EXXON COMPANY, U.S.A.

P.O. BOX 4032 • CONCORD, CA 94524-4032
MARKETING DEPARTMENT • ENVIRONMENTAL ENGINEERING

DARIN L. ROUSE
SENIOR ENGINEER

(925) 246-8768
(925) 246-8798 FAX

245

February 16, 2000

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

RE: Exxon RAS #7-0238/2200 East 12th Street, Oakland, California.

Dear Mr. Chan:

Attached for your review and comment is a letter report entitled ***Sensitive Receptor Survey Report,*** dated February 7, 2000, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the results of a sensitive receptor survey conducted for the subject site.

If you have any questions or comments, please contact me at (925) 246-8768.

Sincerely,

Darin L. Rouse
Senior Engineer

Attachment: ERI's Sensitive Receptor Survey Report, dated February 7, 2000.

cc: w/attachment
Mr. Stephen Hill - California Regional Water Quality Control Board-San Francisco Bay Region

w/o attachment
Mr. James F. Chappell - Environmental Resolutions, Inc.

00 FEB 24 PM 3:00

ENVIRONMENTAL PROTECTION

ENVIRONMENTAL RESOLUTIONS, INC.

February 7, 2000
ERI 229303.R01

Mr. Darin L. Rouse
Exxon Company, U.S.A.
P.O. Box 4032
Concord, California 94524-4032

Subject: Sensitive Receptor Survey Report, Exxon Service Station 7-0238, 2200 East 12th Street, Oakland, California.

Mr. Rouse:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI) conducted a Sensitive Receptor Survey (SRS) to locate utility vaults, storm sewers, municipal and domestic water wells, surface water bodies, subway tunnels, and basements in the vicinity of the subject site.

The site is located on the eastern corner of 22nd Avenue and East 12th Street in Oakland, California, as shown on the Site Vicinity Map (Plate 1). The locations of the underground storage tanks (USTs), dispenser islands, groundwater monitoring wells, and other selected site features are shown on the Generalized Site Plan (Plate 2).

ERI performed the SRS, which included a file review and a field visit. The file review included a record search of the California Department of Water Resources (DWR) well driller's report archive within a 1,000-foot radius of the site. The fieldwork included a visual survey to identify utility vaults, storm sewers, private water wells, subway tunnels, and basements within a 1,000-foot radius of the subject site.

Utility Vaults

The search identified eight utility vaults located on the sidewalks bordering the site, and four utility vaults located on the lot surrounding the building. The vault identities and locations are shown on Plate 3. Utility vault photographs and site photographs are included in Attachment A.

Municipal and Private Water Wells

ERI requested the DWR to review the files and compile a list of water supply wells within a 1,000-foot radius of the site. **The DWR well driller's report archive search revealed no private or municipal wells registered within a 1,000-foot radius of the site.** During the site visit, ERI discovered a UST cathodic protection well CP1. The location of the cathodic protection well is shown on Plate 3.

Surface Water Bodies

Based on visual reconnaissance of the site vicinity, there are no surface water bodies located within a 1,000-foot radius of the site. The closest surface water body, Alameda Harbor, is located approximately 1,500 feet west of the site.

Basements
During a visual reconnaissance of the buildings in the site vicinity, ERI personnel did not observe any basements within a 1,000-foot radius of the subject site.

Subways/Tunnel
During a visual reconnaissance, ERI personnel did not observe any subway tunnels within a 1,000-foot radius of the subject site.

Underground Utility Conduits
In April 1999, ERI performed an underground utility survey, the results of which are reported in ERI's *Report of Findings*, dated June 23, 1999. A map of underground utility conduits in the site vicinity is presented as Plate 4.

ERI recommends forwarding copies of this report to:

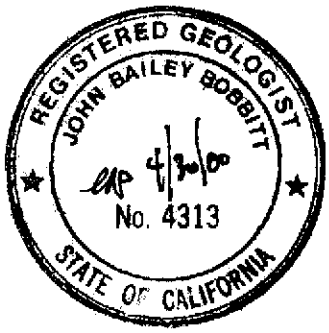
Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

Mr. Stephen Hill
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Please call Mr. James F. Chappell at (415) 382-4323 with any questions regarding this project.

Sincerely,
Environmental Resolutions, Inc.

