



WEISS ASSOCIATES

Geologic and Environmental Services

Fax: 415-547-5043

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91 JAN 21 11:55 AM 15500 Shellmound Street, Emeryville, CA 94608

TRANSMITTAL LETTER

FROM: Tom Fojut

DATE: January 18, 1991

TO: Mr. Lawrence Seto
Alameda County Department of
Environmental Health
Division of Hazardous Materials
80 Swan Way, Room 200
Oakland, California 94621-1426

VIA: X First Class Mail
_____ Fax _____ pages
_____ UPS (Surface)
_____ Federal Express
_____ Courier

SUBJECT: Shell Service Stations
WIC# 204-6852-1404, 1784 150th Ave, San Leandro
WIC# 204-6852-0703, 1285 Bancroft Ave, San Leandro

JOB:
81-422-01
81-423-01

AS: _____ We discussed on the telephone on _____
_____ You requested _____
_____ We believe you may be interested _____
 X _____ Is required

WE ARE SENDING: X Enclosed
_____ Under Separate Cover Via _____

Quarterly status reports for the subject sites.

FOR: _____ Your information
 X _____ Your use
_____ Your review & comments
_____ Return to you

PLEASE: X Keep this material
_____ Return within 2 weeks
_____ Acknowledge receipt

MESSAGE: Please call if you have any questions.

cc: Kurt Miller, Shell Oil Company, P.O. Box 4023, Concord, California 94524
Lester Feldman, California Regional Water Quality Control Board, San
Francisco Bay Region, 1800 Harrison Street, Oakland, California 94612

D:\ALL\TRANS\AUO.WP

January 18, 1991

Mr. Lawrence Seto
Alameda County Department of
Environmental Health
Division of Hazardous Materials
80 Swan Way
Oakland, CA 94621-1426

Re: Shell Service Station
WIC #204-6852-1404
1784 150th Avenue
San Leandro, California
WA Job #81-422-01

Dear Mr. Seto:

This letter describes Weiss Associates' (WA) fourth quarter 1990 activities at the Shell service station referenced above (Figure 1). This status report satisfies the quarterly reporting requirements outlined in our February 23, 1990 workplan, and prescribed by California Administrative Code Title 23 Waters, Chapter 3, Subchapter 16, Article 5, Section 265.d. Included below are:

- Descriptions and results of activities performed in the fourth quarter 1990, and
- Proposed work for the first quarter 1991.

FOURTH QUARTER 1990 ACTIVITIES

During this quarter, WA:

- Collected ground water samples from one site well,
- Measured the ground water depth and determined the ground water elevation, and
- Analyzed the ground water samples and tabulated the analytic results.

