



October 8, 2001

PORT OF OAKLAND

Mr. Richard Hiatt
Associate Water Resources Control Engineer
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: Port of Oakland Clinton Basin Supplemental Environmental Project

Dear Mr. Hiatt:

The Regional Water Quality Control Board ("Regional Board") issued Amended Complaint No. 00-040 for Administrative Civil Liability against the Port of Oakland in August 2000 for activities conducted in the Clinton Basin involving the removal of the vessel, Moby Dick. In lieu of paying \$64,000 in penalties the Port elected to implement a Supplemental Environmental Project ("SEP"). Please find enclosed for your review the SEP report "Former Seabreeze Yacht Harbor Wetland Enhancement Project, Oakland, Alameda County, California." The Port has worked closely with the State Coastal Conservancy, Golden Gate Audubon Society and the interested community groups to produce the enclosed document.

Philip Williams and Associates ("PWA") and Baseline Environmental Consultants were engaged to develop the concept of the restoration project and to collect soil samples for analysis to determine whether the soils that would be excavated and reused on site to complete the project as proposed, pose an unacceptable human health or ecological risk. Baseline concluded that the soils do not pose a risk within the parameters of risk assessment. Unless the Regional Board disapproves of the proposal, the Port is prepared to move forward with the project as designed and described more fully in my letter of April 27, 2001. The main elements of the project include: (1) restoration of a tidal marsh, (2) enhancement of roosting areas for shore and water birds, and (3) increase in habitat diversity.

The Port's Planning Department is poised to pursue BCDC and Corps of Engineers approvals as necessary. Philip Williams & Associates will begin development of construction Plans and Specifications as soon as the enclosed SEP is approved and the contract between the Port and PWA is executed. We estimate that if all permits and approvals are received in a timely manner that we can begin construction activities in the spring of 2002.

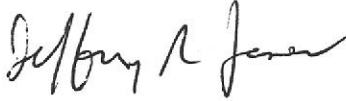
We would like to finalize the enclosed document as soon as possible so that the project may begin. The Port therefore requests that you and all of those persons copied below review the document and submit your final comments by no later than **October 31, 2001**. Please forward your written comments to:

Douglas Herman
(510) 627-1184
Port of Oakland
530 Water Street
Oakland, CA 94607

Mr. Richard Hiett
October 8, 2001
Page 2

If you have any questions, please do not hesitate to contact me at (510) 627-1360.

Sincerely,

A handwritten signature in dark ink, appearing to read "Jeffrey R. Jones". The signature is fluid and cursive, with the first name "Jeffrey" being more prominent than the last name "Jones".

Jeffrey R. Jones, MS, MPH
Environmental Compliance Supervisor

cc:

Keith Lichten, Regional Board
Anne Henny, Port
Jon Amdur, Port
Andy Jahn, Port
Christy Herron, Port
Douglas Herman, Port
Barney Chan, ACHCSA
Maxine Spellman, California Coastal Commission
John Bowers, Golden Gate Audubon Society
Arthur Feinstein, Golden Gate Audubon Society
Scott Miller, CEDA

**Former Seabreeze Yacht Harbor –
Wetland Enhancement Project
Oakland, Alameda County, California**

Prepared for:

Port of Oakland

Prepared by:

Philip Williams & Associates, Ltd.

with

LSA Associates, Inc.

October 5, 2001

PWA Ref. # 1498

OCT 11 2001

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Services provided pursuant to this Agreement are intended solely for the use and benefit of the Port of Oakland.

No other person or entity shall be entitled to rely on the services, opinions, recommendations, plans or specifications provided pursuant to this agreement without the express written consent of Philip Williams & Associates, Ltd., 770 Tamalpais Drive, Suite 401, Corte Madera, California 94925.

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1. INTRODUCTION

The Port of Oakland (Port) is funding environmental and water quality enhancement projects on a portion of the former Seabreeze Yacht Harbor in the Oakland Estuary, in coordination with the California Regional Water Quality Control Board (RWQCB) and the California Coastal Conservancy (Conservancy). Local community representatives have participated in initial project planning and goals establishment. Project funds have been allocated specifically for the identification, development and implementation of a pilot scale enhancement project leading to improved habitat and water quality conditions at the former Seabreeze Yacht Harbor site (Figure 1).

1.1 PROJECT OVERVIEW

This report describes recommendations for a wetland enhancement project at the former Seabreeze Yacht Harbor site (project site) in the Oakland Estuary. The recommendations focus on objectives outlined by the project participants, and defined by opportunities and constraints of the site. The report directs mitigation actions at specific areas of the site to enhance and expand tidal wetland habitats in response to Section 404 requirements.

Existing available data was used in addition to a preliminary site analysis and survey for the assessment of the site and development of enhancement recommendations. The recommendations within this report describe a preliminary design plan. It is recognized that site layout and verification of elevations and limits of grading work are required prior to project construction. Soil composition, permitting requirements, construction access, management and maintenance needs will be important project design considerations in the final project design.

Historic land uses at the site have introduced some contaminants into the subsurface, and a soil quality investigation was directed by the Port to assess the feasibility of the proposed enhancement project. The Investigation of Soil Quality report was undertaken by Baseline Environmental Consulting, Emeryville, California and appears in Appendix A. The results of the tests and evaluations did not identify contamination levels that would limit project implementation. Additional considerations and actions may be required if specific, unanticipated soil conditions are encountered during construction. Based on Port data, the design assumes that utilities and other infrastructure are either not present and/or are not constraints within the area identified for project implementation.

1.2 PROJECT CONTEXT

On a larger scale, the Port of Oakland is currently considering several planning and development alternatives for the Oak Street to 9th Avenue corridor (Port of Oakland General Plan, 2000). These planning and development efforts will affect the ultimate configuration and land use on the project site. The project team reviewed available general plan documents and possible development scenarios in order

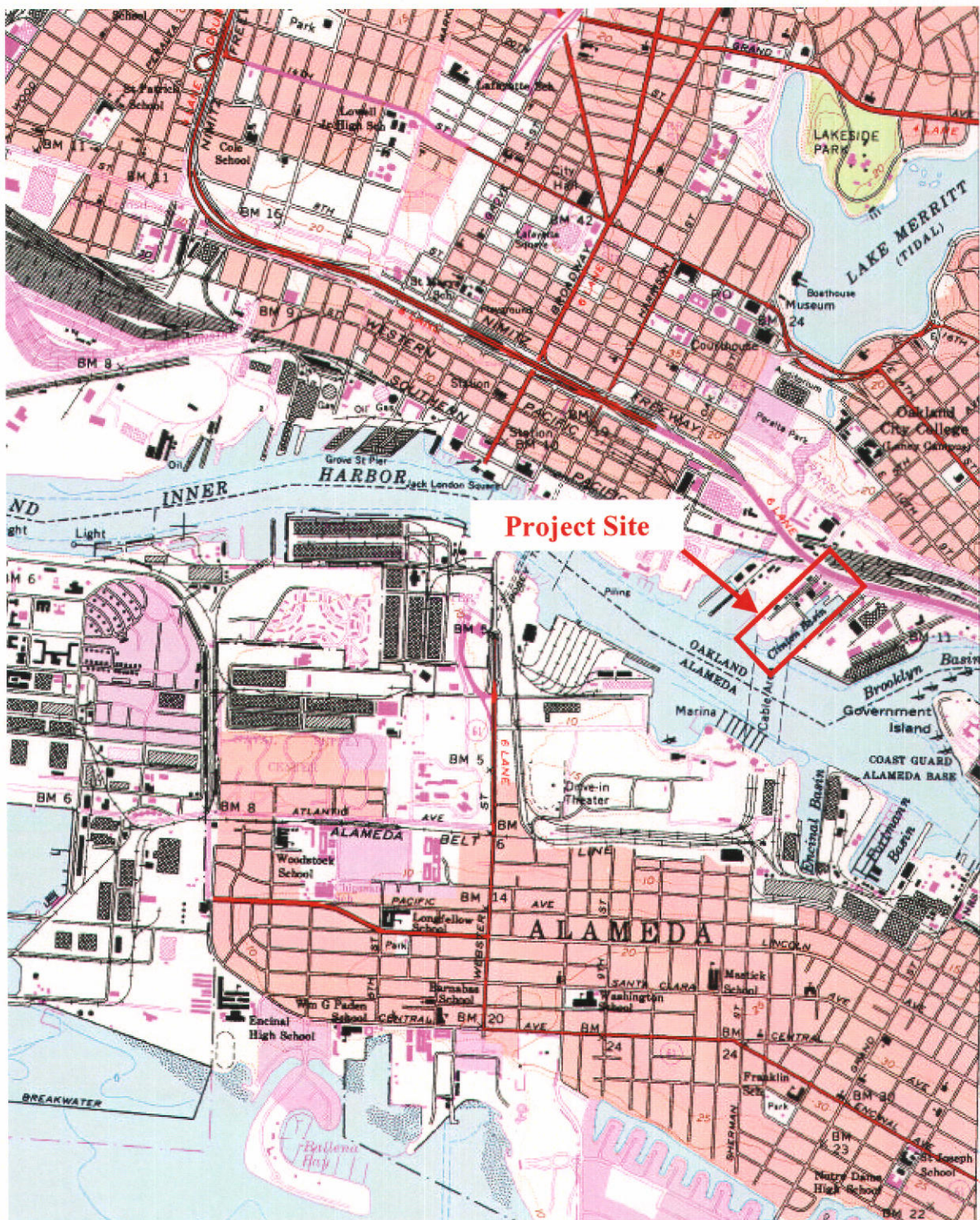


figure 1

Location Map Seabreeze Yacht Harbor

to integrate the pilot enhancement project with future planning efforts. The goal was to develop a project that would not be adversely impacted by likely future development scenarios. Based on these conditions the proposed project is limited to 0.63 acres.

In addition, the enhancement project may also serve as a useful reference for future restoration and enhancement projects in the estuary. Other locations and areas at the former Seabreeze Yacht Harbor site were assessed for potential enhancement activities; in particular, several intertidal and vegetated areas along the interior shoreline exhibit existing habitat value. A diversity of shorebirds has been regularly observed by interested local residents along this section of the project site's shoreline.

Since the project will provide improved habitat quality and increased use by wildlife, the design of future development projects in the area should address disturbance (noise, foot traffic, dogs, etc.) at the project site. Future habitat design elements could include elevated roosting areas, visual screens and fencing, interpretive signage and controlled public access areas.

1.3 SITE GOALS

The goals of the project are to improve habitat conditions for a diversity of water birds by: (1) creating a more natural habitat gradient, consisting of subtidal (open water), intertidal mudflat and sand flats, tidal marsh, and upland habitats; and (2) creating a small island to provide an unvegetated water bird roosting habitat that restricts disturbance by people and dogs.

These habitat improvements would primarily benefit water birds such as shorebirds, ducks, coots, grebes, herons, egrets, and gulls. The primary objective for the island is to provide a less disturbed roost site for shorebirds during high tides, but ducks, gulls, and other water birds may also use it. The site is unlikely to be used by threatened or endangered species such as California clapper rails and salt marsh harvest mice, due to the small extent of tidal marsh in the vicinity.

2. PRELIMINARY SITE ASSESSMENT

2.1 HISTORICAL CONDITIONS

Historically, the project site consisted of subtidal water and intertidal mudflats fronting a large contiguous and mature tidal marsh system along the eastern shore of the Central Bay. The marsh was characterized by extensive tidal influence and included vegetated marshlands, tidal channels and mudflats (*Baylands Ecosystem Habitat Goals*, San Francisco Bay Area Wetlands Ecosystem Goals Project, 1999). These habitats supported rich and diverse wildlife populations, which have declined in response to the highly modified habitats that presently occur in the area. Exact historic elevations of the project site are unknown, but are likely comparable to other existing tidal marshes in the Central Bay. These marshes typically occur within the mean higher high water (MHHW) and mean tide level (MTL) or 0.49 to 3.41 feet National Geodetic Vertical Datum (NGVD).

2.2 CURRENT CONDITIONS

Topography and Soils

Based on a preliminary review of historic documents and photographs, the former Seabreeze Yacht Harbor site was filled by the late 1920s and has been occupied by a steam generation plant, ship decommissioning facility, and a gravel loading/unloading facility. The current elevations across the site limit tidal influences and actions to the shoreline edges. Two small beach areas are located at the southwest end of the site. The project site varies from 0 to 7 feet above NGVD (PWA survey, 12/21/2000) with the highest points found along mounds of concrete construction debris and unconsolidated materials. The project site is generally flat with an elevation of approximately +6 feet NGVD.

The soils in the upland areas of the Seabreeze Yacht Harbor site are compacted and vary in their texture by locations. There are significant amounts of sand within the fill materials most likely as a result of dredge material deposits. The open sand flats have formed as a result of erosion at the edge of the fill, which removes the finer grained materials leaving the sand behind. The project site's shorelines differ in their form and character and are separated by a circular area of revetment roughly 60 feet in diameter. The smaller shoreline along the southern edge of the site is protected from wave action by an area of revetment and has a gentle and shallow gradient. At low tides this beach becomes a valuable exposed intertidal habitat. The larger beach along the western or estuary edge of the site is subject to higher wave action (resulting from the 2000 feet of fetch to the west and prevailing southwesterly winds). This beach is steeper and consists of coarser sand materials (Figure 2).

The soils across site appear to be low in organic materials and at higher elevations support a weedy plant community. This condition may have implications for the implementation and rate of establishment of a vegetated marsh at the project site. Tidal marshes require soils with organic materials to establish and

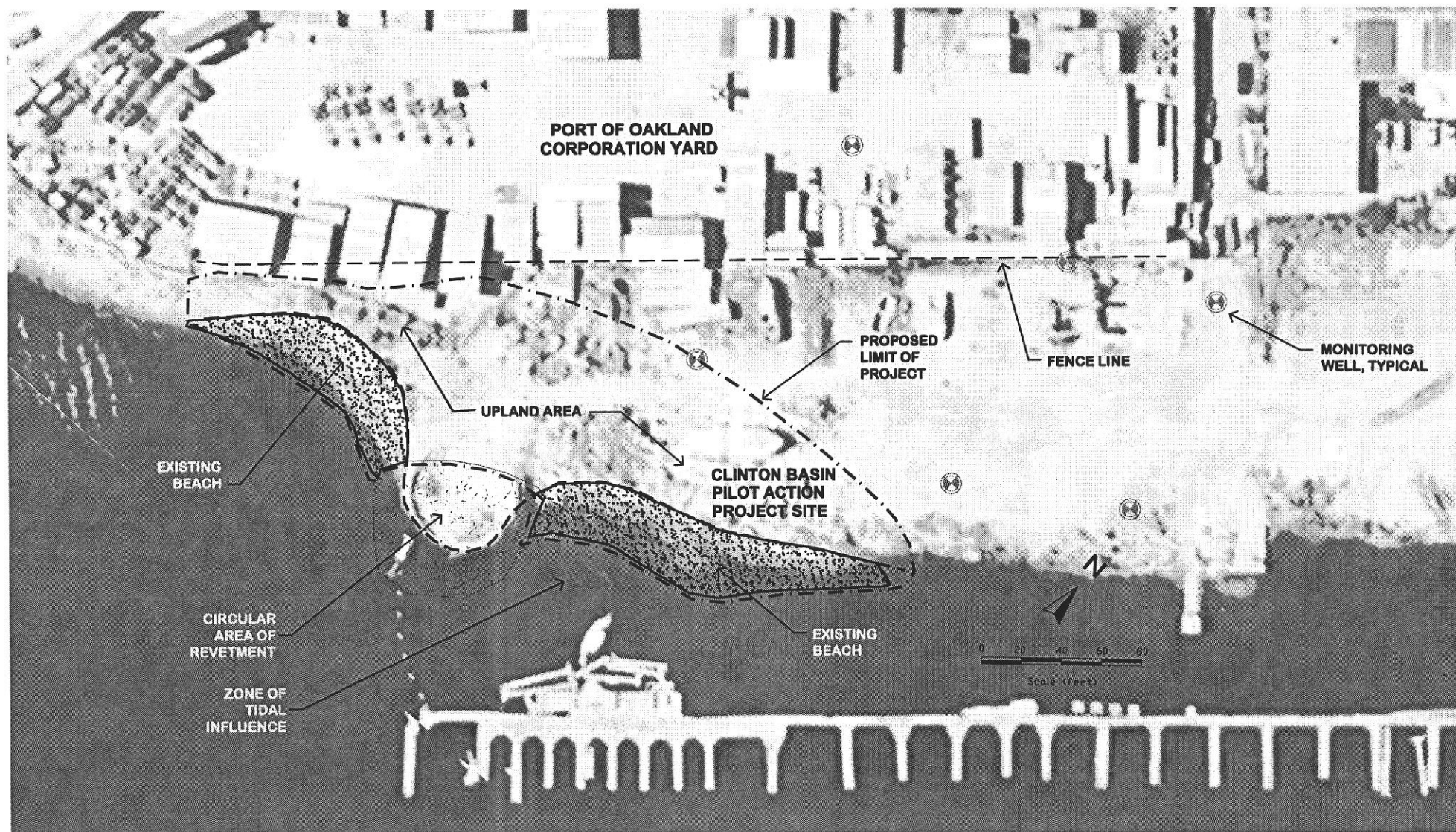


figure 2
Existing Conditions
Seabreeze Yacht Harbor

thrive. Soils that are low in organics will support tidal marsh, however, these marshes typically will take longer to establish. As wetland plants establish, they in turn, will provide debris and material as well as function to capture and accumulate sediment that will contribute to the levels of organic material in the soil. This accumulation of sediments can be expected to help support the vegetated marsh.

A screening and analysis program was undertaken in order to evaluate the soil quality and help determine construction and management options. Results from this study indicate that portions of the site may have to be over-excavated and filled with clean, dredged Merritt Sands in order to meet criteria set forth by the RWQCB. Analysis of the soil samples indicates that excavated material does not pose an unacceptable human or ecological risk, and may be re-used on site. Baseline Environmental Consulting undertook a human health screening as part of the *Investigation of Soil Quality for Habitat Enhancement Project, Former Seabreeze Yacht Center, June 2001*, (Appendix A). This assessment, a Site Specific Threshold Limits (SSTL) assessment, considered potential future users, levels of exposure and duration of exposure to the contaminated soils excavated to create the proposed channel. Human risks were evaluated for future park users and exposure routes considered were ingestion and dermal contact with the soil, and inhalation of particulates and volatile compounds. Ecological risks considered included exposure of terrestrial animals, and of aquatic organisms by leaching of chemicals from the soil into the groundwater, with subsequent discharge of the groundwater to the Clinton Basin. Based on this screening the soils do not present significant health risks to humans as defined by parameters and applicable risk-based screening levels (RBSLs) compiled by the San Francisco RWQCB (2000). If these soils were used as wetland cover, certain aquatic species could have greater exposure to the soils. The soils were determined to pose a potential environmental risk due to the direct and prolonged exposure by aquatic species. Despite these constraints, no soil quality issues were identified that would prevent project implementation.

Hydrodynamics

The Oakland Estuary is subject to the full tidal regime characteristic of the San Francisco Bay. Tides in the San Francisco Bay are referred to as a mixed, meso-tidal regime, with two unequal occurrences of high and low tides daily. Tidal characteristics at the project site are summarized in Table 1, and will provide adequate circulation for the proposed wetland enhancement project.

Table 1. Tidal Datums at Oakland Inner Harbor (from NOAA Station 9414764)

Elevation (feet)	Datum
3.41	Mean High Higher Water (MHHW)
2.81	Mean High Water (MHW)
0.49	Mean Tide Level (MTL)
0.00	National Geodetic Vertical Datum of 1929 (NGVD 29)
-1.83	Mean Low Water (MLW)
-2.94	Mean Lower Low Water (MLLW)

Based on field analysis and observations at the project site, shoreline erosion is highest along the southwestern edge due to boat wakes and wind driven waves over the open water of the estuary channel.

This will not be a significant constraint to the proposed enhancement project. The more western-facing portions of the project site will be exposed to higher wave energy and are more suitable as un-vegetated sand flats. It is anticipated that this section of the proposed project will maintain the existing character. Finer-grained sediment accumulation and vegetation establishment is more suitable and can be expected for the south-facing shoreline and interior channel areas of the proposed project.

2.3 BIOTIC PROCESSES

Although habitat values at the site have been degraded since historic times, substantial numbers of water birds were observed in the vicinity of the site on two recent site visits (Steve Granholm, LSA Associates, Inc., personal observations, October 17 and December 21, 2000). Water birds included two species of ducks (mallard and American wigeon), one species of shorebird (Least Sandpiper), five species of gulls (California, ring-billed, mew, western, and glaucous-winged), and several other water bird species (pied-billed grebe, American coot, double-crested cormorant, and snowy egret). Most of the water birds were near the shoreline in shallow water or on mudflats, except that many of the gulls were perched on docks, pilings, or nearby rooftops. The intertidal mudflats and patchy low marsh on the site provide valuable foraging habitat, both at low tide (for shorebirds and wading birds) and at high tide (for ducks, other water birds, and fish).

Birds observed in the disturbed upland habitats, on and adjacent to the site, included a red-tailed hawk, American crows, black phoebes, mourning doves, rock doves, and several species of songbirds. LSA did not visit the site during a high tide period, but according to a local resident (Patty St. Louis, pers. comm., October 17, 2000), flocks of shorebirds sometimes roost in this upland area during high tides.

The current habitat conditions on the site are highly disturbed. The restoration site itself consists of a small point with a gradually sloped (10:1) rip-rapped shoreline. Tidal marsh and intertidal mudflat are present on both sides of the point. The low marsh zone is gradually sloped and is vegetated by a patchy cover of smooth cordgrass (*Spartina alterniflora*) or a cordgrass hybrid. This is a non-native species that has largely displaced the native Pacific cordgrass (*Spartina foliosa*) in many South Bay tidal marshes. It is possible that the non-native *Spartina* identified at the site was not pure *S. alterniflora* (personal communication 10/02/01 with Debra Smith, California Coastal Conservancy biologist). The cordgrass plants at the site may be various hybrid clones (back-crosses with *S. alterniflora* and *S. foliosa*). This identification has potential implications to the proposed project because the hybrids are threatening to extend the vertical range of cordgrass within the intertidal zone. Preliminary research indicates that the cordgrass hybrids could colonize and displace mudflat as well as pickleweed habitat. The Conservancy has identified the removal of *S. alterniflora* and *S. hybrid* as a regional and local priority within the San Francisco Estuary Invasive *Spartina* Project.

Higher marsh zones on the site are more poorly defined and are compressed into narrow bands on a steep bank of fill material. Higher on the marsh gradient are zones dominated by saltgrass (*Distichlis spicata*), followed by pickleweed (*Salicornia virginica*), and then gumplant (*Grindelia stricta*). The gumplant zone is often called the transition zone, representing a transition from wetland to upland habitat. Above

the gumplant zone is a highly disturbed, relatively level upland zone with a variety of ruderal plants (mostly non-native species) amongst the concrete debris and compacted fill.

3. RECOMMENDED PROJECT ELEMENTS

The objective of this project is to expand tidal influence onto and into the project site, creating a small wetland area. As shown in Figure 3, this marsh area integrates a tidal channel, expanded mudflats, cordgrass marsh, pickleweed marsh and limited extents of transitional upland areas. The project will augment the existing, but limited, habitat areas.

3.1 BEACH HABITATS

The two existing beach habitats will be preserved as part of the proposed enhancement project. In addition, it is anticipated that these beaches will expand through the proposed regrading of the project site (Figure 4). In particular, the beach on the south side of the site will be expanded by approximately 2000 square feet. The beach areas will provide additional sparsely vegetated, intertidal habitat.

3.2 TIDAL MARSH

The project site provides an opportunity to restore a small area of tidal marsh along the southwest edge of the site. Integrated with the marsh are enhanced roosting areas for shore and water birds and an upland transition area to increase habitat diversity at the site.

The proposed wetland enhancement project would create a new channel connecting the two beach areas at the end of the site. The channel would be approximately 60 feet wide (top of bank to top of bank) and 5 to 7 feet deep. The banks of the channel would support a vegetated marsh fringe as described above. In addition, the channel should provide additional mudflat areas at low tide. At high tides the channel will isolate the circular area of revetment further enhancing the roosting area for shorebirds.

Marsh areas will be expanded at the former Seabreeze Yacht Harbor by regrading the specified upland areas and the tidal channel, as shown in Figures 4 and 5. As summarized in Table 2, these elevations will be suitable for cordgrass (1.5 to 3.0 ft NGVD) and pickleweed (2.0 to 4.0 ft NGVD) establishment, and will reconnect areas of the project site with tidal influence. Limited revegetation efforts could accompany the grading work in order to encourage the establishment of desired marsh plant species. It is anticipated that most plant establishment will occur through a process of natural colonization over a period of 3 to 5 years.

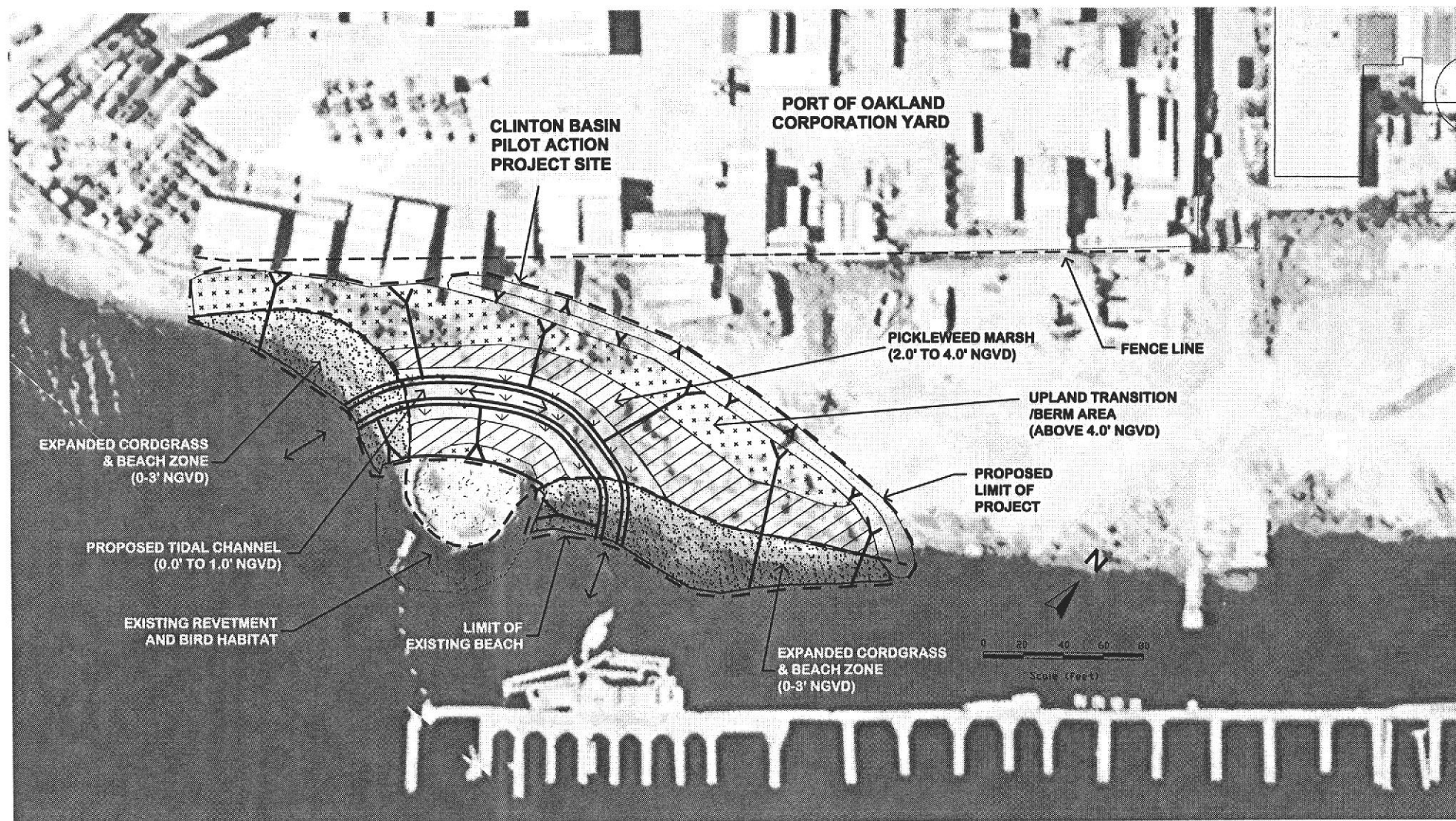


figure 3
**Proposed Pilot Enhancement Plan
 Seabreeze Yacht Harbor**

APPROXIMATE
LIMIT OF EARTHWORK

FENCE

NEW BERM
ON-SITE DISPOSAL OF EXCAVATED
MATERIAL WITHIN PROJECT LIMIT.
REMAINING MATERIAL TO BE SPREAD
ON ADJACENT SITE.

MONITORING WELL
TYPICAL

NEW CHANNEL

SURVEY SPOT
ELEVATION

- REVTMENT
- BEACH
- CORD GRASS, BELOW EL. 2.0
- PICKLEWEED, EL. 2.0 TO 4.0
- UPLAND, ABOVE EL. 4.0
- NEW BERM
UPLAND AND
TRANSITION PLANTING

EXISTING REVTMENT
BIRD ROOSTING AREA
PROTECT IN PLACE

ESTIMATED EXISTING
TOP OF BANK

0' NGVD

0 20 40 60 80
Scale (feet)

NOTES:

- TOTAL PROJECT AREA = 0.63 ACRES
- SPOT ELEVATIONS FROM GROUND SURVEY ON 5/31/01 BY PWA.
- BASE MAP DATA IS APPROXIMATE. VERIFY IN FIELD.
- DESIGN IS PRELIMINARY AND NOT FOR CONSTRUCTION.
- VERTICAL DATUM FOR ALL ELEVATIONS IS NGVD.

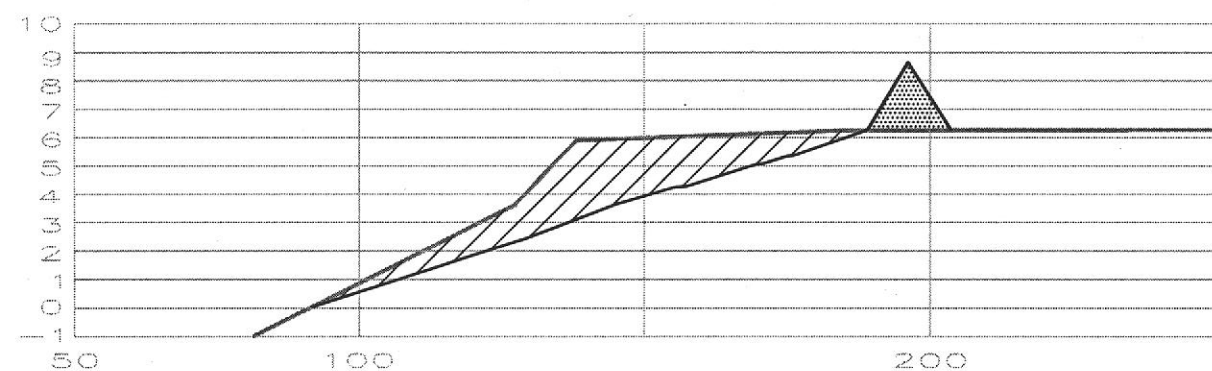
CLINTON BASIN

- ESTIMATED EXISTING TOP OF BANK
- APPROXIMATE LIMIT OF EARTHWORK
- 0' NGVD

DRAFT

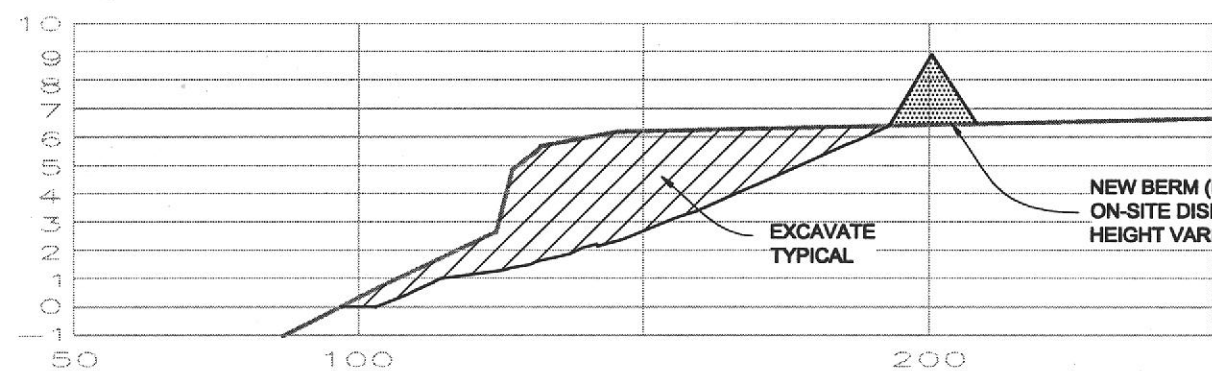
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REVISIONS				DESIGNED BY	CERTIFICATIONS:		APPROVED	Seabreeze Yacht Harbor Wetland Enhancement	PREPARED BY:	PWA PHILIP WILLIAMS & ASSOCIATES, LTD. 770 TAMALPAIS DRIVE, SUITE 401 CORTE MADERA, CALIFORNIA 94025 PHONE (415) 945-0800 FAX (415) 945-0808	SCALE AS SHOWN	JOB NO. 1498	CONTOUR INTERVAL AS SHOWN	DATE 10/4/01	Figure 4. Grading and Planting Plan
NO.	DATE	BY	DESCRIPTION	DRAWN BY											
				CHECKED BY											
				IN CHARGE											



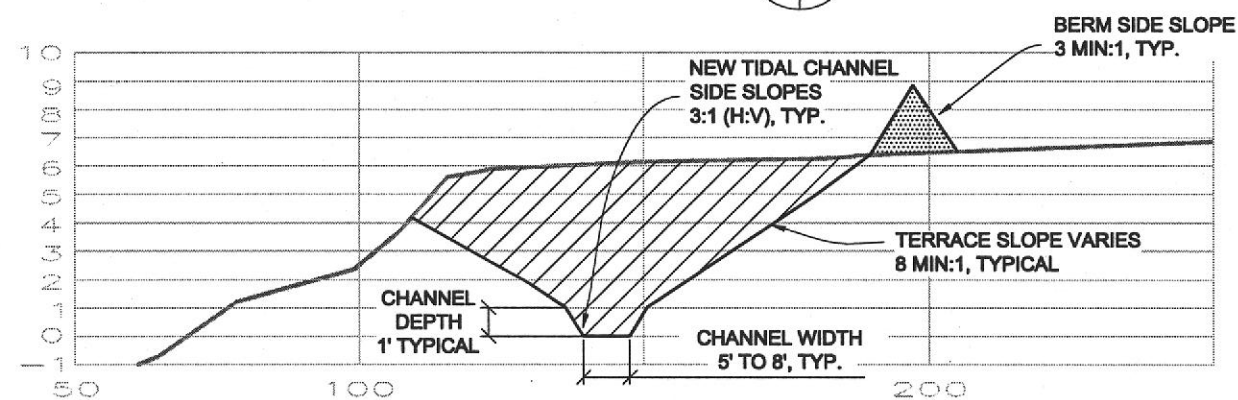
CROSS SECTION A

A
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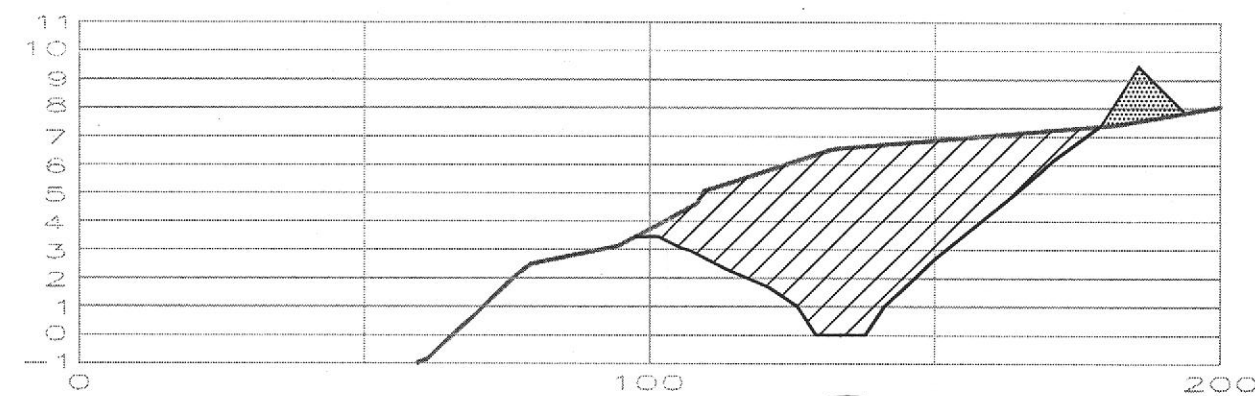
CROSS SECTION B

B
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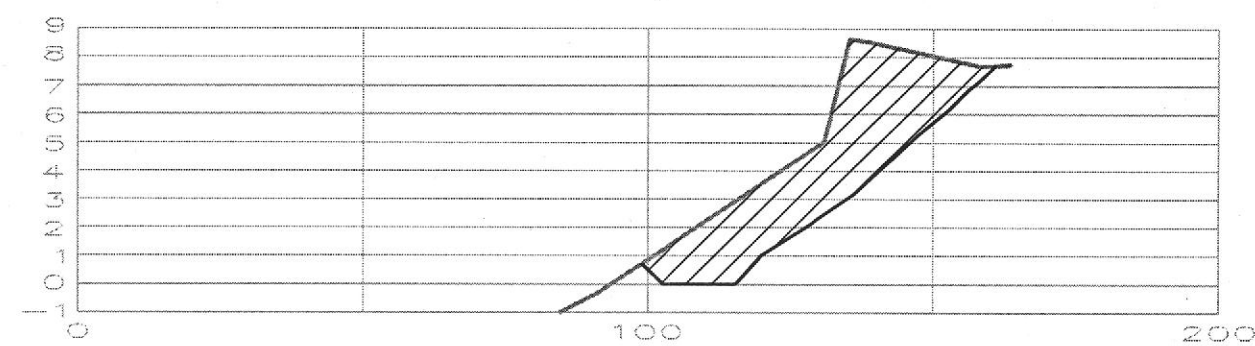
CROSS SECTION C

C
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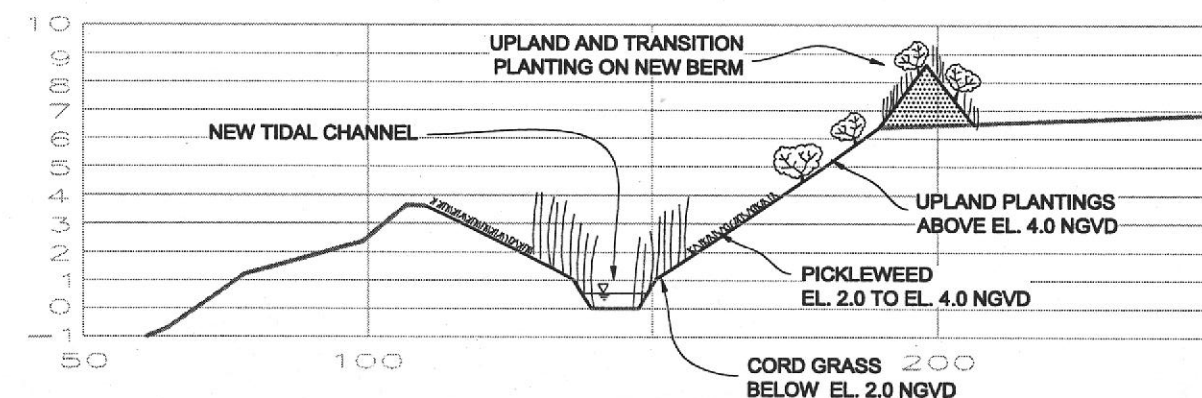
CROSS SECTION D

D
1 2



CROSS SECTION E

E
1 2



TYPICAL SECTION PLANTING

F
1 2

NOTES:

- 1) EXISTING GRADES ARE APPROXIMATE. VERIFY IN FIELD.
- 2) DESIGN IS PRELIMINARY AND NOT FOR CONSTRUCTION.

LEGEND

- EXCAVATION
- FILL (BERM)

DRAFT

FILENAME: Projects\1498\Figure 5.dwg

REVISIONS				DESIGNED BY		CERTIFICATIONS:		APPROVED		Seabreeze Yacht Harbor Wetland Enhancement				PREPARED BY:		Figure 5. Cross Sections			
NO.	DATE	BY	DESCRIPTION	DRAWN BY										PWA					
				CHECKED BY										PHILIP WILLIAMS & ASSOCIATES, LTD.					
				IN CHARGE										770 TAMALPAIS DRIVE, SUITE 401					
														CORTI MADERA, CALIFORNIA 94025					
														PHONE (415) 945-0800 FAX (415) 945-0800					
														SCALE	JOB NO.	CONTOUR INTERVAL	DATE		
														AS SHOWN	1498	AS SHOWN	10/4/01		

Table 2. Elevational Ranges (NGVD) for habitats based on the Port of Oakland Datum

Marsh Habitat Type	Typical Elevation
Tidal Channel	-3 to 1.5 feet
Cordgrass Marsh	1.5 to 3.0 feet
Tidal Pickleweed Marsh	2.0 to 4.0 feet
Upland Transition Zone	4.0 to 7.0 feet
Upland or Grassland	7.0 feet and above

Appropriate plant species for the enhancement project are listed in Table 3 below. A coordinated effort to remove smooth cordgrass (*S. alterniflora* and *S. hybrids*) from the site should be considered as part of the enhancement work. The cost implications of this effort have not been determined however, and may constrain budgets for other proposed project elements.

Table 3. Key Plant Species to the Seabreeze Yacht Harbor Enhancement Project

Common Name	Scientific Name
Gumplant	<i>Grindelia stricta</i>
Pickleweed	<i>Salicornia virginica</i>
Saltgrass	<i>Distichlis spicata</i>
Pacific Cordgrass	<i>Spartina foliosa</i>

The proposed grading plan shown in Figures 4 and 5 would produce approximately 1,800 cubic yards (cy) of excavated material that would either be re-used on site to construct a 'naturalistic' berm or spread across areas adjacent to the site at the former Seabreeze Yacht Harbor.

Soil quality analysis indicates that over-excavation would be required to meet environmental criteria for wetland cover in certain areas of the proposed project. The amount of additional excavated material should be determined as part of a more detailed final design, but is not expected to pose a significant construction problem since the Port has indicated that clean Merritt Sands from the Vision 2000 project are available to be used as backfill.

The Merritt Sands will be used in the tidal channel as wetland cover specifically in areas of over-excavation resulting from the removal of contaminated soils. These sands meet general criteria for appropriate wetland cover. Merritt and other similar fine-grained depositional sands have been used successfully in similar restoration and enhancement projects throughout the Bay. The placement of this material should improve conditions for wetland vegetation establishment as well as provide valuable sand flat habitat. The Merritt Sands are expected to remain in place in the tidal channel and wetland areas although some minor shifting within the project can be expected. Due to the generally quiescent tidal conditions of the project site, it is anticipated that the proposed enhancement project may become a depositional area over time. Approximately 200 to 400 cubic yards (cy) of Merritt Sands will be supplied and imported for use in this project.

3.3 UPLAND BERM

The grading of the proposed tidal channel and banks would produce approximately 1,800 cubic yards (cy) of excavated material that would be used on site to construct a 'naturalistic' berm 260 feet long, 3 feet high, and approximately 16 feet wide at its base. The balance of remaining excavated soil not used in the construction of the berm will be spread evenly across the flat areas of the former Seabreeze Yacht Harbor directly adjacent to the project site. These activities would allow on-site placement of the excavated material, as well as create visual and habitat buffers and delineate project boundaries.

Table 4. Anticipated Soil Volumes

Soil Volumes: Type and Activity	Anticipated Volume
Total material volume excavated for channel creation and re-used on site	~1800 cy
Volume that meets RWQCB Wetlands Cover Criteria	~1500 cy
Volume that does not meet RWQCB Wetlands Cover Criteria	~200 – 400 cy
Volume of clean fill material (Merritt sand) to be imported to the site	~200 – 400 cy
Volume of excavated material to be used on-site in berm construction	~200 cy
Volume of excavated material to be spread on-site, upland of project site	~1800 cy

4. SUMMARY

A wetland enhancement plan is proposed for the former Seabreeze Yacht Harbor. The proposed plan would restore intertidal sand flat, a small tidal marsh at the site, enhance roosting areas for shore and water birds, and include an upland transition area to increase habitat diversity at the site. Material excavated during construction would be used to construct an upland berm that would serve as a visual and habitat buffer.

Analysis of the soil quality indicates that portions of the tidal channel will require over-excavation to meet environmental criteria. However, Merritt Sands could be used as backfill, and material not used to construct the berm can be placed on site. Specific volumes of over-excavation should be determined as part of the final design, but are not expected to be prohibitively large.

Costs for implementation of the proposed wetland enhancement project have not been estimated. Several important factors relating to soil quality and appropriate use on-site or disposal off-site will impact project costs. Cost estimates for the proposed project will be developed in subsequent design phases and will reflect further input from Baseline Environmental Consulting and the Port of Oakland.

