CITY OF
VENTURA

March 28, 2013

Mr. Michael Lyons, Environmental Specialist
California Regional Water Quality Control Board Los Angeles Region
320 W. 4TH Street, Suite 200
Los Angeles, CA 90013

RE: Request for Renewal of Order No. 97-127 Establishing Discharge Requirements for the Ventura Keys Maintenance Dredging Program.

Dear Michael:

This letter forwards the City of Ventura's application for renewal of Order No. 97-127 establishing the discharge requirements for the Ventura Keys - Maintenance Dredging Program. The Keys are a waterfront residential community adjacent to Ventura Harbor. The dredging effort would occur on an as-needed basis over a five-year period commencing on or about September 1, 2013. While approximately 250,000 cubic yards of material could be dredged over the five-year period, the average volume per episode is not expected to exceed 50,000 cubic yards.

The proposed project is required to maintain channel configurations, and to restore and assure safe navigability within the Keys waterways. The project would also provide material for beach replenishment. Deposition options include the surf zone at Cell 1 of the Pierpont Bay Groin Field (the first cell north of Marina Park), and the surf zone at the mouth Of the Santa Clara River and/or the near shore waters at the mouth of the Santa Clara River. The dredging and deposition activities would not commence until after Labor Day in September of any year and would cease on or before March 15 of the following year so as to avoid impacts on grunion spawning, least tern and snowy plover nesting, and recreational use of the beach.

The episode nature of the need to dredge the Keys waterways is directly related to the occurrence of major rainfall events within the local watershed. This situation is well illustrated by the fact that over the past 20 years there have been only 5 dredging episodes. Those episodes have resulted in the removal of 267,752 cubic yards of natural or an average of 53,550 cubic yards per episode. Due to the relatively dry conditions that have persisted over the past 5 years, no maintenance dredging was conducted pursuant to Order No. 97-127

Enclosed herewith are the following items supporting the City's request.

1. A completed Master Dredging Permit Application dated March 26, 2013.

2. A Project Description of the Ventura Keys Maintenance Dredging.

3. Vicinity map and plans (7 sheets), and May 2012 Bathymetric Survey, .

4. Addendum No. 2 to Final Mitigated Negative Declaration (EIR-2171), which was approved on January 24, 2013.

5. The following reports addressing the character of the material to be dredged and the character of the material at the established deposition sites:

   a. Report titled "Final Report Sampling and Analysis Ventura Keys Connecting Channel Sediment Investigation, Ventura, California" Dated January 7, 2013 prepared by Applied Environmental Technologies, Inc.

6, Department of the Army Permit No. 2007-872-PHT for the maintenance dredging of the Ventura Keys between September 3, 2008 and September 2, 2013.

7. Los Angeles Regional Water Quality Control Board Order No. 97-127 for the maintenance dredging of the Ventura Keys between December 6, 2007 and December 31, 2012.

8. California Coastal Commission COP 4-07-118 for the maintenance dredging of the Ventura Keys between July 22, 2008 and June 11,2018.

9. California State Lands Commission lease No, PRC 8786.9 for the Maintenance dredging of the Ventura Keys between June 24, 2008 and June 23, 2018.

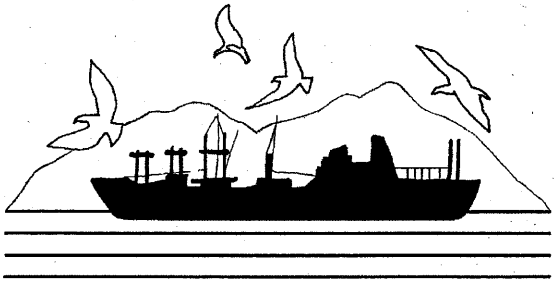
If any additional information is required, please let me know at (805) 649-9759, or on my cell phone at (805) 890-8505. I would also appreciate the opportunity to discuss the project application with you prior to the finalization of your recommendation to the Regional Board.

Yours truly,

Richard W, Parsons
Dredging Program Manager

RWP/97-500

STATE OF CALIFORNIA



Los Angeles Region
CONTAMINATED SEDIMENTS TASK FORCE

MASTER DREDGING PERMIT APPLICATION

Form Number REG4-DREDGE-001

PLEASE INDICATE WHICH OF THE FOLLOWING THIS FORM APPLIES TO:

- ☐ Section 404 and/or Section 10 dredging permits by the Los Angeles District of the Corps of Engineers
- ☐ California Regional Water Quality Control Board, Los Angeles Region, Report of Waste Discharge, pursuant to Sections 13260, 13374, and 13377 of Article 4, Chapter 4, of the Porter-Cologne Water Quality Control Act*
- ☐ Port of Long Beach Harbor Development Permit
- ☐ Port of Los Angeles Coastal Development Permit
- ☐ California Coastal Commission Coastal Development Permit
- ☐ California Coastal Commission Federal Consistency Certification/Determination

(New 04/02)

*This application shall serve as, and be functionally equivalent to, a Report of Waste Discharge, pursuant to Sections 13260, 13374, and 13377 of Article 4, Chapter 4 of the Porter-Cologne Water Quality Control Act.

Exhibit 1

Los Angeles Region
CONTAMINATED
SEDIMENTS
TASK FORCE

LOS ANGELES REGION
CONTAMINATED SEDIMENTS TASK FORCE

(Please complete all sections and follow instructions provided with application.)

SECTION 1 - GENERAL INFORMATION

1. APPLICANT INFORMATION (see instructions)

Applicant Name	**Contact Name (if different)**
City of Ventura	Engineering Dept.

Mailing Address	**City**
1501 Poli Street	Ventura

State	**Zip**	**Business Phone**	**Residence Phone**
CA	93002	(805)654-7870	

2. LEGAL INTEREST (see instructions)

☐ Individual ☐ Legal Entity ☒ Government ☐ Non-profit

☒ Other (Please provide description): Leaseholder

Note: You will need to provide a copy of legal interest with this application (e.g., title, lease, deed, and easement).

3. REPRESENTATIVE INFORMATION (see instructions)

Applicant's authorized agent, point of contact, and/or representative ☐ None

Name/Title	Organization
Richard Parsons	

Mailing Address	City
2271 Los Encinos Rd.	Ojai

State	Zip	Business Phone	Residence Phone
CA	93023	(805)649-9759	(805)890-8505

Who should receive correspondence relevant to this application? ☐ Applicant ☐ Representative ☒ Both

I hereby authorize the above named to act as my representative and bind me in all matters concerning this application.

J. McDermott
Signature of Applicant

3/29/13
Date

THIS BOX IS FOR OFFICIAL USE ONLY: Data Base Entry ☐ Yes ☐ No

Date received: _____
Date completed: _____
SAP Approved: _____
Data Submitted: _____
Date Approved: _____

ACOE No. _____
CCC No. _____
RWQCB No. _____
POLA CDP No. _____
POLB HDP No. _____

SECTION II - PROJECT INFORMATION

4. GENERAL PROJECT INFORMATION (see instructions)

Project Name or Title Ventura Keys Maintenance Dredging		
Type of Dredging Project: ☒ Maintenance ☐ New Work	Timing of Project: ☐ Single Episode	☒ Multi-Episode
Project description (attach additional sheets if necessary): Periodic maintenance dredging on an as needed basis		
Project need and/or purpose: To maintain channel depths		
Month and year work is proposed to begin September 2013	Estimated completion date April 2018	Estimated total project cost $4 million

5. DREDGING INFORMATION (see instructions)

Dredge Site Ventura Keys	County Ventura	Nearest City Ventura
Latitude(s) N34 degrees 15.275	Longitude(s) W119 degrees 15.875	Waterway Ventura Keys

Type and composition of dredged material (Please give percentages if available) ☐ Sand_____ ☐ Silt/Clay_____

Is the material appropriate for beach replenishment? ☒ Yes ☐ No

Proposed type of equipment/construction methods to be used:

Usually hydraulic but occassionally clam shell

Will a temporary rehandling area or storage site be used for the dredged material? ☐ Yes ☒ No

If Yes, for what length of time? _____

Site address? _____

Type of containment? _____

Approximate size of area? _____ acres or ft^2

Will the project result in the construction of temporary or permanent structures? ☐ Yes ☒ No

If Yes, please indicate: ☐ Temporary ☐ Permanent

Please provide a description:

Will the proposed dredging affect existing public access or public recreational facilities? ☒ Yes ☐ No

If Yes, please describe location and nature of impact:

The project is designed to assure the continance of public navigational access to the keys waterways

Please describe how the impacts would be mitigated:

N/A

Will the proposed dredging affect a historic/cultural resource? ☐ Yes ☒ No

If Yes, please describe location and nature of impact:

Please describe how the impacts would be mitigated:

N/A

BOX 5 (CONTINUED)

Depth of dredging based on Mean Lower Low Water (MLLW) datum

Existing depth: varies * Over/depth tolerance: 2 Ft. *see section 3.1 of the attached project description

Proposed design depth: varies * Proposed total depth: Varies *

Volume of material to be dredged: 35,000 cy/yr cy, area of dredging: 13.5 acres

Type(s) of substrate being dredged:

☒ Sub-tidal Bottom ☐ Mudflat ☐ Wetlands ☐ Estuary ☐ Other: _____

Please list agency and identification numbers of any previous permits for this activity:

Agency	Permit/Approval	Permit No.	Issue Date
USACE	Permit	SPL-2007-872-PHT	9-3-2008
Calif. Coastal Commission	Permit	4-07-118	6-11-18
LARWQCB / State Lands	Order / Lease	97-127 / 8786.9	12-31-12 / 6-23-18

If applicable, please give the Assessor's Parcel Number: N/A

6. DISPOSAL SITE INFORMATION

AQUATIC DISPOSAL (see instructions)

Does the project involve aquatic disposal? ☒ Yes ☐ No

Site: (please check all that apply) ☐ LA-2 ☐ LA-3 ☐ CAD ☐ In-Harbor ☐ RCDS ☒ Other: Surf Zone

Total volume of dredged material designated for aquatic disposal: 250,000 cy cy

Will the proposed disposal affect a historic/cultural resource? ☐ Yes ☒ No

If Yes, please describe location and nature of impact:

SITE INFORMATION (Please attach the following information for additional sites):

☐ LA-2 ☐ LA-3 ☐ CAD ☐ In-Harbor ☒ RCDS ☐ Other : Surf Zone

Volume of dredged material designated for this aquatic disposal site: 250,000 cy cy

Is the site an existing site that regularly receives dredged material? ☒ Yes ☐ No

Year site was last used for dredged material disposal: 2007

Proposed type of equipment/construction methods to be used:

hydraulic and/or clam shell

PROPOSED UPLAND, WETLAND, REUSE, OR FILL DISPOSAL (see instructions)

Does the project involve upland, wetland, reuse, or fill disposal? ☐ Yes ☒ No

If the project will involve upland, wetland, or fill disposal, but will not involve reuse, please explain why reuse has not been considered:

Will the proposed disposal affect a historic/cultural resource? ☐ Yes ☒ No

If Yes, please describe location and nature of impact:

Site(s): (please check all that apply)

☐ Upland ☐ Federal Wetland ☐ State Wetland ☒ Reuse ☐ Fill

Total volume of dredged material designated for upland, wetland, reuse, and fill disposal: 250,000 cu. yds. cy over 5 years

SITE INFORMATION (Please attach the following information for additional sites):

(Check only one) ☐ Upland ☐ Federal Wetland ☐ State Wetland ☒ Reuse ☐ Fill

Site Name:

See section 3.1 of the attached project description

BOX 6 (CONTINUED)

Site Description (see instructions):
See section 3.1 of the attached project description

Site Address	City	State	Zip
		CA	

Latitude(s)	Longitude(s)	Zoning

Owner's Name	Phone Number

Address	City	State	Zip
		CA	

Does this site include jurisdictional wetlands? ☐ Yes ☒ No
If Yes, give name and permit number of approved wetlands project where material will be placed:

Is the site an existing site that regularly receives dredged material? ☒ Yes ☐ No
Year site was last used for dredged material disposal: 2006
Volume of dredged material designated for this disposal site: 250,000 cy
Proposed type of equipment to be used:

Will disposal result in the construction of temporary or permanent structures? ☐ Yes ☒ No
If Yes, please describe:

Will the proposed disposal affect existing public access or public recreational facilities? ☐ Yes ☒ No
If Yes, please describe how the impacts would be mitigated:

Will the proposed disposal involve the transportation of dredged material by trucks? ☐ Yes ☒ No
If Yes, please describe the number of truck trips and the route to be used:

(Attach the above information for additional sites)

7. SENSITIVE AREAS (see instructions)

Does the project have the potential to affect a sensitive area? ☒ Yes ☐ No

Type of Habitat:
☒ Sandy Beach ☐ Inter-Tidal ☐ Eelgrass ☐ Sub-Tidal ☐ Kelp Forest ☐ Coastal Wetlands ☐ Riparian

Habitat Name:
See section 3.1 of the attached project description

Habitat Size: _____ acres or ft^2 Size of area impacted: _____ acres or ft^2
Estimated Dates of Impact: From September 1 To March 15

Have you contacted the following agencies? (see instructions):

1. U.S. Environmental Protection Agency	☐ Yes	☒ No	☐ N/A
2. U.S. Fish and Wildlife	☐ Yes	☒ No	☐ N/A
3. U.S. Army Corps of Engineers	☒ Yes	☐ No	☐ N/A
4. National Marine Fisheries Service	☐ Yes	☒ No	☐ N/A
5. U.S. Bureau of Land Management	☐ Yes	☐ No	☒ N/A
6. Nat'l Oceanic & Atmospheric Association	☐ Yes	☐ No	☒ N/A
7. CA Environmental Protection Agency	☐ Yes	☐ No	☒ N/A
8. CA Department of Fish & Game	☐ Yes	☒ No	☐ N/A
9. CA State Lands Commission	☒ Yes	☐ No	☐ N/A
10. S. Coast Air Quality Mgmt. District	☐ Yes	☒ No	☐ N/A
11. California Coastal Commission	☒ Yes	☐ No	☐ N/A
12. Regional Water Quality Control Board	☒ Yes	☐ No	☐ N/A

(BOX 7 CONTINUED)

If Yes to any of the above, please give the following information for each agency:
If more than can be entered here, please attach a supplemental list.

Name of Agency: U.S. Army Corps of Engineers

Name of Contact: Antal Szijj

Permit required?: ☒ Yes ☐ No If Yes, please give number: SPL-2007-872-PHT

Special Condition(s) required?: ☒ Yes ☐ No
If Yes, please describe: Attached

Name of Agency: Los Angeles Regional Water Quality Control Board

Name of Contact: Michael Lyons

Permit required?: ☒ Yes ☐ No If Yes, please give number: 97-127

Special Condition(s) required?: ☒ Yes ☐ No
If Yes, please describe: Attached

Name of Agency: California Coastal Commission

Name of Contact: Jacqueline Blaugrund

Permit required?: ☒ Yes ☐ No If Yes, please give number: 4-07-118

Special Condition(s) required?: ☒ Yes ☐ No
If Yes, please describe: Attached

Name of Agency: State Lands Commission

Name of Contact: Kenneth Foster

Permit required?: ☒ Yes ☐ No If Yes, please give number: 8786.9

Special Condition(s) required?: ☒ Yes ☐ No
If Yes, please describe: Attached

8. THREATENED OR ENDANGERED SPECIES (see instructions)

Does the project have the potential to affect any federal or state threatened or endangered species?
☒ Yes ☐ No If Yes, please indicate: ☒ Federal ☐ State

Note: If more than one, please attach a supplemental list.

Name of species: Snowy Plover, Least Tern

Location of species in relation to project:

Estimated Dates of Impact: *From* September 1 *To* March 15

Do these dates coincide with the breeding season?: ☐ Yes ☒ No
Has a Section 7 consultation been initiated? ☒ Yes ☐ No
Have you prepared a mitigation plan? ☐ Yes ☒ No By the USACE
If Yes, please attach; if No, please give the expected submission date: _____
Does this project have the potential to affect any marine fisheries or marine mammals? ☐ Yes ☒ No
If Yes, have you consulted National Marine Fisheries Service?: ☐ Yes ☐ No
If Yes, please give the following information:

Name of Contact:

Permit required?: ☐ Yes ☒ No If Yes, please give number:

Special Condition(s) required?: ☐ Yes ☐ No
If Yes, please describe: N/A

(BOX 8 CONTINUED)

Have you consulted CA Department of Fish & Game?: ☐ Yes ☒ No If Yes, please give the following information:
Name of Contact:
Permit required?: ☐ Yes ☐ No If Yes, please give number:
Special Condition(s) required?: ☐ Yes ☐ No If Yes, please describe:

9. ESSENTIAL FISH HABITAT (see instructions)

Does the project have the potential to affect any essential fish habitat? ☐ Yes ☒ No
Fishery Type: ☐ Coastal Pelagic Species ☐ Salmon ☐ Pacific Coast Groundfish
Note: If more than one, please attach a supplemental list.
Affected Species :
Has an analysis of the effect of the project on managed species been conducted ? ☐ Yes ☐ No If Yes, please attach; if No, please give the expected submission date:
Have you contacted National Marine Fisheries Service? ☐ Yes ☐ No If Yes, please give the following information:
Name of Contact:
Permit required?: ☐ Yes ☐ No If Yes, please give number:
Special Condition(s) required?: ☐ Yes ☐ No If Yes, please describe:

SECTION III - OTHER REQUIRED INFORMATION

10. ENVIRONMENTAL APPROVALS (see instructions)

Note: Please provide a copy of the project's environmental documentation with your application.
CEQA Lead Agency: Type of Environmental Documentation: ☐ CE ☒ ND ☐ EIR Date of Approval: 1.14.2013 or Approximate date of completion: _____ NEPA Lead Agency: Type of Environmental Documentation: ☐ CE ☐ EA ☐ EIS Date of Approval: _____ or Approximate date of completion: _____

11. OTHER APPROVALS (see instructions)

CA DEPARTMENT OF FISH & GAME - 1601 & 1603 Approval ☒ None Required Number _____ Date of Application _____ Date of Issuance _____
LOCAL GOVERNMENT APPROVALS
Approving Agency: N/A Approval Type:
Approval Date: Local Contact & Phone:
Approving Agency: Approval Type:
Approval Date: Local Contact & Phone:
Approving Agency: Approval Type:
Approval Date: Local Contact & Phone:

12. ADJOINING PROPERTY OWNERS (see instructions)

Please provide names and addresses of property owners, lessees, etc., whose property adjoins either the project or the disposal site (disposal site information is not required for the designated aquatic sites). If more than can be entered here, please attach a supplemental list.

Name
Attached

Address	City	State	Zip
		CA	

Property adjoins: ☐ Dredging Site ☐ Disposal Site
Party given is: ☐ Owner ☐ Lessee ☐ Other (explain):

Name

Address	City	State	Zip

Property adjoins: ☐ Dredging Site ☐ Disposal Site
Party given is: ☐ Owner ☐ Lessee ☐ Other (explain): Terminal on city property

Name

Address	City	State	Zip

Property adjoins: ☐ Dredging Site ☐ Disposal Site
Party given is: ☐ Owner ☐ Lessee ☐ Other (explain):

Name

Address	City	State	Zip

Property adjoins: ☐ Dredging Site ☐ Disposal Site
Party given is: ☐ Owner ☐ Lessee ☐ Other (explain):

13. CHECKLIST OF ADDITIONAL INFORMATION TO BE SUBMITTED (see instructions)

This box identifies other information that is required before your dredging application can be accepted as complete and processing of the application initiated. Please indicate whether the material is attached or in-progress. If the material is in-progress, please give the expected submission date.

	Attached	**OR** In-Progress	Expected Submittal Date
Sampling & Analysis Plan (SAP):	☒	☐	
Testing Data:	☒	☐	
Environmental Documentation:	☒	☐	
Dredging & Disposal Plan:	☒	☐	
Proof of Legal Interest:	☒	☐	
Federal Consistency Determination or Certification	☐	☐	N/A

Fees: ☐ USACE (NA) ☐ CCC (NA) ☐ RWQCB

14. COASTAL DEVELOPMENT PERMIT

Use of this application for a California Coastal Commission Coastal Development Permit (CDP) requires certain additional information. If you plan to use this form to apply for a CDP please provide the following:

- Stamped envelopes addressed to each property owner and occupant of property situated within 100' of property lines of the project site.
- Stamped envelopes addressed to all other parties known to the applicant to be interested in the project.
- Verification of all other permits, permissions, or approvals granted by public agencies such as CA Dept. of Fish and Game, CA State Lands Commission, US Army Corps of Engineers, US Coast Guard, etc.

(BOX 14 CONTINUED)

- Declaration of campaign contributions (see attached form Appendix A).
- Declaration of posting (see attached form Appendix B).

If you have any questions concerning these requirements, please contact the California Coastal Commission South Coast District office in Long Beach.

NOTICE TO APPLICANTS

The California Coastal Commission may adopt or amend regulations affecting the issuance of coastal development permits. If you would like notice of such proposals during the pendency of this application, if such proposals are reasonably related to this application, please indicate that desire: ☐ Yes ☐ No

COMMUNICATION WITH COMMISSIONERS

Decisions of the California Coastal Commission must be made on the basis of information available to all commissioners and the public. Therefore, permit applicants and interested parties and their representatives are advised not to discuss with commissioners any matters relating to a permit outside the public hearing. Such contacts may jeopardize the fairness of the hearing and result in invalidation of the Commission's decision by court. Any written material sent to a commissioner should also be sent to the commission office for inclusion in the public record and distribution to other Commissioners.

15. CERTIFICATION OF ACCURACY OF INFORMATION

I hereby certify under penalty of perjury that to the best of my knowledge, the information in this application and all attached exhibits is full, complete, and correct, and I understand that any misstatement or omission of the requested information or of any information subsequently requested shall be grounds for denying the permit, for suspending or revoking a permit issued on the basis of these or subsequent representation, or for the seeking of such other and further relief as may seem proper to the permitting agencies.

Signature of Applicant or Applicant's Representative — **Date** 3/26/13

APPENDIX A – DECLARATION OF CAMPAIGN CONTRIBUTIONS

Please read and fill out the following if you are using this form to apply for a Coastal Development Permit (CDP) from the California Coastal Commission.

Government Code Section 84308 prohibits any Commissioner from voting on a project if he or she has received campaign contributions in excess of $250 within the past year from project proponents or opponents, their agents, employees or family, or any person with a financial interest in the project.

In the event of such contributions, a Commissioner must disqualify himself or herself from voting on the project.

Each applicant must declare below whether any such contributions have been made to any of the listed Commissioners or Alternates (see attached list – Roster of Commissioners).

Check One

☒ The applicants, their agents, employees, family and/or any person with a financial interest in the project **have not contributed** over $250 to any Commissioner(s) or Alternate(s) within the past year.

☐ The applicants, their agents, employees, family and/or any person with a financial interest in the project **have contributed** over $250 to any Commissioner(s) or Alternate(s) within the past year.

Commissioner or Alternate _____

Commissioner or Alternate _____

Commissioner or Alternate _____

_____ 3/26/13

Signature of Applicant or Authorized Agent *Date*

Please print your name Richard W. Parsons

APPENDIX B - DECLARATION OF POSTING

Please read and fill out the following if you are using this form to apply for a Coastal Development Permit (CDP) from the California Coastal Commission.

TO: Applicant

Pursuant to the requirements of California Administrative Code 13054(b), this certifies that I/we have posted the "Public Notice" of application to obtain Coastal Commission Permit No. _____

for: Ventura Keys Maintenance Dredging

located: Ventura Keys, ,Ventura, CA

The public notice was posted at a conspicuous place, easily read by the public and as close as possible to the site of the proposed development.

_____
(Signature)

_____
(Date)

NOTE: YOUR APPLICATION CANNOT BE PROCESSED UNTIL THIS "DECLARATION OF POSTING" IS RETURNED TO THE CALIFORNIA COASTAL COMMISSION OFFICE. If the site is not posted at least eight days prior to the meeting at which the application is scheduled for hearing, or the Declaration of Posting is not received in our office prior to the hearing, your application will be removed from its scheduled agenda and will not be rescheduled for Commission action until the Declaration of Posting has been received by this office.

PROJECT DESCRIPTION
VENTURA KEYS MAINTENANCE DREDGING

1.0 INTRODUCTION

The City of San Buenaventura is proposing to perform periodic maintenance dredging in the Ventura Keys, a waterfront residential community adjacent to Ventura Harbor. The dredging effort would occur on as-needed basis over a ten-year period commencing on or about September 1, 2013. While approximately 350,000 cubic yards of material could be dredged over the ten-year period, the averaqe volume per episode is not expected to exceed 50,000 cubic yards, and no more than 100,000 cubic yards of material is likely to be dredged in anyone year.

The proposed project is required to maintain channel configurations, and to restore and assure safe navigability within the Keys waterways. The project would also provide material for beach replenishment. Deposition options include the surf zone at Cell 1 of the Pierpont Bay Groin Field (the first cell north of Marina Park) and the surf zone at the mouth of the Santa Clara River and/or the near shore waters at the mouth of the Santa Clara River. The dredging and deposition activities would not commence until after Labor Day in September of any year and would cease on or before March 15 of the following year so as to avoid impacts on grunion spawning, least tern and snowy plover nesting, and recreational use of the beach.

2.0 SITE DESCRIPTION

2.1 Project Location. Purpose and Need

The Ventura Keys are located on the California coast, approximately 55 miles northwest of Los Angeles, within the City limits of Ventura, Ventura County, immediately north of Ventura Harbor (Figure 1). The Keys waterways encompass an area of 32 acres and consist of three channels tending in a general north/south alignment (Channels 1, 2, and 3) and a larger connecting channel to the south that ties the other three channels together and provides a link to Ventura Harbor (Figure 2). The sides of the waterways are bounded by private easements reserved for boat docks for the 302 adjacent waterfront residential parcels. The easement areas occupy about half the water surface of the waterways. The 13.5 acres of channel area have an existing depth of between -9 and -16 feet Mean Lower Low Water(MLLW).

Shoaling in the Ventura Keys results from the Arundell Barranca and 26 smaller storm drains. The rate of sediment accumulation is related to the frequency of storm flows in those flood control facilities and varies from channel to channel Sediment accumulation leads to shallow channel depths, and if uncorrected, results in difficult navigation conditions. It is estimated that, over a ten-year period, the dredging volume will not exceed

Exhibit 2 @

350,000 cubic yards (an average annual volume of 35,000 cubic yards) and that the maximum dredging volume in any one-year will not exceed 100,000 cubic yards.

The proposed maintenance dredging activities will serve a two-fold purpose: (1) maintenance of authorized channel configurations within the Ventura Keys to assure continued safe navigation for vessels transiting the channels; and (2) provision of materials for replenishment of beach sands eroded by littoral processes. The primary benefits realized from the proposed project would be as follows: (1) dredging will maintain safe and navigable channels within the Keys; (2) deposition of dredged material on the beach or near shore will replenish beaches and contribute to a pleasant shoreline environment for the public.

2.2, Previous Projects

Historically, various portions of the Ventura Keys have required dredging on cycles ranging from three to ten years. The most recent maintenance dredging operation was completed in 2005-06, and involved the removal of nearly 46,000 cubic yards of material from the Connecting, Channel with deposition in the surf zone to the north of the mouth of the Santa Clara River. In the 1997-99 time frame, nearly 204,000 cubic yards of material was removed from all channel areas within the Keys with deposition in the surf zone at both the mouth of the river and in Cell 1of the Pierpont Groin Field. An operation was completed in July 1992 that involved the removal of 135,000 cubic yards of material from all channel areas. During that operation, the dredged materials were placed in a 22± acre unlined upland disposal site with an active under drain system to remove saltwater. Earlier, dredging operations in the 1970's and 1980's had involved the placement of dredged material on area beaches.

3.0, PROPOSED ACTIONS AND ALTERNATIVES

3.1 Proposed Action

The proposed project consists of periodic dredging of the various Keys channels over a ten-year period and the deposition of the dredged material in the surf zone / near shore environment.

- Dredging of the Connecting Channel

  This component of the proposed action consists of dredging the connecting channel to a depth of -15 ft. MLLW ± 2 ft. Presently, this channel contains about 12,000 cubic yards of shoal material and is expected to require dredging two or three times over the ten-year

period. Most of the work would usually be accomplished by a private contractor using a 14" to 26"diesel-powered cutterhead hydraulic pipeline dredge operating on a 24-hour per day basis. Depending upon the size of the equipment utilized, the operation could require 10 to 30 days per dredging episode. It is also quite likely that the portion of the connecting channel in the vicinity of the mouth of the Arundell Barranca will require more frequent dredging attention and that a mechanical clamshell type operation (either floating or shore-based) could be utilized in that area on occasion.

- Dredging of Channels 1, 2 and 3

This component of the proposed action consists of dredging Channels 1, 2 and 3 to a depth of -12 ft. MLLW ± 2 ft. Presently, these channels contain about 35,000 cubic yards of shoal material and are expected to require dredging one or two times over the ten–year maintenance period. The work would be accomplished by a private contractor using a 6" to 16" diesel powered cutterhead hydraulic pipeline dredge operating on a 24-hour per day basis. Depending upon the size of the equipment utilized, the operation could require 30 to 60 days per dredging episode.

- Scheduling Options

Daily, seasonal, and annual variations of the dredging schedule are described below:

1. Daily schedule. Rather than operating 24 hours per day, the contractor may choose to dredge on a daylight only schedule, in which case the duration of the operations would be extended.

2. Seasonal schedule. Dredging between March 15 and early September is not proposed in order to minimize impacts to recreational and wildlife uses of the beach deposition areas.

3. Annual schedule. It is not anticipated that all the waterways would necessarily be dredged in anyone year. It is more likely that the connecting channel would be dredged one year and Channels 1, 2, and 3 another year.

- Character of the Dredged Materials

The character of the shoal material to be removed is described in a report entitled, "Sampling and Analysis - Ventura Keys Sediment

Investigation, Ventura, California," Ref. No. 0048-29, dated May 27, 1997 prepared by Applied Environmental Technologies, Inc.(AET).
Relative to the chemical composition of the material to be dredged AET concluded"... that the chemical concentrations measured in the Ventura Keys sediments are not environmentally significant and are comparable to the concentrations detected in offshore samples." Relative to the grain size distribution of the material to be dredged AET concluded that "... the sediment in the connecting channel is comparable to the Santa Clara River and is not expected to affect the marine ecosystem significantly," and that "... the sediment from Ventura Keys Channels 1, 2, and 3 can be discharged either to cell 1 of the Pierpont Groin Field or near the river mouth without causing a long term alteration of the grain size distribution in either of these areas."

Additionally, AET analyzed the character of the shoal material in the Connecting Channel in reports dated July 1, 2002 (Ref. No. 0048-290), August 19, 2005 (Ref. No. 0048-290), and January 7, 2013 (Ref. No. 0048-290) and their conclusions remained consistent with the above statements.

- . Transport of the Dredged Material

Various options exist for the transport of the dredged material to the deposition sites as follows:

1. Surf zone deposition. If surf zone deposition were employed, the discharge pipe would extend through the harbor waters with a combination of floating and submerged pipe and along the beach seaward of the existing sand dunes to either Cell 1 of the Pierpont Groin Field or the mouth of the Santa Clara River. No native vegetation would be disturbed by the Pipeline route and the pipe would be removed from the Least Tern and snowy plover nesting areas prior to March 15.

2; Near shore deposition. .If near shore deposition were employed, the dredged material would be barged to the area just south of the mouth of the Santa Clara River and deposited in waters no deeper than–30 ft MLLW. The material would then disperse,very rapidly and move with the littoral transport system, becoming available for beach replenishment.

- Deposition of the Dredged Material

Three options are available for the deposition of the Dredged Material as follows:

1. Cell 1 Surf Zone Deposition. In order to provide renourishment material for the Cell 1 of the Pierpont Groin Field, dredged material from Channels 1, 2, and 3, which is composed of more that 65% coarse-grained material (i.e., retained on a 200 sieve), may be deposited in the surf zone near the sand depleted beach. This site is owned by the State Lands Commission and the City of Ventura.

2. River Mouth Surf Zone Deposition. Dredged material from the connecting Channel as well as Channels 1, 2, and 3, which is composed of more than15% coarse grained material may be deposited in the surf zone no closer than 300 ft. from the mouth of the Santa Clara River When the river is flowing at 100 c.f.s. or greater in order to provide for the mixing of any turbidity caused by the dredge material with turbidity caused by the river discharge. This site is owned by the California Department of Parks and Recreation and the State Lands Commission.

3. River Mouth Near Shore Deposition. Dredged material from the Connecting Channel as well as Channels 1, 2, and 3, which is composed of more than 15% coarse grained material may be deposited in near shore waters just south of the mouth of the Santa Clara River. This site is owned by the State Lands Commission.

- Operational Requirements and Monitoring

All diesel powered equipment utilized in the dredging operation would be required to operate in compliance with all applicable specifications of the Ventura County Air Pollution Control District including. The following:

1. Only No.1 grad diesel fuel oil, Chevron Special Diesel, or an alternate fuel oil approved by the APCD shall be used.

2. Engines shall be tuned for minimum emissions immediately prior to operation and records shall be maintained on the circumstances of each tune-up.

3. Permanent dally records of fuel consumption, operating hours and brake horsepower of the equipment utilized shall be maintained.

During the dredging and deposition" activity, water quality monitoring shall be conducted as required by the Los Angeles Water Quality Control Board to ensure that the operation does not impair physical Water quality parameters.

3.2" "Alternatives Considered,

•. Alternative A - Dredging and deposition in the Surf Zone / Near Shore

This is the "Proposed/Preferred/Recommended Altemative." This action Is discussed in the preceding section titled, "Proposed Action."

This alternative includes periodic dredging of the Connectinq Channel and Channels 1, 2, and 3 with deposition of the dredged material in the surf zone near shore environment.

Benefits incurred from this action will include assurance of navigational Safety and beach replenishment.

• Alternative B - Dredging and Upland Deposition

This alternative includes periodic dredging of the Connecting Channel and Channels 1, 2, and 3 with deposition of the dredqed material in a diked 22±- acre upland disposal site. Associated benefits would be limited, since chemically clean sediment suitable for beach replenishment would be prevented from entering the littoral system. Associated negative impacts would include the possibility of saltwater contamination of the groundwater aquifer beneath the uplands site.

• "Alternative C - No Action

This "No Action" alternative would have significant negative irnpacts. First, without periodic dredging, continued shoaling" of the Keys waterways would make navigation unsafe, and ultimately, impossible. Second, elimination of dredging would contribute to a decline of littoral material available for beach and near shore replenishment. This "No Action" alternative," in sum, would address none of the navigational safety or beach replenishment concerns that initiated this proposal. It is riot, therefore, an acceptable alternative. ""

4.0. CUMULATIVE EFFECTS

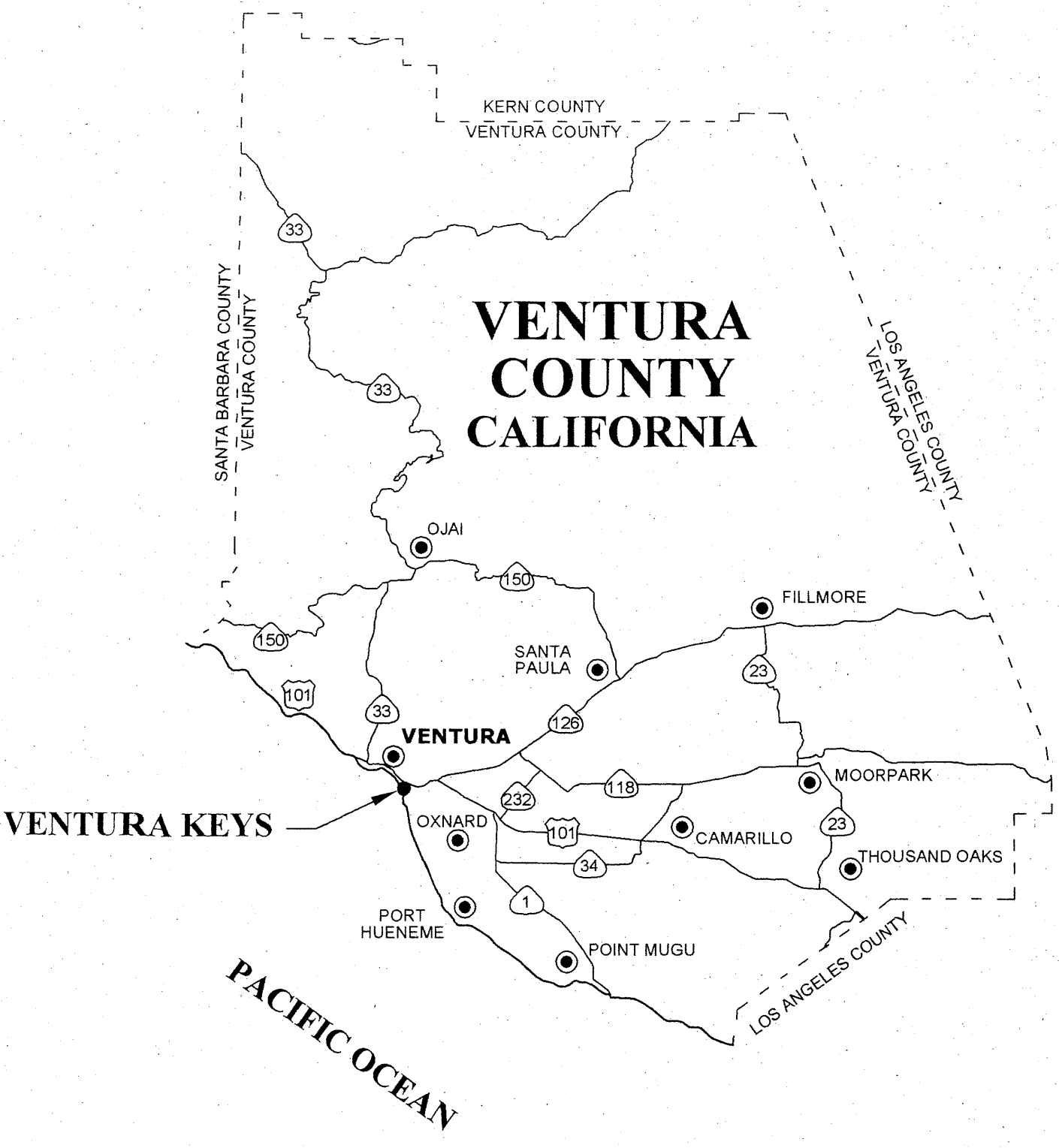
Two other maintenance dredging programs are routinely conducted in the Ventura Harbor area and thus, the potential for cumulative impacts resulting from the deposition of the dredged material from the Ventura Keys is reviewed below:

1. The U.S. Army Corps of Engineers usually dredges the Federal Channel and sand traps at Ventura Harbor on an annual basis. While the average annual volume of material dredged is about 600,000 cu. Yards, the yearly volume over the past 20 years has ranged from low of 140,000 cu. yards to a high of 950,000 cu. yards. The material dredged by the Corps is predominantly coarse-grained sandy material that is naturally deposited in the harbor's entrance area by the littoral transport system. Because this material is desired for beach nourishment purposes, it is deposited on area beaches north and south of the mouth of the Santa Clara River, but not at the mouth of the river itself.

   Thus, no cumulative impact upon the Corps of Engineers' project is expected from the limited volume of finer grained material from the Ventura Keys to be deposited in the surf zone or near shore waters at the mouth of the Santa Clara River, because the character of the material is different and the deposition site is different.

2. The-Ventura Port District periodically conducts maintenance dredging within the inner portions of the Ventura Harbor. The average annual volume of material dredged is less than 40,000 cu. yards, and is limited by permit constraints to a maximum annual volume of 100,000 cu. yards. The material dredged by the Port is predominantly fine grained in character, very similar to the fine-grained material from the Ventura Keys, and is deposited in the surf zone or near shore waters at the mouth of the Santa Clara River.

   The combined volume of the inner harbor and Ventura Keys dredging could approach 200,000 cu. yards in a given year in the unlikely event that maximum quantities were dredge in both areas in the same time frame. Such a combined volume represents less than 1% of the estimated 2 million cubic yards of fine-grained material annually discharged by the Santa Clara River. Thus, the combined effect of the deposition of fine-grained material from both the inner portions of Ventura Harbor and the Ventura Keys will hardly be even measurable and hence, does not represent a potential cumulative impact.