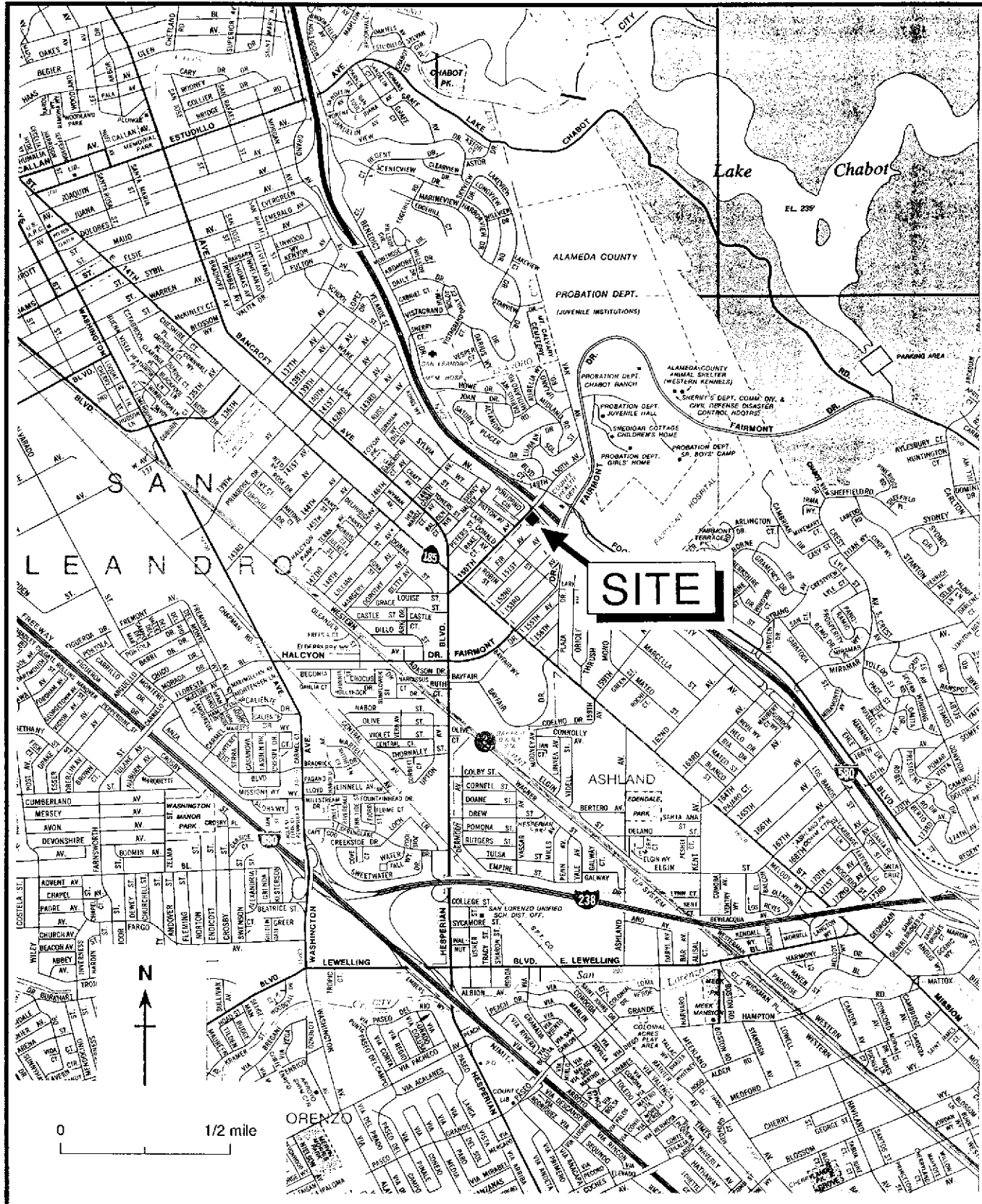


Figure 1. Site Location Map - Shell Service Station WIC #204685214, 1784 150th Avenue, San Leandro, California

These activities are described below.

Ground Water Sampling

WA collected ground water samples from one monitoring well on December 18, 1990, as part of the quarterly ground water monitoring program at Shell Service Station WIC #204-6852-1404 at 1784 150th Avenue in San Leandro, California. Ground water samples from monitoring well MW-1 (Figure 2) contained benzene and 1,2-dichloroethane (DCA) above the California Department of Health Services (DHS) maximum contaminant levels (MCLs) for drinking water.

Sampling Personnel: WA Environmental Technician Paul Cardoza

Monitoring Well Sampled: MW-1

Method of Purging Well:

- Dedicated PVC bailer

Volume of Water Purged Prior to Sampling:

- Well was purged of four well-casing volumes, a total of 47 gallons.

Method of Collecting Ground Water Samples:

- Drawn through the sampling port on the side of the dedicated PVC bailer

Methods of Containing Ground Water Samples:

- 40 ml glass volatile organic analysis (VOA) vials, packed in protective foam sleeves for total petroleum hydrocarbons as gasoline (TPH-G), benzene, ethylbenzene, toluene and xylene (BETX) and halogenated volatile organic compound (HVOC) analyses
- 1000 ml amber glass bottles for total petroleum hydrocarbons as diesel (TPH-D)
- 1000 ml amber glass bottles preserved with sulfuric acid for total oil and grease (TOG) analysis