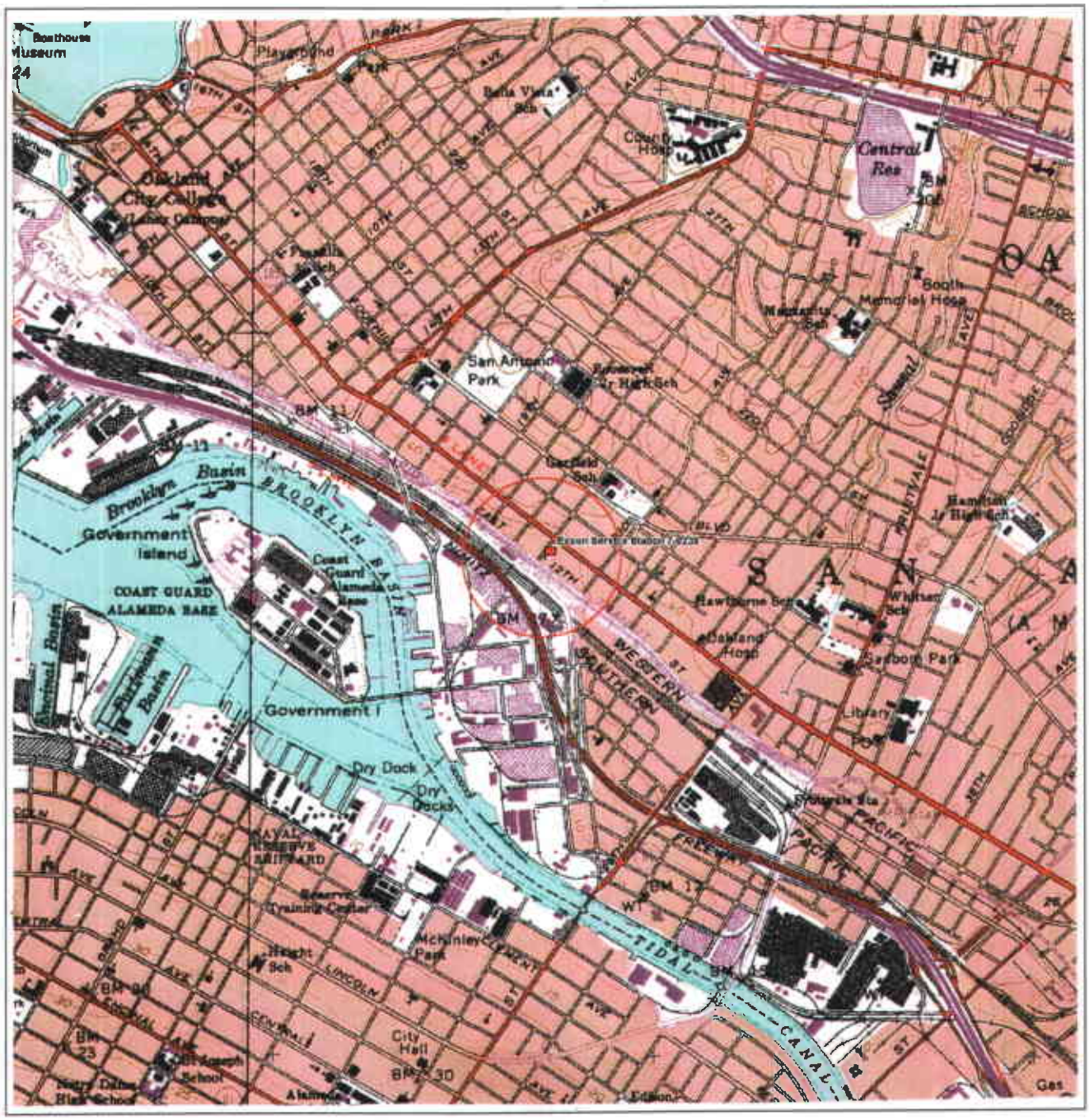
James F. Chappell
Senior Staff Scientist



John B. Bobbitt
R.G. 4313

Attachments:
Plate 1: Site Vicinity Map
Plate 2: Generalized Site Plan
Plate 3: Underground Utility Vault Locations
Plate 4: Underground Utility Map

Attachment A: Site Photographs



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APPROXIMATE SCALE

0 1/2 1

MILE

Source: 3-D Topoquads
Computer software
Delorme 1999

ENVIRONMENTAL RESOLUTIONS, INC.

