson	Date Sampled :	08-20-97
	Horizon Environmental	Date Received:	08-21-97
	5011 Golden Foothill Pkwy, Ste 7	MTBE Analyzed:	09-02-97
	El Dorado Hills, CA 95762	BTEX Analyzed:	09-02-97
		TPHg Analyzed:	09-02-97

Project: 3002.41/Winner Ford Matrix: Water

	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPHg
	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>
Reporting Limit:	5.0	0.5	0.5	0.5	0.5	50

SAMPLE

Laboratory Identification:

W-0820-MW1	331*	18.0	1.3	1.6	2.5	65
W0897503						

ppb= Parts per billion = ug/L = micrograms per liter

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

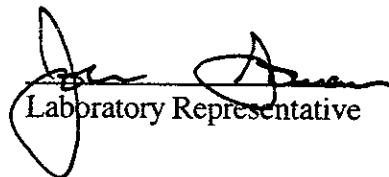
* = Beyond the linear range of detection.

ANALYTICAL PROCEDURES

MTBE (Methyl Tert-Butyl Ether)--MTBE is analyzed by EPA Method 602 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID).

BTEX-- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are analyzed by using EPA Method 602 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID).

TPHg--Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are analyzed by using modified EPA Method 8015, which utilizes a GC equipped with an FID.


Laboratory Representative

09-05-97
Date Reported

**EXCELCHEM
ENVIRONMENTAL LABS**

500 Giuseppe Court, Suite 9
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784



ANALYSIS REPORT

Attention:	Mr. Rich Johnson	Date Sampled :	08-20-97
	Horizon Environmental	Date Received:	08-21-97
	5011 Golden Foothill Pkwy, Ste 7	MTBE Analyzed:	09-02-97
	El Dorado Hills, CA 95762	BTEX Analyzed:	09-02-97
		TPHg Analyzed:	09-02-97

Project: 3002.41/Winner Ford Matrix: Water

	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPHg
	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>
Reporting Limit:	5.0	0.5	0.5	0.5	0.5	50

SAMPLE

Laboratory Identification:

W-0820-MW2 W0897504	ND	ND	ND	ND	ND	ND
------------------------	----	----	----	----	----	----

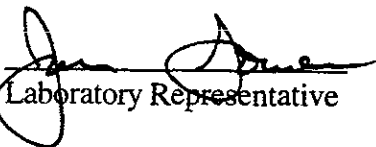
ppb= Parts per billion = ug/L = micrograms per liter
ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

ANALYTICAL PROCEDURES

MTBE (Methyl Tert-Butyl Ether)--MTBE is analyzed by EPA Method 602 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID).

BTEX-- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are analyzed by using EPA Method 602 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID).

TPHg--Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are analyzed by using modified EPA Method 8015, which utilizes a GC equipped with an FID.


Laboratory Representative

09-05-97
Date Reported

**EXCEL CHEM
ENVIRONMENTAL LABS**

500 Giuseppe Court, Suite 9
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784



ANALYSIS REPORT

Attention:	Mr. Rich Johnson	Date Sampled :	08-20-97
	Horizon Environmental	Date Received:	08-21-97
	5011 Golden Foothill Pkwy, Ste 7	Date Analyzed:	08-28-97
	El Dorado Hills, CA 95762		

Project: 3002.41/Winner Ford Matrix: Water

TOG
PPM
10

Reporting Limit:

SAMPLE

Laboratory Identification:

W-0820-MW2

ND

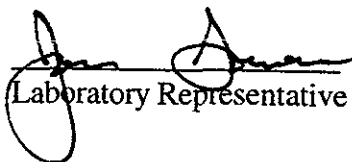
W0897504

ppm = parts per million = mg/L = milligrams per Liter.

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

ANALYTICAL PROCEDURES

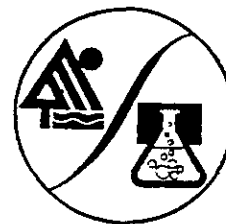
TOG-- Total oil and grease is measured by Standard Method 5520B, 18th Edition.