5. LIST OF PREPARERS

This report was prepared by the following PWA staff:

Jorgen Blomberg, Associate, Project Manager
Don Danmeier, Ph.D., Associate
Dennis Ruttenberg, Design Engineer
Jeffrey Haltiner, Ph.D., P.E., Principal-in-Charge

with:

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157 Park Place
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Steve Granholm, Ph.D., Principal

APPENDIX A
Client Representatives

Appendix A – Project Participants
Client Representatives

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APPENDIX B
Soil Quality Investigation

INVESTIGATION OF SOIL QUALITY FOR HABITAT ENHANCEMENT PROJECT

SEPTEMBER 2001

FORMER SEABREEZE YACHT CENTER
Oakland, California

For:
Environmental Health and Safety Compliance Department
Port of Oakland

S9171-C1

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BASELINE
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21 September 2001
S9171-C0

Mr. Douglas Herman
Port of Oakland
EH&SC
530 Water Street, 2nd Floor
Oakland, CA 94607

Subject: Soil Sampling to Evaluate Subsurface Soil Quality for Habitat Enhancement Project, Former Seabreeze Yacht Center, Oakland

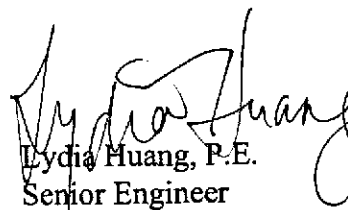
Dear Mr. Herman:

Please find enclosed our report documenting the soil sampling activities conducted at the former Seabreeze Yacht Center in support of the proposed habitat enhancement project. Based on the sampling results, soil quality at the proposed location of the tidal channel is adequate for wetland creation provided over-excavation is performed along a portion of the channel. In addition, excavated soils may be reused on-site without posing unacceptable human or ecological health risks.

Please contact us if you have any questions or if we can be of further assistance.

Sincerely,


Yane Nordhav
Principal


Lydia Huang, P.E.
Senior Engineer

YN:LH:cr
Enclosure

S9171hab.rpt.wpd-9/21/01

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INVESTIGATION OF SOIL QUALITY FOR HABITAT ENHANCEMENT PROJECT

INTRODUCTION

This report documents sampling activities undertaken for the proposed habitat enhancement project at the Seabreeze Yacht Center, Oakland (Figure 1). The Port is considering the construction of a tidal channel in the southern portion of the site to enhance wildlife habitat (Figure 2). BASELINE was directed to develop and implement a sampling and analysis plan to assess the feasibility of the proposed habitat enhancement project with respect to the potential contaminants that may be present in the affected soils.

Site History

The Seabreeze Yacht Center was historically occupied by a steam generating plant, boat maintenance activities, and a gravel loading/unloading facility. These historic land uses have introduced contaminants into the subsurface. Investigations during the past eleven years have identified lead, copper, and Bunker C fuel and associated polycyclic aromatic hydrocarbons (PAHs) as being contaminants of concern for human and ecological receptors. Alameda County has been the lead agency overseeing site investigations and planned site remediation. Past remediation at the site has included the removal of a concrete foundation formerly housing an aboveground tank used for storage of fuel for the steam generating plant, and soil contamination underlying the foundation. Future remediation includes the sealing of two tunnels used for water intake and discharge to the steam generating plant, which is expected to occur in 2001.

SAMPLING PLAN

Sampling at the site was conducted to achieve two objectives: 1) to evaluate the soils that would be excavated for the proposed channel to determine management options; and 2) to compare the chemical quality of the soils within the top three feet below the future channel bottom and side slopes to sediment screening criteria developed by the RWQCB (Wolfenden and Carlin, 1992) for appropriateness of wetlands creation cover.

The sampling scheme was to choose five cross-section locations, labeled HE-1 through HE-5, approximately equally spaced along the channel centerline for sampling (Figure 2). At each cross-section, three sample locations were chosen: one on the centerline, one landward of the centerline, and one Bayward of the centerline (Figures 3 through 7). The two locations on either side of the centerline were chosen to intercept the future surface of the channel side slopes.

The approach was to collect soil samples along the proposed channel from within the materials that would need to be excavated, and from the three feet of soil beneath the future bottom of the channel. The samples within the excavation prism would be analyzed for constituents that could affect soil management options. One sample from the centerline of the channel at each of the five cross-

sections, from 2.0 to 2.5 feet below ground surface (bgs), was to be collected within the prism of excavation for evaluation of soil management options. About four samples within the top four feet of soil from below the proposed channel bottom were to be collected for evaluation of the suitability of the newly exposed soils for wetlands cover.

FIELD ACTIVITIES

BASELINE obtained a drilling permit from Alameda County (Permit No. W01-172) on 13 March 2001 for the installation of borings on the site (Appendix A). We also prepared a health and safety plan for use by BASELINE staff during field activities.

A surveyor with Philip Williams & Associates (PWA), the firm designing the proposed habitat enhancement project, surveyed and staked the centerline and outer extent of the proposed tidal channel in the field on 19 March 2001. PWA staff indicated that the slope on the landward side of the channel would be about 6:1, and about 8:1 on the Bayward side. We chose five cross-section locations, labeled HE-1 through HE-5, approximately equally spaced along the channel centerline for sampling (Figure 2). At each cross-section, we marked three boring locations: one on the centerline, one landward of the centerline, and one Bayward of the centerline (Figures 3 through 7). The two locations on either side of the centerline were chosen to intercept the middle of the future channel side slopes. The elevation and location of the chosen sample locations were surveyed by PWA staff relative to existing groundwater monitoring well MW-SB2.

The first round of sampling occurred on the 20th and 28th of March 2001; the follow-up round of sampling occurred on 11 May 2001. The borings drilled in March 2001 was completed with a direct push technology drilling rig. Resampling along the channel centerline of the material to be excavated for soil management evaluation in May 2001 was accomplished by using hand tools and a slide hammer sampler. Following sample collection, each borehole was grouted to the surface. Each borehole was logged by a registered BASELINE geologist. The drilling logs are included in Appendix B to this report.

Samples were collected in six-inch stainless steel tubes. Each sample tube was sealed with teflon film and plastic caps, and silicon tape, and was marked to indicate which end the laboratory was to use for analysis. The samples were placed in a zip-lock bag into a cooled container and transported to a certified laboratory for analysis. The March 2001 samples were submitted to STL Chromalab for analysis. Subsequently, a portion of these samples were transferred to Curtis & Tompkins laboratory for selenium analysis because Chromalab was unable to achieve the needed reporting limit. The May 2001 samples were submitted directly to Curtis & Tompkins laboratory.

Evaluation for Soil Management

On 20 March 2001, one soil sample was collected from the five cross-section locations along the channel centerline at two feet below existing grade. The purpose for collecting these samples was to determine soil management options. These samples were analyzed for Total Petroleum Hydrocarbons (TPH) as Bunker C (fuel oil) with silica get cleanup, total lead, total copper, and benzene, toluene, ethylbenzene, and xylenes (BTEX).

Additional samples immediately adjacent to the original locations along the middle of the proposed channel were collected on 11 May 2001 to supplement the initial data for the purpose of evaluating whether the excavated material could be reused on-site for construction of an upland berm. These samples were analyzed for Title 22 metals and PAHs.

Wetlands Cover Evaluation

At each of the sample locations along the centerline and on both future slopes of the channel, we attempted to collect three samples, spaced at one-foot intervals, within the top three feet of soil below the future bottom of the channel. The three discrete samples from each boring were to be composited by the laboratory and analyzed for Title 22 metals, TPH as Bunker C, PAHs, and percent moisture. In addition, composite samples from the borings located along the centerline were analyzed for the pesticide DDT and polychlorinated biphenyls (PCBs). One deeper sample was also collected from each boring but was not initially analyzed pending the results from the first round of analyses.

The actual samples collected deviated slightly from the ideal scheme because of incomplete recovery in the samplers and uncertainties in extrapolating the proposed channel bottom in the field. At boring location HE-4A, a brick and cobble debris layer was encountered and we were unable to collect samples below the proposed channel; a second attempt for this boring was made about two feet toward HE-3A, where the same material was encountered; a third and final attempt was made an additional four feet toward HE-3A, where we were able to collect one sample below the elevation of the debris layer encountered during the previous two attempts. Petroleum odor was noticed at an elevation corresponding to just below the surface of the future channel slope at the final location for HE-4A.

SUBSURFACE CONDITIONS

The near-surface soil in the proposed channel area is artificial fill. The fill consists predominantly of sand, silty sand, and clayey sand with some gravel. The fill varies in thickness from about 3.5 to 6.5 feet and is underlain by Bay mud. At locations HE-2 through HE-5, the bottom of the proposed channel would be within the fill and not intersect the Bay mud surface (Figures 3 through 7).

At boring location HE-4A, a layer of brick debris was encountered at a depth of about 3.75 feet below the ground surface (Figure 6). The lateral extent of this material is unknown. At locations HE-1B, HE-3A, HE-3B, HE-4A, and HE-5C, petroleum odor or sheen was noticed or observed during drilling. The petroleum odor noted at location HE-5C was within the prism of soil to be excavated and above the bottom of the future channel (Figure 7). The odor or sheen noted at the other locations was in materials below the bottom of the proposed channel and would remain in-place following channel creation.

EVALUATION FOR WETLANDS COVER

The San Francisco Bay Region of the California Regional Water Quality Control Board (RWQCB) issued a guidance document titled, *Sediment Screening Criteria and Testing Requirements for*

Wetland Creation and Upland Beneficial Reuse, Interim Final, in December 1992. This document provides screening criteria for the beneficial reuse of dredged materials for the creation of wetlands for numerous chemical constituents. If chemical concentrations of soil being considered for wetlands creation were less than the "Wetlands Creation Cover" criteria, then that soil may be used at any depth within the wetland. If chemical concentrations in the subject soils were higher than the "Wetlands Creation Cover" criteria and less than the "Wetlands Creation Noncover" criteria, then that soil may be used in the wetland provided that at least three feet of soils meeting the "Wetland Creation Cover" criteria or uncontaminated native soils were placed on top of the subject soils.

Three borings were installed at each of the five cross-sections (HE-1 through HE-5) (Figure 2). One composite sample, made up of three discrete samples collected within the top three feet of soil below the bottom of the proposed channel, was analyzed from each boring. For example, composite sample COMP 1A was made up of the samples collected from boring HE-1A at 2.5 to 3.0 feet, 3.5 to 4.0 feet, and 4.5 to 5.0 feet bgs (Figure 3). The only exception to the compositing scheme was for boring HE-4A, where brick was encountered at the elevation of the bottom of the proposed channel, and one sample was analyzed discretely (Figure 6).

Laboratory results were reported on a "wet weight" basis, so the results were converted to a "dry weight" basis using the measured percent moisture values for comparison against the "Wetlands Creation Cover" criteria (Table 1).

In general, results from cross-sections HE-1, HE-2, and HE-3 (samples COMP 1A through COMP 3C in Table 1) were below "Wetlands Creation Cover" criteria. The only exceptions were for silver where the laboratory reporting limit was higher than the criterion, and for selenium in one sample where the concentration was 0.71, just above the criterion of 0.7 mg/kg.

One or more of the composite samples collected within the top three feet of soil below the bottom of the proposed channel from cross-sections HE-4 and HE-5 had concentrations that exceeded the "Wetlands Creation Cover" criteria for PAHs, copper, lead, mercury, nickel, selenium, silver, and zinc (Table 1). Slightly deeper samples from locations HE-4B, HE-4C, HE-5A, and HE-5C, which were collected but initially placed on hold, were also analyzed for the same constituents. The deeper samples from HE-4C and HE-5A also exceeded the "Wetlands Creation Cover" criteria. However, it should be noted that these two samples were collected across the interface between the fill and Bay mud. Chemical quality of samples collected entirely within Bay mud at cross-sections HE-4 and HE-5 had concentrations below the "Wetlands Creation Cover" criteria (i.e., samples HE-4B; 8.0-8.5', HE-5C; 7.5-8.0') (Figures 6 and 7). It is reasonable to conclude that only soils within the fill layer contain constituent concentrations that could exceed the "Wetlands Creation Cover" criteria.

Based on the analytical results, the soils within the top three feet of the future bottom of the channel at cross-sections HE-1 through HE-3 would be suitable for wetlands cover since constituent concentrations are below the "Wetlands Creation Cover" criteria. At cross-sections HE-4 and HE-5, the tidal channel would need to be over-excavated, then backfilled with clean Merritt Sands dredged

from the Vision 2000 project.¹ The depth of over-excavation would be dictated either by the depth of fill at each location (based on the conclusion that potential contamination is limited to the fill), or deeper than the Bay mud interface if composite samples containing at least a portion of Bay mud exceeded the "Wetlands Creation Cover" criteria (e.g., sample COMP 4B, Figure 6). At cross-section HE-4, the bottom of the channel would need to be over-excavated by an additional three feet or to the top of the native Bay mud, whichever is deeper (Figure 6). At cross-section HE-5, the channel would need to be over-excavated to the top of the Bay mud, which may range from an additional one to about three feet below the bottom as designed, to reach soils that meet the "Wetlands Creation Cover" criteria (Figure 7).

EVALUATION OF HEALTH RISKS FROM ON-SITE REUSE OF EXCAVATED SOILS

Data from this sampling effort were used to evaluate whether the excavated soils from creation of the proposed channel, including over-excavation of cross-sections HE-4 and HE-5, may be reused on-site for construction of the upland berm, inland of the proposed channel, without posing unacceptable human health or ecological risks. These data are summarized in Table 2. It was assumed that the upland berm area would be used for recreational/open space purposes.²

A human health risk evaluation was performed assuming that future recreational/open space users could be exposed to chemicals of potential concern (COPCs) in the soils excavated from the proposed channel and used to construct the upland berm via ingestion and dermal contact, and inhalation of particulates and volatiles. Potential harm to terrestrial ecological receptors posed by COPCs in the excavated soils and to aquatic organisms by leaching of the COPCs to the groundwater, with subsequent discharge of the groundwater to the Clinton Basin, were also evaluated.

Human Health Risk Assessment

Methodology

Chemicals of potential concern were selected based on analytical results for soil samples collected from the prism of excavation above the future channel bottom and the soil requiring over-excavation (at cross-sections HE-4 and HE-5). All chemicals reported above the laboratory reporting limits were considered in the screening. Chemicals not reported above the laboratory reporting limits were not considered.

Initial screening consisted of comparing the maximum concentrations found in the soil samples against applicable risk-based screening levels compiled by the RWQCB (2000). Chemicals were

¹ The Port has received approval from the Dredge Material Management Office to use the Merritt Sands from the Vision 2000 project for wetlands creation.

² Commercial/industrial land uses may occur on portions of the site where the habitat enhancement project would not take place

selected as COPCs for further evaluation if the maximum soil concentration exceeded the RBSLs developed for human health residential site users.

The use of residential soil RBSLs is very conservative for assessing risks to future recreational/open space users visiting the site, since these users would be present at the site only a small fraction of the time compared to residential users. Residential site users were assumed to be adults and children, present at the site for 24 hours a day, 350 days per year, for 30 years. If the maximum site concentration of a COPC was above the residential soil RBSL, the chemical was evaluated further, as described below.

Human Health Assessment Results

All chemicals identified above the laboratory reporting limits are listed in Table 3, along with the maximum concentrations and the residential RBSLs. Based on the initial screening process, chemicals with maximum concentration greater than the residential RBSLs are naphthalene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, arsenic, total chromium, copper, and lead. Each of these COPCs is further evaluated, as described below.

Naphthalene. The residential RBSL for naphthalene of 1.7 mg/kg is based on exposure to the chemical in indoor air. This is not an applicable exposure pathway for recreational/open space users and is therefore not applicable to this site. The most restrictive applicable RBSL is 11 mg/kg based on direct contact with the soil. Since the maximum site concentration of 4.2 mg/kg is below this RBSL, naphthalene does not pose an unacceptable human health risk for future open space/recreational site users.

Benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene. The lowest RBSL for these PAHs is 0.38 mg/kg based on direct human contact (ingestion, dermal contact, inhalation) with soil. This value was back-calculated based on an excess lifetime cancer risk of 1×10^{-6} . The maximum site concentration of these PAHs (1.9, 2.4, 0.84, and 1.6 mg/kg, respectively) exceed the RBSL of 0.38 mg/kg. The risk to residential site users from the maximum site concentrations of these PAHs would be: 5×10^{-6} for benz(a)anthracene, 6.3×10^{-6} for benzo(b)fluoranthene, 2.2×10^{-6} for benzo(k)fluoranthene, and 4.2×10^{-6} for indeno(1,2,3-cd)pyrene. These risks are within the range of risks (1×10^{-4} to 1×10^{-6}) considered "acceptable" by U.S. EPA under the National Contingency Plan. Therefore, these PAHs do not pose unacceptable human health risks for residential users; future open space/recreational site users would have significantly smaller exposure.

Benzo(a)pyrene. The RWQCB RBSL of 0.038 mg/kg is based on direct human contact with soil, assuming an "acceptable" excess lifetime cancer risk of 1×10^{-6} . The calculated risk for residential site users, assuming the maximum site concentration of 2.4 mg/kg, would be 6.3×10^{-5} . The maximum concentration is within the range of "acceptable" risks. Therefore, benzo(a)pyrene does not pose an unacceptable human health risk, even for residential users who would have higher exposure than future open space/recreational site users.

Dibenz(a,h)anthracene. The RBSL of 0.11 mg/kg is based on direct human contact with soil, assuming a excess lifetime cancer risk of 1×10^{-6} . The calculated risk for residential site users, assuming the maximum concentration of 0.68 mg/kg would be 6.2×10^{-6} , which is within the range of "acceptable" risks. Dibenz(a,h)anthracene therefore does not pose an unacceptable risk to residential or open space/recreational site users.

Arsenic. The RWQCB RBSL is 0.39 mg/kg, which is based on back-calculation of an excess lifetime cancer risk of 1×10^{-6} and direct human contact with soils. Frequently, the RBSL concentration is below the background arsenic concentration at sites in the Bay Area. The maximum concentration of arsenic in the soil that may be reused on-site, 11 mg/kg, exceeds the RBSL based on the cancer endpoint (0.39 mg/kg), but does not exceed the residential RBSL based on the non-cancer endpoint (22 mg/kg).

The U.S. EPA has at times used the non-cancer preliminary remediation goal (similar to an RBSL) to evaluate sites, recognizing that this value tends to be above background levels, yet still falls within the range of soil concentrations that equates to U.S. EPA's "acceptable" cancer risk range of 1×10^{-4} to 1×10^{-6} (Smucker, 2000).

The calculated 95th percent upper confidence limit (UCL) of arsenic concentration from colluvium and fill soils in the Berkeley Hills is 14.0 mg/kg as reported by Lawrence Berkeley National Laboratory (LBNL, 1995). The maximum on-site concentration is below this value. Arsenic, therefore, is not considered to pose an unacceptable health risk to potential residential and open space/recreational users based on the fact that the maximum site concentration is below the non-cancer RBSL and the LBNL background concentrations.

Chromium (total). The RWQCB RBSL for total chromium is 9.8 mg/kg, which is based on back-calculation of an excess lifetime cancer risk of 1×10^{-6} and direct human contact with soils. The calculated risk for residential site users, assuming the maximum site concentration of 53 mg/kg, would be 5.4×10^{-6} , which is within the range of "acceptable" risks. Chromium is therefore eliminated as a COPC for open space/recreational site users.

Lead. The maximum site concentration of lead (490 mg/kg), exceeds the RBSL developed for human health (400 mg/kg). However, the range of lead concentrations found in the 18 soil samples collected from the potential reuse soils ranged between 3.8 and 490 mg/kg; all but one reported concentration is below the human health RBSL of 400 mg/kg. The calculated 95th percent UCL of the lead concentrations from the 18 samples is 119 mg/kg, which is below the RBSL developed for human health protection.³ Therefore, lead in the soils is not considered to pose an unacceptable human health risk for residential or open space/recreational users.

³ All samples collected from the soils that may be used to construct the upland berm, including duplicate sample results, were included in the calculation of the 95th percent UCL.

Cumulative Human Health Risk

The cumulative risk, assuming a residential exposure scenario due to the presence of benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and total chromium was calculated to be 9.2×10^{-5} , which is also within the range of "acceptable" risks. The potential risk to future recreational/open space users would be significantly lower than this calculated risk because of their shorter exposure times and durations, compared to potential residential users.

Conclusions

The 1998 human health risk assessment (BASELINE, 1998), and this human health risk assessment provide evidence to support the conclusion that the quality of soils to be excavated and potentially reused on the site, as part of the habitat restoration project, would not constitute an unacceptable human health risk to future recreational/open space users.

Ecological Health Risk Evaluation

Methodology

The maximum site soil concentrations from data collected in March and May 2001 were compared to Urban Area Ecotoxicity Criteria developed by the Ontario Ministry of Environment and Energy, as compiled by the RWQCB.⁴ These criteria were developed to protect direct soil contact exposure for terrestrial ecological receptors. The maximum site soil concentrations were also compared with RWQCB RBSLs developed for protection of aquatic ecological receptors from the potential leaching of chemicals from soil into groundwater (with subsequent discharge of groundwater to surface water). A comparison of the maximum concentrations of chemicals with these two criteria is presented in Table 3.

Ecological Risk Assessment Results

Only concentrations of copper and lead exceeded either the ecotoxicity criteria or the RBSL for leaching from soils (Table 1). The ecological risks associated with these metals are discussed below.

Copper. The maximum concentration of copper reported in soil samples, 430 mg/kg, is above the ecotoxicity criteria of 225 mg/kg. Of the 18 sample results, the copper concentrations ranged from 5.9 to 430 mg/kg, with only two values exceeding the ecotoxicity criteria of 225 mg/kg. The calculated 95th percent UCL concentration is 120 mg/kg,⁵ which is below the ecotoxicity criteria. Therefore, copper is not considered to pose an ecological threat.

Lead. The maximum concentration of lead, 490 mg/kg, exceeds the ecotoxicity criteria of 200 mg/kg. As discussed previously, the range of lead concentrations is between 3.8 and 490 mg/kg.

⁴ RWQCB (2000), Table B-1, for near surface soils (less than three meters below ground surface), assuming potentially impacted groundwater is not a potential drinking water source.

⁵ See note 2 above.

Only one reported concentration exceeds the ecotoxicity criteria of 200 mg/kg. The calculated 95th percent UCL of the lead concentrations from the 18 samples is 119 mg/kg, which is below ecotoxicity criteria for protection of ecological receptors.⁶ Lead is therefore not considered a threat to ecological health.

Conclusion

The quality of soils to be excavated and potentially reused on the site, as part of the habitat restoration project, would not pose an unacceptable terrestrial or aquatic ecological health risk.

CONCLUSION

Sampling of subsurface soils has been completed to assess the feasibility of creating a tidal channel and associated wetlands at the former Seabreeze Yacht Center. The laboratory results indicate that the soil quality below the bottom of the proposed channel at cross-sections HE-1 through HE-3 meets the "Wetland Creation Cover" criteria. Soil quality under the channel at cross-sections HE-4 and HE-5 does not meet the "Wetlands Creation Cover" criteria. Therefore, over-excavation should occur along the portion of the channel represented by data from cross-sections HE-4 and HE-5. The Port may choose to backfill the over-excavation to the design elevation with clean, dredged Merritt Sands from the Vision 2000 project.

The materials to be excavated for the proposed channel, including over-excavation at cross-sections HE-4 and HE-5, were screened for human health and ecological risk assuming that the materials would be used on-site to construct an upland berm, which is part of the proposed habitat enhancement project. The screening indicates that the excavated material could be used to construct the berm and not pose an unacceptable risk to future site recreational/open space users, or to potential ecological receptors.

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Lawrence Berkeley National Laboratory, 1995, Protocol for Determining Background Concentrations of Metals in Soil at Lawrence Berkeley National Laboratory, Environmental Restoration Program, August.

Regional Water Quality Control Board (RWQCB), 2000, Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater, Interim Final, August.

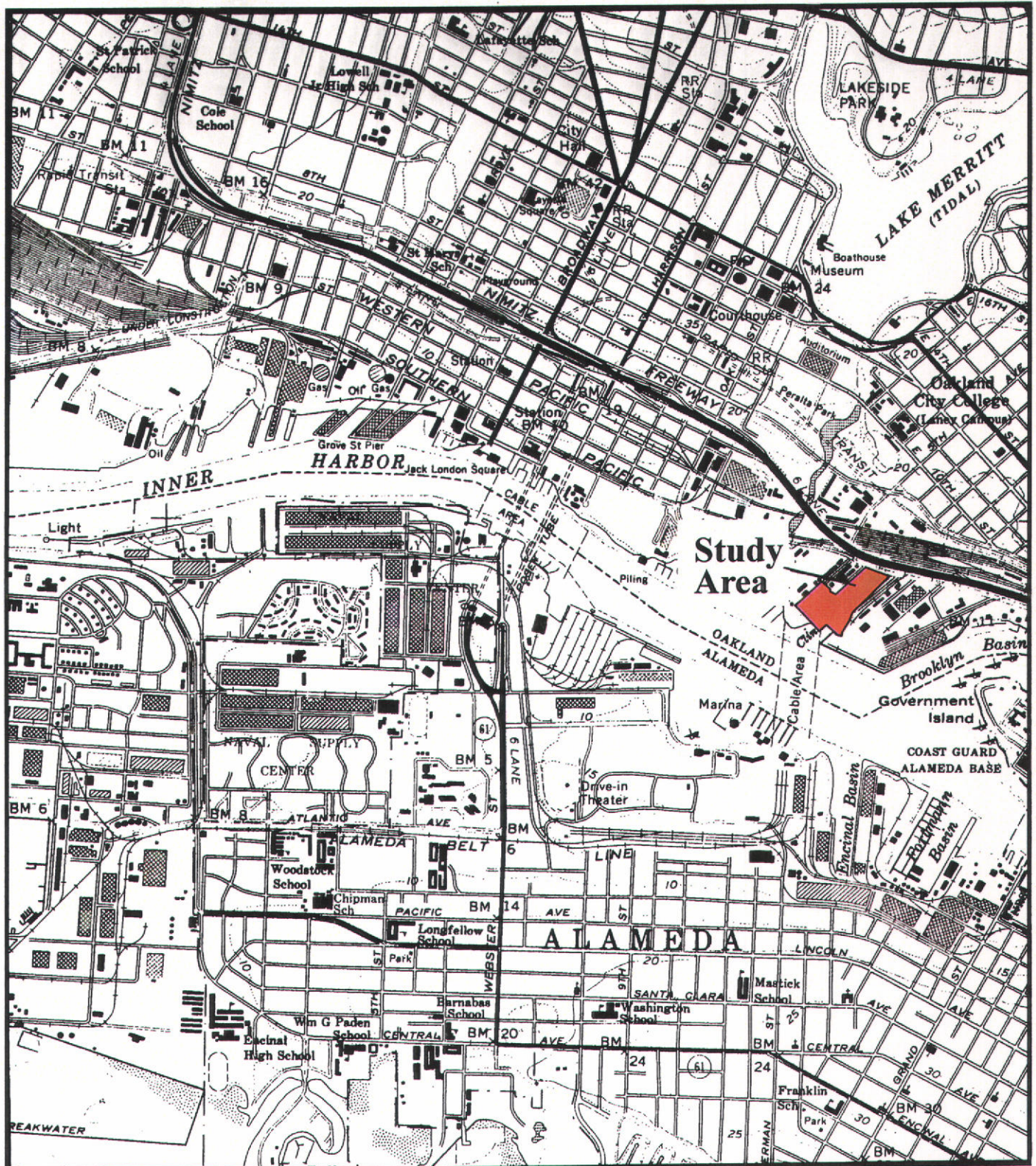
Smucker, Stanford, U.S. Environmental Protection Agency, 2000, Memorandum regarding Region 9 PRGS Table 2000 Update to PRG Table Users, 1 November.

⁶ See note 2 above.

Wolfenden and Carlin, 1992, Sediment Screening Criteria and Testing Requirements for Wetland Creation and Upland Beneficial Reuse, Interim Final, California Regional Water Quality Control Boards, December.

REGIONAL LOCATION

Figure 1



Seabreeze Yacht Center Habitat Enhancement Project Oakland, California

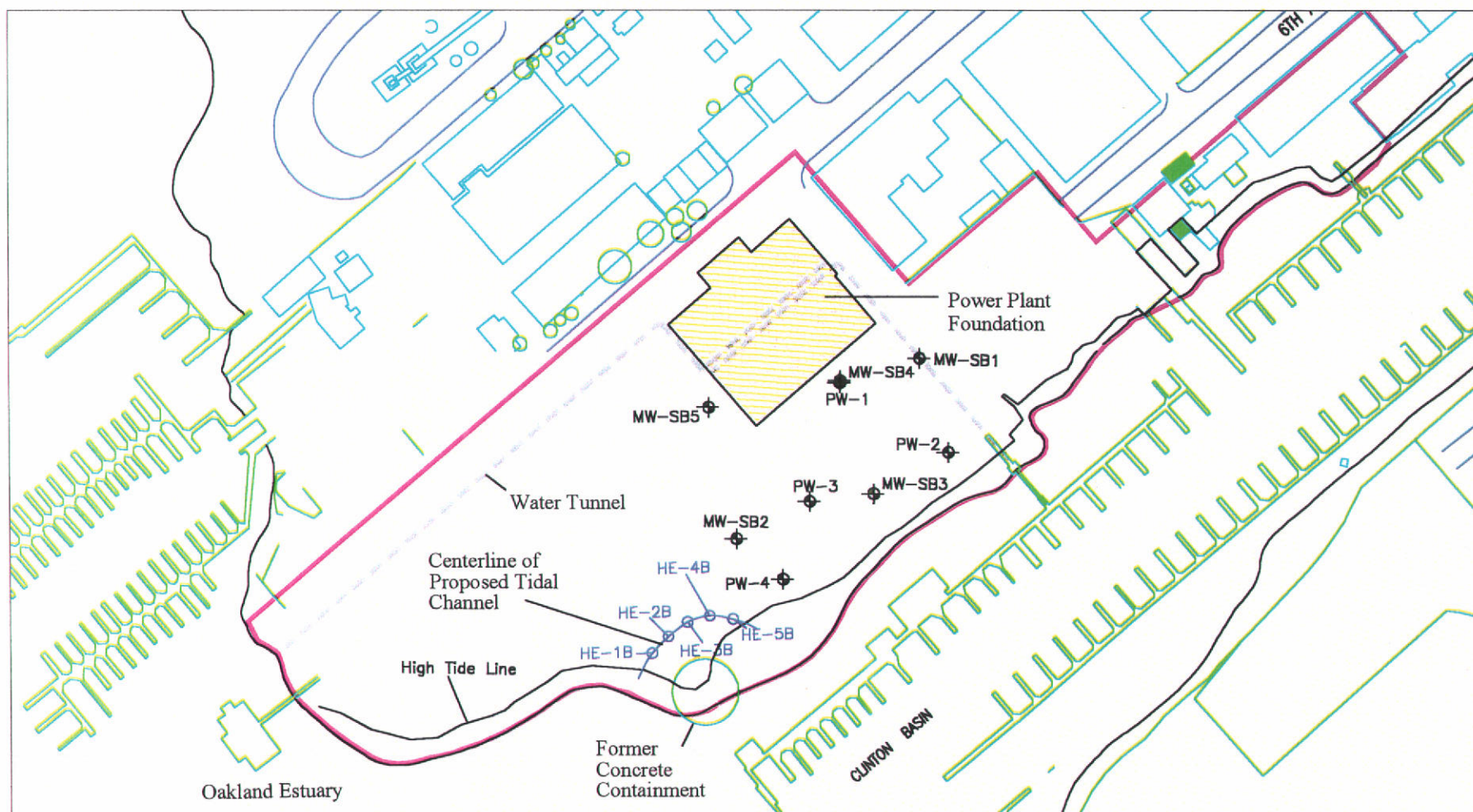
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BASELINE

SAMPLING LOCATION

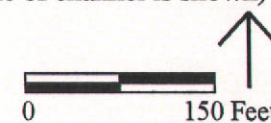
Figure 2



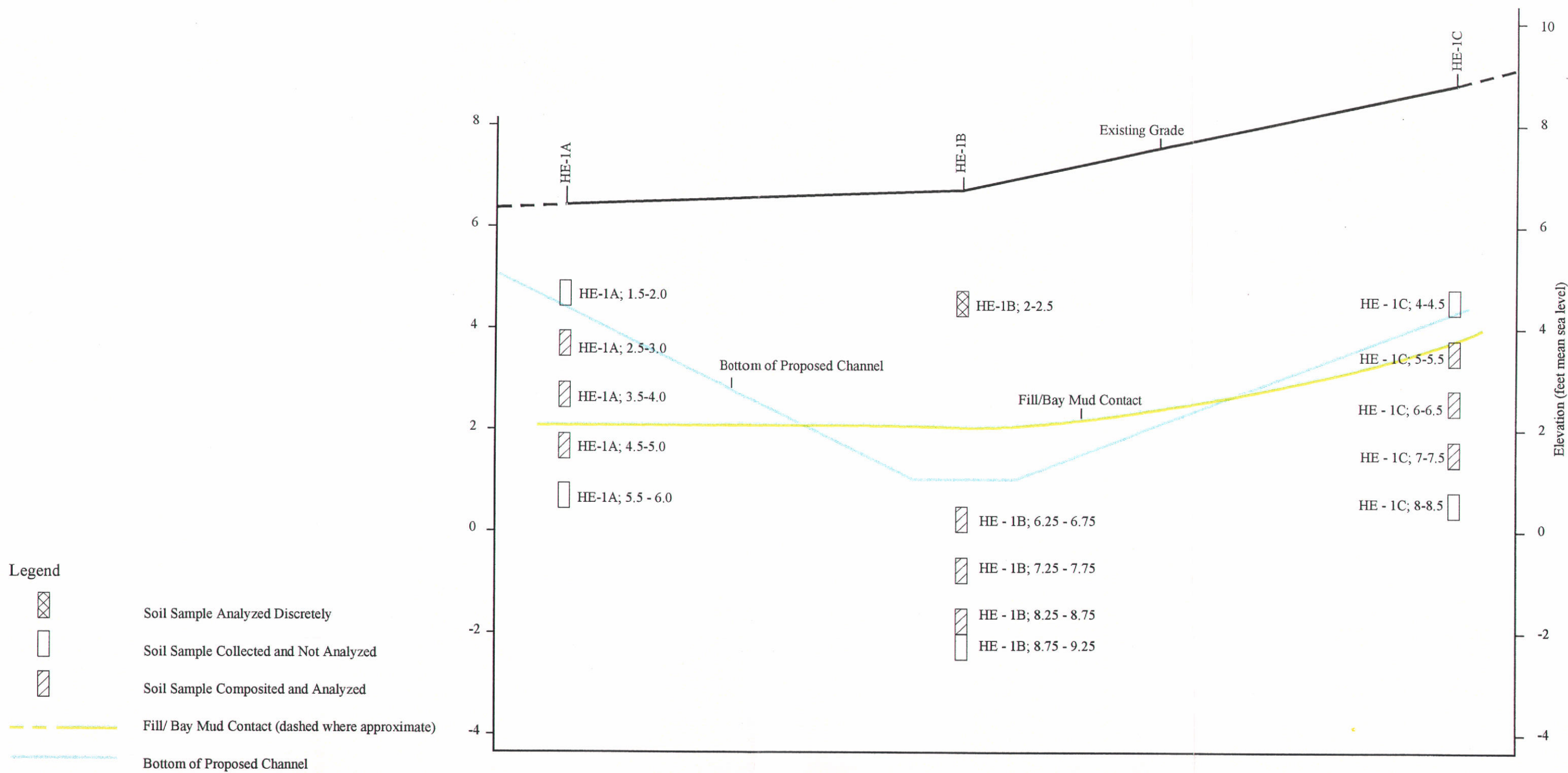
Legend

- Site Boundary
- Groundwater Monitoring Well
- Soil Boring (only boring on the centerline of channel is shown)

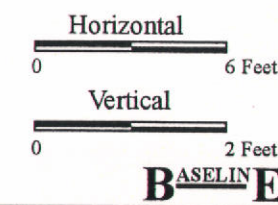
Seabreeze Yacht Center
Habitat Enhancement Project
Oakland, California

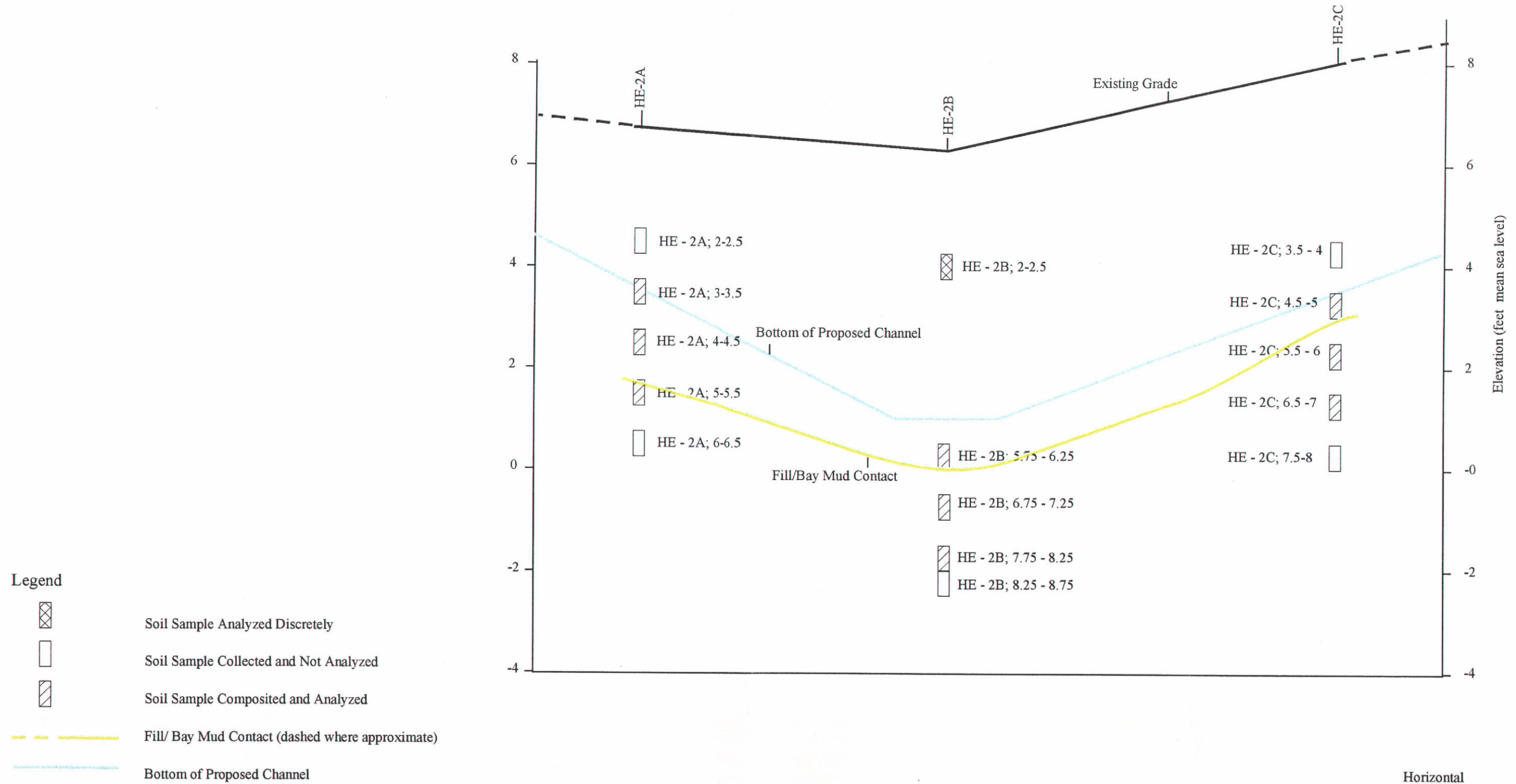


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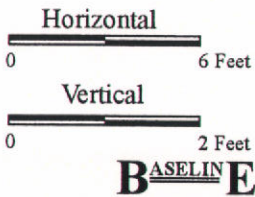


Seabreeze Yacht Center
Habitat Enhancement Project
Oakland, California



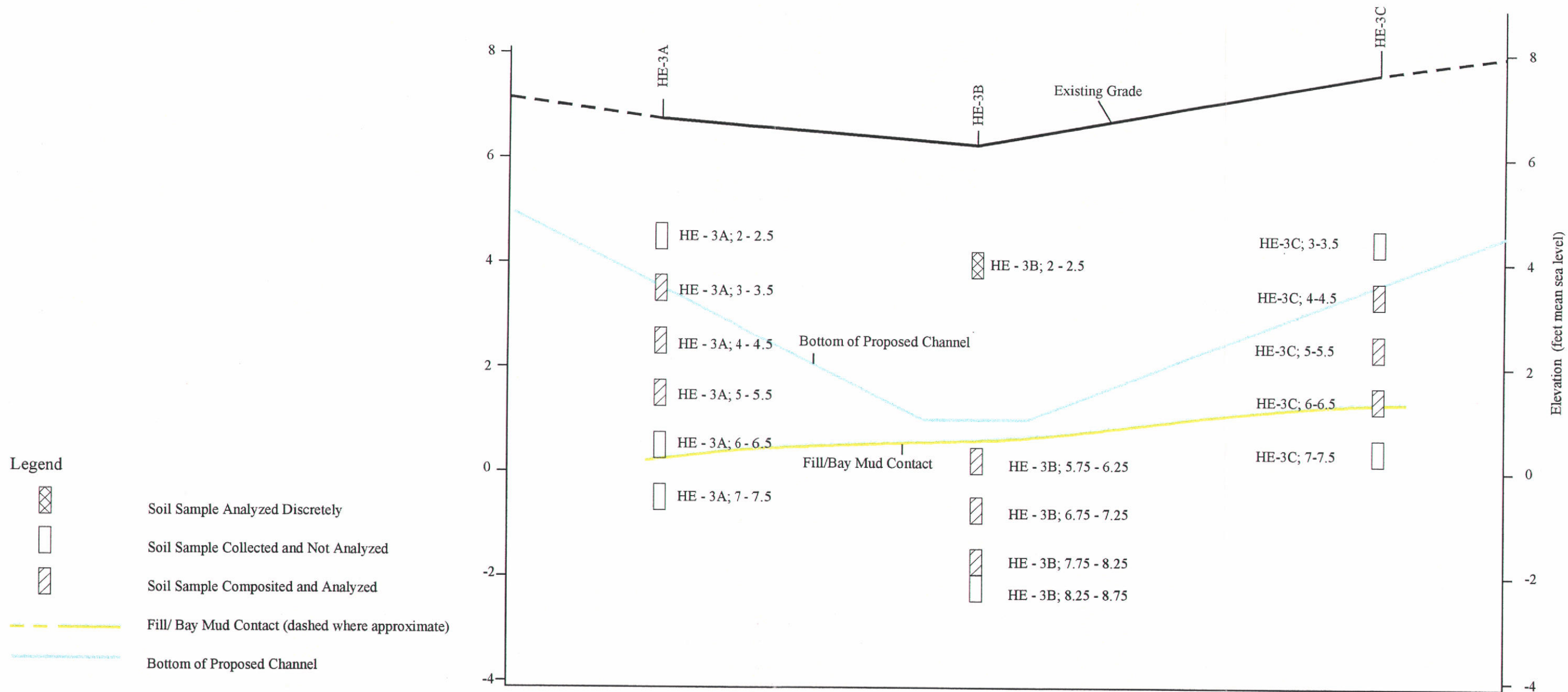


**Seabreeze Yacht Center
Habitat Enhancement Project
Oakland, California**

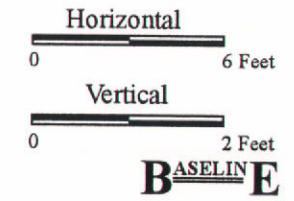


CROSS-SECTION HE-3

Figure 5

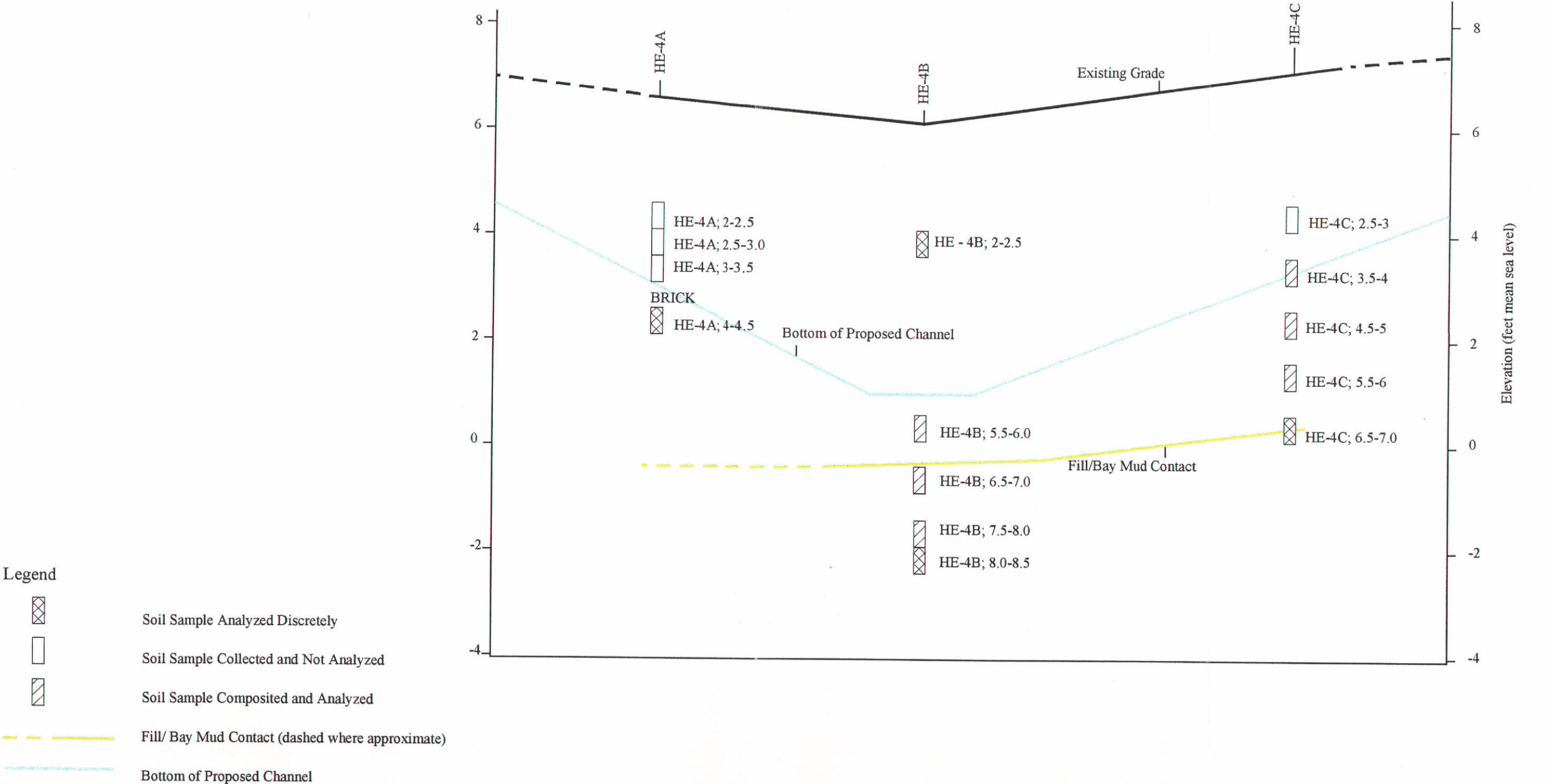


Seabreeze Yacht Center
Habitat Enhancement Project
Oakland, California

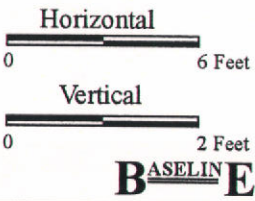


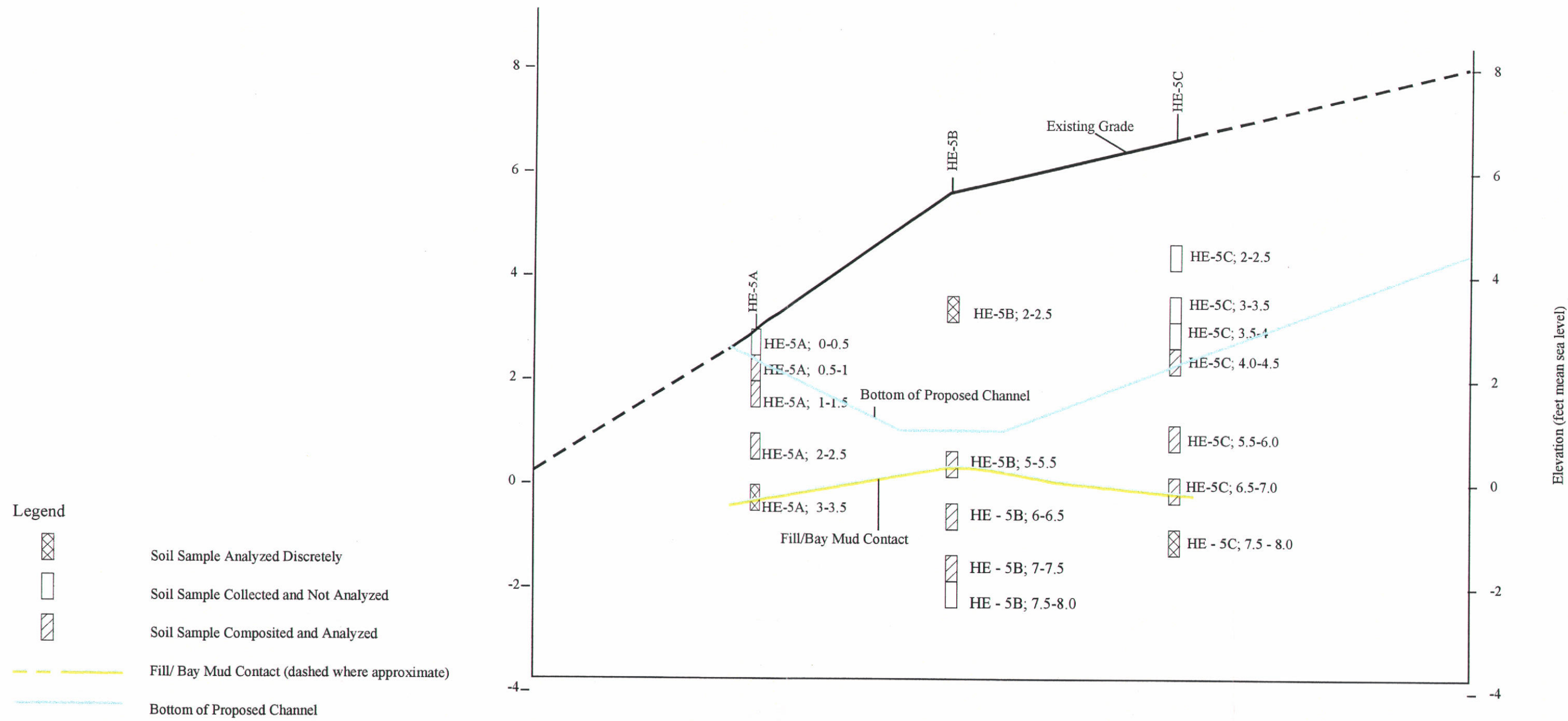
CROSS-SECTION HE-4

Figure 6



Seabreeze Yacht Center
Habitat Enhancement Project
Oakland, California





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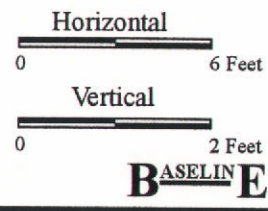


