PORT OF OAKLAND

November 12, 2003

Mr. Barney Chan
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

RE: Phase II Workplan for Suspected Site of UST HF-16 (LOP 6894)
Former Building H-204 at Ninth Avenue Terminal
79 - 8th Avenue, Oakland, CA 94606 (Fuel Leak Case RO0000485)

Dear Mr. Chan:

Please find enclosed for your review is our Phase II Workplan prepared by GAIA Consulting, Inc. (GAIA) to further investigate impacted soil and groundwater at suspected underground storage tank (UST) site HF-16 near former Building H-204 at Ninth Avenue Terminal. This workplan is being submitted in accordance with Alameda County Health Care Services Agency (County) requirements pursuant to your letter dated September 11, 2003 and our response letter dated October 13, 2003. The suspected underground storage tank site is identified as LOP 6894, also known as fuel leak case RO0000485.

Please provide your review and comments at your convenience. We are prepared to implement this Phase II Workplan as soon as approval is received from your office. If you have any questions, please do not hesitate to contact me at (510) 627-1134.

Sincerely,

Jeffrey L. Rubin, CPSS, REA
Port Associate Environmental Scientist
Environmental Health and Safety Compliance

Enclosure: Phase II Workplan for Suspected Site of UST HF-16 (LOP#6894), Former Building H-204 at Ninth Avenue Terminal

Cc (w/encl.): Jeriann Alexander, Fugro West
Greggory Brandt, Wendel Rosen Black & Dean
Jack Hochwarter, Zurich American
Diane Mims, BBL, Inc.
Earl James, Erler & Kalinowski, Inc.
Lydia Huang, Baseline Environmental
Michele Heffes, Port of Oakland, Legal
Patrick Van Ness, Signature Properties (for Oakland Harbor Properties)

Cc (w/o encl.): Diane Heinze, Port of Oakland, EH&SC
Barbara Szudy, Port of Oakland, Commercial Real Estate
Susanne von Rosenberg, GAIA Consulting, Inc.
Melba Policicchio, GAIA Consulting, Inc.
Jonathan Redding, Wendel Rosen Black & Dean
Christine Noma, Wendel Rosen Black & Dean

530 Water Street ■ Jack London Square ■ P.O. Box 2064 ■ Oakland, California 94604–2064
Telephone: (510) 627-1100 ■ Facsimile: (510) 627-1826 ■ Web Page: *www.portofoakland.com*

GAIA
consulting, inc.
2101 Webster Street, 12th Floor Oakland, CA 94612
tel (510) 663-4257 fax (510) 663-4141
www.gaiainc.com

November 7, 2003

Mr. Jeff Rubin
Port of Oakland
EH&C Department
530 Water Street
Oakland, CA 94607

SUBJECT: Letter Workplan for UST Site HF-16 (LOP#6894), former Building H-204 Phase II Site Investigation, Ninth Avenue Terminal

Dear Mr. Rubin:

GAIA Consulting, Inc. has prepared this letter workplan to further investigate soil and groundwater contamination at underground storage tank (UST) site HF-16 located at former Building H-204 at the Ninth Avenue Terminal in Oakland (Figure 1). GAIA conducted an investigation at the site in April 2003 in accordance with an October 8, 2002 workplan, previously approved by Alameda County Health Care Services Agency (County). A site investigation report dated August 14, 2003 was submitted to the County summarizing the field activities performed and analytical results from samples collected during this investigation.

This tank site is currently part of the Local Oversight Program (LOP 6894). The listed address for this UST site is 79 8th Avenue, Oakland. The tank site is physically located on 8th Avenue, approximately 1,100 feet southwest of Embarcadero Road and 100 feet south of Clinton Basin. This UST site is part of a larger development area, designated as the Oak to Ninth District, which will be redeveloped. The redeveloped property encompasses 60 acres of property on the Oakland Estuary, including the Ninth Avenue Terminal (Terminal) and Clinton Basin areas. The goal of the redevelopment is to create a mixed-use waterfront neighborhood.

This workplan has been prepared in response to a request from the County. The overall objective of the investigation activities proposed in this workplan is to delineate the extent of hydrocarbon impacts associated with this UST site and to define the groundwater gradient within the area. A brief summary of the most recent investigation conducted at the site is provided below. For a more detailed description of the site, please reference the above-mentioned workplan and investigation report.