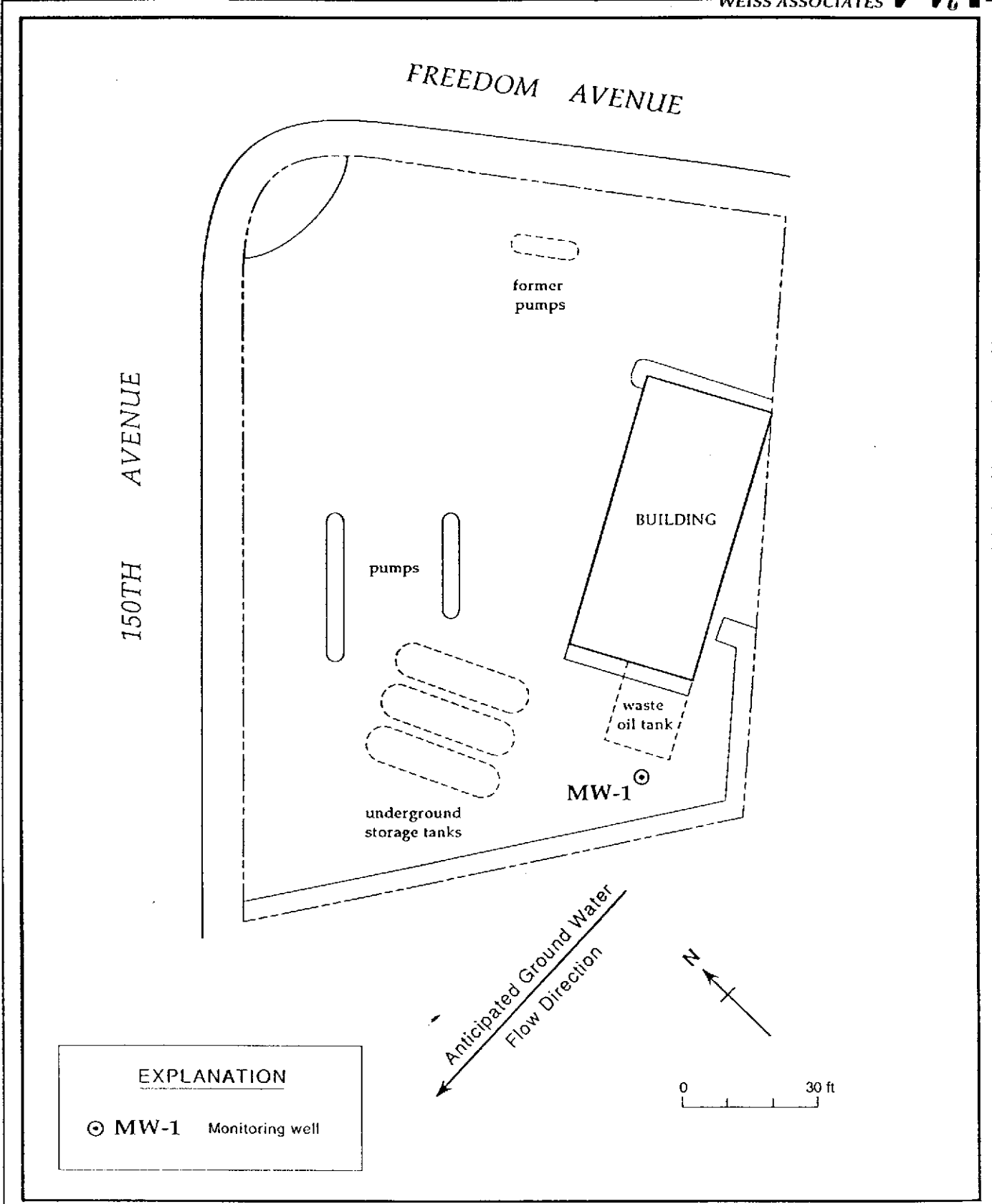


Figure 2. Monitoring Well Location - Shell Service Station WIC #204-685-214, 1784 150th Avenue, San Leandro, California

All samples were refrigerated and transported under chain-of-custody to the analytical laboratory.

Water Samples Transported to:

- National Environmental Testing, (NET) Pacific Inc., Santa Rosa, California, and were received on December 19, 1990

Quality Assurance/Quality Control:

- A travel blank was submitted for analysis.
- An equipment blank was not necessary because the bailer is dedicated to well MW-1.

Water sample collection records and chain-of-custody forms are included in Attachments A and B, respectively.