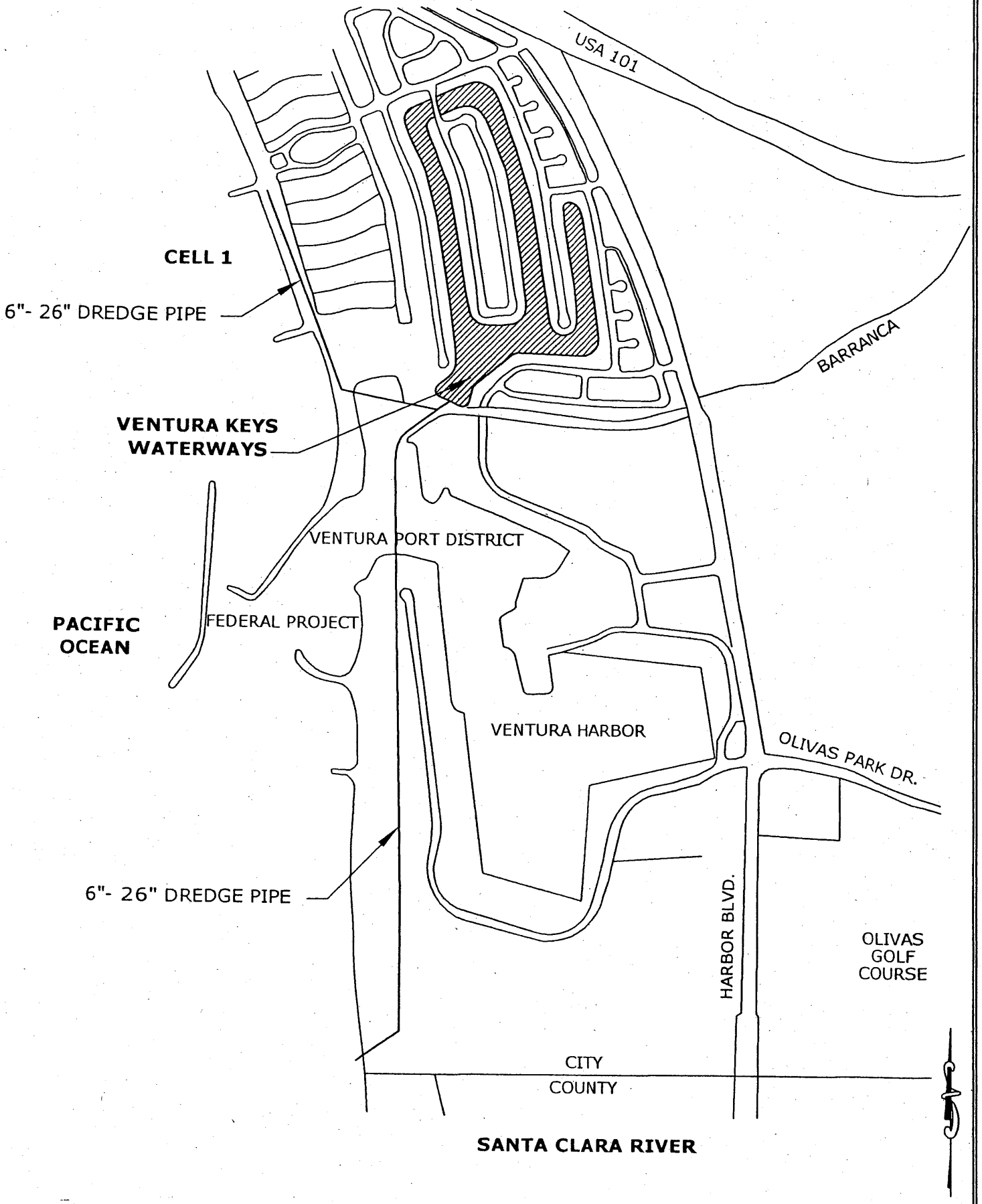
NO SCALE

Applied Environmental Technologies, Inc.
4561 Market Street, Suite B • Ventura, California 93003
Phone (805)650-1400 Fax (805)650-1576

SITE LOCATION PLAN
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE 1

PLATE REFERENCE 0048-29_P1	AUGUST 15, 2007	PROJECT NUMBER 0048-29



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Environmental
Technologies, Inc.
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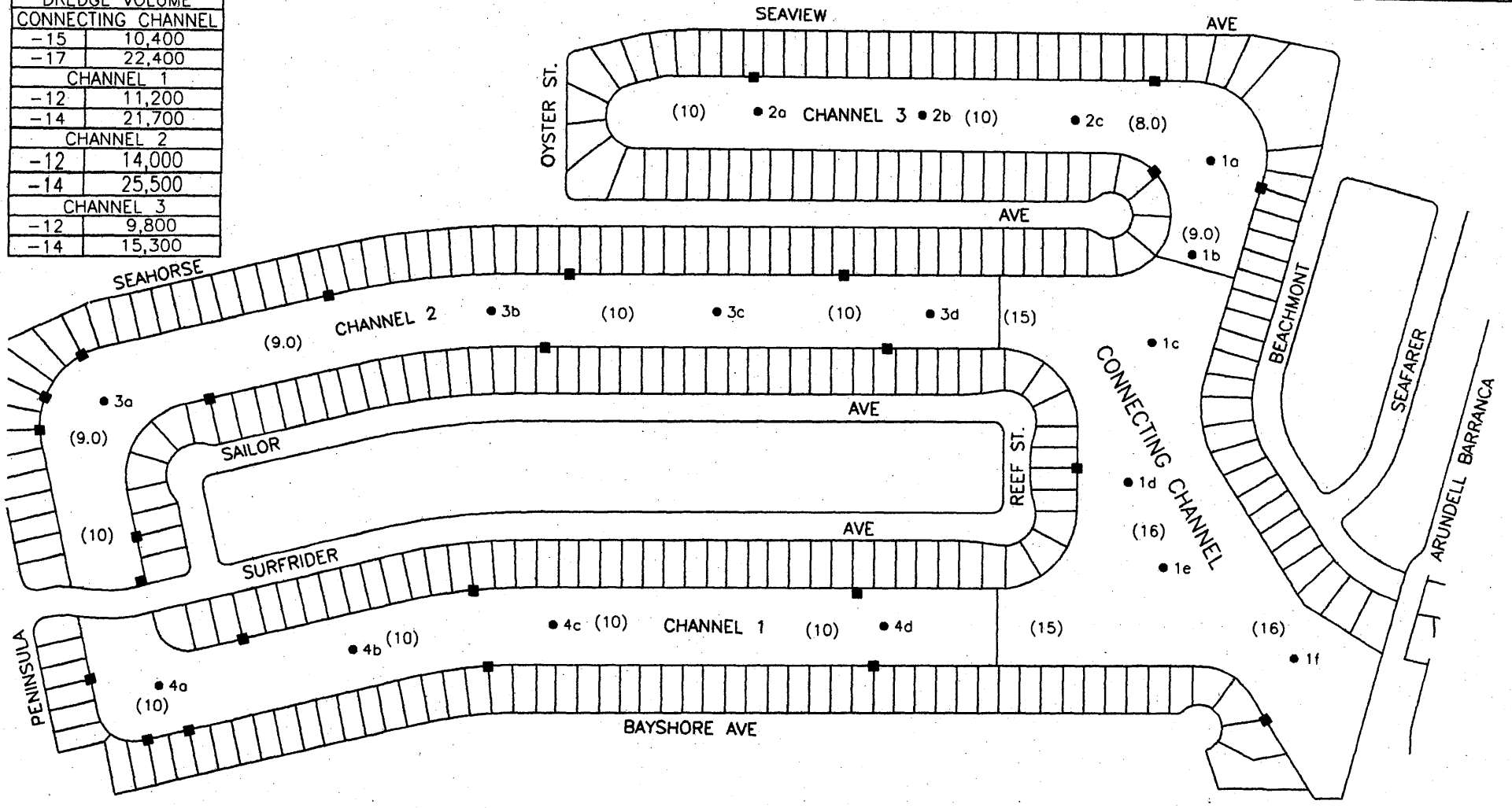
Phone (805)650-1400 Fax (805)650-1576

SITE LOCATION PLAN
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P2	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 2

DREDGE VOLUME	
CONNECTING CHANNEL	
-15	10,400
-17	22,400
CHANNEL 1	
-12	11,200
-14	21,700
CHANNEL 2	
-12	14,000
-14	25,500
CHANNEL 3	
-12	9,800
-14	15,300



LEGEND

- SEDIMENT SAMPLING LOCATION
- STORM DRAIN LOCATIONS

(8.0) CONDITION SURVEY DEPTHS MAY 2007 IN FEET (MLLW)

0' 300' 600'

SCALE - 1" = 300' AT 8.5" x 11"

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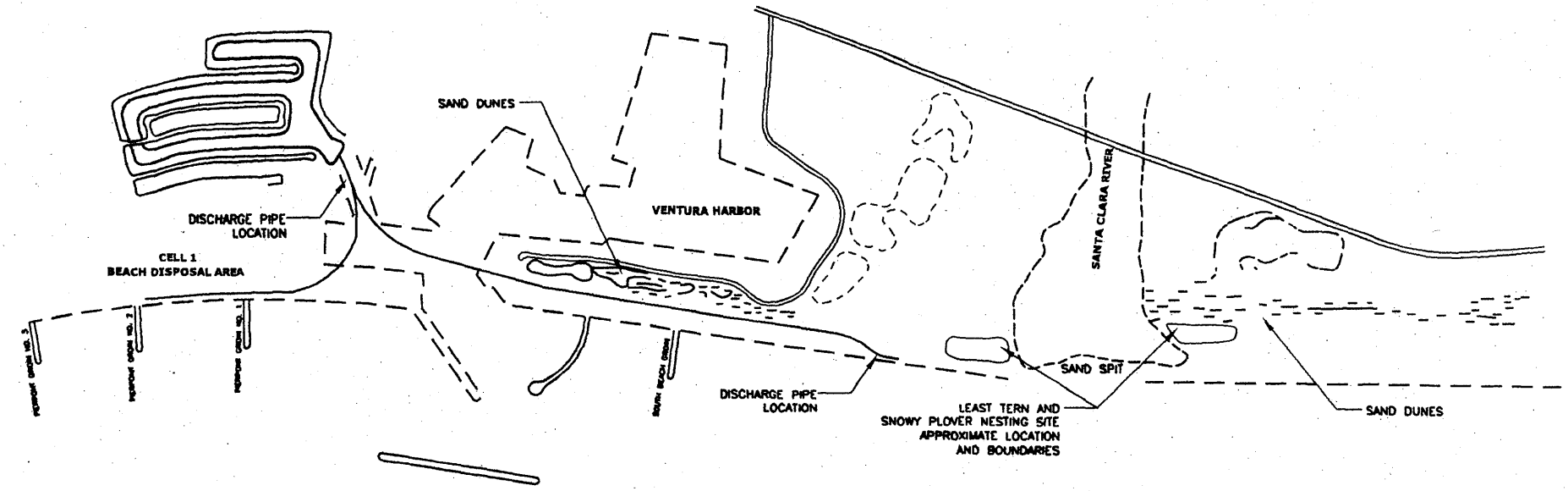
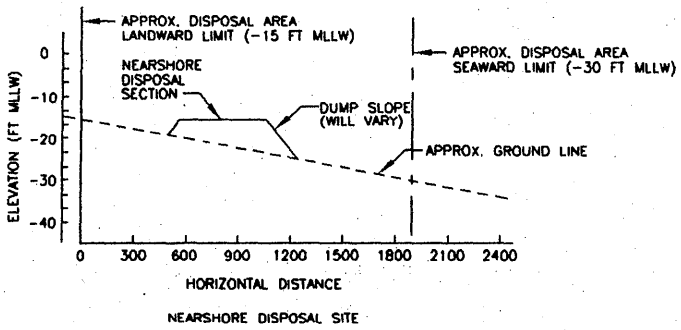
PROPOSED DREDGING AREA
VENTURA KEYS
VENTURA, CALIFORNIA

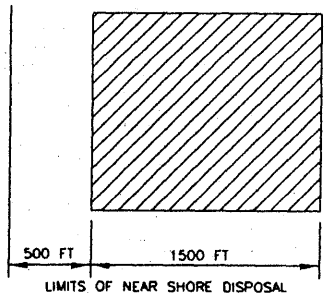
PLATE 3

PLATE REFERENCE 0048-29_P3	AUGUST 15, 2007	PROJECT NUMBER 0048-29





NEARSHORE DISPOSAL SITE



LIMITS OF NEAR SHORE DISPOSAL

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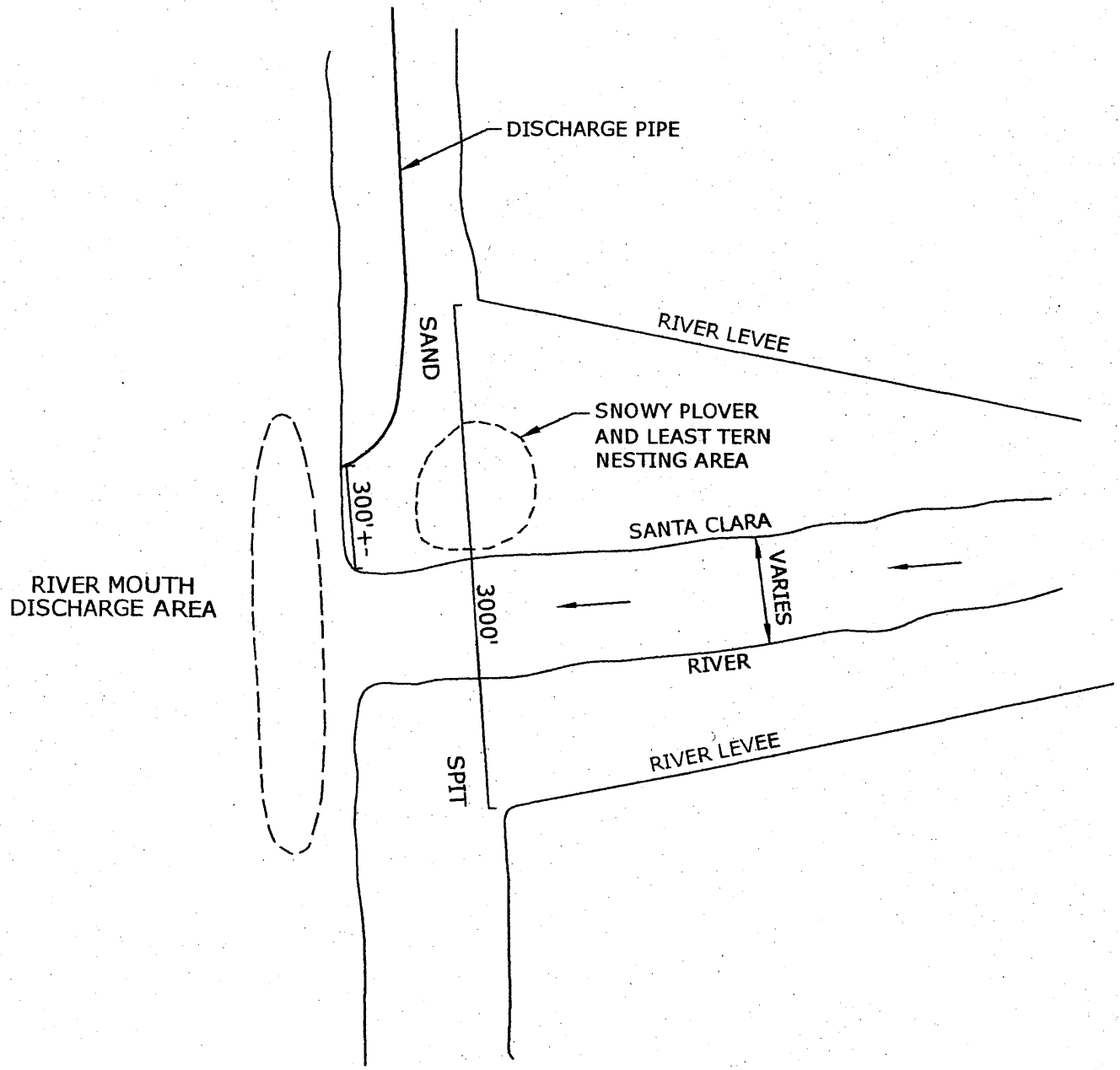
Phone (805)650-1400 Fax (805)650-1576

DEPOSITION SITES OF EXCAVATED MATERIAL
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P4 | AUGUST 15, 2007 | PROJECT NUMBER 0048-29

PLATE 4



NOT TO SCALE

Applied Environmental Technologies, Inc.
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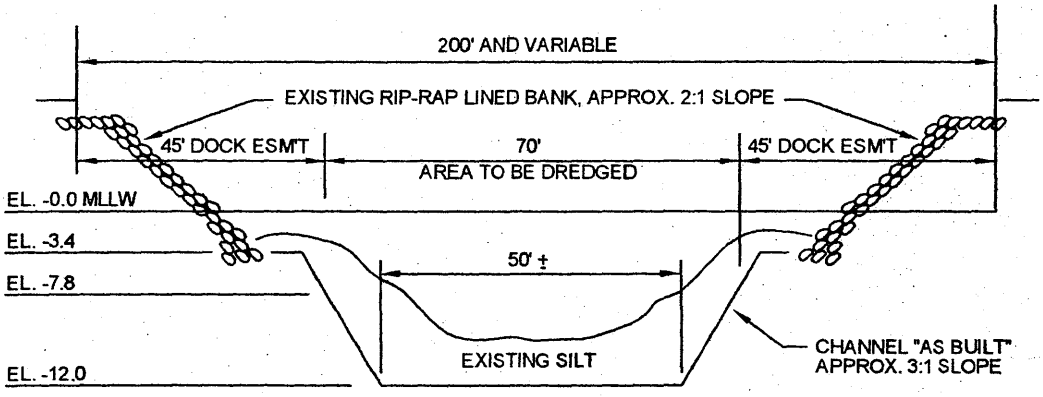
RIVER MOUTH DEPOSITION AREA
VENTURA KEYS
VENTURA, CALIFORNIA

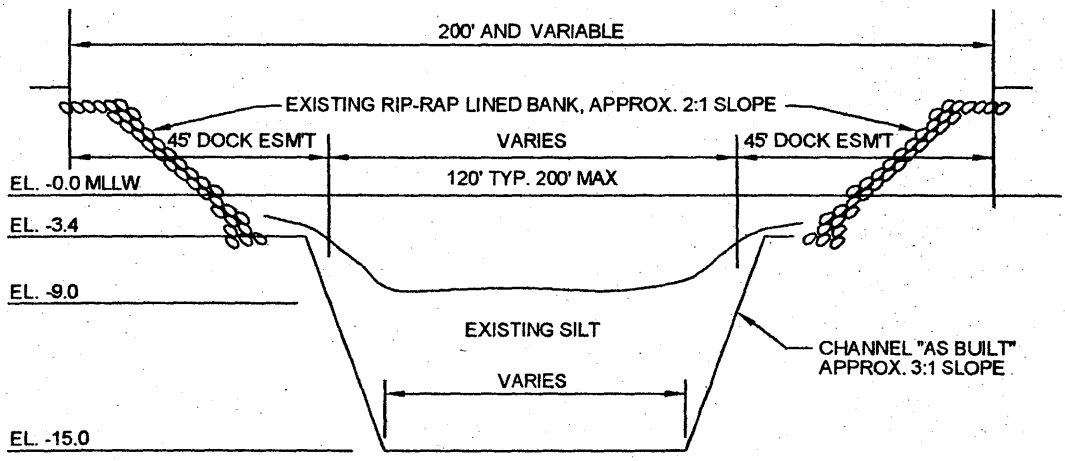
PLATE REFERENCE 0048-29_P5	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 5



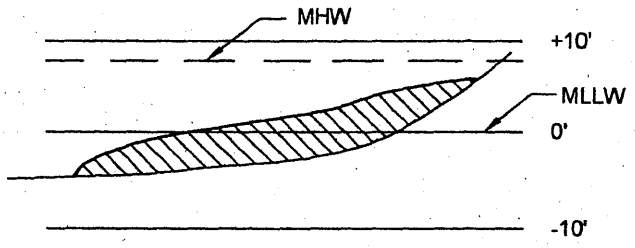
TYPICAL SECTION

FOR CHANNELS 1, 2, AND 3
NOT TO SCALE



TYPICAL SECTION

FOR CONNECTING CHANNEL
NOT TO SCALE



RIVER MOUTH DEPOSITION AREA

NOT TO SCALE

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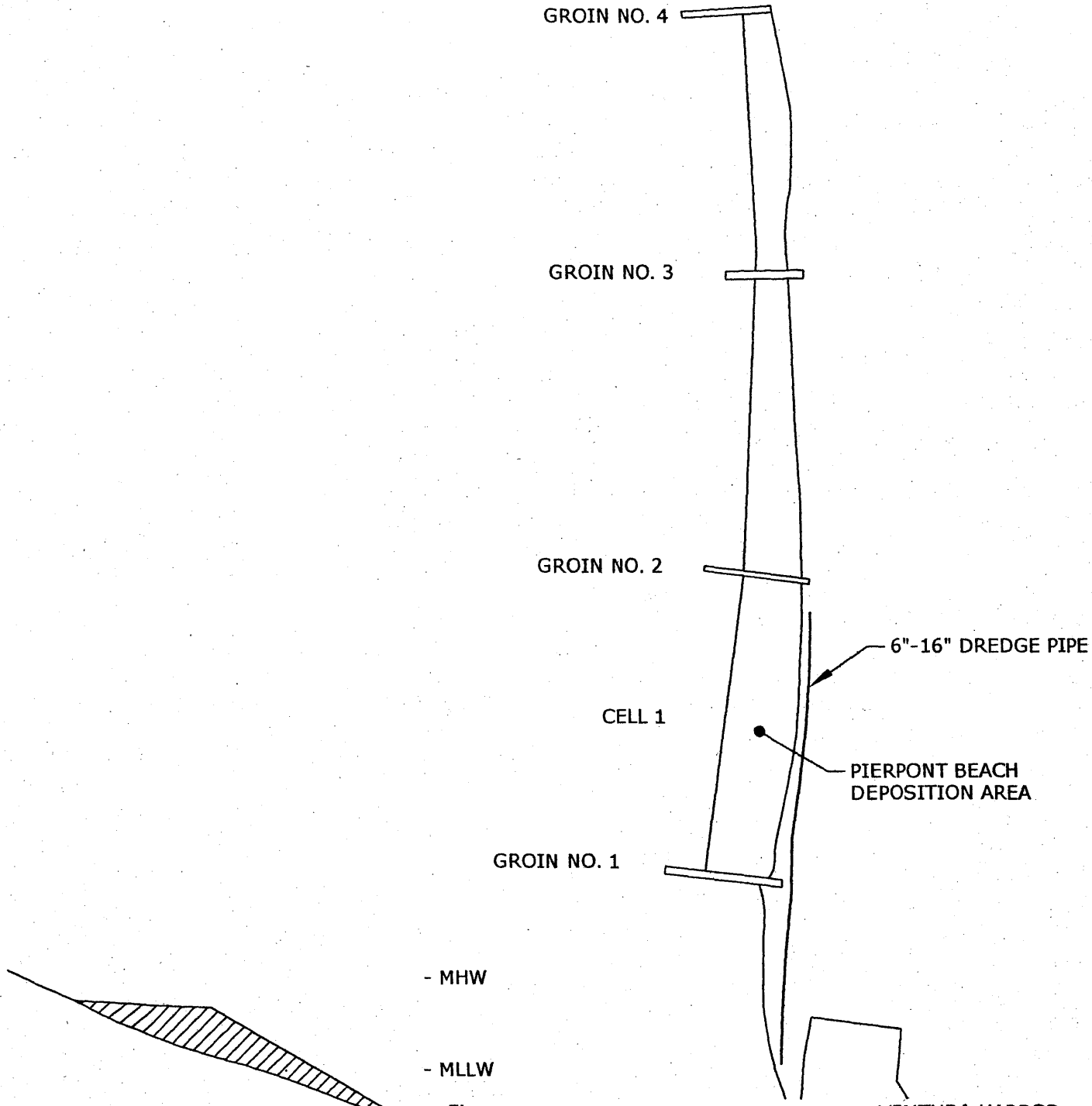
PROPOSED DERDGING AND DISPOSAL SECTIONS
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P6	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 6



TYPICAL SECTION
NOT TO SCALE

0' 600' 1200'

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PIERPONT DEPOSITION AREA
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P7	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 7

2004-2012 Infill Volumes

Dredge Area	Infill Volume (Cubic Yards)
2004-2012 Channel 1	6,921
2004-2012 Channel 2	6,736
2004-2012 Channel 3	6,129
2008-2012 Connecting Channel	2,090
Total	21,867

The volumes listed above represent the amount of material in cubic yards that has infilled since the 2004 & 2008 post dredge survey.

2012 Dredge Volumes

Area	Volume (Cubic Yards)	Dredge Depth
Channel 1	11,891	12
Channel 2	14,235	12
Channel 3	8,840	12
Connecting Channel	11,249	15
Total	46,215	

The volumes listed above represent the amount of material in cubic yards to be removed in order to reach the listed depth.

Legend

Bathymetry Contours (Feet, MLLW)

- Major (Contour interval = 5')
- Minor (Contour Interval = 1')
- Shoreline and Docks
- Limits of Dredging

Grid: CA State Plane, Zone 5, NAD83, Feet

Aerial Photo from http://goto.arcgisonline.com/maps/World_Imagery

Notes:

1. Multibeam data were collected on 5/16/12 to 5/17/12.
2. Horizontal control is California State Plane Coordinate System Zone 5 in feet, NAD 1983.
3. Tide corrections are referenced to MLLW and based on the tide observations at the USACE Tide Board.
4. Survey equipment untilized for data collection included:

a. R2 Sonic 6042
b. Multibeam Sonar
c. Applanix POSMV System
d. AML SV-Plus Sound Velocity Profiler

SCALE : 1:1,800

150 75 0 150 300 450 Feet

FUGRO CONSULTANTS, INC.

VENTURA KEYS MULTIBEAM CONDITION SURVEY BATHYMETRIC CONTOURS

Ventura Port District, California

JOB NUMBER: 04.64120017 | SURVEY DATE: May 2012 | CHART NO.: 1

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d. AML SV-Plus Sound Velocity Profiler

SCALE : 1:1,800

150 75 0 150 300 450 Feet

FUGRO CONSULTANTS, INC.

VENTURA KEYS MULTIBEAM CONDITION SURVEY BATHYMETRIC CONTOURS

Ventura Port District, California

JOB NUMBER: 04.64120017 | SURVEY DATE: May 2012 | CHART NO.: 1

ADDENDUM NO. 2 TO FINAL MITIGATED NEGATIVE DECLARATION

KEYS WATER CHANNEL DREDGING - EIR CASE NO. 2171

This Addendum No. 2 to the Keys Water Channel Dredging Project Final Mitigated Negative Declaration (FMND) is being prepared to substantiate that the analysis and previously determined Mitigation Measures contained therein are consistent with the provisions of the California Environmental Quality Act (CEQA) Guidelines Section 15164.

Since the circulation of the FMND in 1997, there have been no new or substantially more severe environmental impacts related to the project, no significant changes in the project or the surrounding circumstances, nor significant "new information" that has since come to light that would require a revision of the conclusions in the FMND or recirculation of the document.

The proposed project continues to be necessary to maintain channel configurations, and to restore and assure safe navigability within the Keys waterways. The project also provides material for beach replenishment. Deposition options include the surf zone at Cell 1 of the Pierpont Bay Groin Field (the first cell north of Marina Park), and the surf zone at the mouth of the Santa Clara River and/or the near shore waters at the mouth of the Santa Clara River. The dredging and deposition activities would not commence until after Labor Day in September of any year and would cease on or before March 15 of the following year so as to avoid impacts on grunion spawning, least tern and snowy plover nesting, and recreational use of the beach.

The dredging effort would continue, as in previous years, on an as-needed basis over a ten-year period commencing on or about February 1, 2013. The average typical annual volume of dredged material, in the years when dredging occurs, will be a volume of about 35,000 cubic yards, and no more than 100,000 cubic yards of material is likely to be dredged in any one year.

The City has performed, on an as-needed basis, the same periodic maintenance dredging in the Ventura Keys as is currently being proposed. The dredging is performed in accordance with permits issued by the Coastal Commission, the State Lands Commission, the Army Corps of Engineers and the Los Angeles Regional Water Quality Control Board.

In July 1997, an Initial Study/Environmental Assessment was performed and a Mitigated Negative Declaration (Case Number EIR-2202) was recommended, and subsequently approved by the City Council on September 8, 1997. In

Exhibit 4

August, 2007, City staff analyzed the conclusions made in the FMND and determined that no significant changes had occurred and an Addendum to the FMND was prepared. Again, in January, 2013, due to permit requirements for a CEQA determination, City staff analyzed the conclusions made in the FMND and the subsequent determinations have been made as to whether the project scope and/or environmental conditions have changed:

Aesthetics – no change

Agriculture – no change

Air Quality – no change

Biological Resources – no change (the project is consistent with the project as approved with a Final Mitigated Negative Declaration (FMND-2202) in 1997). However, the Mitigation Measure included in FMND-2202 in order to mitigate any potential impacts to Biological Resources shall continue to be required for the project as follows: Dredging and surf zone disposal plans shall be designed to carry out the activity in compliance with requirements of all regulatory agencies. In addition, the dredging and disposal is to occur only between September 1 and March 31, to avoid times critical to California least tern and snowy plover nesting and grunion spawning.

Cultural Resources – no change

Energy and Mineral Resources – no change

Geophysical – no change

Hazards – no change

Land Use / City and Regional Plans – no change

Noise – no change (the project is consistent with the project as approved with the Final Mitigated Negative Declaration (FMND-2202) in 1997). However, the Mitigation Measure included in FMND-2202 in order to mitigate any potential impacts relating to noise shall continue to be required for the project as follows: adjacent property owners shall be notified prior to commencing work, signs shall be posted in the project area, and all equipment shall have appropriate mufflers in good working conditions.

Population and Housing – no change

Public Services – no change

Utilities and Service System – no change

Transportation / Circulation – no change

Water – no change (the project is consistent with the project as approved with the Final Mitigated Negative Declaration (FMND-2202) in 1997). However, the Mitigation Measure included in FMND-2202 in order to mitigate any potential impacts relating to Water Resources and or Water Quality shall continue to be required for the project as follows:

1. In order to mitigate potential significant impacts related to Water Resources, disposal of spoils in either the surf zone or near shore area at the mouth of the Santa Clara River shall not occur unless that water is flowing at 100 c.f.s. or greater.

2. In order to mitigate potential impacts related to water quality, periodic testing of the water shall occur during the dredge operation per standards set forth by the Regional Water Quality Control Board. If quality drops below accepted standards, dredging shall stop until impact is eliminated.

3. In order to mitigate potential significant impacts related to Water Resources, the contractor shall be required to implement the Best Management Practices as established by the National Discharge System Permit and/or as required by the Regional Water Quality Control Board, as appropriate to prohibit entry of pollutants to the storm water runoff.

Based on the foregoing, there is no change in the proposed scope of work and/or in environmental conditions and therefore the project would not result in any new potentially significant impact, or in a substantial increase in the severity of the previously identified environmental impact as determined in the draft MND circulated for public comment in 1997.

APPLIED ENVIRONMENTAL TECHNOLOGIES INC.
4561 Market St., Suite B • Ventura, CA 93003 • Phone: (805) 650-1400 Fax: (805) 650-1576

January 7, 2013
Ref. No. 0048-29O

U. S. Army Corps of Engineers
Los Angeles Regulatory Branch
Ventura Field Office
2151 Alessandro Drive, Suite 110
Ventura, California 93001-3748

Attention: Mr. Antal Szijj

California Regional Water
Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Mr. Michael Lyons

U. S. Environmental Protection Agency
Wetlands Regulatory Office (WR-8)
75 Hawthorne Street
San Francisco, CA 94105-3901

Attention: Mr. Alan Ota

Final Report
Sampling and Analysis - 2012
Ventura Keys Connecting Channel Sediment Investigation
Ventura, California

1.0 Introduction

Applied Environmental Technologies, Inc. has prepared this report on behalf of the City of San Buenaventura to document dredged sediment sampling and analysis performed on October 17, 2012 in the Ventura Keys Connecting Channel. The Ventura Keys Connecting Channel requires periodic maintenance dredging to keep the channel and berthing areas open to vessels (see Plate 1). The City of San Buenaventura is proposing to conduct maintenance dredging of the channel in the future. This report includes the results of the sampling and analysis conducted, according to the workplan dated August 7, 2012, on the sediments within the Ventura Keys Connecting Channel waterway.

The dredging will be conducted under the requirements and conditions of the Los Angeles District U. S. Army Corps of Engineers, Department of the Army Permit SPL-2007-872-PHT and Regional Water Quality Control Board, Los Angeles Region Order Number R4-2007-0061 (File No. 97-127). In order to confirm that the deposition sites authorized by the above referenced permits

Exhibit 5

continue to be appropriate sites for the dredged material from the harbor, the City of Ventura had this sampling and analysis of the harbor sediments conducted. The locations proposed for sampling were provided to Heal the Bay and Ventura Coast Keeper for their review, and found to be acceptable.

The sampling plan included the collection of sediment cores from four (4) discrete areas in Ventura Keys Connecting Channel (see Plate 1). The potential dredge volume for drilling to the design depth of -15 feet MLLW is 9,158 cubic yards with the over-dredge depth (-17 ft MLLW) of 19,347 cubic yards.

2.0 Background

2.1 Previous Sediment Sampling

Previous sampling was conducted in February 1994, March 1997, May 2002, July 2005, and March 2009. It was the conclusion of all reports that the chemical concentrations measured in the Ventura Keys sediments are not environmentally significant. Additionally, it was the opinion of the reports that no significant impact would occur from the deposition of Ventura Keys sediments to waters offshore the Santa Clara River mouth. A description of the individual sampling episodes is contained in Attachments A through E.

It is relevant to the Ventura Keys that that the conclusion of all reports was that sediment in the Ventura Keys is comparable with sediments regularly discharged by the Santa Clara River. Additionally, it was the conclusion of the reports that the sediments dredged from the Ventura Keys could be placed near the river mouth without causing a long-term alteration of the grain size distributions in the area of the river mouth.

2.2 Additional Sampling

Additional beach sediment sampling was conducted in July 1995 in Cell 1 of the Pierpont Groin Field for the City of Ventura. The purpose of the supplemental sampling was to establish the grain size distribution of the existing sediment on the Cell 1 beach including the shallow sub tidal zone (see Attachment F).

Additional sediment sampling was completed on behalf of the Port District at the Santa Clara River mouth in November 1998 (see Attachment G). Based on the sampling results sediment in the Ventura Keys is comparable with sediments regularly discharged by the Santa Clara River. Additionally, sediments dredged from the Ventura Keys could be discharged near the river mouth without causing a long-term alteration of the grain size distributions in the area of the river mouth.

2.3 Previous Intertidal Infaunal Sampling

In addition to sediment sampling of potential dredge areas, the Ventura Port District has in the past conducted Intertidal Infaunal Biological Characterizations for the State of California Department of Parks & Recreation, Channel Coast District on the McGrath State Park Sandy Beach. The Characterization was performed at McGrath only when material was deposited during Ventura

Harbor's annual dredging and beach replenishment. The dredged sediment is deposited onto the intertidal sandy beach of McGrath State Beach. The biological characterization is conducted at the point of deposition and at a control site down coast.

The sediment deposition site was similar to the control site in both species composition and abundance over 10 survey episodes from 1996 to 2001. Based on numerous research documents, the variability of the beach's fauna is correlated with season, substrate, and the organism's own productivity. Based on our observations over 10 survey episodes (5 years), no impact to the beach fauna was attributed to the deposition of dredge material to marine waters.

In 2002, the State agreed that additional surveys of infaunal biota would not be expected to generate any substantial new information. Based on this premise, the State Parks and Recreation Department decided to modify the characterization at this beach. The modified characterization stresses the observation of infauna used as a food source for shore birds.

Based on our observations for the years 2002 to 2005, the deposition of dredged materials onto the McGrath State Beach has had no impact on the presence or absence of invertebrate organisms in the substrate.

3.0 Current Sampling and Analysis Methodology

3.1 Collection of Sediment Core Samples in Proposed Dredging Areas

The collection of sediment cores occurred at (4) discrete sample locations within the Ventura Keys Connecting Channel (see Plate 1). The cores were collected using a vibracore suspended from a work barge on October 17, 2012. The cores were collected at depths of approximately -13.7 to 21 feet MLLW (see Table 1). The design depth for the channel is -15 feet MLLW however, some over dredging may occur.

The core sample collected from each location was extruded from the liner and photographed. The core samples were placed in a bucket and composited to get a representative sample. The sample for chemical analyses was placed in appropriate glassware, labeled and stored on blue ice pending transport to an analytical laboratory certified by the state for the analyses proposed. Strict chain-of-custody documentation was followed, and normal quality control/quality assurance protocols were followed. A sub sample was separated into a plastic bags and submitted to a soils laboratory for grain size analysis.

3.2 Sample Analyses

3.2.1 Grain Size Analysis

Grain size analyses are used to determine general size classes that make up sediment (gravel, sand, silt, clay) and were measured using nested sieves and pipette method for small particle sizes. The grain size distribution sieve analysis was performed in accordance with ASTM C117, C136, D1557, D2419, D4824, and D2487.

3.2.2 Organic and Inorganic Analyses

The objective of the sediment chemical analyses is to characterize the composition of sediment to be dredged from the Ventura Keys Connecting Channel, and identify any compounds that may potentially be released as dissolved constituents to potential receiving water.

The samples were analyzed for constituents generally accepted for determination of hazardous or toxic conditions within the sediments. The composite samples were analyzed for the conventional groups identified in the Southern California Dredged Materials Management Team Sampling and Analysis Plan/Results Report Guidelines, revised March 22, 2012. As shown in Table 2 the samples were analyzed for:

- oil & grease (by EPA Method 1664), total petroleum hydrocarbons as diesel –TPHd and oil –TPHo (by EPA Method 8015B), and total organic carbon –TOC (by EPA Method 9060)
- semi-volatile organics and polychlorinated biphenyls – PCBs (by EPA Method 8270C/D)
- organochlorine pesticides (by EPA Method 8081A), pyrethroids (by EPA Method 8270D)
- organotins (by Method Krone et al.).
- Title 22 metals (by EPA Method 6020), mercury (by EPA Method 7471A), and ammonia (by Method SM4500-NH3-D)
- percent moisture (by Method SM2540-G), total volatile solids (by EPA Method 160.4M), and total solids (by Method SM2540-B)

4.0 Findings

4.1 Grain Size Analyses and Core Photographs

The sediments investigated in the Ventura Keys Connecting Channel consisted of saturated sandy silt to sandy clay (see Table 3). The percentage of sand passing through a #200 sieve was approximately 84%. The grain size analytical report is included as Attachment G. Photographs of the cores are contained in Attachment H.

4.2 Analytical Results

The certified analytical reports are included as Attachment I. No concentrations of oil&grease, TPHd, or TPHo were detected in the samples (see Table 5). TOC (9,140 mg/kg) was detected. Trace concentrations of semi VOCs and PCBs were detected in the sample (see Tables 5 and 6).

Concentrations of organochlorine pesticides 2,4'-DDE (3.4 µg/kg), 4,4'DDD (1.3 µg/kg), and 4,4'-DDE (3.6 µg/kg) were detected in the sample (see Table 7). Concentrations of the insecticide permethrin (4.4 µg/kg) were also detected. No other organochlorine pesticides or pyrethroids were detected.

Tributyltin was detected in the sample (3.1 µg/kg), as shown in Table 8. No other organotins were detected.

Metals were detected in all samples (see Table 9). Detected metals include: arsenic (7.68 mg/kg); cadmium (0.758 mg/kg); chromium (28.6 mg/kg); copper (44.4 mg/kg); lead (13.6 mg/kg); nickel (38.1 mg/kg); selenium (0.789 mg/kg); silver (0.15 mg/kg); and zinc (114 mg/kg).

Mercury was not detected in the sample (see Table 9). Ammonia was detected in the sample (35 mg/kg), as shown in Table 9.

Percent moisture was 36.4 percent (see Table 10). Percent volatile solids was 1.4 and percent totals solids was 62.8.

5.0 Discussion and Conclusions

Based on existing regulatory standards and guidelines the chemical concentrations measured in the Ventura Keys Connecting Channel sediments are not considered to be environmentally significant. In addition, no significant impact is expected to occur from the deposition of Ventura Keys Connecting Channel sediments to waters offshore the Santa Clara River mouth or to authorized depressions on the harbor bottom.

No semi VOC, PCB, pesticide, insecticide, organotin, or metal concentrations were detected that exceed the total threshold limit concentrations (TTLCs) which identifies the material as hazardous (see Tables 4 through 9). TTLC values are contained in the California Code of Regulations (CCR) Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.

In addition, no semi VOC, PCB, pesticide, insecticide, organotin, or metal concentrations were detected that exceed the EPA Region 9 Regional Screening Levels (RSL) for exposure to these compounds in soil.

The results of the sampling during this period and previous sampling episodes discussed at the beginning of this report are consistent. No significant changes were observed between the current and past sampling events. The permits currently in effect are considered to be adequate to protect the waters along the Ventura Coast.

Sediment grain size remains consistent with the river discharge. The grain size is predominantly silts and clays, however, based on previous studies of the Santa Clara River Mouth area, the grain size remains consistent with that discharged by the river. The Santa Clara River discharges approximately 78 percent of their sediment volume as silts and clays, whereas, the

sediment volume consisting of silts and clays from this Ventura Keys Connecting Channel sampling episode is approximately 84%.