2003 INVESTIGATION SUMMARY

Two test pits, GAIA TP-5 and GAIA TP-6, were excavated within the UST area on April 25 and 29, 2003 (Figure 2). No USTs were found during the excavations. A concrete wall was encountered at test pit GAIA TP-5 at approximately 3.0 feet bgs and extended to a depth of approximately 7.5 feet bgs along the southeastern side of the test pit. The wall ran parallel to 8th Avenue. A 3-foot wide concrete slab was also encountered at the bottom of the test pit (approximately 7.5 feet bgs) and directly adjacent to the wall.

A total of 3 soil samples and 2 groundwater samples were collected from test pits GAIA TP-5 and GAIA TP-6. Sample results from this round of investigation, as well as results from previous investigations are included in Tables 1 and 2. Separate-phase hydrocarbon (approximately 0.02 feet) was noted on the groundwater in test pit GAIA TP-6. A petroleum sheen was observed on the water in GAIA TP-5. All soil and groundwater samples were analyzed for TPH compounds by U.S. Environmental Protection Agency (EPA) Method 8015-Modified with silica gel clean-up for THP-d and TPH-mo and BTEX using

EPA Method 8021. Samples were also tested for fuel oxygenates and lead scavengers by EPA Method 8260. Samples collected from GAIA TP-5 were also analyzed for total lead.

Elevated levels of TPH-d, TPH-mo, and TPH-g were detected in soil samples from test pits GAIA TP-5 and GAIA TP-6. The TPH compound detected at the highest concentrations was TPH-g with concentrations ranging from 2,400 mg/kg in GAIA TP-5 at 4 feet bgs to 5,300 mg/kg in GAIA TP-6 at 3 feet bgs. TPH-d and TPH-mo concentrations ranged from 770 mg/kg to 1,800 mg/kg. BTEX was also detected at elevated levels in all these test pit samples. Benzene concentrations ranged from 11 mg/kg to 12 mg/kg. Total lead was analyzed in samples GAIA TP-5@3.5' and GAIA TP-5@4' and was detected at concentrations of 46 mg/kg and 71 mg/kg, respectively. No fuel oxygenates or lead scavengers were detected in any of the soil samples analyzed.

Groundwater samples also contained elevated TPH compounds and BTEX . As with the soil samples, concentrations of TPH-g were greater than concentrations of TPH-d and TPH-mo. TPH-g was detected at concentrations of 17,000 µg/L in GAIA TP-5 and 260,000 µg/L in GAIA TP-6. Concentrations of TPH-d in GAIA TP-5 and GAIA TP-6 water samples were 8,400 µg/L and 56,000 µg/L, respectively, and TPH-mo concentrations were 6,700 µg/L and 21,000 µg/L, respectively. Benzene concentrations in GAIA TP-5 and GAIA TP-6 were 3,100 µg/L and 2,000 µg/L, respectively. No fuel oxygenates or lead scavengers, except Isopropyl Ether (DIPE) were detected in groundwater. DIPE concentrations of 16 µg/L and 23 µg/L were detected in groundwater from GAIA TP-5 and GAIA TP-6, respectively.

Both test pits showed elevated levels of TPH compounds and BTEX in both soil and groundwater samples. Consistent with data collected during prior investigations, TPH-g concentrations in both soil and groundwater at this site were higher than TPH-d and TPH-mo concentrations suggesting, 1) the former UST likely stored gasoline and 2) the area may be impacted by other fuel related releases given the former bulk fuel processing activities conducted in the area.

The nearest groundwater monitoring well, SCIMW-24, which is located approximately 8 to 15 feet from the test pits, previously contained separate-phase hydrocarbons (approximately 0.04 feet) and continues to show elevated levels of TPH and BTEX compounds. The results of the soil and groundwater samples from the test pits are consistent with elevated TPH and BTEX concentrations detected at monitoring well SCIMW-24 and previously drilled boring SCI-12. Based on the information collected from this and previous investigations, it is likely that the source of the elevated TPH-g and BTEX in groundwater, as well as the separate-phase hydrocarbon product, was associated with USTs.