TABLE 1

SUMMARY OF ANALYTICAL RESULTS FOR WETLANDS COVER EVALUATION
Seabreeze Yacht Center, Oakland, California
(mg/kg, dry weight basis)

Sample ID Sample Interval (feet bgs) Sample Date	Cross Section HE-1			Cross Section HE-2			Cross Section HE-3			Wetlands Creation Cover Criteria
	COMP 1A 2.5-5.0 3/20/2001	COMP 1B 6.25-8.75 3/20/2001	COMP 1C 5.0-7.5 3/20/2001	COMP 2A 3.0-5.5 3/20/2001	COMP 2B 5.75-8.25 3/20/2001	COMP 2C 4.5-7.0 3/20/2001	COMP 3A 3.0-5.5 3/20/2001	COMP 3B 5.75-8.25 3/20/2001	COMP 3C 4.0-6.5 3/20/2001	
Percent Moisture	18	31	23	16	33	25	12	32	20	none
Petroleum Hydrocarbons										
TPH as Bunker C	<74	1,230	<84	290	<110	<89	1,100	2,060	84	none
Polycyclic Aromatic Hydrocarbons										
Total PAHs	0.060	0.32	<0.006	0.25	<0.007	<0.007	1.8	2.3	0.27	4
Title 22 Metals										
Antimony	<2.4	<2.9	<2.6	<2.4	<3.0	<2.7	<2.3	<2.9	<2.5	none
Arsenic	5.6	2.6	3.5	4.2	3.0	4.5	8.9	1.8	10	33
Barium	170	75	130	120	160	130	110	110	160	none
Beryllium	<0.61	<0.72	<0.65	<0.60	<0.75	<0.67	<0.57	<0.74	<0.63	none
Cadmium	2	1.4	1.3	1.5	1.4	1.5	0.82	1.3	4.1	5
Chromium	66	46	47	48	48	44	32	46	34	220
Cobalt	16	10	9.4	10	12	12	8.8	7.6	13	none
Copper	45	26	29	33	25	25	89	28	33	90
Lead	20	12	29	20	14	28	47	16	11	50
Mercury	0.083	0.094	0.21	0.11	0.10	0.20	0.33	0.31	0.14	0.35
Molybdenum	<1.2	<1.4	<1.3	<1.2	<1.5	<1.3	<1.1	<1.5	<1.3	none
Nickel	79	58	57	58	57	65	53	44	44	140
Selenium	0.51	0.43	<0.3	<0.25	<0.36	0.71 *	<0.23	<0.34	0.36	0.7
Silver	0.06	<1.4 RL	0.099	0.067	<1.5 RL	0.12	0.16	0.056	0.12	1.0
Thallium	<1.2	<1.4	<1.3	<1.2	<1.5	<1.3	<1.1	<1.5	<1.3	none
Vanadium	41	38	39	35	37	37	56	37	26	none
Zinc	130	58	58	75	57	61	93	49	38	160

TABLE 1

SUMMARY OF ANALYTICAL RESULTS FOR WETLANDS COVER EVALUATION
Seabreeze Yacht Center, Oakland, California
(mg/kg, dry weight basis)

Sample ID Sample Interval (feet bgs) Sample Date	Cross Section HE-4					Cross Section HE-5					Wetlands Creation Cover Criteria
	HE-4A 4.0-4.5 3/20/2001	COMP 4B 5.5-8.0 3/20/2001	HE-4B 8-8.5 3/20/2001	COMP 4C 3.5-6.0 3/20/2001	HE-4C 6.5-7 3/28/2001	COMP 5A 0.5-2.5 3/20/2001	HE-5A 3-3.5 3/20/2001	COMP 5B 5.0-7.5 3/20/2001	COMP 5C 4.0 - 7.0 3/28/2001	HE-5C 7.5-8 3/28/2001	
Percent Moisture	48	31	49	8.3	39	15	11	33	24	26 ¹	none
Petroleum Hydrocarbons											
TPH as Bunker C	310	650	<98	<60	820	<69	<56	120	<86	<70	none
Polycyclic Aromatic Hydrocarbons											
Total PAHs	44 *	0.80	0.046	<0.0055	0.31	0.60	0.031	0.30	0.26	<0.01	4
Title 22 Metals											
Antimony	<3.8	<2.9	<3.9	<2.2	<3.3	<2.4	<2.2	<3.0	<2.6	<2.7	none
Arsenic	4.6	16	3.9	9.8	6.4	5.4	10.7	7.8	5.4	4.3	33
Barium	52	360	50	22	490	41	130	42	74	32	none
Beryllium	<0.96	<0.72	<0.98	<0.55	<0.82	<0.59	<0.56	<0.75	<0.66	<0.68	none
Cadmium	1.5	1.7	2.4	<0.55	2.8	0.60	1.1	0.99	0.67	1.5	5
Chromium	73	54	71	17	59	29	34	48	38	49	220
Cobalt	13	13	12	4.5	8.0	6.4	9.0	11	9.0	8.4	none
Copper	48	51	47	10	700 *	95 *	190 *	25	41	31	90
Lead	37	200 *	31	9.3	800 *	110 *	190 *	14	36	22	50
Mercury	1.3 *	0.75 *	0.13	<0.06	0.31	0.18	0.56 *	0.22	0.41 *	0.27	0.35
Molybdenum	<1.9	<1.4	<2.0	<1.1	1.8	<1.2	<1.1	<1.5	<1.3	<1.4	none
Nickel	75	170 *	73	23	80	35	49	55	51	49	140
Selenium	<0.42	0.32	<0.41	<0.24	0.75 *	<0.24	0.39	0.43	<0.29	0.66	0.7
Silver	0.33	0.17	<2.0 RL	0.12	2.5 *	0.032	<1.1 RL	<1.5 RL	<1.3 RL	<1.4 RL	1
Thallium	<1.9	<1.4	<2.0	<1.1	<1.6	<1.2	<1.1	<1.5	<1.3	<1.4	none
Vanadium	62	160	59	15	64	28	45	40	45	42	none
Zinc	110	200 *	80	26	640 *	92	130	55	66	57	160

Notes:

<xx = Constituent not identified above the laboratory reporting limit of xx.

* = Concentration exceeds Wetland Cover Criterion.

RL = Reporting limit exceeds Wetland Cover Criterion.

x.x = Estimated concentration; value is below the reporting limit but above the method detection limit.

Sample locations are shown on Figures 2 through 7.

Laboratory reports are provided in Appendix C.

¹ Actual moisture content not determined; value is estimated as the average of the moisture contents reported for all other samples.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS FOR SOIL MANAGEMENT EVALUATION
Habitat Enhancement Project
Seabreeze Yacht Center, Oakland, California
(mg/kg, wet weight basis)

Sample ID Sample Interval (feet bgs) Sample Date	Cross Section HE-1	Cross Section HE-2	Cross Section HE-3	Cross Section HE-4					Cross Section HE-5				
	HE-1B 2.0-2.5 3/20 and 5/11/01	HE-2B 2.0-2.5 3/20 and 5/11/01	HE-3B 2.0-2.5 3/20 and 5/11/01	HE-4B 2.0-2.5 3/20 and 5/11/01	HE-4A 4.0-4.5 3/20/01	COMP 4B 5.5-8.0 3/20/01	COMP 4C 3.5-6.0 3/20/01	HE-4C; 6.5-7 6.5-7 3/20/01	HE-5B 2.0-2.5 3/20 and 5/11/01	COMP 5A 0.5-2.5 3/20/01	COMP 5B 5.0-7.5 3/20/01	COMP 5C 4.0 - 7.0 3/20/01	HE-5A; 3-3.5 3-3.5 3/20/01
Percent Moisture	11	7	12	28	48	31	8.3	39	10	15	33	24	11
Petroleum Hydrocarbons													
TPH as Bunker C	<50	70	<50	70	160	450	<55	500	60	<59	79	<65	<50
Polycyclic Aromatic Hydrocarbons													
Acenaphthene	<0.19	<0.036	<0.038	<0.23	<0.05	<0.05	<0.01	<0.02	1.5	<0.05	<0.01	<0.026	<0.01
Acenaphthylene	<0.37	<0.071	<0.075	<0.46	<0.05	<0.05	<0.01	<0.02	<0.73	<0.05	<0.01	<0.026	<0.01
Anthracene	<0.094	<0.018	<0.019	<0.11	0.34	0.074	<0.005	<0.01	1.3	<0.025	0.012	<0.013	<0.005
Benzo(a)anthracene	0.40	<0.0036	0.042	0.092	1.9	<0.025	<0.005	<0.01	0.48	<0.025	<0.005	<0.013	<0.005
Benzo(a)pyrene	0.58	<0.0036	0.053	0.18	2.4	<0.025	<0.005	<0.01	0.49	<0.025	0.027	<0.013	<0.005
Benzo(b)fluoranthene	0.47	<0.0073	0.041	0.15	2.4	<0.025	<0.005	<0.01	0.48	<0.025	0.023	<0.013	<0.005
Benzo(g,h,i)perylene	0.69	<0.0073	0.050	0.31	1.2	<0.05	<0.01	<0.02	0.60	<0.05	<0.01	<0.026	<0.01
Benzo(k)fluoranthene	0.22	<0.0036	0.021	0.072	0.84	<0.025	<0.005	<0.01	0.27	<0.025	<0.005	<0.013	<0.005
Chrysene	0.51	<0.0036	0.047	0.13	1.4	<0.025	<0.005	<0.01	0.51	0.052	0.017	<0.013	<0.005
Dibenz(a,h)anthracene	0.68	<0.0073	0.044	0.47	<0.05	<0.05	<0.01	<0.02	0.46	<0.05	<0.01	<0.026	<0.01
Fluoranthene	0.88	<0.014	0.093	0.20	4.9	<0.025	<0.005	0.096	2.6	0.36	0.041	0.066	0.011
Fluorene	<0.19	<0.036	<0.038	<0.23	<0.025	<0.025	<0.005	<0.01	1.6	<0.025	<0.005	<0.013	<0.005
Indeno(1,2,3-cd)pyrene	0.76	<0.0036	0.067	0.37	1.6	<0.05	<0.01	<0.02	0.49	<0.05	<0.01	<0.026	<0.01
Naphthalene	<0.19	<0.036	<0.038	<0.23	<0.075	<0.075	<0.015	<0.03	4.2	<0.075	<0.015	<0.039	0.017
Phenanthrene	0.55	<0.018	0.074	<0.11	1.6	<0.025	<0.005	0.052	5.0	<0.025	0.032	0.053	<0.005
Pyrene	1.1	<0.0073	0.11	0.25	4.2	0.48	<0.005	0.042	2.2	0.1	0.046	0.077	<0.005
Total PAHs	6.8	<0.0036	0.64	2.2	23	0.55	<0.005	0.19	22	0.51	0.20	0.20	0.028
Aromatic Hydrocarbons													
Benzene	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	--	--	--	--
Toluene	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	--	--	--	--
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	--	--	--	--
Xylenes	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	--	--	--	--
Title 22 Metals													
Antimony	<3.1	<2.9	<3.2	<4.2	<2.0	<2.0	<2.0	<2.0	<3.1	<2.0	<2.0	<2.0	<2.0
Arsenic	6.6	7.6	5.2	8.1	2.4	11	9.0	3.9	6.8	4.6	5.2	4.1	9.5
Barium	170	89	17	81	27	250	20	300	39	35	28	56	120
Beryllium	0.36	0.32	0.16	0.46	<0.50	<0.50	<0.50	<0.50	0.15	<0.50	<0.5	<0.50	<0.50
Cadmium	1.9	2.5	1.4	2.3	0.79	1.2	<0.50	1.7	1.5	0.51	0.66	0.51	0.95
Chromium	38	1.2	23	53	38	37	16	36	26	25	32	29	30
Cobalt	10	5.6	6.8	9.9	6.6	9.0	4.1	4.6	7.0	5.4	7.1	6.6	8.0
Copper	280 (15) / 9	11 / 25	5.9 / 24	76 / 54	25	35	9.3	430 (<0.5)	19 / 21	81	17	31	170
Lead	110 (9.4) / 30	3.8 / 13	4.4 / 24	37 / 53 (4.4)	19	140 (4.6)	8.5	490 (0.79)	32 / 33	92 (2.9)	9.7 (1.4)	27	170
Molybdenum	<1.0	<0.96	<1.1	<1.4	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0
Nickel	73	17	37	73	39	120	21	49	56	30	37	39	44
Selenium	0.51	0.83	0.39	0.69	<0.22	0.22	<0.22	0.46	0.26	<0.20	0.29	<0.22	0.35
Silver	<0.26	<0.24	<0.27	<0.35	0.17	0.12	0.11	1.5	<0.26	0.027	<1.0	<1.0	<1.0
Thallium	<0.26	0.37	<0.27	<0.35	<1.0	<1.0	<1.0	<1.0	<0.26	<1.0	<1.0	<1.0	<1.0
Vanadium	57	16	23	66	32	110	14	39	54	24	27	34	40
Zinc	170	75	25	92	57	140	24	390	53	78	37	50	120
Mercury	1.0	0.17	0.024	0.34	0.68	0.52	<0.055	0.19	0.082	0.15	0.15	0.31	0.50

Notes: <xx = Constituent not identified above the laboratory reporting limit of xx.
(yy) = Soluble concentration as determined using the Waste Extraction Test in mg/L.
x.x = Estimated concentration; value is below the reporting limit but above the method detection limit.
-- = Not analyzed.
Sample locations are shown on Figures 2 through 7.
Laboratory reports are provided in Appendix C.

TABLE 3
SCREENING OF CHEMICALS OF POTENTIAL CONCERN FOR POTENTIAL REUSE ON-SITE
HABITAT ENHANCEMENT PROJECT
Seabreeze Yacht Center, Oakland, California

Chemical	Maximum Site Concentration (mg/kg)	Lowest RBSL (Residential Human and Ecological Health) (mg/kg)	Soil RBSL for Direct Human Contact (mg/kg)	Exceed RBSL for Human Health?	RBSL for Soil Leaching to Groundwater (assuming groundwater is not a drinking water source) (mg/kg)	Urban Area Ecotoxicity RBSL (mg/kg)	Exceed Most Restrictive RBSL for Ecological Health?
Petroleum Hydrocarbons							
TPH as Bunker C	500	500	500	No	1,000	None	No
Polycyclic Aromatic Hydrocarbons							
Naphthalene	4.2	1.7 ¹	11	No	4.9	40	No
Acenaphthene	1.5	16	740	No	16	None	No
Fluorene	1.6	5.1	530	No	5.1	None	No
Phenanthrene	5.0	11	530	No	11	40	No
Anthracene	1.3	2.9	4,400	No	2.9	40	No
Fluoranthene	4.9	40	460	No	60	40	No
Pyrene	4.2	55	460	No	55	None	No
Benzo(a)anthracene	1.9	0.38	0.38	Yes ³	12	40	No
Chrysene	1.4	3.8	3.8	No	4.7	40	No
Benzo(b)fluoranthene	2.4	0.38	0.38	Yes ³	640	None	No
Benzo(k)fluoranthene	0.84	0.38	0.38	Yes ³	37	40	No
Benzo(a)pyrene	2.4	0.038	0.038	Yes ³	130	40	No

Table 3 - (continued)

Chemical	Maximum Site Concentration (mg/kg)	Lowest RBSL (Residential Human and Ecological Health) (mg/kg)	Soil RBSL for Direct Human Contact (mg/kg)	Exceed RBSL for Human Health?	RBSL for Soil Leaching to Groundwater (assuming groundwater is not a drinking water source) (mg/kg)	Urban Area Ecotoxicity RBSL (mg/kg)	Exceed Most Restrictive RBSL for Ecological Health?
Dibenz(a,h)anthracene	0.68	0.11	0.11	Yes ³	140	None	No
Benzo(g,h,i)perylene	1.2	5.3	460	No	5.3	40	No
Indeno (1,2,3-cd)pyrene	1.6	0.38	0.38	Yes ³	72	40	No
Title 22 Metals							
Arsenic	11	0.39	0.39	No ²	None	20	No
Barium	300	750	1,100	No	None	750	No
Beryllium	0.46	4.0	31	No	None	4.0	No
Cadmium	2.5	7.4	7.4	No	None	12	No
Chromium (total)	53	9.8	9.8	Yes ³	None	750	No
Cobalt	10	40	940	No	None	40	No
Copper	430	225	580	No	None	225	Yes ⁴
Lead	490	200	400	Yes	None	200	Yes ⁴
Nickel	120	150	310	No	None	150	No
Selenium	0.83	10	78	No	None	10	No
Thallium	0.37	1.1	1.1	No	None	None	No
Vanadium	110	110	110	No	None	200	No
Zinc	390	600	4,700	No	None	600	No
Mercury	1.0	4.7	4.7	No	None	10	No

Table 3 - (continued)

Chemical	Maximum Site Concentration (mg/kg)	Lowest RBSL (Residential Human and Ecological Health) (mg/kg)	Soil RBSL for Direct Human Contact (mg/kg)	Exceed RBSL for Human Health?	RBSL for Soil Leaching to Groundwater (assuming groundwater is not a drinking water source) (mg/kg)	Urban Area Ecotoxicity RBSL (mg/kg)	Exceed Most Restrictive RBSL for Ecological Health?
Molybdenum	1.1	40	78	No	None	40	No
Silver	1.5	20	78	No	None	20	No

Source:

Regional Water Quality Control Board, 2000, Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater, Interim Final, August 2000 for surface soil (<3 m bgs), where groundwater is not a current or potential source of drinking water.

Notes:

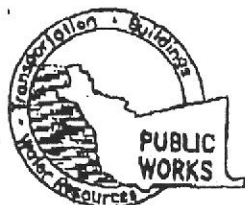
See Table 2 for a summary of analytical results for samples collected from soils that potentially may be reused on-site.

Chemicals not identified below their laboratory reporting limits were not included in the screening of chemicals of potential concern.

Shaded RBSL values indicate most restrictive RBSL that is applicable to this site, and therefore was used for comparison to site data.

- ¹ The lowest RBSL is based on human exposure to indoor air. Indoor air exposure is not a potential exposure route for open space/recreational site users.
- ² Arsenic is considered not to pose an unacceptable health risk because the maximum concentration did not exceed the residential PRG based on the non-cancer endpoint (22 mg/kg), even though the maximum site concentration did exceed the PRG developed for the cancer endpoint (0.39 mg/kg). The EPA has at times used the non-cancer PRG to evaluate sites, recognizing that this value tends to be above background levels yet still falls within the range of soil concentrations that equates to EPA's "acceptable" cancer risk range of 1×10^{-4} to 1×10^{-6} (Smucker, 2000).
- ³ The maximum concentration is within the range of "acceptable" risks (1×10^{-4} to 1×10^{-6}) for residential site users. Risks for recreational/open space users would be much lower.
- ⁴ The calculated 95th percent UCL is below the most restrictive RBSL for ecological health.

APPENDIX A:
DRILLING PERMIT



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

399 ELMHURST ST. MAYWARD CA. 94544-1395

PHONE (510) 670-5534 MARLON MAGALANES/FRANK CODD (510) 470-5783

FAX (510) 782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 280 6TH Ave
Oakland CA

CLIENT
 Name Port of Oakland
 Address 530 Water Street Phone _____
 City Oakland CA Zip 94607

APPLICANT
 Name BASELINE Environmental
 Address 5100 Harte St. B Phone 420 8686
 City Emeryville CA 94608 Zip 94608

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input checked="" type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Precision SamplingDRILLER'S LICENSE NO. 636387

WELL PROJECTS

Drill Hole Diameter	_____ in.	Maximum	
Casing Diameter	_____ in.	Depth	_____ ft.
Surface Seal Depth	_____ ft.	Owner's Well Number	_____

GEOTECHNICAL PROJECTS

Number of Borings	<u>15</u>	Maximum	
Hole Diameter	<u>4</u> in.	Depth	<u>4.5</u> ft.

ESTIMATED STARTING DATE 3-20-01
 ESTIMATED COMPLETION DATE 3-20-01

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-61.

APPLICANT'S SIGNATURE William K. Scott DATE 3-13-01PLEASE PRINT NAME William K. Scott Rev. 5-5-00

FOR OFFICE USE

PERMIT NUMBER WQ1-172
 WELL NUMBER _____
 APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

D. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS

INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

See attached requirements for destruction of shallow wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [Signature]DATE 3-13-01

APPENDIX B:
DRILLING LOGS

BASELINE

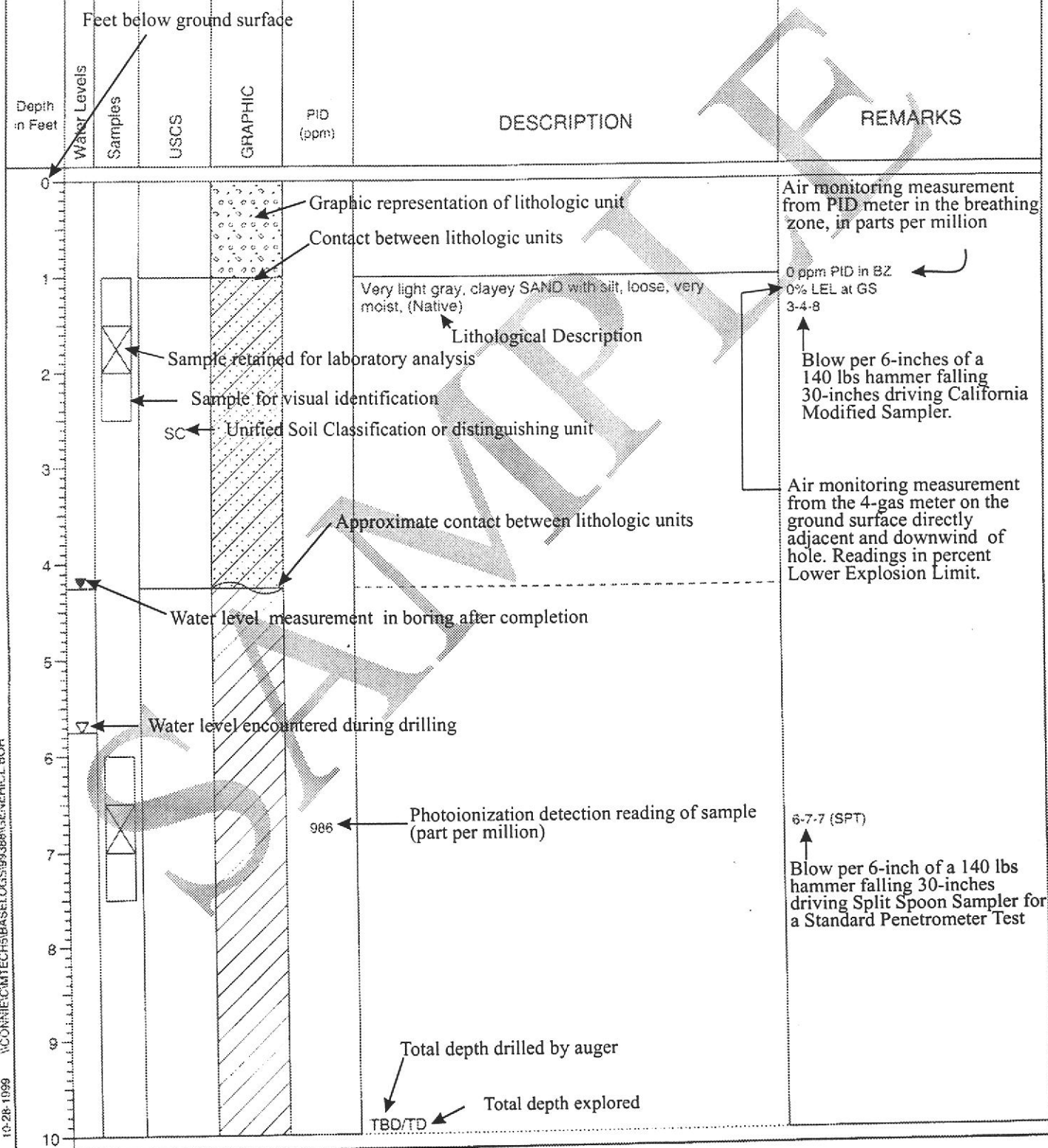
LOG OF BORING B1

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Company X
Driller : ABC Drilling
Method : Hollow Stem
Logger : WKS
Datum (feet) : 0.0

Boring no. : B1
Project no. : 00000
Date : 2/18/99
Casing size : 2-inch
Bore size : 7 3/4 inch



10-28-1999 \CONNIE\CMTECH\BASELOGS\9388\GENERICL BOR

BASELINE

DRILL LOG NO.: HE-1A

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 6.42 feet (NGVD)

Boring no. : HE-1A
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0					
1					
2	X	CH		Brown to reddish brown silty CLAY, some gravel, up to 2-inch diameter angular clasts, moist (Fill)	
3	X			Becoming greenish gray at 3.5 feet, abundant plant pieces at contact, mottled at contact	
4	X				
5	X	CH		Greenish-gray silty CLAY (Bay Mud)	
6	X				
7				Total depth 6.5 feet	
8					
9					
10					

BASELINE

DRILL LOG NO.: HE-1B

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 6.72 feet NGVD

Boring no. : HE-1B
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown SAND, trace of gravel, fine-grained, up to 2-inch diameter angular clasts, moist (Fill)	
1					
2	X				
3		SP			
4					
5					
6	X			Greenish gray becoming black at depth, silty CLAY, plant pieces (Bay Mud)	
7	X	CH			Petroleum odor, sheen on soil
8	X				
9	X				
Total depth 9.25 feet					
10					

BASELINE

DRILL LOG NO.: HE-1C

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 8.80 feet NGVD

Boring no. : HE-1C
Project no. : S9171-C0
Date : 3/27/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown SAND with trace of gravel, medium-grained, angular gravel clasts up to 2-inch diameter, moist (Fill)	
1					
2					
3		SP			
4					
5				Greenish gray to very dark gray silty CLAY, plant pieces, wet (Bay Mud)	
6					
7		CH			
8				Shell fragments	Sampled on 3/28/01 8-8.5
9				Total depth 8.5 feet	
10					

BASELINE

DRILL LOG NO.: HE-2A

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location	: Seabreeze	Boring no.	: HE-2A
Driller	: Precision Sampling	Project no.	: S9171-C0
Method	: Direct push	Date	: 3/20/01
Logger	: WKS	Casing size	: NA
Datum	: 6.70 feet NGVD	Bore size	: 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown silty CLAY, some gravel, up to 2-inch diameter angular to subrounded clasts, high plasticity, wood pieces, moist (Fill)	
1		CH			
2		CH		Greenish gray to very dark gray silty CLAY (Fill)	
3				Brown gravelly SAND, fine- to medium-grained, up to 2-inch diameter subangular clasts (Fill)	
4		SW			
5				Greenish gray to very dark gray silty CLAY (Bay Mud)	
6		CH		Lens of greenish gray SAND, fine grained at 5.5 feet	
Total depth 6.5 feet					
7					
8					
9					
10					

BASELINE



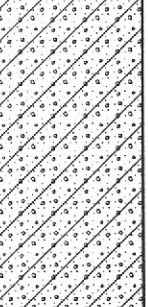
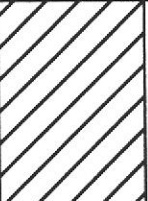
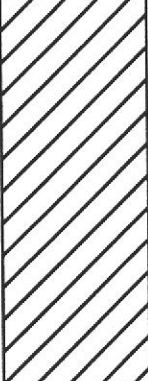
DRILL LOG NO.: HE-2B

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 6.25 feet NGVD

Boring no. : HE-2B
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0		CH		Brown silty CLAY with sand, some gravel, up to 2-inch diameter angular to well-rounded clasts, moist (Fill)	
1		SW		Brown SAND, fine- to coarse-grained, moist Asphalt piece at contact	
2	X	GC		Pale yellowish brown clayey GRAVEL, up to 2-inch diameter angular clasts (Fill)	
3					
4					
5		CH		Brown silty CLAY, high plasticity, mottled with greenish gray not intact bay mud? (Fill)?	
6	X				
7	X	CH		Greenish gray to very dark gray silty CLAY, plant pieces (Bay Mud)	
8	X				
9	X				
10					
Total depth 9.25 feet					

BASELINE

DRILL LOG NO.: HE-2C

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 8.02 feet NGVD

Boring no. : HE-2C
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown SAND, fine- to coarse-grained, some gravel, up to 1-inch diameter well-rounded clasts, beach wash (Fill)	
1					
2		SW			
3					
4		CH		Pale yellowish brown silty CLAY, trace of sand and gravel, high plasticity, wet (Fill)	
5				Greenish gray to very dark gray silty CLAY, plant pieces, wet (Bay Mud)	
6		CH			
7				Abundant shell fragments	
8				Total depth 8.0 feet	
9					
10					

BASELINE

DRILL LOG NO.: HE-3A

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 6.73 feet NGVD

Boring no. : HE-3A
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown SAND with silt, fine-grained, moist (Fill)	
1					
2		SP			
3					
4				Mottled, yellowish brown and greenish gray silty CLAY, some gravel, 1/3- to 1 1/2-inch diameter subangular to subrounded clasts, high plasticity, very moist (Fill)	
5		CH			
6				Wood pier pieces at 6.0 feet lying on top of Bay Mud	Petroleum odor at 5.0 feet 3-28-01: No recovery from 6-8 due to wood pier, moved 1 foot PAH(?) on sampler at 6 to 6.5 feet
7		CH		Greenish gray silty CLAY, plant pieces (Bay Mud)	
8				Total depth 8.0 feet	
9					
10					

BASELINE

DRILL LOG NO.: HE-3B

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method :
Logger : WKS
Datum : 6.25 feet NGVD

Boring no. : HE-3B
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown gravelly CLAY, some sand, high plasticity, pieces of brick, concrete, 1/3- to 1 1/2-inch diameter subangular clasts, moist (Fill)	
1		GC			
2					
3		SP		Brown SAND, fine-grained, very moist (Fill)	
4				Mottled yellowish brown and greenish gray silty CLAY, wet (Fill)	
5		CH			
6				Greenish gray silty CLAY, wet (Bay Mud)	
7				1/4-inch thick sand lenses	Slight petroleum odor
8		CH		Becoming black at 7.5 feet	
9					
10				Total depth 9.0 feet	

BASELINE

DRILL LOG NO.: HE-3C

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 7.6 feet NGVD

Boring no. : HE-3C
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown SAND, some gravel, fine-grained, 1/3- to 1 1/2-inch diameter subangular to subrounded clasts, moist (Fill)	
1		SP			
2					
3	X	CH		Mottled greenish gray and yellowish brown silty CLAY, high plasticity (Fill)	
4	X				
5	X	CH		Greenish gray and black silty CLAY, trace of gravel, rootlets (Fill)	
6	X	GW		GRAVEL, 1/3- to 3/4-inch diameter subangular to subrounded clasts, wet (Fill)	
7	X				
8	X	CH		Greenish gray silty CLAY, soft (Bay Mud)	
				Sand lens at 8.5 feet, fine-grained, shell fragments (Bay Mud)	
Total depth 8.5 feet					
9					
10					

BASELINE

DRILL LOG NO.: HE-4A

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 6.60

Boring no. : HE-4A
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown SAND with gravel, fine grained, 1/3- to 2-inch diameter subangular to subrounded clasts (Fill)	
1		SP			
2				Concrete pieces at 2.0 feet	
3		CH		Greenish gray silty CLAY with gravel, up to 2-inch diameter clasts, high plasticity (Fill)	No return at 4 feet, moved 2 feet parallel to channel axis toward HE-3A. Hit rock again, moved another 4 feet toward HE-3A. Final location of HE-4A was 11 feet away from HE-3A
4				Brick and cobbles to 5.5 feet, wet	Greenish gray silty clay, soft (Bay Mud) at 4 feet on third attempt for HE-4A, sand lenses
5		BRICKS/ ROCK			Sample from 4.5-5.0 feet was collected on third attempt where no brick and rock was encountered
6				Total depth 5.5 feet	Petroleum odor at 5.0
7					
8					
9					
10					

BASELINE

DRILL LOG NO.: HE-4B

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 6.12 feet NGVD

Boring no. : HE-4B
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Dark brown to yellowish brown gravelly CLAY, some sand, 1/3- to 1 1/2-inch diameter subangular to subrounded clasts, moist (Fill)	
1					
2	X	CH			
3					
4		CH		Mottled gray to yellowish brown silty CLAY, some gravel and sand, 1/3- to 3/4-inch diameter subangular clasts, high plasticity, wet	
5				Sand lenses	
6	X	CH		Greenish gray and black silty CLAY, wood pieces at 4.5 feet, (Fill)? not intact Bay Mud?	
7	X	GW		Black gravel, 1/3- to 1-inch diameter well-rounded to subrounded clasts, wet (Fill)	
8	X	CH		Greenish gray to black silty CLAY, soft (Bay Mud)	
9				Total depth 8.5 feet	
10					

BASELINE

DRILL LOG NO.: HE-4C

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 7.11 feet NGVD

Boring no. : HE-4C
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0	X			Brown SAND, some gravel, fine-grained, 1/3- to 1 1/2-inch diameter subangular to subrounded clasts, moist (Fill)	
1					
2		SP			
3	X				
4	X	GP		Brown GRAVEL, some sand, 1/3- to 3/4-inch diameter well-rounded to subangular clasts, wet (Fill)	
5	X	CH		Mottled greenish gray and dark greenish gray silty CLAY, high plasticity, wet (Fill)	
6	X	GP		Brown GRAVEL, some sand, 1/3- to 3/4-inch diameter well-rounded to subangular clasts, wet (Fill)	
7	X	CH		Greenish gray silty CLAY with rock (crushed), high plasticity	
7		CH		Greenish gray to very dark gray silty CLAY, soft (Bay Mud)	
Total depth 7.0 feet					
8					
9					
10					

BASELINE

DRILL LOG NO.: HE-5A

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location	: Seabreeze	Boring no.	: HE-5A
Driller	: Precision Sampling	Project no.	: S9171-C0
Method	: Direct push	Date	: 3/20/01
Logger	: WKS	Casing size	: NA
Datum	: 3.0 feet NGVD	Bore size	: 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown SAND with gravel, fine-grained, 1/2- to 3 1/2-inch cobble-sized angular clasts, shell fragments, wet (Fill)	
1					
2		SP		Becoming black at 2.5 feet	
3					
3.5		CH		Very dark gray silty CLAY, soft (Bay Mud)	
4				Total depth 3.5 feet	
5					
6					
7					
8					
9					
10					

BASELINE

DRILL LOG NO.: HE-5B

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 5.63 feet NGVD

Boring no. : HE-5B
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown clayey GRAVEL with sand, 1/3- to 1 1/2-inch diameter subangular to angular clasts, moist (Fill)	
1		GC			
2	X				
3		GW		Large concrete and rock fragments, crushed rock (Fill)	
4				Brown SAND, medium-grained, wet (Fill)	
5	X	SP		Brick pieces	
6	X			Greenish gray to very dark gray silty CLAY, high plasticity, (Bay Mud)	
7	X	CH			
8	X				
Total depth 8.0 feet					
9					
10					

BASELINE

DRILL LOG NO.: HE-5C

(Page 1 of 1)

5900 Hollis Street, Suite D
Emeryville, California 94608
(510) 420-8686 voice
(510) 420-1707 fax

Location : Seabreeze
Driller : Precision Sampling
Method : Direct push
Logger : WKS
Datum : 6.66 NGVD

Boring no. : HE-5C
Project no. : S9171-C0
Date : 3/20/01
Casing size : NA
Bore size : 2-inch

Depth in feet	Samples	USCS	GRAPHIC	DESCRIPTION	NOTES
0				Brown SAND with gravel, some gravelly CLAY, fine-grained, 1/3- to 2-inch diameter subangular clasts, moist (Fill)	
1		SP			
2					
3		CH		Very dark gray silty CLAY, 1/4-inch thick sand lens stained with petroleum (Fill)	Petroleum odor
4		CH		Brown silty CLAY with sand, trace of gravel, very moist, high plasticity, very loose at 3.5 feet (Fill)	
5		ML		Very dark gray clayey SILT with sand, very loose (Fill)	
6		SM		Very dark gray silty SAND, some clay, fine-grained, shell fragments, wet (Fill)	No recovery from 4.25 to 5.5 feet Moved 2 feet and redrilled
7		SM		Very dark gray silty SAND with clay and gravel, fine-grained, 1/3- to 3/4-inch diameter angular clasts (Fill)	
8		CH		Very dark gray silty CLAY, soft (Bay Mud)	
Total depth 8.0 feet					
9					
10					

APPENDIX C:
LABORATORY REPORTS

Baseline Environmental
5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn.: Ms. Yane Nordhav

Project: S9171-CO
Seabreeze Habitat Enhancement

RECEIVED
APR 20 2001
BASELINE

Dear Ms. Nordhav,

Attached is our report for your samples received on Wednesday March 21, 2001
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

The report contains a Case Narrative detailing sample receipt and analysis.

Please note that any unused portion of the samples will be discarded after May 5, 2001
unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,



Vincent Vancil

To: Baseline Environmental
Attn.: Yane Nordhav

CASE NARRATIVE**General and Sample Comments**

We (STL ChromaLab) received 36 Soil samples, on Mar 21 2001 4:30PM.

Analysis Comments and Flags by QC Batch

MISC metals - No Hg	Soil	QC Batch#: 2001/03/23.03-15
1-6` >> MS		Lab#: 2001/03/23.03-15-108
Compound Flag(s)		
MSO	MS/MSD spike recoveries were out of QC limits due to matrix interference. Precision and Accuracy were verified by LCS/LCSD.	
1-6` >> MSD		Lab#: 2001/03/23.03-15-109
MSO	MS/MSD spike recoveries were out of QC limits due to matrix interference. Precision and Accuracy were verified by LCS/LCSD.	
MISC metals - No Hg	Soil	QC Batch#: 2001/03/26.05-15
HE-1B;2-2.5 >> MS		Lab#: 2001/03/26.05-15-023
MSO	MS/MSD spike recoveries were out of QC limits due to matrix interference. Precision and Accuracy were verified by LCS/LCSD.	
HE-1B;2-2.5 >> MSD		Lab#: 2001/03/26.05-15-024
MSO	MS/MSD spike recoveries were out of QC limits due to matrix interference. Precision and Accuracy were verified by LCS/LCSD.	
TEPH w/ Silica Gel Clean-up	Soil	QC Batch#: 2001/03/23.02-10
Method Blank >> MSD		Lab#: 2001/03/23.02-10-005
rpd	Analyte RPD was out of QC limits due to sample heterogeneity.	
CAM 17 metals	Soil	QC Batch#: 2001/03/23.03-15
COMP 1C		Lab#: 2001-03-0408-002
J	Estimated concentration below Reporting Limit but above Method Detection Limit	
COMP 1A		Lab#: 2001-03-0408-006
J	Estimated concentration below Reporting Limit but above Method Detection Limit	
COMP 2C		Lab#: 2001-03-0408-008
J	Estimated concentration below Reporting Limit but above Method Detection Limit	
COMP 2A		Lab#: 2001-03-0408-012
J	Estimated concentration below Reporting Limit but above Method Detection Limit	
COMP 3B		Lab#: 2001-03-0408-013

To: Baseline Environmental

Attn.: Yane Nordhav

CASE NARRATIVE

Compound Flag(s)

J Estimated concentration below Reporting Limit but above Method Detection Limit

COMP 3C

Lab#: 2001-03-0408-016

J Estimated concentration below Reporting Limit but above Method Detection Limit

CAM 17 metals

Soil

QC Batch#: 2001/03/26.05-15

COMP 3A

Lab#: 2001-03-0408-018

J Estimated concentration below Reporting Limit but above Method Detection Limit

COMP 4C

Lab#: 2001-03-0408-020

J Estimated concentration below Reporting Limit but above Method Detection Limit

COMP 4B

Lab#: 2001-03-0408-021

J Estimated concentration below Reporting Limit but above Method Detection Limit

HE-4A;4-4.5

Lab#: 2001-03-0408-026

J Estimated concentration below Reporting Limit but above Method Detection Limit

COMP 5A

Lab#: 2001-03-0408-029

J Estimated concentration below Reporting Limit but above Method Detection Limit

COMP 5B

Lab#: 2001-03-0408-030

J Estimated concentration below Reporting Limit but above Method Detection Limit

TEPH w/ Silica Gel Clean-up

Soil

QC Batch#: 2001/03/23.02-10

COMP 1B

Lab#: 2001-03-0408-003

Analysis Comment

nbc=Hydrocarbons reported are in the Bunker C ranger and do not match our Bunker C reference.