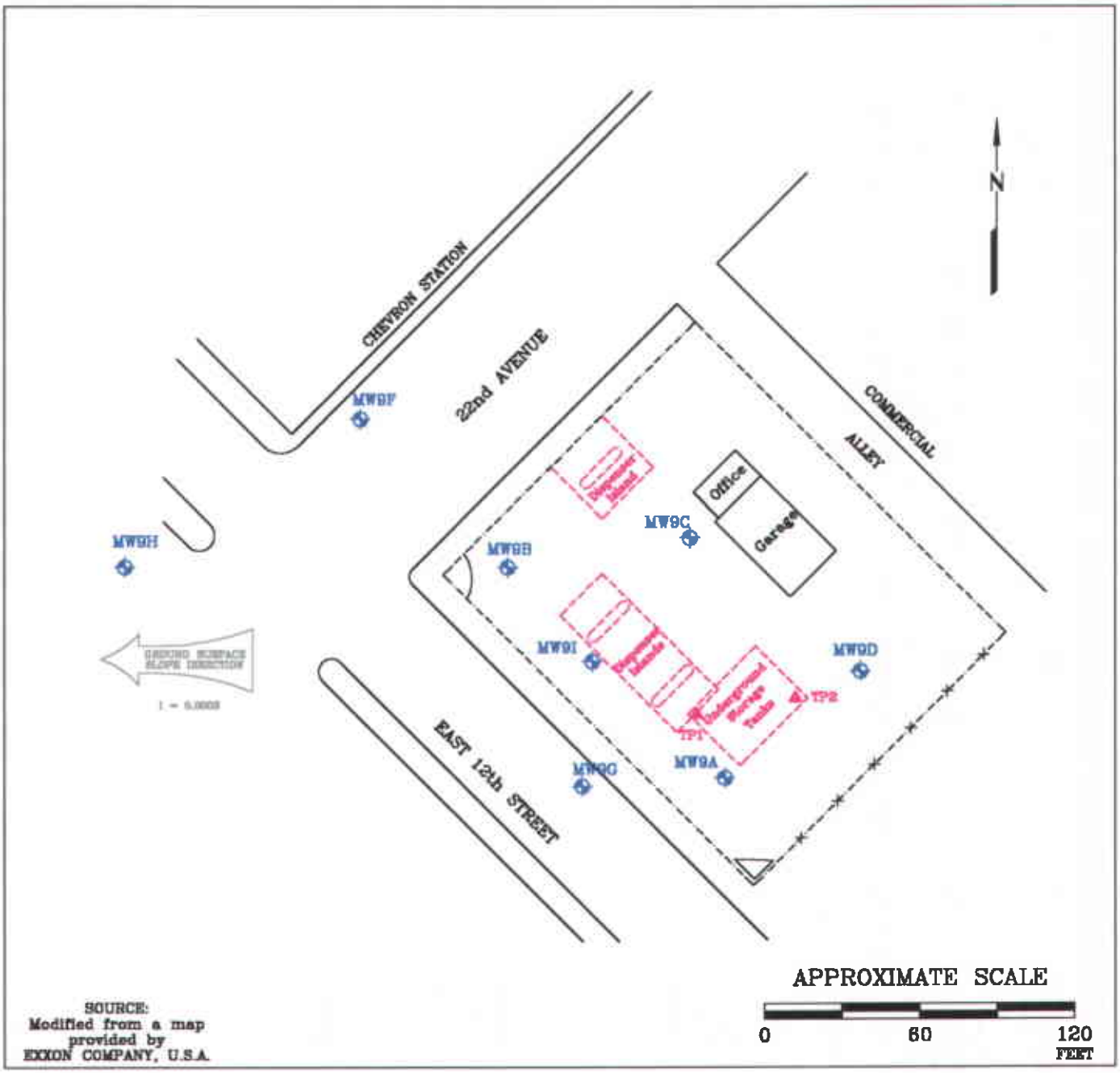
PROJECT 2293

SITE VICINITY MAP

EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PLATE

1



SOURCE:
Modified from a map provided by EXXON COMPANY, U.S.A.

FN 22930002

EXPLANATION

MW9I
Groundwater Monitoring Well

i = Interpreted Ground Surface Slope

TP2
UST Observation Well

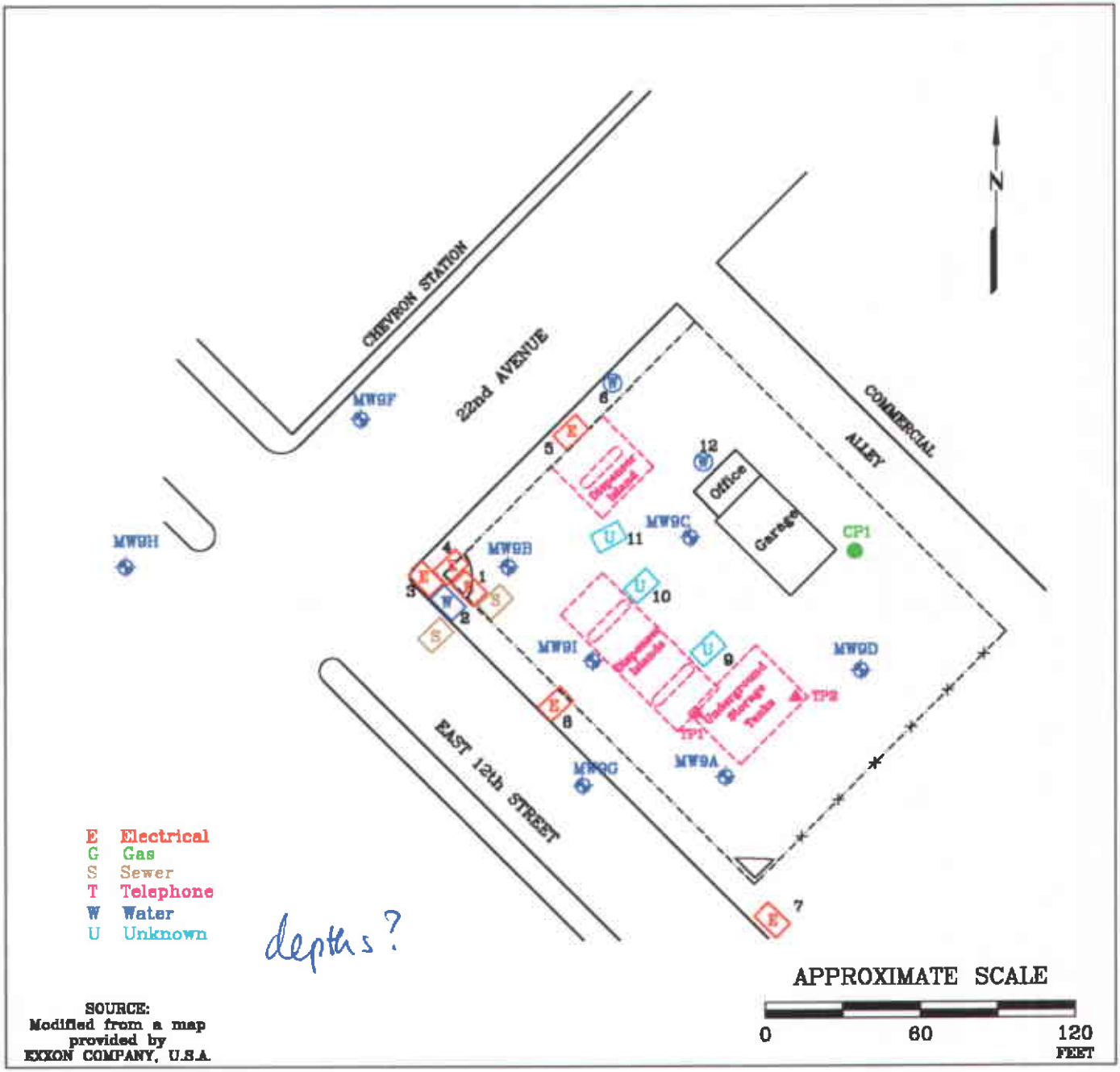
ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PROJECT NO.
2293