Ground Water Elevations and Flow Direction

- The depth to water was measured in MW-1 on December 18, 1990. The ground water elevation increased 0.08 ft from the previous quarter.
- Based upon the topographic gradient, ground water probably flows westward.

Depth to water measurements and ground water elevations are presented in Table 1.

TABLE 1. Ground Water Elevation Data, Active Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

| Well ID | Date | Top-of-Casing Elevation (ft above msl) | Depth to Water (ft) | Ground Water Elevation (ft above msl) |
|---------|----------|--|---------------------|---------------------------------------|
| MW-1 | 03/08/90 | 49.13 | 25.29 | 23.84 |
| | 06/12/90 | | 25.85 | 23.28 |
| | 09/13/90 | | 27.49 | 21.64 |
| | 12/18/90 | | 27.41 | 21.72 |

Chemical Analyses

The Ground Water Samples were Analyzed for:

- TPH-G by modified EPA Method 8015,
- TPH-D by modified EPA Method 8015,
- BETX by EPA Method 8020,
- TOG by American Public Health Association Standard Method 503E, and
- HVOCs by EPA Method 601.

The laboratory analyzed the samples on December 20, 21, and 27, 1990. The results are presented in Table 2 and the analytic reports are included in Attachment B.

Discussion of Ground Water Analytic Results for this Quarter:

- Samples contained benzene and DCA above the DHS MCLs for drinking water.
- TPH-G and BETX concentrations are consistent with previous results.
- No TPH-D was detected for the first time.
- No TOG was detected for the fourth consecutive quarter.

ANTICIPATED WORK FOR FIRST QUARTER 1991

During the first quarter 1991, on behalf of Shell Oil, WA plans to:

- Continue quarterly monitoring of ground water at this site, and
- Prepare a quarterly status report presenting all data generated during the previous quarter including water sampling results and analysis,
- Evaluate the site for a reduction in sampling frequency, and analyzed parameters.

TABLE 2. Analytic Results for Ground Water - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

| Well ID | Date Sampled | Depth to Water (ft) | mg/ℓ (ppm) | | | | | | | | TOG | HVOCs |
|--------------|--------------|---------------------|------------|--------|---------|---------|------------------|---------|-----|--------------------|-----|-------|
| | | | TPH-G | TPH-D | B | E | T | X | | | | |
| MW-1 | 03/08/90 | 25.29 | 0.29 | 0.12 | 0.0015 | <0.0005 | 0.0008 | 0.0054 | <10 | 0.012 ^a | | |
| | 06/12/90 | 25.85 | 0.51 | 0.10 | 0.086 | 0.0007 | 0.0013 | 0.0062 | <10 | ND | | |
| | 09/13/90 | 27.49 | 0.27 | 0.13 | 0.056 | 0.0024 | 0.00075 | 0.0028 | <10 | 0.024 ^b | | |
| | 12/18/90 | 27.41 | 0.27 | <0.050 | 0.054 | 0.0033 | 0.0017 | 0.0037 | <10 | 0.0053 | | |
| Trip Blank | 03/08/90 | | <0.050 | --- | <0.0005 | <0.0005 | <0.0005 | <0.0005 | --- | --- | | |
| | 06/12/90 | | <0.050 | --- | <0.0005 | <0.0005 | <0.0005 | <0.0005 | --- | --- | | |
| | 12/18/90 | | <0.050 | --- | <0.0005 | <0.0005 | <0.0005 | <0.0005 | --- | --- | | |
| Bailer Blank | 03/08/90 | | <0.050 | --- | <0.0005 | <0.0005 | <0.0005 | <0.0005 | --- | --- | | |
| DHS MCLs | | | NE | NE | 0.001 | 0.68 | .10 ^c | 1.75 | NE | d | | |

Abbreviations:

TPH-G = Total Petroleum Hydrocarbons as Gasoline by Modified EPA Method 8015
 TPH-D = Total Petroleum Hydrocarbons as Diesel by Modified EPA Method 8015
 B = Benzene by EPA Method 602
 E = Ethylbenzene by EPA Method 602
 T = Toluene by EPA Method 602
 X = Xylenes by EPA Method 602
 TOG = Total hydrocarbon (non-polar) oil and grease by American Public Health Association Standard Methods 503A&E
 HVOCs = Halogenated Volatile Organic Compounds by EPA Method 601
 --- = Not analyzed
 <n = Not detected at detection limit of n ppm
 ND = Not detected at detection limits between .0004 and .010 ppm
 DHS MCLs = California Department of Health Services Maximum Contaminant Levels for drinking water
 ppm = parts per million
 NE = Not established by DHS