PROPOSED PHASE II WORKPLAN

Due to the presence of elevated levels of petroleum fuel constituents detected during the first phase of investigation at HF-16, a second phase of investigation is needed to delineate and refine the extent of the contamination in the area. Approximately four borings and three monitoring wells will be installed within the UST area, using a drill rig equipped with an 8-inch hollow stem auger. GAIA will coordinate with Alameda County Public Works Agency to obtain the necessary boring and monitoring well permits prior to conducting any fieldwork. Approximate boring locations are shown on Figure 2. The borings will be advanced approximately 12 feet bgs at each location. One grab groundwater sample and up to two soil samples will be submitted for analysis from each of the four borings. Up to two soil samples will be submitted for each monitoring well. Groundwater samples will be collected from each new well once they are developed. In addition, groundwater samples will be collected from existing monitoring wells SCIMW-11 and SCIMW-24. Additional soil and/or groundwater samples may be collected and held by the laboratory for follow-up analysis.

Soil Boring Installation and Sample Collection

During drilling, soil samples will be collected approximately every three feet using a California modified split-spoon sampler lined with stainless steel sleeves. Select soil sample sleeves will be

immediately sealed with Teflon™ film and plastic caps, labeled and placed in a chilled cooler. The remaining sample sleeves will be used for lithologic description in accordance with the Unified Soil Classification System (USCS). To monitor for evidence of contamination during drilling, a portion of the sample will be placed into resealable plastic bags, the headspace monitored for volatile organic vapors using an organic vapor analyzer (OVA) or photoionization detector (PID).

A temporary well screen will be placed within each borehole to allow water to enter the boring prior to collecting a water sample. Water samples will be collected using a disposable bailer. The samples will be immediately decanted into laboratory-supplied bottles and placed on ice in a cooler for delivery to the project laboratory. Bentonite grout will be placed in the annular space utilizing a tremmie pipe to within 2 feet of the surface grade upon completion of each boring. Each soil boring location will be measured from features at the Terminal that will ensure accurate mapping of the boring locations on site figures. All borings will be patched with asphalt or concrete patch as appropriate.

The samples will be transported under chain-of-custody protocol to a state-certified analytical laboratory for chemical analysis. The soil and grab groundwater samples from the borings will be analyzed for TPH-g, TPH-d, and TPH-mo and BTEX, using EPA Methods 8015M and 8021, with silica gel clean up for TPH-d and TPH-mo. Groundwater samples will also be analyzed for total lead and fuel oxygenate DIPE via EPA methods 6010 and 8260, respectively.

Monitoring Well Installation and Sampling
Three new monitoring wells, GMW-1, GMW-2, and GMW-3, will be installed within the vicinity of the UST site. Existing monitoring well SCIMW-24 continues to have elevated levels of petroleum hydrocarbons and BTEX. However, SCIMW-11, located approximately 20 feet from the Clinton Basin Shoreline, has been free of petroleum hydrocarbons for the past three monitoring events. The proposed monitoring wells will be installed to identify the groundwater flow direction specific to this portion of the Terminal as well as the lateral extent of groundwater impacts in this area. The approximate location of the proposed monitoring wells is shown on Figure 2.

The well borings will first be drilled and sampled as described above. The proposed new monitoring wells will be completed and screened to the same depth as the existing nearby monitoring well SCIMW-24. SCIMW-24 was completed in a clayey silt layer (Bay Mud) overlain by a sandy silt to clayey sand layer (fill). The borings will be completed as permanent, flush mounted, 2-inch diameter monitoring wells, and will be screened and completed to a depth of 18 feet bgs with a screen interval from 3.0 feet to 18 feet bgs. The monitoring wells will be completed in accordance with current state well construction requirements.

The groundwater monitoring wells will be developed by surging, bailing, and purging until turbidity is significantly reduced. Prior to collecting groundwater samples, the depth to water will be measured in each well using a decontaminated electronic water indicator, the volume of water standing in each well (pore volume) will be calculated and groundwater parameters including turbidity, temperature, pH, and conductivity will be monitored during purging. Once parameters have stabilized within approximately 10 percent of each other for three consecutive readings or three times the well casing volume has been purged, groundwater samples will be collected from each well using a disposable polyethylene bailer or pump and decanted into laboratory prepared sample jars. Groundwater samples will also be collected from existing wells SCIMW-11 and SCIMW-24; these wells will be purged in the same fashion as the new wells prior to collecting groundwater samples. Samples will be placed on ice in a cooler and transported under chain-of-custody protocol to a state-certified analytical laboratory for chemical analysis. The samples will be analyzed for TPH-g, TPH-d, and TPH-mo and BTEX, using EPA Methods 8015M and 8021, with silica gel cleanup for TPH-d and TPH-mo, as well as total lead and DIPE using EPA method 6010 and 8260.