Compound Flag(s)

rd Quantitation for the above analyte is based on the response factor of Diesel

sd Surrogate recovery not reportable due to required dilution.

COMP 2A

Lab#: 2001-03-0408-012

rd Quantitation for the above analyte is based on the response factor of Diesel

COMP 3B

Lab#: 2001-03-0408-013

sd Surrogate recovery not reportable due to required dilution.

rd Quantitation for the above analyte is based on the response factor of Diesel

COMP 3C

Lab#: 2001-03-0408-016

rd Quantitation for the above analyte is based on the response factor of Diesel

COMP 3A

Lab#: 2001-03-0408-018

sd Surrogate recovery not reportable due to required dilution.

To: Baseline Environmental
Attn.: Yane Nordhav

CASE NARRATIVE

Analysis Comments and Flags by QC Batch

COMP 3A	Lab#: 2001-03-0408-018
Compound Flag(s)	
rd	Quantitation for the above analyte is based on the response factor of Diesel
COMP 4B	Lab#: 2001-03-0408-021
rd	Quantitation for the above analyte is based on the response factor of Diesel
HE-4A;4-4.5	Lab#: 2001-03-0408-026
rd	Quantitation for the above analyte is based on the response factor of Diesel
COMP 5A	Lab#: 2001-03-0408-029
rd	Quantitation for the above analyte is based on the response factor of Diesel
COMP 5B	Lab#: 2001-03-0408-030
rd	Quantitation for the above analyte is based on the response factor of Diesel
HE-2B;2-2.5	Lab#: 2001-03-0408-033
rd	Quantitation for the above analyte is based on the response factor of Diesel
HE-4B;2-2.5	Lab#: 2001-03-0408-035
rd	Quantitation for the above analyte is based on the response factor of Diesel
HE-5B;2-2.5	Lab#: 2001-03-0408-036
rd	Quantitation for the above analyte is based on the response factor of Diesel

Polynuclear Aromatic Hydrocarbons (PNA)

Baseline Environmental5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
COMP 1C	Soil	03/20/2001	2
COMP 1B	Soil	03/20/2001	3
COMP 1A	Soil	03/20/2001	6
COMP 2C	Soil	03/20/2001	8
COMP 2B	Soil	03/20/2001	9
COMP 2A	Soil	03/20/2001	12
COMP 3B	Soil	03/20/2001	13
COMP 3C	Soil	03/20/2001	16
COMP 3A	Soil	03/20/2001	18
COMP 4C	Soil	03/20/2001	20
COMP 4B	Soil	03/20/2001	21
HE-4A;4-4.5	Soil	03/20/2001 14:55	26
COMP 5A	Soil	03/20/2001	29
COMP 5B	Soil	03/20/2001	30

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	COMP 1C	Lab Sample ID:	2001-03-0408-002
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 06:22
Matrix:	Soil	QC-Batch:	2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	15	ug/Kg	1.00	03/27/2001 17:22	
Acenaphthylene	ND	10	ug/Kg	1.00	03/27/2001 17:22	
Acenaphthene	ND	10	ug/Kg	1.00	03/27/2001 17:22	
Fluorene	ND	5.0	ug/Kg	1.00	03/27/2001 17:22	
Phenanthrene	ND	5.0	ug/Kg	1.00	03/27/2001 17:22	
Anthracene	ND	5.0	ug/Kg	1.00	03/27/2001 17:22	
Fluoranthene	ND	5.0	ug/Kg	1.00	03/27/2001 17:22	
Pyrene	ND	5.0	ug/Kg	1.00	03/27/2001 17:22	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	03/27/2001 17:22	
Chrysene	ND	5.0	ug/Kg	1.00	03/27/2001 17:22	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	1.00	03/27/2001 17:22	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	03/27/2001 17:22	
Benzo(a)pyrene	ND	5.0	ug/Kg	1.00	03/27/2001 17:22	
Dibenzo(a,h)anthracene	ND	10	ug/Kg	1.00	03/27/2001 17:22	
Benzo(g,h,i)perylene	ND	10	ug/Kg	1.00	03/27/2001 17:22	
Indeno(1,2,3-cd)pyrene	ND	10	ug/Kg	1.00	03/27/2001 17:22	
Surrogate(s)						
1-Methyl naphthalene	85.0	50-150	%	1.00	03/27/2001 17:22	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	COMP 1B	Lab Sample ID:	2001-03-0408-003
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 06:22
Matrix:	Soil	QC-Batch:	2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	15	ug/Kg	1.00	04/04/2001 01:34	
Acenaphthylene	ND	10	ug/Kg	1.00	04/04/2001 01:34	
Acenaphthene	65	10	ug/Kg	1.00	04/04/2001 01:34	
Fluorene	70	5.0	ug/Kg	1.00	04/04/2001 01:34	
Phenanthrene	83	5.0	ug/Kg	1.00	04/04/2001 01:34	
Anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 01:34	
Fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 01:34	
Pyrene	ND	5.0	ug/Kg	1.00	04/04/2001 01:34	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 01:34	
Chrysene	ND	5.0	ug/Kg	1.00	04/04/2001 01:34	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 01:34	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 01:34	
Benzo(a)pyrene	ND	5.0	ug/Kg	1.00	04/04/2001 01:34	
Dibenzo(a,h)anthracene	ND	10	ug/Kg	1.00	04/04/2001 01:34	
Benzo(g,h,i)perylene	ND	10	ug/Kg	1.00	04/04/2001 01:34	
Indeno(1,2,3-cd)pyrene	ND	10	ug/Kg	1.00	04/04/2001 01:34	
Surrogate(s)						
1-Methyl naphthalene	130.8	50-150	%	1.00	04/04/2001 01:34	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID: COMP 1A	Lab Sample ID: 2001-03-0408-006
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 06:22
Matrix: Soil	QC-Batch: 2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	15	ug/Kg	1.00	04/04/2001 02:09	
Acenaphthylene	ND	10	ug/Kg	1.00	04/04/2001 02:09	
Acenaphthene	ND	10	ug/Kg	1.00	04/04/2001 02:09	
Fluorene	ND	5.0	ug/Kg	1.00	04/04/2001 02:09	
Phenanthrene	ND	5.0	ug/Kg	1.00	04/04/2001 02:09	
Anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 02:09	
Fluoranthene	20	5.0	ug/Kg	1.00	04/04/2001 02:09	
Pyrene	29	5.0	ug/Kg	1.00	04/04/2001 02:09	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 02:09	
Chrysene	ND	5.0	ug/Kg	1.00	04/04/2001 02:09	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 02:09	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 02:09	
Benzo(a)pyrene	ND	5.0	ug/Kg	1.00	04/04/2001 02:09	
Dibenzo(a,h)anthracene	ND	10	ug/Kg	1.00	04/04/2001 02:09	
Benzo(g,h,i)perylene	ND	10	ug/Kg	1.00	04/04/2001 02:09	
Indeno(1,2,3-cd)pyrene	ND	10	ug/Kg	1.00	04/04/2001 02:09	
Surrogate(s)						
1-Methyl naphthalene	55.6	50-150	%	1.00	04/04/2001 02:09	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	COMP 2C	Lab Sample ID:	2001-03-0408-008
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 06:22
Matrix:	Soil	QC-Batch:	2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	15	ug/Kg	1.00	04/04/2001 09:12	
Acenaphthylene	ND	10	ug/Kg	1.00	04/04/2001 09:12	
Acenaphthene	ND	10	ug/Kg	1.00	04/04/2001 09:12	
Fluorene	ND	5.0	ug/Kg	1.00	04/04/2001 09:12	
Phenanthrene	ND	5.0	ug/Kg	1.00	04/04/2001 09:12	
Anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 09:12	
Fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 09:12	
Pyrene	ND	5.0	ug/Kg	1.00	04/04/2001 09:12	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 09:12	
Chrysene	ND	5.0	ug/Kg	1.00	04/04/2001 09:12	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 09:12	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 09:12	
Benzo(a)pyrene	ND	5.0	ug/Kg	1.00	04/04/2001 09:12	
Dibenzo(a,h)anthracene	ND	10	ug/Kg	1.00	04/04/2001 09:12	
Benzo(g,h,i)perylene	ND	10	ug/Kg	1.00	04/04/2001 09:12	
Indeno(1,2,3-cd)pyrene	ND	10	ug/Kg	1.00	04/04/2001 09:12	
Surrogate(s)						
1-Methyl naphthalene	131.4	50-150	%	1.00	04/04/2001 09:12	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8310

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	COMP 2B	Lab Sample ID:	2001-03-0408-009
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 06:22
Matrix:	Soil	QC-Batch:	2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	15	ug/Kg	1.00	04/04/2001 09:46	
Acenaphthylene	ND	10	ug/Kg	1.00	04/04/2001 09:46	
Acenaphthene	ND	10	ug/Kg	1.00	04/04/2001 09:46	
Fluorene	ND	5.0	ug/Kg	1.00	04/04/2001 09:46	
Phenanthrene	ND	5.0	ug/Kg	1.00	04/04/2001 09:46	
Anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 09:46	
Fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 09:46	
Pyrene	ND	5.0	ug/Kg	1.00	04/04/2001 09:46	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 09:46	
Chrysene	ND	5.0	ug/Kg	1.00	04/04/2001 09:46	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 09:46	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 09:46	
Benzo(a)pyrene	ND	5.0	ug/Kg	1.00	04/04/2001 09:46	
Dibenzo(a,h)anthracene	ND	10	ug/Kg	1.00	04/04/2001 09:46	
Benzo(g,h,i)perylene	ND	10	ug/Kg	1.00	04/04/2001 09:46	
Indeno(1,2,3-cd)pyrene	ND	10	ug/Kg	1.00	04/04/2001 09:46	
Surrogate(s)						
1-Methyl naphthalene	122.0	50-150	%	1.00	04/04/2001 09:46	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	COMP 2A	Lab Sample ID:	2001-03-0408-012
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	04/04/2001 07:00
Matrix:	Soil	QC-Batch:	2001/04/04-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	75	ug/Kg	5.00	04/04/2001 14:24	
Acenaphthylene	ND	50	ug/Kg	5.00	04/04/2001 14:24	
Acenaphthene	ND	50	ug/Kg	5.00	04/04/2001 14:24	
Fluorene	ND	25	ug/Kg	5.00	04/04/2001 14:24	
Phenanthrene	66	25	ug/Kg	5.00	04/04/2001 14:24	
Anthracene	ND	25	ug/Kg	5.00	04/04/2001 14:24	
Fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 14:24	
Pyrene	140	25	ug/Kg	5.00	04/04/2001 14:24	
Benzo(a)anthracene	ND	25	ug/Kg	5.00	04/04/2001 14:24	
Chrysene	ND	25	ug/Kg	5.00	04/04/2001 14:24	
Benzo(b)fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 14:24	
Benzo(k)fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 14:24	
Benzo(a)pyrene	ND	25	ug/Kg	5.00	04/04/2001 14:24	
Dibenzo(a,h)anthracene	ND	50	ug/Kg	5.00	04/04/2001 14:24	
Benzo(g,h,i)perylene	ND	50	ug/Kg	5.00	04/04/2001 14:24	
Indeno(1,2,3-cd)pyrene	ND	50	ug/Kg	5.00	04/04/2001 14:24	
Surrogate(s)						
1-Methyl naphthalene	68.3	50-150	%	5.00	04/04/2001 14:24	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	COMP 3B	Lab Sample ID:	2001-03-0408-013
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	04/04/2001 07:00
Matrix:	Soil	QC-Batch:	2001/04/04-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	75	ug/Kg	5.00	04/04/2001 14:59	
Acenaphthylene	ND	50	ug/Kg	5.00	04/04/2001 14:59	
Acenaphthene	ND	50	ug/Kg	5.00	04/04/2001 14:59	
Fluorene	ND	25	ug/Kg	5.00	04/04/2001 14:59	
Phenanthrene	86	25	ug/Kg	5.00	04/04/2001 14:59	
Anthracene	88	25	ug/Kg	5.00	04/04/2001 14:59	
Fluoranthene	620	25	ug/Kg	5.00	04/04/2001 14:59	
Pyrene	740	25	ug/Kg	5.00	04/04/2001 14:59	
Benzo(a)anthracene	ND	25	ug/Kg	5.00	04/04/2001 14:59	
Chrysene	ND	25	ug/Kg	5.00	04/04/2001 14:59	
Benzo(b)fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 14:59	
Benzo(k)fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 14:59	
Benzo(a)pyrene	ND	25	ug/Kg	5.00	04/04/2001 14:59	
Dibenzo(a,h)anthracene	ND	50	ug/Kg	5.00	04/04/2001 14:59	
Benzo(g,h,i)perylene	ND	50	ug/Kg	5.00	04/04/2001 14:59	
Indeno(1,2,3-cd)pyrene	ND	50	ug/Kg	5.00	04/04/2001 14:59	
Surrogate(s)						
1-Methyl naphthalene	115.5	50-150	%	5.00	04/04/2001 14:59	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	COMP 3C	Lab Sample ID:	2001-03-0408-016
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	04/04/2001 07:00
Matrix:	Soil	QC-Batch:	2001/04/04-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	75	ug/Kg	5.00	04/04/2001 15:33	
Acenaphthylene	ND	50	ug/Kg	5.00	04/04/2001 15:33	
Acenaphthene	ND	50	ug/Kg	5.00	04/04/2001 15:33	
Fluorene	ND	25	ug/Kg	5.00	04/04/2001 15:33	
Phenanthrene	ND	25	ug/Kg	5.00	04/04/2001 15:33	
Anthracene	ND	25	ug/Kg	5.00	04/04/2001 15:33	
Fluoranthene	120	25	ug/Kg	5.00	04/04/2001 15:33	
Pyrene	97	25	ug/Kg	5.00	04/04/2001 15:33	
Benzo(a)anthracene	ND	25	ug/Kg	5.00	04/04/2001 15:33	
Chrysene	ND	25	ug/Kg	5.00	04/04/2001 15:33	
Benzo(b)fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 15:33	
Benzo(k)fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 15:33	
Benzo(a)pyrene	ND	25	ug/Kg	5.00	04/04/2001 15:33	
Dibenzo(a,h)anthracene	ND	50	ug/Kg	5.00	04/04/2001 15:33	
Benzo(g,h,i)perylene	ND	50	ug/Kg	5.00	04/04/2001 15:33	
Indeno(1,2,3-cd)pyrene	ND	50	ug/Kg	5.00	04/04/2001 15:33	
Surrogate(s)						
1-Methyl naphthalene	88.1	50-150	%	5.00	04/04/2001 15:33	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID: COMP 3A	Lab Sample ID: 2001-03-0408-018
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 06:22
Matrix: Soil	QC-Batch: 2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	150	ug/Kg	10.00	04/03/2001 23:50	
Acenaphthylene	ND	100	ug/Kg	10.00	04/03/2001 23:50	
Acenaphthene	ND	100	ug/Kg	10.00	04/03/2001 23:50	
Fluorene	ND	50	ug/Kg	10.00	04/03/2001 23:50	
Phenanthrene	260	50	ug/Kg	10.00	04/03/2001 23:50	
Anthracene	81	50	ug/Kg	10.00	04/03/2001 23:50	
Fluoranthene	440	50	ug/Kg	10.00	04/03/2001 23:50	
Pyrene	270	50	ug/Kg	10.00	04/03/2001 23:50	
Benzo(a)anthracene	ND	50	ug/Kg	10.00	04/03/2001 23:50	
Chrysene	140	50	ug/Kg	10.00	04/03/2001 23:50	
Benzo(b)fluoranthene	140	50	ug/Kg	10.00	04/03/2001 23:50	
Benzo(k)fluoranthene	ND	50	ug/Kg	10.00	04/03/2001 23:50	
Benzo(a)pyrene	240	50	ug/Kg	10.00	04/03/2001 23:50	
Dibenzo(a,h)anthracene	ND	100	ug/Kg	10.00	04/03/2001 23:50	
Benzo(g,h,i)perylene	ND	100	ug/Kg	10.00	04/03/2001 23:50	
Indeno(1,2,3-cd)pyrene	ND	100	ug/Kg	10.00	04/03/2001 23:50	
Surrogate(s)						
1-Methyl naphthalene	84.2	50-150	%	10.00	04/03/2001 23:50	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	COMP 4C	Lab Sample ID:	2001-03-0408-020
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 06:22
Matrix:	Soil	QC-Batch:	2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	15	ug/Kg	1.00	04/04/2001 00:25	
Acenaphthylene	ND	10	ug/Kg	1.00	04/04/2001 00:25	
Acenaphthene	ND	10	ug/Kg	1.00	04/04/2001 00:25	
Fluorene	ND	5.0	ug/Kg	1.00	04/04/2001 00:25	
Phenanthrene	ND	5.0	ug/Kg	1.00	04/04/2001 00:25	
Anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 00:25	
Fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 00:25	
Pyrene	ND	5.0	ug/Kg	1.00	04/04/2001 00:25	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 00:25	
Chrysene	ND	5.0	ug/Kg	1.00	04/04/2001 00:25	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 00:25	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 00:25	
Benzo(a)pyrene	ND	5.0	ug/Kg	1.00	04/04/2001 00:25	
Dibenzo(a,h)anthracene	ND	10	ug/Kg	1.00	04/04/2001 00:25	
Benzo(g,h,i)perylene	ND	10	ug/Kg	1.00	04/04/2001 00:25	
Indeno(1,2,3-cd)pyrene	ND	10	ug/Kg	1.00	04/04/2001 00:25	
Surrogate(s)						
1-Methyl naphthalene	104.9	50-150	%	1.00	04/04/2001 00:25	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	COMP 4B	Lab Sample ID:	2001-03-0408-021
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 06:22
Matrix:	Soil	QC-Batch:	2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	75	ug/Kg	5.00	04/04/2001 10:21	
Acenaphthylene	ND	50	ug/Kg	5.00	04/04/2001 10:21	
Acenaphthene	ND	50	ug/Kg	5.00	04/04/2001 10:21	
Fluorene	ND	25	ug/Kg	5.00	04/04/2001 10:21	
Phenanthrene	ND	25	ug/Kg	5.00	04/04/2001 10:21	
Anthracene	74	25	ug/Kg	5.00	04/04/2001 10:21	
Fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 10:21	
Pyrene	480	25	ug/Kg	5.00	04/04/2001 10:21	
Benzo(a)anthracene	ND	25	ug/Kg	5.00	04/04/2001 10:21	
Chrysene	ND	25	ug/Kg	5.00	04/04/2001 10:21	
Benzo(b)fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 10:21	
Benzo(k)fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 10:21	
Benzo(a)pyrene	ND	25	ug/Kg	5.00	04/04/2001 10:21	
Dibenzo(a,h)anthracene	ND	50	ug/Kg	5.00	04/04/2001 10:21	
Benzo(g,h,i)perylene	ND	50	ug/Kg	5.00	04/04/2001 10:21	
Indeno(1,2,3-cd)pyrene	ND	50	ug/Kg	5.00	04/04/2001 10:21	
Surrogate(s)						
1-Methyl naphthalene	80.1	50-150	%	5.00	04/04/2001 10:21	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	HE-4A;4-4.5	Lab Sample ID:	2001-03-0408-026
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 14:55	Extracted:	03/23/2001 06:22
Matrix:	Soil	QC-Batch:	2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	75	ug/Kg	5.00	04/04/2001 10:56	
Acenaphthylene	ND	50	ug/Kg	5.00	04/04/2001 10:56	
Acenaphthene	ND	50	ug/Kg	5.00	04/04/2001 10:56	
Fluorene	ND	25	ug/Kg	5.00	04/04/2001 10:56	
Phenanthrene	1600	25	ug/Kg	5.00	04/04/2001 10:56	
Anthracene	340	25	ug/Kg	5.00	04/04/2001 10:56	
Fluoranthene	4900	25	ug/Kg	5.00	04/04/2001 10:56	
Pyrene	4200	25	ug/Kg	5.00	04/04/2001 10:56	
Benzo(a)anthracene	1900	25	ug/Kg	5.00	04/04/2001 10:56	
Chrysene	1400	25	ug/Kg	5.00	04/04/2001 10:56	
Benzo(b)fluoranthene	2400	25	ug/Kg	5.00	04/04/2001 10:56	
Benzo(k)fluoranthene	840	25	ug/Kg	5.00	04/04/2001 10:56	
Benzo(a)pyrene	2400	25	ug/Kg	5.00	04/04/2001 10:56	
Dibenzo(a,h)anthracene	ND	50	ug/Kg	5.00	04/04/2001 10:56	
Benzo(g,h,i)perylene	1200	50	ug/Kg	5.00	04/04/2001 10:56	
Indeno(1,2,3-cd)pyrene	1600	50	ug/Kg	5.00	04/04/2001 10:56	
Surrogate(s)						
1-Methyl naphthalene	91.9	50-150	%	5.00	04/04/2001 10:56	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8310

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID: COMP 5A	Lab Sample ID: 2001-03-0408-029
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 06:22
Matrix: Soil	QC-Batch: 2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	75	ug/Kg	5.00	04/04/2001 11:30	
Acenaphthylene	ND	50	ug/Kg	5.00	04/04/2001 11:30	
Acenaphthene	ND	50	ug/Kg	5.00	04/04/2001 11:30	
Fluorene	ND	25	ug/Kg	5.00	04/04/2001 11:30	
Phenanthrene	ND	25	ug/Kg	5.00	04/04/2001 11:30	
Anthracene	ND	25	ug/Kg	5.00	04/04/2001 11:30	
Fluoranthene	360	25	ug/Kg	5.00	04/04/2001 11:30	
Pyrene	100	25	ug/Kg	5.00	04/04/2001 11:30	
Benzo(a)anthracene	ND	25	ug/Kg	5.00	04/04/2001 11:30	
Chrysene	52	25	ug/Kg	5.00	04/04/2001 11:30	
Benzo(b)fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 11:30	
Benzo(k)fluoranthene	ND	25	ug/Kg	5.00	04/04/2001 11:30	
Benzo(a)pyrene	ND	25	ug/Kg	5.00	04/04/2001 11:30	
Dibenzo(a,h)anthracene	ND	50	ug/Kg	5.00	04/04/2001 11:30	
Benzo(g,h,i)perylene	ND	50	ug/Kg	5.00	04/04/2001 11:30	
Indeno(1,2,3-cd)pyrene	ND	50	ug/Kg	5.00	04/04/2001 11:30	
Surrogate(s)						
1-Methyl naphthalene	102.3	50-150	%	5.00	04/04/2001 11:30	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	COMP 5B	Lab Sample ID:	2001-03-0408-030
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 06:22
Matrix:	Soil	QC-Batch:	2001/03/23-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	15	ug/Kg	1.00	04/04/2001 01:00	
Acenaphthylene	ND	10	ug/Kg	1.00	04/04/2001 01:00	
Acenaphthene	ND	10	ug/Kg	1.00	04/04/2001 01:00	
Fluorene	ND	5.0	ug/Kg	1.00	04/04/2001 01:00	
Phenanthrene	32	5.0	ug/Kg	1.00	04/04/2001 01:00	
Anthracene	12	5.0	ug/Kg	1.00	04/04/2001 01:00	
Fluoranthene	41	5.0	ug/Kg	1.00	04/04/2001 01:00	
Pyrene	46	5.0	ug/Kg	1.00	04/04/2001 01:00	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	04/04/2001 01:00	
Chrysene	17	5.0	ug/Kg	1.00	04/04/2001 01:00	
Benzo(b)fluoranthene	23	5.0	ug/Kg	1.00	04/04/2001 01:00	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	04/04/2001 01:00	
Benzo(a)pyrene	27	5.0	ug/Kg	1.00	04/04/2001 01:00	
Dibenzo(a,h)anthracene	ND	10	ug/Kg	1.00	04/04/2001 01:00	
Benzo(g,h,i)perylene	ND	10	ug/Kg	1.00	04/04/2001 01:00	
Indeno(1,2,3-cd)pyrene	ND	10	ug/Kg	1.00	04/04/2001 01:00	
Surrogate(s)						
1-Methyl naphthalene	118.9	50-150	%	1.00	04/04/2001 01:00	

To: Baseline Environmental

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Method Blank

Soil

QC Batch # 2001/03/23-01.18

MB: 2001/03/23-01.18-001

Date Extracted: 03/23/2001 06:22

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Naphthalene	ND	15.0	ug/Kg	03/27/2001 14:28	
Acenaphthylene	ND	10	ug/Kg	03/27/2001 14:28	
Acenaphthene	ND	10	ug/Kg	03/27/2001 14:28	
Fluorene	ND	5.0	ug/Kg	03/27/2001 14:28	
Phenanthrene	ND	5.0	ug/Kg	03/27/2001 14:28	
Anthracene	ND	5.0	ug/Kg	03/27/2001 14:28	
Fluoranthene	ND	5.0	ug/Kg	03/27/2001 14:28	
Pyrene	ND	5.0	ug/Kg	03/27/2001 14:28	
Benzo(a)anthracene	ND	5.0	ug/Kg	03/27/2001 14:28	
Chrysene	ND	5.0	ug/Kg	03/27/2001 14:28	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	03/27/2001 14:28	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	03/27/2001 14:28	
Benzo(a)pyrene	ND	5.0	ug/Kg	03/27/2001 14:28	
Dibenzo(a,h)anthracene	ND	10.0	ug/Kg	03/27/2001 14:28	
Benzo(g,h,i)perylene	ND	10.0	ug/Kg	03/27/2001 14:28	
Indeno(1,2,3-cd)pyrene	ND	10.0	ug/Kg	03/27/2001 14:28	
Surrogate(s)					
1-Methyl naphthalene	88.7	50-150	%	03/27/2001 14:28	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Method Blank	Soil	QC Batch # 2001/04/04-01.18
MB: 2001/04/04-01.18-001		Date Extracted: 04/04/2001 07:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Naphthalene	ND	15.0	ug/Kg	04/04/2001 13:49	
Acenaphthylene	ND	10	ug/Kg	04/04/2001 13:49	
Acenaphthene	ND	10	ug/Kg	04/04/2001 13:49	
Fluorene	ND	5.0	ug/Kg	04/04/2001 13:49	
Phenanthrene	ND	5.0	ug/Kg	04/04/2001 13:49	
Anthracene	ND	5.0	ug/Kg	04/04/2001 13:49	
Fluoranthene	ND	5.0	ug/Kg	04/04/2001 13:49	
Pyrene	ND	5.0	ug/Kg	04/04/2001 13:49	
Benzo(a)anthracene	ND	5.0	ug/Kg	04/04/2001 13:49	
Chrysene	ND	5.0	ug/Kg	04/04/2001 13:49	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	04/04/2001 13:49	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	04/04/2001 13:49	
Benzo(a)pyrene	ND	5.0	ug/Kg	04/04/2001 13:49	
Dibenzo(a,h)anthracene	ND	10.0	ug/Kg	04/04/2001 13:49	
Benzo(g,h,i)perylene	ND	10.0	ug/Kg	04/04/2001 13:49	
Indeno(1,2,3-cd)pyrene	ND	10.0	ug/Kg	04/04/2001 13:49	
Surrogate(s)					
1-Methyl naphthalene	68.7	50-150	%	04/04/2001 13:49	

To: **Baseline Environmental**

Test Method: 8310

Attn: Yane Nordhav

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2001/03/23-01.18

LCS: 2001/03/23-01.18-002

Extracted: 03/23/2001 06:22

Analyzed 04/03/2001 20:22

LCSD: 2001/03/23-01.18-003

Extracted: 03/23/2001 06:22

Analyzed 04/03/2001 20:57

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Naphthalene	173	203	200	200	86.5	101.5	16.0	50-150	35		
Phenanthrene	184	218	200	200	92.0	109.0	16.9	50-150	35		
Pyrene	187	216	200	200	93.5	108.0	14.4	50-150	35		
Chrysene	176	199	200	200	88.0	99.5	12.3	50-150	35		
Benzo(a)pyrene	172	192	200	200	86.0	96.0	11.0	50-150	35		
Surrogate(s)											
1-Methyl naphthalene	20.0	19.8	15	15	133.3	132.0		50-150			

To: **Baseline Environmental**

Test Method: 8310

Attn: Yane Nordhav

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2001/04/04-01.18

LCS: 2001/04/04-01.18-002

Extracted: 04/04/2001 07:00

Analyzed 04/04/2001 12:05

LCSD: 2001/04/04-01.18-003

Extracted: 04/04/2001 07:00

Analyzed 04/04/2001 12:40

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Naphthalene	184	172	200	200	92.0	86.0	6.7	50-150	35		
Phenanthrene	189	188	200	200	94.5	94.0	0.5	50-150	35		
Pyrene	191	179	200	200	95.5	89.5	6.5	50-150	35		
Chrysene	169	184	200	200	84.5	92.0	8.5	50-150	35		
Benzo(a)pyrene	140	151	200	200	70.0	75.5	7.6	50-150	35		
Surrogate(s)											
1-Methyl naphthalene	9.20	8.28	15	15	61.3	55.2		50-150			

Gas/BTEX Compounds by 8015M/8020

Baseline Environmental✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-1B;2-2.5	Soil	03/20/2001 09:05	32
HE-2B;2-2.5	Soil	03/20/2001 10:50	33
HE-3B;2-2.5	Soil	03/20/2001 12:05	34
HE-4B;2-2.5	Soil	03/20/2001 13:45	35
HE-5B;2-2.5	Soil	03/20/2001 15:30	36

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-03-0408

To: **Baseline Environmental**

Test Method: 8020

Attn.: Yane Nordhav

Prep Method: 5030

Gas/BTEX Compounds by 8015M/8020

Sample ID:	HE-1B;2-2.5	Lab Sample ID:	2001-03-0408-032
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 09:05	Extracted:	03/27/2001 14:08
Matrix:	Soil	QC-Batch:	2001/03/27-01.04

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Benzene	ND	0.0050	mg/Kg	1.00	03/27/2001 14:08	
Toluene	ND	0.0050	mg/Kg	1.00	03/27/2001 14:08	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	03/27/2001 14:08	
Xylene(s)	ND	0.0050	mg/Kg	1.00	03/27/2001 14:08	
Surrogate(s) Trifluorotoluene	72.7	53-125	%	1.00	03/27/2001 14:08	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

Printed on: 03/28/2001 12:08

Page 2 of 8

To: **Baseline Environmental**

Test Method: 8020

Attn.: Yane Nordhav

Prep Method: 5030

Gas/BTEX Compounds by 8015M/8020

Sample ID:	HE-2B;2-2.5	Lab Sample ID:	2001-03-0408-033
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 10:50	Extracted:	03/27/2001 14:36
Matrix:	Soil	QC-Batch:	2001/03/27-01.04

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Benzene	ND	0.0050	mg/Kg	1.00	03/27/2001 14:36	
Toluene	ND	0.0050	mg/Kg	1.00	03/27/2001 14:36	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	03/27/2001 14:36	
Xylene(s)	ND	0.0050	mg/Kg	1.00	03/27/2001 14:36	
Surrogate(s)						
Trifluorotoluene	56.1	53-125	%	1.00	03/27/2001 14:36	

To: **Baseline Environmental**

Test Method: 8020

Attn.: Yane Nordhav

Prep Method: 5030

Gas/BTEX Compounds by 8015M/8020

Sample ID:	HE-3B;2-2.5	Lab Sample ID:	2001-03-0408-034
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 12:05	Extracted:	03/27/2001 15:33
Matrix:	Soil	QC-Batch:	2001/03/27-01.04

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Benzene	ND	0.0050	mg/Kg	1.00	03/27/2001 15:33	
Toluene	ND	0.0050	mg/Kg	1.00	03/27/2001 15:33	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	03/27/2001 15:33	
Xylene(s)	ND	0.0050	mg/Kg	1.00	03/27/2001 15:33	
Surrogate(s) Trifluorotoluene	62.3	53-125	%	1.00	03/27/2001 15:33	

To: **Baseline Environmental**

Test Method: 8020

Attn.: Yane Nordhav

Prep Method: 5030

Gas/BTEX Compounds by 8015M/8020

Sample ID:	HE-4B;2-2.5	Lab Sample ID:	2001-03-0408-035
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 13:45	Extracted:	03/27/2001 16:01
Matrix:	Soil	QC-Batch:	2001/03/27-01.04

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Benzene	ND	0.0050	mg/Kg	1.00	03/27/2001 16:01	
Toluene	ND	0.0050	mg/Kg	1.00	03/27/2001 16:01	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	03/27/2001 16:01	
Xylene(s)	ND	0.0050	mg/Kg	1.00	03/27/2001 16:01	
Surrogate(s)						
Trifluorotoluene	73.9	53-125	%	1.00	03/27/2001 16:01	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8020

Prep Method: 5030

Gas/BTEX Compounds by 8015M/8020

Sample ID:	HE-5B;2-2.5	Lab Sample ID:	2001-03-0408-036
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 15:30	Extracted:	03/27/2001 16:29
Matrix:	Soil	QC-Batch:	2001/03/27-01.04

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Benzene	ND	0.0050	mg/Kg	1.00	03/27/2001 16:29	
Toluene	ND	0.0050	mg/Kg	1.00	03/27/2001 16:29	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	03/27/2001 16:29	
Xylene(s)	ND	0.0050	mg/Kg	1.00	03/27/2001 16:29	
Surrogate(s)						
Trifluorotoluene	71.2	53-125	%	1.00	03/27/2001 16:29	

To: **Baseline Environmental**

Test Method: 8015M

Attn.: Yane Nordhav

8020

Prep Method: 5030

Batch QC Report

Gas/BTEX Compounds by 8015M/8020

Method Blank	Soil	QC Batch # 2001/03/27-01.04
MB: 2001/03/27-01.04-003		Date Extracted: 03/27/2001 08:02

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Benzene	ND	0.0050	mg/Kg	03/27/2001 08:02	
Toluene	ND	0.0050	mg/Kg	03/27/2001 08:02	
Ethyl benzene	ND	0.0050	mg/Kg	03/27/2001 08:02	
Xylene(s)	ND	0.0050	mg/Kg	03/27/2001 08:02	
Surrogate(s)					
Trifluorotoluene	79.3	53-125	%	03/27/2001 08:02	

To: **Baseline Environmental**

Test Method: 8020

Attn: Yane Nordhav

Prep Method: 5030

Batch QC Report

Gas/BTEX Compounds by 8015M/8020

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2001/03/27-01.04

LCS: 2001/03/27-01.04-008

Extracted: 03/27/2001 10:44

Analyzed 03/27/2001 10:44

LCSD: 2001/03/27-01.04-005

Extracted: 03/27/2001 08:58

Analyzed 03/27/2001 08:58

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Benzene	0.0956	0.0908	0.1000	0.1000	95.6	90.8	5.2	77-123	35		
Toluene	0.0886	0.0851	0.1000	0.1000	88.6	85.1	4.0	78-122	35		
Ethyl benzene	0.0884	0.0852	0.1000	0.1000	88.4	85.2	3.7	70-130	35		
Xylene(s)	0.267	0.257	0.300	0.300	89.0	85.7	3.8	75-125	35		
Surrogate(s)											
Trifluorotoluene	487	450	500	500	97.4	90.0		53-125			

Metals**Baseline Environmental**5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-1B;2-2.5	Soil	03/20/2001 09:05	32
HE-2B;2-2.5	Soil	03/20/2001 10:50	33
HE-3B;2-2.5	Soil	03/20/2001 12:05	34
HE-4B;2-2.5	Soil	03/20/2001 13:45	35
HE-5B;2-2.5	Soil	03/20/2001 15:30	36

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-03-0408

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3050B

Metals

Sample ID:	HE-1B;2-2.5	Lab Sample ID:	2001-03-0408-032
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 09:05	Extracted:	03/26/2001 13:47
Matrix:	Soil	QC-Batch:	2001/03/26-05.15
Sample/Analysis Flag . (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Copper	9.0	1.0	mg/Kg	1.00	03/28/2001 08:38	
Lead	30	1.0	mg/Kg	1.00	03/28/2001 08:38	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3050B

Metals

Sample ID:	HE-2B;2-2.5	Lab Sample ID:	2001-03-0408-033
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 10:50	Extracted:	03/26/2001 13:47
Matrix:	Soil	QC-Batch:	2001/03/26-05.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Copper	25	1.0	mg/Kg	1.00	03/28/2001 09:01	
Lead	13	1.0	mg/Kg	1.00	03/28/2001 09:01	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-03-0408

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3050B

Metals

Sample ID:	HE-3B;2-2.5	Lab Sample ID:	2001-03-0408-034
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 12:05	Extracted:	03/26/2001 13:47
Matrix:	Soil	QC-Batch:	2001/03/26-05.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Copper	24	1.0	mg/Kg	1.00	03/28/2001 09:04	
Lead	24	1.0	mg/Kg	1.00	03/28/2001 09:04	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3050B

Metals

Sample ID:	HE-4B;2-2.5	Lab Sample ID:	2001-03-0408-035
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 13:45	Extracted:	03/26/2001 13:47
Matrix:	Soil	QC-Batch:	2001/03/26-05.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Copper	54	1.0	mg/Kg	1.00	03/28/2001 09:08	
Lead	53	1.0	mg/Kg	1.00	03/28/2001 09:08	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3050B

Metals

Sample ID:	HE-5B;2-2.5	Lab Sample ID:	2001-03-0408-036
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 15:30	Extracted:	03/26/2001 13:47
Matrix:	Soil	QC-Batch:	2001/03/26-05.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Copper	21	1.0	mg/Kg	1.00	03/28/2001 09:11	
Lead	33	1.0	mg/Kg	1.00	03/28/2001 09:11	

To: **Baseline Environmental**

Test Method: 6010B

Attn.: Yane Nordhav

Prep Method: 3050B

Batch QC Report
Metals**Method Blank****Soil****QC Batch # 2001/03/26-05.15**

MB: 2001/03/26-05.15-011

Date Extracted: 03/26/2001 13:47

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Copper	ND	1.0	mg/Kg	03/28/2001 08:08	
Lead	ND	1.0	mg/Kg	03/28/2001 08:08	

To: **Baseline Environmental**

Test Method: 6010B

Attn: Yane Nordhav

Prep Method: 3050B

Batch QC Report

Metals

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/03/26-05.15	
LCS:	2001/03/26-05.15-012	Extracted:	03/26/2001 13:47	Analyzed	03/28/2001 08:12
LCSD:	2001/03/26-05.15-013	Extracted:	03/26/2001 13:47	Analyzed	03/28/2001 08:15

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Copper	102	104	100.0	100.0	102.0	104.0	1.9	80-120	20		
Lead	98.7	102	100.0	100.0	98.7	102.0	3.3	80-120	20		

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3050B

Batch QC Report

Metals

Matrix Spike (MS / MSD)

Soil

QC Batch # 2001/03/26-05.15

Sample ID: **HE-1B;2-2.5**

Lab Sample ID: 2001-03-0408-032

MS: 2001/03/26-05.15-023 Extracted: 03/26/2001 13:47 Analyzed: 03/28/2001 08:55 Dilution: 1.0

MSD: 2001/03/26-05.15-024 Extracted: 03/26/2001 13:47 Analyzed: 03/28/2001 08:58 Dilution: 1.0

Compound	Conc. [mg/Kg]			Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD		Recovery	RPD	MS	MSD
Copper	109	112	9.01	100.0	100.0	100.0	103.0	3.0	75-125	20		
Lead	102	101	29.6	100.0	100.0	72.4	71.4	1.4	75-125	20	mso	mso

To: **Baseline Environmental**

Attn: Yane Nordhav

Test Method: 6010B

Prep Method: 3050B

Legend & Notes

Metals

QC Compound Flags

· mso

MS/MSD spike recoveries were out of QC limits due to matrix interference. Precision and Accuracy were verified by LCS/LCSD.

per cent Moisture

Baseline Environmental✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
COMP 1C	Soil	03/20/2001	2
COMP 1B	Soil	03/20/2001	3
COMP 1A	Soil	03/20/2001	6
COMP 2C	Soil	03/20/2001	8
COMP 2B	Soil	03/20/2001	9
COMP 2A	Soil	03/20/2001	12
COMP 3B	Soil	03/20/2001	13
COMP 3C	Soil	03/20/2001	16
COMP 3A	Soil	03/20/2001	18
COMP 4C	Soil	03/20/2001	20
COMP 4B	Soil	03/20/2001	21
HE-4A;4-4.5	Soil	03/20/2001 14:55	26
COMP 5A	Soil	03/20/2001	29
COMP 5B	Soil	03/20/2001	30

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-03-0408

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 1C	Lab Sample ID:	2001-03-0408-002
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	23.1 % (1.3003)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	23	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 1B	Lab Sample ID:	2001-03-0408-003
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	31.1 % (1.4516)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	31	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 1A	Lab Sample ID:	2001-03-0408-006
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	17.8 % (1.2168)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	18	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 2C	Lab Sample ID:	2001-03-0408-008
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	25.2 % (1.3369)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	25	0.10	%	1.00	03/27/2001 08:00	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-03-0408

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 2B	Lab Sample ID:	2001-03-0408-009
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	32.9 % (1.4899)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	33	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 2B	Lab Sample ID:	2001-03-0408-009
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	32.9 % (1.4899)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	33	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 2A	Lab Sample ID:	2001-03-0408-012
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	15.6 % (1.1844)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	16	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 3B	Lab Sample ID:	2001-03-0408-013
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	32.4 % (1.4799)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	32	0.10	%	1.00	03/27/2001 08:00	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-03-0408

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 3C	Lab Sample ID:	2001-03-0408-016
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	19.9 % (1.2492)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	20	0.10	%	1.00	03/27/2001 08:00	

1220 Quarry Lane * Pleasanton, CA 94566-4756

Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 3A	Lab Sample ID:	2001-03-0408-018
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	11.8 % (1.1343)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	12	0.10	%	1.00	03/27/2001 08:00	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-03-0408

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 4C	Lab Sample ID:	2001-03-0408-020
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	8.3 % (1.0900)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	8.3	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 4B	Lab Sample ID:	2001-03-0408-021
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	30.7 % (1.4422)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	31	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	HE-4A;4-4.5	Lab Sample ID:	2001-03-0408-026
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 14:55	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	47.5 % (1.9065)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	48	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 5A	Lab Sample ID:	2001-03-0408-029
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	15.2 % (1.1787)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	15	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 5B	Lab Sample ID:	2001-03-0408-030
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/27/2001 09:30
Matrix:	Soil	QC-Batch:	2001/03/27-02.35
		Moisture:	32.6 % (1.4842)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	33	0.10	%	1.00	03/27/2001 08:00	

To: **Baseline Environmental**

Test Method:

Attn.: Yane Nordhav

Prep Method: Moisture

Batch QC Report
per cent Moisture**Method Blank****Soil****QC Batch # 2001/03/27-02.35**

MB: 2001/03/27-02.35-001

Date Extracted: 03/26/2001 09:30

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Moisture, percent	ND	0.1	%	03/27/2001 08:00	

TEPH w/ Silica Gel Clean-up

Baseline Environmental✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
COMP 1C	Soil	03/20/2001	2
COMP 1B	Soil	03/20/2001	3
COMP 1A	Soil	03/20/2001	6
COMP 2C	Soil	03/20/2001	8
COMP 2B	Soil	03/20/2001	9
COMP 2A	Soil	03/20/2001	12
COMP 3B	Soil	03/20/2001	13
COMP 3C	Soil	03/20/2001	16
COMP 3A	Soil	03/20/2001	18
COMP 4C	Soil	03/20/2001	20
COMP 4B	Soil	03/20/2001	21
HE-4A;4-4.5	Soil	03/20/2001 14:55	26
COMP 5A	Soil	03/20/2001	29
COMP 5B	Soil	03/20/2001	30
HE-1B;2-2.5	Soil	03/20/2001 09:05	32
HE-2B;2-2.5	Soil	03/20/2001 10:50	33
HE-3B;2-2.5	Soil	03/20/2001 12:05	34
HE-4B;2-2.5	Soil	03/20/2001 13:45	35
HE-5B;2-2.5	Soil	03/20/2001 15:30	36

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 1C	Lab Sample ID:	2001-03-0408-002
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	65	mg/Kg	1.00	03/27/2001 04:46	
<i>Surrogate(s)</i> o-Terphenyl	116.1	60-130	%	1.00	03/27/2001 04:46	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 1B	Lab Sample ID:	2001-03-0408-003
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10
Sample/Analysis Flag ,nbc (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	850	360	mg/Kg	5.00	03/27/2001 13:50	rd,nbc
Surrogate(s) o-Terphenyl	NA	60-130	%	5.00	03/27/2001 13:50	sd

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 1A	Lab Sample ID:	2001-03-0408-006
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	61	mg/Kg	1.00	03/27/2001 06:03	
<i>Surrogate(s)</i> o-Terphenyl	91.1	60-130	%	1.00	03/27/2001 06:03	

To: **Baseline Environmental**

Test Method: 8015M

Attn.: Yane Nordhav

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 2C	Lab Sample ID:	2001-03-0408-008
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	67	mg/Kg	1.00	03/27/2001 06:41	
Surrogate(s) o-Terphenyl	98.1	60-130	%	1.00	03/27/2001 06:41	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 2B	Lab Sample ID:	2001-03-0408-009
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	74	mg/Kg	1.00	03/27/2001 07:19	
Surrogate(s) o-Terphenyl	87.7	60-130	%	1.00	03/27/2001 07:19	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID: **COMP 2A**Lab Sample ID: **2001-03-0408-012**Project: S9171-CO
Seabreeze Habitat Enhancement

Received: 03/21/2001 16:30

Sampled: 03/20/2001

Extracted: 03/23/2001 09:04

Matrix: Soil

QC-Batch: 2001/03/23-02.10

Sample/Analysis Flag ,nbc (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	240	59	mg/Kg	1.00	03/27/2001 07:58	rd,nbc
Surrogate(s) o-Terphenyl	109.2	60-130	%	1.00	03/27/2001 07:58	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 3B	Lab Sample ID:	2001-03-0408-013
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10
Sample/Analysis Flag ,nbcp (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	1400	740	mg/Kg	10.00	03/27/2001 13:50	rd,nbcp
Surrogate(s) o-Terphenyl	NA	60-130	%	10.00	03/27/2001 13:50	sd

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 3C	Lab Sample ID:	2001-03-0408-016
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10
Sample/Analysis Flag ,nbc (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	67	62	mg/Kg	1.00	03/27/2001 01:35	rd,nbc
Surrogate(s) o-Terphenyl	99.7	60-130	%	1.00	03/27/2001 01:35	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 3A	Lab Sample ID:	2001-03-0408-018
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10
Sample/Analysis Flag ,nbcp (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	970	570	mg/Kg	10.00	03/27/2001 14:29	rd,nbcp
Surrogate(s) o-Terphenyl	NA	60-130	%	10.00	03/27/2001 14:29	sd

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 4C	Lab Sample ID:	2001-03-0408-020
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	55	mg/Kg	1.00	03/27/2001 02:51	
Surrogate(s) o-Terphenyl	97.0	60-130	%	1.00	03/27/2001 02:51	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 4B	Lab Sample ID:	2001-03-0408-021
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10
Sample/Analysis Flag ,nbcp (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	450	72	mg/Kg	1.00	03/27/2001 03:29	rd,nbcp
Surrogate(s) o-Terphenyl	106.5	60-130	%	1.00	03/27/2001 03:29	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	HE-4A;4-4.5	Lab Sample ID:	2001-03-0408-026
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 14:55	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10
Sample/Analysis Flag ,nbcp (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	160	95	mg/Kg	1.00	03/27/2001 04:07	rd,nbcp
Surrogate(s) o-Terphenyl	100.1	60-130	%	1.00	03/27/2001 04:07	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 5A	Lab Sample ID:	2001-03-0408-029
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10
Sample/Analysis Flag ,nbcp (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	59	mg/Kg	1.00	03/27/2001 04:46	rd,nbcp
Surrogate(s) o-Terphenyl	104.3	60-130	%	1.00	03/27/2001 04:46	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 5B	Lab Sample ID:	2001-03-0408-030
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10
Sample/Analysis Flag ,nbc (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	79	74	mg/Kg	1.00	03/27/2001 05:24	rd,nbc
Surrogate(s) o-Terphenyl	96.4	60-130	%	1.00	03/27/2001 05:24	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	HE-1B;2-2.5	Lab Sample ID:	2001-03-0408-032
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 09:05	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	50	mg/Kg	1.00	03/27/2001 04:07	
Surrogate(s) o-Terphenyl	112.3	60-130	%	1.00	03/27/2001 04:07	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	HE-2B;2-2.5	Lab Sample ID:	2001-03-0408-033
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 10:50	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10
Sample/Analysis Flag ,nbc (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	70	50	mg/Kg	1.00	03/27/2001 06:03	rd,nbc
Surrogate(s) o-Terphenyl	101.8	60-130	%	1.00	03/27/2001 06:03	

To: Baseline Environmental

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	HE-3B;2-2.5	Lab Sample ID:	2001-03-0408-034
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 12:05	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	50	mg/Kg	1.00	03/27/2001 06:41	
Surrogate(s) o-Terphenyl	97.7	60-130	%	1.00	03/27/2001 06:41	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	HE-4B;2-2.5	Lab Sample ID:	2001-03-0408-035
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 13:45	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10
Sample/Analysis Flag ,nbc (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	70	50	mg/Kg	1.00	03/27/2001 07:19	rd,nbc
Surrogate(s) o-Terphenyl	102.9	60-130	%	1.00	03/27/2001 07:19	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	HE-5B;2-2.5	Lab Sample ID:	2001-03-0408-036
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 15:30	Extracted:	03/23/2001 09:04
Matrix:	Soil	QC-Batch:	2001/03/23-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	60	50	mg/Kg	1.00	03/27/2001 07:58	rd,nbcp
Surrogate(s) o-Terphenyl	105.0	60-130	%	1.00	03/27/2001 07:58	

To: **Baseline Environmental**

Test Method: 8015M

Attn.: Yane Nordhav

Prep Method: 3550/8015M

Batch QC Report
TEPH w/ Silica Gel Clean-up

Method Blank	Soil	QC Batch # 2001/03/23-02.10
MB: 2001/03/23-02.10-003		Date Extracted: 03/23/2001 09:04

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	03/27/2001 13:30	
Surrogate(s) o-Terphenyl	93.5	60-130	%	03/27/2001 13:30	

To: Baseline Environmental

Test Method: 8015M

Attn: Yane Nordhav

Prep Method: 3550/8015M

Batch QC Report

TEPH w/ Silica Gel Clean-up

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2001/03/23-02.10

LCS: 2001/03/23-02.10-001

Extracted: 03/23/2001 09:04

Analyzed 03/27/2001 01:35

LCSD: 2001/03/23-02.10-002

Extracted: 03/23/2001 09:04

Analyzed 03/27/2001 02:13

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Diesel	33.8	34.1	41.7	41.7	81.1	81.8	0.9	60-130	25		
Surrogate(s)											
o-Terphenyl	20.4	19.9	20.0	20.0	102.0	99.5		60-130			

To: **Baseline Environmental**

Test Method: 8015M

Attn.: Yane Nordhav

Prep Method: 3550/8015M

Batch QC Report

TEPH w/ Silica Gel Clean-up

Matrix Spike (MS / MSD)**Soil****QC Batch # 2001/03/23-02.10**Sample ID: **HE-1B;2-2.5**

Lab Sample ID: 2001-03-0408-032

MS: 2001/03/23-02.10-004 Extracted: 03/23/2001 09:04 Analyzed: 03/27/2001 02:51 Dilution: 1.0

MSD: 2001/03/23-02.10-005 Extracted: 03/23/2001 09:04 Analyzed: 03/27/2001 03:29 Dilution: 1.0

Compound	Conc. [mg/Kg]			Exp.Conc. [mg/Kg]			Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]		Recovery	RPD	MS	MSD
Diesel	37.8	51.3	10.6	41.3	41.2	65.9	98.8	40.0		60-130	25		rpd
Surrogate(s)													
o-Terphenyl	19.3	20.5		20.0	20.0	96.5	102.5			60-130			

To: **Baseline Environmental**

Attn: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

Legend & Notes

TEPH w/ Silica Gel Clean-up

QC Compound Flags

rpd

Analyte RPD was out of QC limits due to sample heterogeneity.