Analytical Laboratory:

National Environmental Testing (NET) Pacific, Inc., Santa Rosa, California

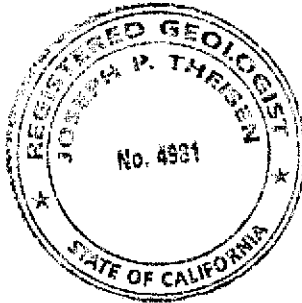
Notes:

- a = 1,2-dichloroethane (DCA) detected at n ppm
- b = tetrachloroethylene (PCE) detected at n ppm
- c = DHS recommended action level, MCL not established
- d = DHS MCL for DCA: .0005 ppm; DHS MCL for PCE: .005 ppm

Mr. Lawrence Seto
January 18, 1991

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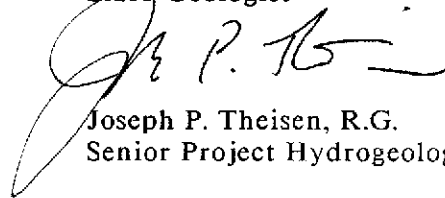
We trust that this submittal satisfies your requirements. Please contact Tom Fojut or Eric Anderson if you have any questions.



Sincerely,
Weiss Associates



Thomas J. Fojut
Staff Geologist



Joseph P. Theisen, R.G.
Senior Project Hydrogeologist

TJF/JPT:jg

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Attachments: A - Water Sample Collection Records
 B - Analytic Reports and Chain-of-Custody Form

ATTACHMENT A

WATER SAMPLE COLLECTION RECORDS



WATER SAMPLING DATA

Well Name MW-1 Date 12/18/90 Time of Sampling 11:45
 Job Name Shell-San Leandro Job Number 81-422-01 Initials PC
 Sample Point Description MW (M = Monitoring Well)
 Location SE area of site

WELL DATA: Depth to Water 27.4/ft (static, pumping) Depth to Product — ft.
 Product Thickness — Well Depth 45 ft (spec) Well Depth 44.68ft(sounded) Well Diameter 4 in
 Initial Height of Water in Casing 17.27 ft. = volume 11.28 gal.
4 Casing Volumes to be Evacuated. Total to be evacuated 45.11 gal.

EVACUATION METHOD: Pump # and type — Hose # and type —
 Bailer# and type 4" PVC Dedicated Y (Y/N)
 Other —

Evacuation Time: Stop 10:32
 Start 9:43
 Total Evacuation Time 49min
 Total Evacuated Prior to Sampling 47.0 gal.
 Evacuation Rate .96 gal. per minute

Formulas/Conversions

- r = well radius in ft.
- h = ht of water col in ft.
- vol. in cyl. = $\pi r^2 h$
- 7.48 gal/ft³
- V₂" casing = 0.163 gal/ft
- V₃" casing = 0.367 gal/ft
- V₄" casing = 0.653 gal/ft
- V_{4.5}" casing = 0.826 gal/ft
- V₆" casing = 1.47 gal/ft
- V₈ casing = 2.61 gal/ft

Depth to Water during Evacuation — ft. — time
 Depth to Water at Sampling 27.41 ft. 11:25 time
 Evacuated Dry? No After — gal. Time —
 80% Recovery = —
 % Recovery at Sample Time — Time —

CHEMICAL DATA: Meter Brand/Number —

Calibration: 4.0 7.0 10.0

Measured: SC/ μ mhos pH T°C Time Volume Evacuated (gal.)

| SC/ μ mhos | pH | T°C | Time | Volume Evacuated (gal.) |
|----------------|----|-----|------|-------------------------|
| <u>N/A</u> | | | | |
| | | | | |
| | | | | |
| | | | | |