The new monitoring wells will be surveyed relative to SCIMW-24 and SCIMW-11. Groundwater elevation measurements from the new wells and wells SCIMW-11 and SCIMW-24 will be collected after the new wells are first developed. These water table elevations will be used to generate a limited potentiometric surface contour map for the vicinity of former Building H-204 that indicates localized groundwater gradient and flow direction.

QA/QC PROGRAM

During this investigation, field quality assurance/quality control (QA/QC) will be ensured by following standard sampling protocols and field documentation requirements. To ensure valid and representative samples, drilling and sampling equipment will be decontaminated between borings and waste materials generated during sampling will be properly contained. The analytical laboratory is subject to its own QA/QC program. Four formats will be used to document the implementation of field activities, as follows:

- Field log book;
- Field Data Sheets;
- Sample Labels; and,
- Chain-of-custody form.

Field Log Book

All field data will be recorded in a logbook while in the field. Logged data includes soil boring specifications and sample-collection information including sample date and time, location, depth, client, analytical methods, samplers' initials, and the name and address of the laboratory. In addition, other pertinent information, such as descriptions of anomalous conditions, will be recorded.

Field Data Sheets

Geologic boring logs will be completed in the field to describe the lithology of each boring installed. The logs will indicate the depth of the fill-bay mud interface, the depth of encountered groundwater, and any anomalies such as hydrocarbon odors. The logs will also provide well completion information.

Sample Labels

Sample labels will be completed in waterproof ink at the time of sample collection and before the sample is placed in the cooler. The following information will be included on the sample label: sample ID number, date and time, sample location, depth, client, analyses, preservative, and sampler's initials.

Chain-of-Custody Procedures

A chain-of-custody (COC) form will be used to record all samples collected. The COC will be checked for completeness at the end of each day and signed by the sampler. Information on the chain-of-custody record includes: sample date and time, sample ID and location, matrix, number of containers, required analyses, preservative, turnaround time, project manager's name, project number, project name and location, client and laboratory names, and sampler signature(s).

Equipment Decontamination

All drilling equipment will be decontaminated in between borings to prevent cross-contamination. The drilling equipment will be steam cleaned prior to arriving on site. All down-hole drilling equipment will either be steam-cleaned in between borings or washed in an alconox solution and rinsed in clean water. A new pair of disposable nitrile gloves will be donned before each sample is collected.

Investigation-Derived Waste

Investigation-derived waste (IDW) will be placed in labeled, 55-gallon, United States Department of Transportation (DOT) 17H IDW drums. These drums will be left on the site pending receipt of final

laboratory data and subsequent disposal by the Port. The Port will have the IDW removed by a Port designated hazardous waste contractor.

Laboratory QA/QC Procedures
All analytical testing will be performed by a Cal-EPA ELAP-accredited hazardous-waste laboratory. Each laboratory is required to maintain its own QA/QC program. The laboratory is responsible for maintaining custody of the samples, and for maintaining all associated records documenting that custody. Upon receipt of the samples, the laboratory checks the original chain-of-custody documents and compares them with the labeled contents of each sample container for accuracy and traceablity. The laboratory checks all sample containers for integrity, and records any observations on the original COC record; the COC form is then signed and dated by the laboratory.

Each sample is logged into the laboratory by assigning it a unique sample number. All samples received as part of the same shipment receive the same work order. Each container of the sample is identified by appending sequential letters to the end of the sample number. The laboratory number and the sample ID number are recorded on the laboratory report.