PLATE
2



SOURCE:
Modified from a map provided by EXXON COMPANY, U.S.A.

FN 22930002

EXPLANATION

MW9I — Groundwater Monitoring Well

CP1 — Cathodic Protection Well

TP2 — UST Observation Well

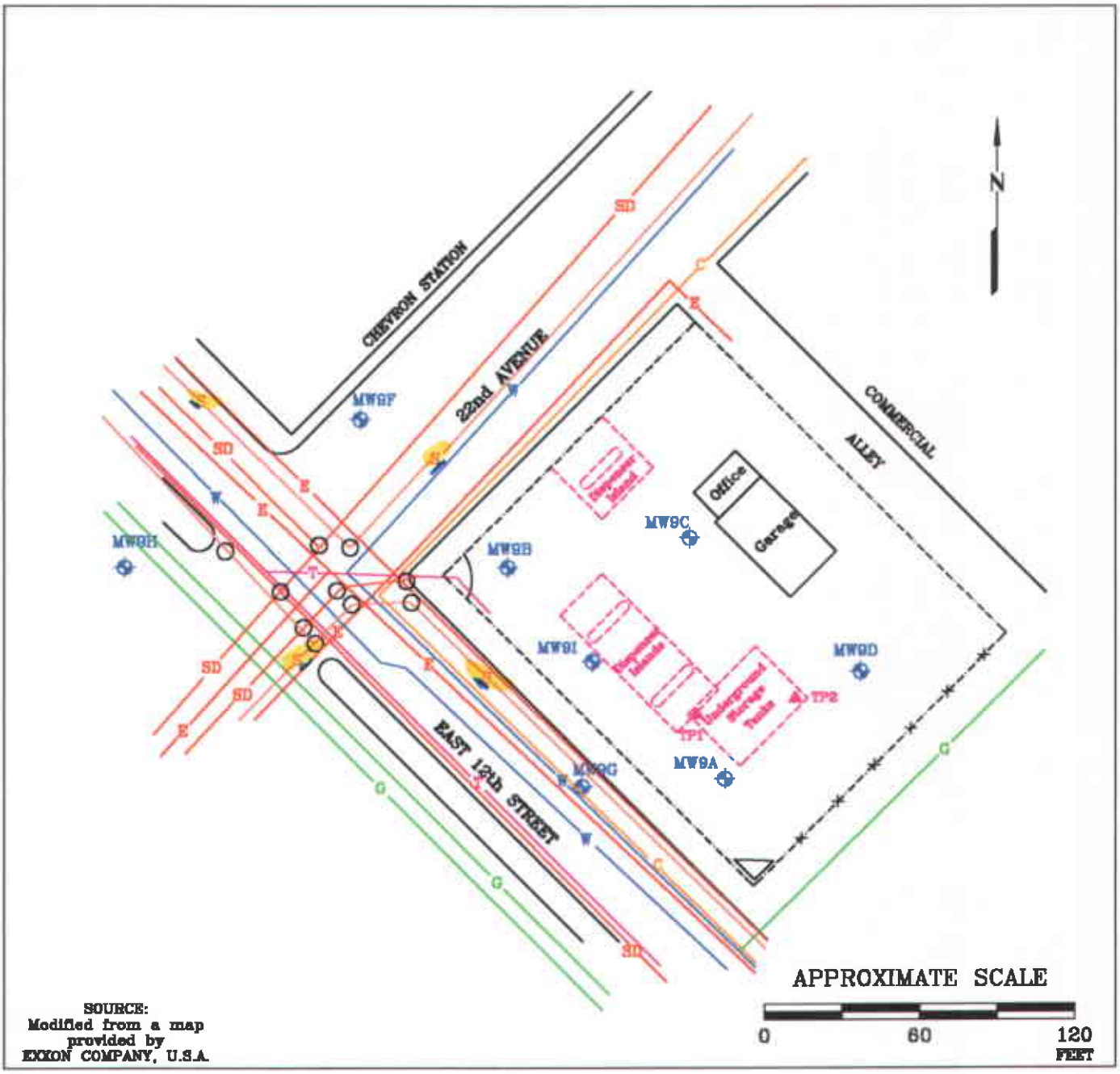
ENVIRONMENTAL RESOLUTIONS, INC.

UNDERGROUND UTILITY VAULT LOCATIONS

EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PROJECT NO. 2293

PLATE 3



SOURCE:
Modified from a map
provided by
EXXON COMPANY, U.S.A.