Based on studies conducted by R. P. Williams (1978, "Sediment Discharge in the Santa Clara River Basin, Ventura County, California", USGS Water Resources Investigation 79-78), the sediment grain sizes discharged by the Santa Clara River range from clays and silts to gravel. Particle size measurements were collected during the years 1969 to 1975. Silts and clays comprised a majority (over 79 percent) of the sediments discharged by the Santa Clara River during these years. The river has discharged between 0.4 and 40,200,000 tons per day (estimated to be between 0.3 and 30,000,000 cubic yards) from the river mouth into the marine environment. The estimated mean daily total sediment discharge during the period 1950 to 1975 for the Santa Clara River was 9,720 tons (estimated at approximately 7,200 cubic yards). This can be estimated to consist of over 2.5 million cubic yards of sediment per year. The discharge of river sediments is highly variable depending on rainfall and flooding. The deposition of Ventura Keys Connecting Channel sediments in the vicinity of the river mouth or to authorized depressions on the harbor bottom are not expected to have any significant affect on the marine ecosystem.

In addition the previous studies conducted on the sediments offshore the Santa Clara River mouth show the materials present in the Ventura Keys Connecting Channel are comparable to those discharged from the Santa Clara River. No apparent environmental concerns were observed during previous placement of dredged sediments to the surf zone of the beaches near the Santa Clara River mouth. During the period from 1982 to 2012, 4 episodes of dredging saw the deposition of 172,183 cubic yards (ranging from 13,500 to 71,000 cubic yards per episode) of Ventura Keys sediment to the area of the Santa Clara River mouth. The average deposition is calculated at 43,046 cubic yards per episode. No adverse impacts were recorded.

The estimated average dredge volume of 43,046 cubic yards is considered to be an insignificant volume when compared to the annual discharge from the Santa Clara River (2.5 million cubic yards per year). No affect to the marine environment would be expected from the placement of the Ventura Keys Connecting Channel sediments to the area near the Santa Clara River mouth.

It is the conclusion of this report that the sediment in the Ventura Keys Connecting Channel (approximately 84 percent silts and clays) is considered insignificant with sediments regularly discharged by the Santa Clara River (78 percent silts and clays). Additionally, it is the conclusion of the report that the sediments dredged from the Ventura Keys Connecting Channel could be placed near the river mouth without causing a long-term alteration of the grain size distributions in the area of the river mouth. The effects of weather; wave action, and the Santa Clara River discharge are considered to have significantly more impact on the beaches than dredging activities.

6.0 Limitations

This report has been prepared as a field assessment of sediment conditions in the Ventura Keys Connecting Channel. In performing our professional services, we have applied present engineering and scientific judgment and used a level of effort consistent with the standard of practice measured on the date of this report and in the locale of the project site for similar type studies.

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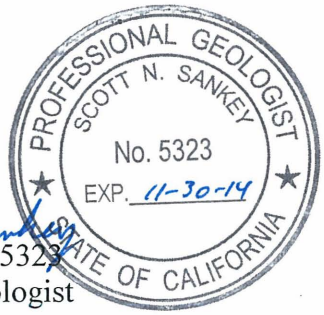
The results of this report have been developed based on a limited number of sediment sample analyses from discrete locations in the Ventura Keys Connecting Channel. It should be recognized that sediment conditions could vary laterally and with depth below a given location.

* * * * *

Should you have any questions or comments concerning this report, please contact us.



Very truly yours,
Applied Environmental
Technologies, Inc.

E. B. Pedram, President

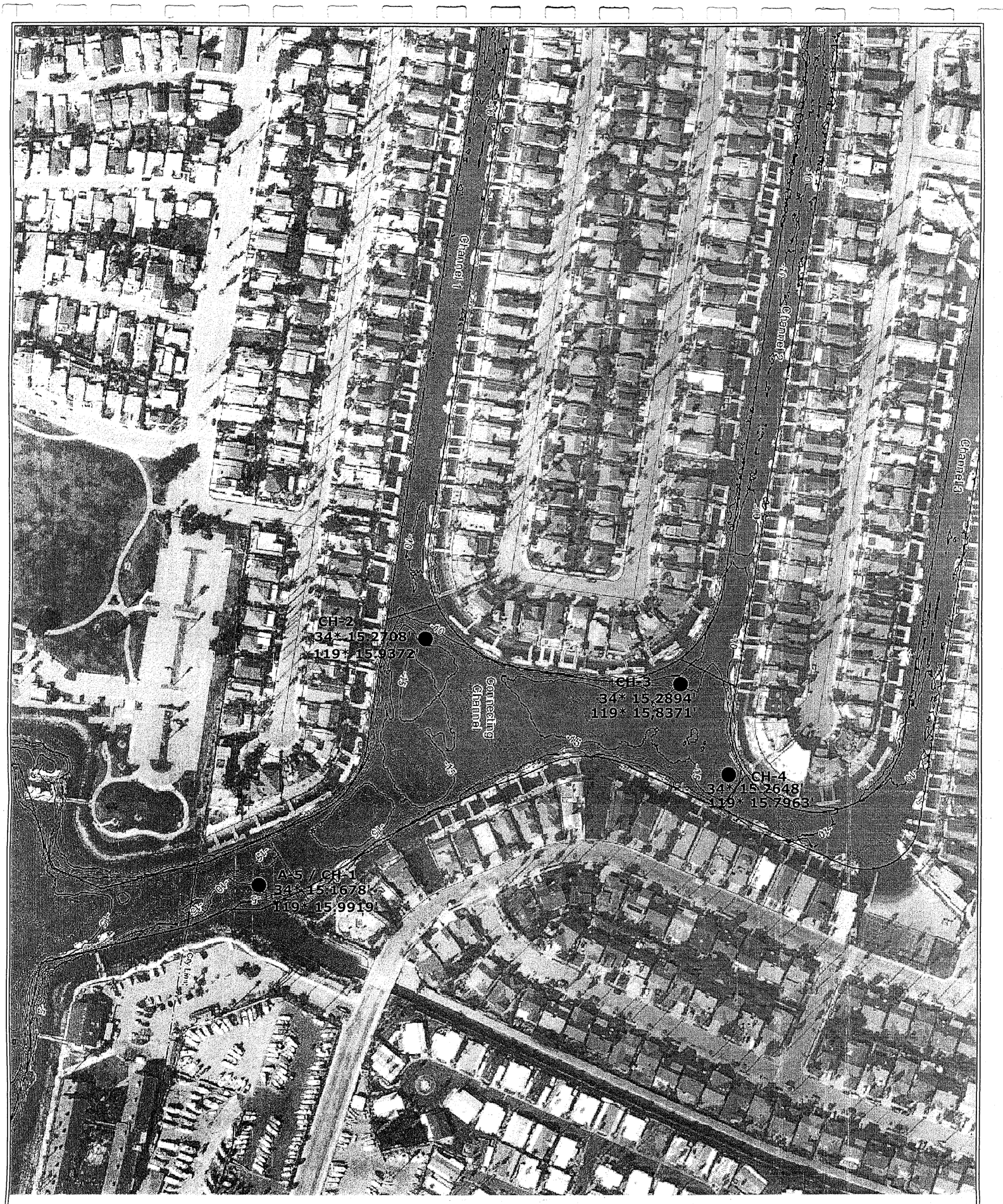
Scott Sankey PG #5323
Senior Project Geologist

Harry C. Finney
Senior Marine Ecologist

Attachment A - February 1994 Sediment Investigation
Attachment B - March 1997 Sediment Investigation
Attachment C – May 2002 Sediment Sampling
Attachment D – July 2005 Sediment Sampling
Attachment E –March 2009 Sediment Investigation
Attachment F - July 1997 Cell 1 Pierpont Groin Field Investigation
Attachment G- November 1998 Sediment Sampling, Santa Clara River Mouth
Attachment H – Grain Size Analytical Report
Attachment I – Photographs of Sediment Cores
Attachment J – Certified Analytical Reports

cc: Mr. Richard Parsons, Coastal Project Manger, City of San Buenaventura

PLATES



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CITY OF VENTURA, VENTURA KEYS CONNECTING CHANNEL, SAMPLE LOCATIONS

VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_BMCH2	NOVEMBER 21, 2012	PROJECT NUMBER 0048-29

PLATE 1

TABLES

Table 1
Sediment Core Completion Data
Ventura Keys Connecting Channel, Ventura, CA

Sediment Sample	Depth to Top of Sediment (feet)
CH-1	13.7
CH-2	21
CH-3	18.8
CH-4	18.5

Table 2
Chemical Constituents Analyzed
Ventura Harbor, Ventura, CA

Analyte	Analytical Method	Practical Quantitation Limit (PQL) or Reporting Limit (RL)
Petroleum Hydrocarbons and Total Organic Carbon		
Oil and Grease (mg/kg)	Oil and Grease analyzed by EPA Method 1664.	20 mg/kg (PQL)
THOd (mg/kg)	Total Petroleum Hydrocarbons as Diesel and Oil analyzed by EPA Method 8015B.	10 mg/kg (PQL)
TPHo (mg/kg)	Total Organic Carbon analyzed by EPA Method 9060.	50 mg/kg (PQL)
TOC (mg/kg)		1.0 mg/kg (PQL)
semi-VOCs (mg/kg)	Semi-volatile organic compounds analyzed by EPA Method 8270C SIM	
1-Methylnapthalene		0.013 to 0.017 mg/kg (RL)
2,4,5-Trichlorophenol		0.013 to 0.017 mg/kg (RL)
2,4,6-Trichlorophenol		0.013 to 0.017 mg/kg (RL)
2,4-Dichlorophenol		0.013 to 0.017 mg/kg (RL)
2,4-Dimethylphenol		0.013 to 0.017 mg/kg (RL)
2,4-Dinitrophenol		0.65 to 0.83 mg/kg (RL)
2-Chlorophenol		0.013 to 0.017 mg/kg (RL)
2-Methylnaphthalene		0.013 to 0.017 mg/kg (RL)
2-Methylphenol		0.013 to 0.017 mg/kg (RL)
2-Nitrophenol		0.013 to 0.017 mg/kg (RL)
3/4-Methylphenol		0.013 to 0.017 mg/kg (RL)
4,6-Dinitro-2-Methylphenol		0.65 to 0.83 mg/kg (RL)
4-Chloro-3-Methylphenol		0.013 to 0.017 mg/kg (RL)
4-Nitrophenol		0.65 to 0.83 mg/kg (RL)
Acenapthene		0.013 to 0.017 mg/kg (RL)
Acenapthylene		0.013 to 0.017 mg/kg (RL)
Anthracene		0.013 to 0.017 mg/kg (RL)
Benzo (a) Anthracene		0.013 to 0.017 mg/kg (RL)
Benzo (a) Pyrene		0.013 to 0.017 mg/kg (RL)
Benzo (b) Fluoranthene		0.013 to 0.017 mg/kg (RL)
Benzo (g,h,i) Perylene		0.013 to 0.017 mg/kg (RL)
Benzo (k) Fluoranthene		0.013 to 0.017 mg/kg (RL)
Bis (2-Ethylhexyl) Phthalate		0.013 to 0.017 mg/kg (RL)
Butyl Benzyl Phthalate		0.013 to 0.017 mg/kg (RL)
Chrysene		0.013 to 0.017 mg/kg (RL)
Di-n-Butyl Phthalate		0.013 to 0.017 mg/kg (RL)
Di-n-Octyl Phthalate		0.013 to 0.017 mg/kg (RL)
Dibenz (a,h) Anthracene		0.013 to 0.017 mg/kg (RL)
Diethyl Pthalate		0.013 to 0.017 mg/kg (RL)
Dimethyl Phthalate		0.013 to 0.017 mg/kg (RL)
Fluoranthene		0.013 to 0.017 mg/kg (RL)
Fluorene		0.013 to 0.017 mg/kg (RL)
Indeno (1,2,3-c,d) Pyrene		0.013 to 0.017 mg/kg (RL)
Naphthalene		0.013 to 0.017 mg/kg (RL)
Pentachlorophenol		0.65 to 0.83 mg/kg (RL)
Phenanthrene		0.013 to 0.017 mg/kg (RL)
Phenol		0.013 to 0.017 mg/kg (RL)
Pyrene		0.013 to 0.017 mg/kg (RL)
1,6,7-Trimethylnaphthalene		0.013 to 0.017 mg/kg (RL)
2,3,4,6-Tetrachlorophenol		0.013 to 0.017 mg/kg (RL)
2,6-Dichlorophenol		0.013 to 0.017 mg/kg (RL)
Benzoic Acid		0.13 to 0.17 mg/kg (RL)
DCPA		0.013 to 0.017 mg/kg (RL)

Table 2
Chemical Constituents Analyzed
Ventura Harbor, Ventura, CA

Analyte	Analytical Method	Practical Quantitation Limit (PQL) or Reporting Limit (RL)
semi-VOCs CONT. (mg/kg)	Semi-volatile organic compounds analyzed by EPA Method 8270C SIM	
Dibenzothiophene		0.013 to 0.017 mg/kg (RL)
Perthane		0.013 to 0.017 mg/kg (RL)
1-Methylphenanthrene		0.013 to 0.017 mg/kg (RL)
Benzo (e) Pyrene		0.013 to 0.017 mg/kg (RL)
Perylene		0.013 to 0.017 mg/kg (RL)
Biphenyl		0.013 to 0.017 mg/kg (RL)
2,6-Dimethylnaphthalene		0.013 to 0.017 mg/kg (RL)
PCBs (µg/kg)	Polychlorinated biphenyls analyzed by EPA Method 8270C.	
PCB003		0.65 to 0.83 µg/kg (RL)
PCB008		0.65 to 0.83 µg/kg (RL)
PCB018		0.65 to 0.83 µg/kg (RL)
PCB028		0.65 to 0.83 µg/kg (RL)
PCB031		0.65 to 0.83 µg/kg (RL)
PCB033		0.65 to 0.83 µg/kg (RL)
PCB037		0.65 to 0.83 µg/kg (RL)
PCB044		0.65 to 0.83 µg/kg (RL)
PCB049		0.65 to 0.83 µg/kg (RL)
PCB052		0.65 to 0.83 µg/kg (RL)
PCB056		0.65 to 0.83 µg/kg (RL)
PCB060		0.65 to 0.83 µg/kg (RL)
PCB066		0.65 to 0.83 µg/kg (RL)
PCB070		0.65 to 0.83 µg/kg (RL)
PCB074		0.65 to 0.83 µg/kg (RL)
PCB077		0.65 to 0.83 µg/kg (RL)
PCB081		0.65 to 0.83 µg/kg (RL)
PCB087		0.65 to 0.83 µg/kg (RL)
PCB095		0.65 to 0.83 µg/kg (RL)
PCB097		0.65 to 0.83 µg/kg (RL)
PCB099		0.65 to 0.83 µg/kg (RL)
PCB101		0.65 to 0.83 µg/kg (RL)
PCB105		0.65 to 0.83 µg/kg (RL)
PCB110		0.65 to 0.83 µg/kg (RL)
PCB114		0.65 to 0.83 µg/kg (RL)
PCB118		0.65 to 0.83 µg/kg (RL)
PCB119		0.65 to 0.83 µg/kg (RL)
PCB123		0.65 to 0.83 µg/kg (RL)
PCB126		0.65 to 0.83 µg/kg (RL)
PCB128		0.65 to 0.83 µg/kg (RL)
PCB132		0.65 to 0.83 µg/kg (RL)
PCB138/158		1.3 to 1.7 µg/kg (RL)
PCB141		0.65 to 0.83 µg/kg (RL)
PCB149		0.65 to 0.83 µg/kg (RL)
PCB151		0.65 to 0.83 µg/kg (RL)
PCB153		0.65 to 0.83 µg/kg (RL)
PCB156		0.65 to 0.83 µg/kg (RL)
PCB157		0.65 to 0.83 µg/kg (RL)
PCB167		0.65 to 0.83 µg/kg (RL)
PCB168		0.65 to 0.83 µg/kg (RL)
PCB169		0.65 to 0.83 µg/kg (RL)

Table 2
Chemical Constituents Analyzed
Ventura Harbor, Ventura, CA

Analyte	Analytical Method	Practical Quantitation Limit (PQL) or Reporting Limit (RL)
PCBs CONT. (µg/kg)	Polychlorinated biphenyls analyzed by EPA Method 8270C.	
PCB170		0.65 to 0.83 µg/kg (RL)
PCB174		0.65 to 0.83 µg/kg (RL)
PCB177		0.65 to 0.83 µg/kg (RL)
PCB180		0.65 to 0.83 µg/kg (RL)
PCB183		0.65 to 0.83 µg/kg (RL)
PCB184		0.65 to 0.83 µg/kg (RL)
PCB187		0.65 to 0.83 µg/kg (RL)
PCB189		0.65 to 0.83 µg/kg (RL)
PCB194		0.65 to 0.83 µg/kg (RL)
PCB195		0.65 to 0.83 µg/kg (RL)
PCB200		0.65 to 0.83 µg/kg (RL)
PCB201		0.65 to 0.83 µg/kg (RL)
PCB203		0.65 to 0.83 µg/kg (RL)
PCB206		0.65 to 0.83 µg/kg (RL)
PCB209		0.65 to 0.83 µg/kg (RL)
Orgaonchloro Pesticides (µg/kg)	Organo-chlorine pesticides analyzed by EPA Method 8081A	
4,4'-Dichlorobenzophenone		33 to 42 µg/kg (RL)
Aldrin		1.3 to 1.7 µg/kg (RL)
Alpha-BHC		1.3 to 1.7 µg/kg (RL)
Beta-BHC		1.3 to 1.7 µg/kg (RL)
Delta-BHC		1.3 to 1.7 µg/kg (RL)
Gamma-BHC		1.3 to 1.7 µg/kg (RL)
Chlorane		13 to 17 µg/kg (RL)
Dieldrin		1.3 to 1.7 µg/kg (RL)
Trans-nonachlor		1.3 to 1.7 µg/kg (RL)
2,4'-DDD		1.3 to 1.7 µg/kg (RL)
2,4'-DDE		1.3 to 1.7 µg/kg (RL)
2,4'-DDT		1.3 to 1.7 µg/kg (RL)
4,4'-DDD		1.3 to 1.7 µg/kg (RL)
4,4'-DDE		1.3 to 1.7 µg/kg (RL)
4,4'-DDT		1.3 to 1.7 µg/kg (RL)
Endosulfan I		1.3 to 1.7 µg/kg (RL)
Endosulfan II		1.3 to 1.7 µg/kg (RL)
Endosulfan Sulfate		1.3 to 1.7 µg/kg (RL)
Endrin		1.3 to 1.7 µg/kg (RL)
Endrin Aldehyde		1.3 to 1.7 µg/kg (RL)
Endrin Ketone		1.3 to 1.7 µg/kg (RL)
Heptachlor		1.3 to 1.7 µg/kg (RL)
Heptachlor Epoxide		1.3 to 1.7 µg/kg (RL)
Methoxychlor		1.3 to 1.7 µg/kg (RL)
Toxaphene		26 to 31 µg/kg (RL)
Alpha Chlordane		1.3 to 1.7 µg/kg (RL)
Gamma Chlordane		1.3 to 1.7 µg/kg (RL)
Cis-nonachlor		1.3 to 1.7 µg/kg (RL)
Mirex		6.5 to 8.3 µg/kg (RL)
Oxychlordane		1.3 to 1.7 µg/kg (RL)

Table 2
Chemical Constituents Analyzed
Ventura Harbor, Ventura, CA

Analyte	Analytical Method	Practical Quantitation Limit (PQL) or Reporting Limit (RL)
Pyrethroids (µg/kg)	Pyrethroids analyzed by EPA Method 8270D.	
Allethrin		6.5 to 8.3 µg/kg (RL)
Bifenthrin		6.5 to 8.3 µg/kg (RL)
Cyfluthrin		6.5 to 8.3 µg/kg (RL)
Cypermethrin		6.5 to 8.3 µg/kg (RL)
Deltamethrin/Tralomethrin		6.5 to 8.3 µg/kg (RL)
Fenpropathrin		6.5 to 8.3 µg/kg (RL)
Fenvalerate/Esfenvalerate		6.5 to 8.3 µg/kg (RL)
Fluvalinate		6.5 to 8.3 µg/kg (RL)
Permethrin (cis/trans)		1.3 to 1.7 µg/kg (RL)
Phenothrin		6.5 to 8.3 µg/kg (RL)
Resmethrin/Bioresmethrin		6.5 to 8.3 µg/kg (RL)
Tetramehtrin		6.5 to 8.3 µg/kg (RL)
lambda-Cyhalothrin		6.5 to 8.3 µg/kg (RL)
Organotins (µg/kg)	Organotins analyzed by Method Krone et al.	
Dibutyltin		3.9 to 5 µg/kg (RL)
Monobutylin		3.9 to 5 µg/kg (RL)
Tetrabutyltin		3.9 to 5 µg/kg (RL)
Tributyltin		3.9 to 5 µg/kg (RL)
Metals (mg/kg)	Metals analyzed by EPA Method 6020.	
Arsenic		0.13 to 0.167 mg/kg (RL)
Cadmium		0.13 to 0.167 mg/kg (RL)
Chromium		0.13 to 0.167 mg/kg (RL)
Copper		0.13 to 0.167 mg/kg (RL)
Lead		0.13 to 0.167 mg/kg (RL)
Nickel		0.13 to 0.167 mg/kg (RL)
Selenium		0.13 to 0.167 mg/kg (RL)
Silver		0.13 to 0.167 mg/kg (RL)
Zinc		1.3 to 1.67 mg/kg (RL)
Mercury	Mercury analyzed by EPA Method 7471A.	0.05 mg/kg (PQL)
Ammonia as N (mg/kg)	Ammonia analyzed by EPA Method SM4500-NH3-D.	2.0 mg/kg (PQL)
Percent Moisture (%)	Percent moisture analyzed by EPA Method SM2540-G.	1.0 % (PQL)
Solids, Volatile (%)	Total volatile solids analyzed by EPA Method 160.4M	0.1 % (RL)
Solids, Total (%)	Total solids analyzed by EPA Method SM 2540 B	0.1 % (RL)

Table 3
Sediment Sample Grain Size Distribution Data
Ventura Keys Connecting Channel, Ventura, CA

Sieve Size	Soil Type	CH		
		Weight Retained (grams)	Percent Retained %	Percent Passed %
1-1/2 inch (37mm)	coarse gravel	0	0%	100%
1 inch (25mm)	coarse gravel	0	0%	100%
3/4 inch (19 mm)	fine gravel	0	0%	100%
1/2 inch (12.5 mm)	fine gravel	0	0%	100%
3/8 inch (9.5 mm)	fine gravel	0	0%	100%
#4 (4.75 mm)	coarse sand	0	0%	100%
#8 (2.36 mm)	coarse sand	1.8	0%	100%
#16 (1.18 mm)	medium sand	3.9	1%	99%
#30 (0.6 mm)	medium sand	7.8	2%	98%
#50 (0.3 mm)	fine sand	20.9	5%	95%
#100 (0.15 mm)	fine sand	52.2	12%	88%
#200 (0.075 mm)	fine sand	70.4	16%	84%
description		Sandy Silt or Sandy Clay		
Wet Weight (grams)		456.6		
Dry Weight (grams)		443.3		

Table 4
Summary of Soil Sample Analytical Results
Petroleum Hydrocarbons and Total Organic Carbon
Ventura Keys Connecting Channel, Ventura, CA

Analyte	Sample Designation	Regulatory Levels	
	Ch-C	TTLC	RSL Soil
	(mg/kg)	(mg/kg)	(mg/kg)
Oil and Grease[1] (mg/kg)	$ND_{(<20)}$	--	--
THOd[2] (mg/kg)	$ND_{(<10)}$	--	--
TPHo[2] (mg/kg)	$ND_{(<50)}$	--	--
TOC[3] (mg/kg)	**9,140**	--	--

Notes:

1 = Oil and Grease analyzed by EPA Method 1664.

2 = Total Petroleum Hydrocarbons as Diesel and Oil analyzed by EPA Method 8015B.

3 = Total Organic Carbon analyzed by EPA Method 9060.

ND = Not detected at laboratory method Practical Quantitation Limit.

TTLC = Total Threshold Limit Concentration from California Code of Regulations Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.

RSL = Regional Screening Levels for residential soil exposure from EPA Region 9.

Table 5
Summary of Soil Sample Analytical Results
Semi-Volatile Organic Compounds
Ventura Keys Connecting Channel, Ventura, CA

Analyte	Sample Designation Ch-C (mg/kg)	Regulatory Levels TTLC (mg/kg)	Regulatory Levels RSL Soil (mg/kg)
1-Methylnapthalene	$ND_{(<0.016)}$	--	--
2-Chlorophenol	$ND_{(<0.016)}$	--	390
2-Methylnaphthalene	$ND_{(<0.016)}$	--	--
3/4-Methylphenol	$ND_{(<0.016)}$	--	--
4-Chloro-3-Methylphenol	$ND_{(<0.016)}$	--	--
Acenapthene	$ND_{(<0.016)}$	--	--
Acenapthylene	$ND_{(<0.016)}$	--	--
Anthracene	$ND_{(<0.016)}$	--	--
Benzo (a) Anthracene	0.0067	--	--
Benzo (a) Pyrene	0.0081	--	--
Benzo (b) Fluoranthene	0.013	--	--
Benzo (g,h,i) Perylene	0.0092	--	--
Benzo (k) Fluoranthene	0.0086	--	--
Bis (2-Ethylhexyl) Phthalate	0.079	--	35
Butyl Benzyl Phthalate	0.0098	--	260
Chrysene	0.012	--	--
Di-n-Butyl Phthalate	0.0062	--	--
Dibenz (a,h) Anthracene	$ND_{(<0.016)}$	--	--
Diethyl Pthalate	0.0046	--	49,000
Dimethyl Phthalate	0.48	--	--
Fluoranthene	0.16	--	--
Fluorene	$ND_{(<0.016)}$	--	--
Indeno (1,2,3-c,d) Pyrene	0.0077	--	--
Naphthalene	$ND_{(<0.016)}$	--	--
Phenanthrene	0.0077	--	--
Phenol	$ND_{(<0.016)}$	--	18,000
Pyrene	0.018	--	--
Benzoic Acid	0.041	--	240,000
Benzo (e) Pyrene	0.011	--	--
Perylene	0.027	--	--
Biphenyl	$ND_{(<0.016)}$	--	51
2,6-Dimethylnaphthalene	0.0053	--	--
Other semi-VOCs	$ND_{(<0.016\ to\ 0.8)}$	--	--

Notes:

1 = Semi-volatile organic compounds analyzed by EPA Method 8270C SIM

ND = Not detected at laboratory method Reporting Limit.

TTLC = Total Threshold Limit Concentration from California Code of Regulations Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.

RSL = Regional Screening Levels for residential soil exposure from EPA Region 9.

Table 6
Summary of Soil Sample Analytical Results
Polychlorinated Biphenyls
Ventura Keys Connecting Channel, Ventura, CA

Analyte	Sample Designation Ch-C (mg/kg)	Regulatory Levels TTLC (mg/kg)	Regulatory Levels RSL Soil (mg/kg)
PCB044	$ND_{(<0.8)}$	--	--
PCB049	**0.31**	--	--
PCB052	$ND_{(<0.8)}$	--	--
PCB060	$ND_{(<0.8)}$	--	--
PCB066	$ND_{(<0.8)}$	--	--
PCB070	$ND_{(<0.8)}$	--	--
PCB074	$ND_{(<0.8)}$	--	--
PCB087	$ND_{(<0.8)}$	--	--
PCB095	$ND_{(<0.8)}$	--	--
PCB097	$ND_{(<0.8)}$	--	--
PCB099	$ND_{(<0.8)}$	--	--
PCB101	$ND_{(<0.8)}$	--	--
PCB105	$ND_{(<0.8)}$	--	**110**
PCB110	$ND_{(<0.8)}$	--	--
PCB114	**0.19**	--	**110**
PCB118	$ND_{(<0.8)}$	--	**110**
PCB128	$ND_{(<0.8)}$	--	--
PCB138/158	$ND_{(<1.6)}$	--	**110**
PCB149	$ND_{(<0.8)}$	--	--
PCB153	$ND_{(<0.8)}$	--	--
PCB170	$ND_{(<0.8)}$	--	--
PCB180	$ND_{(<0.8)}$	--	--
PCB187	$ND_{(<0.8)}$	--	--
Other PCB's	$ND_{(<0.8)}$	--	--

Notes:

1 = Polychlorinated biphenyls analyzed by EPA Method 8270C.

ND = Not detected at laboratory method Reporting Limit.

TTLC = Total Threshold Limit Concentration from California Code of Regulations Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.

RSL = Regional Screening Levels for residential soil exposure from EPA Region 9.

Table 7
Summary of Soil Sample Analytical Results
Organochlorine Pesticides and Pyrethroids
Ventura Keys Connecting Channel, Ventura, CA

Analyte	Sample Designation	Regulatory Levels	
	Ch-C (µg/kg)	TTLC (µg/kg)	RSL Soil (µg/kg)
Orgaonchlorine Pesticides[1]			
2,4'-DDE	3.4	1,000,000	1,400
4,4'-DDD	1.3	1,000,000	2,000
4,4'-DDE	3.6	1,000,000	1,400
other pesticides	$ND_{(<1.6 \text{ to } 40)}$	--	--
			--
Pyrethroids[2]			--
Permethrin (cis/trans)	4.4	--	3,100,000
other insecticides	$ND_{(<0.79)}$	--	--

Notes:

1 = Organo-chlorine pesticides analyzed by EPA Method 8081A

2 = Pyrethroids analyzed by EPA Method 8270D.

ND = Not detected at laboratory method Reporting Limit.

TTLC = Total Threshold Limit Concentration from California Code of Regulations Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.

RSL = Regional Screening Levels for residential soil exposure from EPA Region 9.

Table 8
Summary of Soil Sample Analytical Results - Organotins
Ventura Keys Connecting Channel, Ventura, CA

Analyte	Sample Designation	Regulatory Levels	
	Ch-C (µg/kg)	TTLC (µg/kg)	RSL Soil (µg/kg)
Dibutyltin	$ND_{(<4.8)}$	--	**18,000**
Monobutylin	$ND_{(<4.8)}$	--	--
Tetrabutyltin	$ND_{(<4.8)}$	--	--
Tributyltin	**3.1**	--	**18,000**

Notes:

1 = Organotins analyzed by Method Krone et al.

ND = Not detected at laboratory method Reporting Limit.

TTLC = Total Threshold Limit Concentration from California Code of Regulations Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.

RSL = Regional Screening Levels for residential soil exposure from EPA Region 9.

Table 9
Summary of Soil Sample Analytical Results - Metals, Mercury, and Ammonia
Ventura Keys Connecting Channel, Ventura, CA

Analyte	Sample Designation	Regulatory Levels	
	Ch-C (µg/kg)	TTLC (µg/kg)	RSL Soil (µg/kg)
Metals[1]			
Arsenic	7.68	0.0013	0.29
Cadmium	0.758	0.52	0.38
Chromium	28.6	--	180,000
Copper	44.4	22	46
Lead	13.6	--	14
Nickel	38.1	--	--
Selenium	0.789	0.4	0.26
Silver	0.15	0.6	--
Zinc	114	290	--
Mercury[2]	$ND_{(<0.05)}$	0.033	0.1
Ammonia as N[3]	35	--	--

Notes:

1 = Metals analyzed by EPA Method 6020.

2 = Mercury analyzed by EPA Method 7471A.

3 = Ammonia analyzed by EPA Method SM4500-NH3-D.

ND = Not detected at laboratory method Reporting Limit.

TTLC = Total Threshold Limit Concentration from California Code of Regulations Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24.

RSL = Regional Screening Levels for residential soil exposure from EPA Region 9.

Table 10
Summary of Soil Sample Analytical Results
Percent Moisture, Total Volatile Solids, and Total Solids
Ventura Keys Connecting Channel, Ventura, CA

Analyte	Ch-C (%)
Percent Moisture[1]	**36.4**
Solids, Volatile[2]	**1.4**
Solids, Total[3]	**62.8**

Notes:

1 = Percent moisture analyzed by EPA Method SM2540-G.

2 = Total volatile solids analyzed by EPA Method 160.4M

3 = Total solids analyzed by EPA Method SM 2540 B

ND = Not detected at laboratory method Practical Quantitation Limit.

ATTACHMENT A

February 1994 Sediment Investigation

February 1994 Sediment Investigation

The February sediment sampling included the collection of sediment samples from offshore c the Santa Clara River mouth at depths of 45 to 47 feet (Plate 3). The 3 offshore samples were composited into a single offshore sample.

The samples were analyzed for grain size, total organic carbon (TOC), and total solids. The grain sizes of the composite offshore sample were gravel at 0.0%, sand at 29.926%, silt at 64.794% and clay at 5.280%. The average percent that passes the 200-sieve (silt and clay) was calculated to be 70.044%.

Based on studies conducted by R. P. Williams (1978, "Sediment Discharge in the Santa Clara River Basin, Ventura County, California", USGS Water Resources Investigation 79-78), the sediment grain sizes discharged by the Santa Clara River range from clays and silts to gravel. Particle size measurements were collected during the years 1969 to 1975. Silts and clays comprised a majority (over 79 percent) of the sediments discharged by the Santa Clara River during these years. The river has discharged between 0.4 and 40,200,000 tons per day (estimated to be between 0.3 and 30,000,000 cubic yards) from the river mouth into the marine environment. The estimated mean daily total sediment discharge during the period 1950 to 1975 for the Santa Clara River was 9,720 tons (estimated at approximately 7,200 cubic yards). This can be estimated to consist of over 2.5 million cubic yards of sediment per year. The discharge of sediments is highly variable depending on rainfall and flooding, and it is our opinion that the deposition of harbor sediments in the vicinity of the river mouth would not affect the marine ecosystem significantly.

In addition to the previous studies conducted on the sediments offshore the Santa Clara River mouth that show that materials present in the Ventura Keys Connecting Channel are comparable to those discharged from the Santa Clara River, no apparent environmental concerns were observed during previous deposition of Ventura Keys Connecting Channel sediments to the surf zone of the beaches near the Santa Clara River mouth.

The calculated material deposition for the next dredging period (1994-1997) was a maximum of 50,000 cubic yards per year. This estimated discharge is well within the parameters that have been discharged in the past. The estimated material dredged was considered to be an insignificant volume when compared to the annual discharge from the Santa Clara River (2.5 million cubic yards per year). No affect to the marine environment would be expected from the discharge of the Ventura Keys Connecting Channel sediments to the area near the Santa Clara River mouth.

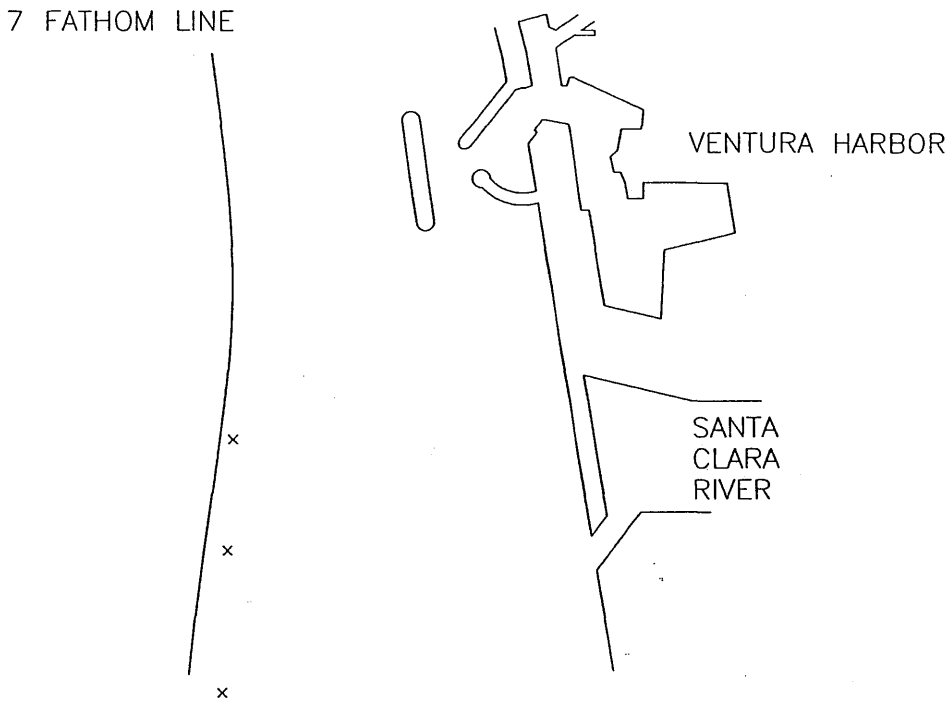
It was the conclusion of the 1994 report that the dredged sediment was comparable in sediment grain size and chemistry with sediments regularly discharged by the Santa Clara River. Additionally, it was the conclusion of this report that the dredged sediments could be discharged near the river mouth without causing a long-term alteration of the grain size distributions in the area of the river mouth.

In summary, no detectable concentrations of Polynuclear Aromatic Hydrocarbons (PAHs) including total Phthalates, Pesticides, Polychlorinated Biphenyls (PCBs), total recoverable petroleum

hydrocarbons (TRPH), Phenols, or oil and grease were measured in the offshore sample. Sulfides were measured in the offshore sample at 47 milligrams per kilogram (mg/kg).

Four metals (Chromium, Copper, Nickel, and Zinc) were detected in the offshore sample at 8.40, 6.55, 8.45, and 30.4 mg/kg, respectively. Arsenic was measured in the offshore sample at 4.3 mg/kg.

T report concluded that the chemical concentrations measured in the Ventura Harbor sediments were comparable to the concentrations detected in offshore samples. Additionally, no significant impact was expected to occur from the disposal of harbor sediments to waters offshore the Santa Clara River mouth.



× OFFSHORE SAMPLE LOCATION

0' 3,000' 6,000'

SCALE - 1" = 3,000' AT 8.5" x 11"

Applied
Environmental
Technologies, Inc.

4561 Market Street, Suite B • Ventura, California 93003
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1994 OFFSHORE SAMPLE LOCATIONS

VENTURA PORT DISTRICT
VENTURA, CALIFORNIA

PLATE REFERENCE 00622201F	JULY 2, 2002	PROJECT NUMBER 0062-22

PLATE 3

ATTACHMENT B

March 1997 Sediment Investigation

March 1997 Sediment Sampling Investigation

The sediment sampling investigation was conducted on the Connecting Channel and the Ventura Keys. The sampling included the collection of sediment cores from 6 locations in the Connecting Channel shown on Plates 1 and 2. The cores were collected using a vibracore mounted on a 36-foot workboat. The sediment samples were collected from the areas of proposed dredging within the Connecting Channel. A composite sample from 3 locations was collected from the Santa Clara River mouth (Plate 2). Two composite samples, for analyses, were analyzed for the Connecting Channel and the Santa Clara river mouth.

The depth of the samples within the individual waterways varied according to the required dredging depth. The depth of the samples from the Connecting Channel and Ventura Keys was approximately -17 feet MLLW (proposed dredge depth was -15 ft MLLW).

The objective of the sediment chemical analyses was to characterize the composition of sediment to be dredged, and identify any compounds that could potentially be released as dissolved constituents to the receiving waters. The composite samples from each sampling area were also analyzed for grain size.

In summary, the sediments of the Connecting Channel and Ventura Keys consisted of silty clay less than 2 feet thick followed by very fine-to-fine sand to total depth. Organic debris was encountered in the Connecting Channel near the southwest end.

The grain sizes of the Connecting Channel, the composite offshore samples, and the sample from the river mouth were approximately 41% for the Connecting Channel, and approximately 24% for the sample at the river mouth. The sediment from the Connecting Channel and Ventura keys was considered acceptable for discharge off the Santa Clara River Mouth.

The sediment samples were analyzed for total organic carbon (TOC). The results showed that between 0.49 and 1.84 percent of the samples in the Connecting Channel and Ventura Keys contained organic carbon. The offshore samples contained 0.42 to 0.45 percent TOC. The analysis for total solids and total organic carbon were comparable for both the Connecting Channel and river mouth areas.