SAMPLE: Color Light Tan Odor None
 Description of matter in sample: small amount of grey particles
 Sampling Method: Sampling port on side of dedicated bailer
 Sample Port: Rate — gpm Totalizer — gal.
 Time —

| # of Cont. | Sample ID | Cont. Type ¹ | Vol ² | Fil ³ | Ref ⁴ | Preservative (specify) | Analytic Method | Turn ⁵ | LAB |
|------------|-----------|-------------------------|------------------|------------------|------------------|--------------------------------|-----------------|-------------------|-----|
| 3 | 120-01 | W/PCV | 40ml | N | Y | None | EPA 8015/602 | N | NET |
| 3 | ↓ | W/PCV | 40ml | N | Y | None | EPA 601 | N | NET |
| 3 | ↓ | W/Ox-PV | 1L | N | Y | None | EPA 8015 | N | NET |
| 3 | ↓ | W/Ox-PV | 1L | N | Y | H ₂ SO ₄ | EPA 503E | N | NET |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

1 Sample Type Codes: W = Water, S = Soil, Describe Other
 Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other
 Cap Codes: PT = Plastic, Teflon lined;
 2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)
 5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

Trip Blanks

WEISS ASSOCIATES



WATER SAMPLING DATA

Well Name _____ Date 12/18/90 Time of Sampling 11:15
 Job Name Shell-San Leandro Job Number 81-422-01 Initials PL
 Sample Point Description _____ (M = Monitoring Well)
 Location _____

WELL DATA: Depth to Water _____ ft (static, pumping) Depth to Product _____ ft.
 Product Thickness _____ Well Depth _____ ft (spec) Well Depth _____ ft (sounded) Well Diameter _____ in
 Initial Height of Water in Casing _____ ft. = volume _____ gal.
 Casing Volumes to be Evacuated. Total to be evacuated _____ gal.

EVACUATION METHOD: Pump # and type _____ Hose # and type _____
 Bailer # and type _____ Dedicated _____ (Y/N)
 Other _____

Evacuation Time: Stop _____
 Start _____
 Total Evacuation Time _____
 Total Evacuated Prior to Sampling _____ gal.
 Evacuation Rate _____ gal. per minute

Formulas/Conversions

- r = well radius in ft.
- h = ht of water col in ft.
- vol. in cyl. = $\pi r^2 h$
- 7.48 gal/ft³
- V_{2"} casing = 0.163 gal/ft
- V_{3"} casing = 0.367 gal/ft
- V_{4"} casing = 0.653 gal/ft
- V_{4.5"} casing = 0.826 gal/ft
- V_{6"} casing = 1.47 gal/ft
- V_{8"} casing = 2.61 gal/ft

Depth to Water during Evacuation _____ ft. _____ time
 Depth to Water at Sampling _____ ft. _____ time
 Evacuated Dry? _____ After _____ gal. Time _____
 80% Recovery = _____
 % Recovery at Sample Time _____ Time _____

CHEMICAL DATA: Meter Brand/Number _____

Calibration: _____ 4.0 _____ 7.0 _____ 10.0

| Measured: | SC/ μ mhos | pH | T°C | Time | Volume Evacuated (gal.) |
|-----------|----------------|----|-----|------|-------------------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

SAMPLE: Color _____ Odor _____
 Description of matter in sample: _____
 Sampling Method: _____
 Sample Port: Rate _____ gpm Totalizer _____ gal.
 Time _____

| # of Cont. | Sample ID | Cont. Type ¹ | Vol ² | Fil ³ | Ref ⁴ | Preservative (specify) | Analytic Method | Turn ⁵ | LAB |
|------------|-----------|-------------------------|------------------|------------------|------------------|------------------------|-----------------|-------------------|-----|
| 3 | 12D-01 | W/CV | 40ml | N | Y | None | EPA 8015/602 | N | NET |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

1 Sample Type Codes: W = Water, S = Soil, Describe Other
 Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other
 Cap Codes: PT = Plastic, Teflon lined;
 2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)
 5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]
ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

ATTACHMENT B

ANALYTIC RESULTS AND CHAIN-OF-CUSTODY FORM



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Tom Fojut
Weiss Associates
5500 Shell Mound Rd.
Emeryville, CA 94524

Date: 01-04-91
NET Client Acct. No: 18.09
NET Pacific Log No: 5407
Received: 12-20-90 0800

Client Reference Information

SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-01

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

A handwritten signature in black ink, appearing to read "GAL/K", is written over a horizontal line.