FN 22930002

EXPLANATION

MW9I — Groundwater Monitoring Well

TP2 — UST Observation Well

- SD — Storm Drain 3.5'
- W — Water 3.5'
- E — Electric 3'
- S — Sewer 6'
- G — Gas 3'
- C — Cable 1.5'
- T — Telephone 2'-3'
- Manhole

ENVIRONMENTAL RESOLUTIONS, INC.

UNDERGROUND UTILITY MAP

EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PROJECT NO. 2293

PLATE 4

June 15, 1999

ATTACHMENT A

SITE PHOTOGRAPHS

Exxon Service Station 7-0238

Front of Site

Rear of Site

North corner to east corner

East corner to south corner

Exxon Service Station 7-0238

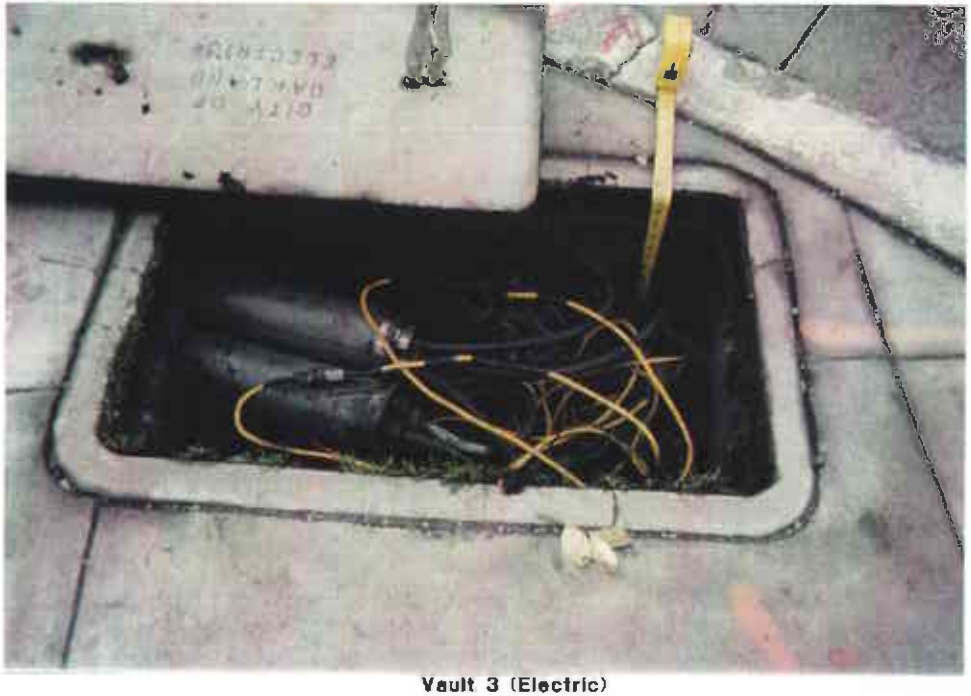
South corner to west corner

West corner to north corner

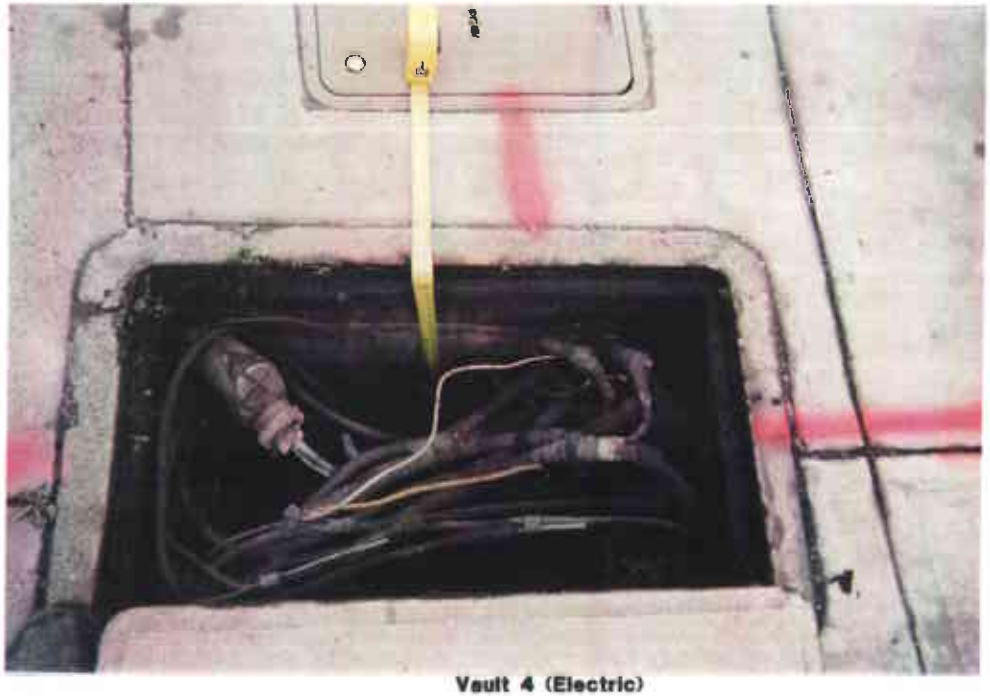
Vault 1 (Electric)

Vault 2 (Water)

Exxon Service Station 7-0238



Vault 3 (Electric)