Analysis Notes

COMP 1B (Lab# 2001-03-0408-003)

nbc=Hydrocarbons reported are in the Bunker C ranger and do not match our Bunker C reference.

Analyte Flags

rd

Quantitation for the above analyte is based on the response factor of Diesel

sd

Surrogate recovery not reportable due to required dilution.

CAM 17 metals

Baseline Environmental

✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
COMP 1C	Soil	03/20/2001	2
COMP 1B	Soil	03/20/2001	3
COMP 1A	Soil	03/20/2001	6
COMP 2C	Soil	03/20/2001	8
COMP 2B	Soil	03/20/2001	9
COMP 2A	Soil	03/20/2001	12
COMP 3B	Soil	03/20/2001	13
COMP 3C	Soil	03/20/2001	16
COMP 3A	Soil	03/20/2001	18
COMP 4C	Soil	03/20/2001	20
COMP 4B	Soil	03/20/2001	21
HE-4A;4-4.5	Soil	03/20/2001 14:55	26
COMP 5A	Soil	03/20/2001	29
COMP 5B	Soil	03/20/2001	30

To: **Baseline Environmental**Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID: **COMP 1C**Lab Sample ID: **2001-03-0408-002**Project: S9171-CO
Seabreeze Habitat Enhancement

Received: 03/21/2001 16:30

Sampled: 03/20/2001
Matrix: SoilExtracted: 03/23/2001 13:21
QC-Batch: 2001/03/23-03.15
Units mg/Kg

Sample/Analysis Flag . (See Legend & Note section)

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 01:25	1.0	
Arsenic	2.7	1.0	0.12	03/28/2001 01:25	1.0	
Barium	98	1.0	0.003	03/28/2001 01:25	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 01:25	1.0	
Cadmium	1.0	0.50	0.008	03/28/2001 01:25	1.0	
Chromium	36	1.0	0.020	03/28/2001 01:25	1.0	
Cobalt	7.2	1.0	0.016	03/28/2001 01:25	1.0	
Copper	22	1.0	0.023	03/28/2001 01:25	1.0	
Lead	22	1.0	0.067	03/28/2001 01:25	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 01:25	1.0	
Nickel	44	1.0	0.011	03/28/2001 01:25	1.0	
Selenium	ND	2.0	0.21	03/28/2001 01:25	1.0	
Silver	0.076	1.0	0.012	03/28/2001 01:25	1.0	J
Thallium	ND	1.0	0.12	03/28/2001 01:25	1.0	
Vanadium	30	1.0	0.010	03/28/2001 01:25	1.0	
Zinc	45	1.0	0.083	03/28/2001 01:25	1.0	
Mercury	0.16	0.050	0.050	03/26/2001 09:04	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID: COMP 1B	Lab Sample ID: 2001-03-0408-003
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 13:21
Matrix: Soil	QC-Batch: 2001/03/23-03.15
	Units mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 01:28	1.0	
Arsenic	1.8	1.0	0.12	03/28/2001 01:28	1.0	
Barium	52	1.0	0.003	03/28/2001 01:28	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 01:28	1.0	
Cadmium	0.95	0.50	0.008	03/28/2001 01:28	1.0	
Chromium	32	1.0	0.020	03/28/2001 01:28	1.0	
Cobalt	7.2	1.0	0.016	03/28/2001 01:28	1.0	
Copper	18	1.0	0.023	03/28/2001 01:28	1.0	
Lead	8.3	1.0	0.067	03/28/2001 01:28	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 01:28	1.0	
Nickel	40	1.0	0.011	03/28/2001 01:28	1.0	
Selenium	ND	2.0	0.21	03/28/2001 01:28	1.0	
Silver	ND	1.0	0.012	03/28/2001 01:28	1.0	
Thallium	ND	1.0	0.12	03/28/2001 01:28	1.0	
Vanadium	26	1.0	0.010	03/28/2001 01:28	1.0	
Zinc	40	1.0	0.083	03/28/2001 01:28	1.0	
Mercury	0.065	0.050	0.050	03/26/2001 09:05	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID: COMP 1A	Lab Sample ID: 2001-03-0408-006
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 13:21
Matrix: Soil	QC-Batch: 2001/03/23-03.15
	Units mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 01:31	1.0	
Arsenic	4.6	1.0	0.12	03/28/2001 01:31	1.0	
Barium	140	1.0	0.003	03/28/2001 01:31	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 01:31	1.0	
Cadmium	1.6	0.50	0.008	03/28/2001 01:31	1.0	
Chromium	54	1.0	0.020	03/28/2001 01:31	1.0	
Cobalt	13	1.0	0.016	03/28/2001 01:31	1.0	
Copper	37	1.0	0.023	03/28/2001 01:31	1.0	
Lead	16	1.0	0.067	03/28/2001 01:31	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 01:31	1.0	
Nickel	65	1.0	0.011	03/28/2001 01:31	1.0	
Selenium	ND	2.0	0.21	03/28/2001 01:31	1.0	
Silver	0.049	1.0	0.012	03/28/2001 01:31	1.0	J
Thallium	ND	1.0	0.12	03/28/2001 01:31	1.0	
Vanadium	34	1.0	0.010	03/28/2001 01:31	1.0	
Zinc	110	1.0	0.083	03/28/2001 01:31	1.0	
Mercury	0.068	0.050	0.050	03/26/2001 09:06	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID:	COMP 2C	Lab Sample ID:	2001-03-0408-008
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 13:21
Matrix:	Soil	QC-Batch:	2001/03/23-03.15
		Units	mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 01:34	1.0	J
Arsenic	3.4	1.0	0.12	03/28/2001 01:34	1.0	
Barium	100	1.0	0.003	03/28/2001 01:34	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 01:34	1.0	
Cadmium	1.1	0.50	0.008	03/28/2001 01:34	1.0	
Chromium	33	1.0	0.020	03/28/2001 01:34	1.0	
Cobalt	9.1	1.0	0.016	03/28/2001 01:34	1.0	
Copper	19	1.0	0.023	03/28/2001 01:34	1.0	
Lead	21	1.0	0.067	03/28/2001 01:34	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 01:34	1.0	
Nickel	49	1.0	0.011	03/28/2001 01:34	1.0	
Selenium	ND	2.0	0.21	03/28/2001 01:34	1.0	
Silver	0.087	1.0	0.012	03/28/2001 01:34	1.0	
Thallium	ND	1.0	0.12	03/28/2001 01:34	1.0	
Vanadium	28	1.0	0.010	03/28/2001 01:34	1.0	
Zinc	46	1.0	0.083	03/28/2001 01:34	1.0	
Mercury	0.15	0.050	0.050	03/26/2001 09:10	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID: COMP 2B	Lab Sample ID: 2001-03-0408-009
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 13:21
Matrix: Soil	QC-Batch: 2001/03/23-03.15
	Units mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 01:37	1.0	
Arsenic	2.0	1.0	0.12	03/28/2001 01:37	1.0	
Barium	110	1.0	0.003	03/28/2001 01:37	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 01:37	1.0	
Cadmium	0.93	0.50	0.008	03/28/2001 01:37	1.0	
Chromium	32	1.0	0.020	03/28/2001 01:37	1.0	
Cobalt	8.3	1.0	0.016	03/28/2001 01:37	1.0	
Copper	17	1.0	0.023	03/28/2001 01:37	1.0	
Lead	9.5	1.0	0.067	03/28/2001 01:37	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 01:37	1.0	
Nickel	38	1.0	0.011	03/28/2001 01:37	1.0	
Selenium	ND	2.0	0.21	03/28/2001 01:37	1.0	
Silver	ND	1.0	0.012	03/28/2001 01:37	1.0	
Thallium	ND	1.0	0.12	03/28/2001 01:37	1.0	
Vanadium	25	1.0	0.010	03/28/2001 01:37	1.0	
Zinc	38	1.0	0.083	03/28/2001 01:37	1.0	
Mercury	0.068	0.050	0.050	03/26/2001 09:11	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID: COMP 2A	Lab Sample ID: 2001-03-0408-012
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 13:21
Matrix: Soil	QC-Batch: 2001/03/23-03.15
	Units mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 01:40	1.0	
Arsenic	3.5	1.0	0.12	03/28/2001 01:40	1.0	
Barium	100	1.0	0.003	03/28/2001 01:40	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 01:40	1.0	
Cadmium	1.3	0.50	0.008	03/28/2001 01:40	1.0	
Chromium	40	1.0	0.020	03/28/2001 01:40	1.0	
Cobalt	8.7	1.0	0.016	03/28/2001 01:40	1.0	
Copper	28	1.0	0.023	03/28/2001 01:40	1.0	
Lead	17	1.0	0.067	03/28/2001 01:40	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 01:40	1.0	
Nickel	49	1.0	0.011	03/28/2001 01:40	1.0	
Selenium	ND	2.0	0.21	03/28/2001 01:40	1.0	
Silver	0.056	1.0	0.012	03/28/2001 01:40	1.0	J
Thallium	ND	1.0	0.12	03/28/2001 01:40	1.0	
Vanadium	29	1.0	0.010	03/28/2001 01:40	1.0	
Zinc	63	1.0	0.083	03/28/2001 01:40	1.0	
Mercury	0.089	0.050	0.050	03/26/2001 09:12	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID:	COMP 3B	Lab Sample ID:	2001-03-0408-013
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 13:21
Matrix:	Soil	QC-Batch:	2001/03/23-03.15
		Units	mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 01:43	1.0	
Arsenic	1.2	1.0	0.12	03/28/2001 01:43	1.0	
Barium	74	1.0	0.003	03/28/2001 01:43	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 01:43	1.0	
Cadmium	0.86	0.50	0.008	03/28/2001 01:43	1.0	
Chromium	31	1.0	0.020	03/28/2001 01:43	1.0	
Cobalt	5.2	1.0	0.016	03/28/2001 01:43	1.0	
Copper	19	1.0	0.023	03/28/2001 01:43	1.0	
Lead	11	1.0	0.067	03/28/2001 01:43	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 01:43	1.0	
Nickel	30	1.0	0.011	03/28/2001 01:43	1.0	
Selenium	ND	2.0	0.21	03/28/2001 01:43	1.0	
Silver	0.038	1.0	0.012	03/28/2001 01:43	1.0	J
Thallium	ND	1.0	0.12	03/28/2001 01:43	1.0	
Vanadium	25	1.0	0.010	03/28/2001 01:43	1.0	
Zinc	33	1.0	0.083	03/28/2001 01:43	1.0	
Mercury	0.21	0.050	0.050	03/26/2001 09:13	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID:	COMP 3C	Lab Sample ID:	2001-03-0408-016
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 13:21
Matrix:	Soil	QC-Batch:	2001/03/23-03.15
		Units	mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 02:05	1.0	J
Arsenic	8.0	1.0	0.12	03/28/2001 02:05	1.0	
Barium	130	1.0	0.003	03/28/2001 02:05	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 02:05	1.0	
Cadmium	3.3	0.50	0.008	03/28/2001 02:05	1.0	
Chromium	27	1.0	0.020	03/28/2001 02:05	1.0	
Cobalt	10	1.0	0.016	03/28/2001 02:05	1.0	
Copper	26	1.0	0.023	03/28/2001 02:05	1.0	
Lead	8.9	1.0	0.067	03/28/2001 02:05	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 02:05	1.0	
Nickel	35	1.0	0.011	03/28/2001 02:05	1.0	
Selenium	ND	2.0	0.21	03/28/2001 02:05	1.0	
Silver	0.097	1.0	0.012	03/28/2001 02:05	1.0	
Thallium	ND	1.0	0.12	03/28/2001 02:05	1.0	
Vanadium	21	1.0	0.010	03/28/2001 02:05	1.0	
Zinc	30	1.0	0.083	03/28/2001 02:05	1.0	
Mercury	0.11	0.050	0.050	03/26/2001 09:14	1.0	

To: **Baseline Environmental**Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID:	COMP 3A	Lab Sample ID:	2001-03-0408-018
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/26/2001 13:47
Matrix:	Soil	QC-Batch:	2001/03/26-05.15
		Units	mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 08:19	1.0	
Arsenic	7.8	1.0	0.12	03/28/2001 08:19	1.0	
Barium	100	1.0	0.003	03/28/2001 08:19	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 08:19	1.0	
Cadmium	0.72	0.50	0.008	03/28/2001 08:19	1.0	
Chromium	28	1.0	0.020	03/28/2001 08:19	1.0	
Cobalt	7.7	1.0	0.016	03/28/2001 08:19	1.0	
Copper	78	1.0	0.023	03/28/2001 08:19	1.0	
Lead	41	1.0	0.067	03/28/2001 08:19	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 08:19	1.0	
Nickel	47	1.0	0.011	03/28/2001 08:19	1.0	
Selenium	0.30	2.0	0.21	03/28/2001 08:19	1.0	J
Silver	0.14	1.0	0.012	03/28/2001 08:19	1.0	J
Thallium	ND	1.0	0.12	03/28/2001 08:19	1.0	
Vanadium	49	1.0	0.010	03/28/2001 08:19	1.0	
Zinc	82	1.0	0.083	03/28/2001 08:19	1.0	
Mercury	0.29	0.057	0.050	03/27/2001 11:49	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID:	COMP 4C	Lab Sample ID:	2001-03-0408-020
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/26/2001 13:47
Matrix:	Soil	QC-Batch:	2001/03/26-05.15
		Units	mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 08:22	1.0	
Arsenic	9.0	1.0	0.12	03/28/2001 08:22	1.0	
Barium	20	1.0	0.003	03/28/2001 08:22	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 08:22	1.0	
Cadmium	ND	0.50	0.008	03/28/2001 08:22	1.0	
Chromium	16	1.0	0.020	03/28/2001 08:22	1.0	
Cobalt	4.1	1.0	0.016	03/28/2001 08:22	1.0	
Copper	9.3	1.0	0.023	03/28/2001 08:22	1.0	
Lead	8.5	1.0	0.067	03/28/2001 08:22	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 08:22	1.0	
Nickel	21	1.0	0.011	03/28/2001 08:22	1.0	
Selenium	0.26	2.0	0.21	03/28/2001 08:22	1.0	J
Silver	0.11	1.0	0.012	03/28/2001 08:22	1.0	J
Thallium	ND	1.0	0.12	03/28/2001 08:22	1.0	
Vanadium	14	1.0	0.010	03/28/2001 08:22	1.0	
Zinc	24	1.0	0.083	03/28/2001 08:22	1.0	
Mercury	ND	0.055	0.050	03/27/2001 11:51	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID:	COMP 4B	Lab Sample ID:	2001-03-0408-021
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/26/2001 13:47
Matrix:	Soil	QC-Batch:	2001/03/26-05.15
		Units	mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 08:26	1.0	
Arsenic	11	1.0	0.12	03/28/2001 08:26	1.0	
Barium	250	1.0	0.003	03/28/2001 08:26	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 08:26	1.0	
Cadmium	1.2	0.50	0.008	03/28/2001 08:26	1.0	
Chromium	37	1.0	0.020	03/28/2001 08:26	1.0	
Cobalt	9.0	1.0	0.016	03/28/2001 08:26	1.0	
Copper	35	1.0	0.023	03/28/2001 08:26	1.0	
Lead	140	1.0	0.067	03/28/2001 08:26	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 08:26	1.0	
Nickel	120	1.0	0.011	03/28/2001 08:26	1.0	
Selenium	0.70	2.0	0.21	03/28/2001 08:26	1.0	J
Silver	0.12	1.0	0.012	03/28/2001 08:26	1.0	J
Thallium	ND	1.0	0.12	03/28/2001 08:26	1.0	
Vanadium	110	1.0	0.010	03/28/2001 08:26	1.0	
Zinc	140	1.0	0.083	03/28/2001 08:26	1.0	
Mercury	0.52	0.072	0.050	03/27/2001 11:54	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID:	HE-4A;4-4.5	Lab Sample ID:	2001-03-0408-026
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001 14:55	Extracted:	03/26/2001 13:47
Matrix:	Soil	QC-Batch:	2001/03/26-05.15
		Units	mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 08:29	1.0	
Arsenic	2.4	1.0	0.12	03/28/2001 08:29	1.0	
Barium	27	1.0	0.003	03/28/2001 08:29	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 08:29	1.0	
Cadmium	0.79	0.50	0.008	03/28/2001 08:29	1.0	
Chromium	38	1.0	0.020	03/28/2001 08:29	1.0	
Cobalt	6.6	1.0	0.016	03/28/2001 08:29	1.0	
Copper	25	1.0	0.023	03/28/2001 08:29	1.0	
Lead	19	1.0	0.067	03/28/2001 08:29	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 08:29	1.0	
Nickel	39	1.0	0.011	03/28/2001 08:29	1.0	
Selenium	0.62	2.0	0.21	03/28/2001 08:29	1.0	J
Silver	0.17	1.0	0.012	03/28/2001 08:29	1.0	J
Thallium	ND	1.0	0.12	03/28/2001 08:29	1.0	
Vanadium	32	1.0	0.010	03/28/2001 08:29	1.0	
Zinc	57	1.0	0.083	03/28/2001 08:29	1.0	
Mercury	0.68	0.095	0.050	03/27/2001 11:56	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID: COMP 5A	Lab Sample ID: 2001-03-0408-029
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/26/2001 13:47
Matrix: Soil	QC-Batch: 2001/03/26-05.15 Units mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 08:32	1.0	
Arsenic	4.6	1.0	0.12	03/28/2001 08:32	1.0	
Barium	35	1.0	0.003	03/28/2001 08:32	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 08:32	1.0	
Cadmium	0.51	0.50	0.008	03/28/2001 08:32	1.0	
Chromium	25	1.0	0.020	03/28/2001 08:32	1.0	
Cobalt	5.4	1.0	0.016	03/28/2001 08:32	1.0	
Copper	81	1.0	0.023	03/28/2001 08:32	1.0	
Lead	92	1.0	0.067	03/28/2001 08:32	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 08:32	1.0	
Nickel	30	1.0	0.011	03/28/2001 08:32	1.0	
Selenium	ND	2.0	0.21	03/28/2001 08:32	1.0	
Silver	0.027	1.0	0.012	03/28/2001 08:32	1.0	J
Thallium	ND	1.0	0.12	03/28/2001 08:32	1.0	
Vanadium	24	1.0	0.010	03/28/2001 08:32	1.0	
Zinc	78	1.0	0.083	03/28/2001 08:32	1.0	
Mercury	0.15	0.059	0.050	03/27/2001 11:57	1.0	

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 metals

Sample ID:	COMP 5B	Lab Sample ID:	2001-03-0408-030
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/26/2001 13:47
Matrix:	Soil	QC-Batch:	2001/03/26-05.15
		Units	mg/Kg

Compound	Result	Rep.Limit	MDL	Analyzed:	Dilution	Flag
Antimony	ND	2.0	0.24	03/28/2001 08:35	1.0	J
Arsenic	5.2	1.0	0.12	03/28/2001 08:35	1.0	
Barium	28	1.0	0.003	03/28/2001 08:35	1.0	
Beryllium	ND	0.50	0.003	03/28/2001 08:35	1.0	
Cadmium	0.66	0.50	0.008	03/28/2001 08:35	1.0	
Chromium	32	1.0	0.020	03/28/2001 08:35	1.0	
Cobalt	7.1	1.0	0.016	03/28/2001 08:35	1.0	
Copper	17	1.0	0.023	03/28/2001 08:35	1.0	
Lead	9.7	1.0	0.067	03/28/2001 08:35	1.0	
Molybdenum	ND	1.0	0.054	03/28/2001 08:35	1.0	
Nickel	37	1.0	0.011	03/28/2001 08:35	1.0	
Selenium	0.79	2.0	0.21	03/28/2001 08:35	1.0	
Silver	ND	1.0	0.012	03/28/2001 08:35	1.0	
Thallium	ND	1.0	0.12	03/28/2001 08:35	1.0	
Vanadium	27	1.0	0.010	03/28/2001 08:35	1.0	
Zinc	37	1.0	0.083	03/28/2001 08:35	1.0	
Mercury	0.15	0.074	0.050	03/27/2001 11:58	1.0	

To: **Baseline Environmental**
Attn.: Yane Nordhav

Test Method: 7471A
Prep Method: 7471A

Batch QC Report
CAM 17 metals

Method Blank	Soil	QC Batch # 2001/03/23-03.16
MB: 2001/03/23-03.16-029		Date Extracted: 03/23/2001 13:25

Compound	Result	Rep.Limit	MDL	Units	Analyzed	Flag
Mercury	ND	0.050		mg/Kg	03/26/2001 08:41	

To: **Baseline Environmental**

Test Method: 7471A

Attn.: Yane Nordhav

Prep Method: 7471A

Batch QC Report

CAM 17 metals

Method Blank**Soil****QC Batch # 2001/03/27-04.16**

MB: 2001/03/27-04.16-028

Date Extracted: 03/27/2001 10:28

Compound	Result	Rep.Limit	MDL	Units	Analyzed	Flag
Mercury	ND	0.050		mg/Kg	03/27/2001 11:46	

To: **Baseline Environmental**
Attn.: Yane Nordhav

Test Method: 6010B
Prep Method: 3050B

Batch QC Report
CAM 17 metals

Method Blank	Soil	QC Batch # 2001/03/23-03.15
MB: 2001/03/23-03.15-102		Date Extracted: 03/23/2001 13:21

Compound	Result	Rep.Limit	MDL	Units	Analyzed	Flag
Antimony	ND	2.0		mg/Kg	03/27/2001 23:53	
Arsenic	ND	1.0		mg/Kg	03/27/2001 23:53	
Barium	ND	1.0		mg/Kg	03/27/2001 23:53	
Beryllium	ND	0.50		mg/Kg	03/27/2001 23:53	
Cadmium	ND	0.50		mg/Kg	03/27/2001 23:53	
Chromium	ND	1.0		mg/Kg	03/27/2001 23:53	
Cobalt	ND	1.0		mg/Kg	03/27/2001 23:53	
Copper	ND	1.0		mg/Kg	03/27/2001 23:53	
Lead	ND	1.0		mg/Kg	03/27/2001 23:53	
Molybdenum	ND	1.0		mg/Kg	03/27/2001 23:53	
Nickel	ND	1.0		mg/Kg	03/27/2001 23:53	
Selenium	ND	2.0		mg/Kg	03/27/2001 23:53	
Silver	ND	1.0		mg/Kg	03/27/2001 23:53	
Thallium	ND	1.0		mg/Kg	03/27/2001 23:53	
Vanadium	ND	1.0		mg/Kg	03/27/2001 23:53	
Zinc	ND	1.0		mg/Kg	03/27/2001 23:53	

To: **Baseline Environmental**

Test Method: 6010B

Attn.: Yane Nordhav

Prep Method: 3050B

Batch QC Report

CAM 17 metals

Method Blank**Soil****QC Batch # 2001/03/26-05.15**

MB: 2001/03/26-05.15-011

Date Extracted: 03/26/2001 13:47

Compound	Result	Rep.Limit	MDL	Units	Analyzed	Flag
Antimony	ND	2.0		mg/Kg	03/28/2001 08:08	
Arsenic	ND	1.0		mg/Kg	03/28/2001 08:08	
Barium	ND	1.0		mg/Kg	03/28/2001 08:08	
Beryllium	ND	0.50		mg/Kg	03/28/2001 08:08	
Cadmium	ND	0.50		mg/Kg	03/28/2001 08:08	
Chromium	ND	1.0		mg/Kg	03/28/2001 08:08	
Cobalt	ND	1.0		mg/Kg	03/28/2001 08:08	
Copper	ND	1.0		mg/Kg	03/28/2001 08:08	
Lead	ND	1.0		mg/Kg	03/28/2001 08:08	
Molybdenum	ND	1.0		mg/Kg	03/28/2001 08:08	
Nickel	ND	1.0		mg/Kg	03/28/2001 08:08	
Selenium	ND	2.0		mg/Kg	03/28/2001 08:08	
Silver	ND	1.0		mg/Kg	03/28/2001 08:08	
Thallium	ND	1.0		mg/Kg	03/28/2001 08:08	
Vanadium	ND	1.0		mg/Kg	03/28/2001 08:08	
Zinc	ND	1.0		mg/Kg	03/28/2001 08:08	

To: **Baseline Environmental**

Test Method: 7471A

Attn: Yane Nordhav

Prep Method: 7471A

Batch QC Report

CAM 17 metals

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/03/23-03.16	
LCS:	2001/03/23-03.16-030	Extracted:	03/23/2001 13:25	Analyzed	03/26/2001 08:42
LCSD:	2001/03/23-03.16-031	Extracted:	03/23/2001 13:25	Analyzed	03/26/2001 08:43

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Mercury	0.478	0.499	0.500	0.500	95.6	99.8	4.3	85-115	20		

To: **Baseline Environmental**

Test Method: 7471A

Attn: Yane Nordhav

Prep Method: 7471A

Batch QC Report

CAM 17 metals

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/03/27-04.16	
LCS:	2001/03/27-04.16-029	Extracted:	03/27/2001 10:28	Analyzed	03/27/2001 11:47
LCSD:	2001/03/27-04.16-030	Extracted:	03/27/2001 10:28	Analyzed	03/27/2001 11:48

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Mercury	0.484	0.485	0.500	0.500	96.8	97.0	0.2	85-115	20		

To: **Baseline Environmental**
Attn: Yane Nordhav

Test Method: 6010B
Prep Method: 3050B

Batch QC Report

CAM 17 metals

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/03/23-03.15	
LCS:	2001/03/23-03.15-103	Extracted:	03/23/2001 13:21	Analyzed	03/27/2001 23:57
LCSD:	2001/03/23-03.15-104	Extracted:	03/23/2001 13:21	Analyzed	03/28/2001

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Antimony	97.8	99.6	100.0	100.0	97.8	99.6	1.8	80-120	20		
Arsenic	104	106	100.0	100.0	104.0	106.0	1.9	80-120	20		
Barium	102	103	100.0	100.0	102.0	103.0	1.0	80-120	20		
Beryllium	101	101	100.0	100.0	101.0	101.0	0.0	80-120	20		
Cadmium	98.0	98.6	100.0	100.0	98.0	98.6	0.6	80-120	20		
Chromium	101	102	100.0	100.0	101.0	102.0	1.0	80-120	20		
Cobalt	98.8	99.1	100.0	100.0	98.8	99.1	0.3	80-120	20		
Copper	99.2	98.7	100.0	100.0	99.2	98.7	0.5	80-120	20		
Lead	96.8	98.6	100.0	100.0	96.8	98.6	1.8	80-120	20		
Molybdenum	101	102	100.0	100.0	101.0	102.0	1.0	80-120	20		
Nickel	101	101	100.0	100.0	101.0	101.0	0.0	80-120	20		
Selenium	95.9	97.7	100.0	100.0	95.9	97.7	1.9	80-120	20		
Silver	99.4	99.7	100.0	100.0	99.4	99.7	0.3	80-120	20		
Thallium	96.3	98.3	100.0	100.0	96.3	98.3	2.1	80-120	20		
Vanadium	99.1	99.3	100.0	100.0	99.1	99.3	0.2	80-120	20		
Zinc	95.0	95.4	100.0	100.0	95.0	95.4	0.4	80-120	20		

To: **Baseline Environmental**

Test Method: 6010B

Attn: Yane Nordhav

Prep Method: 3050B

Batch QC Report

CAM 17 metals

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/03/26-05.15	
LCS:	2001/03/26-05.15-012	Extracted:	03/26/2001 13:47	Analyzed	03/28/2001 08:12
LCSD:	2001/03/26-05.15-013	Extracted:	03/26/2001 13:47	Analyzed	03/28/2001 08:15

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Antimony	101	105	100.0	100.0	101.0	105.0	3.9	80-120	20		
Arsenic	107	111	100.0	100.0	107.0	111.0	3.7	80-120	20		
Barium	100	102	100.0	100.0	100.0	102.0	2.0	80-120	20		
Beryllium	101	104	100.0	100.0	101.0	104.0	2.9	80-120	20		
Cadmium	98.6	101	100.0	100.0	98.6	101.0	2.4	80-120	20		
Chromium	101	103	100.0	100.0	101.0	103.0	2.0	80-120	20		
Cobalt	100	102	100.0	100.0	100.0	102.0	2.0	80-120	20		
Copper	102	104	100.0	100.0	102.0	104.0	1.9	80-120	20		
Lead	98.7	102	100.0	100.0	98.7	102.0	3.3	80-120	20		
Molybdenum	102	104	100.0	100.0	102.0	104.0	1.9	80-120	20		
Nickel	99.0	101	100.0	100.0	99.0	101.0	2.0	80-120	20		
Selenium	97.4	100	100.0	100.0	97.4	100.0	2.6	80-120	20		
Silver	99.9	102	100.0	100.0	99.9	102.0	2.1	80-120	20		
Thallium	97.5	101	100.0	100.0	97.5	101.0	3.5	80-120	20		
Vanadium	102	104	100.0	100.0	102.0	104.0	1.9	80-120	20		
Zinc	98.8	101	100.0	100.0	98.8	101.0	2.2	80-120	20		

To: **Baseline Environmental**

Test Method: 6010B
7471A

Attn: Yane Nordhav

Prep Method: 3050B
7471A

Legend & Notes

CAM 17 metals

Analyte Flags

J

Estimated concentration below Reporting Limit but above Method Detection Limit

Organochlorine Pesticides & PCBs (8081/8082)

Baseline Environmental✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
COMP 1B	Soil	03/20/2001	3
COMP 2B	Soil	03/20/2001	9
COMP 3B	Soil	03/20/2001	13
COMP 4B	Soil	03/20/2001	21
COMP 5B	Soil	03/20/2001	30

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BASELINE

To: **Baseline Environmental**

Test Method: 8081
8082

Attn.: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Organochlorine Pesticides & PCBs (8081/8082)

Sample ID: COMP 1B	Lab Sample ID: 2001-03-0408-003
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 05:39
Matrix: Soil	QC-Batch: 2001/03/23-01.13 2001/03/23-01.14
Sample/Analysis Flag lrm (See Legend & Note section)	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Aldrin	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Dieldrin	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Endrin aldehyde	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Endrin	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Endrin ketone	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Heptachlor	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Heptachlor epoxide	ND	10	ug/Kg	5.00	05/02/2001 03:08	
4,4'-DDT	ND	10	ug/Kg	5.00	05/02/2001 03:08	
4,4'-DDE	ND	10	ug/Kg	5.00	05/02/2001 03:08	
4,4'-DDD	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Endosulfan I	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Endosulfan II	ND	10	ug/Kg	5.00	05/02/2001 03:08	
alpha-BHC	ND	10	ug/Kg	5.00	05/02/2001 03:08	
beta-BHC	ND	10	ug/Kg	5.00	05/02/2001 03:08	
gamma-BHC (Lindane)	ND	10	ug/Kg	5.00	05/02/2001 03:08	
delta-BHC	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Endosulfan sulfate	ND	10	ug/Kg	5.00	05/02/2001 03:08	
4,4'-Methoxychlor	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Chlordane (Technical)	ND	250	ug/Kg	5.00	05/02/2001 03:08	
alpha-Chlordane	ND	10	ug/Kg	5.00	05/02/2001 03:08	
gamma-Chlordane	ND	10	ug/Kg	5.00	05/02/2001 03:08	
Toxaphene	ND	500	ug/Kg	5.00	05/02/2001 03:08	
Aroclor 1016	ND	50	ug/Kg	1.00	05/01/2001 22:31	
Aroclor 1221	ND	50	ug/Kg	1.00	05/01/2001 22:31	
Aroclor 1232	ND	50	ug/Kg	1.00	05/01/2001 22:31	
Aroclor 1242	ND	50	ug/Kg	1.00	05/01/2001 22:31	
Aroclor 1248	ND	50	ug/Kg	1.00	05/01/2001 22:31	
Aroclor 1254	ND	50	ug/Kg	1.00	05/01/2001 22:31	
Aroclor 1260	ND	50	ug/Kg	1.00	05/01/2001 22:31	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	79.1	50-125	%	5.00	05/02/2001 03:08	

To: **Baseline Environmental**

Test Method: 8081
8082

Attn.: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Organochlorine Pesticides & PCBs (8081/8082)

Sample ID:	COMP 1B	Lab Sample ID:	2001-03-0408-003
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 05:39
Matrix:	Soil	QC-Batch:	2001/03/23-01.13 2001/03/23-01.14
Sample/Analysis Flag In (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Surrogate(s)						
Decachlorobiphenyl (Pest/8081)	70.6	46-142	%	5.00	05/02/2001 03:08	
2,4,5,6-Tetrachloro-m-xylene	60.3	50-125	%	1.00	05/01/2001 22:31	
Decachlorobiphenyl (PCB/8082)	56.7	46-142	%	1.00	05/01/2001 22:31	

To: **Baseline Environmental**

Test Method: 8081
8082

Attn.: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Organochlorine Pesticides & PCBs (8081/8082)

Sample ID: COMP 2B	Lab Sample ID: 2001-03-0408-009
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 05:39
Matrix: Soil	QC-Batch: 2001/03/23-01.13 2001/03/23-01.14
Sample/Analysis Flag Im (See Legend & Note section)	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Aldrin	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Dieldrin	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Endrin aldehyde	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Endrin	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Endrin ketone	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Heptachlor	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Heptachlor epoxide	ND	10	ug/Kg	5.00	05/02/2001 03:39	
4,4'-DDT	ND	10	ug/Kg	5.00	05/02/2001 03:39	
4,4'-DDE	ND	10	ug/Kg	5.00	05/02/2001 03:39	
4,4'-DDD	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Endosulfan I	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Endosulfan II	ND	10	ug/Kg	5.00	05/02/2001 03:39	
alpha-BHC	ND	10	ug/Kg	5.00	05/02/2001 03:39	
beta-BHC	ND	10	ug/Kg	5.00	05/02/2001 03:39	
gamma-BHC (Lindane)	ND	10	ug/Kg	5.00	05/02/2001 03:39	
delta-BHC	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Endosulfan sulfate	ND	10	ug/Kg	5.00	05/02/2001 03:39	
4,4'-Methoxychlor	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Chlordane (Technical)	ND	250	ug/Kg	5.00	05/02/2001 03:39	
alpha-Chlordane	ND	10	ug/Kg	5.00	05/02/2001 03:39	
gamma-Chlordane	ND	10	ug/Kg	5.00	05/02/2001 03:39	
Toxaphene	ND	500	ug/Kg	5.00	05/02/2001 03:39	
Aroclor 1016	ND	50	ug/Kg	1.00	05/01/2001 23:03	
Aroclor 1221	ND	50	ug/Kg	1.00	05/01/2001 23:03	
Aroclor 1232	ND	50	ug/Kg	1.00	05/01/2001 23:03	
Aroclor 1242	ND	50	ug/Kg	1.00	05/01/2001 23:03	
Aroclor 1248	ND	50	ug/Kg	1.00	05/01/2001 23:03	
Aroclor 1254	ND	50	ug/Kg	1.00	05/01/2001 23:03	
Aroclor 1260	ND	50	ug/Kg	1.00	05/01/2001 23:03	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	83.8	50-125	%	5.00	05/02/2001 03:39	

To: **Baseline Environmental**Test Method: 8081
8082

Attn.: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Organochlorine Pesticides & PCBs (8081/8082)

Sample ID:	COMP 2B	Lab Sample ID:	2001-03-0408-009
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 05:39
Matrix:	Soil	QC-Batch:	2001/03/23-01.13 2001/03/23-01.14
Sample/Analysis Flag Irr (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Surrogate(s)						
Decachlorobiphenyl (Pest/8081)	82.1	46-142	%	5.00	05/02/2001 03:39	
2,4,5,6-Tetrachloro-m-xylene	82.0	50-125	%	1.00	05/01/2001 23:03	
Decachlorobiphenyl (PCB/8082)	63.2	46-142	%	1.00	05/01/2001 23:03	

To: **Baseline Environmental**

Test Method: 8081
8082

Attn.: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Organochlorine Pesticides & PCBs (8081/8082)

Sample ID: COMP 3B	Lab Sample ID: 2001-03-0408-013
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 05:39
Matrix: Soil	QC-Batch: 2001/03/23-01.13 2001/03/23-01.14
Sample/Analysis Flag In (See Legend & Note section)	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Aldrin	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Dieldrin	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Endrin aldehyde	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Endrin	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Endrin ketone	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Heptachlor	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Heptachlor epoxide	ND	10	ug/Kg	5.00	05/02/2001 04:10	
4,4'-DDT	ND	10	ug/Kg	5.00	05/02/2001 04:10	
4,4'-DDE	ND	10	ug/Kg	5.00	05/02/2001 04:10	
4,4'-DDD	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Endosulfan I	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Endosulfan II	ND	10	ug/Kg	5.00	05/02/2001 04:10	
alpha-BHC	ND	10	ug/Kg	5.00	05/02/2001 04:10	
beta-BHC	ND	10	ug/Kg	5.00	05/02/2001 04:10	
gamma-BHC (Lindane)	ND	10	ug/Kg	5.00	05/02/2001 04:10	
delta-BHC	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Endosulfan sulfate	ND	10	ug/Kg	5.00	05/02/2001 04:10	
4,4'-Methoxychlor	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Chlordane (Technical)	ND	250	ug/Kg	5.00	05/02/2001 04:10	
alpha-Chlordane	ND	10	ug/Kg	5.00	05/02/2001 04:10	
gamma-Chlordane	ND	10	ug/Kg	5.00	05/02/2001 04:10	
Toxaphene	ND	500	ug/Kg	5.00	05/02/2001 04:10	
Aroclor 1016	ND	50	ug/Kg	1.00	05/01/2001 23:35	
Aroclor 1221	ND	50	ug/Kg	1.00	05/01/2001 23:35	
Aroclor 1232	ND	50	ug/Kg	1.00	05/01/2001 23:35	
Aroclor 1242	ND	50	ug/Kg	1.00	05/01/2001 23:35	
Aroclor 1248	ND	50	ug/Kg	1.00	05/01/2001 23:35	
Aroclor 1254	ND	50	ug/Kg	1.00	05/01/2001 23:35	
Aroclor 1260	ND	50	ug/Kg	1.00	05/01/2001 23:35	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	80.0	50-125	%	5.00	05/02/2001 04:10	

To: **Baseline Environmental**

Test Method: 8081
8082

Attn.: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Organochlorine Pesticides & PCBs (8081/8082)

Sample ID:	COMP 3B	Lab Sample ID:	2001-03-0408-013
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 05:39
Matrix:	Soil	QC-Batch:	2001/03/23-01.13 2001/03/23-01.14
Sample/Analysis Flag In (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Surrogate(s)						
Decachlorobiphenyl (Pest/8081)	35.4	46-142	%	5.00	05/02/2001 04:10	s
2,4,5,6-Tetrachloro-m-xylene	63.3	50-125	%	1.00	05/01/2001 23:35	
Decachlorobiphenyl (PCB/8082)	49.7	46-142	%	1.00	05/01/2001 23:35	

To: **Baseline Environmental**

Test Method: 8081
8082

Attn.: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Organochlorine Pesticides & PCBs (8081/8082)