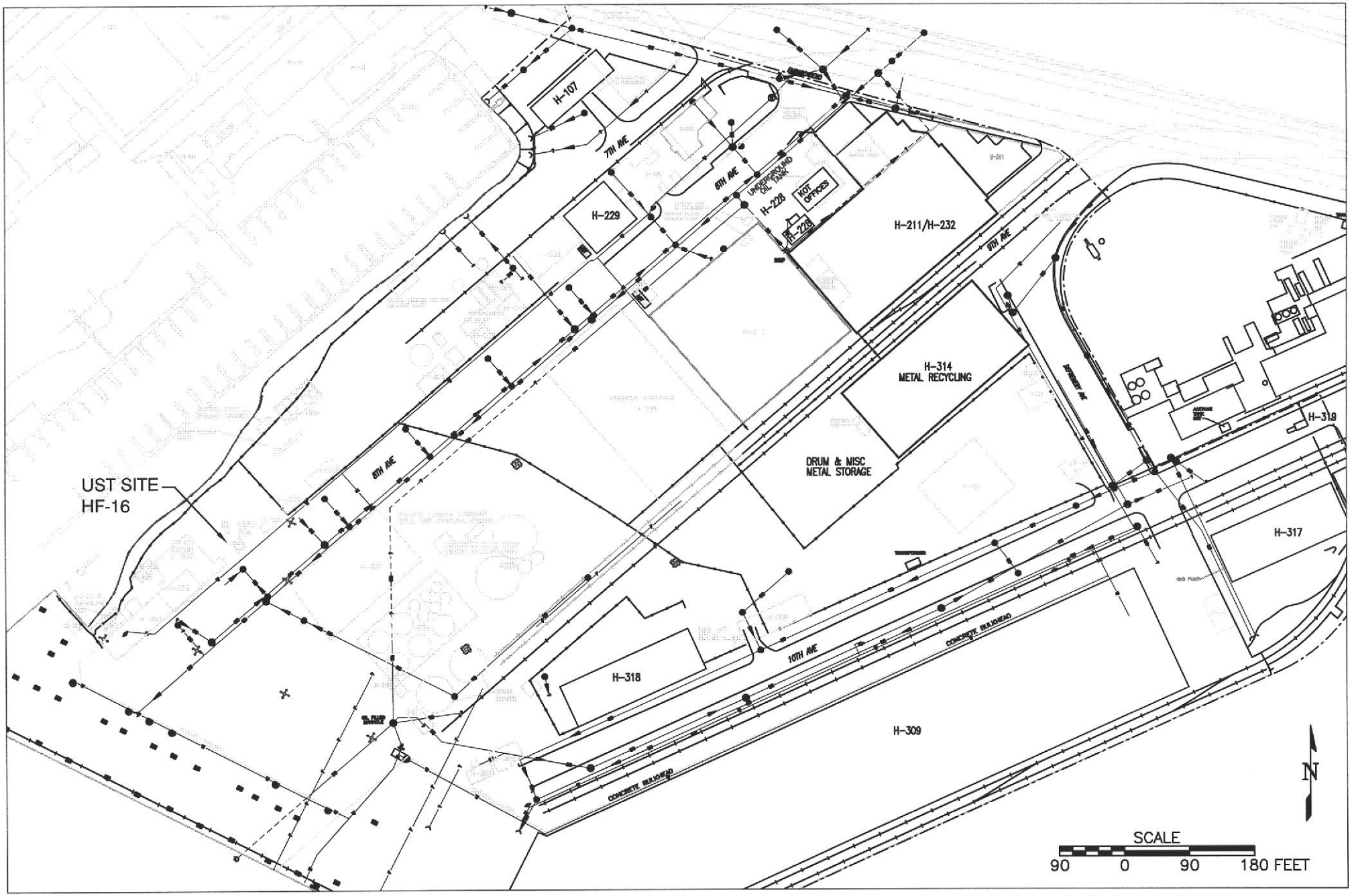
DATA EVALUATION/REPORT PREPARATION
The results of the field investigation will be prepared in a summary investigation report. The report will include tabulated data, cross section lithology, approximate groundwater flow direction, conclusions, and recommendations. Sample results will be compared to the San Francisco Regional Water Quality Control Board 2003 Environmental Screening Levels.

PROPOSED INVESTIGATION SCHEDULE
The proposed schedule is dependent on the review cycle by the County. We anticipate that mobilization for Phase II would be completed within 2 to 3 weeks following approval of the workplan by the County. A final investigation report, including recommendations for future actions, will be submitted within twelve weeks of the completion of the investigation.

Cordially,
GAIA Consulting, Inc.