Laboratory Representative

09-05-97
Date Reported

**EXCELICHEM
ENVIRONMENTAL LABS**

500 Giuseppe Court, Suite 9
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784



QA/QC REPORT

Attention: Mr. Rich Johnson
Horizon Environmental
5011 Golden Foothill Pkwy. Ste 7
El Dorado Hills, CA 95762

Date Analyzed: 08-29-97
Matrix: Water

Project : 3002.41/Winner Ford

	Benzene	Toluene	Ethyl- benzene	Total Xylenes
	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>
Reporting Limit:	0.5	0.5	0.5	0.5

QA/QC PARAMETER

Matrix Blank	ND	ND	ND	ND
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PERCENT RECOVERIES

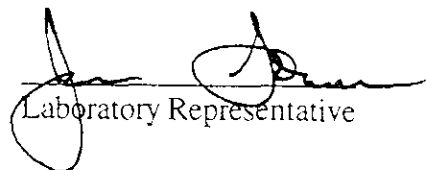
Laboratory Control Spike	85%	96%	86%	89%
Laboratory Control Spike Duplicate	92%	102%	92%	94%

ppb = parts per billion = ug/L = microgram per liter
ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

All surrogate recoveries were within 30% of target values.
Spikes & Spike Duplicates were each spiked with 250 ng BTEX standard.

ANALYTICAL PROCEDURES

BTEX-- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction using EPA Method 5030 followed by analysis using EPA Method 602 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID).


Laboratory Representative

09-05-97
Date Reported

EXCEL CHEM
ENVIRONMENTAL LABS

500 Giuseppe Court, Suite 9
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784



QA/OC REPORT

Attention: Mr. Rich Johnson
Horizon Environmental
5011 Golden Foothill Pkwy, Ste 7
El Dorado Hills, CA 95762

Date Analyzed: 08-28-97
Matrix: Water

Project: 3002.41/Winner Ford

	TOG
	<u>PPM</u>
Reporting Limit:	10

QA/QC PARAMETER

Matrix Blank	ND
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PERCENT RECOVERIES

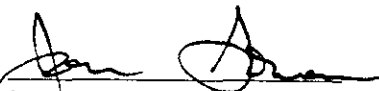
Laboratory Control Spike	98%
Laboratory Control Spike Duplicate	91%

ppm = parts per million = mg/L = milligram per liter.
ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

Spikes & Spike Duplicates were each spiked with 50mg of motor oil.

ANALYTICAL PROCEDURES

TOG-- Total oil and grease is measured gravimetrically by Standard Method 5520B, 18th Edition.


Laboratory Representative

09-05-97
Date Reported

Excelchem
Environmental Labs

500 Giuseppe Court, Suite 9
Roseville, CA 95678
(916) 773-3664

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Rich Johnson Phone #: 916-939-2170

897092

ANALYSIS REQUEST

TAT

Company/Address: 5011 Golden Foothill Prwy, El Dorado Hills, CA 95762 FAX #: 916-939-2172

Project Number: 3002-41 P.O.#: Project Name: WINTER FORD

Project Location: ALAMEDA Sampler Signature: [Signature]

Sample ID	Sampling		Container		Method Preserved				Matrix		BTEX (602/8020)	BTEX/TPH as Gasoline (602/8020/6015) /MTBE	TPH as Diesel (8015)	TPH as Oil (8015)	Total Oil & Grease (5520 B/E, F)	Total Oil & Grease IR (5520 B/E, F, C)	96 - Hour Fish Bioassay	EPA 601/8010	EPA 602/8020	EPA 615/8150	EPA 608/8080 - Pesticides	EPA 608/8080-PCBs	EPA 624/8240	EPA 625/8270	ORGANIC LEAD	Reactivity, Corrosivity, Ignitibility	W.E.T. (✓)	TOTAL (✓)	RUSH SERVICE (12 hr) or (24 hr)	EXPEDITED SERVICE (48 hr) or (1 wk)	STANDARD SERVICE (2wk)	
	DATE	TIME	VOA	SLEEVE	1L GLASS	1L PLASTIC	HCl	HNO3	ICE	NONE																						WATER
W-0820-MW1	8/20/97	8:07	2				/	/		/		/																				
W-0820-MW2	8/20/97	8:55	2	1			/	/		/		/																				

Relinquished by: Horizon
[Signature]

Date Time: 8/20/97 10:22

Received by: [Signature] 1-BOX COURIER
261 10:22
3/20/97

Remarks:
one voa of W-0820-MW1 received broken.
per Gary - added MTBE by 602. NSR.
[Signature]

Relinquished by:

Date Time:

Received by:

Relinquished by:

Date Time: 8/21/97 13:00

Received by Laboratory: [Signature]

Bill To: Horizon Environmental
5011 Golden Foothill Prwy
El Dorado Hills, CA 95762