Sample ID:	COMP 4B	Lab Sample ID:	2001-03-0408-021
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 05:39
Matrix:	Soil	QC-Batch:	2001/03/23-01.13 2001/03/23-01.14
Sample/Analysis Flag lrm (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Aldrin	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Dieldrin	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Endrin aldehyde	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Endrin	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Endrin ketone	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Heptachlor	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Heptachlor epoxide	ND	10	ug/Kg	5.00	05/02/2001 04:41	
4,4'-DDT	ND	10	ug/Kg	5.00	05/02/2001 04:41	
4,4'-DDE	ND	10	ug/Kg	5.00	05/02/2001 04:41	
4,4'-DDD	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Endosulfan I	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Endosulfan II	ND	10	ug/Kg	5.00	05/02/2001 04:41	
alpha-BHC	ND	10	ug/Kg	5.00	05/02/2001 04:41	
beta-BHC	ND	10	ug/Kg	5.00	05/02/2001 04:41	
gamma-BHC (Lindane)	ND	10	ug/Kg	5.00	05/02/2001 04:41	
delta-BHC	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Endosulfan sulfate	ND	10	ug/Kg	5.00	05/02/2001 04:41	
4,4'-Methoxychlor	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Chlordane (Technical)	ND	250	ug/Kg	5.00	05/02/2001 04:41	
alpha-Chlordane	ND	10	ug/Kg	5.00	05/02/2001 04:41	
gamma-Chlordane	ND	10	ug/Kg	5.00	05/02/2001 04:41	
Toxaphene	ND	500	ug/Kg	5.00	05/02/2001 04:41	
Aroclor 1016	ND	50	ug/Kg	1.00	05/02/2001 00:07	
Aroclor 1221	ND	50	ug/Kg	1.00	05/02/2001 00:07	
Aroclor 1232	ND	50	ug/Kg	1.00	05/02/2001 00:07	
Aroclor 1242	ND	50	ug/Kg	1.00	05/02/2001 00:07	
Aroclor 1248	ND	50	ug/Kg	1.00	05/02/2001 00:07	
Aroclor 1254	ND	50	ug/Kg	1.00	05/02/2001 00:07	
Aroclor 1260	ND	50	ug/Kg	1.00	05/02/2001 00:07	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	48.8	50-125	%	5.00	05/02/2001 04:41	sl

To: **Baseline Environmental**Test Method: 8081
8082

Attn.: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Organochlorine Pesticides & PCBs (8081/8082)

Sample ID:	COMP 4B	Lab Sample ID:	2001-03-0408-021
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 05:39
Matrix:	Soil	QC-Batch:	2001/03/23-01.13 2001/03/23-01.14
Sample/Analysis Flag Im (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Surrogate(s)						
Decachlorobiphenyl (Pest/8081)	43.6	46-142	%	5.00	05/02/2001 04:41	sl
2,4,5,6-Tetrachloro-m-xylene	35.2	50-125	%	1.00	05/02/2001 00:07	sl
Decachlorobiphenyl (PCB/8082)	30.0	46-142	%	1.00	05/02/2001 00:07	sl

To: **Baseline Environmental**

Test Method: 8081
8082

Attn.: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Organochlorine Pesticides & PCBs (8081/8082)

Sample ID: COMP 5B	Lab Sample ID: 2001-03-0408-030
Project: S9171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001 16:30
Sampled: 03/20/2001	Extracted: 03/23/2001 05:39
Matrix: Soil	QC-Batch: 2001/03/23-01.13 2001/03/23-01.14
Sample/Analysis Flag lrm (See Legend & Note section)	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Aldrin	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Dieldrin	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Endrin aldehyde	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Endrin	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Endrin ketone	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Heptachlor	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Heptachlor epoxide	ND	10	ug/Kg	5.00	05/02/2001 05:12	
4,4'-DDT	ND	10	ug/Kg	5.00	05/02/2001 05:12	
4,4'-DDE	ND	10	ug/Kg	5.00	05/02/2001 05:12	
4,4'-DDD	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Endosulfan I	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Endosulfan II	ND	10	ug/Kg	5.00	05/02/2001 05:12	
alpha-BHC	ND	10	ug/Kg	5.00	05/02/2001 05:12	
beta-BHC	ND	10	ug/Kg	5.00	05/02/2001 05:12	
gamma-BHC (Lindane)	ND	10	ug/Kg	5.00	05/02/2001 05:12	
delta-BHC	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Endosulfan sulfate	ND	10	ug/Kg	5.00	05/02/2001 05:12	
4,4'-Methoxychlor	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Chlordane (Technical)	ND	250	ug/Kg	5.00	05/02/2001 05:12	
alpha-Chlordane	ND	10	ug/Kg	5.00	05/02/2001 05:12	
gamma-Chlordane	ND	10	ug/Kg	5.00	05/02/2001 05:12	
Toxaphene	ND	500	ug/Kg	5.00	05/02/2001 05:12	
Aroclor 1016	ND	50	ug/Kg	1.00	05/02/2001 00:40	
Aroclor 1221	ND	50	ug/Kg	1.00	05/02/2001 00:40	
Aroclor 1232	ND	50	ug/Kg	1.00	05/02/2001 00:40	
Aroclor 1242	ND	50	ug/Kg	1.00	05/02/2001 00:40	
Aroclor 1248	ND	50	ug/Kg	1.00	05/02/2001 00:40	
Aroclor 1254	ND	50	ug/Kg	1.00	05/02/2001 00:40	
Aroclor 1260	ND	50	ug/Kg	1.00	05/02/2001 00:40	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	85.5	50-125	%	5.00	05/02/2001 05:12	

To: **Baseline Environmental**

Test Method: 8081
8082

Attn.: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Organochlorine Pesticides & PCBs (8081/8082)

Sample ID:	COMP 5B	Lab Sample ID:	2001-03-0408-030
Project:	S9171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001 16:30
Sampled:	03/20/2001	Extracted:	03/23/2001 05:39
Matrix:	Soil	QC-Batch:	2001/03/23-01.13 2001/03/23-01.14
Sample/Analysis Flag In (See Legend & Note section)			

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Surrogate(s)						
Decachlorobiphenyl (Pest/8081)	83.2	46-142	%	5.00	05/02/2001 05:12	
2,4,5,6-Tetrachloro-m-xylene	105.3	50-125	%	1.00	05/02/2001 00:40	
Decachlorobiphenyl (PCB/8082)	78.1	46-142	%	1.00	05/02/2001 00:40	

To: **Baseline Environmental**

Test Method: 8082

Attn.: Yane Nordhav

Prep Method: 3550/8082

Batch QC Report

Organochlorine Pesticides & PCBs (8081/8082)

Method Blank**Soil****QC Batch # 2001/03/23-01.14**

MB: 2001/03/23-01.14-001

Date Extracted: 03/23/2001 05:41

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Aroclor 1016	ND	0.05	mg/Kg	03/23/2001 10:37	
Aroclor 1221	ND	0.05	mg/Kg	03/23/2001 10:37	
Aroclor 1232	ND	0.05	mg/Kg	03/23/2001 10:37	
Aroclor 1242	ND	0.05	mg/Kg	03/23/2001 10:37	
Aroclor 1248	ND	0.05	mg/Kg	03/23/2001 10:37	
Aroclor 1254	ND	0.05	mg/Kg	03/23/2001 10:37	
Aroclor 1260	ND	0.05	mg/Kg	03/23/2001 10:37	
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	86.8	50-125	%	03/23/2001 10:37	
Decachlorobiphenyl (PCB/8082)	93.2	46-142	%	03/23/2001 10:37	

To: Baseline Environmental

Test Method: 8081

Attn.: Yane Nordhav

Prep Method: 3550/8081

Batch QC Report

Organochlorine Pesticides & PCBs (8081/8082)

Method Blank

Soil

QC Batch # 2001/03/23-01.13

MB: 2001/03/23-01.13-001

Date Extracted: 03/23/2001 05:39

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Aldrin	ND	2.0	ug/Kg	03/23/2001 12:57	
Dieldrin	ND	2.0	ug/Kg	03/23/2001 12:57	
Endrin aldehyde	ND	2.0	ug/Kg	03/23/2001 12:57	
Endrin	ND	2.0	ug/Kg	03/23/2001 12:57	
Endrin ketone	ND	2.0	ug/Kg	03/23/2001 12:57	
Heptachlor	ND	2.0	ug/Kg	03/23/2001 12:57	
Heptachlor epoxide	ND	2.0	ug/Kg	03/23/2001 12:57	
4,4'-DDT	ND	2.0	ug/Kg	03/23/2001 12:57	
4,4'-DDE	ND	2.0	ug/Kg	03/23/2001 12:57	
4,4'-DDD	ND	2.0	ug/Kg	03/23/2001 12:57	
Endosulfan I	ND	2.0	ug/Kg	03/23/2001 12:57	
Endosulfan II	ND	2.0	ug/Kg	03/23/2001 12:57	
alpha-BHC	ND	2.0	ug/Kg	03/23/2001 12:57	
beta-BHC	ND	2.0	ug/Kg	03/23/2001 12:57	
gamma-BHC (Lindane)	ND	2.0	ug/Kg	03/23/2001 12:57	
delta-BHC	ND	2.0	ug/Kg	03/23/2001 12:57	
Endosulfan sulfate	ND	2.0	ug/Kg	03/23/2001 12:57	
4,4'-Methoxychlor	ND	2.0	ug/Kg	03/23/2001 12:57	
Toxaphene	ND	100	ug/Kg	03/23/2001 12:57	
Chlordane (Technical)	ND	50	ug/Kg	03/23/2001 12:57	
alpha-Chlordane	ND	2.0	ug/Kg	03/23/2001 12:57	
gamma-Chlordane	ND	2.0	ug/Kg	03/23/2001 12:57	
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	85.2	50-125	%	03/23/2001 12:57	
Decachlorobiphenyl (Pest/8081)	72.2	46-142	%	03/23/2001 12:57	

To: **Baseline Environmental**

Test Method: 8082

Attn: Yane Nordhav

Prep Method: 3550/8082

Batch QC Report

Organochlorine Pesticides & PCBs (8081/8082)

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/03/23-01.14	
LCS:	2001/03/23-01.14-002	Extracted:	03/23/2001 05:41	Analyzed	03/23/2001 11:06
LCSD:	2001/03/23-01.14-003	Extracted:	03/23/2001 05:41	Analyzed	03/23/2001 11:34

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Aroclor 1016	0.0661	0.0545	0.0667	0.0667	99.1	81.7	19.2	65-135	30		
Aroclor 1260	0.0653	0.0645	0.0667	0.0667	97.9	96.7	1.2	65-135	30		
Surrogate(s)											
2,4,5,6-Tetrachloro-m-xyl	45.1	40.0	50	50	90.2	80.0		50-125			
Decachlorobiphenyl	46.2	41.7	50	50	92.4	83.4		46-142			

To: **Baseline Environmental**

Test Method: 8081

Attn: Yane Nordhav

Prep Method: 3550/8081

Batch QC Report

Organochlorine Pesticides & PCBs (8081/8082)

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2001/03/23-01.13

LCS: 2001/03/23-01.13-002

Extracted: 03/23/2001 05:39

Analyzed 03/29/2001 02:39

LCSD: 2001/03/23-01.13-003

Extracted: 03/23/2001 05:39

Analyzed 03/29/2001 03:10

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Aldrin	15.5	15.6	16.7	16.7	92.8	93.4	0.6	37-136	25		
Dieldrin	15.1	15.1	16.7	16.7	90.4	90.4	0.0	58-135	35		
Endrin	14.8	14.8	16.7	16.7	88.6	88.6	0.0	58-134	35		
Heptachlor	15.2	15.2	16.7	16.7	91.0	91.0	0.0	40-136	20		
4,4'-DDT	13.2	13.2	16.7	16.7	79.0	79.0	0.0	55-132	35		
gamma-BHC (Lindane)	15.6	15.6	16.7	16.7	93.4	93.4	0.0	37-137	35		
Surrogate(s)											
2,4,5,6-Tetrachloro-m-xyI	41.9	42.3	50	50	83.8	84.6		50-125			
Decachlorobiphenyl	45.2	40.7	50	50	90.4	81.4		46-142			

To: **Baseline Environmental**

Test Method: 8082
8081

Attn: Yane Nordhav

Prep Method: 3550/8081
3550/8082

Legend & Notes

Organochlorine Pesticides & PCBs (8081/8082)

Analysis Flags

lrm

Reporting limits raised due to high level of non-target analyte materials.

Analyte Flags

s

One surrogate recovery out of control, but second surrogate within QC limits confirms test performance.

sl

Surrogate recoveries were lower than QC limit due to matrix interference, confirmed by reanalysis.

BASELINE

5900 Hollis Street, Suite D
Emeryville, CA 94608
Tel: (510) 420-8686 Fax: (510) 420-1707

2001-03-0408

CHAIN OF CUSTODY RECORD

Turn-around Time

Lab

BASELINE Contact Person

Standard
Chromatals
Yane

Project No. 59171-CO		Project Name and Location: Seabreeze Habitat Enhancement										58148				
Samplers: (Signature) <i>William C. Saff</i>				Containers												
Sample ID No. Station	Date:	Time:	Media	No.	Type	None	HCl	NO ₃	SO ₄	Other: Ice	Bunker C (Silica gel cleanup)	PAH (E310)	Title 22 Metals (ICP)	% Solids	DDT + PCBs (E300) Extraction ONLY	Remarks/ Composite
HE-1C, 4-4.5	3/20/01	8:45	Soil	1	stainless											Hold Comp 1C
HE-1C, 5-5.5		8:46														
HE-1C, 6-6.5		8:47														
HE-1C, 7-7.5		8:48														
HE-1B, 6.25-6.75	3/20/01	9:30														Hold Comp 1B
HE-1B, 7.25-7.75		9:31														
HE-1B, 8.25-8.75		9:32														
HE-1B, 8.75-9.25		9:33														
HE-1A, 1.5-2		9:50														Hold Comp 1A
HE-1A, 2.5-3		9:51														
HE-1A, 3.5-4		9:52														
HE-1A, 4.5-5		9:53														
Relinquished by: (Signature) <i>William C. Saff</i>		Date/Time 3/21/01 16:30		Received by: (Signature) <i>Denise Harrington</i>		Date/Time 3/21/01 @ 1630		Conditions of Samples Upon Arrival at Laboratory: 4.5°C								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Remarks:								
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time										

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2001-03-0408
CHAIN OF CUSTODY RECORD

Turn-around Time

Lab

BASELINE Contact Person

Standard:

chronicles

✓ and

Project No.		Project Name and Location:		BASELINE Contact Person																
59171-CO		Seabreeze Habitat Enhancement		JANE																
Samplers: (Signature)				Containers																
Sample ID No. Station				Date:	Time:	Media	No.	Type	None	HCl	NO ₃	SO ₄	Other: Ice	Bunker C (silica gel cleanup)	PAH (E310)	Trace Metals ICP	% Solids	DDT + PCB (E200) Extraction ONLY	Remarks/Composite	
HE-2C, 3.5-4				3/20/01	10:15	Soil	1	stainless												
HE-2C, 4.5-5					10:16															HOLD
HE-2C, 5.5-6					10:17															
HE-2C, 6.5-7				✓	10:18															
HE-2B, 5.75-6.25					10:55															
HE-2B, 6.75-7.25					10:56															
HE-2B, 7.75-8.25					11:18															
HE-2B, 8.25-8.75				✓	11:19															Comp 2B
HE-2A, 2-2.5					11:35															HOLD
HE-2A, 3-3.5					11:36															
HE-2A, 4-4.5					11:37															
HE-2A, 5-5.5				✓	11:59															Comp 2A
Relinquished by: (Signature)				Date/Time		Received by: (Signature)				Date/Time		Conditions of Samples Upon Arrival at Laboratory:								
JANE				3/21/01 16:30		Denise Harrington				3/21/01 16:30										
Relinquished by: (Signature)				Date/Time		Received by: (Signature)				Date/Time		Remarks:								
												* Take sample from bottom of tube								
Relinquished by: (Signature)				Date/Time		Received by: (Signature)				Date/Time										

BASELINE

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2001-03-0408
CHAIN OF CUSTODY RECORD

Turn-around Time

Lab

BASELINE Contact Person

Standard
chromatals
ave

Project No. S9171-CO		Project Name and Location: Seabreeze Habitat Enhancement		Containers		Preservative		Other: Ice		Remarks/Composite															
Samplers: (Signature) <i>William E. Lutz</i>		Sample ID No. Station		Date:	Time:	Media	No.	Type	None	HCl	NO ₃	SO ₄	Other: Ice	Bunker C (silica gel cleanup)		PAH (E310)		Ti+Fe 22 Metals ICP		% Solids		DDT+PCB (GORD) Extraction ONLY		58148	
HE-3B, 5.75-6.25		3/20/01	12:12	Soil	1	stainless																			
HE-3B, 6.75-7.25			12:13																						
HE-3B, 7.75-8.25			12:14																						
HE-3B, 8.25-8.75		✓	12:15																						
HE-3C, 3-3.5			11:50																						
* HE-3C, 4-4.5			11:51																						
HE-3C, 5-5.5			11:52																						
HE-3C, 6-6.5		✓	11:53																						
HE-3A, 2-2.5			13:05																						
* HE-3A, 3-3.5			13:06																						
HE-3A, 4-4.5			13:07																						
HE-3A, 5-5.5		✓	13:08																						
Relinquished by: (Signature) <i>William E. Lutz</i>		Date/Time 3/21/01 16:30		Received by: (Signature) <i>Denise Harrington</i>		Date/Time 3/21/01 16:30		Conditions of Samples Upon Arrival at Laboratory:																	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Remarks:																	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Remarks:																	

BASELINE

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2001-03-0408

CHAIN OF CUSTODY RECORD

Turn-around Time

Lab

BASELINE Contact Person

Standard

Chrom Labs

Jane

Project No. S9171-CO		Project Name and Location: Seabreeze Habitat Enhancement		Containers		Preservative		Other: Ice		Bunker C (Silica gel cleanup)		PAH (E310)		Tithe 22 Metals ICP		% Solids		DDT + PCB (GORD) Extraction ONLY		Remarks/Composite	
Sample ID No. Station	Date:	Time:	Media	No.	Type	None	HCl	NO ₃	SO ₄												
HE-4C, 2.5-3	3/20/01	13:35	Soil	1	stainless																
HE-4C, 3.5-4		13:36																			Hold
HE-4C, 4.5-5		13:37																			} Comp 4C
HE-4C, 5.5-6		13:38																			
HE-4B, 5.5-6		14:10																			} Comp 4B
HE-4B, 6.5-7		14:11																			
HE-4B, 7.5-8		13:55																			} Hold
HE-4B, 8-8.5		13:56																			
HE-4A, 2-2.5		14:20																			Hold
HE-4A, 3-3.5		14:30																			Hold
HE-4A, 2.5-3		14:45																			Hold
HE-4A, 4-4.5		14:55																			4A

Relinquished by: (Signature) William K. Saut	Date/Time 03/24/01/16:30	Received by: (Signature) Denise Harrington	Date/Time 3/21/01 @ 1630	Conditions of Samples Upon Arrival at Laboratory:
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Remarks:
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	

BASELINE

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2001-03-0408

CHAIN OF CUSTODY RECORD

Turn-around Time

Lab

BASELINE Contact Person

Standard

Chromatels

Yane

Project No. S9171-CO		Project Name and Location: Seabreeze Habitat Enhancement												58148				
Samplers: (Signature) <i>[Signature]</i>				Containers										Remarks/ Composite				
Sample ID No. Station	Date:	Time:	Media	No.	Type	None	HCl	NO ₃	SO ₄	Other: Ice	Bunker C (silica gel cleanup)	PAH (E310)	Title 22 Metals ICP			% Solids	DDT + PCB (E300) Extraction Only	
HE-5A, 0-0.5	3/20/01	11:40	Soil	1	stainless												} Comp 5A	
* HE-5A, 0.5-1		11:45																} Hold
HE-5A, 1-1.5		12:07																
HE-5A, 2-2.5		13:30																
HE-5A, 3-3.5	3/21/01																} Comp 5B	
HE-5B, 5-5.5	3/20/01	15:35																} Hold
HE-5B, 6-6.5		15:36																
HE-5B, 7-7.5		15:37																
HE-5B, 7.5-8		15:38															} Hold	

Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 3/21/01 16:30	Received by: (Signature) <i>[Signature]</i>	Date/Time 3/21/01 @ 1630	Conditions of Samples Upon Arrival at Laboratory:
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Remarks:
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	* Take sample from bottom of tube

Tel: (510) 420-8686 Fax: (510) 420-1707

Excavated

2001-03-0408
CHAIN OF CUSTODY RECORD

Turn-around Time

Lab

BASELINE Contact Person

Standard

around chromosome

Bill Scott

[illegible]

2001-03-0408

5814.8

Baseline - Seabreeze Habitat

✓ HE-5A ; 0.5-1.0 Bottom ✓ sample from bottom

✓ HE-3A ; 3-3.5 Bottom ✓

✓ HE-3C ; 4-4.5 " ✓

✓ HE-2A ; 3-3.5 " ✓

✓ HE-2C ; 4.5-5 " ✓

HE-4C 3.5-4 ✓

~~HE-5C ; 4-4.5~~

Baseline Environmental
5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn.: Ms. Yane Nordhav

RECEIVED
APR 19 2001
BASELINE

Project: S9171-CO
Seabreeze Habitat Environment

Dear Ms. Nordhav,

Attached is our report for your samples received on Wednesday March 28, 2001
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after May 12, 2001
unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,



Vincent Vancil

Polynuclear Aromatic Hydrocarbons (PNA)

Baseline Environmental✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-CO

Project: Seabreeze Habitat Environment

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
COMP 5C	Soil	03/28/2001 15:55	4

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID: COMP 5C	Lab Sample ID: 2001-03-0540-004
Project: S9171-CO Seabreeze Habitat Environment	Received: 03/28/2001 18:02
Sampled: 03/28/2001 15:55	Extracted: 03/29/2001 08:37
Matrix: Soil	QC-Batch: 2001/03/29-01.18
	Moisture: 23.5 % (1.3080)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	39	ug/Kg	2.00	04/13/2001 13:21	
Acenaphthylene	ND	26	ug/Kg	2.00	04/13/2001 13:21	
Acenaphthene	ND	26	ug/Kg	2.00	04/13/2001 13:21	
Fluorene	ND	13	ug/Kg	2.00	04/13/2001 13:21	
Phenanthrene	53	13	ug/Kg	2.00	04/13/2001 13:21	
Anthracene	ND	13	ug/Kg	2.00	04/13/2001 13:21	
Fluoranthene	66	13	ug/Kg	2.00	04/13/2001 13:21	
Pyrene	77	13	ug/Kg	2.00	04/13/2001 13:21	
Benzo(a)anthracene	ND	13	ug/Kg	2.00	04/13/2001 13:21	
Chrysene	ND	13	ug/Kg	2.00	04/13/2001 13:21	
Benzo(b)fluoranthene	ND	13	ug/Kg	2.00	04/13/2001 13:21	
Benzo(k)fluoranthene	ND	13	ug/Kg	2.00	04/13/2001 13:21	
Benzo(a)pyrene	ND	13	ug/Kg	2.00	04/13/2001 13:21	
Dibenzo(a,h)anthracene	ND	26	ug/Kg	2.00	04/13/2001 13:21	
Benzo(g,h,i)perylene	ND	26	ug/Kg	2.00	04/13/2001 13:21	
Indeno(1,2,3-cd)pyrene	ND	26	ug/Kg	2.00	04/13/2001 13:21	
Surrogate(s)						
1-Methyl naphthalene	121.0	50-150	%	2.00	04/13/2001 13:21	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Method Blank	Soil	QC Batch # 2001/03/29-01.18
MB: 2001/03/29-01.18-001		Date Extracted: 03/29/2001 08:37

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Naphthalene	ND	15.0	ug/Kg	04/06/2001 17:32	
Acenaphthylene	ND	10	ug/Kg	04/06/2001 17:32	
Acenaphthene	ND	10	ug/Kg	04/06/2001 17:32	
Fluorene	ND	5.0	ug/Kg	04/06/2001 17:32	
Phenanthrene	ND	5.0	ug/Kg	04/06/2001 17:32	
Anthracene	ND	5.0	ug/Kg	04/06/2001 17:32	
Fluoranthene	ND	5.0	ug/Kg	04/06/2001 17:32	
Pyrene	ND	5.0	ug/Kg	04/06/2001 17:32	
Benzo(a)anthracene	ND	5.0	ug/Kg	04/06/2001 17:32	
Chrysene	ND	5.0	ug/Kg	04/06/2001 17:32	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	04/06/2001 17:32	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	04/06/2001 17:32	
Benzo(a)pyrene	ND	5.0	ug/Kg	04/06/2001 17:32	
Dibenzo(a,h)anthracene	ND	10.0	ug/Kg	04/06/2001 17:32	
Benzo(g,h,i)perylene	ND	10.0	ug/Kg	04/06/2001 17:32	
Indeno(1,2,3-cd)pyrene	ND	10.0	ug/Kg	04/06/2001 17:32	
Surrogate(s)					
1-Methyl naphthalene	63.1	50-150	%	04/06/2001 17:32	

To: **Baseline Environmental**

Test Method: 8310

Attn: Yane Nordhav

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2001/03/29-01.18

LCS: 2001/03/29-01.18-002

Extracted: 03/29/2001 08:37

Analyzed 04/06/2001 18:07

LCSD: 2001/03/29-01.18-003

Extracted: 03/29/2001 08:37

Analyzed 04/06/2001 18:42

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Naphthalene	260	216	200	200	130.0	108.0	18.5	50-150	35		
Phenanthrene	193	186	200	200	96.5	93.0	3.7	50-150	35		
Pyrene	171	193	200	200	85.5	96.5	12.1	50-150	35		
Chrysene	184	191	200	200	92.0	95.5	3.7	50-150	35		
Benzo(a)pyrene	140	140	200	200	70.0	70.0	0.0	50-150	35		
Surrogate(s)											
1-Methyl naphthalene	9.49	10.6	15	15	63.3	70.7		50-150			

CAM 17 Metals

Baseline Environmental5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-CO

Project: Seabreeze Habitat Environment

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
COMP 5C	Soil	03/28/2001 15:55	4

To: **Baseline Environmental**Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 Metals

Sample ID:	COMP 5C	Lab Sample ID:	2001-03-0540-004
Project:	S9171-CO Seabreeze Habitat Environment	Received:	03/28/2001 18:02
Sampled:	03/28/2001 15:55	Extracted:	04/03/2001 05:47
Matrix:	Soil	QC-Batch:	2001/04/03-02.15 2001/04/03-03.16
		Moisture:	23.5 % (1.3080)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	1.00	04/03/2001 13:16	
Arsenic	4.1	1.0	mg/Kg	1.00	04/03/2001 13:16	
Barium	56	1.0	mg/Kg	1.00	04/03/2001 13:16	
Beryllium	ND	0.50	mg/Kg	1.00	04/03/2001 13:16	
Cadmium	0.51	0.50	mg/Kg	1.00	04/03/2001 13:16	
Chromium	29	1.0	mg/Kg	1.00	04/03/2001 13:16	
Cobalt	6.6	1.0	mg/Kg	1.00	04/03/2001 13:16	
Copper	31	1.0	mg/Kg	1.00	04/03/2001 13:16	
Lead	27	1.0	mg/Kg	1.00	04/03/2001 13:16	
Molybdenum	ND	1.0	mg/Kg	1.00	04/03/2001 13:16	
Nickel	39	1.0	mg/Kg	1.00	04/03/2001 13:16	
Selenium	ND	2.0	mg/Kg	1.00	04/03/2001 13:16	
Silver	ND	1.0	mg/Kg	1.00	04/03/2001 13:16	
Thallium	ND	1.0	mg/Kg	1.00	04/03/2001 13:16	
Vanadium	34	1.0	mg/Kg	1.00	04/03/2001 13:16	
Zinc	50	1.0	mg/Kg	1.00	04/03/2001 13:16	
Mercury	0.31	0.065	mg/Kg	1.00	04/03/2001 12:32	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-03-0540

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 7471A

Prep Method: 7471A

Batch QC Report

CAM 17 Metals

Method Blank

Soil

QC Batch # 2001/04/03-03.16

MB: 2001/04/03-03.16-069

Date Extracted: 04/03/2001 09:55

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	04/03/2001 12:18	

1220 Quarry Lane * Pleasanton, CA 94566-4756

Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

To: **Baseline Environmental**

Test Method: 6010B

Attn.: Yane Nordhav

Prep Method: 3050B

Batch QC Report

CAM 17 Metals

Method Blank**Soil****QC Batch # 2001/04/03-02.15**

MB: 2001/04/03-02.15-036

Date Extracted: 04/03/2001 05:47

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	04/03/2001 12:29	
Arsenic	ND	1.0	mg/Kg	04/03/2001 12:29	
Barium	ND	1.0	mg/Kg	04/03/2001 12:29	
Beryllium	ND	0.50	mg/Kg	04/03/2001 12:29	
Cadmium	ND	0.50	mg/Kg	04/03/2001 12:29	
Chromium	ND	1.0	mg/Kg	04/03/2001 12:29	
Cobalt	ND	1.0	mg/Kg	04/03/2001 12:29	
Copper	ND	1.0	mg/Kg	04/03/2001 12:29	
Lead	ND	1.0	mg/Kg	04/03/2001 12:29	
Molybdenum	ND	1.0	mg/Kg	04/03/2001 12:29	
Nickel	ND	1.0	mg/Kg	04/03/2001 12:29	
Selenium	ND	2.0	mg/Kg	04/03/2001 12:29	
Silver	ND	1.0	mg/Kg	04/03/2001 12:29	
Thallium	ND	1.0	mg/Kg	04/03/2001 12:29	
Vanadium	ND	1.0	mg/Kg	04/03/2001 12:29	
Zinc	ND	1.0	mg/Kg	04/03/2001 12:29	

To: **Baseline Environmental**

Test Method: 7471A

Attn: Yane Nordhav

Prep Method: 7471A

Batch QC Report

CAM 17 Metals

Laboratory Control Spike (LCS/LCSD)**Soil****QC Batch # 2001/04/03-03.16**

LCS: 2001/04/03-03.16-070

Extracted: 04/03/2001 09:55

Analyzed 04/03/2001 12:19

LCSD: 2001/04/03-03.16-071

Extracted: 04/03/2001 09:55

Analyzed 04/03/2001 12:20

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Mercury	0.477	0.484	0.500	0.500	95.4	96.8	1.5	85-115	20		

To: **Baseline Environmental**

Test Method: 6010B

Attn: Yane Nordhav

Prep Method: 3050B

Batch QC Report

CAM 17 Metals

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/04/03-02.15	
LCS:	2001/04/03-02.15-037	Extracted:	04/03/2001 05:47	Analyzed	04/03/2001 12:33
LCSD:	2001/04/03-02.15-038	Extracted:	04/03/2001 05:47	Analyzed	04/03/2001 12:36

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Antimony	97.7	99.8	100.0	100.0	97.7	99.8	2.1	80-120	20		
Arsenic	102	103	100.0	100.0	102.0	103.0	1.0	80-120	20		
Barium	90.0	93.4	100.0	100.0	90.0	93.4	3.7	80-120	20		
Beryllium	95.4	98.8	100.0	100.0	95.4	98.8	3.5	80-120	20		
Cadmium	91.5	94.8	100.0	100.0	91.5	94.8	3.5	80-120	20		
Chromium	91.6	95.1	100.0	100.0	91.6	95.1	3.7	80-120	20		
Cobalt	94.2	97.7	100.0	100.0	94.2	97.7	3.6	80-120	20		
Copper	98.4	102	100.0	100.0	98.4	102.0	3.6	80-120	20		
Lead	94.1	96.0	100.0	100.0	94.1	96.0	2.0	80-120	20		
Molybdenum	93.3	97.0	100.0	100.0	93.3	97.0	3.9	80-120	20		
Nickel	90.4	93.6	100.0	100.0	90.4	93.6	3.5	80-120	20		
Selenium	90.2	90.4	100.0	100.0	90.2	90.4	0.2	80-120	20		
Silver	93.2	96.7	100.0	100.0	93.2	96.7	3.7	80-120	20		
Thallium	91.1	93.6	100.0	100.0	91.1	93.6	2.7	80-120	20		
Vanadium	94.8	98.5	100.0	100.0	94.8	98.5	3.8	80-120	20		
Zinc	94.7	98.1	100.0	100.0	94.7	98.1	3.5	80-120	20		

per cent Moisture

Baseline Environmental

✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-CO

Project: Seabreeze Habitat Environment

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
COMP 5C	Soil	03/28/2001 15:55	4

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	COMP 5C	Lab Sample ID:	2001-03-0540-004
Project:	S9171-CO Seabreeze Habitat Environment	Received:	03/28/2001 18:02
Sampled:	03/28/2001 15:55	Extracted:	04/02/2001 09:00
Matrix:	Soil	QC-Batch:	2001/04/03-02.35
		Moisture:	23.5 % (1.3080)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	24	0.10	%	1.00	04/03/2001 10:00	

To: **Baseline Environmental**
Attn.: Yane Nordhav

Test Method:
Prep Method: Moisture

Batch QC Report
per cent Moisture

Method Blank	Soil	QC Batch # 2001/04/03-02.35
MB: 2001/04/03-02.35-001		Date Extracted: 04/03/2001 10:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Moisture, percent	ND	0.1	%	04/03/2001 10:00	

TEPH w/ Silica Gel Clean-up

Baseline Environmental

✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008
Phone: (510) 420-8686 Fax: (510) 420-1707

Attn: Yane Nordhav

Project #: S9171-CO

Project: Seabreeze Habitat Environment

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
COMP 5C	Soil	03/28/2001 15:55	4

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-03-0540

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	COMP 5C	Lab Sample ID:	2001-03-0540-004
Project:	S9171-CO Seabreeze Habitat Environment	Received:	03/28/2001 18:02
Sampled:	03/28/2001 15:55	Extracted:	03/30/2001 08:49
Matrix:	Soil	QC-Batch:	2001/03/30-01.10
		Moisture:	23.5 % (1.3080)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	65	mg/Kg	1.00	04/03/2001 17:07	
Surrogate(s) o-Terphenyl	76.7	60-130	%	1.00	04/03/2001 17:07	

To: **Baseline Environmental**

Test Method: 8015M

Attn.: Yane Nordhav

Prep Method: 3550/8015M

Batch QC Report

TEPH w/ Silica Gel Clean-up

Method Blank**Soil****QC Batch # 2001/03/30-01.10**

MB: 2001/03/30-01.10-001

Date Extracted: 03/30/2001 08:49

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	04/03/2001 20:19	
Bunker-C	ND	50	mg/Kg	04/03/2001 20:19	
Surrogate(s)					
o-Terphenyl	75.5	60-130	%	04/03/2001 20:19	

To: **Baseline Environmental**

Test Method: 8015M

Attn: Yane Nordhav

Prep Method: 3550/8015M

Batch QC Report

TEPH w/ Silica Gel Clean-up

Laboratory Control Spike (LCS/LCSD)		Soil	QC Batch # 2001/03/30-01.10	
LCS:	2001/03/30-01.10-002	Extracted: 03/30/2001 08:49	Analyzed	04/03/2001 14:49
LCSD:	2001/03/30-01.10-003	Extracted: 03/30/2001 08:49	Analyzed	04/03/2001 15:32

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Diesel	38.0	37.7	41.7	41.7	91.1	90.4	0.8	60-130	25		
Surrogate(s)											
o-Terphenyl	24.3	23.3	20.0	20.0	121.5	116.5		60-130			

BASELINE

5900 Hollis Street, Suite D
Emeryville, CA 94608
Tel: (510) 420-8686 Fax: (510) 420-1707

2001-03-0540

CHAIN OF CUSTODY RECORD

Turnaround Time

BASELINE Contact Person

58290

Standard
SQL Chromatols
Yane

Project No. 59171-CO		Project Name and Location: Seabreeze Habitat Enhancement																					
Samplers: (Signature) <i>Michael K. Scott</i>				Containers										<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Bunker C (silicagel)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PAH (8310)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Tilte 22 Metals ICP</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">10 solids</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">DPT+PCB (8080) Extraction ONLY</div> </div>									
Sample ID No. Station	Date:	Time:	Media	No.	Type	None	HCl	NO ₃	SO ₄	Other:	Ice	Remarks/ Composite											
HE-5C; 2-2.5	3/20/01	15:00	soil	1	stainless						X							Hold					
HE-5C; 3-3.5		15:15																Hold					
HE-5C; 3.5-4		15:56																Hold					
HE-5C; 4-4.5		15:55																Hold					
HE-5C; 5.5-6.0	3/28/01	11:00	soil	1								X	X	X	X			Comp 5C					
HE-5C; 6.5-7.0		11:03																					
HE-5C; 7.5-8.0		11:06																Hold					
HE-4C; 6.5-7.0		10:42																Hold					
HE-3A; 7-7.5		10:11																Hold					
HE-3A; 6-6.5		10:10																Hold					
HE-3C; 7-7.5		9:24																Hold					
HE-2A; 6-6.5		9:05																Hold					
HE-2C; 7.5-8.0		8:48																Hold					
HE-1A; 5.5-6.0		8:29	soil	1														Hold					
HE-1C; 8-8.5	3/28/01	8:11	soil	1	stainless						X							Hold					
Relinquished by: (Signature) <i>Michael F. Scott</i>		Date/Time 3/28/01		Received by: (Signature) <i>[Signature]</i>				Date/Time 3/28/01		Conditions of Samples Upon Arrival at Laboratory:													
Relinquished by: (Signature) <i>[Signature]</i>		Date/Time 3/28/01		Received by: (Signature) <i>Debbie Harrington</i>				Date/Time 3/28/01 @ 1802		Remarks:													
Relinquished by: (Signature)		Date/Time		Received by: (Signature)				Date/Time		4.2°C													

Baseline Environmental
5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn.: Ms. Yane Nordhav

Project: 59171-CO
Seabreeze Habitat Enhancement

Dear Ms. Nordhav,

Attached is our report for your samples received on Wednesday March 21, 2001
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after May 5, 2001
unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,



Vincent Vancil

Polynuclear Aromatic Hydrocarbons (PNA)

Baseline Environmental✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: 59171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-4B; 8-8.5	Soil	03/21/2001	1
HE-4C; 6.5-7	Soil	03/28/2001	2
HE-5A; 3-3.5	Soil	03/21/2001	3

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID: HE-4B; 8-8.5	Lab Sample ID: 2001-04-0217-001
Project: 59171-CO Seabreeze Habitat Enhancement	Received: 03/21/2001
Sampled: 03/21/2001	Extracted: 04/11/2001 13:56
Matrix: Soil	QC-Batch: 2001/04/11-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	15	ug/Kg	1.00	04/19/2001 12:47	
Acenaphthylene	ND	10	ug/Kg	1.00	04/19/2001 12:47	
Acenaphthene	ND	10	ug/Kg	1.00	04/19/2001 12:47	
Fluorene	ND	5.0	ug/Kg	1.00	04/19/2001 12:47	
Phenanthrene	ND	5.0	ug/Kg	1.00	04/19/2001 12:47	
Anthracene	ND	5.0	ug/Kg	1.00	04/19/2001 12:47	
Fluoranthene	8.9	5.0	ug/Kg	1.00	04/19/2001 12:47	
Pyrene	ND	5.0	ug/Kg	1.00	04/19/2001 12:47	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	04/19/2001 12:47	
Chrysene	ND	5.0	ug/Kg	1.00	04/19/2001 12:47	
Benzo(b)fluoranthene	5.1	5.0	ug/Kg	1.00	04/19/2001 12:47	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	04/19/2001 12:47	
Benzo(a)pyrene	9.7	5.0	ug/Kg	1.00	04/19/2001 12:47	
Dibenzo(a,h)anthracene	ND	10	ug/Kg	1.00	04/19/2001 12:47	
Benzo(g,h,i)perylene	ND	10	ug/Kg	1.00	04/19/2001 12:47	
Indeno(1,2,3-cd)pyrene	ND	10	ug/Kg	1.00	04/19/2001 12:47	
Surrogate(s)						
1-Methyl naphthalene	55.8	50-150	%	1.00	04/19/2001 12:47	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	HE-4C; 6.5-7	Lab Sample ID:	2001-04-0217-002
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/28/2001	Extracted:	04/11/2001 13:56
Matrix:	Soil	QC-Batch:	2001/04/11-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	30	ug/Kg	2.00	04/17/2001 02:42	
Acenaphthylene	ND	20	ug/Kg	2.00	04/17/2001 02:42	
Acenaphthene	ND	20	ug/Kg	2.00	04/17/2001 02:42	
Fluorene	ND	10	ug/Kg	2.00	04/17/2001 02:42	
Phenanthrene	52	10	ug/Kg	2.00	04/17/2001 02:42	
Anthracene	ND	10	ug/Kg	2.00	04/17/2001 02:42	
Fluoranthene	96	10	ug/Kg	2.00	04/17/2001 02:42	
Pyrene	42	10	ug/Kg	2.00	04/17/2001 02:42	
Benzo(a)anthracene	ND	10	ug/Kg	2.00	04/17/2001 02:42	
Chrysene	ND	10	ug/Kg	2.00	04/17/2001 02:42	
Benzo(b)fluoranthene	ND	10	ug/Kg	2.00	04/17/2001 02:42	
Benzo(k)fluoranthene	ND	10	ug/Kg	2.00	04/17/2001 02:42	
Benzo(a)pyrene	ND	10	ug/Kg	2.00	04/17/2001 02:42	
Dibenzo(a,h)anthracene	ND	20	ug/Kg	2.00	04/17/2001 02:42	
Benzo(g,h,i)perylene	ND	20	ug/Kg	2.00	04/17/2001 02:42	
Indeno(1,2,3-cd)pyrene	ND	20	ug/Kg	2.00	04/17/2001 02:42	
Surrogate(s)						
1-Methyl naphthalene	52.6	50-150	%	2.00	04/17/2001 02:42	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	HE-5A; 3-3.5	Lab Sample ID:	2001-04-0217-003
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/21/2001	Extracted:	04/11/2001 13:56
Matrix:	Soil	QC-Batch:	2001/04/11-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	17	15	ug/Kg	1.00	04/17/2001 03:12	
Acenaphthylene	ND	10	ug/Kg	1.00	04/17/2001 03:12	
Acenaphthene	ND	10	ug/Kg	1.00	04/17/2001 03:12	
Fluorene	ND	5.0	ug/Kg	1.00	04/17/2001 03:12	
Phenanthrene	ND	5.0	ug/Kg	1.00	04/17/2001 03:12	
Anthracene	ND	5.0	ug/Kg	1.00	04/17/2001 03:12	
Fluoranthene	11	5.0	ug/Kg	1.00	04/17/2001 03:12	
Pyrene	ND	5.0	ug/Kg	1.00	04/17/2001 03:12	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	04/17/2001 03:12	
Chrysene	ND	5.0	ug/Kg	1.00	04/17/2001 03:12	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	1.00	04/17/2001 03:12	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	04/17/2001 03:12	
Benzo(a)pyrene	ND	5.0	ug/Kg	1.00	04/17/2001 03:12	
Dibenzo(a,h)anthracene	ND	10	ug/Kg	1.00	04/17/2001 03:12	
Benzo(g,h,i)perylene	ND	10	ug/Kg	1.00	04/17/2001 03:12	
Indeno(1,2,3-cd)pyrene	ND	10	ug/Kg	1.00	04/17/2001 03:12	
Surrogate(s)						
1-Methyl naphthalene	86.2	50-150	%	1.00	04/17/2001 03:12	

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Method Blank	Soil	QC Batch # 2001/04/11-01.18
MB: 2001/04/11-01.18-001		Date Extracted: 04/11/2001 13:56

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Naphthalene	ND	15.0	ug/Kg	04/16/2001 23:41	
Acenaphthylene	ND	10	ug/Kg	04/16/2001 23:41	
Acenaphthene	ND	10	ug/Kg	04/16/2001 23:41	
Fluorene	ND	5.0	ug/Kg	04/16/2001 23:41	
Phenanthrene	ND	5.0	ug/Kg	04/16/2001 23:41	
Anthracene	ND	5.0	ug/Kg	04/16/2001 23:41	
Fluoranthene	ND	5.0	ug/Kg	04/16/2001 23:41	
Pyrene	ND	5.0	ug/Kg	04/16/2001 23:41	
Benzo(a)anthracene	ND	5.0	ug/Kg	04/16/2001 23:41	
Chrysene	ND	5.0	ug/Kg	04/16/2001 23:41	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	04/16/2001 23:41	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	04/16/2001 23:41	
Benzo(a)pyrene	ND	5.0	ug/Kg	04/16/2001 23:41	
Dibenzo(a,h)anthracene	ND	10.0	ug/Kg	04/16/2001 23:41	
Benzo(g,h,i)perylene	ND	10.0	ug/Kg	04/16/2001 23:41	
Indeno(1,2,3-cd)pyrene	ND	10.0	ug/Kg	04/16/2001 23:41	
Surrogate(s)					
1-Methyl naphthalene	71.3	50-150	%	04/16/2001 23:41	

To: **Baseline Environmental**

Test Method: 8310

Attn: Yane Nordhav

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Laboratory Control Spike (LCS/LCSD)		Soil	QC Batch # 2001/04/11-01.18	
LCS:	2001/04/11-01.18-002	Extracted: 04/11/2001 13:56	Analyzed	04/17/2001 00:11
LCSD:	2001/04/11-01.18-003	Extracted: 04/11/2001 13:56	Analyzed	04/17/2001 00:42