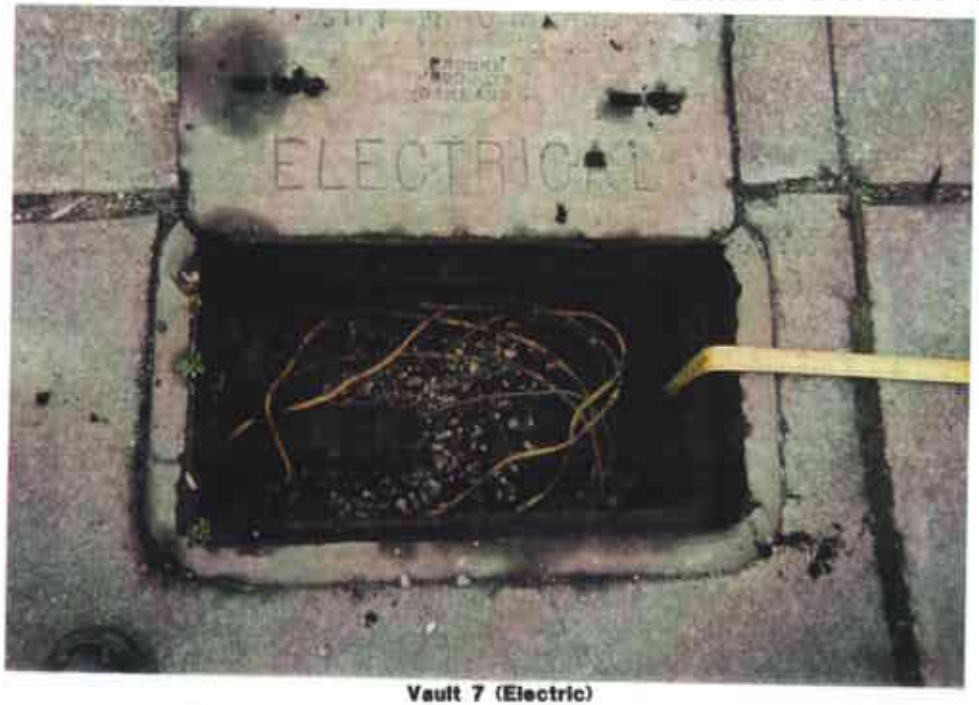


Vault 4 (Electric)

Vault 5 (Electric)

Vault 6 (Water)

Exxon Service Station 7-0238



Vault 7 (Electric)

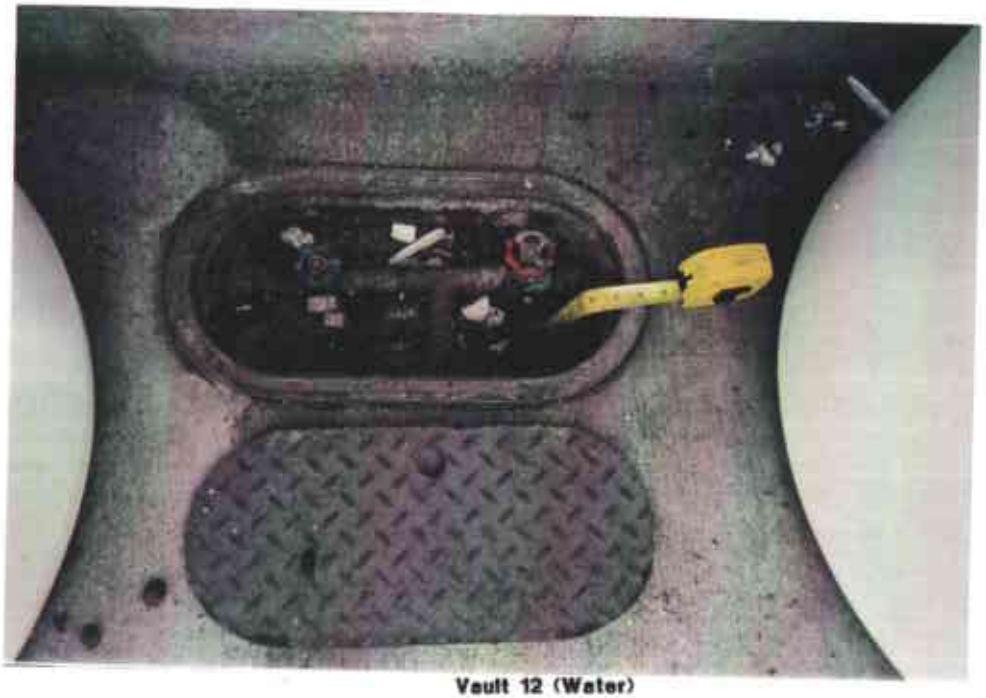
Vault 8 (Electric)

Vault 9 (Unknown)

Vault 10 (Unknown)

Exxon Service Station 7-0238

Vault 11 (Unknown)



Vault 12 (Water)

Cathodic protection well (CP1)

Sensitive Receptor Survey Workscope

EXXON LOCATION NUMBER: **7-0238**
ADDRESS: **2200 EAST 12TH STREET**
CITY: **OAKLAND**
COUNTY: **ALAMEDA**
STATE: **CALIFORNIA**
ZIP: **94606**

The sensitive receptor survey should provide all of the information on this form. The form should be filled in and submitted in addition to a brief narrative report which describes the results of the survey and includes a site sketch map, topographic map showing the location of sensitive receptors in the area, pictures, and back up data as needed. The narrative report should "stand alone" in describing the site and data, and not reference this form.