Jules Skamarack
Laboratory Manager

Enclosure(s)



NET Pacific, Inc. Client Acct: 18.09
Client Name: Weiss Associates
NET Log No: 5407

Date: 01-04-91
Page: 2

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-01

SAMPLE DESCRIPTION: 120-01 12-18-90
LAB Job No: (-71156)

| Parameter | Method | Reporting Limit | Results | Units |
|---------------------------------------|-----------|-----------------|----------|-------|
| Oil & Grease(Total) | EPA9070 | 5 | ND | mg/L |
| Oil & Grease(Non-Polar) METHOD 601 | SM5520B/F | 10 | ND | mg/L |
| DATE ANALYZED | | | 12-27-90 | |
| DILUTION FACTOR* | | | 1 | |
| Bromodichloromethane | | 0.4 | ND | ug/L |
| Bromoform | | 0.4 | ND | ug/L |
| Bromomethane | | 0.4 | ND | ug/L |
| Carbon tetrachloride | | 0.4 | ND | ug/L |
| Chlorobenzene | | 0.4 | ND | ug/L |
| Chloroethane | | 0.4 | ND | ug/L |
| 2-Chloroethylvinyl ether | | 1.0 | ND | ug/L |
| Chloroform | | 0.4 | ND | ug/L |
| Chloromethane | | 0.4 | ND | ug/L |
| Dibromochloromethane | | 0.4 | ND | ug/L |
| 1,2-Dichlorobenzene | | 0.4 | ND | ug/L |
| 1,3-Dichlorobenzene | | 0.4 | ND | ug/L |
| 1,4-Dichlorobenzene | | 0.4 | ND | ug/L |
| Dichlorodifluoromethane | | 0.4 | ND | ug/L |
| 1,1-Dichloroethane | | 0.4 | ND | ug/L |
| 1,2-Dichloroethane | | 0.4 | 5.3 | ug/L |
| 1,1-Dichloroethene | | 0.4 | ND | ug/L |
| trans-1,2-Dichloroethene | | 0.4 | ND | ug/L |
| 1,2-Dichloropropane | | 0.4 | ND | ug/L |
| cis-1,3-Dichloropropene | | 0.4 | ND | ug/L |
| trans-1,3-Dichloropropene | | 0.4 | ND | ug/L |
| Methylene Chloride | | 10 | ND | ug/L |
| 1,1,2,2-Tetrachloroethane | | 0.4 | ND | ug/L |
| Tetrachloroethene | | 0.4 | ND | ug/L |
| 1,1,1-Trichloroethane | | 0.4 | ND | ug/L |
| 1,1,2-Trichloroethane | | 0.4 | ND | ug/L |
| Trichloroethene | | 0.4 | ND | ug/L |
| Trichlorofluoromethane | | 0.4 | ND | ug/L |
| Vinyl chloride | | 2.0 | ND | ug/L |



Client Acct: 18.09
Client Name: Weiss Associates
NET Log No: 5407

Date: 01-04-91
Page: 3

NET Pacific, Inc.

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-01

SAMPLE DESCRIPTION: 120-01 12-18-90
LAB Job No: (-71156)

| Parameter | Method | Reporting Limit | Results | Units |
|------------------------|--------|-----------------|----------|-------|
| PETROLEUM HYDROCARBONS | | | -- | |
| VOLATILE (WATER) | | | -- | |
| DILUTION FACTOR * | | | 1 | |
| DATE ANALYZED | | | 12-21-90 | |
| METHOD GC FID/5030 | | | -- | |
| as Gasoline | | 0.05 | 0.27 | mg/L |
| METHOD 602 | | | -- | |
| DILUTION FACTOR * | | | 1 | |
| DATE ANALYZED | | | 12-21-90 | |
| Benzene | | 0.5 | 54 | ug/L |
| Ethylbenzene | | 0.5 | 3.3 | ug/L |
| Toluene | | 0.5 | 1.7 | ug/L |
| Xylenes, total | | 0.5 | 3.7 | ug/L |
| PETROLEUM HYDROCARBONS | | | -- | |
| EXTRACTABLE (WATER) | | | -- | |
| DILUTION FACTOR * | | | 1 | |
| DATE EXTRACTED | | | 12-20-90 | |
| DATE ANALYZED | | | 12-20-90 | |
| METHOD GC FID/3510 | | | -- | |
| as Diesel | | 0.05 | ND | mg/L |
| as Motor Oil | | 0.5 | ND | mg/L |



NET Pacific, Inc.