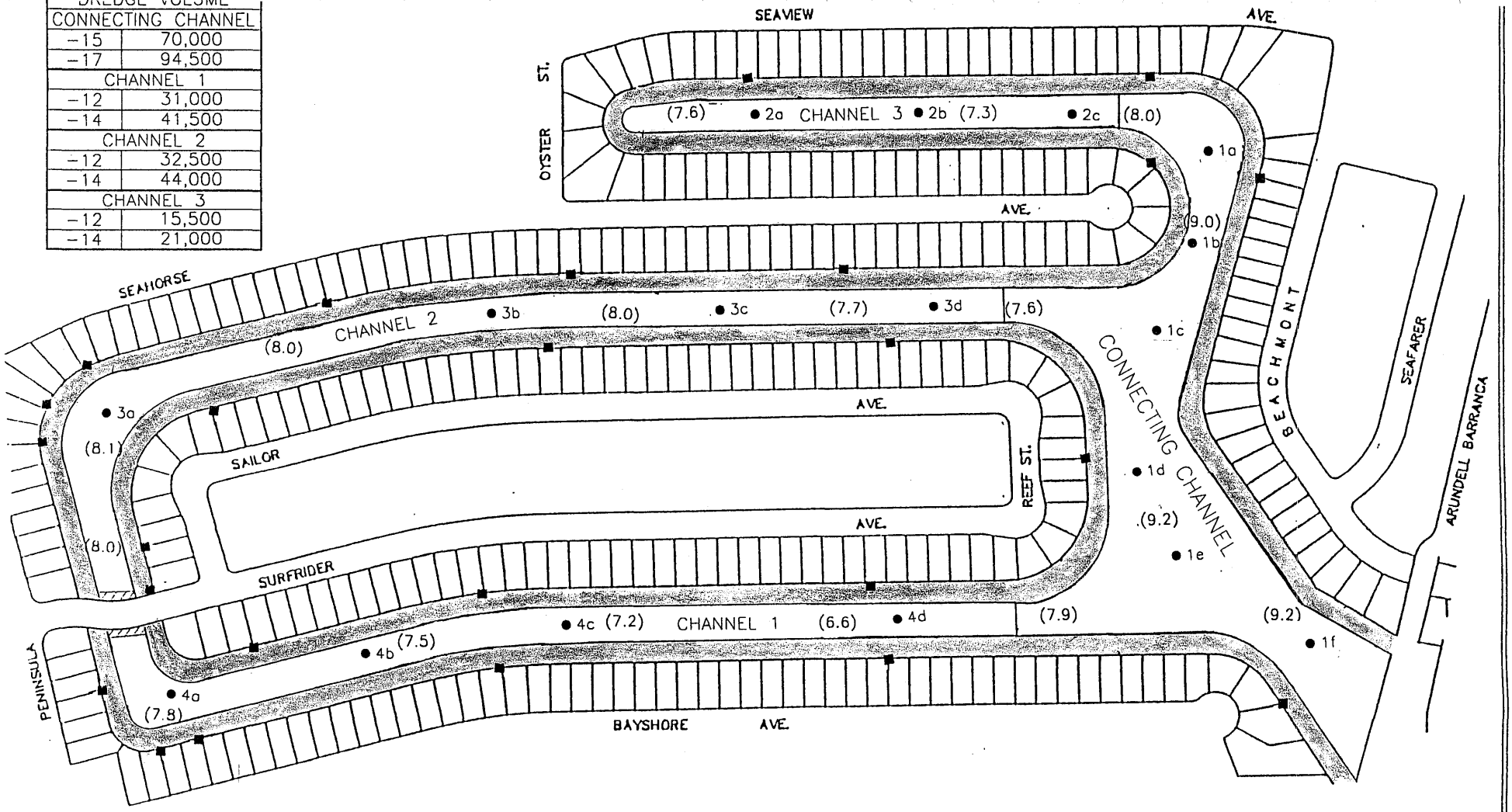
The chemical analyses conducted on the samples from the Connecting Channel resulted in no detectable concentrations of volatile organic compounds, polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), organochlorine pesticides, phenols, phthalate esters, organotin compounds, and cyanide. Based on the chemical analyses conducted on the samples from the Connecting Channel, and the offshore areas, there was no significant difference.

Metals analyses were conducted on the sediment samples. No arsenic, mercury, selenium or silver concentrations were detected in the samples. No concentrations were measured that exceed the total threshold limit concentration, (TTLC) which identify the material as hazardous. No concentrations were measured that were 10 times the soluble threshold limit concentration (STLC), which would infer that, the sediments do not contain hazardous levels of a metal. No impacts due to

metals were expected to occur from discharge of dredged materials from the Connecting Channel to the marine environment offshore.

It was the conclusion of the Ventura Keys Sediment Investigation, dated May 27, 1997, that the chemical concentrations measured in the Ventura Keys sediments were not environmentally significant and were comparable to the concentrations detected in offshore samples.

DREDGE VOLUME	
CONNECTING CHANNEL	
−15	70,000
−17	94,500
CHANNEL 1	
−12	31,000
−14	41,500
CHANNEL 2	
−12	32,500
−14	44,000
CHANNEL 3	
−12	15,500
−14	21,000



LEGEND

- PROPOSED SAMPLING LOCATION
- STORM DRAIN LOCATIONS

(8.0) CONDITION SURVEY DEPTHS AUGUST 1996 IN FEET (MLLW)

EASEMENT BORDER

0' 300' 600'

N

Applied Environmental Technologies, Inc.

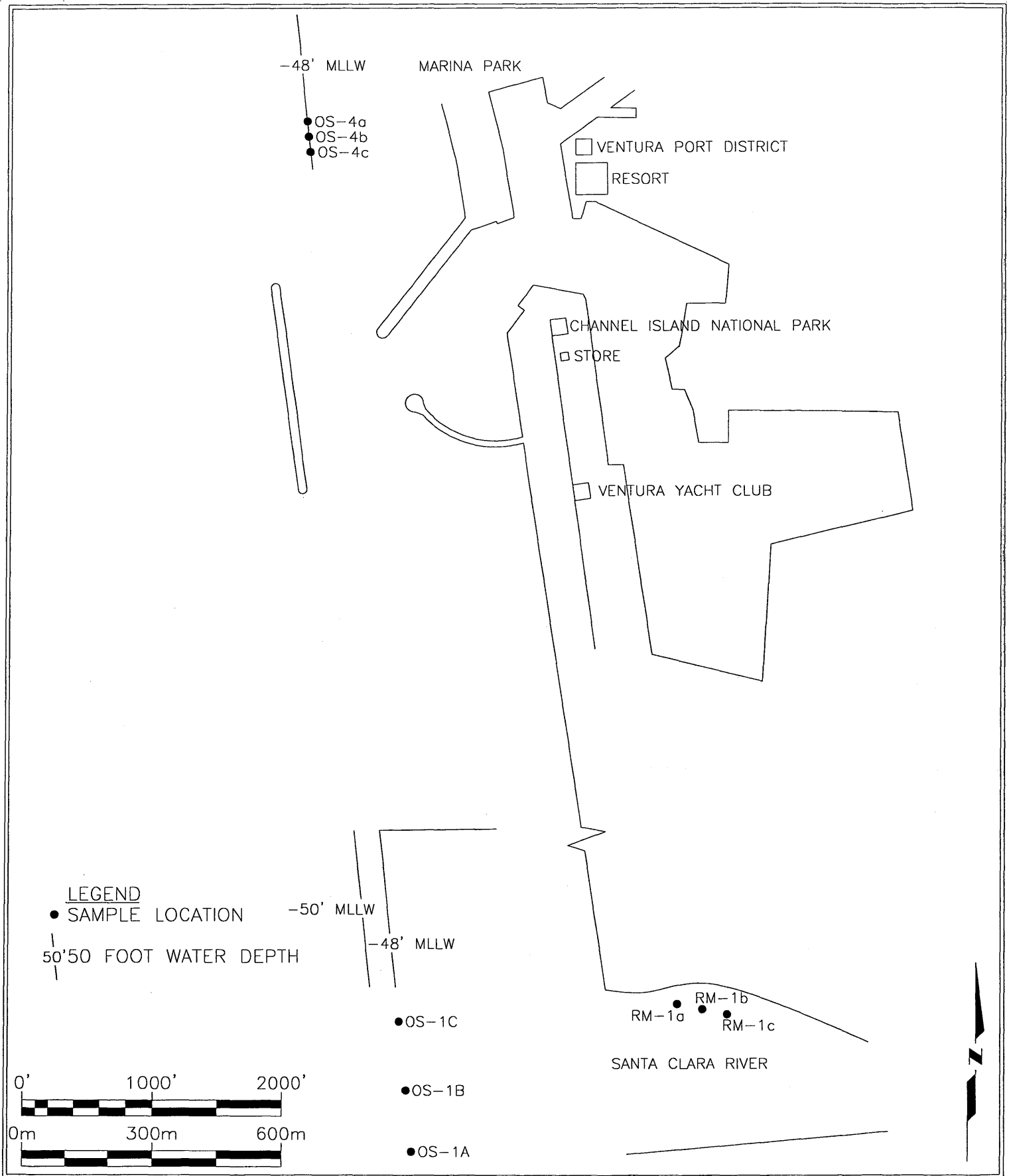
PROPOSED SAMPLING LOCATION

Ventura Keys
Ventura, California

PROJECT NUMBER 0048-29

12-30-96

PLATE 1



Applied Environmental Technologies, Inc.

PROPOSED OFFSHORE SAMPLING LOCATIONS

Ventura Keys
Ventura, California

PROJECT NUMBER 0048-29

5-26-97

PLATE 2

0048298

ATTACHMENT C

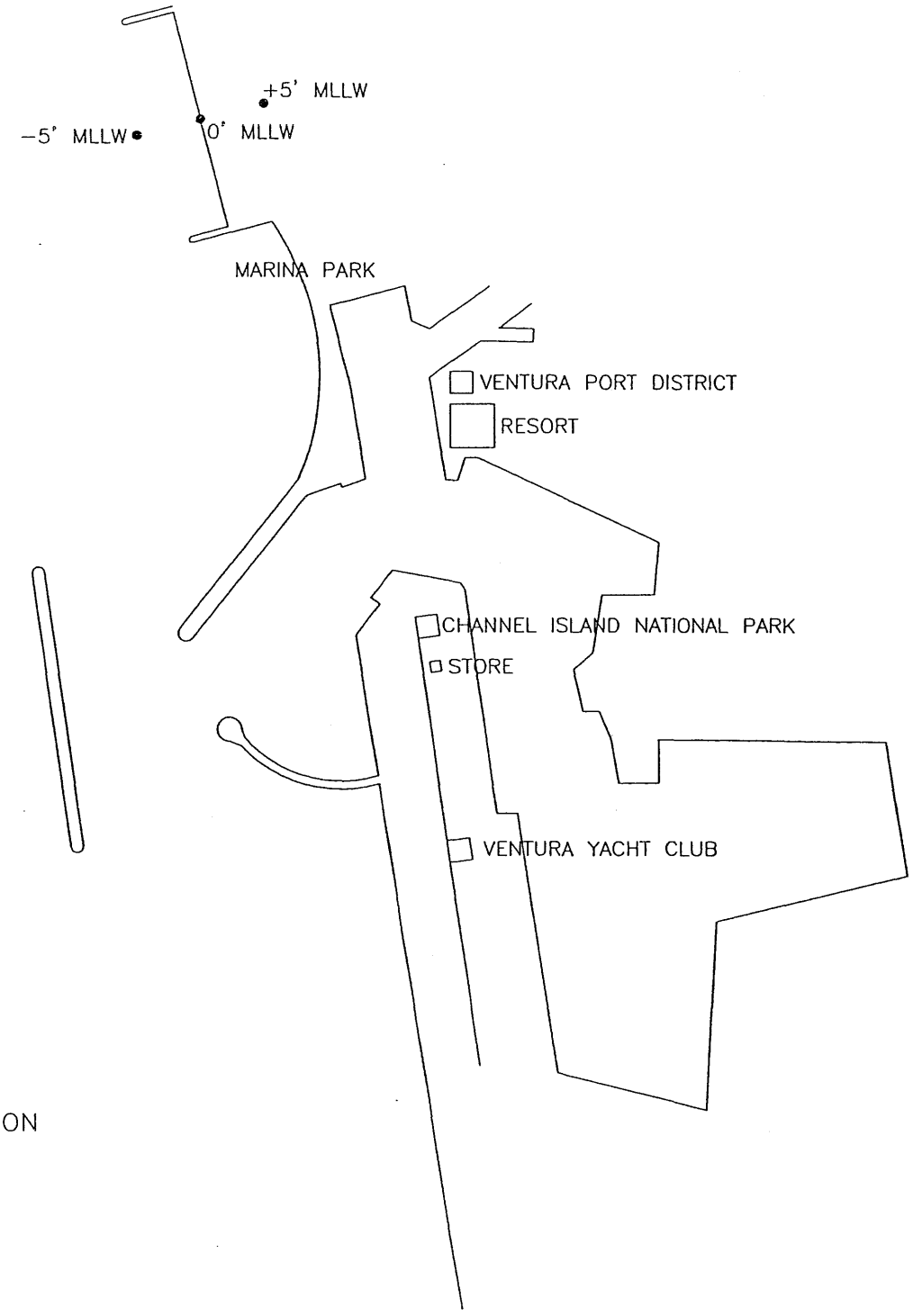
July 1997 Cell 1 Pierpont Groin Field Investigation

July 1997 Cell 1 Pierpont Groin Field Investigation

Additional beach sediment sampling, from the Ventura Keys and Connecting Channel investigation, was conducted in Cell 1 of the Pierpont Groin Field. The purpose of the supplemental sampling was to establish the grain size distribution of the existing sediment on the Cell 1 beach including the shallow subtidal zone.

Samples were collected samples at +5, 0, and -5 feet MLLW at approximately the mid point of Cell 1 (see Plate 1) on July 22, 1997 at 0600 hrs. The sediment samples were collected from the 3 locations described above using grab sample methodology. At each location, 3 samples were collected in glass grab containers. The samples at each location the samples were composited into a single sample.

The composite sample from each zone was analyzed for grain size. Grain size analyses to determine general size classes that make up sediment (gravel, sand, silt, clay) were measured using nested sieves and pipette method for small particle sizes. The grain size identified at the 3 locations on the Cell I beach was sand. At +5 feet MLLW on the Cell I beach the grain size was 99.098% sand and 0.902% silts and clays. At 0 feet MLLW, the grain size was 98.396% sand and 1.604% silts and clays. At -5 feet MLLW, the sand content was 96.606% with 0.898% gravel. Silts and clays at this depth were 2.496% of the total sample.



LEGEND
• SAMPLE LOCATION

0' 1000' 2000'
m 300m 600m

N

Applied Environmental Technologies, Inc.

BEACH SAMPLING LOCATIONS CELL 1

Ventura Keys
Ventura, California

PROJECT NUMBER 0048-29

8-5-97

PLATE 1

ATTACHMENT D

November 1998 Sediment Sampling, Santa Clara River Mouth

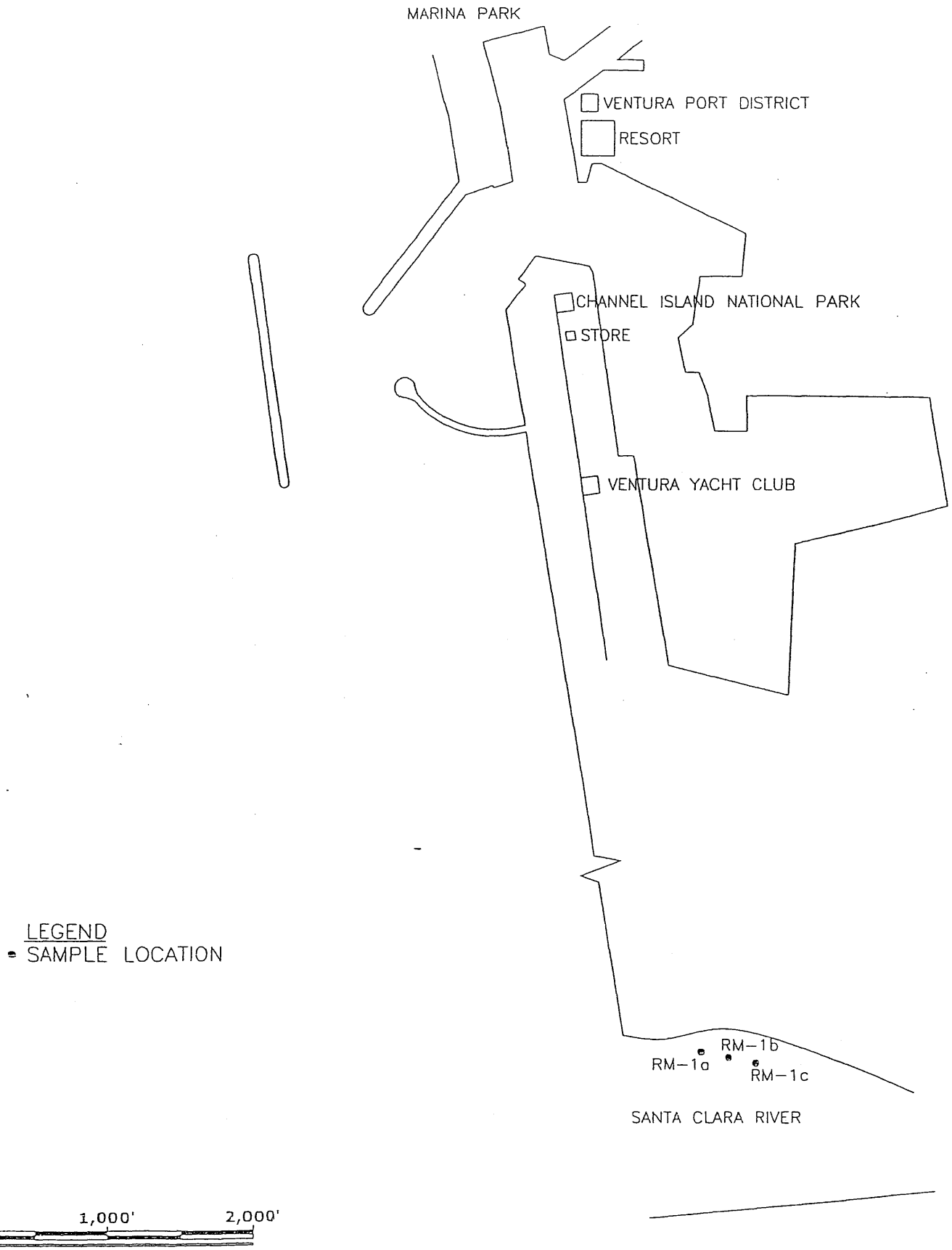
November 1998 Sediment Sampling, Santa Clara River Mouth

Additional sediment sampling was completed on behalf of the Port District at the Santa Clara River mouth in November 1998. A total of three grab samples were collected the top 10 cm of the the Santa Clara River Mouth sediment and composited into a single sample for laboratory analyses (see Plate 5).

The river mouth sample grain size was predominantly silts and clays with 76% of the sample passing a #200-sieve.

The chemical analyses conducted on the samples resulted in no detectable concentrations of volatile organic compounds, polychlorinated biphenyls (PCBs), PAHs, organochlorine pesticides, phenols, phthalate esters, organotin compounds, and cyanide.

Based on the sampling results sediment in the Ventura Keys is comparable with sediments regularly discharged by the Santa Clara River. Additionally, sediments dredged from the Ventura Keys could be discharged near the river mouth without causing a long-term alteration of the grain size distributions in the area of the river mouth.



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1997 SAMPLE LOCATIONS (RIVER MOUTH)

VENTURA PORT DISTRICT
VENTURA, CALIFORNIA

PLATE REFERENCE 00622201J | SEPTEMBER 18, 2001 | PROJECT NUMBER 0062-22

PLATE 5

ATTACHMENT E

May 2002 Sediment Sampling

May 2002 Sediment Sampling

The collection of sediment cores occurred at four (4) discrete sample areas in the Ventura Keys Connecting Channel (see Plate 1). The cores were collected using a gravity core suspended from a work barge on May 10, 2002. The cores were collected to a maximum depth of -17 feet MLLW. The design depth for the Connecting Channel was -15 feet MLLW.

In summary, the sediment investigated in the Ventura Connecting Channel consisted generally of saturated silty clay in the first 2 feet followed by silty sand or silty clay to the total depth. Fine to coarse grain sand with occasional gravels were encountered at various locations around the Ventura Connecting Channel in the areas investigated.

The percent of the individual grain sizes of the Ventura Connecting Channel sample are: gravel = 1.8%; sand = 8.2%; and silts and clays = 90%. The percentage retained on a 200 sieve was 10%.

The sediment sample was measured for total percent solids. The percent of solids measured for the core sample was 59.2 percent. The sediment samples were analyzed for total organic carbon (TOC). The results showed that approximately 0.6 percent of the sample in the core sample contained organic carbon.

The sediment sample was analyzed for Polynuclear Aromatic Hydrocarbons (PAHs). No detectable concentrations exceeding the practical quantification limit were measured. The chemical analyses conducted on the samples resulted in no detectable concentrations of volatile organic compounds, polychlorinated biphenyls (PCBs), pesticides, cyanide, or organic tin.

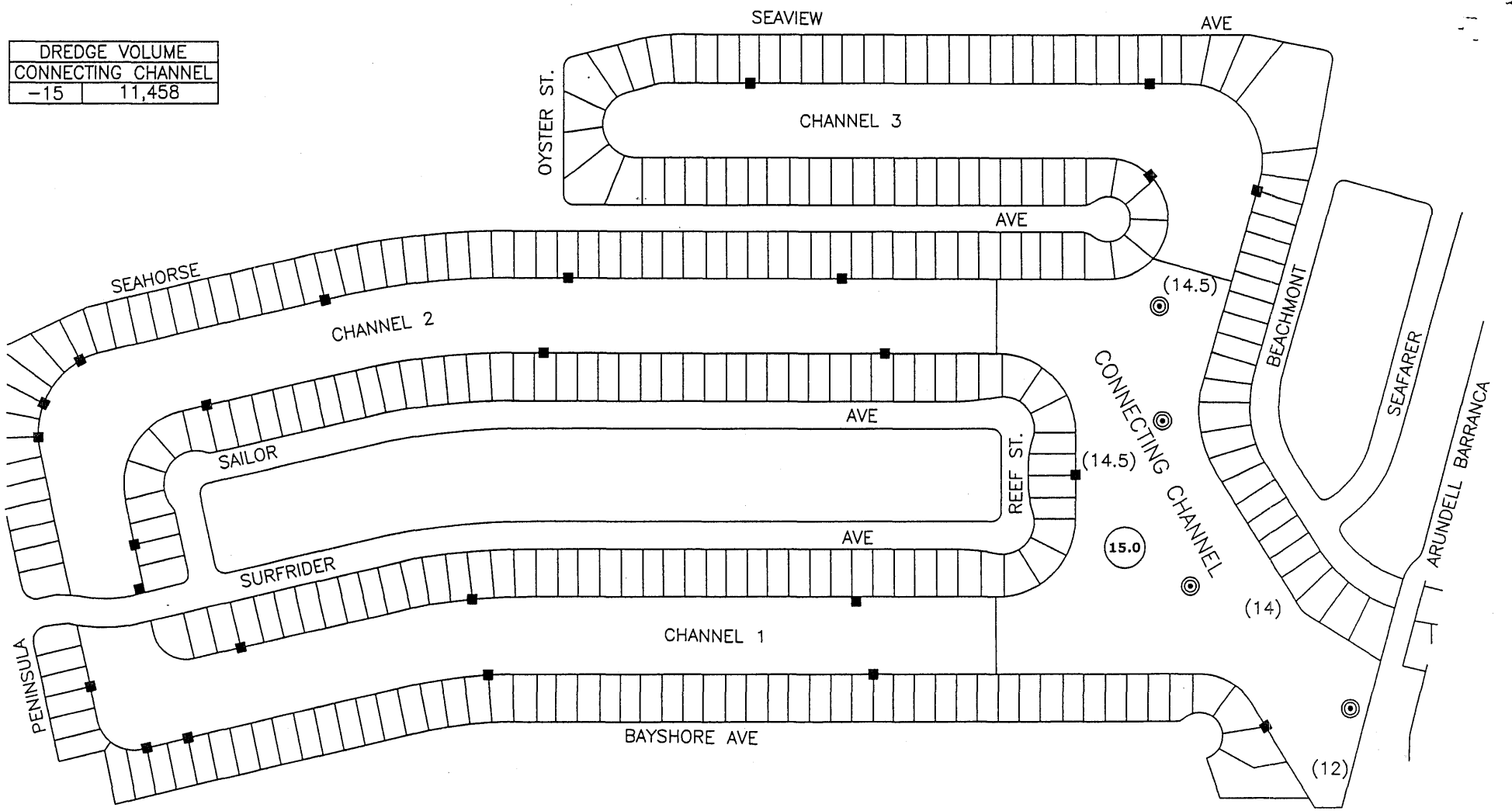
Metals analyses were conducted on the sediment samples. No mercury concentrations were detected in the samples. A summary of the concentrations of metals measured is shown on Table 2. No concentrations were measured that exceed the total threshold limit concentration, (TTLC) which identify the material as hazardous (see Table 2). No concentrations were measured that were 10 times the soluble threshold limit concentration (STLC), which would infer that the sediments do not contain hazardous levels of a metal (see Table 2).

It was the conclusion of the report that the chemical concentrations measured in the Ventura Connecting Channel sediments are not environmentally significant. Additionally, it was the opinion of the report that no significant impact would occur from the disposal of Ventura Connecting Channel sediments to waters offshore the Santa Clara River mouth or to waters along the coast near Ventura Connecting Channel.

The results of the sampling during this period and previous sampling episodes discussed at the beginning of this report are consistent. No significant changes have been observed between this sampling period and previous ones. The permits currently in effect are adequate to protect the waters along the Ventura Coast.

Sediment grain size was finer than in past surveys. The grain size is predominantly silts and clays, however, based on previous studies of the Santa Clara River Mouth area, the grain size remains consistent with that discharged by the river.

DREDGE VOLUME	
CONNECTING CHANNEL	
-15	11,458



LEGEND

◎ PROPOSED SEDIMENT SAMPLING LOCATION

■ STORM DRAIN LOCATIONS

(12.0) CONDITION SURVEY DEPTHS JUNE, 2001 IN FEET (MLLW)

(15.0) DESIGN DEPTH

0' 300' 600'

SCALE - 1" = 300' AT 8.5" x 11"

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SAMPLING LOCATIONS

VENTURA KEYS CONNECTING CHANNEL

VENTURA, CALIFORNIA

PLATE REFERENCE 00482901A | JULY 2, 2002 | PROJECT NUMBER 0048-290

PLATE 1

Table 2.
Metals Concentrations
in mg/kg

Constituent	Area A	Regulatory Limits TTLC	STLC*
Arsenic	4.86	500	50
Cadmium	1.47	500	50
Chromium	9.58	500	50
Copper	33.8	2500	250
Lead	0.83	1000	50
Mercury	ND	20	2
Nickel	34.8	2000	200
Selenium	1.81	100	10
Silver	1.16	500	50
Zinc	112	5000	2500

ND = not detected at detection limit of 0.2 mg/kg

* Incorporates a 10 times dilution to correlate to sample concentrations shown above.

ATTACHMENT F

July 2005 Sediment Sampling

July 2005 Sediment Investigation

The collection of sediment cores occurred at (4) discrete sample locations within the Connecting Channel of the Ventura Keys (see Plate 1). The cores were collected using a vibracore suspended from the vessel Zypher on July 30, 2005. The cores were collected to a maximum depth of -17 feet MLLW. The design depth for the channel is -15 feet MLLW however, some over dredging (maximum of 2 feet) may occur.

In summary, the sediments investigated in the Connecting Channel consisted generally of saturated silty clay. Fine to medium grain sand was encountered at various locations in the areas investigated.

The percent of the individual grain sizes (i.e., gravel, sand, silt and clay) of the Connecting Channel samples are shown on Table 2. The percentage retained on a 200 sieve is 11.4.

The sediment sample was measured for total percent solids. The sample had a 65.6 percent solids consistency.

The sediment sample was analyzed for total organic carbon (TOC). The result showed that 0.56 percent of the sample contained organic carbon.

The sediment samples were analyzed for volatile organic compounds (VOCs). The sample contained acetone at 27.1 µg/kg and 2-butanone at 7.0 µg/kg.

The sediment sample was analyzed for Polynuclear Aromatic Hydrocarbons (PAHs). The sample contained minor concentrations of diethyl phthalate (45 µg/kg), bis(2-ethylhexyl) phthalate (32 µg/kg), anthracene (0.5J µg/kg), benzo(a)pyrene (4J µg/kg), Benzo(b)fluoranthene (11 µg/kg), Benzo(k)fluoranthene (130 µg/kg), chrysene (2J µg/kg), fluoranthene (5 µg/kg), Phenanthrene (5 µg/kg) and pyrene (33 µg/kg) at less than the practical quantification limit but above the method detection limit.

The chemical analyses conducted on the sample resulted in no detectable concentrations of volatile organic compounds, polychlorinated biphenyls (PCBs), phenols, or cyanide.

The organochlorine pesticides DDD and DDE were detected at 0.81 and 1.38 µg/kg. No other pesticides were identified.

No detectable concentrations of Monobutyltin or Dibutyltin were measured. Tributyltin was detected at 23.2 µg/kg.

No mercury or selenium concentrations were detected in the sample (see Table below). No metals concentrations were measured that exceed the total threshold limit concentration (TTLC) which identifies the material as hazardous. No concentrations were measured that were 10 times the soluble threshold limit concentration (STLC), which would infer that the sediments do not contain hazardous levels of a metal.

Constituent	Concentration in mg/kg	TTLC	STLC*
Arsenic	0.16J	500	50
Cadmium	0.23J	500	50
Chromium	11.5	500	50
Copper	17.1	2500	250
Lead	6.64	1000	50
Mercury	ND	20	2
Nickel	22.2	2000	200
Selenium	ND	100	10
Silver	1.33	500	50
Zinc	54.6	5000	2500

It was the conclusion of the report that the chemical concentrations measured in the Connecting Channel sediments are not environmentally significant. Additionally, it was our opinion that no significant impact would occur from the disposal of Connecting Channel sediments to waters offshore the Santa Clara River mouth.

The results of the sampling during this period and previous sampling episodes discussed at the beginning of this report are consistent. No significant changes have been observed between this sampling period and previous ones. The permits currently in effect are adequate to protect the waters along the Ventura Coast.

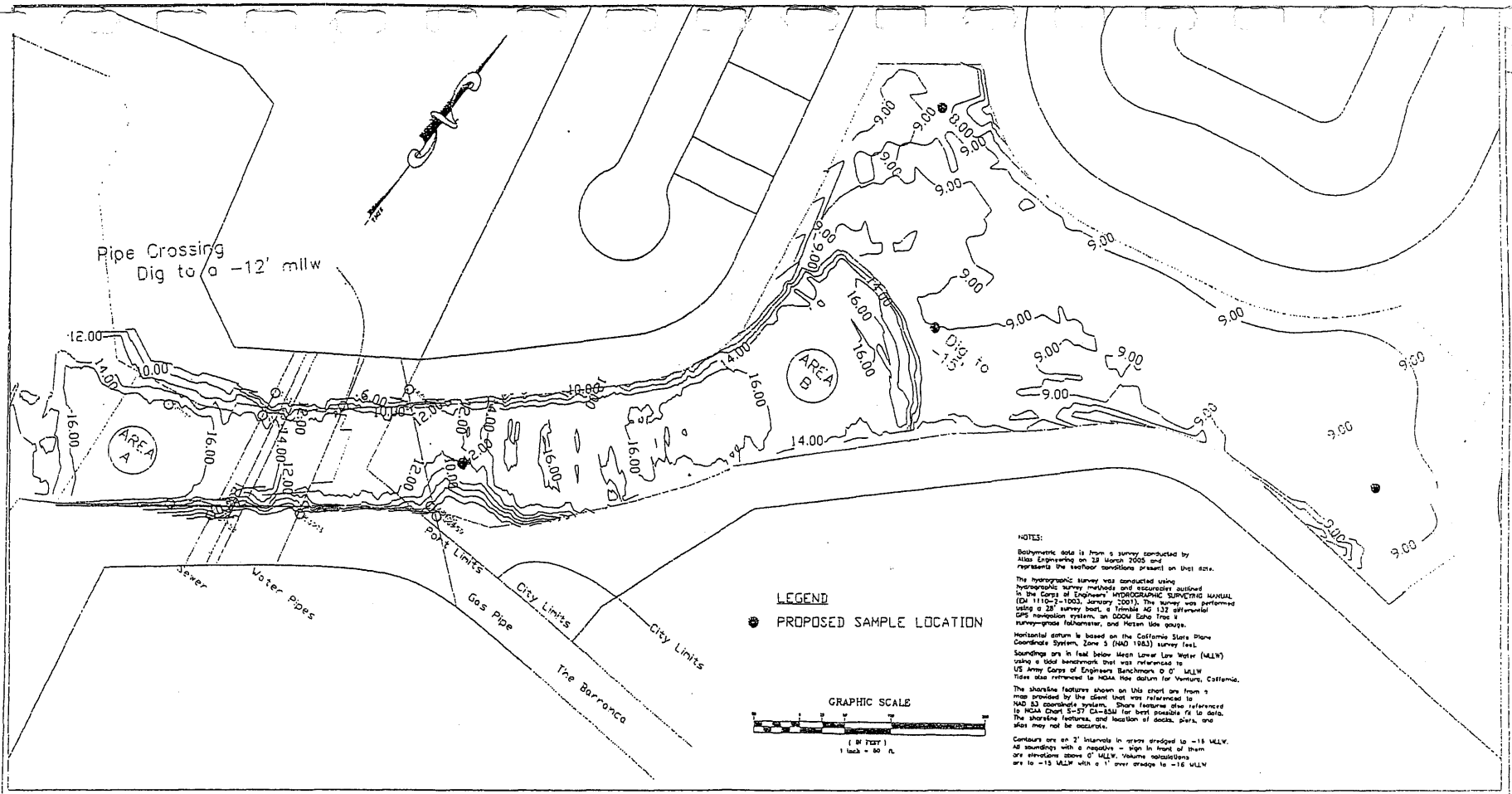
The grain size is predominantly silts and clays, however, based on previous studies of the Santa Clara River Mouth area, the grain size remains consistent with that discharged by the river.

Based on studies conducted by R. P. Williams (1978, "Sediment Discharge in the Santa Clara River Basin, Ventura County, California", USGS Water Resources Investigation 79-78), the sediment grain sizes discharged by the Santa Clara River range from clays and silts to gravel. Particle size measurements were collected during the years 1969 to 1975. Silts and clays comprised a majority (over 79 percent) of the sediments discharged by the Santa Clara River during these years. The river has discharged between 0.4 and 40,200,000 tons per day (estimated to be between 0.3 and 30,000,000 cubic yards) from the river mouth into the marine environment. The estimated mean daily total sediment discharge during the period 1950 to 1975 for the Santa Clara River was 9,720 tons (estimated at approximately 7,200 cubic yards). This can be estimated to consist of over 2.5 million cubic yards of sediment per year. The discharge of sediments is highly variable depending on rainfall and flooding, and it is our opinion that the dispersement of harbor sediments in the vicinity of the river mouth would not affect the marine ecosystem significantly.

This estimated dredge volume is well within the parameters that have been released to the river mouth area in the past. The estimated dredge volume of about 31,666 cubic yards is considered to be an insignificant volume when compared to the annual discharge from the Santa Clara River (2.5 million cubic yards per year). No affect to the marine environment would be expected from the placement of the Connecting Channel sediments to the area near the Santa Clara River mouth.

It is the conclusion of this report that the sediment in the Connecting Channel is comparable with sediments regularly discharged by the Santa Clara River. Additionally, it is the conclusion of the report that the sediments dredged from the Connecting Channel could be placed near the river

mouth without causing a long-term alteration of the grain size distributions in the area of the river mouth



City of Ventura "Inner Harbor Connecting Channel"
Maintenance Dredging Project

SOURCE:
ATLAS ENGINEERING
2035 Placentia Ave Suite F, Costa Mesa, CA 92627
(909)376-8942 FAX: (949)597-8518

REVISIONS					REFERENCES				SCALE 1"=50'	DATE
NO.	DATE	INITIAL	DESCRIPTION	APP'VD	Port Ventura MLLW Feet				DESIGNED jps	04/05/05
1	03-09-05		Pre Dredge		CA-Zone 5 NAD 1983 Feet				DRAWN jps	
2	03-29-05		Post Dredge		NOAA Chart CA-65-s57				TRACED	
3	04-06-05		Post Dredge REV 1 (text)		USACOE Tide Board Ventura				CHECKED	
					APPROVALS				SUBMITTED	
					DESIGN	OPER.	CONST.	R/W	RECOMMENDED	

NAPA Dredging LLP
Napa, California

Post Dredge Survey
Stub Channel & Connecting Channel Dredging
City of Ventura, California

I.D.
S.A.
W.O.
C.O.
COORD:
SHT. 1 OF 1

Table 2.
Sediment Grain Sizes
Ventura Keys Connecting Channel Dredge Investigation
July 2005

Grain Size	
Gravel	0.0%
Sand	11.4%
Silt & Clay	88.6%
Percent Retained on 200 Sieve	11.4

ATTACHMENT G

March 2009 Sediment Investigation

March 2009 Sediment Sampling, Santa Clara River Mouth

The collection of sediment cores occurred at (4) discrete sample locations within the Connecting Channel of the Ventura Keys (see Plate 1). The cores were collected using a vibracore suspended from a work barge owned by TEG on March 4, 2009. The cores were collected to a maximum depth of -17 feet MLLW. The design depth for the channel is -15 feet MLLW however, some over dredging (maximum of 2 feet) may occur.

In summary, the sediments investigated in the Connecting Channel consisted generally of saturated silty clay. Fine to medium grain sand was encountered at various locations in the areas investigated.

The percent of the individual grain sizes (i.e., gravel, sand, silt and clay) of the Connecting Channel sample are shown on Table 2. The percentage retained on a 200 sieve is 29.9%.

The sediment sample was measured for total percent solids. The sample had a 67.1 percent solids consistency

The sediment sample was analyzed for total organic carbon (TOC). The result showed that 0.80 percent of the sample contained organic carbon. No volatile component was identified in the sample.

The sediment samples were analyzed for volatile organic compounds (VOCs). The sample contained acetone at 72.8 µg/kg.

The sediment sample was analyzed for Polynuclear Aromatic Hydrocarbons (PAHs). No PAHs were identified in the sample.

The chemical analyses conducted on the sample resulted in no detectable concentrations of VOCs, polychlorinated biphenyls (PCBs), phenols, or cyanide.

The organochlorine pesticides DDD and DDE were detected at 1.22 and 1.20 µg/kg, respectively.

No detectable concentrations of Monobutyltin or Dibutyltin were measured. Tributyltin was detected at 2.88 µg/kg.

No cadmium, selenium or silver concentrations were detected in the sample. The concentrations of the metals are shown below. No concentrations were measured that exceed the total threshold limit concentration (TTLC), which identifies the material as hazardous (see below). No concentrations were measured that were 10 times the soluble threshold limit concentration (STLC), which would infer that the sediments do not contain hazardous levels of a metal (see below).

Constituent	Concentration in mg/kg	TTLC	STLC*
Arsenic	0.251	500	50
Cadmium	ND	500	50
Chromium	0.992	500	50
Copper	1.32	2500	250
Lead	0.430	1000	50
Mercury	0.0220	20	2
Nickel	1.16	2000	200
Selenium	ND	100	10
Silver	ND	500	50
Zinc	4.08	5000	2500

It was the conclusion of the report that the chemical concentrations measured in the Connecting Channel sediments are not environmentally significant. Additionally, it was our opinion that no significant impact would occur from the disposal of Connecting Channel sediments to waters offshore the Santa Clara River mouth.

The results of the sampling during this period and previous sampling episodes discussed at the beginning of this report are consistent. No significant changes have been observed between this sampling period and previous ones. The permits currently in effect are adequate to protect the waters along the Ventura Coast.

The grain size is predominantly silts and clays, however, based on previous studies of the Santa Clara River Mouth area, the grain size remains consistent with that discharged by the river.

Based on studies conducted by R. P. Williams (1978, "Sediment Discharge in the Santa Clara River Basin, Ventura County, California", USGS Water Resources Investigation 79-78), the sediment grain sizes discharged by the Santa Clara River range from clays and silts to gravel. Particle size measurements were collected during the years 1969 to 1975. Silts and clays comprised a majority (over 79 percent) of the sediments discharged by the Santa Clara River during these years. The river has discharged between 0.4 and 40,200,000 tons per day (estimated to be between 0.3 and 30,000,000 cubic yards) from the river mouth into the marine environment. The estimated mean daily total sediment discharge during the period 1950 to 1975 for the Santa Clara River was 9,720 tons (estimated at approximately 7,200 cubic yards). This can be estimated to consist of over 2.5 million cubic yards of sediment per year. The discharge of sediments is highly variable depending on rainfall and flooding, and it is our opinion that the dispersement of harbor sediments in the vicinity of the river mouth would not affect the marine ecosystem significantly.

This estimated dredge volume is well within the parameters that have been released to the river mouth area in the past. The connecting channel is generally dredged about once every 5 to 6 years depending on the deposition of sediments in the channel. Maintenance dredging only occurs when a volume of about 50 thousand cubic yards has accumulated in the connecting channel. This quantity is considered to be an insignificant volume when compared to the annual discharge from the Santa Clara River (2.5 million cubic yards per year). No affect to the marine environment would be expected from the placement of the Connecting Channel sediments to the area near the Santa Clara River mouth.

It is the conclusion of this report that the sediment in the Connecting Channel is comparable with sediments regularly discharged by the Santa Clara River. Additionally, it is the conclusion of the report that the sediments dredged from the Connecting Channel could be placed near the river mouth without causing a long-term alteration of the grain size distributions in the area of the river mouth. It is our opinion, that weather; wave action and the Santa Clara River have significantly more impact on the beaches than dredging activities.