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Naphthalene	171	168	200	200	85.5	84.0	1.8	50-150	35		
Phenanthrene	153	148	200	200	76.5	74.0	3.3	50-150	35		
Pyrene	162	159	200	200	81.0	79.5	1.9	50-150	35		
Chrysene	167	168	200	200	83.5	84.0	0.6	50-150	35		
Benzo(a)pyrene	172	166	200	200	86.0	83.0	3.6	50-150	35		
Surrogate(s)											
1-Methyl naphthalene	14.0	11.7	15	15	93.3	78.0		50-150			

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Matrix Spike (MS / MSD)

Soil

QC Batch # 2001/04/11-01.18

Sample ID: **HE-4C; 6.5-7**

Lab Sample ID: 2001-04-0217-002

MS: 2001/04/11-01.18-004 Extracted: 04/11/2001 13:56 Analyzed: 04/17/2001 01:12 Dilution: 2.0

MSD: 2001/04/11-01.18-005 Extracted: 04/11/2001 13:56 Analyzed: 04/17/2001 01:42 Dilution: 1.0

Compound	Conc. [ug/Kg]			Exp. Conc. [ug/Kg]		Recovery [%]			RPD		Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]			Recovery	RPD	MS	MSD
Naphthalene	89.6	45.7	ND	199	200	45.0	22.9	65.1	50-150	35				
Phenanthrene	162	103	52.4	199	200	55.1	25.3	74.1	50-150	35				
Pyrene	144	104	42.0	199	200	51.3	31.0	49.3	50-150	35				
Chrysene	213	141	ND	199	200	107.0	70.5	41.1	50-150	35				
Benzo(a)pyrene	193	119	ND	199	200	97.0	59.5	47.9	50-150	35				
Surrogate(s)														
1-Methyl naphthalene	13.2	8.48		15	15	88.0	56.5		50-150					

CAM 17 Metals

Baseline Environmental✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: 59171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-4B; 8-8.5	Soil	03/21/2001	1
HE-4C; 6.5-7	Soil	03/28/2001	2
HE-5A; 3-3.5	Soil	03/21/2001	3

To: **Baseline Environmental**Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 Metals

Sample ID:	HE-4B; 8-8.5	Lab Sample ID:	2001-04-0217-001
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/21/2001	Extracted:	04/16/2001 12:04
Matrix:	Soil	QC-Batch:	2001/04/16-09.15 2001/04/17-02.16

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	1.00	04/19/2001 21:19	
Arsenic	2.0	1.0	mg/Kg	1.00	04/19/2001 21:19	
Barium	28	1.0	mg/Kg	1.00	04/19/2001 21:19	
Beryllium	ND	0.50	mg/Kg	1.00	04/19/2001 21:19	
Cadmium	1.2	0.50	mg/Kg	1.00	04/19/2001 21:19	
Chromium	36	1.0	mg/Kg	1.00	04/19/2001 21:19	
Cobalt	6.1	1.0	mg/Kg	1.00	04/19/2001 21:19	
Copper	24	1.0	mg/Kg	1.00	04/19/2001 21:19	
Lead	16	1.0	mg/Kg	1.00	04/19/2001 21:19	
Molybdenum	ND	1.0	mg/Kg	1.00	04/19/2001 21:19	
Nickel	37	1.0	mg/Kg	1.00	04/19/2001 21:19	
Selenium	ND	2.0	mg/Kg	1.00	04/19/2001 21:19	
Silver	ND	1.0	mg/Kg	1.00	04/19/2001 21:19	
Thallium	ND	1.0	mg/Kg	1.00	04/19/2001 21:19	
Vanadium	30	1.0	mg/Kg	1.00	04/19/2001 21:19	
Zinc	42	1.0	mg/Kg	1.00	04/19/2001 21:19	
Mercury	0.065	0.050	mg/Kg	1.00	04/17/2001 12:45	

To: **Baseline Environmental**Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 Metals

Sample ID:	HE-4C; 6.5-7	Lab Sample ID:	2001-04-0217-002
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/28/2001	Extracted:	04/16/2001 12:04
Matrix:	Soil	QC-Batch:	2001/04/16-09.15 2001/04/17-02.16

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	1.00	04/19/2001 21:22	
Arsenic	3.9	1.0	mg/Kg	1.00	04/19/2001 21:22	
Barium	300	1.0	mg/Kg	1.00	04/19/2001 21:22	
Beryllium	ND	0.50	mg/Kg	1.00	04/19/2001 21:22	
Cadmium	1.7	0.50	mg/Kg	1.00	04/19/2001 21:22	
Chromium	36	1.0	mg/Kg	1.00	04/19/2001 21:22	
Cobalt	4.6	1.0	mg/Kg	1.00	04/19/2001 21:22	
Copper	430	1.0	mg/Kg	1.00	04/19/2001 21:22	
Lead	490	1.0	mg/Kg	1.00	04/19/2001 21:22	
Molybdenum	1.1	1.0	mg/Kg	1.00	04/19/2001 21:22	
Nickel	49	1.0	mg/Kg	1.00	04/19/2001 21:22	
Selenium	ND	2.0	mg/Kg	1.00	04/19/2001 21:22	
Silver	1.5	1.0	mg/Kg	1.00	04/19/2001 21:22	
Thallium	ND	1.0	mg/Kg	1.00	04/19/2001 21:22	
Vanadium	39	1.0	mg/Kg	1.00	04/19/2001 21:22	
Zinc	390	1.0	mg/Kg	1.00	04/19/2001 21:22	
Mercury	0.19	0.050	mg/Kg	1.00	04/17/2001 12:46	

To: **Baseline Environmental**Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 Metals

Sample ID:	HE-5A; 3-3.5	Lab Sample ID:	2001-04-0217-003
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/21/2001	Extracted:	04/16/2001 12:04
Matrix:	Soil	QC-Batch:	2001/04/16-09.15 2001/04/17-02.16

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	1.00	04/19/2001 21:26	
Arsenic	9.5	1.0	mg/Kg	1.00	04/19/2001 21:26	
Barium	120	1.0	mg/Kg	1.00	04/19/2001 21:26	
Beryllium	ND	0.50	mg/Kg	1.00	04/19/2001 21:26	
Cadmium	0.95	0.50	mg/Kg	1.00	04/19/2001 21:26	
Chromium	30	1.0	mg/Kg	1.00	04/19/2001 21:26	
Cobalt	8.0	1.0	mg/Kg	1.00	04/19/2001 21:26	
Copper	170	1.0	mg/Kg	1.00	04/19/2001 21:26	
Lead	170	1.0	mg/Kg	1.00	04/19/2001 21:26	
Molybdenum	ND	1.0	mg/Kg	1.00	04/19/2001 21:26	
Nickel	44	1.0	mg/Kg	1.00	04/19/2001 21:26	
Selenium	ND	2.0	mg/Kg	1.00	04/19/2001 21:26	
Silver	ND	1.0	mg/Kg	1.00	04/19/2001 21:26	
Thallium	ND	1.0	mg/Kg	1.00	04/19/2001 21:26	
Vanadium	40	1.0	mg/Kg	1.00	04/19/2001 21:26	
Zinc	120	1.0	mg/Kg	1.00	04/19/2001 21:26	
Mercury	0.50	0.050	mg/Kg	1.00	04/17/2001 12:50	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 7471A

Prep Method: 7471A

Batch QC Report

CAM 17 Metals

Method Blank	Soil	QC Batch # 2001/04/17-02.16
MB: 2001/04/17-02.16-064		Date Extracted: 04/17/2001 09:37

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	04/17/2001 12:21	

To: **Baseline Environmental**

Test Method: 6010B

Attn.: Yane Nordhav

Prep Method: 3050B

Batch QC Report
CAM 17 Metals**Method Blank****Soil****QC Batch # 2001/04/16-09.15**

MB: 2001/04/16-09.15-018

Date Extracted: 04/16/2001 12:04

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	04/19/2001 20:04	
Arsenic	ND	1.0	mg/Kg	04/19/2001 20:04	
Barium	ND	1.0	mg/Kg	04/19/2001 20:04	
Beryllium	ND	0.50	mg/Kg	04/19/2001 20:04	
Cadmium	ND	0.50	mg/Kg	04/19/2001 20:04	
Chromium	ND	1.0	mg/Kg	04/19/2001 20:04	
Cobalt	ND	1.0	mg/Kg	04/19/2001 20:04	
Copper	ND	1.0	mg/Kg	04/19/2001 20:04	
Lead	ND	1.0	mg/Kg	04/19/2001 20:04	
Molybdenum	ND	1.0	mg/Kg	04/19/2001 20:04	
Nickel	ND	1.0	mg/Kg	04/19/2001 20:04	
Selenium	ND	2.0	mg/Kg	04/19/2001 20:04	
Silver	ND	1.0	mg/Kg	04/19/2001 20:04	
Thallium	ND	1.0	mg/Kg	04/19/2001 20:04	
Vanadium	ND	1.0	mg/Kg	04/19/2001 20:04	
Zinc	ND	1.0	mg/Kg	04/19/2001 20:04	

To: **Baseline Environmental**

Test Method: 7471A

Attn: Yane Nordhav

Prep Method: 7471A

Batch QC Report

CAM 17 Metals

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/04/17-02.16	
LCS:	2001/04/17-02.16-065	Extracted:	04/17/2001 09:37	Analyzed	04/17/2001 12:22
LCSD:	2001/04/17-02.16-066	Extracted:	04/17/2001 09:37	Analyzed	04/17/2001 12:23

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Mercury	0.502	0.505	0.500	0.500	100.4	101.0	0.6	85-115	20		

To: **Baseline Environmental**

Test Method: 6010B

Attn: Yane Nordhav

Prep Method: 3050B

Batch QC Report

CAM 17 Metals

Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 2001/04/16-09.15

LCS: 2001/04/16-09.15-019

Extracted: 04/16/2001 12:04

Analyzed 04/19/2001 20:09

LCSD: 2001/04/16-09.15-020

Extracted: 04/16/2001 12:04

Analyzed 04/19/2001 20:13

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Antimony	90.9	91.4	100.0	100.0	90.9	91.4	0.5	80-120	20		
Arsenic	94.5	94.5	100.0	100.0	94.5	94.5	0.0	80-120	20		
Barium	95.5	95.8	100.0	100.0	95.5	95.8	0.3	80-120	20		
Beryllium	91.7	91.8	100.0	100.0	91.7	91.8	0.1	80-120	20		
Cadmium	92.3	92.4	100.0	100.0	92.3	92.4	0.1	80-120	20		
Chromium	94.4	94.6	100.0	100.0	94.4	94.6	0.2	80-120	20		
Cobalt	93.3	93.6	100.0	100.0	93.3	93.6	0.3	80-120	20		
Copper	94.7	95.2	100.0	100.0	94.7	95.2	0.5	80-120	20		
Lead	92.0	92.4	100.0	100.0	92.0	92.4	0.4	80-120	20		
Molybdenum	95.0	95.7	100.0	100.0	95.0	95.7	0.7	80-120	20		
Nickel	93.8	94.1	100.0	100.0	93.8	94.1	0.3	80-120	20		
Selenium	88.9	89.9	100.0	100.0	88.9	89.9	1.1	80-120	20		
Silver	94.0	94.3	100.0	100.0	94.0	94.3	0.3	80-120	20		
Thallium	93.5	94.1	100.0	100.0	93.5	94.1	0.6	80-120	20		
Vanadium	97.0	97.2	100.0	100.0	97.0	97.2	0.2	80-120	20		
Zinc	89.2	89.5	100.0	100.0	89.2	89.5	0.3	80-120	20		

per cent Moisture

Baseline Environmental✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: 59171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-4B; 8-8.5	Soil	03/21/2001	1
HE-4C; 6.5-7	Soil	03/28/2001	2
HE-5A; 3-3.5	Soil	03/21/2001	3

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-04-0217

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	HE-4B; 8-8.5	Lab Sample ID:	2001-04-0217-001
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/21/2001	Extracted:	04/16/2001
Matrix:	Soil	QC-Batch:	2001/04/17-02.35

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	49	0.10	%	1.00	04/16/2001	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-04-0217

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	HE-4C; 6.5-7	Lab Sample ID:	2001-04-0217-002
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/28/2001	Extracted:	04/16/2001
Matrix:	Soil	QC-Batch:	2001/04/17-02.35

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	39	0.10	%	1.00	04/16/2001	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

per cent Moisture

Sample ID:	HE-5A; 3-3.5	Lab Sample ID:	2001-04-0217-003
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/21/2001	Extracted:	04/16/2001
Matrix:	Soil	QC-Batch:	2001/04/17-02.35

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Moisture, percent	11	0.10	%	1.00	04/16/2001	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method:

Prep Method: Moisture

Batch QC Report
per cent Moisture

Method Blank	Soil	QC Batch # 2001/04/17-02.35
MB: 2001/04/17-02.35-001		Date Extracted: 04/16/2001

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Moisture, percent	ND	0.1	%	04/16/2001	

STL ChromaLab

Environmental Services (CA 1094)

REVISED

RECEIVED Submission #: 2001-04-0217

MAY 04 2001

BASELINE

TEPH w/ Silica Gel Clean-up

Baseline Environmental



5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: 59171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-4B; 8-8.5	Soil	03/21/2001	1
HE-4C; 6.5-7	Soil	03/28/2001	2
HE-5A; 3-3.5	Soil	03/21/2001	3

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-04-0217

To: **Baseline Environmental**

Test Method: 8015M

Attn.: Yane Nordhav

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	HE-4B; 8-8.5	Lab Sample ID:	2001-04-0217-001
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/21/2001	Extracted:	04/11/2001 09:07
Matrix:	Soil	QC-Batch:	2001/04/11-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	50	mg/Kg	1.00	04/12/2001 18:30	
Surrogate(s) o-Terphenyl	87.4	60-130	%	1.00	04/12/2001 18:30	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-04-0217

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	HE-4C; 6.5-7	Lab Sample ID:	2001-04-0217-002
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/28/2001	Extracted:	04/11/2001 09:07
Matrix:	Soil	QC-Batch:	2001/04/11-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	500	50	mg/Kg	1.00	04/12/2001 16:35	rd,nbc
Surrogate(s) o-Terphenyl	84.4	60-130	%	1.00	04/12/2001 16:35	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-04-0217

To: **Baseline Environmental**

Test Method: 8015M

Attn.: Yane Nordhav

Prep Method: 3550/8015M

TEPH w/ Silica Gel Clean-up

Sample ID:	HE-5A; 3-3.5	Lab Sample ID:	2001-04-0217-003
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/21/2001	Extracted:	04/11/2001 09:07
Matrix:	Soil	QC-Batch:	2001/04/11-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	50	mg/Kg	1.00	04/12/2001 17:52	
<i>Surrogate(s)</i> o-Terphenyl	97.7	60-130	%	1.00	04/12/2001 17:52	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-04-0217

To: **Baseline Environmental**

Test Method: 8015M

Attn.: Yane Nordhav

Prep Method: 3550/8015M

Batch QC Report
TEPH w/ Silica Gel Clean-up

Method Blank	Soil	QC Batch # 2001/04/11-01.10
MB: 2001/04/11-01.10-001		Date Extracted: 04/11/2001 09:07

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	04/12/2001 09:23	
Bunker-C	ND	50	mg/Kg	04/12/2001 09:23	
Surrogate(s) o-Terphenyl	75.5	60-130	%	04/12/2001 09:23	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-04-0217

To: **Baseline Environmental**

Test Method: 8015M

Attn: Yane Nordhav

Prep Method: 3550/8015M

Batch QC Report

TEPH w/ Silica Gel Clean-up

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/04/11-01.10	
LCS:	2001/04/11-01.10-002	Extracted:	04/11/2001 09:07	Analyzed	04/16/2001 10:56
LCSD:	2001/04/11-01.10-003	Extracted:	04/11/2001 09:07	Analyzed	04/16/2001 11:34

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Diesel	38.7	38.2	41.7	41.7	92.8	91.6	1.3	60-130	25		
Surrogate(s)											
o-Terphenyl	23.4	23.5	20.0	20.0	117.0	117.5		60-130			

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-04-0217

To: **Baseline Environmental**

Attn: Yane Nordhav

Test Method: 8015M

Prep Method: 3550/8015M

Legend & Notes

TEPH w/ Silica Gel Clean-up

Analysis Notes

HE-4C; 6.5-7 (Lab# 2001-04-0217-002)

nbc= Hydrocarbons reported are in the Bunker c range and do not match our Bunker C reference.

Analyte Flags

rd

Quantitation for the above analyte is based on the response factor of Diesel

CAM W.E.T. (STLC) Lead

Baseline Environmental☒ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: 59171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
COMP 4B	Soil	03/20/2001	4
COMP 5B	Soil	03/20/2001	5

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-04-0217

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3005A

CAM W.E.T. (STLC) Lead

Sample ID:	COMP 4B	Lab Sample ID:	2001-04-0217-004
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/20/2001	Extracted:	04/16/2001 07:32
Matrix:	Soil	QC-Batch:	2001/04/16-03.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	4.6	0.50	mg/L	1.00	04/16/2001 17:03	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3005A

CAM W.E.T. (STLC) Lead

Sample ID:	COMP 5B	Lab Sample ID:	2001-04-0217-005
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/20/2001	Extracted:	04/16/2001 07:32
Matrix:	Soil	QC-Batch:	2001/04/16-03.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	1.4	0.50	mg/L	1.00	04/16/2001 17:03	

To: **Baseline Environmental**

Test Method: 6010B

Attn.: Yane Nordhav

Prep Method: 3005A

Batch QC Report
CAM W.E.T. (STLC) Lead

Method Blank	Soil	QC Batch # 2001/04/16-03.15
MB: 2001/04/16-03.15-032		Date Extracted: 04/16/2001 07:32

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	0.50	mg/L	04/16/2001 16:56	

To: **Baseline Environmental**

Test Method: 6010B

Attn: Yane Nordhav

Prep Method: 3005A

Batch QC Report

CAM W.E.T. (STLC) Lead

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/04/16-03.15	
LCS:	2001/04/16-03.15-033	Extracted:	04/16/2001 07:32	Analyzed	04/16/2001 16:56
LCSD:	2001/04/16-03.15-034	Extracted:	04/16/2001 07:32	Analyzed	04/16/2001 16:57

Compound	Conc. [mg/L]		Exp.Conc. [mg/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Lead	5.57	5.39	5.00	5.00	111.4	107.8	3.3	80-120	20		

X-Sender: baseline#mail.crl.com@wingate (Unverified)
X-Mailer: QUALCOMM Windows Eudora Pro Version 4.2.2
Date: Tue, 10 Apr 2001 10:29:22 -0700
To: vvancil@chromalab.com
From: Lydia Huang <lydia@baseline-env.com>
Subject: Additional analysis request for 2001-03-0408
X-Loop-Detect: 1

2001-04-0217

Hi Vincent,

Please perform the following additional analyses for samples from this project.

HE-4B; 8-8.5, HE-4C; 6.5-7, and HE-5A; 3-3.5 (3 samples discretely)-
PAH by 8310, TEPH w/ silica gel for Bunker C, Title 22 metals by ICP, and percent solids.

COMP 4B and COMP5B (use same extractant as previously used for total metals analysis) -
WET lead

Please respond to my earlier question of what is the lowest reporting limit that Chromalab could achieve for selenium using ICP in soil samples. I understand from a different lab that their reporting limit for selenium using ICP in soil samples is routinely 0.25 mg/kg. Could you explain to me why Chromalab's normal reporting limit is nearly an order of magnitude higher? Thanks.

-Lydia

-Lydia

Environmental Services (SDB) (DOI-IS 1094)

2004-04-0217
New Submission No: _____

New Submission No:

Order No: 58571

Name of Caller: Lydia

Call Date: 4/10/01 Time:

Client Name: Baseline

Project Mgr: Yane Nordhav

Project Name: Seabreeze Habitat Enhancement

Project No: 59171-CO

PO#: _____

Date Received: 3-21-01

Submission No: 2001-03-0408
03-540

Add on Due Date: 5 day Date Sampled

Comments: TEPA with silica gel.

For STLC use sample composite as previous samples.

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.
H E-4B: 8-85	3/21		Soil	NM
H E-4C: 6-97	3/28			
H E SA: 3-35	3/20/01		Soil	
COMP 4B	3/20/01	NM		a
COMP 5B	3/20/01	NM	d	a

Project No:

S9171-CO

PO#:

Date Received:

3-21-01

Submission No:

2001-03-0408
03-540

ANALYSIS REPORT

TPH-(EPA 8015, 8020)
☐ Gas w/☐ BTEX CMTE

PURGEABLE AROMATICS
BTX (EPA 8020)

TPH-Diesel (EPA 8015M)

TEPH (EPA 8015M) *Bunker*
☒ Diesel ☐ MLO ☐ Other

PURGEABLE HALOCARBONS,
(HVOCs) (EPA 8010)

VOLATILE ORGANICS
(VOCs) (EPA 8260)

SEMI-VOLATILES
(EPA 8270)

Oil & Grease
☐ Petrol ☐ Total ☐ 1664

*EXTRACT + HOLD
PEST./PCBS*

☐ PESTICIDES(EPA 8080)
☐ PCB'S (EPA 8080)

PNA's by ☐ 8270
☒ 8310

☐ Spec Cond.
☐ TSS ☐ TDS

LIFT METALS:
Cd, Cr, Pb, Ni, Zn

CAM 17 METALS
(EPA 8010/7470/7471)

TOTAL LEAD

pH
DOW.E.T. (STLG)
☐ TCLP

☐ Hexavalent Chromium
☐ pH (2.4 hr hold time for H₂O)

% Master

NUMBER OF CONTAINERS

22
540-
6
28
21
30

RECEIVED

APR 11 2001

BASELINE

Baseline Environmental
5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn.: Ms. Yane Nordhav

Project: 59171-CO
Seabreeze Habitat Enhancement

Dear Ms. Nordhav,

Attached is our report for your samples received on Wednesday March 21, 2001
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after May 5, 2001
unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,



Vincent Vancil

CAM W.E.T. (STLC) Lead

Baseline Environmental

✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: 59171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-4B; 2-2.5	Soil	03/20/2001 13:45	1

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-04-0024

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3005A

CAM W.E.T. (STLC) Lead

Sample ID:	HE-4B; 2-2.5	Lab Sample ID:	2001-04-0024-001
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/21/2001
Sampled:	03/20/2001 13:45	Extracted:	04/06/2001 06:08
Matrix:	Soil	QC-Batch:	2001/04/06-01.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	4.4	0.50	mg/L	1.00	04/06/2001 11:35	

To: **Baseline Environmental**

Test Method: 6010B

Attn.: Yane Nordhav

Prep Method: 3005A

Batch QC Report
CAM W.E.T. (STLC) Lead

Method Blank	Soil	QC Batch # 2001/04/06-01.15
MB: 2001/04/06-01.15-011	Date Extracted: 04/06/2001 06:08	

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	0.50	mg/L	04/06/2001 11:05	

To: **Baseline Environmental**

Test Method: 6010B

Attn: Yane Nordhav

Prep Method: 3005A

Batch QC Report

CAM W.E.T. (STLC) Lead

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/04/06-01.15	
LCS:	2001/04/06-01.15-012	Extracted:	04/06/2001 06:08	Analyzed	04/06/2001 11:09
LCSD:	2001/04/06-01.15-013	Extracted:	04/06/2001 06:08	Analyzed	04/06/2001 11:14

Compound	Conc. [mg/L]		Exp. Conc. [mg/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Lead	4.83	5.03	5.00	5.00	96.6	100.6	4.1	80-120	20		

Environmental Services (SDB) (DOHS 1094)

New Submission No: _____

Order No: 58374

Order No: 58577
2001-04-0024

Original Submission Info

Name of Caller: Lydia Huang

Call Date: 4.2.01 Time: _____

Add on Due Date: 3 day Date Sampled 3-21-01

Comments: _____

Client Name: Baseline

Project Mgr: Vane Nordhav

Project Name: Seabird Habitat Enhancement

Project No: 59171-60

PO#: _____

Date Received: 3-21-01

Submission No: 2001-03 e408

[illegible]

X-Sender: baseline#mail.crl.com@wingate (Unverified)
X-Mailer: QUALCOMM Windows Eudora Pro Version 4.2.2
Date: Mon, 02 Apr 2001 13:04:29 -0700
To: vvancil@chromalab.com
From: Lydia Huang <lydia@baseline-env.com>
Subject: Additional analysis request - 2001-03-0408
X-Loop-Detect: 1

Hi Vincent,

We are still eagerly awaiting the PAH results for these samples and awaiting the EDD for the results already faxed us (and the PAH results). Need to know when to expect these.

Please add a WET lead analysis for 2001-03-0408-035 (HE-4B;2-2.5); respond in email to acknowledge.

Thanks.
-Lydia

2001-04-0024

58374

000100

Baseline Environmental
5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn.: Ms. Yane Nordhav

RECEIVED

MAY 10 2001

BASELINE

Project: 59171-CO
Seabreeze Habitat Enhancement

Dear Ms. Nordhav,

Attached is our report for your samples received on Wednesday March 28, 2001
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

The report contains a Case Narrative detailing sample receipt and analysis.

Please note that any unused portion of the samples will be discarded after May 12, 2001
unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,



Vincent Vancil

To: Baseline Environmental
Attn.: Yane Nordhav

CASE NARRATIVE

General and Sample Comments

We (STL ChromaLab) received 1 Soil samples, on Mar 28 2001 12:00AM.

Moisture not analyzed due to insufficient sample volume.

Analysis Comments and Flags by QC Batch

Polynuclear Aromatic Hydrocarbons (PNA) by 8310	Soil	QC Batch#: 2001/05/01.01-18
---	------	-----------------------------

TD-324(A-D) >> MSD

Lab#: 2001/05/01.01-18-005

The percent recoveries for Napthalene and pyrene inicate matrix effect. Batch precision and accuracy for these compounds was verified by the LCS/LCSD.

Polynuclear Aromatic Hydrocarbons (PNA)

Baseline Environmental☒ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: 59171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-5C; 7.5-8	Soil	03/28/2001 11:00	1

To: **Baseline Environmental**

Test Method: 8310

Attn.: Yane Nordhav

Prep Method: 3550/8310

Polynuclear Aromatic Hydrocarbons (PNA)

Sample ID:	HE-5C; 7.5-8	Lab Sample ID:	2001-05-0004-001
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/28/2001
Sampled:	03/28/2001 11:00	Extracted:	05/01/2001 06:28
Matrix:	Soil	QC-Batch:	2001/05/01-01.18

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	ND	15	ug/Kg	1.00	05/01/2001 19:06	
Acenaphthylene	ND	10	ug/Kg	1.00	05/01/2001 19:06	
Acenaphthene	ND	10	ug/Kg	1.00	05/01/2001 19:06	
Fluorene	ND	5.0	ug/Kg	1.00	05/01/2001 19:06	
Phenanthrene	ND	5.0	ug/Kg	1.00	05/01/2001 19:06	
Anthracene	ND	5.0	ug/Kg	1.00	05/01/2001 19:06	
Fluoranthene	ND	5.0	ug/Kg	1.00	05/01/2001 19:06	
Pyrene	ND	5.0	ug/Kg	1.00	05/01/2001 19:06	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	05/01/2001 19:06	
Chrysene	ND	5.0	ug/Kg	1.00	05/01/2001 19:06	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	1.00	05/01/2001 19:06	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	05/01/2001 19:06	
Benzo(a)pyrene	ND	5.0	ug/Kg	1.00	05/01/2001 19:06	
Dibenzo(a,h)anthracene	ND	10	ug/Kg	1.00	05/01/2001 19:06	
Benzo(g,h,i)perylene	ND	10	ug/Kg	1.00	05/01/2001 19:06	
Indeno(1,2,3-cd)pyrene	ND	10	ug/Kg	1.00	05/01/2001 19:06	
Surrogate(s)						
1-Methyl naphthalene	114.2	50-150	%	1.00	05/01/2001 19:06	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8310

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Method Blank	Soil	QC Batch # 2001/05/01-01.18
MB: 2001/05/01-01.18-001		Date Extracted: 05/01/2001 06:28

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Naphthalene	ND	15.0	ug/Kg	05/01/2001 13:35	
Acenaphthylene	ND	10	ug/Kg	05/01/2001 13:35	
Acenaphthene	ND	10	ug/Kg	05/01/2001 13:35	
Fluorene	ND	5.0	ug/Kg	05/01/2001 13:35	
Phenanthrene	ND	5.0	ug/Kg	05/01/2001 13:35	
Anthracene	ND	5.0	ug/Kg	05/01/2001 13:35	
Fluoranthene	ND	5.0	ug/Kg	05/01/2001 13:35	
Pyrene	ND	5.0	ug/Kg	05/01/2001 13:35	
Benzo(a)anthracene	ND	5.0	ug/Kg	05/01/2001 13:35	
Chrysene	ND	5.0	ug/Kg	05/01/2001 13:35	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	05/01/2001 13:35	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	05/01/2001 13:35	
Benzo(a)pyrene	ND	5.0	ug/Kg	05/01/2001 13:35	
Dibenzo(a,h)anthracene	ND	10.0	ug/Kg	05/01/2001 13:35	
Benzo(g,h,i)perylene	ND	10.0	ug/Kg	05/01/2001 13:35	
Indeno(1,2,3-cd)pyrene	ND	10.0	ug/Kg	05/01/2001 13:35	
Surrogate(s)					
1-Methyl naphthalene	76.0	50-150	%	05/01/2001 13:35	

To: **Baseline Environmental**

Test Method: 8310

Attn: Yane Nordhav

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Laboratory Control Spike (LCS/LCSD)**Soil****QC Batch # 2001/05/01-01.18**

LCS: 2001/05/01-01.18-002

Extracted: 05/01/2001 06:28

Analyzed 05/01/2001 13:34

LCSD: 2001/05/01-01.18-003

Extracted: 05/01/2001 06:28

Analyzed 05/01/2001 13:05

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Naphthalene	179	160	200	200	89.5	80.0	11.2	50-150	35		
Phenanthrene	176	145	200	200	88.0	72.5	19.3	50-150	35		
Pyrene	191	159	200	200	95.5	79.5	18.3	50-150	35		
Chrysene	184	153	200	200	92.0	76.5	18.4	50-150	35		
Benzo(a)pyrene	184	154	200	200	92.0	77.0	17.8	50-150	35		
Surrogate(s)											
1-Methyl naphthalene	11.2	11.9	15	15	74.7	79.3		50-150			

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 8310

Prep Method: 3550/8310

Batch QC Report

Polynuclear Aromatic Hydrocarbons (PNA)

Matrix Spike (MS / MSD)

Soil

QC Batch # 2001/05/01-01.18

Sample ID: **TD-324(A-D)**

Lab Sample ID: 2001-04-0633-006

MS: 2001/05/01-01.18-004 Extracted: 05/01/2001 06:28 Analyzed: 05/01/2001 18:06 Dilution: 5.0

MSD: 2001/05/01-01.18-005 Extracted: 05/01/2001 06:28 Analyzed: 05/01/2001 18:36 Dilution: 5.0

Compound	Conc. [ug/Kg]			Exp. Conc. [ug/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD		Recovery	RPD	MS	MSD
Naphthalene	160	10.9	ND	200	200	80.0	5.5	174.3	50-150	35		
Phenanthrene	170	145	ND	200	200	85.0	72.5	15.9	50-150	35		
Pyrene	63.8	39.5	ND	200	200	31.9	19.8	46.8	50-150	35		
Chrysene	142	127	ND	200	200	71.0	63.5	11.2	50-150	35		
Benzo(a)pyrene	133	116	ND	200	200	66.5	58.0	13.7	50-150	35		
Surrogate(s)												
1-Methyl naphthalene	24.4	7.59		15	15	162.7	50.6		50-150			

CAM 17 Metals

Baseline Environmental5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: 59171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-5C; 7.5-8	Soil	03/28/2001 11:00	1

To: **Baseline Environmental**Test Method: 6010B
7471A

Attn.: Yane Nordhav

Prep Method: 3050B
7471A

CAM 17 Metals

Sample ID:	HE-5C; 7.5-8	Lab Sample ID:	2001-05-0004-001
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/28/2001
Sampled:	03/28/2001 11:00	Extracted:	05/02/2001 06:35
Matrix:	Soil	QC-Batch:	2001/05/02-03.15 2001/05/02-03.16

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	1.00	05/02/2001 12:00	
Arsenic	3.2	1.0	mg/Kg	1.00	05/02/2001 12:00	
Barium	24	1.0	mg/Kg	1.00	05/02/2001 12:00	
Beryllium	ND	0.50	mg/Kg	1.00	05/02/2001 12:00	
Cadmium	1.1	0.50	mg/Kg	1.00	05/02/2001 12:00	
Chromium	36	1.0	mg/Kg	1.00	05/02/2001 12:00	
Cobalt	6.2	1.0	mg/Kg	1.00	05/02/2001 12:00	
Copper	23	1.0	mg/Kg	1.00	05/02/2001 12:00	
Lead	16	1.0	mg/Kg	1.00	05/02/2001 12:00	
Molybdenum	ND	1.0	mg/Kg	1.00	05/02/2001 12:00	
Nickel	36	1.0	mg/Kg	1.00	05/02/2001 12:00	
Selenium	ND	2.0	mg/Kg	1.00	05/02/2001 12:00	
Silver	ND	1.0	mg/Kg	1.00	05/02/2001 12:00	
Thallium	ND	1.0	mg/Kg	1.00	05/02/2001 12:00	
Vanadium	31	1.0	mg/Kg	1.00	05/02/2001 12:00	
Zinc	42	1.0	mg/Kg	1.00	05/02/2001 12:00	
Mercury	0.20	0.050	mg/Kg	1.00	05/02/2001 10:52	

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 7471A

Prep Method: 7471A

Batch QC Report

CAM 17 Metals

Method Blank**Soil****QC Batch # 2001/05/02-03.16**

MB: 2001/05/02-03.16-032

Date Extracted: 05/02/2001 06:37

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	05/02/2001 10:34	.

To: **Baseline Environmental**

Test Method: 6010B

Attn.: Yane Nordhav

Prep Method: 3050B

Batch QC Report

CAM 17 Metals

Method Blank	Soil	QC Batch # 2001/05/02-03.15
MB: 2001/05/02-03.15-025		Date Extracted: 05/02/2001 06:35

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	05/02/2001 10:53	
Arsenic	ND	1.0	mg/Kg	05/02/2001 10:53	
Barium	ND	1.0	mg/Kg	05/02/2001 10:53	
Beryllium	ND	0.50	mg/Kg	05/02/2001 10:53	
Cadmium	ND	0.50	mg/Kg	05/02/2001 10:53	
Chromium	ND	1.0	mg/Kg	05/02/2001 10:53	
Cobalt	ND	1.0	mg/Kg	05/02/2001 10:53	
Copper	ND	1.0	mg/Kg	05/02/2001 10:53	
Lead	ND	1.0	mg/Kg	05/02/2001 10:53	
Molybdenum	ND	1.0	mg/Kg	05/02/2001 10:53	
Nickel	ND	1.0	mg/Kg	05/02/2001 10:53	
Selenium	ND	2.0	mg/Kg	05/02/2001 10:53	
Silver	ND	1.0	mg/Kg	05/02/2001 10:53	
Thallium	ND	1.0	mg/Kg	05/02/2001 10:53	
Vanadium	ND	1.0	mg/Kg	05/02/2001 10:53	
Zinc	ND	1.0	mg/Kg	05/02/2001 10:53	

To: **Baseline Environmental**

Test Method: 7471A

Attn: Yane Nordhav

Prep Method: 7471A

Batch QC Report

CAM 17 Metals

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/05/02-03.16	
LCS:	2001/05/02-03.16-033	Extracted:	05/02/2001 06:37	Analyzed	05/02/2001 10:35
LCSD:	2001/05/02-03.16-034	Extracted:	05/02/2001 06:37	Analyzed	05/02/2001 10:36

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Mercury	0.467	0.459	0.500	0.500	93.4	91.8	1.7	85-115	20		

To: **Baseline Environmental**

Test Method: 6010B

Attn: Yane Nordhav

Prep Method: 3050B

Batch QC Report

CAM 17 Metals

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/05/02-03.15	
LCS:	2001/05/02-03.15-026	Extracted:	05/02/2001 06:35	Analyzed	05/02/2001 10:58
LCSD:	2001/05/02-03.15-027	Extracted:	05/02/2001 06:35	Analyzed	05/02/2001 11:02

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Antimony	96.3	98.1	100.0	100.0	96.3	98.1	1.9	80-120	20		
Arsenic	103	104	100.0	100.0	103.0	104.0	1.0	80-120	20		
Barium	97.2	99.6	100.0	100.0	97.2	99.6	2.4	80-120	20		
Beryllium	93.8	98.5	100.0	100.0	93.8	98.5	4.9	80-120	20		
Cadmium	94.5	95.2	100.0	100.0	94.5	95.2	0.7	80-120	20		
Chromium	97.1	98.6	100.0	100.0	97.1	98.6	1.5	80-120	20		
Cobalt	96.2	96.9	100.0	100.0	96.2	96.9	0.7	80-120	20		
Copper	100	102	100.0	100.0	100.0	102.0	2.0	80-120	20		
Lead	95.5	97.0	100.0	100.0	95.5	97.0	1.6	80-120	20		
Molybdenum	98.4	99.8	100.0	100.0	98.4	99.8	1.4	80-120	20		
Nickel	96.1	99.0	100.0	100.0	96.1	99.0	3.0	80-120	20		
Selenium	91.9	93.9	100.0	100.0	91.9	93.9	2.2	80-120	20		
Silver	97.9	99.5	100.0	100.0	97.9	99.5	1.6	80-120	20		
Thallium	94.7	97.3	100.0	100.0	94.7	97.3	2.7	80-120	20		
Vanadium	99.4	102	100.0	100.0	99.4	102.0	2.6	80-120	20		
Zinc	93.2	92.3	100.0	100.0	93.2	92.3	1.0	80-120	20		

Total Extractable Petroleum Hydrocarbons (TEPH)

Baseline Environmental5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: 59171-CO

Project: Seabreeze Habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-5C; 7.5-8	Soil	03/28/2001 11:00	1

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-05-0004

To: **Baseline Environmental**

Test Method: 8015M

Attn.: Yane Nordhav

Prep Method: 3550/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	HE-5C; 7.5-8	Lab Sample ID:	2001-05-0004-001
Project:	59171-CO Seabreeze Habitat Enhancement	Received:	03/28/2001
Sampled:	03/28/2001 11:00	Extracted:	05/01/2001 09:10
Matrix:	Soil	QC-Batch:	2001/05/01-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Bunker-C	ND	50	mg/Kg	1.00	05/01/2001 14:37	
Surrogate(s) o-Terphenyl	83.1	60-130	%	1.00	05/01/2001 14:37	

To: **Baseline Environmental**

Test Method: 8015M

Attn.: Yane Nordhav

Prep Method: 3550/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Method Blank	Soil	QC Batch # 2001/05/01-02.10
MB: 2001/05/01-02.10-001		Date Extracted: 05/01/2001 09:10

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	05/02/2001 08:02	
Bunker-C	ND	50	mg/Kg	05/02/2001 08:02	
Surrogate(s) o-Terphenyl	115.0	60-130	%	05/02/2001 08:02	

To: **Baseline Environmental**

Test Method: 8015M

Attn: Yane Nordhav

Prep Method: 3550/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/05/01-02.10	
LCS:	2001/05/01-02.10-002	Extracted:	05/01/2001 09:10	Analyzed	05/01/2001 16:04
LCSD:	2001/05/01-02.10-003	Extracted:	05/01/2001 09:10	Analyzed	05/01/2001 16:47

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Diesel	38.3	37.1	41.7	41.7	91.8	89.0	3.1	60-130	25		
Surrogate(s)											
o-Terphenyl	20.7	20.3	20.0	20.0	103.5	101.5		60-130			

Environmental Services (SDB) (DOHS 1094)

2001-085-004

New Submission No: _____

Order No: 58990

Name of Caller: Lydia Huanes

Call Date: _____ Time: _____

Add on Due Date: 5-201 Date Sampled _____

Comments: _____

Client Name: Baseline

Project Mgr: Yane

Project Name: Seabreeze Habitat Enhancement

Project No: 59/7/60

PO#: _____

Date Received: 328

Submission No: 2001030540

ANALYSIS REPORT				
SAMPLE ID	DATE	TIME	MATRIX	PRESERV.
HE5C-758	3/28/01	11:00	Soil	N
<div style="text-align: center; font-size: 2em; font-weight: bold;">RUSH</div>				
<div style="display: flex; justify-content: space-between;"> <div> TPH-(EPA 8015, 8020) <input type="checkbox"/> Gas w/ <input type="checkbox"/> BTEX <input type="checkbox"/> MTBE </div> <div> TPH-Diesel (EPA 8015M) TEPH (EPA 8015M) <input type="checkbox"/> Diesel <input checked="" type="checkbox"/> M.O. <input checked="" type="checkbox"/> Other <i>Asph</i> </div> <div> PURGEABLE AROMATICS BTX (EPA 8020) </div> <div> PURGEABLE HALOCARBONS (HVOCs) (EPA 8010) </div> <div> VOLATILE ORGANICS (VOCs) (EPA 8260) </div> <div> SEMIVOLATILES (EPA 8270) </div> <div> Oil & Grease <input type="checkbox"/> Petrol <input type="checkbox"/> Total <input type="checkbox"/> 1664 </div> <div> <input type="checkbox"/> PESTICIDES (EPA 8080) <input type="checkbox"/> PCB'S (EPA 8080) </div> <div> PNA's by <input type="checkbox"/> 8270 <input checked="" type="checkbox"/> 8310 </div> <div> <input type="checkbox"/> Spec. Cond. <input type="checkbox"/> TSS <input type="checkbox"/> TDS </div> <div> LIGHT METALS: Cd, Cr, Pb, Ni, Zn </div> <div> CAM 17 METALS (EPA 6010/7470/7471) </div> <div> TOTAL LEAD </div> <div> <input type="checkbox"/> W.E.T. (STLC) <input type="checkbox"/> TCLP </div> <div> <input type="checkbox"/> Hexavalent Chromium <input type="checkbox"/> pH (24 hr hold time for H2O) </div> </div>				
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RUSH

五

Baseline Environmental
5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn.: Ms. Yane Nordhav

Project: S9171-C0
Seabreeze habitat Enhancement

RECEIVED

JUN 14 2001

BASELINE

Dear Ms. Nordhav,

Attached is our report for your samples received on Tuesday June 5, 2001
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after July 20, 2001
unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,



Vincent Vancil

CAM W.E.T. (STLC) Lead

Baseline Environmental

✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-C0

Project: Seabreeze habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-5A 3-3.5	Soil	03/21/2001	2

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-06-0066

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3005A

CAM W.E.T. (STLC) Lead

Sample ID:	HE-5A 3-3.5	Lab Sample ID:	2001-06-0066-002
Project:	S9171-C0 Seabreeze habitat Enhancement	Received:	06/05/2001 11:54
Sampled:	03/21/2001	Extracted:	06/08/2001 05:38
Matrix:	Soil	QC-Batch:	2001/06/08-01.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	2.9	0.50	mg/L	1.00	06/08/2001 09:25	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

Printed on: 06/08/2001 13:56

Page 2 of 5

To: **Baseline Environmental**

Test Method: 6010B

Attn.: Yane Nordhav

Prep Method: 3005A

Batch QC Report
CAM W.E.T. (STLC) Lead

Method Blank	Soil	QC Batch # 2001/06/08-01.15
MB: 2001/06/08-01.15-011	Date Extracted: 06/08/2001 05:38	

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	0.50	mg/L	06/08/2001 09:00	

To: **Baseline Environmental**

Test Method: 6010B

Attn: Yane Nordhav

Prep Method: 3005A

Batch QC Report

CAM W.E.T. (STLC) Lead

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2001/06/08-01.15	
LCS:	2001/06/08-01.15-012	Extracted:	06/08/2001 05:38	Analyzed	06/08/2001 09:04
LCSD:	2001/06/08-01.15-013	Extracted:	06/08/2001 05:38	Analyzed	06/08/2001 09:07

Compound	Conc. [mg/L]		Exp.Conc. [mg/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Lead	4.51	4.63	5.00	5.00	90.2	92.6	2.6	80-120	20		

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3005A

Batch QC Report

CAM W.E.T. (STLC) Lead

Matrix Spike (MS / MSD)

Soil

QC Batch # 2001/06/08-01.15

Sample ID: **HE-4C;6.5-7**

Lab Sample ID: 2001-06-0066-001

MS: 2001/06/08-01.15-015 Extracted: 06/08/2001 05:38 Analyzed: 06/08/2001 09:16 Dilution: 1.0

MSD: 2001/06/08-01.15-016 Extracted: 06/08/2001 05:38 Analyzed: 06/08/2001 09:21 Dilution: 1.0

Compound	Conc. [mg/L]			Exp. Conc. [mg/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD		Recovery	RPD	MS	MSD
Lead	5.23	5.13	0.791	5.00	5.00	88.8	86.8	2.3	75-125	20		

CAM W.E.T. (STLC) Metals

Baseline Environmental

✉ 5900 Hollis Street, Suite D
Emeryville, CA 94608-2008

Attn: Yane Nordhav

Phone: (510) 420-8686 Fax: (510) 420-1707

Project #: S9171-C0

Project: Seabreeze habitat Enhancement

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
HE-4C;6.5-7	Soil	03/28/2001	1

To: **Baseline Environmental**

Test Method: 6010B

Attn.: Yane Nordhav

Prep Method: 3005A

CAM W.E.T. (STLC) Metals

Sample ID:	HE-4C;6.5-7	Lab Sample ID:	2001-06-0066-001
Project:	S9171-C0 Seabreeze habitat Enhancement	Received:	06/05/2001 11:54
Sampled:	03/28/2001	Extracted:	06/08/2001 05:38
Matrix:	Soil	QC-Batch:	2001/06/08-01.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Copper	ND	0.50	mg/L	1.00	06/08/2001 09:12	
Lead	0.79	0.50	mg/L	1.00	06/08/2001 09:12	

To: **Baseline Environmental**

Test Method: 6010B

Attn.: Yane Nordhav

Prep Method: 3005A

Batch QC Report
CAM W.E.T. (STLC) Metals

Method Blank	Soil	QC Batch # 2001/06/08-01.15
MB: 2001/06/08-01.15-011		Date Extracted: 06/08/2001 05:38

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Copper	ND	0.50	mg/L	06/08/2001 09:00	
Lead	ND	0.50	mg/L	06/08/2001 09:00	

To: **Baseline Environmental**

Test Method: 6010B

Attn: Yane Nordhav

Prep Method: 3005A

Batch QC Report

CAM W.E.T. (STLC) Metals

Laboratory Control Spike (LCS/LCSD)**Soil****QC Batch # 2001/06/08-01.15**

LCS: 2001/06/08-01.15-012

Extracted: 06/08/2001 05:38

Analyzed 06/08/2001 09:04

LCSD: 2001/06/08-01.15-013

Extracted: 06/08/2001 05:38

Analyzed 06/08/2001 09:07

Compound	Conc. [mg/L]		Exp.Conc. [mg/L]		Recovery [%]			RPD		Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD	Recovery	RPD	LCS	LCSD	LCS	LCSD
Copper	4.94	5.07	5.00	5.00	98.8	101.4	2.6	80-120	20				
Lead	4.51	4.63	5.00	5.00	90.2	92.6	2.6	80-120	20				

To: **Baseline Environmental**

Attn.: Yane Nordhav

Test Method: 6010B

Prep Method: 3005A

Batch QC Report

CAM W.E.T. (STLC) Metals

Matrix Spike (MS / MSD)	Soil	QC Batch # 2001/06/08-01.15
Sample ID: HE-4C;6.5-7		Lab Sample ID: 2001-06-0066-001
MS: 2001/06/08-01.15-015	Extracted: 06/08/2001 05:38	Analyzed: 06/08/2001 09:16 Dilution: 1.0
MSD: 2001/06/08-01.15-016	Extracted: 06/08/2001 05:38	Analyzed: 06/08/2001 09:21 Dilution: 1.0

Compound	Conc. [mg/L]			Exp.Conc. [mg/L]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD		Recovery	RPD	MS	MSD
Copper	4.96	4.93	ND	5.00	5.00	99.2	98.6	0.6	75-125	20		
Lead	5.23	5.13	0.791	5.00	5.00	88.8	86.8	2.3	75-125	20		

Environmental Services (SDB) (DOI-IS 1094)

2001-06-0064

New Submission No:

Order No: 59650

Name of Caller: Lydia Hugney

Call Date: _____ Time: _____

Client Name: Baseline

Add on Due Date: ASAP Date Sampled

Project Mgr: Yane Nardhan

Project Name: Seabreeze Habitat Enhancement

Project No: 59171-00

PO#: _____

Date Received: _____

Submission No: 2001-04-0217
2001-03-0408

Comments:

RUSH

[illegible]



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

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

RECEIVED
MAY 0 2001
BASELINE


Prepared for:

Baseline Environmental
5900 Hollis St.
Suite D
Emeryville, CA 94608


Date: 30-APR-01
Lab Job Number: 151495
Project ID: N/A
Location: N/A

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:


Project Manager

Reviewed by:


Operations Manager

This package may be reproduced only in its entirety.