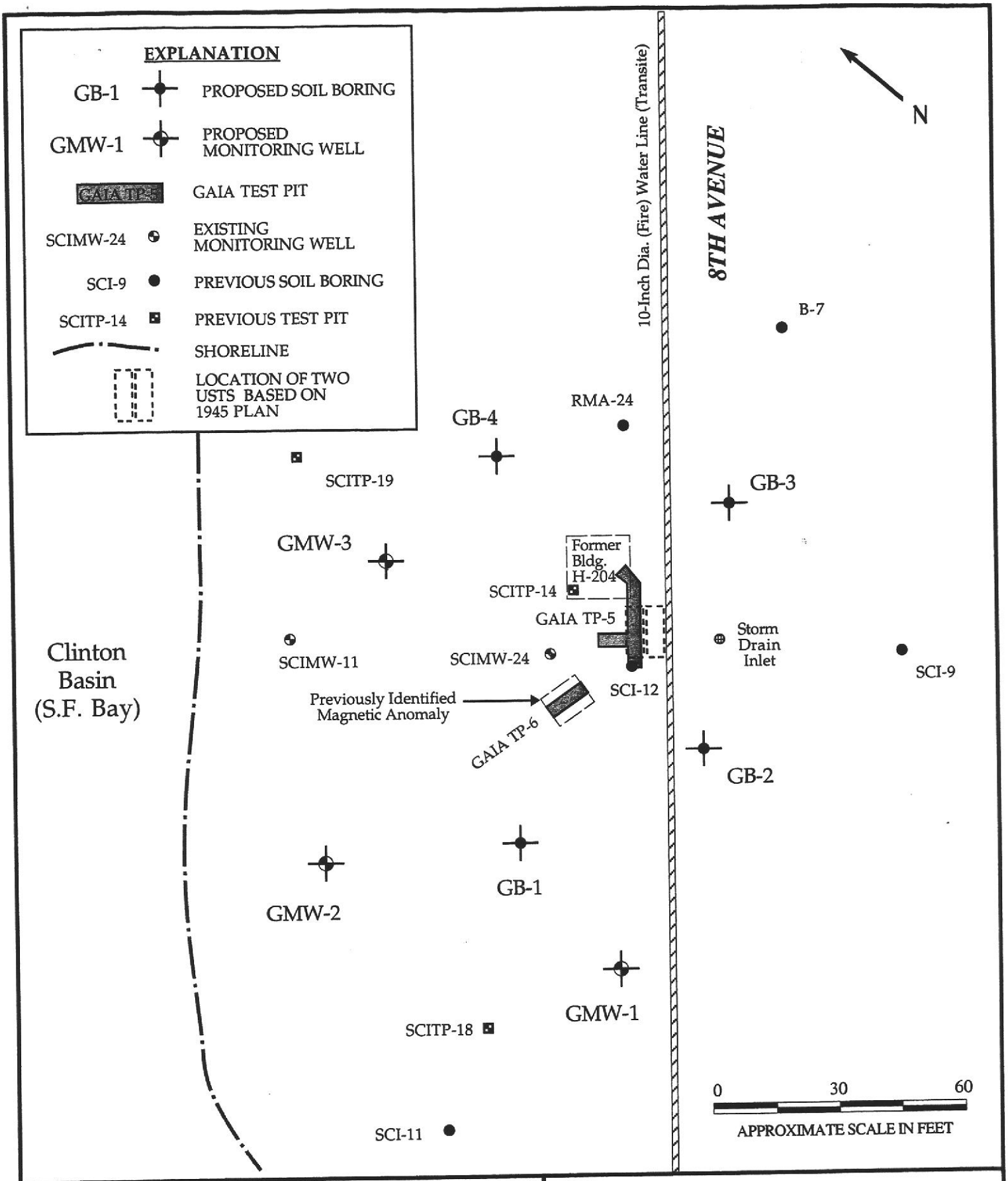
Susanne von Rosenberg, P.E.
Project Manager

Jeriann Alexander, P.E., REA
Fugro West, Inc.
1000 Broadway, Suite 200
Oakland, CA 94607



SITE LOCATION
9TH AVENUE TERMINAL

FIGURE 1



PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS (Phase 2)
UST Site HF-16, Building H-204
9th Avenue Terminal
Port of Oakland

GAIA CONSULTING, INC.