LEGEND

VK ● **SAMPLE LOCATION**
DESIGN DEPTH (-15)
9,158 CUYDS

TOTAL DESIGN &
OVERDREDGE VOLUME (-17ft)
19,347 CUYDS

0' 200' 400'

SCALE - 1" = 200' AT 8.5" x 11"

Applied Environmental Technologies, Inc.
4561 Market Street, Suite B • Ventura, California 93003
Phone (805)650-1400 Fax (805)650-1576

SAMPLE LOCATIONS

VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_02	MARCH 2009	PROJECT NUMBER 0048-29

PLATE 1

Table 2.
Sediment Grain Sizes
Ventura Keys Connecting Channel Dredge Investigation
March 2009

Grain Size	
Gravel	1.0%
Sand	28.9%
Silt & Clay	70.1%
Percent Retained on 200 Sieve	29.9%

ATTACHMENT H

Grain Size Analytical Report

Report of Soil Testing

To: Applied Environmental Technologies

Project Name: Ventura Channel

Project Number: 30-1004L

Laboratory Number: 648

Sample Data:

CH

October 17, 2012

Wet Wt:	456.6				**Specifications:**	
Dry Wt:	443.3					
Sieve Size	Wt. (Grams)	% Retained	% Passing	Total % Passing	Specifications	Remarks
1-1/2 inch (37 mm)	0.0	0.0	100.0			
1 inch (25 mm)	0.0	0.0	100.0			
3/4 inch (19 mm)	0.0	0.0	100.0			
1/2 inch (12.5 mm)	0.0	0.0	100.0			
3/8 inch (9.5 mm)	0.0	0.0	100.0			
#4 (4.75 mm)	0.0	0.0	100.0			
#8 (2.36 mm)	1.8	0	100			
#16 (1.18 mm)	3.9	1	99			
#30 (0.6 mm)	7.8	2	98			
#50 (0.3 mm)	20.9	5	95			
#100 (0.15 mm)	52.2	12	88			
#200 (0.075 mm)	70.4	16	84			
Sand Equivalent						
Classification						
Maximum Density (pcf)						
Opt. Moist. Content (%)						
R-Value						
LL:PI						

Tested in Accordance with ASTM C117, C136, D1557, D2419, D4824, D2487

Technician: Brian Henry Date: November 7, 2012

Reviewed By: Glenn Taylor, Laboratory Manager Date: 11-7-12

SOIL LABORATORY TEST SCHEDULE

PROJECT: VTA CHANNEL
PROJECT #: 30-1004L
LAB #: 648

SAMPLED BY: OTHERS
DATE SAMPLED: 10-17-12
DATE RECEIVED: 10-30-12

ASSIGNED BY:
DATE NEEDED:

BIN LOCATION:

SAVE SAMPLE ?
YES ☐ NO ☐

								CLASSIFICATION				SHEAR						ASPHALT										
Sample Designation	Sample Depth (feet)	Soil Type	Sample Type (Ring/Bulk/etc.)	In-Place Moisture and Density	200 Wash	Maximum Density/Proctor	Expansion	Gradation/Sieve Analysis	Atterberg Limits	Hydrometer	Sand Equivalent	Undisturbed Saturated (**Loads** ____)	Undisturbed Field Moisture	Remolded to __% (**Loads** ____)	Consolidation (**Saturate After** ____ **Stress**)	R-Value (**Traffic Index** ____)		Extraction & Gradation	Cores Unit Weight/Thickness	Theoretical Max. Density	Hveem Compacted Max Density	Marshall Compacted Max Density		Chemical (Circle: Sulfate, Chloride, pH, Resistivity)	Rebars / High Strength Bolts (Tensile - Rockwell)	Aggregate LA Abrasion	Aggregate Sodium Sulfate Soundness	**Other:**
		CH																										

CHAIN OF CUSTODY RECORD

Applied Environmental Technologies, Inc.

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JOB NO.	TASK	PROJECT NAME	PROJECT MANAGER	SAMPLER	LABORATORY	GLOBAL I.D.
48-290	1	VTA CHANNEL	HF	DF	CTE	NA

Sample Identification	Date	Time	Sample Container (Size/Material)	Sample Type (Liquid, Soil, etc.)	Preservative	Analyses Requested A	B	C	D	E	F	Laboratory ID#	Comments
CH	10/17/12		Plastic Bag	Soil	ICE	X							

Relinquished By (Signature)	Date	Time	Received By (Signature)
Lee & Zeldin	10/30/12	3:33P	Barbara Cathey

Analyses:

A Grain Size

B

C

D

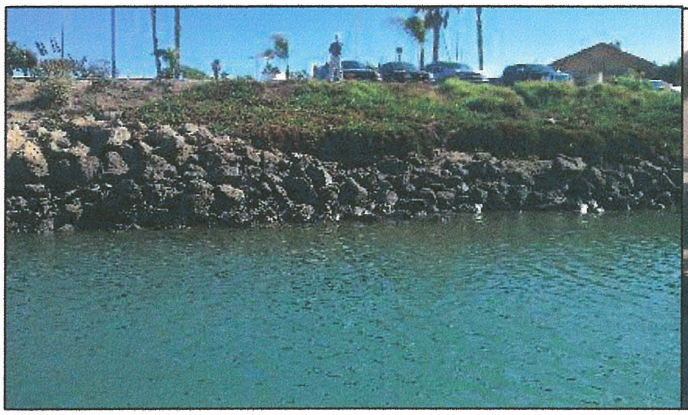
E

F

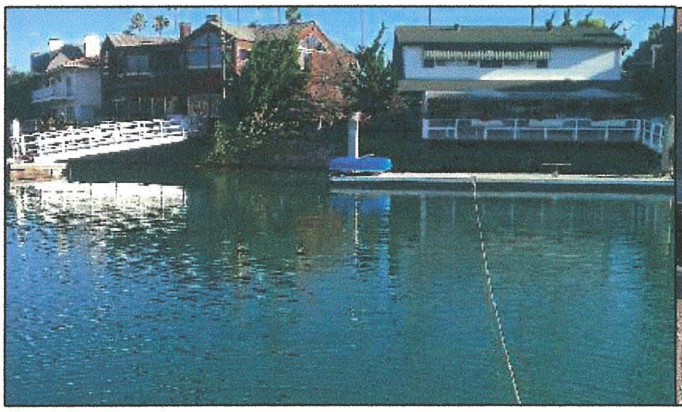
ATTACHMENT I

Photographs of Sediment Cores

SAMPLE LOCATION A-5/CH-1, OCTOBER,2012



SAMPLE LOCATION CH-2, OCTOBER,2012



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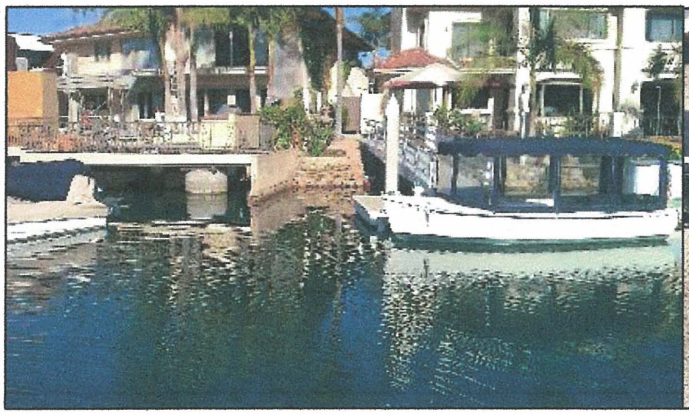
REPRESENTATIVE PHOTOGRAPHS
VENTURA KEYS CONNECTING CHANNEL
VENTURA - PORT DISTRICT
VENTURA, CALIFORNIA

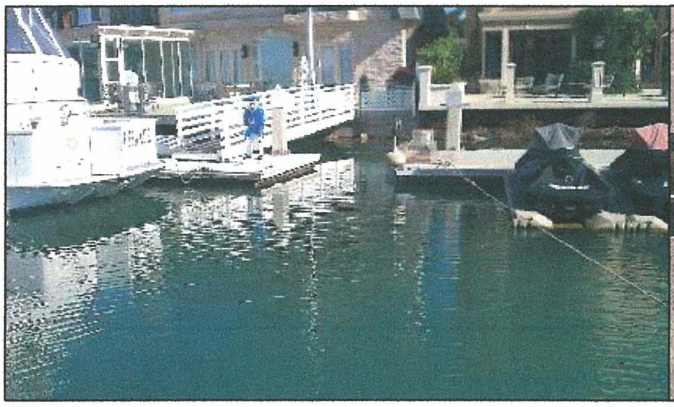
PLATE REFERENCE 0062-22_SA1	OCTOBER, 2012	PROJECT NUMBER 0062-22

SA1

SAMPLE LOCATION CH-3, OCTOBER,2012



SAMPLE LOCATION CH-4, OCTOBER,2012



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REPRESENTATIVE PHOTOGRAPHS
VENTURA KEYS CONNECTING CHANNEL
VENTURA - PORT DISTRICT
VENTURA, CALIFORNIA

PLATE REFERENCE 0062-22_SA1	OCTOBER, 2012	PROJECT NUMBER 0062-22

SA2

ATTACHMENT J

Certified Analytical Reports

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

Ordered By

Applied Enviro. Technologies, Inc.
4561 Market St., Suite B
Ventura, CA 93003

Telephone (805)650-1400
Attn Harry Finney

Number of Pages 7
Date Received 10/18/2012
Date Reported 11/05/2012

Job Number	Ordered	Client
55074	10/18/2012	AET

Project ID: 48-29O
Project Name: Connecting Channel

Enclosed are the results of analyses on 1 sample analyzed as specified on attached chain of custody.

Wendy Lu
Organics Supervisor

AS TOB 55724

JOB NO.	TASK	PROJECT NAME	PROJECT MANAGER	SAMPLER	LABORATORY	GLOBAL I.D.
48-290	2A	connecting channel	HF	DF	ASL	NA

Sample Identification	Date	Time	Sample Container (Size/Material)	Sample Type (Liquid, Soil, etc.)	Preservative	Analyses Requested A	B	C	D	E	F	Laboratory ID#	Comments
Ch-C	10/17/12	11:00A	6X 402 glass	soil	ice	X						289627	

Relinquished By (Signature)	Date	Time	Received By (Signature)
Dan G Feldman	10/18/12	9:45A	
	10-18-12	10:45	

Analyses:
A See Attached
B
C
D
E
F

CHAIN OF CUSTODY RECORD

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(805) 650-1400 • FAX (805) 650-1576 • 4561 MARKET ST., SUITE B, VENTURA, CA 93003

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By

Applied Enviro. Technologies, Inc.
4561 Market St., Suite B
Ventura, CA 93003

Telephone: (805)650-1400
Attn: Harry Finney

Page: 2

Project ID: 48-290
Project Name: Connecting Channel

ASL Job Number	Submitted	Client
55074	10/18/2012	AET

Method: 1664, Revision A, Oil and Grease (HEM)

QC Batch No: 102212-1

Our Lab I.D.		289627				
Client Sample I.D.		Ch-C				
Date Sampled		10/17/2012				
Date Prepared		10/22/2012				
Preparation Method						
Date Analyzed		10/22/2012				
Matrix		Soil				
Units		mg/Kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Conventionals						
Oil and Grease	20.0	ND				

QUALITY CONTROL REPORT

QC Batch No: 102212-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Conventionals										
Oil and Grease	90	92	1.8	80-120	<20					

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ANALYTICAL RESULTS

Ordered By

Applied Enviro. Technologies, Inc.
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Ventura, CA 93003

Telephone: (805)650-1400
Attn: Harry Finney

Page: 3

Project ID: 48-290
Project Name: Connecting Channel

ASL Job Number	Submitted	Client
55074	10/18/2012	AET

Method: 7471A, Mercury (CVAA)

QC Batch No: 101912-1

Our Lab I.D.		289627				
Client Sample I.D.		Ch-C				
Date Sampled		10/17/2012				
Date Prepared		10/19/2012				
Preparation Method						
Date Analyzed		10/22/2012				
Matrix		Soil				
Units		mg/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
AA Metals						
Mercury	0.0500	ND				

QUALITY CONTROL REPORT

QC Batch No: 101912-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
AA Metals										
Mercury	116	113	2.6	70-130						

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ANALYTICAL RESULTS

Ordered By

Applied Enviro. Technologies, Inc.
4561 Market St., Suite B
Ventura, CA 93003

Telephone: (805)650-1400
Attn: Harry Finney

Page: **4**

Project ID: 48-290
Project Name: Connecting Channel

ASL Job Number	Submitted	Client
55074	10/18/2012	AET

Method: 8015B, TPH DROs and OROs (Diesel and Oil Range Organics)

QC Batch No: S2P-101912

Our Lab I.D.		289627				
Client Sample I.D.		Ch-C				
Date Sampled		10/17/2012				
Date Prepared		10/19/2012				
Preparation Method						
Date Analyzed		10/20/2012				
Matrix		Soil				
Units		mg/Kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
TPH DROs (C10 to C28)	10.0	ND				
TPH OROs (C28+)	50.0	ND				

Our Lab I.D.		289627				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	102				

QUALITY CONTROL REPORT

QC Batch No: S2P-101912

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	104	111	6.5	75-120	<20					

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ANALYTICAL RESULTS

Ordered By

Applied Enviro. Technologies, Inc.
4561 Market St., Suite B
Ventura, CA 93003

Telephone: (805)650-1400
Attn: Harry Finney

Page: 5

Project ID: 48-290
Project Name: Connecting Channel

ASL Job Number	Submitted	Client
55074	10/18/2012	AET

Method: 9060, Total Organic Carbon (TOC)

QC Batch No: 102512-1

Our Lab I.D.		289627				
Client Sample I.D.		Ch-C				
Date Sampled		10/17/2012				
Date Prepared		10/25/2012				
Preparation Method						
Date Analyzed		10/25/2012				
Matrix		Soil				
Units		mg/Kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Carbon, Total Organic (TOC)	1.00	9140				

QUALITY CONTROL REPORT

QC Batch No: 102512-1

Analytes	LCS % REC	LCS/LCSD % Limit								
Carbon, Total Organic (TOC)	101	80-120								

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By

Applied Enviro. Technologies, Inc.
4561 Market St., Suite B
Ventura, CA 93003

Telephone: (805)650-1400
Attn: Harry Finney

Page: 6

Project ID: 48-290
Project Name: Connecting Channel

ASL Job Number	Submitted	Client
55074	10/18/2012	AET

Method: SM2540-G, Percent Moisture

QC Batch No: 102212-1

Our Lab I.D.		289627				
Client Sample I.D.		Ch-C				
Date Sampled		10/17/2012				
Date Prepared		10/18/2012				
Preparation Method						
Date Analyzed		10/18/2012				
Matrix		Soil				
Units		percent(%)				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
% Moisture	1.00	36.4				

QUALITY CONTROL REPORT

QC Batch No: 102212-1

Analytes	SM Result	SM DUP Result	RPD %							
% Moisture	36.4	36.1	<1							

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By

Applied Enviro. Technologies, Inc.
4561 Market St., Suite B
Ventura, CA 93003

Telephone: (805)650-1400
Attn: Harry Finney

Page: **7**

Project ID: 48-290
Project Name: Connecting Channel

ASL Job Number	Submitted	Client
55074	10/18/2012	AET

Method: SM4500-NH3-D, Ammonia-Selective Electrode Method

QC Batch No: 102212-1

Our Lab I.D.		**289627**				
Client Sample I.D.		Ch-C				
Date Sampled		10/17/2012				
Date Prepared		10/22/2012				
Preparation Method						
Date Analyzed		10/22/2012				
Matrix		Soil				
Units		mg/Kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Conventionals						
Ammonia as N	2.00	35.0				

QUALITY CONTROL REPORT

QC Batch No: 102212-1

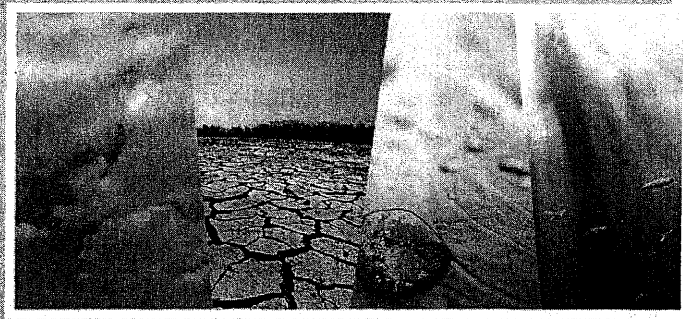
Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Conventionals										
Ammonia as N	109	99	10.0	80-120	20					

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 12-10-1384

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: American Scientific Laboratories, LLC

Client Project Name: 55074

Attention: Alen Hosepians
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Approved for release on 11/5/2012 by:
Kristin Beckley
Project Manager

Result Link ›

Email your PM ›

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

MS

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: 55074
Work Order Number: 12-10-1384

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC	Date Received:	10/19/12
2520 North San Fernando Road	Work Order No:	12-10-1384
Los Angeles, CA 90065-1324	Preparation:	N/A
	Method:	EPA 160.4M

Project: 55074

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289627	**12-10-1384-1-A**	**10/17/12 11:00**	**Solid**	**N/A**	**10/22/12**	**10/22/12 20:00**	**C1022VSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Volatile	1.4	0.10	1		%

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-05-020-1,014**	**N/A**	**Solid**	**N/A**	**10/22/12**	**10/22/12 20:00**	**C1022VSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Volatile	ND	0.10	1		%

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

American Scientific Laboratories, LLC		Date Received:	10/19/12
2520 North San Fernando Road		Work Order No:	12-10-1384
Los Angeles, CA 90065-1324		Preparation:	N/A
		Method:	SM 2540 B

Project: 55074

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289627	**12-10-1384-1-A**	**10/17/12 11:00**	**Solid**	**N/A**	**10/23/12**	**10/23/12 16:30**	**C1023TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	62.8	0.100	1		%

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-05-019-2,083**	**N/A**	**Solid**	**N/A**	**10/23/12**	**10/23/12 16:30**	**C1023TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	ND	0.100	1		%

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received:	10/19/12
Work Order No:	12-10-1384
Preparation:	EPA 3540C
Method:	EPA 8270D (M)/TQ/EI
Units:	ug/kg
	Page 1 of 1

Project: 55074

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289627	12-10-1384-1-A	10/17/12 11:00	Solid	GCTQ 2	10/23/12	10/25/12 19:04	121023L01

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.
-Results are reported on a dry weight basis.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Allethrin	ND	0.79	0.41	0.995		Fluvalinate	ND	0.79	0.091	0.995	
Bifenthrin	ND	0.79	0.15	0.995		Permethrin (cis/trans)	4.4	1.6	0.17	0.995	
Cyfluthrin	ND	0.79	0.13	0.995		Phenothrin	ND	0.79	0.11	0.995	
Cypermethrin	ND	0.79	0.11	0.995		Resmethrin/Bioresmethrin	ND	0.79	0.15	0.995	
Deltamethrin/Tralomethrin	ND	0.79	0.33	0.995		Tetramethrin	ND	0.79	0.060	0.995	
Fenpropathrin	ND	0.79	0.058	0.995		lambda-Cyhalothrin	ND	0.79	0.069	0.995	
Fenvalerate/Esfenvalerate	ND	0.79	0.057	0.995							

Surrogates:	REC (%)	Control Limits	Qual
trans-Permethrin(C13)	99	25-200	

Method Blank	099-14-403-25	N/A	Sediment	GCTQ 2	10/23/12	10/25/12 18:27	121023L01

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Allethrin	ND	0.50	0.26	1		Fluvalinate	ND	0.50	0.057	1	
Bifenthrin	ND	0.50	0.094	1		Permethrin (cis/trans)	ND	1.0	0.11	1	
Cyfluthrin	ND	0.50	0.085	1		Phenothrin	ND	0.50	0.069	1	
Cypermethrin	ND	0.50	0.069	1		Resmethrin/Bioresmethrin	ND	0.50	0.092	1	
Deltamethrin/Tralomethrin	ND	0.50	0.21	1		Tetramethrin	ND	0.50	0.038	1	
Fenpropathrin	ND	0.50	0.036	1		lambda-Cyhalothrin	ND	0.50	0.044	1	
Fenvalerate/Esfenvalerate	ND	0.50	0.036	1							

Surrogates:	REC (%)	Control Limits	Qual
trans-Permethrin(C13)	75	25-200	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

American Scientific Laboratories, LLC	Date Received:	10/19/12
2520 North San Fernando Road	Work Order No:	12-10-1384
Los Angeles, CA 90065-1324	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: 55074		Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289627	12-10-1384-1-A	10/17/12 11:00	Solid	GC 44	10/23/12	10/25/12 22:06	121023L01

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.
-Results are reported on a dry weight basis.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
4,4'-Dichlorobenzophenone	ND	40	3.2	1		Endosulfan I	ND	1.6	0.42	1	
Aldrin	ND	1.6	0.50	1		Endosulfan II	ND	1.6	0.44	1	
Alpha-BHC	ND	1.6	0.52	1		Endosulfan Sulfate	ND	1.6	0.54	1	
Beta-BHC	ND	1.6	0.42	1		Endrin	ND	1.6	0.57	1	
Delta-BHC	ND	1.6	0.41	1		Endrin Aldehyde	ND	1.6	0.39	1	
Gamma-BHC	ND	1.6	0.55	1		Endrin Ketone	ND	1.6	0.55	1	
Chlordane	ND	16	5.2	1		Heptachlor	ND	1.6	0.51	1	
Dieldrin	ND	1.6	0.52	1		Heptachlor Epoxide	ND	1.6	0.57	1	
Trans-nonachlor	ND	1.6	0.46	1		Methoxychlor	ND	1.6	0.52	1	
2,4'-DDD	ND	1.6	0.54	1		Toxaphene	ND	32	10	1	
2,4'-DDE	3.4	1.6	0.49	1	Z	Alpha Chlordane	ND	1.6	0.51	1	
2,4'-DDT	ND	1.6	0.48	1		Gamma Chlordane	ND	1.6	0.51	1	
4,4'-DDD	1.3	1.6	0.50	1	J	Cis-nonachlor	ND	1.6	0.47	1	
4,4'-DDE	3.6	1.6	0.48	1		Mirex	ND	8.0	0.49	1	
4,4'-DDT	ND	1.6	0.53	1		Oxychlordane	ND	1.6	0.45	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	82	50-130		Decachlorobiphenyl	85	50-130	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC	Date Received:	10/19/12
2520 North San Fernando Road	Work Order No:	12-10-1384
Los Angeles, CA 90065-1324	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: 55074		Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-858-162**	**N/A**	**Solid**	**GC 44**	**10/23/12**	**10/25/12 20:54**	**121023L01**

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
4,4'-Dichlorobenzophenone	ND	25	2.0	1		Endosulfan I	ND	1.0	0.26	1	
Aldrin	ND	1.0	0.31	1		Endosulfan II	ND	1.0	0.28	1	
Alpha-BHC	ND	1.0	0.32	1		Endosulfan Sulfate	ND	1.0	0.34	1	
Beta-BHC	ND	1.0	0.26	1		Endrin	ND	1.0	0.36	1	
Delta-BHC	ND	1.0	0.26	1		Endrin Aldehyde	ND	1.0	0.24	1	
Gamma-BHC	ND	1.0	0.35	1		Endrin Ketone	ND	1.0	0.35	1	
Chlordane	ND	10	3.3	1		Heptachlor	ND	1.0	0.32	1	
Dieldrin	ND	1.0	0.33	1		Heptachlor Epoxide	ND	1.0	0.36	1	
Trans-nonachlor	ND	1.0	0.29	1		Methoxychlor	ND	1.0	0.32	1	
2,4'-DDD	ND	1.0	0.34	1		Toxaphene	ND	20	6.3	1	
2,4'-DDE	ND	1.0	0.31	1		Alpha Chlordane	ND	1.0	0.32	1	
2,4'-DDT	ND	1.0	0.30	1		Gamma Chlordane	ND	1.0	0.32	1	
4,4'-DDD	ND	1.0	0.32	1		Cis-nonachlor	ND	1.0	0.29	1	
4,4'-DDE	ND	1.0	0.30	1		Mirex	ND	5.0	0.31	1	
4,4'-DDT	ND	1.0	0.33	1		Oxychlordane	ND	1.0	0.28	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	130	50-130		Decachlorobiphenyl	119	50-130	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received:	10/19/12
Work Order No:	12-10-1384
Preparation:	EPA 3545
Method:	EPA 8270C SIM
Units:	mg/kg

Project: 55074

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289627	12-10-1384-1-A	10/17/12 11:00	Solid	GC/MS MM	10/23/12	10/25/12 00:31	121023L02

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.
-Results are reported on a dry weight basis.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1-Methylnaphthalene	ND	0.016	0.0029	1		Di-n-Butyl Phthalate	0.0062	0.016	0.0033	1	J
2,4,5-Trichlorophenol	ND	0.016	0.0028	1		Di-n-Octyl Phthalate	ND	0.016	0.0046	1	
2,4,6-Trichlorophenol	ND	0.016	0.0021	1		Dibenz (a,h) Anthracene	ND	0.016	0.0031	1	
2,4-Dichlorophenol	ND	0.016	0.0021	1		Diethyl Phthalate	0.0046	0.016	0.0032	1	J
2,4-Dimethylphenol	ND	0.016	0.0026	1		Dimethyl Phthalate	0.48	0.016	0.0028	1	B
2,4-Dinitrophenol	ND	0.80	0.086	1		Fluoranthene	0.016	0.016	0.0030	1	
2-Chlorophenol	ND	0.016	0.0026	1		Fluorene	ND	0.016	0.0028	1	
2-Methylnaphthalene	ND	0.016	0.0028	1		Indeno (1,2,3-c,d) Pyrene	0.0077	0.016	0.0029	1	J
2-Methylphenol	ND	0.016	0.0025	1		Naphthalene	ND	0.016	0.0029	1	
2-Nitrophenol	ND	0.016	0.0024	1		Pentachlorophenol	ND	0.80	0.086	1	
3/4-Methylphenol	ND	0.016	0.0025	1		Phenanthrene	0.0077	0.016	0.0030	1	J
4,6-Dinitro-2-Methylphenol	ND	0.80	0.11	1		Phenol	ND	0.016	0.0029	1	
4-Chloro-3-Methylphenol	ND	0.016	0.0022	1		Pyrene	0.018	0.016	0.0040	1	
4-Nitrophenol	ND	0.80	0.10	1		1,6,7-Trimethylnaphthalene	ND	0.016	0.0054	1	
Acenaphthene	ND	0.016	0.0029	1		2,3,4,6-Tetrachlorophenol	ND	0.016	0.0035	1	
Acenaphthylene	ND	0.016	0.0026	1		2,6-Dichlorophenol	ND	0.016	0.0040	1	
Anthracene	ND	0.016	0.0029	1		Benzoic Acid	0.041	0.16	0.0040	1	J
Benzo (a) Anthracene	0.0067	0.016	0.0034	1	J	DCPA	ND	0.016	0.0051	1	
Benzo (a) Pyrene	0.0081	0.016	0.0028	1	J	Dibenzothiophene	ND	0.016	0.0051	1	
Benzo (b) Fluoranthene	0.013	0.016	0.0029	1	J	Perthane	ND	0.016	0.0053	1	
Benzo (g,h,i) Perylene	0.0092	0.016	0.0029	1	J	1-Methylphenanthrene	ND	0.016	0.0022	1	
Benzo (k) Fluoranthene	0.0086	0.016	0.0040	1	J	Benzo (e) Pyrene	0.011	0.016	0.0022	1	J
Bis(2-Ethylhexyl) Phthalate	0.079	0.016	0.0049	1	B	Perylene	0.027	0.016	0.0022	1	
Butyl Benzyl Phthalate	0.0098	0.016	0.0050	1	J	Biphenyl	ND	0.016	0.0022	1	
Chrysene	0.012	0.016	0.0033	1	J	2,6-Dimethylnaphthalene	0.0053	0.016	0.0021	1	J

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	78	32-143		2-Fluorobiphenyl	59	14-146	
2-Fluorophenol	49	15-138		Nitrobenzene-d5	49	18-162	
p-Terphenyl-d14	71	34-148		Phenol-d6	64	17-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 10/19/12
Work Order No: 12-10-1384
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: mg/kg

Project: 55074

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-256-14**	**N/A**	**Solid**	**GC/MS MM**	**10/23/12**	**10/24/12 21:57**	**121023L02**

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1-Methylnaphthalene	ND	0.010	0.0018	1		Di-n-Butyl Phthalate	ND	0.010	0.0021	1	
2,4,5-Trichlorophenol	ND	0.010	0.0018	1		Di-n-Octyl Phthalate	ND	0.010	0.0029	1	
2,4,6-Trichlorophenol	ND	0.010	0.0013	1		Dibenz (a,h) Anthracene	ND	0.010	0.0020	1	
2,4-Dichlorophenol	ND	0.010	0.0014	1		Diethyl Phthalate	ND	0.010	0.0020	1	
2,4-Dimethylphenol	ND	0.010	0.0016	1		Dimethyl Phthalate	0.0034	0.010	0.0018	1	J
2,4-Dinitrophenol	ND	0.50	0.054	1		Fluoranthene	ND	0.010	0.0019	1	
2-Chlorophenol	ND	0.010	0.0016	1		Fluorene	ND	0.010	0.0018	1	
2-Methylnaphthalene	ND	0.010	0.0018	1		Indeno (1,2,3-c,d) Pyrene	ND	0.010	0.0018	1	
2-Methylphenol	ND	0.010	0.0016	1		Naphthalene	ND	0.010	0.0018	1	
2-Nitrophenol	ND	0.010	0.0015	1		Pentachlorophenol	ND	0.50	0.054	1	
3/4-Methylphenol	ND	0.010	0.0016	1		Phenanthrene	ND	0.010	0.0019	1	
4,6-Dinitro-2-Methylphenol	ND	0.50	0.069	1		Phenol	ND	0.010	0.0018	1	
4-Chloro-3-Methylphenol	ND	0.010	0.0014	1		Pyrene	ND	0.010	0.0025	1	
4-Nitrophenol	ND	0.50	0.064	1		1,6,7-Trimethylnaphthalene	ND	0.010	0.0034	1	
Acenaphthene	ND	0.010	0.0018	1		2,3,4,6-Tetrachlorophenol	ND	0.010	0.0022	1	
Acenaphthylene	ND	0.010	0.0016	1		2,6-Dichlorophenol	ND	0.010	0.0025	1	
Anthracene	ND	0.010	0.0018	1		Benzoic Acid	ND	0.10	0.0025	1	
Benzo (a) Anthracene	ND	0.010	0.0022	1		DCPA	ND	0.010	0.0032	1	
Benzo (a) Pyrene	ND	0.010	0.0018	1		Dibenzothiophene	ND	0.010	0.0032	1	
Benzo (b) Fluoranthene	ND	0.010	0.0018	1		Perthane	ND	0.010	0.0033	1	
Benzo (g,h,i) Perylene	ND	0.010	0.0018	1		1-Methylphenanthrene	ND	0.010	0.0014	1	
Benzo (k) Fluoranthene	ND	0.010	0.0025	1		Benzo (e) Pyrene	ND	0.010	0.0014	1	
Bis(2-Ethylhexyl) Phthalate	0.0036	0.010	0.0031	1	J	Perylene	ND	0.010	0.0014	1	
Butyl Benzyl Phthalate	ND	0.010	0.0032	1		Biphenyl	ND	0.010	0.0014	1	
Chrysene	ND	0.010	0.0020	1		2,6-Dimethylnaphthalene	ND	0.010	0.0013	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	84	32-143		2-Fluorobiphenyl	57	14-146	
2-Fluorophenol	47	15-138		Nitrobenzene-d5	34	18-162	
p-Terphenyl-d14	81	34-148		Phenol-d6	73	17-141	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 10/19/12
Work Order No: 12-10-1384
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: 55074

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289627	12-10-1384-1-A	10/17/12 11:00	Solid	GC/MS HHH	10/23/12	10/29/12 14:44	121023L03

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.
-Results are reported on a dry weight basis.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
PCB003	ND	0.80	0.19	1		PCB126	ND	0.80	0.22	1	
PCB008	ND	0.80	0.14	1		PCB128	ND	0.80	0.16	1	
PCB018	ND	0.80	0.25	1		PCB132	ND	0.80	0.26	1	
PCB028	ND	0.80	0.16	1		PCB138/158	ND	1.6	0.32	1	
PCB031	ND	0.80	0.18	1		PCB141	ND	0.80	0.18	1	
PCB033	ND	0.80	0.17	1		PCB149	ND	0.80	0.14	1	
PCB037	ND	0.80	0.21	1		PCB151	ND	0.80	0.16	1	
PCB044	ND	0.80	0.21	1		PCB153	ND	0.80	0.17	1	
PCB049	0.31	0.80	0.19	1	J	PCB156	ND	0.80	0.16	1	
PCB052	ND	0.80	0.15	1		PCB157	ND	0.80	0.15	1	
PCB056	ND	0.80	0.22	1		PCB167	ND	0.80	0.16	1	
PCB060	ND	0.80	0.17	1		PCB168	ND	0.80	0.14	1	
PCB066	ND	0.80	0.15	1		PCB169	ND	0.80	0.13	1	
PCB070	ND	0.80	0.13	1		PCB170	ND	0.80	0.15	1	
PCB074	ND	0.80	0.15	1		PCB174	ND	0.80	0.17	1	
PCB077	ND	0.80	0.16	1		PCB177	ND	0.80	0.20	1	
PCB081	ND	0.80	0.19	1		PCB180	ND	0.80	0.097	1	
PCB087	ND	0.80	0.16	1		PCB183	ND	0.80	0.18	1	
PCB095	ND	0.80	0.26	1		PCB184	ND	0.80	0.089	1	
PCB097	ND	0.80	0.22	1		PCB187	ND	0.80	0.17	1	
PCB099	ND	0.80	0.14	1		PCB189	ND	0.80	0.14	1	
PCB101	ND	0.80	0.13	1		PCB194	ND	0.80	0.15	1	
PCB105	ND	0.80	0.17	1		PCB195	ND	0.80	0.084	1	
PCB110	ND	0.80	0.16	1		PCB200	ND	0.80	0.15	1	
PCB114	0.19	0.80	0.16	1	J	PCB201	ND	0.80	0.091	1	
PCB118	ND	0.80	0.21	1		PCB203	ND	0.80	0.17	1	
PCB119	ND	0.80	0.14	1		PCB206	ND	0.80	0.13	1	
PCB123	ND	0.80	0.14	1		PCB209	ND	0.80	0.17	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	96	50-125		p-Terphenyl-d14	87	50-125	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 10/19/12
Work Order No: 12-10-1384
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: 55074

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-341-69**	**N/A**	**Solid**	**GC/MS HHH**	**10/23/12**	**10/29/12 13:20**	**121023L03**

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
PCB003	ND	0.50	0.12	1		PCB126	ND	0.50	0.14	1	
PCB008	ND	0.50	0.085	1		PCB128	ND	0.50	0.10	1	
PCB018	ND	0.50	0.16	1		PCB132	ND	0.50	0.17	1	
PCB028	ND	0.50	0.099	1		PCB138/158	ND	1.0	0.20	1	
PCB031	ND	0.50	0.12	1		PCB141	ND	0.50	0.11	1	
PCB033	ND	0.50	0.11	1		PCB149	ND	0.50	0.089	1	
PCB037	ND	0.50	0.13	1		PCB151	ND	0.50	0.10	1	
PCB044	ND	0.50	0.13	1		PCB153	ND	0.50	0.10	1	
PCB049	ND	0.50	0.12	1		PCB156	ND	0.50	0.098	1	
PCB052	ND	0.50	0.097	1		PCB157	ND	0.50	0.096	1	
PCB056	ND	0.50	0.14	1		PCB167	ND	0.50	0.10	1	
PCB060	ND	0.50	0.11	1		PCB168	ND	0.50	0.086	1	
PCB066	ND	0.50	0.091	1		PCB169	ND	0.50	0.082	1	
PCB070	ND	0.50	0.082	1		PCB170	ND	0.50	0.093	1	
PCB074	ND	0.50	0.094	1		PCB174	ND	0.50	0.11	1	
PCB077	ND	0.50	0.097	1		PCB177	ND	0.50	0.12	1	
PCB081	ND	0.50	0.12	1		PCB180	ND	0.50	0.061	1	
PCB087	ND	0.50	0.10	1		PCB183	ND	0.50	0.11	1	
PCB095	ND	0.50	0.17	1		PCB184	ND	0.50	0.056	1	
PCB097	ND	0.50	0.14	1		PCB187	ND	0.50	0.10	1	
PCB099	ND	0.50	0.085	1		PCB189	ND	0.50	0.086	1	
PCB101	ND	0.50	0.081	1		PCB194	ND	0.50	0.096	1	
PCB105	ND	0.50	0.10	1		PCB195	ND	0.50	0.053	1	
PCB110	ND	0.50	0.10	1		PCB200	ND	0.50	0.093	1	
PCB114	ND	0.50	0.10	1		PCB201	ND	0.50	0.057	1	
PCB118	ND	0.50	0.13	1		PCB203	ND	0.50	0.11	1	
PCB119	ND	0.50	0.087	1		PCB206	ND	0.50	0.083	1	
PCB123	ND	0.50	0.087	1		PCB209	ND	0.50	0.11	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	59	50-125		p-Terphenyl-d14	60	50-125	

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received:	10/19/12
Work Order No:	12-10-1384
Preparation:	EPA 3550B (M)
Method:	Organotins by Krone et al.
Units:	ug/kg

Project: 55074

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289627	**12-10-1384-1-A**	**10/17/12 11:00**	**Solid**	**GC/MS JJJ**	**10/24/12**	**10/29/12 18:45**	**121024L10**

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.
-Results are reported on a dry weight basis.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	4.8	1.0	1		Tetrabutyltin	ND	4.8	1.2	1	
Monobutyltin	ND	4.8	1.0	1		Tributyltin	3.1	4.8	0.92	1	J

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	95	48-126	

Method Blank	099-07-016-978	N/A	Solid	GC/MS JJJ	10/24/12	10/29/12 16:16	121024L10

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	3.0	0.65	1		Tetrabutyltin	ND	3.0	0.77	1	
Monobutyltin	ND	3.0	0.65	1		Tributyltin	ND	3.0	0.58	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	122	48-126	

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7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Analytical Report

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received:	10/19/12
Work Order No:	12-10-1384
Preparation:	EPA 3050B
Method:	EPA 6020
Units:	mg/kg

Project: 55074

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
289627	12-10-1384-1-C	10/17/12 11:00	Solid	ICP/MS 03	10/23/12	10/23/12 13:28	121023L01E

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.
-Results are reported on a dry weight basis.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	7.68	0.159	0.139	1		Nickel	38.1	0.159	0.0806	1	
Cadmium	0.758	0.159	0.0911	1		Selenium	0.789	0.159	0.116	1	
Chromium	28.6	0.159	0.0988	1		Silver	0.150	0.159	0.0498	1	J
Copper	44.4	0.159	0.0667	1	B	Zinc	114	1.59	1.27	1	
Lead	13.6	0.159	0.105	1							

Method Blank	099-15-254-57	N/A	Solid	ICP/MS 03	10/23/12	10/23/12 12:56	121023L01E

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	ND	0.100	0.0873	1		Nickel	ND	0.100	0.0506	1	
Cadmium	ND	0.100	0.0572	1		Selenium	ND	0.100	0.0731	1	
Chromium	ND	0.100	0.0621	1		Silver	ND	0.100	0.0313	1	
Copper	0.0453	0.100	0.0419	1	J	Zinc	ND	1.00	0.795	1	
Lead	ND	0.100	0.0659	1							

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 10/19/12
Work Order No: 12-10-1384
Preparation: EPA 3050B
Method: EPA 6020

Project 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
289627	Solid	ICP/MS 03	10/23/12	10/23/12	121023S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	4.822	25.00	28.15	93	29.21	98	80-120	4	0-20	
Cadmium	0.4760	25.00	25.74	101	27.23	107	80-120	6	0-20	
Chromium	17.96	25.00	43.59	103	41.87	96	80-120	4	0-20	
Copper	27.89	25.00	50.93	92	47.62	79	80-120	7	0-20	3
Lead	8.510	25.00	33.59	100	33.01	98	80-120	2	0-20	
Nickel	23.95	25.00	47.98	96	47.39	94	80-120	1	0-20	
Selenium	0.4954	25.00	26.02	102	26.44	104	80-120	2	0-20	
Silver	ND	12.50	12.16	97	13.13	105	80-120	8	0-20	
Zinc	71.46	25.00	94.63	93	89.77	73	80-120	5	0-20	3

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC		Date Received	10/19/12
2520 North San Fernando Road		Work Order No:	12-10-1384
Los Angeles, CA 90065-1324		Preparation:	EPA 3050B
		Method:	EPA 6020

Project 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
289627	Solid	ICP/MS 03	10/23/12	10/23/12	121023S01

Parameter	SAMPLE_CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	Qualifiers
Arsenic	4.822	25.00	29.34	98	75-125	
Cadmium	0.4760	25.00	25.54	100	75-125	
Chromium	17.96	25.00	41.00	92	75-125	
Copper	27.89	25.00	53.45	102	75-125	
Lead	8.510	25.00	33.14	99	75-125	
Nickel	23.95	25.00	48.70	99	75-125	
Selenium	0.4954	25.00	26.91	106	75-125	
Silver	ND	12.50	10.91	87	75-125	
Zinc	71.46	25.00	96.21	99	75-125	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC	Date Received:	10/19/12
2520 North San Fernando Road	Work Order No:	12-10-1384
Los Angeles, CA 90065-1324	Preparation:	N/A
	Method:	SM 2540 B

Project: 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
12-10-1385-1	**Solid**	**N/A**	**10/23/12**	**10/23/12**	**C1023TSD1**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Solids, Total	76.8	74.4	3	0-10	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC	Date Received:	10/19/12
2520 North San Fernando Road	Work Order No:	12-10-1384
Los Angeles, CA 90065-1324	Preparation:	N/A
	Method:	EPA 160.4M

Project: 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
12-10-1385-1	Solid	N/A	10/22/12	10/22/12	C1022VSD1

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Solids, Volatile	1.4	1.3	7	0-25	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 10/19/12
Work Order No: 12-10-1384
Preparation: EPA 3540C
Method: EPA 8270D (M)/TQ/EI

Project 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-10-1385-5	Solid	GCTQ 2	10/23/12	10/25/12	121023S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Allethrin	ND	5.000	3.078	62	2.553	51	25-200	19	0-30	
Bifenthrin	ND	5.000	4.047	81	3.236	65	25-200	22	0-30	
Cyfluthrin	ND	5.000	1.722	34	2.512	50	25-200	37	0-30	4
Cypermethrin	ND	5.000	1.640	33	2.574	51	25-200	44	0-30	4
Deltamethrin/Tralomethrin	ND	5.000	2.504	50	2.940	59	25-200	16	0-30	
Fenpropathrin	ND	5.000	3.303	66	3.884	78	25-200	16	0-30	
Fenvalerate/Esfenvalerate	ND	5.000	1.665	33	2.086	42	25-200	22	0-30	
Fluvalinate	ND	5.000	0.7861	16	2.220	44	25-200	95	0-30	3,4
Permethrin (cis/trans)	3.092	5.000	7.580	90	6.793	74	25-200	11	0-30	
Phenothrin	ND	5.000	9.303	186	8.536	171	25-200	9	0-30	
Resmethrin/Bioresmethrin	ND	5.000	5.734	115	5.083	102	25-200	12	0-30	
Tetramethrin	ND	5.000	4.059	81	3.646	73	25-200	11	0-30	
lambda-Cyhalothrin	ND	5.000	3.961	79	3.899	78	25-200	2	0-30	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 10/19/12
Work Order No: 12-10-1384
Preparation: EPA 3550B (M)
Method: Organotins by Krone et al.