151495

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

Curtis & Tompkins

1220 Quarry Lane • Pleasanton, California 94566-4756

(925) 484-1919 • Fax (925) 484-1096

Reference #: _____

Chain of Custody

DATE 4/16/01 PAGE 1 OF 3

PROJ. MGR. Yane Nordhav
 COMPANY Baseline Environmental
 ADDRESS 5900 Hollis St., Ste. D
Emeryville, CA 94608

SAMPLERS (SIGNATURE) _____ (PHONE NO.) (510) 420-8686
 _____ (FAX NO.) (510) 420-1707

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH-(EPA 8015,8020) <input type="checkbox"/> Gas w/ <input type="checkbox"/> BTEX <input type="checkbox"/> MTBE	PURGEABLE AROMATICS BTX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) <input type="checkbox"/> Diesel <input type="checkbox"/> M.O. <input type="checkbox"/> Other	PURGEABLE HALOCARBONS (HVOCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMI-VOLATILES (EPA 8270)	Oil & Grease <input type="checkbox"/> Petrol <input type="checkbox"/> Total <input type="checkbox"/> 1664	PESTICIDES (EPA 8080) <input type="checkbox"/> PCB's (EPA 8080)	PNA's by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310	Spec. Cond. <input type="checkbox"/> TSS <input type="checkbox"/> TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	W.E.T. (STIC) <input type="checkbox"/> TCLP	Hexavalent Chromium <input type="checkbox"/> pH (24 hr hold time for H2O)	Selenium	NUMBER OF CONTAINERS
1 COMP 1A	3/20	-	SOIL	-																	X	1
2 COMP 1B		-		-																	X	1
3 COMP 1C		-		-																	X	1
4 COMP 2A		-		-																	X	1
5 COMP 2B		-		-																	X	1
6 COMP 3A		-		-																	X	1
7 COMP 3B		-		-																	X	1
8 COMP 2C		-		-																	X	1
9 COMP 3C	✓	-	✓	-																	X	1

Received ☐ On Ice
☒ Cold ☒ Ambient ☒ Intact

PROJECT INFORMATION

SAMPLE RECEIPT

PROJECT NAME:		TOTAL NO. OF CONTAINERS		9	
PROJECT NUMBER		HEAD SPACE			
P.O. #		TEMPERATURE			
		CONFORMS TO RECORD			
TAT	STANDARD 5-DAY		24	48	72 OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Electronic Report

Call Yane w/any questions + for TAT
 Please homogenize individual
 samples prior to analysis.

RELINQUISHED BY

RELINQUISHED BY

RELINQUISHED BY

1. Crowley
 (SIGNATURE) _____ (TIME) _____
Crowley 4/17/01
 (PRINTED NAME) _____ (DATE) _____
STL-CL
 (COMPANY) _____

2. [Signature]
 (SIGNATURE) _____ (TIME) _____
[Signature]
 (PRINTED NAME) _____ (DATE) _____
 (COMPANY) _____

3. _____
 (SIGNATURE) _____ (TIME) _____
 (PRINTED NAME) _____ (DATE) _____
 (COMPANY) _____

RECEIVED BY

RECEIVED BY

RECEIVED BY (LABORATORY)

1. [Signature]
 (SIGNATURE) _____ (TIME) _____
Morrison 7/16/01
 (PRINTED NAME) _____ (DATE) _____
STL-CL
 (COMPANY) _____

2. [Signature]
 (SIGNATURE) _____ (TIME) _____
 (PRINTED NAME) _____ (DATE) _____
 (COMPANY) _____

3. _____
 (SIGNATURE) _____ (TIME) _____
 (PRINTED NAME) _____ (DATE) _____
 (LAB) _____

151495

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756

(925) 484-1919 • Fax (925) 484-1096

Reference #:

Chain of Custody

DATE

4/16/01

PAGE

2

OF

3

PROJ. MGR.

COMPANY

Baseline

ADDRESS

See COC page 1

SAMPLERS (SIGNATURE)

(PHONE NO.)

(FAX NO.)

ANALYSIS REPORT

TPH (EPA 8015, 8020)

☐ Gas w/ ☐ BTEX ☐ MTBE

PURGEABLE AROMATICS

BTX (EPA 8020)

TPH-Diesel (EPA 8015M)

TEPH (EPA 8015M)

☐ Diesel ☐ M.O. ☐ Other

PURGEABLE HALOCARBONS,

(HVOCs) (EPA 8010)

VOLATILE ORGANICS

(VOCs) (EPA 8260)

SEMIVOLATILES

(EPA 8270)

Oil & Grease

☐ Petrol ☐ Total ☐ 1664☐ PESTICIDES (EPA 8080)☐ PCB'S (EPA 8080)PNA's by ☐ 8270☐ 8310☐ Spec. Cond.☐ TSS ☐ TDS

LUFT METALS:

Cd, Cr, Pb, Ni, Zn

CAM 17 METALS

(EPA 6010/7470/7471)

TOTAL LEAD

☐ W.E.T. (STLC)☐ TCLP☐ Hexavalent Chromium☐ pH (24 hr hold time for H2O)

Selenium

NUMBER OF CONTAINERS

	SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH	PCB	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TPH	TP
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Received ☐ On Ice
☐ Cold ☒ Ambient ☐ Intact

PROJECT INFORMATION

SAMPLE RECEIPT

PROJECT NAME:

TOTAL NO. OF CONTAINERS

9

PROJECT NUMBER

HEAD SPACE

P.O. #

TEMPERATURE

CONFORMS TO RECORD

TAT

STANDARD
5-DAY

24

48

72

OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Electronic Report

RELINQUISHED BY

1.

C. Kowley

(SIGNATURE)

C. Kowley

(PRINTED NAME)

STL-CL

(COMPANY)

RECEIVED BY

1.

C. Kowley

(SIGNATURE)

C. Kowley

(PRINTED NAME)

STL-CL

(COMPANY)

RELINQUISHED BY

RELINQUISHED BY

3.

C. Kowley

(SIGNATURE)

C. Kowley

(PRINTED NAME)

STL-CL

(COMPANY)

RECEIVED BY

RECEIVED BY (LABORATORY)

3

C. Kowley

(SIGNATURE)

C. Kowley

(PRINTED NAME)

STL-CL

(COMPANY)

(LAB)

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756

(925) 484-1919 • Fax (925) 484-1096

Reference #: _____

Chain of Custody

DATE 4/16/01 PAGE 3 OF 3

PROJECT INFORMATION						SAMPLE RECEIPT			
PROJECT NAME:			TOTAL NO. OF CONTAINERS						
PROJECT NUMBER			HEAD SPACE						
P.O. #			TEMPERATURE						
			CONFORMS TO RECORD						
TAT	STANDARD 5-DAY		24	48	72	OTHER			
SPECIAL INSTRUCTIONS/COMMENTS: Report: <input type="checkbox"/> Routine <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> Electronic Report									
<div>Received <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cold <input checked="" type="checkbox"/> Ambient <input type="checkbox"/> Intact</div>									



Selenium

Lab #:	151495	Prep:	EPA 3050
Client:	Baseline Environmental	Analysis:	EPA 6010B
Project#:	STANDARD		
Analyte:	Selenium	Basis:	wet
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Received:	04/17/01

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled	Prepared	Analyzed
COMP 1A	SAMPLE	151495-001	0.42	0.20	63133	03/20/01	04/19/01	04/23/01
COMP 1B	SAMPLE	151495-002	0.30	0.22	63133	03/20/01	04/19/01	04/23/01
COMP 1C	SAMPLE	151495-003	ND	0.23	63133	03/20/01	04/19/01	04/23/01
COMP 2A	SAMPLE	151495-004	ND	0.21	63133	03/20/01	04/19/01	04/23/01
COMP 2B	SAMPLE	151495-005	ND	0.24	63133	03/20/01	04/19/01	04/23/01
COMP 3A	SAMPLE	151495-006	ND	0.20	63133	03/20/01	04/19/01	04/23/01
COMP 3B	SAMPLE	151495-007	ND	0.23	63133	03/20/01	04/19/01	04/23/01
COMP 2C	SAMPLE	151495-008	0.53	0.24	63133	03/20/01	04/19/01	04/23/01
COMP 3C	SAMPLE	151495-009	0.29	0.22	63133	03/20/01	04/19/01	04/23/01
COMP 4B	SAMPLE	151495-010	0.22	0.21	63133	03/20/01	04/19/01	04/23/01
COMP 4C	SAMPLE	151495-011	ND	0.22	63133	03/20/01	04/19/01	04/23/01
COMP 5A	SAMPLE	151495-012	ND	0.20	63133	03/20/01	04/19/01	04/23/01
COMP 5B	SAMPLE	151495-013	0.29	0.21	63133	03/20/01	04/19/01	04/23/01
COMP 5C	SAMPLE	151495-014	ND	0.22	63133	03/28/01	04/19/01	04/23/01
4A; 4-4.5	SAMPLE	151495-015	ND	0.22	63133	03/20/01	04/19/01	04/23/01
4B; 8-8.5	SAMPLE	151495-016	ND	0.21	63133	03/20/01	04/19/01	04/23/01
HE-4C; 6.5-7	SAMPLE	151495-017	0.46	0.22	63133	03/28/01	04/19/01	04/23/01
HE-5A; 3-3.5	SAMPLE	151495-018	0.35	0.20	63133	03/21/01	04/19/01	04/23/01
HE-5C; 7.5-8	SAMPLE	151495-019	0.49	0.23	63156	03/28/01	04/20/01	04/23/01
	BLANK	QC143565	ND	0.25	63133		04/19/01	04/20/01
	BLANK	QC143670	ND	0.25	63156		04/20/01	04/23/01

Not Detected

RL= Reporting Limit

Selenium

Lab #:	151495	Prep:	EPA 3050
Client:	Baseline Environmental	Analysis:	EPA 6010B
Project#:	STANDARD		
Analyte:	Selenium	Basis:	wet
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Analyzed:	04/23/01

Field ID	Type	MSS	Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Sampled	Received	Prepared
	BS			QC143566		50.00	48.15	96	73-111			63133			04/19/01
	BSD			QC143567		50.00	41.55	83	73-111	15	20	63133			04/19/01
COMP 1A	MS	151495-001	QC143568		0.2996	44.84	34.04	75	40-118			63133	03/20/01	04/17/01	04/19/01
COMP 1A	MSD	151495-001	QC143569			46.30	38.01	81	40-118	8	39	63133	03/20/01	04/17/01	04/19/01
	BS			QC143671		50.00	43.50	87	73-111			63156			04/20/01
	BSD			QC143672		50.00	43.10	86	73-111	1	20	63156			04/20/01
ZZZZZZZZZZ	MS	151571-003	QC143673		0.2833	44.25	32.39	73	40-118			63156	04/19/01	04/19/01	04/20/01
ZZZZZZZZZZ	MSD	151571-003	QC143674			39.06	32.42	82	40-118	12	39	63156	04/19/01	04/19/01	04/20/01

RPD= Relative Percent Difference

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A N A L Y T I C A L R E P O R T

Prepared for:

Baseline Environmental
5900 Hollis Street
Suite D
Emeryville, CA 94608

Date: 04-JUN-01
Lab Job Number: 151956
Project ID: S9171-JO
Location: Seabreeze Hab Enhance

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:


Project Manager

Reviewed by:


Operations Manager

This package may be reproduced only in its entirety.



Laboratory Number: 151956
Client: Baseline Environmental
Project Name: Seabreeze Hab Enhance
Project #: S9171-JO
Receipt Date: 05/11/01

CASE NARRATIVE

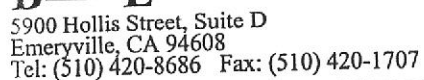
This hardcopy data package contains sample results and batch QC results for five soil samples received from the above referenced project on May 11, 2001. The samples were received cold and intact. The request for bulk density on the chain of custody could not be undertaken because an extra undisturbed core was not taken. The client was duly informed and requested that the analysis for bulk density be cancelled. The results are reported on a dry-weight basis.

Polynuclear Aromatic Hydrocarbons (EPA 8310):

The recovery for the 1-methylnaphthalene UV surrogate was over the acceptable QC limits for client ID HE-5B;2-2.5 (C&T ID 151956-005). The 1-methylnaphthalene (F) surrogate was within acceptable QC limits so the quality of the sample data should not be affected. No other analytical problems were encountered.

Metals (EPA 6010B):

The relative percent difference between the matrix spike and its duplicate for chromium, copper and nickel were over the acceptable QC limits. The relative percent difference for these analytes between the blank spike and its duplicate were within acceptable QC limits so the quality of the sample data should not be affected. No other analytical problems were encountered.



151956 ●
CHAIN OF CUSTODY RECORD

Turn-around Time

Lab

BASELINE Contact Person

Stanford
Lydia

[illegible]



Polynuclear Aromatics by HPLC

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3550
Project#:	S9171-JO	Analysis:	EPA 8310
Field ID:	HE-1B;2-2.5	Batch#:	63625
Lab ID:	151956-001	Sampled:	05/11/01
Matrix:	Soil	Received:	05/11/01
Units:	ug/Kg	Prepared:	05/15/01
Basis:	dry	Analyzed:	05/17/01
Diln Fac:	5.000		

Moisture: 11%

Analyte	Result	RL
Naphthalene	ND	190
Acenaphthylene	ND	370
Acenaphthene	ND	190
Fluorene	ND	190
Phenanthrene	550	94
Anthracene	ND	94
Fluoranthene	880	75
Pyrene	1,100	38
Benzo(a)anthracene	400	19
Chrysene	510	19
Benzo(b)fluoranthene	470	38
Benzo(k)fluoranthene	220	19
Benzo(a)pyrene	580	19
Dibenz(a,h)anthracene	680	38
Benzo(g,h,i)perylene	690	38
Indeno(1,2,3-cd)pyrene	760	19

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	92	30-122
1-Methylnaphthalene (F)	58	32-132

Polynuclear Aromatics by HPLC

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3550
Project#:	S9171-JO	Analysis:	EPA 8310
Field ID:	HE-2B;2-2.5	Batch#:	63625
Lab ID:	151956-002	Sampled:	05/11/01
Matrix:	Soil	Received:	05/11/01
Units:	ug/Kg	Prepared:	05/15/01
Basis:	dry	Analyzed:	05/16/01
Diln Fac:	1.000		

Moisture: 7%

Analyte	Result	RL
Naphthalene	ND	36
Acenaphthylene	ND	71
Acenaphthene	ND	36
Fluorene	ND	36
Phenanthrene	ND	18
Anthracene	ND	18
Fluoranthene	ND	14
Pyrene	ND	7.3
Benzo (a) anthracene	ND	3.6
Chrysene	ND	3.6
Benzo (b) fluoranthene	ND	7.3
Benzo (k) fluoranthene	ND	3.6
Benzo (a) pyrene	ND	3.6
Dibenz (a,h) anthracene	ND	7.3
Benzo (g,h,i) perylene	ND	7.3
Indeno (1,2,3-cd) pyrene	ND	3.6

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	69	30-122
1-Methylnaphthalene (F)	72	32-132

Polynuclear Aromatics by HPLC

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3550
Project#:	S9171-JO	Analysis:	EPA 8310
Field ID:	HE-3B;2-2.5	Batch#:	63625
Lab ID:	151956-003	Sampled:	05/11/01
Matrix:	Soil	Received:	05/11/01
Units:	ug/Kg	Prepared:	05/15/01
Basis:	dry	Analyzed:	05/16/01
Diln Fac:	1.000		

Moisture: 12%

Analyte	Result	RL
Naphthalene	ND	38
Acenaphthylene	ND	75
Acenaphthene	ND	38
Fluorene	ND	38
Phenanthrene	74	19
Anthracene	ND	19
Fluoranthene	93	15
Pyrene	110	7.6
Benzo(a)anthracene	42	3.8
Chrysene	47	3.8
Benzo(b)fluoranthene	41	7.6
Benzo(k)fluoranthene	21	3.8
Benzo(a)pyrene	53	3.8
Dibenz(a,h)anthracene	44	7.6
Benzo(g,h,i)perylene	50	7.6
Indeno(1,2,3-cd)pyrene	67	3.8

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	64	30-122
1-Methylnaphthalene (F)	66	32-132

Polynuclear Aromatics by HPLC

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3550
Project#:	S9171-JO	Analysis:	EPA 8310
Field ID:	HE-4B;2-2.5	Batch#:	63625
Lab ID:	151956-004	Sampled:	05/11/01
Matrix:	Soil	Received:	05/11/01
Units:	ug/Kg	Prepared:	05/15/01
Basis:	dry	Analyzed:	05/16/01
Diln Fac:	5.000		

Moisture: 28%

Analyte	Result	RL
Naphthalene	ND	230
Acenaphthylene	ND	460
Acenaphthene	ND	230
Fluorene	ND	230
Phenanthrene	ND	110
Anthracene	ND	110
Fluoranthene	200	91
Pyrene	250	46
Benzo(a)anthracene	92	23
Benz(a)pyrene	130	23
Benzo(b)fluoranthene	150	46
Benzo(k)fluoranthene	72	23
Benzo(a)pyrene	180	23
Dibenz(a,h)anthracene	470	46
Benzo(g,h,i)perylene	310	46
Indeno(1,2,3-cd)pyrene	370	23

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	60	30-122
1-Methylnaphthalene (F)	48	32-132

Polynuclear Aromatics by HPLC

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3550
Project#:	S9171-JO	Analysis:	EPA 8310
Field ID:	HE-5B;2-2.5	Batch#:	63625
Lab ID:	151956-005	Sampled:	05/11/01
Matrix:	Soil	Received:	05/11/01
Units:	ug/Kg	Prepared:	05/15/01
Basis:	dry	Analyzed:	05/17/01

Moisture: 10%

Analyte	Result	RL	Diln Fac
Naphthalene	4,200	360	10.00
Acenaphthylene	ND	730	10.00
Acenaphthene	1,500	360	10.00
Fluorene	1,600	360	10.00
Phenanthrene	5,000	920	50.00
Anthracene	1,300	180	10.00
Fluoranthene	2,600	150	10.00
Pyrene	2,200	74	10.00
Benzo (a) anthracene	480	36	10.00
Chrysene	510	36	10.00
Benzo (b) fluoranthene	480	74	10.00
Benzo (k) fluoranthene	270	36	10.00
Benzo (a) pyrene	490	36	10.00
Dibenz (a, h) anthracene	460	74	10.00
Benzo (g, h, i) perylene	600	74	10.00
Indeno (1, 2, 3-cd) pyrene	490	36	10.00

Surrogate	%REC	Limits	Diln Fac
1-Methylnaphthalene (UV)	182 *	30-122	10.00
1-Methylnaphthalene (F)	87	32-132	10.00

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Polynuclear Aromatics by HPLC

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3550
Project#:	S9171-JO	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC145387	Batch#:	63625
Matrix:	Soil	Prepared:	05/15/01
Units:	ug/Kg	Analyzed:	05/16/01
Basis:	wet		

Analyte	Result	RL
Naphthalene	ND	33
Acenaphthylene	ND	66
Acenaphthene	ND	33
Fluorene	ND	33
Phenanthrene	ND	17
Anthracene	ND	17
Fluoranthene	ND	13
Pyrene	ND	6.7
Benzo(a)anthracene	ND	3.3
Chrysene	ND	3.3
Benzo(b)fluoranthene	ND	6.7
Benzo(k)fluoranthene	ND	3.3
Benzo(a)pyrene	ND	3.3
Benzo(a,h)anthracene	ND	6.7
Benzo(g,h,i)perylene	ND	6.7
Indeno(1,2,3-cd)pyrene	ND	3.3

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	64	30-122
1-Methylnaphthalene (F)	67	32-132



Polynuclear Aromatics by HPLC

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3550
Project#:	S9171-JO	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC145388	Batch#:	63625
Matrix:	Soil	Prepared:	05/15/01
Units:	ug/Kg	Analyzed:	05/16/01
Basis:	wet		

Analyte	Spiked	Result	%REC	Limits
Naphthalene	329.4	249.3	76	38-130
Acenaphthylene	658.8	412.1	63	48-110
Acenaphthene	329.4	241.5	73	53-115
Fluorene	65.88	47.85	73	59-110
Phenanthrene	32.94	25.07	76	51-110
Anthracene	32.94	18.66	57	45-110
Benzo (k) fluoranthene	32.94	25.76	78	64-110
Indeno (1,2,3-cd) pyrene	32.94	25.20	77	49-110

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	76	30-122
1-Methylnaphthalene (F)	78	32-132

California Title 26 Metals

Lab #:	151956	Project#:	S9171-JO
Client:	Baseline Environmental	Location:	Seabreeze Hab Enhance
Field ID:	HE-1B;2-2.5	Diln Fac:	1.000
Lab ID:	151956-001	Sampled:	05/11/01
Matrix:	Soil	Received:	05/11/01
Units:	mg/Kg	Analyzed:	05/14/01
Basis:	dry		

Moisture: 11%

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	3.1	63597	05/13/01	EPA 3050	EPA 6010B
Arsenic	6.6	0.26	63597	05/13/01	EPA 3050	EPA 6010B
Barium	170	0.52	63597	05/13/01	EPA 3050	EPA 6010B
Beryllium	0.36	0.10	63597	05/13/01	EPA 3050	EPA 6010B
Cadmium	1.9	0.26	63597	05/13/01	EPA 3050	EPA 6010B
Chromium	38	0.52	63597	05/13/01	EPA 3050	EPA 6010B
Cobalt	10	1.0	63597	05/13/01	EPA 3050	EPA 6010B
Copper	280	0.52	63597	05/13/01	EPA 3050	EPA 6010B
Lead	110	0.15	63597	05/13/01	EPA 3050	EPA 6010B
Mercury	1.0	0.021	63614	05/14/01	METHOD	EPA 7471
Molybdenum	ND	1.0	63597	05/13/01	EPA 3050	EPA 6010B
Nickel	73	1.0	63597	05/13/01	EPA 3050	EPA 6010B
Selenium	0.51	0.26	63597	05/13/01	EPA 3050	EPA 6010B
Silver	ND	0.26	63597	05/13/01	EPA 3050	EPA 6010B
Thallium	ND	0.26	63597	05/13/01	EPA 3050	EPA 6010B
Vanadium	57	0.52	63597	05/13/01	EPA 3050	EPA 6010B
Zinc	170	1.0	63597	05/13/01	EPA 3050	EPA 6010B

Not Detected

RL= Reporting Limit

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California Title 26 Metals

Lab #:	151956	Project#:	S9171-JO
Client:	Baseline Environmental	Location:	Seabreeze Hab Enhance
Field ID:	HE-2B;2-2.5	Diln Fac:	1.000
Lab ID:	151956-002	Sampled:	05/11/01
Matrix:	Soil	Received:	05/11/01
Units:	mg/Kg	Analyzed:	05/14/01
Basis:	dry		

Moisture: 7%

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	2.9	63597	05/13/01	EPA 3050	EPA 6010B
Arsenic	7.6	0.24	63597	05/13/01	EPA 3050	EPA 6010B
Barium	89	0.48	63597	05/13/01	EPA 3050	EPA 6010B
Beryllium	0.32	0.096	63597	05/13/01	EPA 3050	EPA 6010B
Cadmium	2.5	0.24	63597	05/13/01	EPA 3050	EPA 6010B
Chromium	1.2	0.48	63597	05/13/01	EPA 3050	EPA 6010B
Cobalt	5.6	0.96	63597	05/13/01	EPA 3050	EPA 6010B
Copper	11	0.48	63597	05/13/01	EPA 3050	EPA 6010B
Lead	3.8	0.14	63597	05/13/01	EPA 3050	EPA 6010B
Mercury	0.17	0.022	63614	05/14/01	METHOD	EPA 7471
Molybdenum	ND	0.96	63597	05/13/01	EPA 3050	EPA 6010B
Nickel	17	0.96	63597	05/13/01	EPA 3050	EPA 6010B
Selenium	0.83	0.24	63597	05/13/01	EPA 3050	EPA 6010B
Silver	ND	0.24	63597	05/13/01	EPA 3050	EPA 6010B
Thallium	0.37	0.24	63597	05/13/01	EPA 3050	EPA 6010B
Vanadium	16	0.48	63597	05/13/01	EPA 3050	EPA 6010B
Zinc	75	0.96	63597	05/13/01	EPA 3050	EPA 6010B

ND= Not Detected

RL= Reporting Limit

California Title 26 Metals

Lab #:	151956	Project#:	S9171-JO
Client:	Baseline Environmental	Location:	Seabreeze Hab Enhance
Field ID:	HE-3B;2-2.5	Diln Fac:	1.000
Lab ID:	151956-003	Sampled:	05/11/01
Matrix:	Soil	Received:	05/11/01
Units:	mg/Kg	Analyzed:	05/14/01
Basis:	dry		

Moisture: 12%

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	3.2	63597	05/13/01	EPA 3050	EPA 6010B
Arsenic	5.2	0.27	63597	05/13/01	EPA 3050	EPA 6010B
Barium	17	0.53	63597	05/13/01	EPA 3050	EPA 6010B
Beryllium	0.16	0.11	63597	05/13/01	EPA 3050	EPA 6010B
Cadmium	1.4	0.27	63597	05/13/01	EPA 3050	EPA 6010B
Chromium	23	0.53	63597	05/13/01	EPA 3050	EPA 6010B
Cobalt	6.8	1.1	63597	05/13/01	EPA 3050	EPA 6010B
Copper	5.9	0.53	63597	05/13/01	EPA 3050	EPA 6010B
Lead	4.4	0.16	63597	05/13/01	EPA 3050	EPA 6010B
Mercury	0.024	0.021	63614	05/14/01	METHOD	EPA 7471
Molybdenum	ND	1.1	63597	05/13/01	EPA 3050	EPA 6010B
Nickel	37	1.1	63597	05/13/01	EPA 3050	EPA 6010B
Selenium	0.39	0.27	63597	05/13/01	EPA 3050	EPA 6010B
Silver	ND	0.27	63597	05/13/01	EPA 3050	EPA 6010B
Thallium	ND	0.27	63597	05/13/01	EPA 3050	EPA 6010B
Vanadium	23	0.53	63597	05/13/01	EPA 3050	EPA 6010B
Zinc	25	1.1	63597	05/13/01	EPA 3050	EPA 6010B



California Title 26 Metals

Lab #:	151956	Project#:	S9171-JO
Client:	Baseline Environmental	Location:	Seabreeze Hab Enhance
Field ID:	HE-4B;2-2.5	Diln Fac:	1.000
Lab ID:	151956-004	Sampled:	05/11/01
Matrix:	Soil	Received:	05/11/01
Units:	mg/Kg	Analyzed:	05/14/01
Basis:	dry		

Moisture: 28%

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	4.2	63597	05/13/01	EPA 3050	EPA 6010B
Arsenic	8.1	0.35	63597	05/13/01	EPA 3050	EPA 6010B
Barium	81	0.69	63597	05/13/01	EPA 3050	EPA 6010B
Beryllium	0.46	0.14	63597	05/13/01	EPA 3050	EPA 6010B
Cadmium	2.3	0.35	63597	05/13/01	EPA 3050	EPA 6010B
Chromium	53	0.69	63597	05/13/01	EPA 3050	EPA 6010B
Cobalt	9.9	1.4	63597	05/13/01	EPA 3050	EPA 6010B
Copper	76	0.69	63597	05/13/01	EPA 3050	EPA 6010B
Lead	37	0.21	63597	05/13/01	EPA 3050	EPA 6010B
Mercury	0.34	0.028	63614	05/14/01	METHOD	EPA 7471
Molybdenum	ND	1.4	63597	05/13/01	EPA 3050	EPA 6010B
Nickel	73	1.4	63597	05/13/01	EPA 3050	EPA 6010B
Selenium	0.69	0.35	63597	05/13/01	EPA 3050	EPA 6010B
Silver	ND	0.35	63597	05/13/01	EPA 3050	EPA 6010B
Thallium	ND	0.35	63597	05/13/01	EPA 3050	EPA 6010B
Vanadium	66	0.69	63597	05/13/01	EPA 3050	EPA 6010B
Zinc	92	1.4	63597	05/13/01	EPA 3050	EPA 6010B

ND= Not Detected

RL= Reporting Limit



California Title 26 Metals

Lab #:	151956	Project#:	S9171-JO
Client:	Baseline Environmental	Location:	Seabreeze Hab Enhance
Field ID:	HE-5B;2-2.5	Diln Fac:	1.000
Lab ID:	151956-005	Sampled:	05/11/01
Matrix:	Soil	Received:	05/11/01
Units:	mg/Kg	Analyzed:	05/14/01
Basis:	dry		

Moisture: 10%

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	3.1	63597	05/13/01	EPA 3050	EPA 6010B
Arsenic	6.8	0.26	63597	05/13/01	EPA 3050	EPA 6010B
Barium	39	0.52	63597	05/13/01	EPA 3050	EPA 6010B
Beryllium	0.15	0.10	63597	05/13/01	EPA 3050	EPA 6010B
Cadmium	1.5	0.26	63597	05/13/01	EPA 3050	EPA 6010B
Chromium	26	0.52	63597	05/13/01	EPA 3050	EPA 6010B
Cobalt	7.0	1.0	63597	05/13/01	EPA 3050	EPA 6010B
Copper	19	0.52	63597	05/13/01	EPA 3050	EPA 6010B
Lead	32	0.16	63597	05/13/01	EPA 3050	EPA 6010B
Mercury	0.082	0.022	63614	05/14/01	METHOD	EPA 7471
Molybdenum	ND	1.0	63597	05/13/01	EPA 3050	EPA 6010B
Nickel	56	1.0	63597	05/13/01	EPA 3050	EPA 6010B
Selenium	0.26	0.26	63597	05/13/01	EPA 3050	EPA 6010B
Silver	ND	0.26	63597	05/13/01	EPA 3050	EPA 6010B
Thallium	ND	0.26	63597	05/13/01	EPA 3050	EPA 6010B
Vanadium	54	0.52	63597	05/13/01	EPA 3050	EPA 6010B
Zinc	53	1.0	63597	05/13/01	EPA 3050	EPA 6010B

California Title 26 Metals

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3050
Project#:	S9171-JO	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC145299	Batch#:	63597
Matrix:	Miscell.	Prepared:	05/13/01
Units:	mg/Kg	Analyzed:	05/14/01
Basis:	wet		

Analyte	Result	RL
Antimony	ND	3.0
Arsenic	ND	0.25
Barium	ND	0.50
Beryllium	ND	0.10
Cadmium	ND	0.25
Chromium	ND	0.50
Cobalt	ND	1.0
Copper	ND	0.50
Lead	ND	0.15
Molybdenum	ND	1.0
Nickel	ND	1.0
Selenium	ND	0.25
Silver	ND	0.25
Thallium	ND	0.25
Vanadium	ND	0.50
Zinc	ND	1.0

California Title 26 Metals

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 7471
Analyte:	Mercury	Basis:	wet
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC145347	Batch#:	63614
Matrix:	Soil	Prepared:	05/14/01
Units:	mg/Kg	Analyzed:	05/14/01

Result	RL
ND	0.020



Curtis & Tompkins, Ltd.

California Title 26 Metals

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3050
Project#:	S9171-JO	Analysis:	EPA 6010B
Matrix:	Miscell.	Batch#:	63597
Units:	mg/Kg	Prepared:	05/13/01
Basis:	wet	Analyzed:	05/14/01
Diln Fac:	1.000		

Type: BS Lab ID: QC145300

Analyte	Spiked	Result	%REC	Limit
Antimony	100.0	82.50	83	73-111
Arsenic	50.00	39.65	79	74-110
Barium	100.0	78.50	79	76-110
Beryllium	2.500	2.045	82	77-110
Cadmium	10.00	7.450	75	75-112
Chromium	100.0	80.50	81	73-111
Cobalt	25.00	19.60	78	74-110
Copper	12.50	10.60	85	75-111
Lead	100.0	77.50	78	70-110
Molybdenum	20.00	16.35	82	75-110
Nickel	25.00	19.85	79	74-111
Selenium	50.00	37.45	75	73-111
Silver	10.00	7.950	80	70-115
Thallium	50.00	38.30	77	75-110
Vanadium	25.00	20.55	82	74-110
Zinc	25.00	21.25	85	68-110

Type: BSD Lab ID: QC145301

Analyte	Spiked	Result	%REC	Limit	RPD	Lim
Antimony	100.0	83.50	84	73-111	1	20
Arsenic	50.00	39.55	79	74-110	0	20
Barium	100.0	78.50	79	76-110	0	23
Beryllium	2.500	2.070	83	77-110	1	20
Cadmium	10.00	7.500	75	75-112	1	20
Chromium	100.0	81.00	81	73-111	1	23
Cobalt	25.00	19.80	79	74-110	1	24
Copper	12.50	10.65	85	75-111	0	22
Lead	100.0	78.50	79	70-110	1	20
Molybdenum	20.00	16.50	83	75-110	1	20
Nickel	25.00	20.00	80	74-111	1	21
Selenium	50.00	37.85	76	73-111	1	20
Silver	10.00	8.000	80	70-115	1	39
Thallium	50.00	38.65	77	75-110	1	20
Vanadium	25.00	20.75	83	74-110	1	20
Zinc	25.00	21.40	86	68-110	1	22

California Title 26 Metals

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3050
Project#:	S9171-JO	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	63597
MSS Lab ID:	151919-001	Sampled:	05/10/01
Lab ID:	QC145302	Received:	05/10/01
Matrix:	Soil	Prepared:	05/13/01
Units:	mg/Kg	Analyzed:	05/14/01
Basis:	wet		

Analyte	MSS Result	Result	RL	RPD	Lim
Antimony	<2.830	ND	2.8	NC	48
Arsenic	2.099	2.009	0.23	4	39
Barium	21.23	19.31	0.46	9	29
Beryllium	0.1132	ND	0.093	NC	21
Cadmium	0.4208	0.5185	0.23	21	27
Chromium	2.844	5.833	0.46	69 *	34
Cobalt	<0.9434	ND	0.93	NC	34
Copper	39.76	38.43	0.46	3	38
Lead	15.00	15.19	0.14	1	40
Molybdenum	1.127	1.644	0.93	37	37
Nickel	4.717	7.685	0.93	48 *	31
Selenium	0.3896	ND	0.23	NC	39
Silver	<0.2358	ND	0.23	NC	46
Thallium	0.3910	ND	0.23	NC	45
Vanadium	2.340	2.287	0.46	2	26
Zinc	19.53	19.31	0.93	1	34

*= Value outside of QC limits; see narrative

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

RPD= Relative Percent Difference



California Title 26 Metals

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	EPA 3050
Project#:	S9171-JO	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SSPIKE	Batch#:	63597
MSS Lab ID:	151919-001	Sampled:	05/10/01
Lab ID:	QC145303	Received:	05/10/01
Matrix:	Soil	Prepared:	05/13/01
Units:	mg/Kg	Analyzed:	05/14/01
Basis:	wet		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	0.2123	98.52	42.22	43	15-112
Arsenic	2.099	49.26	43.74	85	51-114
Barium	21.23	98.52	106.4	86	29-149
Beryllium	0.1132	2.463	2.300	89	56-116
Cadmium	0.4208	9.852	9.015	87	35-128
Chromium	2.844	98.52	94.09	93	23-141
Cobalt	0.5519	24.63	22.41	89	45-115
Copper	39.76	12.32	58.62	153 *	36-132
Lead	15.00	98.52	100.5	87	31-133
Molybdenum	1.127	19.70	20.05	96	34-121
Nickel	4.717	24.63	34.19	120	32-112
Selenium	0.3896	49.26	37.93	76	40-112
Silver	<0.02000	9.852	8.621	88	36-137
Thallium	0.3910	49.26	40.44	81	55-109
Vanadium	2.340	24.63	25.22	93	22-142
Zinc	19.53	24.63	39.36	81	30-132



California Title 26 Metals

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 7471
Analyte:	Mercury	Diln Fac:	1.000
Matrix:	Soil	Batch#:	63614
Units:	mg/Kg	Prepared:	05/14/01
Basis:	wet	Analyzed:	05/14/01

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC145348	0.5000	0.5030	101	80-114		
BSD	QC145349	0.5000	0.4750	95	80-114	6	130



California Title 26 Metals

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 7471
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	63614
MSS Lab ID:	151818-003	Sampled:	05/01/01
Matrix:	Soil	Received:	05/03/01
Units:	mg/Kg	Prepared:	05/14/01
Basis:	dry	Analyzed:	05/14/01

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
MS	QC145350	0.1944	0.5018	0.6363	88	62-135	6%		
MSD	QC145351		0.5018	0.6513	91	62-135	6%	2	35

California Title 26 Metals

Lab #:	151956	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 7471
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	63614
MSS Lab ID:	151845-002	Sampled:	05/03/01
Matrix:	Soil	Received:	05/05/01
Units:	mg/Kg	Prepared:	05/14/01
Basis:	dry	Analyzed:	05/14/01

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim
MS	QC145352	0.004546	0.5906	0.5646	95	62-135	17%		
MSD	QC145353		0.5792	0.5271	90	62-135	17%	5	35



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

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A N A L Y T I C A L R E P O R T

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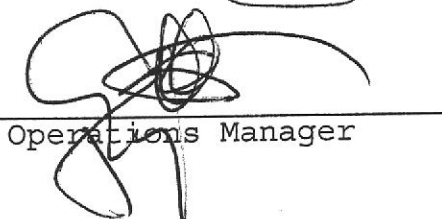
Date: 13-JUN-01
Lab Job Number: 152110
Project ID: S9171-JO
Location: Seabreeze Hab Enhance

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:


Project Manager

Reviewed by:


Operations Manager

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	152110	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 6010B
Field ID:	HE-1B;2-2.5	Sampled:	05/11/01
Matrix:	WET Leachate	Received:	05/11/01
Units:	ug/L	Prepared:	05/23/01
Diln Fac:	10.00	Analyzed:	05/23/01
Batch#:	63820		

Type: SAMPLE Lab ID: 152110-001

Analyte	Result	RL
Chromium	ND	500
Copper	15,000	500
Lead	9,400	150

Type: BLANK Lab ID: QC146102

Analyte	Result	RL
Chromium	ND	500
Copper	ND	500
Lead	ND	150



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Curtis & Tompkins Laboratories Analytical Report

Lab #:	152110	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 6010B
Matrix:	WET Leachate	Batch#:	63820
Units:	ug/L	Prepared:	05/23/01
Diln Fac:	1.000	Analyzed:	05/23/01

Type: BS Lab ID: QC146103

Analyte	Spiked	Result	%REC	Limits
Chromium	2,000	1,950	98	80-113
Copper	250.0	243.0	97	80-114
Lead	2,000	1,900	95	78-120

Type: BSD Lab ID: QC146104

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chromium	2,000	1,920	96	80-113	2	21
Copper	250.0	242.0	97	80-114	0	
Lead	2,000	1,870	94	78-120	2	



Curtis & Tompkins Laboratories Analytical Report

Lab #:	152110	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	10.00
Type:	SDUP	Batch#:	63820
MSS Lab ID:	152013-001	Sampled:	05/15/01
Lab ID:	QC146105	Received:	05/15/01
Matrix:	WET Leachate	Prepared:	05/23/01
Units:	ug/L	Analyzed:	05/23/01

Analyte	MSS Result	Result	RL	RPD	Lim
Chromium	2,310	2,215	500	4	20
Copper	3,260	3,145	500	4	20
Lead	2,765	2,635	150	5	29

Reporting Limit

RPD = Relative Percent Difference

Curtis & Tompkins Laboratories Analytical Report

Lab #:	152110	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	10.00
Type:	SSPIKE	Batch#:	63820
MSS Lab ID:	152013-001	Sampled:	05/15/01
Lab ID:	QC146106	Received:	05/15/01
Matrix:	WET Leachate	Prepared:	05/23/01
Units:	ug/L	Analyzed:	05/23/01

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chromium	2,310	10,000	11,500	92	70-124
Copper	3,260	1,250	4,485	98	74-122
Lead	2,765	10,000	12,000	92	66-128

Curtis & Tompkins Laboratories Analytical Report

Lab #:	152110	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 6010B
Field ID:	HE-1B;2-2.5	Sampled:	05/11/01
Matrix:	WET Leachate	Received:	05/11/01
Units:	ug/L	Prepared:	05/23/01
Diln Fac:	10.00	Analyzed:	05/23/01
Batch#:	63820		

Type: SAMPLE Lab ID: 152110-001

Analyte	Result	RL
Chromium	ND	500
Copper	15,000	500
Lead	9,400	150

Type: BLANK Lab ID: QC146102

Analyte	Result	RL
Chromium	ND	500
Copper	ND	500
Lead	ND	150



Curtis & Tompkins Laboratories Analytical Report

Lab #:	152110	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 6010B
Matrix:	WET Leachate	Batch#:	63820
Units:	ug/L	Prepared:	05/23/01
Diln Fac:	1.000	Analyzed:	05/23/01

Type: BS Lab ID: QC146103

Analyte	Spiked	Result	%REC	Limits
Chromium	2,000	1,950	98	80-113
Copper	250.0	243.0	97	80-114
Lead	2,000	1,900	95	78-120

Type: BSD Lab ID: QC146104

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chromium	2,000	1,920	96	80-113	2	21
Copper	250.0	242.0	97	80-114	0	
Lead	2,000	1,870	94	78-120	2	

Curtis & Tompkins Laboratories Analytical Report

Lab #:	152110	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	10.00
Type:	SDUP	Batch#:	63820
MSS Lab ID:	152013-001	Sampled:	05/15/01
Lab ID:	QC146105	Received:	05/15/01
Matrix:	WET Leachate	Prepared:	05/23/01
Units:	ug/L	Analyzed:	05/23/01

Analyte	MSS Result	Result	RL	RPD	Lim
Chromium	2,310	2,215	500	4	20
Copper	3,260	3,145	500	4	20
Lead	2,765	2,635	150	5	29

Reporting Limit

RPD = Relative Percent Difference

Curtis & Tompkins Laboratories Analytical Report

Lab #:	152110	Location:	Seabreeze Hab Enhance
Client:	Baseline Environmental	Prep:	METHOD
Project#:	S9171-JO	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Diln Fac:	10.00
Type:	SSPIKE	Batch#:	63820
MSS Lab ID:	152013-001	Sampled:	05/15/01
Lab ID:	QC146106	Received:	05/15/01
Matrix:	WET Leachate	Prepared:	05/23/01
Units:	ug/L	Analyzed:	05/23/01

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chromium	2,310	10,000	11,500	92	70-124
Copper	3,260	1,250	4,485	98	74-122
Lead	2,765	10,000	12,000	92	66-128