Project No.	Figure Date	Figure
180.041	**10/03**	**2**

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
UST Site HF-16 at Former Building H-204 (LOP#6894)
Ninth Avenue Terminal, Port of Oakland

SAMPLE ID	DEPTH (ft. bgs)	SAMPLE DATE	*Total Petroleum Hydrocarbons & BTEX (mg/kg)*							*Fuel Oxygenates, Lead Scavengers, & Total Lead (mg/kg)*							
			TPH-d	TPH-mo	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB	Total Lead
HISTORIC SITE INVESTIGATION																	
SCI-12@6.5	6.5	5/22/1996	**800**	**330YHL**	**940YH**	**12.0**	**34.0**	**13.0**	**48.1**		--	--	--	--	--	--	--
RMA-24@6.5-7	6.5	11/22/1996	<10	--	<10	--	--	--	--	--	--	--	--	--	--	--	--
SCITP-14@4	4.0	2/5/1997	**99YHL**	**420**	**270**	<0.13	<0.13	<0.13	**5.2**	--	--	--	--	--	--	--	**57**
SCIMW-24@3	3.0	4/29/1997	**20YHL**	**140**	**440**	**1.6**	**0.31J**	**11**	**6.4**	--	--	--	--	--	--	--	**18**
SCIMW-24@6	6.0	4/29/1997	**140HL**	**200**	**910**	**0.63**	<0.5	**2.4**	**3.9**	--	--	--	--	--	--	--	--
GAIA UST INVESTIGATION																	
GAIA TP-5@3.5	3.5	4/25/2003	**1,100 HLY**	**870**	**3,800**	**12.0**	**19.0**	**38.0**	**17.3**	<0.71	<14	<0.71	<0.71	<0.71	<0.71	<0.71	**46**
GAIA TP-5@4.0	4	4/25/2003	**920 HLY**	**1,800**	**2,400**	**11.0**	<0.25	**22.0**	**11.3 C**	<0.63	<13	<0.63	<0.63	<0.63	<0.63	<0.63	**71**
GAIA TP-6@3	3	4/29/2003	**1,200 HLY**	**770**	**5,300**	**12.0**	**<1.0**	**46.0**	**12 C**	<0.13	<2.5	<0.13	<0.13	<0.13	<0.13	<0.13	--

Notes:

<0.05	Analyte not detected above the stated reporting limit
--	Sample not analyzed
H	Heavier hydrocarbons contributed to the quantitation
L	Lighter hydrocarbons contributed to the quantitation
Y	Sample exhibits chromatographic pattern which does not resemble standard
C	Presence confirmed, but relative percent difference btwn colums exceeds 40%
TPH-d	Total Petroleum Hydrocarbons as diesel by EPA Method 8015M w/ silica gel cleanup
TPH-mo	Total Petroleum Hydrocarbons as motor oil by EPA Method 8015M w/silica gel cleanup
TPH-g	Total Petroleum Hydrocarbons as gasoline by EPA Method 8015M
BTEX	Benzene, Toluene, Ethyl-Benzene, Total Xylenes by EPA Method 8021
mg/kg	miligrams per kilogram
Fuel Oxygenates	MTBE, TBA, DIPE, ETBE, & TAME by EPA Method 8260B
Lead Scavengers	1,2-DCA and EDB by EPA Method 8260B
MTBE	methyl tert-Butyl ether
TBA	tert-Butyl Alcohol
DIPE	Isopropyl Ether
ETBE	Ethyl tert-Butyl Ether
TAME	Methyl tert-amyl ether
1,2-DCA	1,2-Dichloroethane
EDB	1,2 Dibromoethane

Table 2
GROUNDWATER SAMPLE ANALYTICAL RESULTS
UST Site HF-16 at Former Building H-204 (LOP#6894)
Ninth Avenue Terminal, Port of Oakland