PROPERTY BOUNDARY AND ADJACENT LAND USE

PICTURES

- All pictures included in the report should be clearly labeled as to location, direction, and subject. Take pictures of the property boundaries of the site. Start at any corner of the site.
- Take a picture from the corner while looking along a property line. Then walk along the property line in the direction that the picture was taken. Walk to the next corner. Take a picture along the next property line. Proceed along each property line while taking a picture at each change in direction. Continue taking pictures along property lines until you arrive at the starting point.
- Take pictures of at least two areas of the site. One picture should generally cover the front of the site and the other picture should cover the rear part of the site.
- Take pictures of any utility vaults on the site.

SITE SKETCH

Draw a sketch of the site and adjacent property. Indicate north with an arrow. the following information should be indicated on the sketch:

- Site Property Lines
- Building on Site and Adjacent Properties
- USTs
- Storm Sewers
- Street Names
- Water Supply Wells
- Existing Tank field Observation Wells
- Existing Monitoring Wells
- Utility Vaults
- Downhill Slope
- Subway/Tunnel

TOPOGRAPHY

- Topographic map. Include an 8 1/2 x 11 color USGS topographic map section with the site centered on the map. Indicate location of site and any surrounding municipal or private water wells.

- Is the land surrounding the site relatively flat:
  Yes **X** No ____

  If "No," then indicate downhill direction from site.

  N: ____ N/E: ____ E: ____ S/E: ____ S: ____ S/W: ____ W: ____ N/W: ____

PICTURES

- Stand over the underground storage tanks at the site and take one picture in the downhill direction. If the land surrounding the site is relatively flat, then this picture is not necessary.

UTILITY VAULT

- Are there any utility vaults located on or adjacent to the site?
  Yes **X** No ____

  If "Yes," then complete the following information (for each vault).

Vault # **1st**
Type of Vault:
Electric: **X** Telephone: ____ Gas: ____ Water: ____ Unknown: ____

Near Which Property Boundary:
N: ____ E: ____ S: ____ W: **X**

Depth of Vault:
1.6 Feet Unknown: ____

Vault # **2nd**
Type of Vault:
Electric: ____ Telephone: ____ Gas: ____ Water: **X** Unknown: ____

Near Which Property Boundary:
N: ____ E: ____ S: ____ W: **X**

Depth of Vault:
1.8 Feet Unknown: ____

Vault # **3rd**
Type of Vault:
Electric: **X** Telephone: ____ Gas: ____ Water: ____ Unknown: ____

Near Which Property Boundary:
N: ____ E: ____ S: ____ W: **X**

Depth of Vault:
1.0 Feet Unknown: ____

Vault # 4th
Type of Vault:
Electric: X Telephone: ____ Gas: ____ Water: ____ Unknown: ____

Near Which Property Boundary:
N: ____ E: ____ S: ____ W: X

Depth of Vault:
2.8 Feet Unknown: ____

Vault # 5th
Type of Vault:
Electric: X Telephone: ____ Gas: ____ Water: ____ Unknown: ____

Near Which Property Boundary:
N: X E: ____ S: ____ W: ____

Depth of Vault:
____ Feet Unknown: X

Vault # 6th
Type of Vault:
Electric: ____ Telephone: ____ Gas: ____ Water: X Unknown: ____

Near Which Property Boundary:
N: X E: ____ S: ____ W: ____

Depth of Vault:
1.3 Feet Unknown: ____

Vault # 7th
Type of Vault:
Electric: X Telephone: ____ Gas: ____ Water: ____ Unknown: ____

Near Which Property Boundary:
N: ____ E: ____ S: X W: ____

Depth of Vault:
0.9 Feet Unknown: ____

Vault # 8th
Type of Vault:
Electric: X Telephone: ____ Gas: ____ Water: ____ Unknown: ____

Near Which Property Boundary:
N: ____ E: ____ S: ____ W: X

Depth of Vault:
0.8 Feet Unknown: ____

Vault # 9th
Type of Vault:
Electric: ____ Telephone: ____ Gas: ____ Water: ____ Unknown: X

Near Which Property Boundary:
N: ____ E: ____ S: X W: ____

Depth of Vault:
0.3 Feet Unknown: ____

Vault # 10th
Type of Vault:
Electric: ____ Telephone: ____ Gas: ____ Water: ____ Unknown: X

Near Which Property Boundary:
N: ____ E: ____ S: ____ W: X

Depth of Vault:
0.6 Feet Unknown: ____

Vault # 11th
Type of Vault:
Electric: ____ Telephone: ____ Gas: ____ Water: ____ Unknown: X

Near Which Property Boundary:
N: X E: ____ S: ____ W: ____

Depth of Vault:
0.5 Feet Unknown: ____

Vault # 12th
Type of Vault:
Electric: ____ Telephone: ____ Gas: ____ Water: X Unknown: ____

Near Which Property Boundary:
N: X E: ____ S: ____ W: ____

Depth of Vault:
0.5 Feet Unknown: ____

Recopy this section and provide the information for each additional vault as needed.

BUILDINGS WITH BASEMENTS

- Drive the area within 1,000 feet of the site. Do any of the buildings within 1,000 feet of the site have basements?

Yes ____ No **X**

If "Yes," then complete the following information for the nearest three basements.