Project 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-10-1385-3	Solid	GC/MS JJJ	10/24/12	10/29/12	121024S10

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	ND	100.0	79.17	79	76.48	76	79-175	3	0-31	3
Tributyltin	10.67	100.0	81.69	71	78.23	68	69-135	4	0-29	3

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 10/19/12
Work Order No: 12-10-1384
Preparation: EPA 3545
Method: EPA 8270C SIM

Project 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-10-1385-2	Solid	GC/MS MM	10/23/12	10/25/12	121023S02

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	ND	1.000	0.6403	64	0.6051	61	40-160	6	0-20	
2,4-Dichlorophenol	ND	1.000	0.7787	78	0.7016	70	40-160	10	0-20	
2-Methylphenol	ND	1.000	0.7489	75	0.6529	65	40-160	14	0-20	
2-Nitrophenol	ND	1.000	0.6994	70	0.6327	63	40-160	10	0-20	
4-Chloro-3-Methylphenol	ND	1.000	0.7475	75	0.6429	64	40-160	15	0-20	
Acenaphthene	ND	1.000	0.7685	77	0.7113	71	40-106	8	0-20	
Benzo (a) Pyrene	ND	1.000	0.9050	90	0.8827	88	17-163	2	0-20	
Chrysene	ND	1.000	0.8130	81	0.8056	81	17-168	1	0-20	
Di-n-Butyl Phthalate	ND	1.000	0.6199	62	0.5464	55	40-160	13	0-20	
Dimethyl Phthalate	0.3189	1.000	1.022	70	0.9017	58	40-160	13	0-20	
Fluoranthene	ND	1.000	0.7742	77	0.7478	75	26-137	3	0-20	
Fluorene	ND	1.000	0.8028	80	0.7547	75	59-121	6	0-20	
Naphthalene	ND	1.000	0.7096	71	0.6987	70	21-133	2	0-20	
Phenanthrene	ND	1.000	0.7930	79	0.7626	76	54-120	4	0-20	
Phenol	0.05328	1.000	0.8515	80	0.7008	65	40-160	19	0-20	
Pyrene	0.01383	1.000	0.8380	82	0.8173	80	6-156	3	0-46	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 10/19/12
Work Order No: 12-10-1384
Preparation: EPA 3545
Method: EPA 8081A

Project 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-10-1385-4	Solid	GC 44	10/23/12	10/25/12	121023S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aldrin	ND	5.000	3.311	66	3.451	69	50-135	4	0-25	
Alpha-BHC	ND	5.000	5.113	102	4.859	97	50-135	5	0-25	
Beta-BHC	ND	5.000	4.803	96	5.041	101	50-135	5	0-25	
Delta-BHC	ND	5.000	3.700	74	3.826	77	50-135	3	0-25	
Gamma-BHC	ND	5.000	3.725	74	4.002	80	50-135	7	0-25	
Dieldrin	ND	5.000	4.115	82	4.471	89	50-135	8	0-25	
4,4'-DDD	8.960	5.000	16.81	157	22.21	265	50-135	28	0-25	3,4
4,4'-DDE	21.74	5.000	36.94	304	46.97	505	50-135	24	0-25	3
4,4'-DDT	3.172	5.000	12.38	184	12.77	192	50-135	3	0-25	3
Endosulfan I	ND	5.000	4.280	86	4.605	92	50-135	7	0-25	
Endosulfan II	ND	5.000	4.557	91	4.751	95	50-135	4	0-25	
Endosulfan Sulfate	ND	5.000	5.066	101	3.971	79	50-135	24	0-25	
Endrin	ND	5.000	3.638	73	3.374	67	50-135	8	0-25	
Endrin Aldehyde	ND	5.000	4.567	91	4.448	89	50-135	3	0-25	
Endrin Ketone	ND	5.000	4.576	92	4.089	82	50-135	11	0-25	
Heptachlor	ND	5.000	3.824	76	3.695	74	50-135	3	0-25	
Heptachlor Epoxide	ND	5.000	7.082	142	9.324	186	50-135	27	0-25	3,4
Methoxychlor	ND	5.000	6.691	134	4.731	95	50-135	34	0-25	4
Alpha Chlordane	ND	5.000	5.982	120	6.514	130	50-135	9	0-25	
Gamma Chlordane	ND	5.000	5.081	102	5.524	110	50-135	8	0-25	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: 10/19/12
Work Order No: 12-10-1384
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-10-1385-2	Solid	GC/MS HHH	10/23/12	10/30/12	121023S03

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
PCB008	ND	25.00	26.54	106	27.38	110	50-125	3	0-30	
PCB018	ND	25.00	26.58	106	26.84	107	50-125	1	0-30	
PCB028	ND	25.00	26.77	107	26.10	104	50-125	3	0-30	
PCB044	ND	25.00	28.86	115	26.91	108	50-125	7	0-30	
PCB052	ND	25.00	26.18	105	26.11	104	50-125	0	0-30	
PCB066	ND	25.00	26.36	105	25.90	104	50-125	2	0-30	
PCB077	ND	25.00	27.62	110	26.37	105	50-125	5	0-30	
PCB101	ND	25.00	28.37	113	27.66	111	50-125	3	0-30	
PCB105	ND	25.00	27.47	110	27.06	108	50-125	2	0-30	
PCB118	ND	25.00	31.01	124	31.15	125	50-125	0	0-30	
PCB126	ND	25.00	26.31	105	25.12	100	50-125	5	0-30	
PCB128	ND	25.00	26.95	108	28.17	113	50-125	4	0-30	
PCB153	ND	25.00	26.11	104	26.72	107	50-125	2	0-30	
PCB170	ND	25.00	24.48	98	24.18	97	50-125	1	0-30	
PCB180	ND	25.00	28.53	114	28.70	115	50-125	1	0-30	
PCB187	ND	25.00	27.18	109	26.26	105	50-125	3	0-30	
PCB195	ND	25.00	26.56	106	26.53	106	50-125	0	0-30	
PCB206	ND	25.00	27.12	108	27.68	111	50-125	2	0-30	
PCB209	ND	25.00	25.25	101	25.38	102	50-125	1	0-30	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC		Date Received:	N/A
2520 North San Fernando Road		Work Order No:	12-10-1384
Los Angeles, CA 90065-1324		Preparation:	EPA 3050B
		Method:	EPA 6020

Project: 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-254-57	Solid	ICP/MS 03	10/23/12	10/23/12	121023L01E

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	25.19	101	24.86	99	80-120	1	0-20	
Cadmium	25.00	24.40	98	23.94	96	80-120	2	0-20	
Chromium	25.00	24.87	99	25.92	104	80-120	4	0-20	
Copper	25.00	27.21	109	26.77	107	80-120	2	0-20	
Lead	25.00	24.50	98	24.78	99	80-120	1	0-20	
Nickel	25.00	25.53	102	26.31	105	80-120	3	0-20	
Selenium	25.00	24.93	100	25.50	102	80-120	2	0-20	
Silver	12.50	10.70	86	10.64	85	80-120	1	0-20	
Zinc	25.00	25.16	101	25.15	101	80-120	0	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: N/A
Work Order No: 12-10-1384
Preparation: EPA 3540C
Method: EPA 8270D (M)/TQ/EI

Project: 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-403-25	Sediment	GCTQ 2	10/23/12	10/25/12	121023L01

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Allethrin	5.000	5.347	107	6.119	122	25-200	0-229	13	0-30	
Bifenthrin	5.000	5.261	105	5.509	110	25-200	0-229	5	0-30	
Cyfluthrin	5.000	5.808	116	5.479	110	25-200	0-229	6	0-30	
Cypermethrin	5.000	6.406	128	5.800	116	25-200	0-229	10	0-30	
Deltamethrin/Tralomethrin	5.000	5.599	112	5.319	106	25-200	0-229	5	0-30	
Fenpropathrin	5.000	6.265	125	5.815	116	25-200	0-229	7	0-30	
Fenvalerate/Esfenvalerate	5.000	5.438	109	5.255	105	25-200	0-229	3	0-30	
Fluvalinate	5.000	6.130	123	5.492	110	25-200	0-229	11	0-30	
Permethrin (cis/trans)	5.000	4.516	90	4.620	92	25-200	0-229	2	0-30	
Phenothrin	5.000	8.246	165	8.622	172	25-200	0-229	4	0-30	
Resmethrin/Bioresmethrin	5.000	5.433	109	5.995	120	25-200	0-229	10	0-30	
Tetramethrin	5.000	6.804	136	7.084	142	25-200	0-229	4	0-30	
lambda-Cyhalothrin	5.000	5.920	118	5.722	114	25-200	0-229	3	0-30	

Total number of LCS compounds : 13
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC		Date Received:	N/A
2520 North San Fernando Road		Work Order No:	12-10-1384
Los Angeles, CA 90065-1324		Preparation:	EPA 3550B (M)
		Method:	Organotins by Krone et al.

Project: 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-016-978	Solid	GC/MS JJJ	10/24/12	10/29/12	121024L10

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	100.0	122.9	123	120.2	120	79-151	2	0-20	
Tributyltin	100.0	112.2	112	114.0	114	51-129	2	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: N/A
Work Order No: 12-10-1384
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-256-14	Solid	GC/MS MM	10/23/12	10/24/12	121023L02

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	1.000	0.5068	51	0.5297	53	40-160	20-180	4	0-20	
2,4-Dichlorophenol	1.000	0.5920	59	0.5948	59	40-160	20-180	0	0-20	
2-Methylphenol	1.000	0.4981	50	0.5224	52	40-160	20-180	5	0-20	
2-Nitrophenol	1.000	0.3839	38	0.3899	39	40-160	20-180	2	0-20	ME
4-Chloro-3-Methylphenol	1.000	0.5452	55	0.5866	59	40-160	20-180	7	0-20	
Acenaphthene	1.000	0.7562	76	0.7466	75	48-108	38-118	1	0-11	
Benzo (a) Pyrene	1.000	0.9715	97	0.9308	93	17-163	0-187	4	0-20	
Chrysene	1.000	0.8510	85	0.8342	83	17-168	0-193	2	0-20	
Di-n-Butyl Phthalate	1.000	0.7964	80	0.7583	76	40-160	20-180	5	0-20	
Dimethyl Phthalate	1.000	0.6776	68	0.7311	73	40-160	20-180	8	0-20	
Fluoranthene	1.000	0.8415	84	0.8171	82	26-137	8-156	3	0-20	
Fluorene	1.000	0.8075	81	0.7960	80	59-121	49-131	1	0-20	
Naphthalene	1.000	0.7414	74	0.7028	70	21-133	2-152	5	0-20	
Phenanthrene	1.000	0.7860	79	0.7751	78	54-120	43-131	1	0-20	
Phenol	1.000	0.5508	55	0.4711	47	40-160	20-180	16	0-20	
Pyrene	1.000	0.8248	82	0.8152	82	28-106	15-119	1	0-16	

Total number of LCS compounds : 16
Total number of ME compounds : 1
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: N/A
Work Order No: 12-10-1384
Preparation: EPA 3545
Method: EPA 8081A

Project: 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-858-162	Solid	GC 44	10/23/12	10/25/12	121023L01

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	5.000	5.087	102	4.871	97	50-135	36-149	4	0-25	
Alpha-BHC	5.000	5.316	106	5.011	100	50-135	36-149	6	0-25	
Beta-BHC	5.000	5.232	105	4.814	96	50-135	36-149	8	0-25	
Delta-BHC	5.000	4.824	96	4.753	95	50-135	36-149	1	0-25	
Gamma-BHC	5.000	5.322	106	5.010	100	50-135	36-149	6	0-25	
Dieldrin	5.000	5.223	104	4.948	99	50-135	36-149	5	0-25	
4,4'-DDD	5.000	5.281	106	5.032	101	50-135	36-149	5	0-25	
4,4'-DDE	5.000	5.366	107	5.101	102	50-135	36-149	5	0-25	
4,4'-DDT	5.000	5.133	103	4.535	91	50-135	36-149	12	0-25	
Endosulfan I	5.000	5.247	105	5.002	100	50-135	36-149	5	0-25	
Endosulfan II	5.000	5.243	105	4.936	99	50-135	36-149	6	0-25	
Endosulfan Sulfate	5.000	5.095	102	4.922	98	50-135	36-149	3	0-25	
Endrin	5.000	4.933	99	4.756	95	50-135	36-149	4	0-25	
Endrin Aldehyde	5.000	5.382	108	5.114	102	50-135	36-149	5	0-25	
Endrin Ketone	5.000	5.526	111	5.231	105	50-135	36-149	5	0-25	
Heptachlor	5.000	5.289	106	5.040	101	50-135	36-149	5	0-25	
Heptachlor Epoxide	5.000	4.545	91	4.327	87	50-135	36-149	5	0-25	
Methoxychlor	5.000	5.088	102	4.856	97	50-135	36-149	5	0-25	
Alpha Chlordane	5.000	5.121	102	4.863	97	50-135	36-149	5	0-25	
Gamma Chlordane	5.000	4.960	99	4.715	94	50-135	36-149	5	0-25	

Total number of LCS compounds : 20
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, CA 90065-1324

Date Received: N/A
Work Order No: 12-10-1384
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: 55074

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-341-69	Solid	GC/MS HHH	10/23/12	10/29/12	121023L03

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
PCB008	25.00	26.95	108	27.16	109	50-125	38-138	1	0-30	
PCB018	25.00	26.56	106	27.30	109	50-125	38-138	3	0-30	
PCB028	25.00	26.41	106	26.98	108	50-125	38-138	2	0-30	
PCB044	25.00	27.99	112	28.77	115	50-125	38-138	3	0-30	
PCB052	25.00	26.57	106	27.37	109	50-125	38-138	3	0-30	
PCB066	25.00	27.69	111	28.81	115	50-125	38-138	4	0-30	
PCB077	25.00	28.44	114	30.27	121	50-125	38-138	6	0-30	
PCB101	25.00	28.82	115	30.24	121	50-125	38-138	5	0-30	
PCB105	25.00	27.71	111	28.70	115	50-125	38-138	4	0-30	
PCB118	25.00	32.01	128	33.54	134	50-125	38-138	5	0-30	ME
PCB126	25.00	26.43	106	26.87	107	50-125	38-138	2	0-30	
PCB128	25.00	27.39	110	27.89	112	50-125	38-138	2	0-30	
PCB153	25.00	26.53	106	27.91	112	50-125	38-138	5	0-30	
PCB170	25.00	23.98	96	25.47	102	50-125	38-138	6	0-30	
PCB180	25.00	29.08	116	29.59	118	50-125	38-138	2	0-30	
PCB187	25.00	27.92	112	28.46	114	50-125	38-138	2	0-30	
PCB195	25.00	26.53	106	27.60	110	50-125	38-138	4	0-30	
PCB206	25.00	27.80	111	28.66	115	50-125	38-138	3	0-30	
PCB209	25.00	25.36	101	25.90	104	50-125	38-138	2	0-30	

Total number of LCS compounds : 19
Total number of ME compounds : 1
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

Work Order Number: 12-10-1384

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
MPN - Most Probable Number

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Calscience Environmental Laboratories, Inc.

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

WO # / LAB USE ONLY: 12-10-1384

CHAIN OF CUSTODY RECORD

Date 10-19-12

Page 1 of 1

LABORATORY CLIENT: American Scientific Labs.

ADDRESS: 2520 N. San Fernando Road

CITY: L.A. STATE: CA ZIP: 90065

TEL: 323 223 9700 E-MAIL: alen@calab.com

CLIENT PROJECT NAME / NUMBER: 55074

P.O. NO.:

PROJECT CONTACT:

SAMPLER(S): (PRINT)

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☑ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	1600.4 (volatile Solid)	6020 (Ag, As, Cd, Cu, Ni, Pb, Se + Zn)	8270C (SIM PCB Congeners)	8270C (SIM Phenols, Phthalates and PAHs)	Krone et. al. Organotins	8270D Pyrethroids										
1	289627	10-17-12	11:00	Soil	3				X	X	X	X	X	X	X	X								

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 10/19/12	Time: 12:17
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

06/01/10 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-10-[1][3][8][4]

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ASL

DATE: 10/19/12

TEMPERATURE: Thermometer ID: SC4 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 4.4 °C - 0.3 °C (CF) = 4.1 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter Initial: G.L

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: N.L

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: N.L

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☐	☑	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** N.L

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** _____

Preservative: h: HCL n: HNO_3 na$_2$:$Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** _____

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Kristin Beckley

From: Alen Hosepians [alen@asllab.com]
Sent: Friday, November 02, 2012 12:36 PM
To: Kristin Beckley
Subject: RE: 55073 and 55074

Hi Kristin,

Please report chromium and if you can also report the J-flag.

Thank You,

Alen Hosepians
Contracts Manager
American Scientific Laboratories, LLC
2520 N San Fernando Road
Los Angeles, CA 90065
323-223-9700
323-223-9500 (FAX)
www.asllab.com

From: Kristin Beckley [mailto:kbeckley@calscience.com]
Sent: Friday, November 02, 2012 12:27 PM
To: Alen Hosepians
Subject: RE: 55073 and 55074

Hi Alen,

Did you also need Chromium reported on these? I'm looking back at the original emails between Molky and our sales folks and this metal is listed (but not requested on COC).

Also, do you need J flagged (report to MDL) data? The initial request lists MDL/RL, but does not specify.

Thank you,

Kristin Beckley
Project Manager
(714) 895-5494

The difference is service

From: Alen Hosepians [mailto:alen@asllab.com]
Sent: Friday, October 19, 2012 12:37 PM
To: Kristin Beckley
Subject: 55073 and 55074

Hi Kristin,

Can you please 8081A to project 55073 and 55074 received today.

Thank You,

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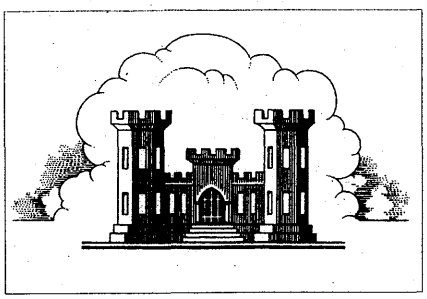


LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

DEPARTMENT OF THE ARMY PERMIT

Permittee: City of Ventura

Permit Number: SPL-2007-872-PHT

Issuing Office: Los Angeles District

Note: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: To maintenance dredge, to design depths, up to 175,000 cubic yards of material over a five-year period from the Ventura Keys waterways, as shown on the attached drawings. No more than 100,000 cubic yards of material would be dredged within one year. Deposition of the dredged material would occur in the surf zone at Cell 1 of the Pierpont Groin Field, and in the surf zone or near shore waters at the mouth of the Santa Clara River.

Connecting Channel: The Connecting Channel would be dredged to a depth of -15 feet MLLW plus a two-foot overdredge. The work would be accomplished using a 14-inch to 26-inch diesel powered cutterhead hydraulic pipeline dredge operating on a 24-hour-per-day basis. Each dredging episode would take 10 to 30 days to complete. If the cutterhead hydraulic pipeline dredge cannot be used within the vicinity of the Arundell Barranca, a mechanized clamshell dredge would be used.

Channels 1, 2, 3: The three channels would be dredged to a depth of -12 MLLW plus a two-foot overdredge. Dredging would be accomplished using a six-inch to 16-inch diesel powered cutterhead hydraulic pipeline dredge operating on a 24-hour-per-day basis. Each dredging episode would take 30 to 60 days to complete.

Transportation of the Dredged Material to the Disposal Site
Surf Zone Deposition: If surf zone deposition is employed, the discharge pipeline would extend through the harbor waters with a combination of floating and submerged pipe and along the

Exhibit 6

beach seaward of the existing sand dunes to either Cell 1 of the Pierpont Groin Field or the Santa Clara River mouth.

Near Shore Deposition: If near shore deposition is employed, the dredged material would be barged to the area just south of the Santa Clara River mouth and deposited in waters no deeper than -30 MLLW.

Deposition of the Dredged Material
Cell 1 Surf Zone Deposition: To replenish the beach in Cell 1 of the Pierpont Groin Field, dredged material from Channels 1, 2, and 3 would be deposited in the surf zone near the beach.

Santa Clara River Mouth Surf Zone Deposition: Dredged material from the Connecting Channel as well as Channels 1, 2, and 3 would be deposited in the surf zone at least 300 feet away from the Santa Clara River mouth.

Santa Clara River Near Shore Deposition: Dredged material from the Connecting Channel as well as Channels 1, 2, and 3 would be deposited in near shore waters just south of the Santa Clara River mouth when the river is flowing at 100 cubic feet per second or greater.

Project Location: In and adjacent to the Ventura Keys, City and County of Ventura, California, as shown on the attached drawings.

Permit Conditions:

General Conditions:

1. The time limit for completing the authorized activity ends five years from the date of issuance. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification from this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archaeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.

Section 10

1. The permitted activity shall not interfere with the right of the public to free navigation on all navigable waters of the United States as defined by 33 C.F.R. Part 329.

2. The permittee understands and agrees that, if future operations by the United States require the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

3. Prior to each maintenance dredging event, a pre-project eelgrass survey shall be conducted in accordance with the Southern California Eelgrass Mitigation Policy (SCEMP) (http://swr.nmfs.noaa.gov/hcd/eelpol.htm). If the pre-project survey demonstrates eelgrass presence within the project vicinity, a post-project survey should be conducted and impacts to eelgrass mitigated in accordance with the SCEMP.

4. A pre-construction survey of the project area for *Caulerpa taxifolia* (Caulerpa) shall be conducted in accordance with the Caulerpa Control Protocol (see http://swr.nmfs.noaa.gov/hcd/caulerpa/ccp.pdf) not earlier than 90 calendar days prior to planned construction and not later than 30 calendar days prior to dredging. The results of that survey shall be furnished to the Corps, NOAA Fisheries, and the California Department of Fish and Game (CDFG) at least 15 calendar days prior to initiation of work in navigable waters. In the event that Caulerpa is detected within the project area, the permittee shall not commence work until such time as the infestation has been isolated, treated, and the risk of spread is eliminated as confirmed in writing by the Corps, in consultation with NOAA Fisheries and CDFG.

5. The permittee shall discharge only clean construction materials suitable for use in the oceanic environment. The permittee shall ensure no debris, soil, silt, sand, sawdust, rubbish, cement or concrete washings thereof, oil or petroleum products, from construction shall be allowed to enter into or placed where it may be washed by rainfall or runoff into waters of the United States. Upon completion of the project authorized herein, any and all excess material or

debris shall be completely removed from the work area and disposed of in an appropriate upland site.

I. Dredging Operations

A. For this permit, the term dredging operations for a complete individual dredging project is defined as: navigation of the dredging vessel at the dredging site, excavation of the dredged material within the project boundaries using a hydraulic suction dredge, clamshell dredge, and/or hopper dredge.

B. Dredging authorized under this permit shall not exceed 100,000 cubic yards of material per year within the Ventura Keys, as depicted on the attached drawings. No dredging is authorized in any other location by this permit. This permit does not authorize the placement or removal of buoys.

C. For this permit, the maximum dredging design depth (also known as the project depth or grade) shall be -12 feet below mean lower low water (MLLW) for Channels 1, 2, and 3, with a maximum allowable overdredge depth of –2 feet below MLLW. No dredging shall occur deeper than –14 feet below MLLW (dredging design depth plus overdredge depth) or outside the project boundaries.

D. For this permit, the maximum dredging design depth (also known as the project depth or grade) shall be -15 feet below mean lower low water (MLLW) for the Connecting Channel, with a maximum allowable overdredge depth of –2 feet below MLLW. No dredging shall occur deeper than –17 feet below MLLW (dredging design depth plus overdredge depth) or outside the project boundaries.

E. The permittee is prohibited from dredging and disposing material in navigable waters of the U.S. that has not been tested and determined by the Corps, in consultation with the Environmental Protection Agency Region IX (EPA), to be both clean and suitable for beach nourishment. Re-testing of previously tested or dredged areas is required after three years from the date of sediment sampling. This time limit is subject to shortening given the occurrence of any event that may cause previously determined clean material to become suspect, at the discretion of the Corps. Prior to each dredging episode, the permittee must demonstrate that the proposed dredged materials are chemically suitable for beach nourishment according to provisions of the Inland Testing Manual or Ocean Disposal Manual as appropriate. If the material does not meet the chemical criteria for beach replenishment, the dredged material shall be disposed in an upland disposal area. The permittee shall submit to the Corps and EPA a draft sampling and analysis plan (SAP) at the following addresses: Los Angeles District Regulatory Division, Attn: Phuong H. Trinh, P.O. Box 532711, Los Angeles, CA 90053-2325; and U.S. EPA, Region IX, Wetlands Regulatory Office (WR-8), Attn: Allan Ota, 75 Hawthorne St, San Francisco, CA 94105-3901. Sampling may not commence until the SAP is approved, in writing, by the Corps, in consultation with EPA.

F. For each individual dredging project, the permittee shall send a dredging and disposal operations plan to the Los Angeles District's Regulatory Division and U.S. EPA at the addresses previously listed at least fifteen (15) calendar days before initiation of any dredging

operations authorized by this permit. The dredging and disposal operations plan shall include the following information:

1. A list of the names, addresses, and telephone numbers of the permittee's project manager, the contractor's project manager, the dredging operations inspector, the disposal operations inspector, and the captain of each tug boat, hopper dredge, or other form of vehicle used to transport dredged material to the designated disposal site.

2. A list of all vessels, major dredging equipment, and electronic positioning systems, or navigation equipment that will be used for dredging and disposal operations, including the capacity, load level, and acceptable operating sea conditions for each hopper dredge or disposal barge or scow to assure compliance with special conditions on dredging and disposal operations.

3. The results of a detailed grain size and chemical analysis of all material to be dredged pursuant to an approved SAP.

4. A detailed description of the dredging and disposal operations authorized by this permit. Description of the dredging and disposal operations should include, at a minimum, the following:

    a. Dredging and disposal procedures for the volume of dredged material determined by the Corps and EPA Region IX to be unsuitable for beach replenishment.

    b. Dredging and disposal procedures for the volume of dredged material determined by the Corps and EPA Region IX to be suitable for beach replenishment.

    c. A vicinity map showing the exact location of the individual dredging project and the beach replenishment site. All maps shall be drawn to scale.

    d. A schedule showing when the dredging project is planned to begin and end.

5. A pre-dredging bathymetric condition survey (presented as a large format plan view drawing), taken at least thirty (30) days before the dredging begins, accurate to 0.5-foot width the exact location of all surroundings clearly defined on the survey chart. The pre-dredge survey chart shall be prepared showing the following information:

    a. The entire dredging area and near shore disposal site (when applicable), the toe and top of all side-slopes and typical cross sections of the dredging areas. To ensure that the entire area is surveyed, the pre-dredge condition survey should cover an area at least 50 feet outside the top of the side-slope or the boundary of the dredging area, unless obstructions are encountered.

    b. The dredging design depth, over-dredge depth and side-slope ratio.

    c. The quantity of the dredged material to be removed from the dredging areas and the side-slope areas.

d. Areas shallower than the dredging design depth shall be shaded green, areas between the dredging design depth and over-dredge depth shall be shaded yellow, and areas below over-dredge depth that will not be dredged shall be shaded blue. If these areas are not clearly shown, the Corps may request additional information.

e. The pre-dredging survey chart shall be signed by the permittee to certify that the data are accurate and that the survey was completed at least thirty (30) days before dredging begins.

6. A debris management plan to prevent disposal of large debris at all disposal locations. The debris management plan shall include: sources and expected types of debris, debris separation and retrieval methods, and debris disposal methods.

G. Dredging operations shall not commence until the dredging operations plans are approved in writing by the Los Angeles District and the permittee receives a Notice to Proceed from the Los Angeles District.

H. Required contact with the U.S. Coast Guard (USCG).

1. The permittee shall notify the Commander Eleventh Coast Guard (USCG), and the Coast Guard Marine Safety Office / Sector LA-LB not less than 14 calendar days prior to commencing work and as project information changes. The notifications, either letter, fax, or e-mail, shall include as a minimum the following information:

a. Project description including the type of operation (i.e. dredging, diving, construction, etc.).

b. Location of operation, including Latitude / Longitude (NAD 83).

c. Work start and completion dates and the expected duration of operations. The Coast Guard needs to be notified if these dates change.

d. Vessels involved in the operation (name, size, and type).

e. VHF-FM radio frequencies monitored by vessels on scene.

f. Point of contact and 24-hour phone number.

g. Potential hazards to navigation.

h. Chart number for the area of operation.

Mail Addresses:

Commander, 11th Coast Guard District (dpw)
ATTN: Local Notice to Mariners
Coast Guard Island, Bldg 50-2
Alameda, California 94501-5100

TEL: (510) 437-2970
FAX: (510) 437-3423
e-mail: d11LNM@uscg.mil

U.S. Coast Guard
Sector LA-LB
1001 South Seaside Ave, Bldg 20
San Pedro, California 90731
ATTN: Waterways Management
TEL: (310) 732-2020
FAX: (310) 732-2029
e-mail: Peter.W.Gooding@uscg.mil

A copy of the notification to the USCG shall be sent to the Corps' Los Angeles District for our file.

2. The permittee shall contact the USCG Marine Safety Office and the Corps' Los Angeles District at least twenty-four (24) hours in advance of any anticipated dredging activity which may restrict navigation within any channel or impact a bridge.

3. The navigational clearances of bridges may not be interfered with, without the prior approval of the Coast Guard. In addition to contacting Coast Guard Sector LA-LB for navigational channel impacts, the appropriate Coast Guard office to contact, for review and approval of any proposed impacts to a bridge is:

   Commander (dpw)
   Eleventh Coast Guard District
   Attn: Bridge Admin
   Bldg 50-2 Coast Guard Island
   Alameda, California 94501
   TEL: (510) 437-3516
   e-mail: David.H.Sulouff@uscg.mil

4. The permittee or their contractors shall not remove, relocate, obstruct, willfully damage, make fast to, or interfere with any aids to navigation defined at 33 C.F.R. chapter I, subchapter C, part 66. The permittee shall ensure its contractor notifies the USCG in writing, with a copy to the Corps, not less than 30 calendar days in advance of operating any equipment adjacent to any aids to navigation which requires relocation or removal. Should any federal aids to navigation be affected by this project, the permittee shall submit a request, in writing, to the Corps as well as the USCG, Aids to Navigation office. The permittee and its contractors are prohibited from relocating or removing any aids to navigation until authorized to do so by the Corps and the U.S. Coast Guard.

5. Should the permittee determine the work requires the placement and use of private aids to navigation in navigable waters of the U.S., the permittee shall submit a request in writing to the Corps as well as the USCG, Aids to Navigation office. The permittee is prohibited from establishing private aids to navigation in navigable waters of the U.S., until authorized to do so by the Corps and the USCG.

6. The permittee shall ensure that the captain of any hopper dredge, tug, or other vessel used in the dredging and disposal operations, is a licensed operator under USCG regulations and follows the Inland and Ocean Rules of Navigation or the USCG Vessel Traffic Control Service. All such vessels, hopper dredges, or disposal barges or scows, shall have the proper day shapes, operating marine band radio, and other appropriate navigational aids.

7. The permitee's contractor and the captain of any dredge covered by this permit shall monitor VHF-FM channels 13 and 16 while conducting dredging operations.

I. The permittee shall have an inspector present on the dredging vessel at all times during dredging operations or in the alternative able to attest to the location of the dredging vessel at all times during the dredging operations. The inspector shall ensure that all permit conditions are obeyed during dredging operations. When the individual dredging project is completed, the inspector shall report on permit compliance and indicate whether any permit violations occurred. If any permit violations occur, the inspector shall provide a complete written explanation of each violation.

J. When using a hopper dredge, the permittee shall monitor dredging and disposal operations using the Silent Inspector (SI) system. The permittee's SI system must have been certified by the SI Support Center within one calendar year prior to the initiation of the dredging/disposal. Questions regarding certification should be addressed to the SI Support Center at 877-840-8024. Additional information about the SI system can be found at http://si.usace.army. The permittee is responsible for insuring that the SI system is operational throughout the dredging and disposal project and that project data are submitted to the SI National Support Center in accordance with the specifications provided at the aforementioned website. The data collected by the SI system shall, upon request, be made available to the Regulatory Division of the U.S. Army Corps of Engineers, Los Angeles District.

K. If a violation of any permit condition occurs, the violation shall be reported by the permittee to the Corps' Los Angeles District Office within twenty-four (24) hours. If the permittee retains any contractors to perform any activity authorized by this General Permit, the permittee shall instruct all such contractors that notice of any violations must be reported to the permittee immediately.

L. When using a hopper dredge, water flowing through the weirs shall not exceed 10 minutes during dredging operations. The level that a hopper dredge can be filled shall not exceed the load line to prevent any dredged material or water from spilling over the sides at the dredging site or during transit from the dredging site to the disposal site. No hopper dredge shall be filled above this pre-determined level. Before each hopper dredge is transported to the disposal site, the dredging site inspector shall certify that it is filled correctly.

M. When using a disposal barge or scow, no water shall be allowed to flow over the sides. The level that a disposal barge or scow can be filled shall not exceed the load line to prevent any dredged material or water from spilling over the sides at the dredging site. No disposal barge or scow shall be filled above this pre-determined level. Before each dispose barge or scow is

transported to the disposal site, the dredging site inspector shall certify that it is filled correctly.

N. The permittee shall use an electronic positioning system to navigate at the dredging site. The electronic positioning system shall have a minimum accuracy and precision of +/- 10 feet (3 meters). If the electronic positioning system fails or navigation problems are detected, all dredging operations shall cease until the failure or navigation problems are corrected. Any navigation problems and corrective measures shall be described in the post-dredging report.

O. The permittee shall maintain a copy of this permit on all vessels used for dredging, transportation, and disposal of dredged material authorized under this permit.

P. The City shall notify Venoco, Inc. at 370 17th Street, Ste 2950, Denver, Colorado 80202 or (303) 626-8300, and Underground Service Alert at (800) 227-2600 or (800) 422-4133, two days prior to any excavation within 50 feet of the pipeline.

II. Disposal Operations

A. For this permit, the term disposal operations for a complete individual dredging project is defined as: the hydraulic pumping of dredged material from the dredging site and the placement of dredged material by pipeline at an approved disposal area and/or the transportation of dredged material from the dredging site to the near shore disposal site, proper disposal of the dredged material at the disposal site, and transportation of the hopper dredge or disposal barge or scow back to the dredging site.

B. Disposal of material under this permit is authorized only at the locations approximated on the attached drawings.

C. Disposal of material dredged from the Ventura Keys shall be conducted below the high tide line along 2,500 feet of beach at the mouth of the Santa Clara River with the actual discharge point being at least 300 feet away from the location at which the river flows into the ocean or in the 1,500 feet of near shore area just to the south of the mouth of the Santa Clara River when flow, measured in the vicinity of the Victoria Avenue bridge, is 100 cubic feet per second or greater.

D. Disposal of material dredged from Channels 1, 2, and 3 which is composed of more than 65% coarse grained material (i.e., retained on a 200 sieve) may be conducted below the high tide line within Cell 1 of the Pierpont Groin Field.

E. If a hopper or clamshell dredge is used the permittee shall dispose the dredged material in the designated near shore disposal area. The approximate location of the near shore area is indicated on the attached Plates. Prior to the disposal of any material in the near shore disposal area, the corners shall be surveyed by the permittee and approved by the Corps. The permittee shall be responsible for marking the corners of the disposal area with approved buoys and making periodic inspections of the buoy locations. The dredge material shall be deposited in such a way as to create a berm approximately parallel to the shoreline. The mound shall be located in the center of the disposal site, between -15 and -30 feet MLLW

contours. Disposal in the near shore disposal area shall advance only when operational technique, under keel clearance or equipment considerations, will permit safe operations.

F. The permittee shall use a short to medium range electronic positioning system (EPS) or global positioning system (GPS) throughout disposal operations at the near shore disposal site. The EPS or GPS must have a minimum accuracy and precision of +/-16.5 feet (5 meters). The permittee shall ensure that the EPS or GPS shall be activated at least 1,000 feet from the disposal site when traveling, and shall not be deactivated until at least 1,000 feet from the site on the return trip. The permittee shall plot the continuous course of each disposal trip once inside the designated site. The permittee shall use latitude and longitude or UTM coordinates for all plots. The plot shall show: the continuous course of the hopper dredge and/or disposal barge or scow and the time and position of the hopper dredge or disposal barge or scow when disposal commenced and ceased.

G. Beach replenishment at all disposal areas shall not occur twenty-four (24) hours before the predicted start of the first grunion run after March 31 to September 1 of any given year, unless such discharge is approved in writing by the Corps after consultation with the U.S. Fish and Wildlife Service, NOAA Fisheries, and the California Department of Fish and Game. If disposal cannot be completed prior to the first predicted grunion run after March 31, a contingency plan shall be implemented as described below:

1. The zone of operations and impact shall not exceed 500 feet in width and shall be fixed for each dredging episode by the Corps in consultation with the U.S. Fish and Wildlife Service, California Department of Fish and Game, and NOAA Fisheries.

2. Primary and alternate discharge pipes shall be located perpendicular to the shoreline and shall extend seaward beyond the mean-higher-high tide line.

3. As the material deposited within the zone of operations accumulates, the discharge pipe shall be extended seaward. Lateral movement of the outfall shall only be permitted when seaward extension of the pipeline is no longer feasible; however, the discharge point may only be moved within the zone of operations and in such a location that dredged material remains within the 500 foot zone of operations.

4. Slotted or perforated pipe shall be used in the final length of the discharge line to ensure maintenance of the sand mound upon which the line lays.

5. If upon inspection, it is determined by the Corps that adverse impacts to grunion spawning are occurring as a result of the contingency plan, reasonable alternative disposal methods and/or remedial measures shall be evaluated by the Corps and implemented by the permittee at the Corps' direction.

H. The disposal pipeline shall not cross or disturb sand dunes.

I. The permittee shall not remove the onshore pipeline if:

1. The onshore pipeline is in the vicinity of the California least tern (Sterna antillarum browni) or western snowy plover (Charadrius alexandrinus nivosus) nesting areas from April 15 to September 1 and,

2. The onshore pipeline is not set back more than 25 feet from the mean high water line 24 hours before the start of the first predicted grunion run of March 31 to September 1.