SAMPLE ID	GW Elevation (ft)	SAMPLE DATE	*Total Petroleum Hydrocarbons & BTEX (µg/L)*							*Fuel Oxygenates, Lead Scavengers, & Total Lead (µg/L)*							
			TPH-d	TPH-mo	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB	Total Lead
HISTORIC SITE INVESTIGATION																	
SCI-12	--	5/22/1996	**2,400YHL**	**14,000Y**	**18,000**	**810**	**680**	**2,200**	**3,900**	--	--	--	--	--	--	--	
RMA-24@6.5-7	--	11/22/1996	<500	--	<500	--	--	--	--	--	--	--	--	--	--	--	
SCITP-14@4	--	2/5/1997	**15,000YLH**	**41,000 L**	**18,000 L**	**1,700**	**1,100**	**110**	**690**		--	--	--	--	--	--	
SCIMW-24	4.44	5/6/1997	**2,700 L**	**2,100 L**	**5,000**	**720**	**37**	**220**	**120**	--	--	--	--	--	--	--	**6.3**
SCIMW-24	4.96	9/18/1998	**330YL**	<300	**7,100**	**950**	**53**	**99**	**98**	--	--	--	--	--	--	--	<3
SCIMW-24	5.79	12/11/1998	**800YL**	<300	**8,300**	**1,200**	**56**	**180**	**111**	--	--	--	--	--	--	--	<3
SCIMW-24	5.14	5/6/1999	**1,900YL**	**660YL**	**6,700**	**1,100**	**31**	**120**	**89**	--	--	--	--	--	--	--	<3
SCIMW-24	4.59	8/25/1999	**FREE PRODUCT (0.5 inches) - NOT SAMPLED**														
SCIMW-24	4.99	12/1/1999	**960YL**	<300	**7,000**	**860**	**35**	**25**	**53.6**	--	--	--	--	--	--	--	<3
SCIMW-24	5.05	4/6/2000	**2,600YL**	**2,100**	**4,500**	**1,700**	**41**	**87**	**81**	--	--	--	--	--	--	--	**8.3**
SCIMW-24	4.95	10/10/2000	**1,200LY**	<300	**5,400**	**1,600**	**59**	**36**	**69**	--	--	--	--	--	--	--	--
SCIMW-24	4.94	5/4/2001	**5,300HLY**	**3,600**	**7,100**	**2,700**	**64**	**160**	**100**	--	--	--	--	--	--	--	--
SCIMW-24	5.37	11/28/2001	**5,800 HLY**	**5,000**	**8,900**	**1,000**	**44**	**51**	**57**	--	--	--	--	--	--	--	--
SCIMW-24	5.17	7/30/2002	**2,300 HLY**	**1,700**	**25,000**	**1,600**	**<2.5**	**160**	**66**	--	--	--	--	--	--	--	--
SCIMW-24	5.74	1/21/2003	**8,900 HLY**	**11,000**	**23,000**	**2,200**	**55**	**170**	**107**	--	--	--	--	--	--	--	--
GAIA INVESTIGATION SAMPLING																	
GAIA TP-5	--	4/25/2003	**8,400 HLY**	**6,700**	**17,000**	**3,100**	**200**	**1,300**	**1,530**	<3.1	<63	**16**	<3.1	<3.1	<3.1	<3.1	**570***
GAIA TP-6	--	4/29/2003	**56,000 HLY**	**21,000 L**	**260,000**	**2,000**	<50	**1,500**	**350 C**	<0.5	<10	**23**	<0.5	<0.5	<0.5	<0.5	--

Notes:

* This sample was not filtered prior to analysis, therefore the concentration reported does not reflect the true conditions at the site.

<0.05 Analyte not detected above the stated reporting limit

-- Sample not analyzed

H Heavier hydrocarbons contributed to the quantitation

L Lighter hydrocarbons contributed to the quantitation

Y Sample exhibits chromatographic pattern which does not resemble standard

C Presence confirmed, but relative percent difference between colums exceeds 40%

TPH-d Total diesel range petroleum hydrocarbons by EPA Method 8015M w/ silica gel cleanup

TPH-mo Total motor oil range petroleum hydrocarbons by EPA Method 8015M w/ silica gel cleanup

TPH-g Total gasoline range petroleum hydrocarbons by EPA Method 8015M

BTEX Benzene, Toluene, Ethyl-Benzene, Total Xylenes by EPA Method 8021

µg/L micrograms per Liter

Fuel Oxygenates MTBE, TBA, DIPE, ETBE, & TAME by EPA Method 8260B

Lead Scavengers 1,2-DCA and EDB by EPA Method 8260B

MTBE methyl tert-Butyl ether

TBA tert-Butyl Alcohol

DIPE Isopropyl Ether

ETBE Ethyl tert-Butyl Ether

TAME Methyl tert-Amyl Ether

1,2-DCA 1,2-Dichloroethane

EDB 1,2 Dibromoethane