Client Acct: 18.09
Client Name: Weiss Associates
NET Log No: 5407

Date: 01-04-91
Page: 4

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-01

SAMPLE DESCRIPTION: 120-21 12-18-90
LAB Job No: (-71157)

| Parameter | Method | Reporting Limit | Results | Units |
|------------------------|--------|-----------------|----------|-------|
| PETROLEUM HYDROCARBONS | | | -- | |
| VOLATILE (WATER) | | | -- | |
| DILUTION FACTOR * | | | 1 | |
| DATE ANALYZED | | | 12-26-90 | |
| METHOD GC FID/5030 | | | -- | |
| as Gasoline | | 0.05 | ND | mg/L |
| METHOD 602 | | | -- | |
| DILUTION FACTOR * | | | 1 | |
| DATE ANALYZED | | | 12-26-90 | |
| Benzene | | 0.5 | ND | ug/L |
| Ethylbenzene | | 0.5 | ND | ug/L |
| Toluene | | 0.5 | ND | ug/L |
| Xylenes, total | | 0.5 | ND | ug/L |



KEY TO ABBREVIATIONS and METHOD REFERENCES

NET Pacific, Inc.

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- * : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference, $100 \text{ [Value 1 - Value 2] / mean value}$.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 16th Edition, APHA, 1985.

Shell Service Station Address:
1784 150TH AV
SAN LEANDRO, CA

Shell Contact: E PAUL HAYES
 WIC #: 204-6852-1404
 AFE #:

Please send analytic results
 and a copy of the signed chain of custody form to:

TOM FOJUT

Project ID: 81-422-01

5407

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Sampled by: Paul Cardona Laboratory Name: NET

- Lab Personnel: 1) Specify analytic method and detection limit in report.
 2) Notify us if there are any anomalous peaks on GC or other scans.
 3) ANY QUESTIONS/CLARIFICATIONS: CALL US.

| No. of Containers | Sample ID | Container Type | Sample Date | Vol ² | Fil ³ | Ref ⁴ | Preservative (specify) | Analyze for | Analytic Method | Turn ⁵ | COMMENTS |
|-------------------|-----------|----------------|-------------|------------------|------------------|------------------|--------------------------------|-------------|-----------------|-------------------|----------|
| 3 | 120-01 | w/cv | 12/18/90 | 40ml | N | V | None | TPH-G/BETX | EPA 8015/602 | N | |
| | | w/cv | | 40ml | | | None | MVDC's | EPA 601 | | |
| | | w/DG-PT | | 1L | | | None | TPH-D | EPA 8015 | | |
| | | w/CG-PT | | 1L | | | H ₂ SO ₄ | TOG | EPA 503E | | |
| ↓ | 120-21 | w/cv | ↓ | 40ml | ↓ | ↓ | None | TPH-G/BETX | EPA 8015/602 | V | |

16:32
 1 Paul Cardona 12/18/90
 Released by (Signature), Date

1 Weiss Associates
 Affiliation

2 Jeff Winkel 12/19/90
 Received by (Signature), Date 0930

2 Weiss Assoc.
 Affiliation

3 Jeff Winkel 12/19/90
 Released by (Signature), Date 12:40

3 Weiss Assoc.
 Affiliation

4 Jeff Winkel
 Shipping Carrier, Method, Date

4 NET 12/19/90 12:40
 Affiliation

5 VIA NCS Jeff Winkel
 Released by (Signature), Date

5
 Affiliation

6 Schwartz 12/20/90 0800 yes
 Received by Lab Personnel, Date Seal Intact?

6
 Affiliation, Telephone

1 Sample Type Codes: W = Water, S = Soil, Describe Other; Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B - Clear/Brown Glass, Describe Other; Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround (N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out))

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

→ Stored in secure, locked area overnight 12/18 → 12/19