J. A qualified specialist on western snowy plover shall be retained to monitor the installation and removal of the discharge pipeline for impacts to this species. The monitor shall be present beginning two weeks prior to construction, throughout the dredging operation, and for two weeks after the completion of dredging operations. A report on the monitoring shall be submitted to the Corps at the conclusion of these activities.

K. The deposition of dredged material in the California least tern or western snowy plover nesting areas is prohibited.

L. Disposal operations within designated critical habitat of the western snowy plover shall be limited to the period from October 15 to March 31 to avoid adverse effects to nesting western snowy plovers and California least terns. To further ensure that the operations will have no effect on plover, the permittee shall limit the number of vehicle trips across the river mouth and on the beach south of the estuary to installation, emergency maintenance, and pipeline removal activities. The permittee shall also limit beach re-contouring to the footprint of the pipeline and the immediately adjacent access corridor.

M. The captain of the hopper dredge shall ensure compliance with all disposal operation general and special conditions defined in this permit. If the captain detects any violation, he or she shall report the violation to the permittee immediately. The permittee shall contact the Corps' Los Angeles District Office at (213) 452-3372 and EPA Region IX at (213) 244-1830 to report the violation within twenty-four (24) hours. The captain of the dredge covered by this permit shall monitor VHF-16 while conducting disposal operations.

N. The temporary floating discharge pipeline shall have warning lights affixed to it. The pipeline shall be submerged where it crosses the main Ventura Harbor channel, and shall not interfere with navigation.

III. Post-Dredging Completion Report

A. The permittee shall send one (1) copy of the post-dredging report to the Los Angeles District's Regulatory Division documenting compliance with all general and special conditions defined in this permit. The post-dredging report shall be sent within 30 days after completion of the dredging and disposal operations authorized in this permit. The report shall include the following information:

1. Corps permit number.

2. Actual start date and completion date of dredging and disposal operations.

3. Total cubic yards disposed at each disposal site.

4. Tug boat, hopper dredge, or other disposal vessel logs documenting contact with USCG before each trip to each disposal site.

5. Copies of all Dredging Operations Compliance Forms and Disposal Operations Compliance Forms.

6. Mode of dredging, transportation, and disposal, frequency of disposal and plots of all trips to the near shore disposal sites.

7. Form of dredged material and percent sand, silt, and clay in the dredged material.

8. All information collected by the permittee, the dredging operations inspector and the disposal operations inspector or the disposal vessel captain as required by the special conditions of this permit. The report shall indicate whether all general and special permit conditions were met. Any violations of the permit shall be explained in detail.

9. A detailed post-dredging condition survey (presented as a large format plan view drawing) showing areas shallower than the dredging design depth shaded green, areas between the dredging design depth and over-dredge depth shaded yellow, areas below over-dredging depth that were not dredged or areas that were deeper than the over-dredge depth before the project began as indicated on the pre-dredging survey (Special Condition I.E.5) shaded blue, and areas dredged below the over-dredge depth or outside authorized boundaries shaded red. The methods used to prepare the post-dredging survey shall be the same as the methods used in the pre-dredging condition survey. The survey shall be signed by the permittee certifying the data are accurate.

   The permittee shall send a copy of the post-project survey to the NOAA National Ocean Service for chart updating: Gerald E. Wheaton, NOAA, Regional Manager, West Coast and Pacific Ocean, DOD Center Monterey Bay, Room 5082, Seaside, CA 93955-6711.

10. The post-dredging report shall be signed by a duly authorized representative of the permittee. The permittee's representative shall make the following certification:

    I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

IV. Inspections

A. The permittee and its contractors shall allow inspectors from the Corps, EPA Region IX, or the USCG to inspect all phases of the dredging and disposal operations.

B. Upon request, the permittee and all contractors retained to perform work authorized by the permit or to monitor compliance with this permit shall make available to inspectors from the Corps, EPA Region IX, or the USCG the following: dredging and disposal operations

inspectors' logs, the vessel track plots and all disposal vessel logs or records, any analyses of the characteristics of dredged material, or any other documents related to dredging and disposal operations.

V. Beach Profiles

A. The permittee shall submit for review by the Corps annual beach profile surveys for Cell 1 for the five-year period commencing the date the permit is issued. Two baselines for the profiles shall be at the two survey locations used in the past by the Ventura Port District for shoreline profile surveys between groins 1 and 2. The profile shall use five-foot intervals.

Further Information:

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:

   (x) Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403).

   (x) Section 404 of the Clean Water Act (33 U.S.C. 1344).

   ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

   a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

   b. This permit does not grant any property rights or exclusive privileges.

   c. This permit does not authorize any injury to the property or rights of others.

   d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

   a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

   b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

   c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

   d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

   a. You fail to comply with the terms and conditions of this permit.

   b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

   c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

   Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give you favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

PERMITTEE — DATE: 7-28-08

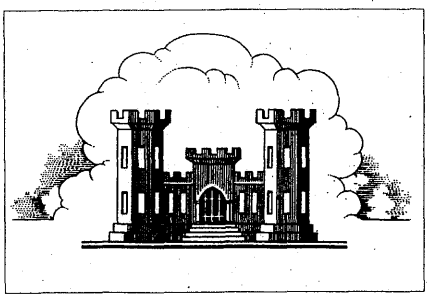
Rick Raives
City Engineer
Assistant Public Works Director

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

For David J. Castanon
Chief, Regulatory Division
Los Angeles District — DATE: 9/3/08

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

TRANSFEREE — DATE



LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT

Permit Number: SPL-2007-872-PHT

Name of Permittee: City of Ventura

Date of Issuance: September 3, 2008

Upon completion of the activity authorized by this permit, sign this certification and return it to the following address:

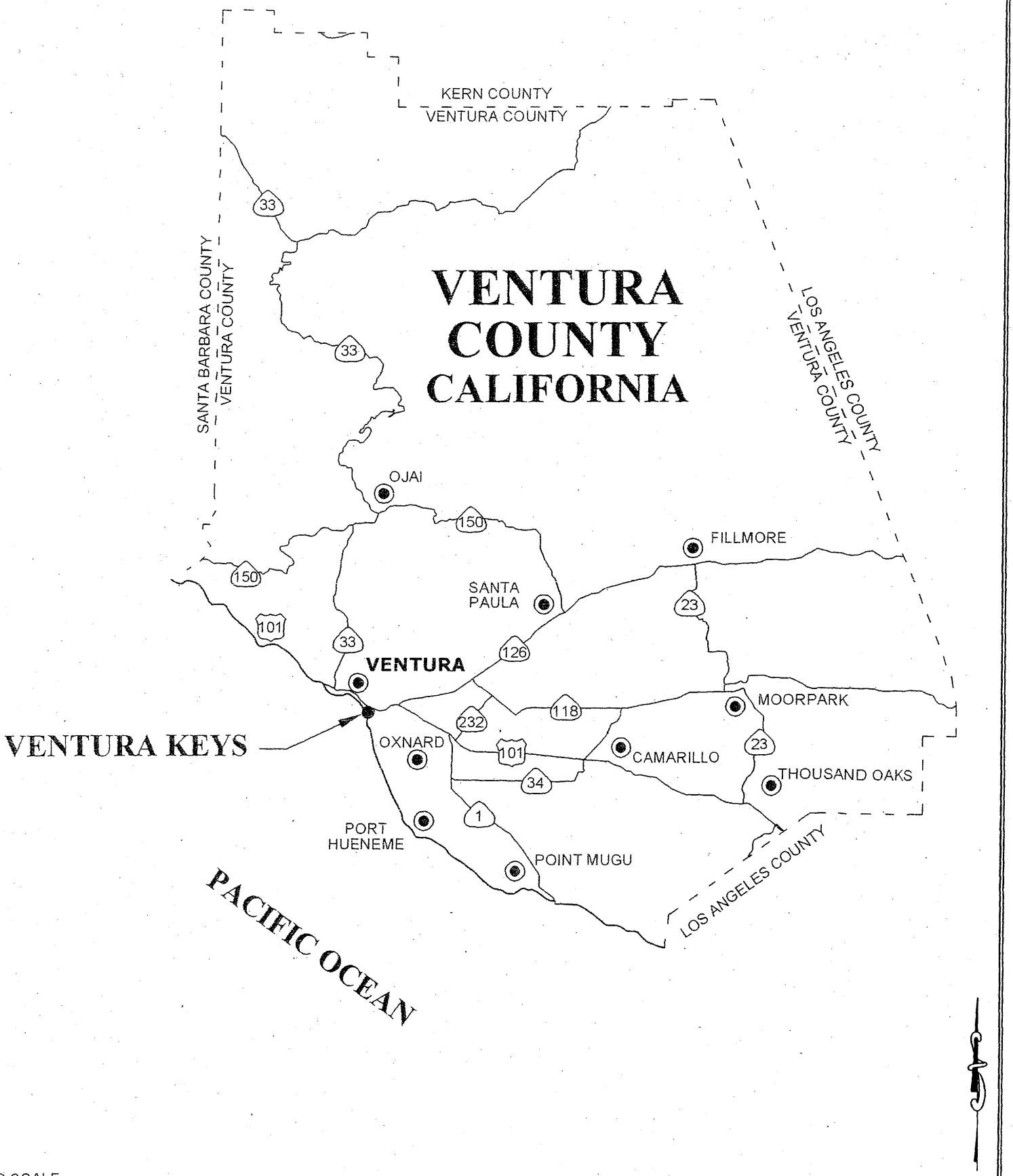
Regulatory Division - Los Angeles District Office
ATTN: CESPL-RG-NL-SPL-2007-872-PHT
P.O. Box 532711
Los Angeles, California 90053-2325

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this permit you may be subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of said permit.

_____ _____

Signature of Permittee Date



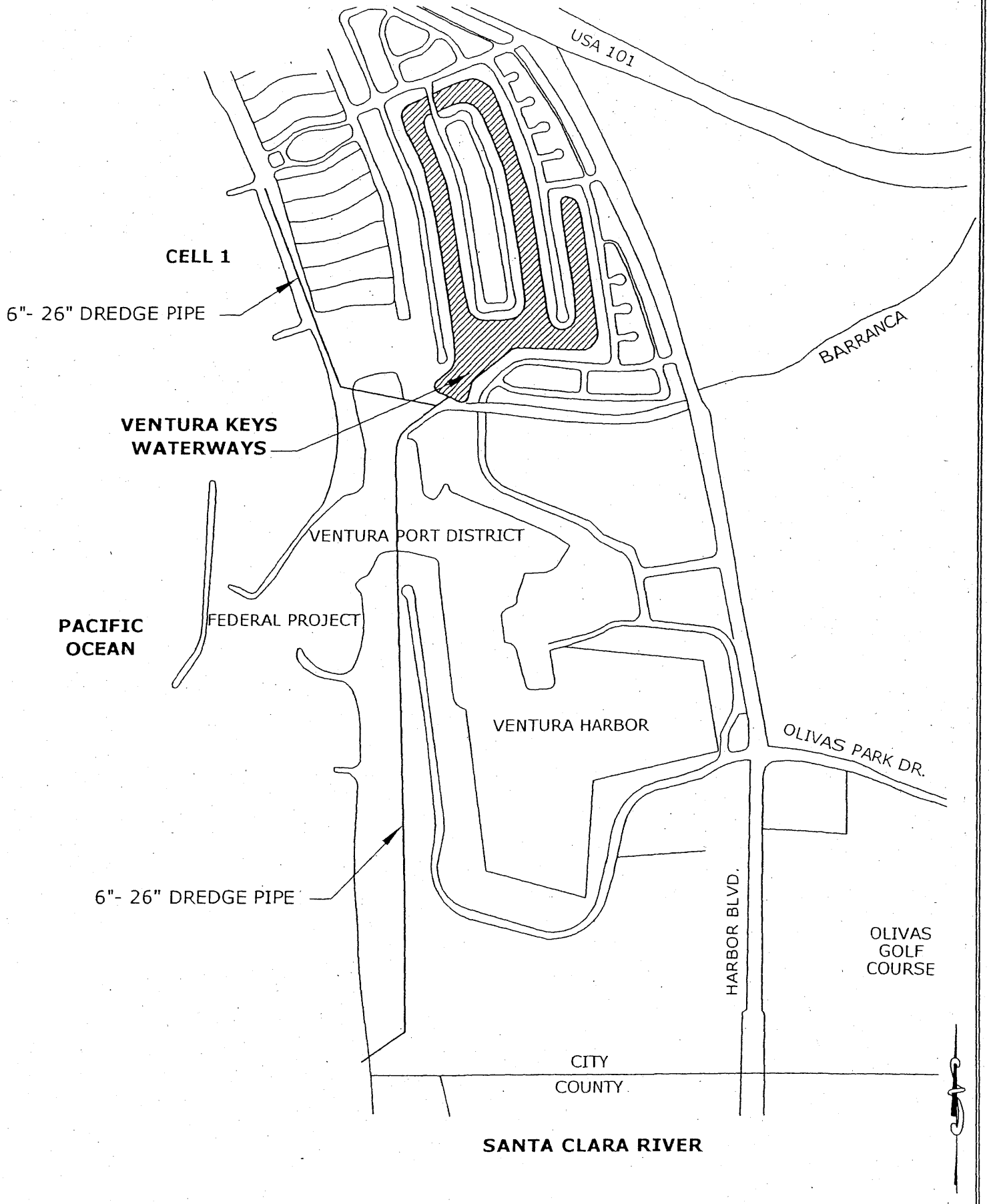
NO SCALE

Applied Environmental Technologies, Inc.
4561 Market Street, Suite B • Ventura, California 93003
Phone (805)650-1400 Fax (805)650-1576

SITE LOCATION PLAN
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P1	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 1



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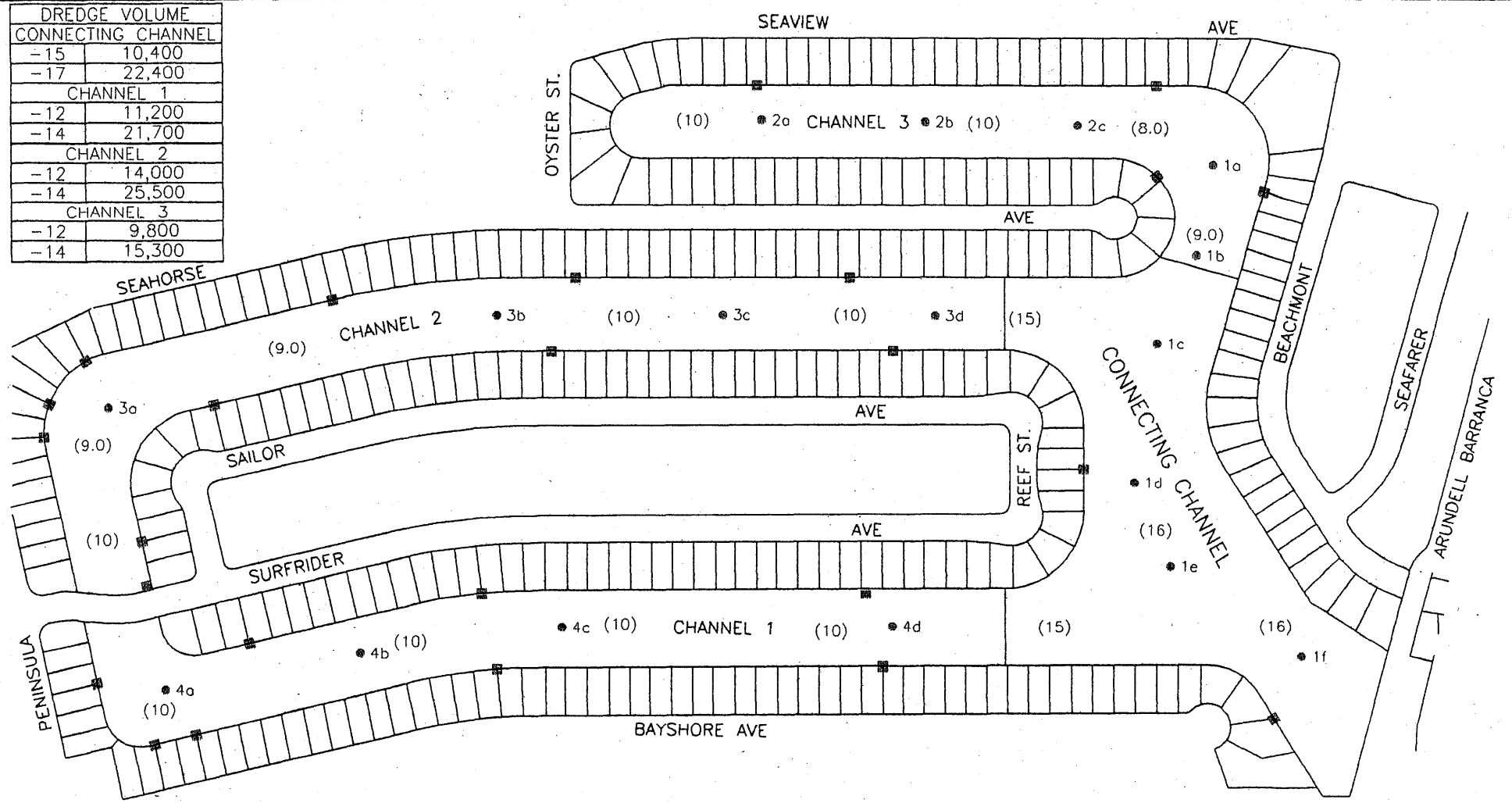
SITE LOCATION PLAN
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE 2

PLATE REFERENCE 0048-29_P2	AUGUST 15, 2007	PROJECT NUMBER 0048-29

DREDGE VOLUME	
CONNECTING CHANNEL	
-15	10,400
-17	22,400
CHANNEL 1	
-12	11,200
-14	21,700
CHANNEL 2	
-12	14,000
-14	25,500
CHANNEL 3	
-12	9,800
-14	15,300



LEGEND

- SEDIMENT SAMPLING LOCATION
- STORM DRAIN LOCATIONS

(8.0) CONDITION SURVEY DEPTHS MAY 2007 IN FEET (MLLW)

0' 300' 600'

SCALE - 1" = 300' AT 8.5" x 11"

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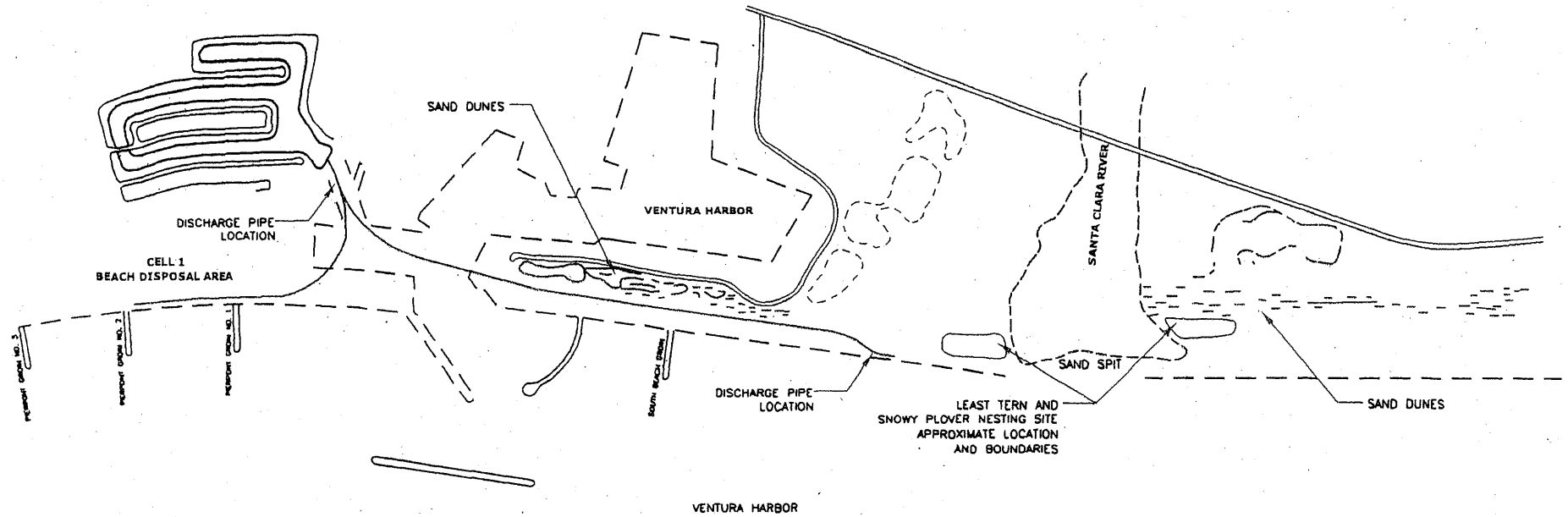
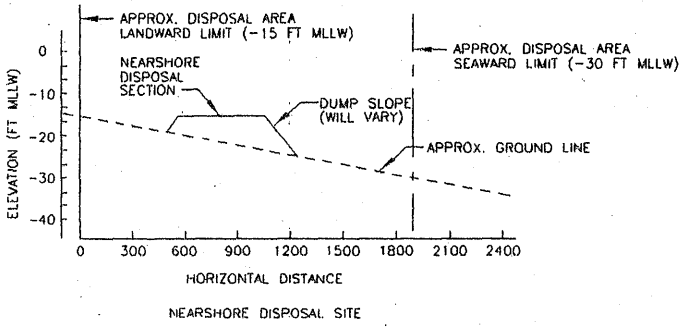
PROPOSED DREDGING AREA

VENTURA KEYS
VENTURA, CALIFORNIA

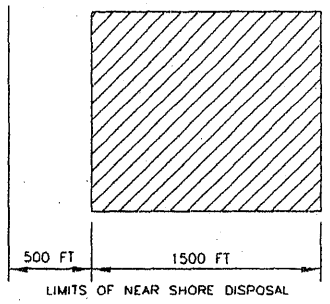
PLATE REFERENCE 0048-29_P3 | AUGUST 15, 2007 | PROJECT NUMBER 0048-29

PLATE 3





NEARSHORE DISPOSAL SITE



LIMITS OF NEAR SHORE DISPOSAL

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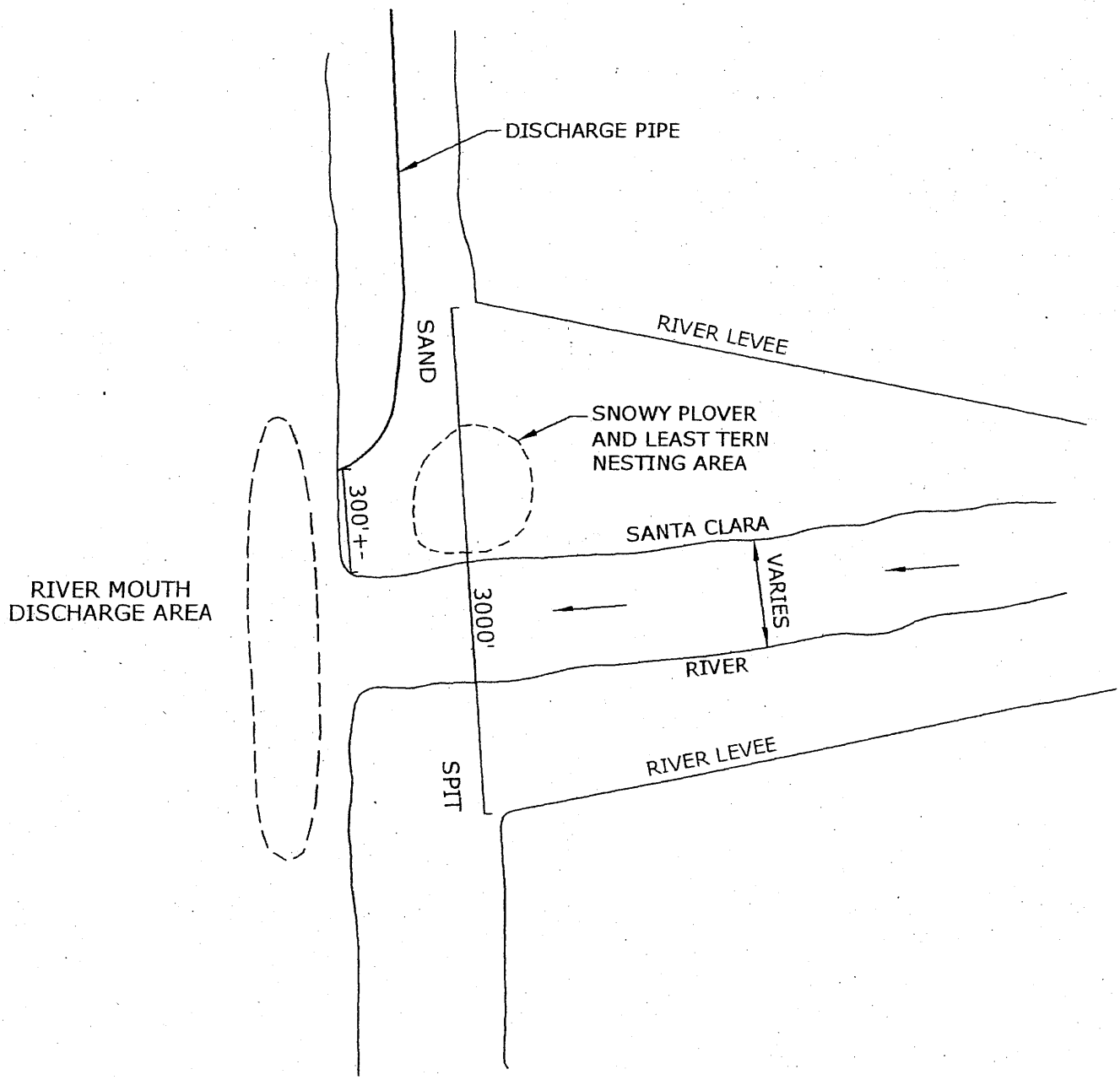
DEPOSITION SITES OF EXCAVATED MATERIAL
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P4 | AUGUST 15, 2007 | PROJECT NUMBER 0048-29

PLATE 4



NOT TO SCALE

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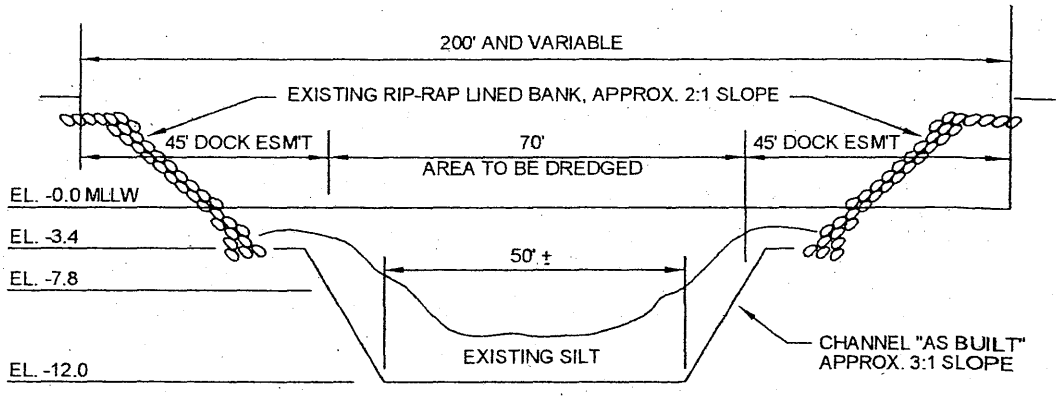
RIVER MOUTH DEPOSITION AREA
VENTURA KEYS
VENTURA, CALIFORNIA

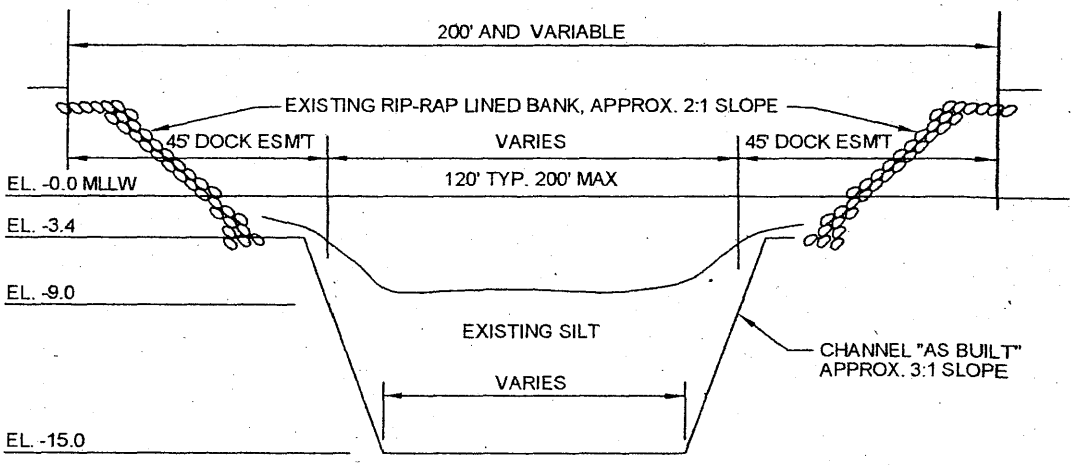
PLATE REFERENCE 0048-29_P5	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 5



TYPICAL SECTION

FOR CHANNELS 1, 2, AND 3
NOT TO SCALE



TYPICAL SECTION

FOR CONNECTING CHANNEL
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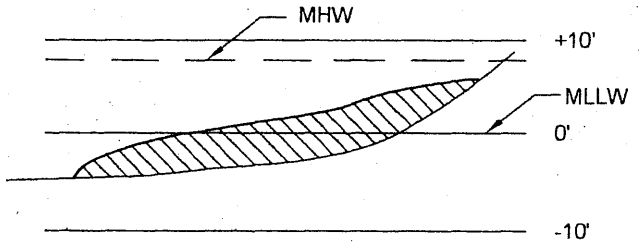

RIVER MOUTH DEPOSITION AREA

NOT TO SCALE

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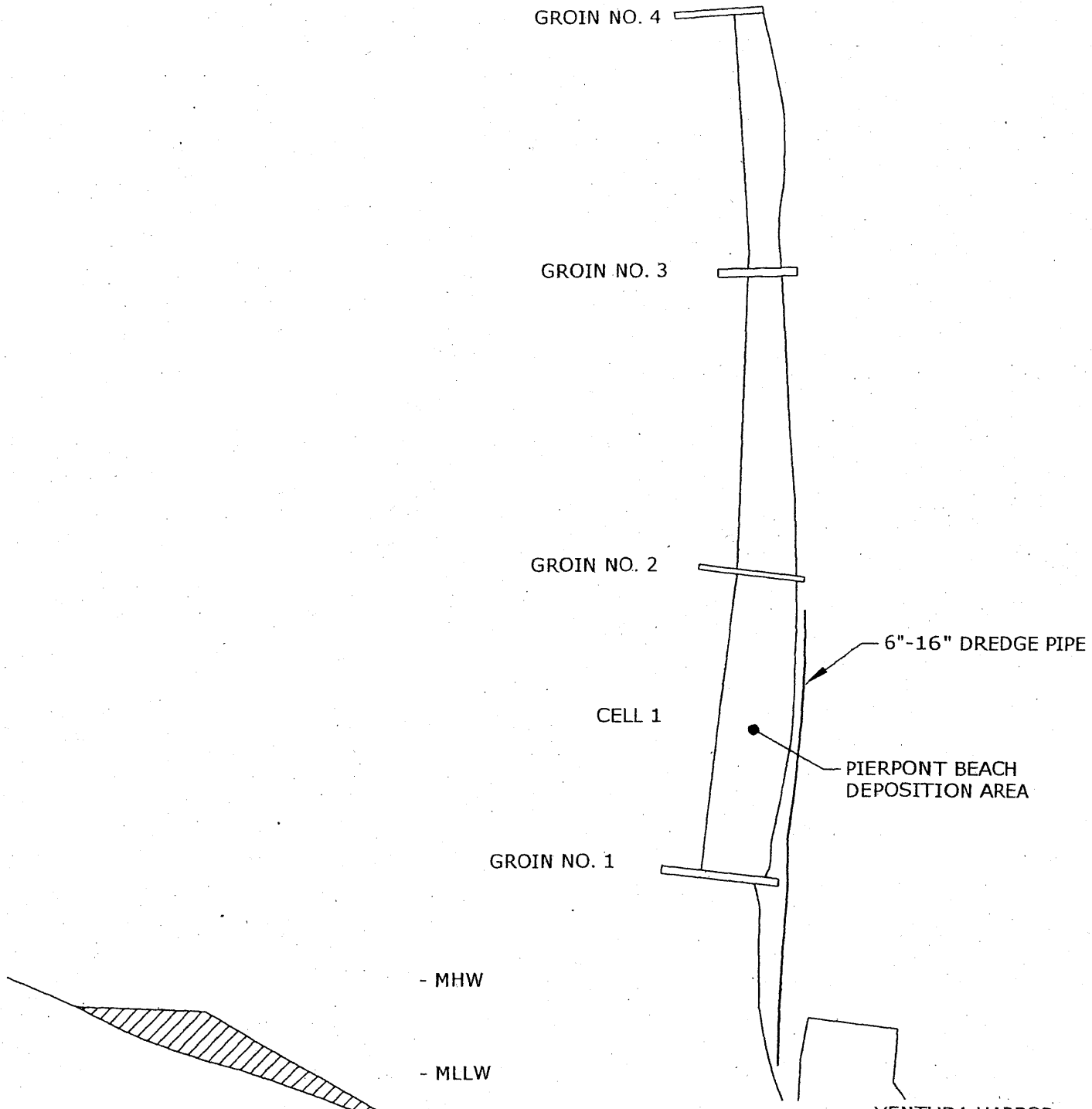
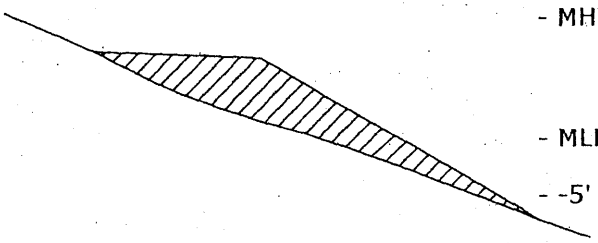
Phone (805)650-1400 Fax (805)650-1576

PROPOSED DERDGING AND DISPOSAL SECTIONS
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P6	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 6





TYPICAL SECTION
NOT TO SCALE

0' 600' 1200'

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PIERPONT DEPOSITION AREA
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P7	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 7

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. R4-2007-0061

RENEWAL OF
WASTE DISCHARGE REQUIREMENTS
FOR
CITY OF SAN BUENAVENTURA
(VENTURA KEYS MAINTENANCE DREDGING)
(FILE NO. 97-127)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

1. The City of San Buenaventura (the City) has filed an application for renewal of the Waste Discharge Requirements contained in Regional Board Order No. 97-141, adopted on December 8, 1997, for routine maintenance dredging operations within the Ventura Keys, a waterfront residential community adjacent to Ventura Harbor in the City and County of Ventura (Plate 1).

2. The Ventura Keys waterways encompass an area of 32 acres and consist of three channels tending in a general north-south alignment (Channels 1, 2 and 3) and a larger connecting channel to the south that interconnects the other three channels and provides a link to Ventura Harbor (Plate 2). The 13.5 acres of actual channels have existing depths between -9 and -16 Mean Lower Low Water (MLLW). Shoaling in the Ventura Keys results from accumulation of sediments transported into the area by the Arundell Barranca and 26 smaller storm drains.

   Order No. 97-141 authorized the City to dredge up to 100,000 cubic yards of bottom sediments per year from the navigation channels, and no more than 350,000 cubic yards over a ten-year period. The most recent maintenance dredging operation was completed in 2005-6 and involved the removal of nearly 46,000 cubic yards of material from the Connecting Channel, with deposition in the surf zone to the north of the mouth of the Santa Clara River. In the 1997-1999 period, nearly 204,000 cubic yards of material was removed from the Connecting Channel and Channels 1, 2 and 3, with deposition in the surf zone at both the mouth of the river and in Cell 1 of the Pierpont Groin Field (nearshore coastal waters north of Marina Park). Approval for disposal within the surf zone near the mouth of the Santa Clara River was contingent upon the river flowing at a rate of 100 cubic feet per second or greater.

3. The City estimates that approximately 175,000 cubic yards of material could accumulate in the Ventura Keys over the next five years and require removal via maintenance dredging (Plate 3). Consequently, the City proposes to dredge and dispose of an average of 35,000 cubic yards of sediment per year over the next five years. However, to provide operational flexibility, the City proposes to dredge up to a maximum volume of 100,000 cubic yards in any one calendar year (the cumulative total dredged over a 5-year period would not exceed 175,000 cubic yards).

Exhibit 7

The connecting channel presently contains approximately 22,000 cubic yards of shoal material and is expected to require dredging two or three times over the next ten years. It is anticipated that the dredging would be accomplished with a hydraulic pipeline dredge and would require 10 to 30 days to complete each dredging operation. It is likely that the portion of the connecting channel in the vicinity of the mouth of the Arundell Barranca would require more frequent dredging, which probably would be accomplished with a mechanical clamshell dredge. Channels 1, 2 and 3 presently contain approximately 30,000 cubic yards of shoal material and are expected to require dredging one or two times over the next ten years. It is anticipated that the dredging would be accomplished with a hydraulic pipeline dredge and would require 30 to 60 days to complete each dredging operation.

The City proposes to dispose of the dredged material in the surf zone at Cell 1 of the Pierpont Bay Groin Field (the first cell north of Marina Park) or the surf zone at the mouth of the Santa Clara River or the nearshore waters at the mouth of the Santa Clara River (Plates 4, 5, 6 and 7). Dredged material disposed of into Cell 1 of the Pierpont Bay Groin Field would be composed of sediment that contains 65% or more coarse-grained material (i.e., retained on a number 200 sieve). This material would contribute to beach replenishment at a nearby sand-depleted beach. Dredged material disposed of into the surf zone or nearshore waters at the mouth of the Santa Clara River would be composed of sediment that contains 25% or more coarse-grained material. This material would be rapidly dispersed by the currents and the river discharge flow and some fraction would contribute to beach replenishment.

If surf zone deposition is employed, a discharge pipe would extend from the dredge site through the harbor waters with a combination of floating and submerged pipe and along the beach seaward of the existing sand dunes to either Cell 1 of the Pierpont Groin Field or to the mouth of the Santa Clara River. If nearshore deposition is employed, the dredged material would be barged to the area just south of the mouth of the Santa Clara River and deposited in waters no deeper than -30 feet MLLW. The dredging and disposal operations would not commence until after Labor Day in September of a given year and would cease on or before March 15th of the following year, so as to avoid impacts to grunion spawning, least tern and snowy plover nesting, and recreational use of the beach.

4. The City and its consulting firm, Applied Environmental Technologies, Inc., conducted sampling of sediments at four locations within the Ventura Keys in July 2005. The four core samples were combined into a single composite for analysis (Table 1). Sediment samples also were collected at several locations within the Ventura Keys in 1997. Composite samples were analyzed separately for the Connecting Channel, Channel 1, Channel 2 and Channel 3 (ranges of values shown in Table 1).

Table 1. Sediment characterization results for the Ventura Keys.

Constituent	1997 Sediment Sampling	2005 Sediment Sampling
Arsenic	Not detected	1.33 mg/kg
Cadmium	0.22-0.36 mg/kg	0.23 mg/kg
Chromium	4.13-6.84 mg/kg	11.5 mg/kg
Copper	9.86-20.7 mg/kg	17.1 mg/kg
Lead	5.77-11.5 mg/kg	6.64 mg/kg
Mercury	Not detected-0.04 mg/kg	<0.02 mg/kg
Nickel	7.92-11.5 mg/kg	22.2 mg/kg
Zinc	25.3-45.6 mg/kg	54.6 mg/kg
Selenium	Not analyzed	<0.10 mg/kg
Aldrin	Not detected	<0.23 µg/kg
Chlordane	Not detected	<0.20 µg/kg
4,4'-DDD	Not detected	0.81 µg/kg
4,4'-DDE	Not detected	1.38 µg/kg
4,4'-DDT	Not detected	<0.22 µg/kg
Dieldrin	Not detected	<0.20 µg/kg
Toxaphene	Not detected	<17 µg/kg
Total PCBs	Not detected	<4.2 µg/kg
Total PAHs	Not detected	<100 µg/kg

The State has not yet promulgated sediment quality objectives for the constituents listed in Table 1. However, the concentrations measured are below the levels at which biological effects would be expected to occur.

5. The City plans to conduct sediment characterization tests (e.g., grain size and sediment chemistry analyses) again in 2008 and at least once every three years in subsequent years to confirm that the material to be dredged would be suitable for disposal as proposed.

6. The United States Corps of Engineers has issued a public notice to renew the Individual Permit for Maintenance Dredging of the Ventura Keys (Application No. 2007-872-PHT). The existing permit (97-50041-TW) will expire on December 15, 2007 and it is anticipated that the United States Corps of Engineers will renew the permit in a timely manner.