Type:

Residential ____ Office Building: ____ Commercial: ____
____ Other (Describe): _____

Distance from Site(in feet):

(<100): ____ (100 to 500): ____ (500 to 1,000): ____ (1,000 to 2,000): ____ (>2,000): ____

Direction from Site:

N: ____ N/E: ____ E: ____ S/E: ____ S: ____ S/W: ____ W: ____ N/W: ____

Recopy and complete this section as necessary for each of the three nearest basements.

SUBWAY/TUNNEL

- Is there a subsurface mass transit system or tunnel walkway located within 1,000 feet of the site?

Yes ____ No **X**

If "Yes," then complete the following information:

Name: _____

Minimum Distance between Site and Subway/Tunnel (in feet):
(<100): ____ (100 to 500): ____ (500 to 1,000): ____ (1,000 to 2,000): ____ (>2,000): ____

Direction from Site to Subway/Tunnel:
N: ____ N/E: ____ E: ____ S/E: ____ S: ____ S/W: ____ W: ____ N/W: ____

STORM SEWER

- Are there any storm sewer drains located on or adjacent to the site?
  Yes X No ____

  If "Yes", then indicate the location on the site sketch. Denote sewer location with S.

SURFACE BODY OF WATER

- Is there a surface body of water located within 1,000 feet of the site?
  Yes ____ No X

  If "Yes", then complete the following information:

  Name: _____

  Type:
  Lake: ____ River: ____ Creek: ____ Pond: ____ Flood Control Ditch: ____

  Closest Distance between Site and Water (in feet):
  (<100): ____ (100 to 500): ____ (500 to 1,000): X (1,000 to 2,000): ____ (>2,000): ____

  Direction From Site to Water:
  N: ____ N/E: ____ E: ____ S/E: ____ S: ____ S/W: ____ W: X N/W: ____

  Is this topographically down hill from the site?
  Yes X No ____

Repeat this entire section as needed for additional bodies of water within 1,000 feet of the site.

PICTURE

- If there is a surface body of water that is visible from the site, then stand on the site and take a picture of the body of water.

MUNICIPAL WATER WELLS

- Based on a review of available public records, list all municipal water supply wells within 2,000 feet of site (in Municipal Water Well section, below). Include copies of all data obtained on the wells in an appendix; i.e., well reports, etc. Verify the location of the listed wells in the field.

- Are the municipal water wells at the listed locations?
  Yes ____ No ____

  Explain any discrepancies: **No Municipal Water Wells within 2,000 feet are listed.**

  Drive the area within 2,000 feet of the site. Are there any other obvious municipal water wells within 2000 feet of the site?
  Yes ____ No **X**

Complete the following for each Municipal Well within 2,000 feet of the site:

Distance from Site (in feet):

(<100): ____ (100 to 500): ____ (500 to 1,000): ____ (1,000 to 2,000): ____ (>2,000): ____

Direction from Site:

N: ____ N/E: ____ E: ____ S/E: ____ S: ____ S/W: ____ W: ____ N/W: ____

Screen Depth of Well:

____ Feet

Repeat this section as necessary for each additional Municipal water-well within 2,000 feet.

PRIVATE WATER WELLS

- Based on a review of available public records list all private water wells within 1,000 feet of the site (in an appendix or attachment). Verify the location of the closest three wells.

- Is the location correct?
  Yes ____ No ____

  Explain any discrepancies: **No Private Water Wells within 1,000 feet are listed.**

  Drive the area within 1,000 feet of the site. Are there any other private water wells visible within 1,000 feet of the site?
  Yes ____ No **X**

  Is there a water well located on the retail site?
  Yes ____ No **X**

If yes on any of the above questions, then complete the following information for the three closest private wells:

Private Water Well

List actual distance from site to well if less than 500 feet: _____ Feet

Distance from Site to Well (in feet):
(<100): ____ (100 to 500): ____ (500 to 1,000): ____ (1,000 to 2,000): ____ (>2,000): ____

Direction from Site to Well:
N: ____ N/E: ____ E: ____ S/E: ____ S: ____ S/W: ____ W: ____ N/W: ____

Distance between the closest Municipal Water Connection and Private Well:
(<100): ____ (100 to 500): ____ (500 to 1,000): ____ (1,000 to 2,000): ____ (>2,000): ____

Screened Depth of Well:
_____ Feet

Is the well being used?:
Yes ____ No ____ Unknown ____

Repeat this Section as needed for the three closest Private water wells.

WATER SUPPLY

Describe the type of local water supply in the area.

Public X

Suppliers' Name **East Bay Municipal Utilities District**

Suppliers' Source **Reservoirs storing water from the Sierra Nevada Mountains.**

Source Distance and Direction from Site **Seven miles east.**

Private _____

If private list distance and direction to nearest available public source.

Distance and Direction to Source _____

AQUIFER INFORMATION

List Aquifer Classification:

Class I

___ Special Ground Waters

___ Irreplaceable Drinking Water Source

___ Ecologically Vital

Class II

___ Current and Potential Drinking Water Sources

Class III

X Not Potential Source of Drinking Water

- Is this a sole source aquifer?
  Yes ____ No **X**
- List the depth to the aquifer
  10 Feet
- List the number of observation and monitoring wells, if any, on the site.
  # Of Wells: **7**

Information Provided By:

Name: **Carl W. Miklich**

Company: **Environmental Resolutions, Incorporated**

Date: **January 20, 2000**