7. On August 31, 2007, the City of Ventura issued an Addendum to the previously approved Final Mitigated Negative Declaration (FMND-2202), which confirms that since the circulation of the FMND in 1997, there have been no new or substantially more severe environmental impacts related to the project, no significant changes in the project or the surrounding circumstances, nor significant new information that has since come to light that would require a revision of the conclusions in the FMND or recirculation of the document. The Addendum concludes that the current request is consistent with the project as approved with the FMND.

The Addendum requires adherence to the following mitigation measures: 1) in order to mitigate potential significant impacts related to Water Resources, disposal of spoils in either the surf zone or near shore area at the mouth of the Santa Clara River shall not occur unless that water is flowing at 100 cubic feet per second or greater; 2) in order to mitigate potential impacts related to water quality, periodic testing of the water shall occur during the dredge operation per standards set forth by the Regional Water Quality Control Board; if quality drops below accepted standards, dredging shall stop until impact is eliminated; 3) in order to mitigate potential significant impacts related to Water Resources, the contractor shall be required to implement the Best Management Practices as established by the National Discharge System Permit and/or as required by the Regional Water Quality Control Board, as appropriate to prohibit entry of pollutants to the storm water runoff.

8. The Regional Board adopted a revised Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties on June 13, 1994. The Water Quality Control Plan contains water quality objectives for the Ventura Keys and the Ventura County coastal nearshore and offshore waters. The requirements contained in this Order as they are met will be in conformance with the goals of the Water Quality Control Plan.

9. The beneficial uses of the Ventura Keys waters are: navigation, water contact recreation, non-contact water recreation, commercial and sport fishing, marine habitat, and wildlife habitat. The beneficial uses of the Ventura County coastal nearshore and offshore waters are: industrial service supply, navigation, water contact recreation, non-contact water recreation, commercial and sport fishing, marine habitat, wildlife habitat, preservation of rare and endangered species, migration of aquatic organisms, spawning, reproduction and/or early development of aquatic organisms, and shellfish harvesting.

10. With proper management of the dredging and disposal operations, the project is not expected to release significant levels of contaminants to the Harbor waters or other State waters nor adversely impact beneficial uses.

11. Dredging and disposal operations will be accomplished through the use of temporary equipment. The Waste Discharge Requirements imposed below will not result in any significant increase in energy consumption.

The Regional Board has notified the City and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED that the City of San Buenaventura, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act as amended, and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Requirements

1. The removal and placement of dredged/excavated material shall be managed such that the concentrations of toxic pollutants in the water column, sediments or biota shall not adversely affect beneficial uses, in particular those identified in Finding number 9 above.

2. Marine and enclosed bay and estuarine communities and populations, including vertebrate, invertebrate and plant species, shall not be degraded as a result of the discharge of waste.

3. The natural taste and odor of fish, shellfish or other marine and enclosed bay and estuarine resources used for human consumption shall not be impaired as a result of the discharge of waste.

4. Toxic pollutants shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.

5. There shall be no acute toxicity or chronic toxicity in ambient waters as a result of the discharge of waste.

6. The City shall conduct the monitoring required and comply with the reporting requirements outlined in the attached Monitoring and Reporting Program, which is incorporated by reference as part of these Waste Discharge Requirements.

7. Dredging, excavation or disposal of dredge spoils shall not cause any of the following conditions in the receiving waters:

   a. The formation of sludge banks or deposits of waste origin that would adversely affect the composition of the bottom fauna and flora, interfere with the fish propagation or deleteriously affect their habitat, or adversely change the physical or chemical nature of the bottom.

   b. Turbidity that would cause substantial visible contrast with the natural appearance of the water outside the immediate area of operation.

   c. Discoloration outside the immediate area of operation.

   d. Visible material, including oil and grease, either floating on or suspended in the water or deposited on beaches, shores, or channel structures outside the immediate area of operation.

   e. Objectionable odors emanating from the water surface.

f. Depression of dissolved oxygen concentrations below 5.0 milligrams per liter at any time outside the immediate area of operation.

g. Any condition of pollution or nuisance.

B. Provisions

1. The Discharge Requirements specified above are valid only for dredging and disposal of a maximum volume of 100,000 cubic yards of sediment per year, provided that the average volume does not exceed 35,000 cubic yards of sediment over the five-year period, as proposed by the City. Dredging and disposal operations shall not commence until after Labor Day in September of a given year and shall cease on or before March 15th of the following year.

2. The City may dispose of dredged material for beach replenishment purposes into Cell 1 of the Pierpont Bay Groin Field provided that the material is composed of sediment that contains 65% or more coarse-grained material (i.e., retained on a number 200 sieve) and the dredged material does not contain elevated concentrations of trace metals or trace organics.

3. The City may dispose of dredged material in the surf zone or nearshore waters within 200 feet of the mouth of the Santa Clara River provided that the river is flowing at a rate of 100 cubic feet per second or greater and the dredged material does not contain elevated concentrations of trace metals or trace organics.

4. The City shall conduct a sediment characterization study to assess trace metal and trace organic concentrations within the Ventura Keys in 2008 and 2011, at a minimum. In addition, sediment toxicity testing and benthic infaunal community analysis shall be included at representative locations to allow evaluation of the condition of surficial sediments.

5. The City shall notify this Regional Board immediately by telephone of any adverse conditions in receiving waters or adjacent areas resulting from the removal of dredge materials; written confirmation by the Port to the Regional Board shall follow within one week.

6. A copy of this Order shall be made available at all times to project construction personnel.

7. The City shall provide the following information to the Regional Board:

   a. The scheduled date of commencement of each dredging operation and an engineering plan and profile of the excavation and the disposal site at least two weeks prior to commencement.

b. Notice of termination of the operation, within one week following the termination date.

8. The City shall submit, under penalty of perjury, technical reports to the Regional Board in accordance with specifications prepared by the Executive Officer.

9. In accordance with section 13260(c) of the Water Code, the City shall file a report of any material change or proposed change in the character, location, or volume of the waste.

10. These requirements do not exempt the City from compliance with any other laws, regulations, or ordinances which may be applicable: they do not legalize this waste discharge, and they leave unaffected any further restraint on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

11. In accordance with Water Code section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification. All discharges of waste into waters of the State are privileges, not rights.

12. This Order includes Attachment N: "Standard Provisions, General Monitoring and Reporting Requirements" ("Standard Provisions") and the attached Monitoring and Reporting Requirements, both of which are incorporated herein by reference. If there is any conflict between provisions stated hereinbefore and said "Standard Provisions", those provisions stated hereinbefore prevail. If there is any conflict between requirements stated in the attached Monitoring and Reporting Program and said "Standard Provisions", the former shall prevail.

13. This Order fulfills the requirements for a Clean Water Act Section 401 Water Quality Certification for the proposed project. Pursuant to section 3860 of title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:

a. this certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the California Water Code and Article 6 (commencing with 23 CCR section 3867);

b. this certification action is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought;

c. this certification is conditioned upon total payment of any fee required pursuant to 23 CCR division 3, chapter 28, and owed by the applicant.

14. This Order shall expire on December 31, 2012.

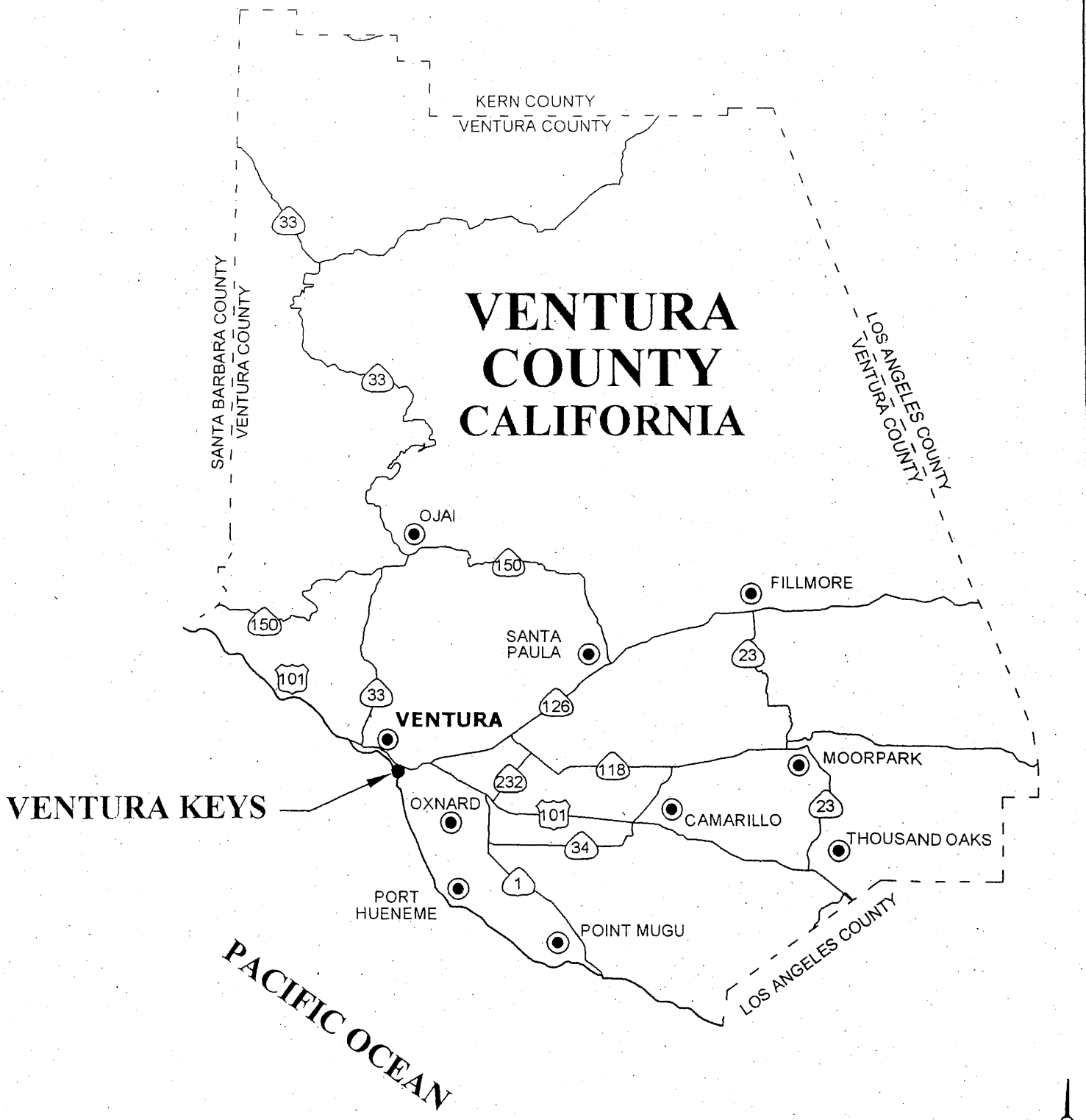
15. This Order rescinds Regional Board Order No. 97-141, except for enforcement purposes.

I, Tracy J. Egoscue, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on December 6, 2007.

Chief Deputy E.O.
for

TRACY J. EGOSCUE
Executive Officer

\jml



NO SCALE

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VENTURA KEYS
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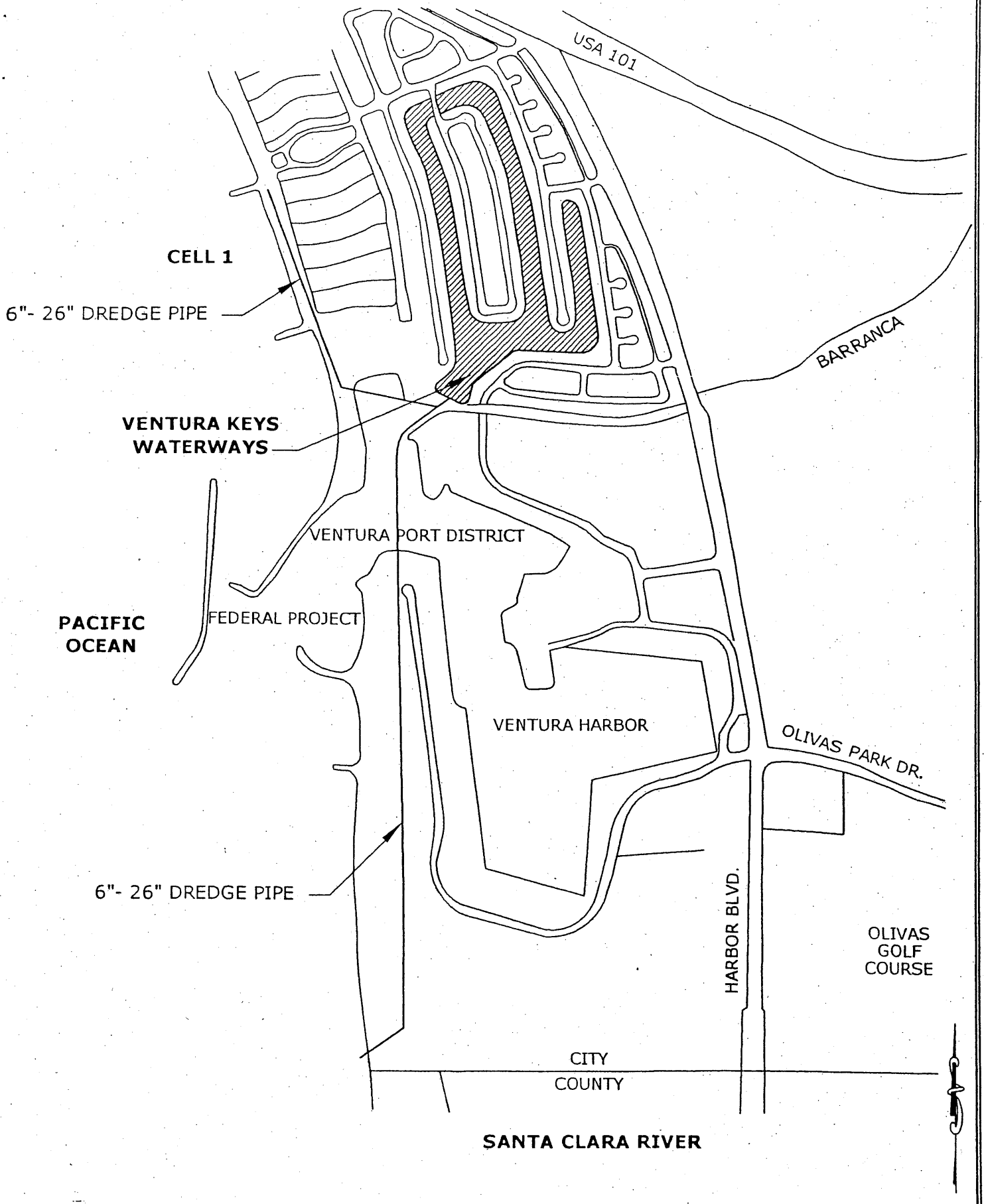
PLATE REFERENCE 0048-29 P1 | AUGUST 15, 2007 | PROJECT NUMBER 0048-29

PLATE 1



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SITE LOCATION PLAN
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VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P2	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 2

DREDGE VOLUME	
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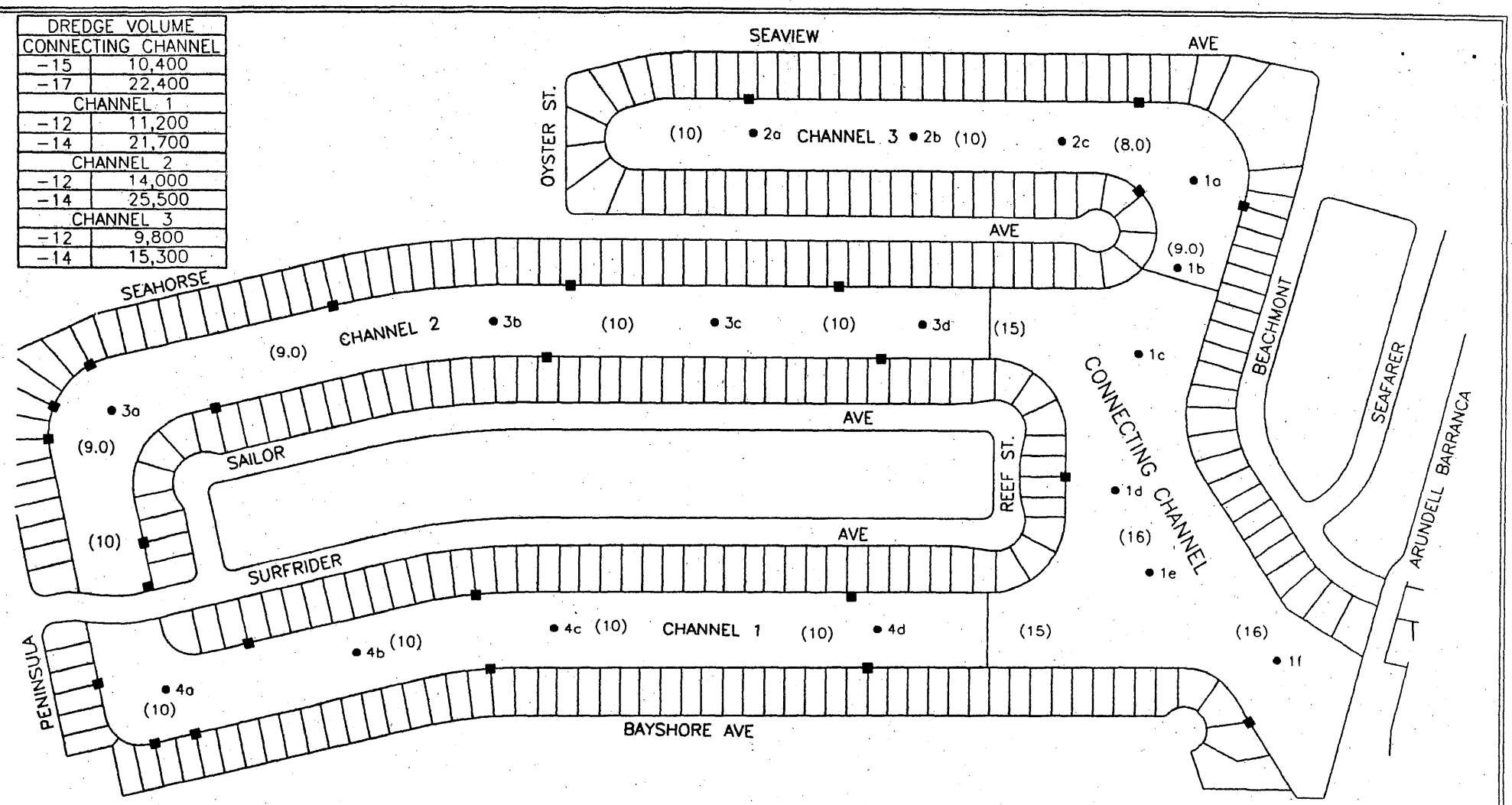

LEGEND

- SEDIMENT SAMPLING LOCATION
- STORM DRAIN LOCATIONS

(8.0) CONDITION SURVEY DEPTHS MAY 2007 IN FEET (MLLW)

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PROPOSED DREDGING AREA
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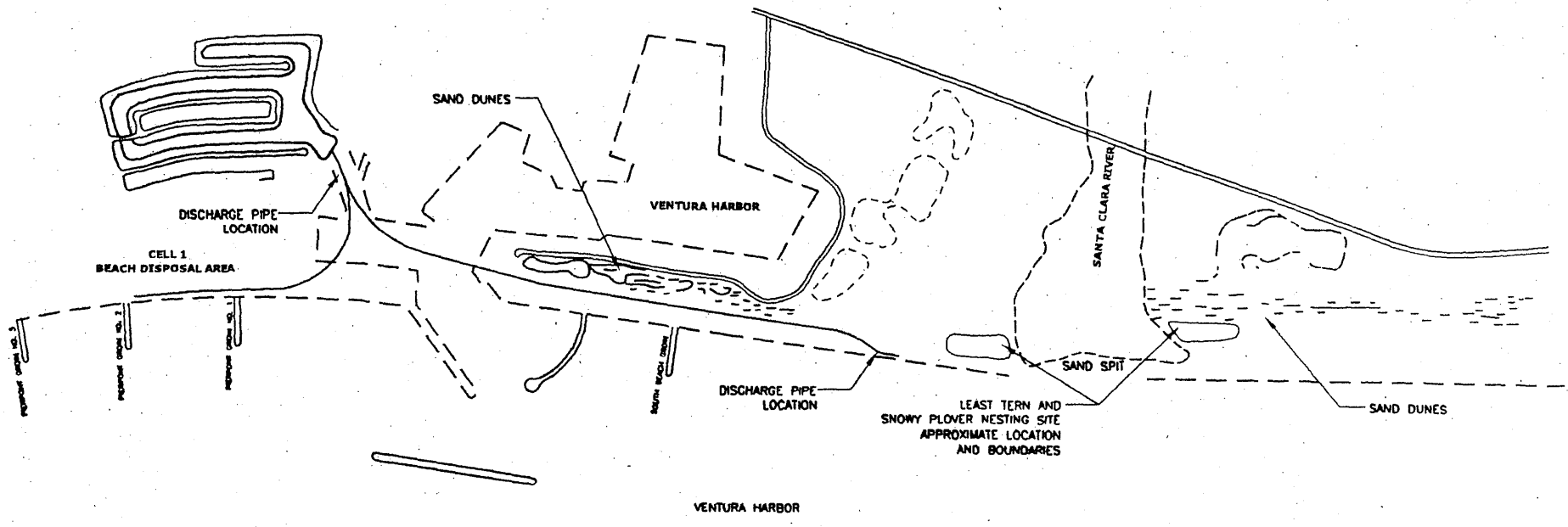
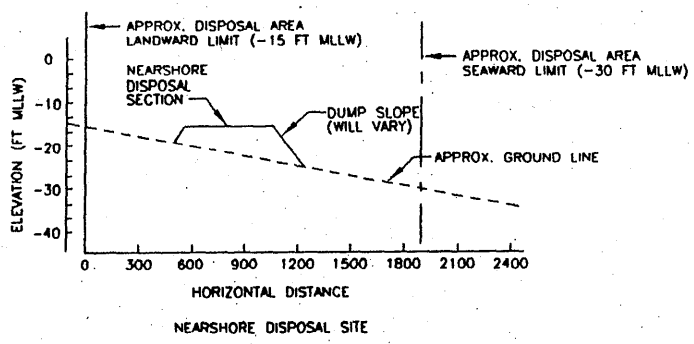
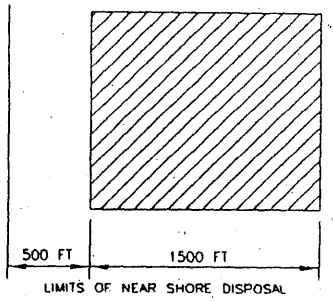
PLATE 3

PLATE REFERENCE 0048-29_P3	AUGUST 15, 2007	PROJECT NUMBER 0048-29





NEARSHORE DISPOSAL SITE



LIMITS OF NEAR SHORE DISPOSAL

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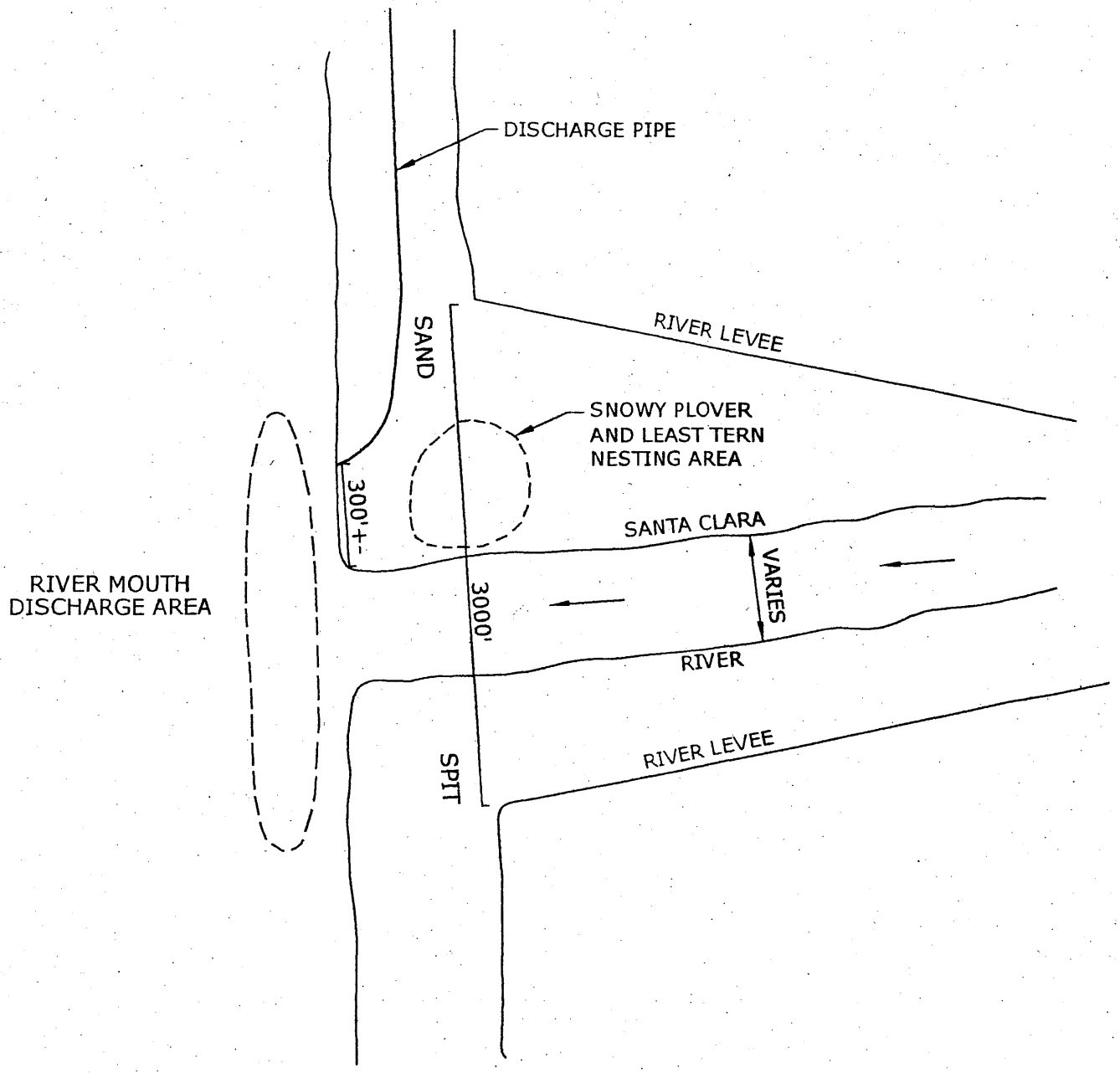
DEPOSITION SITES OF EXCAVATED MATERIAL
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P4 | AUGUST 15, 2007 | PROJECT NUMBER 0048-29

PLATE 4



NOT TO SCALE

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RIVER MOUTH DEPOSITION AREA
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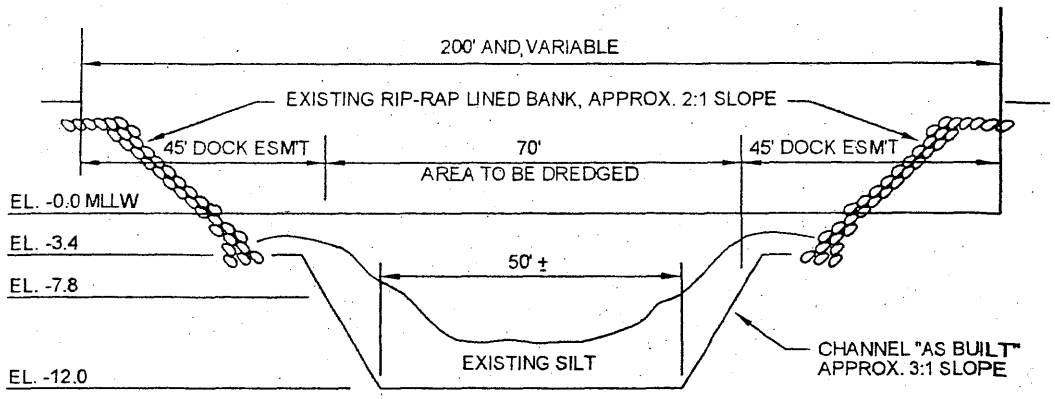
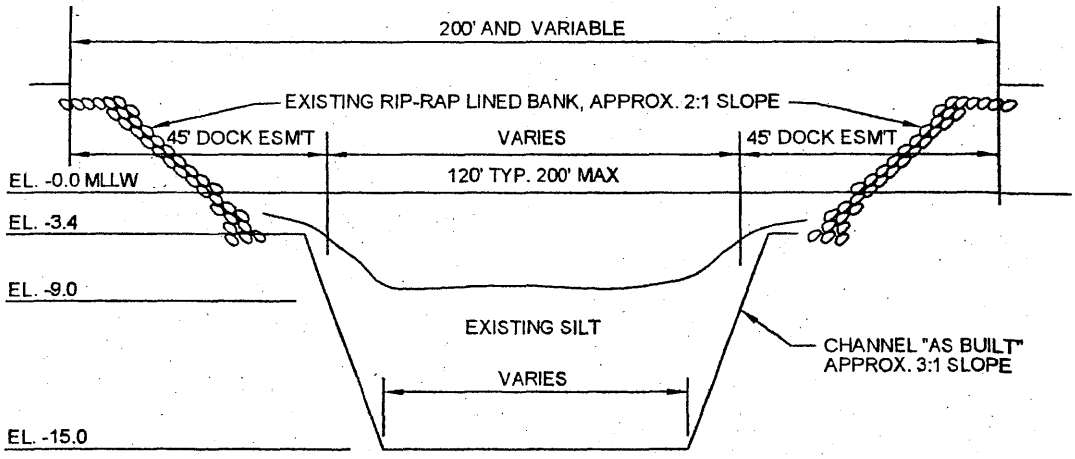
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P5	AUGUST 15, 2007	PROJECT NUMBER 0048-29

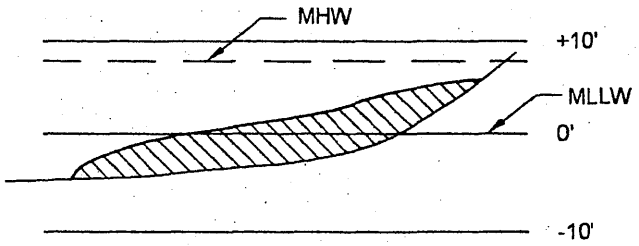
PLATE 5



TYPICAL SECTION
FOR CHANNELS 1, 2, AND 3
NOT TO SCALE



TYPICAL SECTION
FOR CONNECTING CHANNEL
NOT TO SCALE



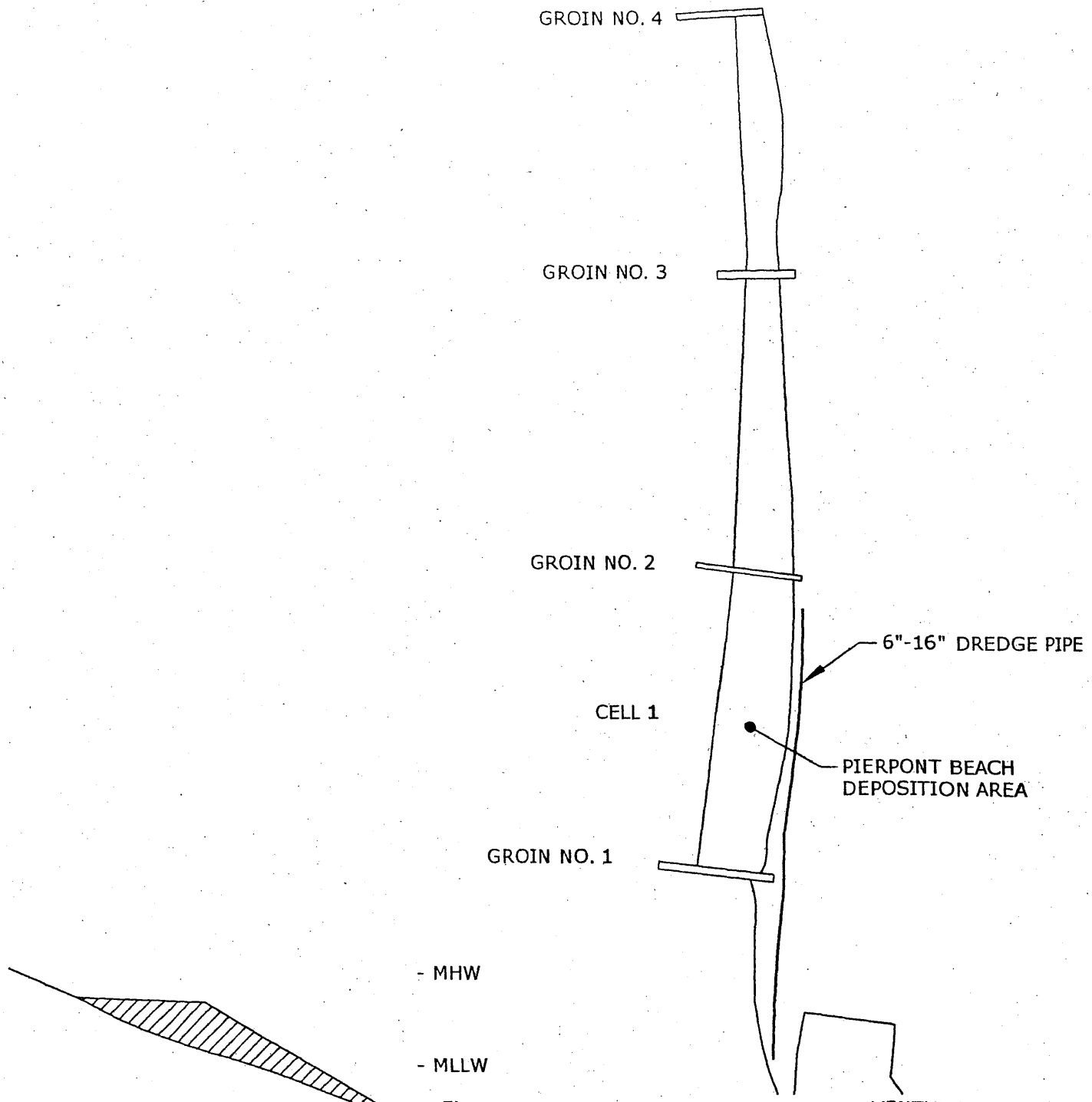
RIVER MOUTH DEPOSITION AREA
NOT TO SCALE

Applied Environmental Technologies, Inc.
4561 Market Street, Suite B • Ventura, California 93003
Phone (805)650-1400 Fax (805)650-1576

PROPOSED DERDGING AND DISPOSAL SECTIONS
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P6	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 6



TYPICAL SECTION
NOT TO SCALE

0' 600' 1200'

Applied Environmental Technologies, Inc.
4561 Market Street, Suite B • Ventura, California 93003
Phone (805)650-1400 Fax (805)650-1576

PIERPONT DEPOSITION AREA
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P7	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 7

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 7855
FOR
CITY OF SAN BUENAVENTURA
(VENTURA KEYS MAINTENANCE DREDGING)
(FILE NO. 97-127)

1. Receiving Water Monitoring

The following sampling protocol shall be undertaken by the City of San Buenaventura (City) during the proposed dredging project. Sampling for the receiving water monitoring shall commence at least one week prior to the start of the dredging and fill operations and continue at least one week following the completion of all such operations. Sampling shall be conducted a minimum of once a week during dredging operations. Sampling shall be conducted down current of the dredge sites at least one hour after the start of dredging operations. All receiving water monitoring data shall be obtained via grab samples or remote electronic detection equipment. Receiving water samples shall be taken at the following stations:

Station	Description
A	30.5 meters (100 feet) up current of the dredging operations, safety permitting.
B	30.5 meters (100 feet) down current of the dredging operations, safety permitting.
C	91.5 meters (300 feet) down current of the dredging operations.
D	Control site (area not affected by dredging operations).

The following shall constitute the receiving water monitoring program:

Water Column Monitoring

Parameters	Units	Station	Frequency
Dissolved oxygen[1]	mg/l	A-D	Weekly[2]
Light transmittance[1]	% Transmittance	" "	"
pH[1]	pH units	" "	"
Suspended solids[3]	mg/l	" "	"

[1]Measurements shall be taken throughout the water column (at a minimum, at 2-meter increments).
[2]During the first two weeks of dredging, stations shall be sampled two times per week.
[3]Mid-depth shall be sampled.

Water column light transmittance values from Stations C and D shall be compared for the near surface (1 meter below the surface), for mid-water (averaged values throughout the water column, excluding the near surface and bottom) and for the bottom (1 meter above the bottom). If the difference in % light transmittance between stations C and D for the near surface or mid-water or bottom is 30% or greater, water samples shall be collected at mid-depth (or the depth at which the maximum turbidity occurs) and analyzed for trace metals, DDTs, PCBs and PAHs. At a minimum, one set of water samples shall be collected and analyzed for these chemical constituents during the maintenance dredging operation.

In the event that the water column light transmittance values from Stations C and D exceed the 30% trigger described above, the Port shall conduct the standard water quality monitoring described above for three consecutive days following the date of exceedance. The Port shall notify the Regional Board, the California Coastal Commission, the United States Environmental Protection Agency and the United States Army Corps of Engineers within 24 hours following observance of the transmissivity exceedance. The Port shall investigate whether the exceedance is due to obvious dredging operational problems and can be corrected easily and quickly. However, if the turbidity problem persists or recurs, the Port shall look for other causes of the problem and evaluate whether additional, more aggressive best management practices are required to eliminate the exceedances; this evaluation shall be performed in consultation with the four regulatory agencies listed above.

Color photographs shall be taken at the time of sampling to record the presence and extent of visible effects of dredging operations. These photographs shall be submitted with the receiving water monitoring reports.

The Port shall provide Regional Board staff with a receiving water monitoring program field schedule at least one week prior to initiating the program. Regional Board staff shall be notified of any changes in the field schedule at least 48 hours in advance.

2. Observations

The following receiving water observations shall be made and logged daily during dredging or excavating operations:

a. Date and time;
b. Direction and estimated speed of currents;
c. General weather conditions and wind velocity;
d. Tide stage;
e. Appearance of trash, floatable material, grease, oil or oily slick, or other objectionable materials;
f. Discoloration and/or turbidity;
g. Odors;

h. Depth of dredge operations during previous day;
i. Amount of material dredged the previous day;
j. Cumulative total amount of material dredged to date.

3. General Provisions

All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" promulgated by the United States Environmental Protection Agency.

All chemical analyses shall be conducted at a laboratory certified for such analysis by the State Department of Health Services, Environmental Laboratory Accreditation Program (ELAP), or approved by the Executive Officer.

The Port shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to insure accuracy of measurements, or shall insure that both activities will be conducted by third parties under Port supervision.

A grab sample is defined as an individual sample collected in fewer than 15 minutes.

All samples shall be representative of the waste discharge under normal operating conditions.

4. Reporting

Monitoring reports shall be submitted within 10 days following each weekly sampling period. In reporting, the Port shall arrange the monitoring data in tabular form so that dates, time, parameters, test data, and observations are readily discernible. The data shall be summarized to demonstrate compliance with the waste discharge requirements. A final report, summarizing the results of the weekly monitoring and reporting the total volume discharged, shall be submitted within one month of completion of the project.

Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.

Each monitoring report must affirm in writing that:

> All analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current EPA guidelines or as specified in the Monitoring Program.

For any analysis preformed for which no procedure is specified in the EPA guidelines or in the Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the report.

5. General Provisions for Reporting

For every item where the requirements are not met, the Port shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

Each report shall contain the following completed declaration:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the_____day of_____, 20___,
at _____.

_____(Signature)

_____(Title)"

These records and reports are public documents and shall be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by:

Chief Deputy E.O. for

TRACY J. EGOSCUE
Executive Officer

Date: December 6, 2007

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

Date: July 22, 2008
Permit Application No. 4-07-118

COASTAL DEVELOPMENT PERMIT

On June 11, 2008, the California Coastal Commission granted to City of San Buenaventura, permit 4-07-118, subject to the attached Standard and Special Conditions, for development consisting of: Implement a Maintenance Dredging Program in four navigation channels in the Ventura Keys, which encompass an area of 32 acres and consist of three channels trending in a general north/south alignment (channels 1, 2, and 3) and a larger connecting channel to the south (channel 4) that ties the other three channels together and provides a link to Ventura Harbor. Approximately 350,000 cubic yards of material may be dredged over the ten year term, not to exceed 100,000 cubic yards in any one year. Material will be deposited by pipeline either: (1) within the surf zone at Cell 1 of the Pierpont Groin Field, (2) within surf zone at the mouth of the Santa Clara River, and/or (3) the near shore waters at the mouth of the Santa Clara River. Dredging is also proposed to remove sediment from the City's sailing dock area in Ventura Harbor adjacent to Marina Park. Approximately 2,000 cu. yds. of material is proposed to be dredged from the sailing dock area over the 10 year term and deposited on the sea floor about 100 ft. to the southwest of the dock in the Ventura Harbor in the Pierpont Basin. The dredging and deposition period will be subject to timing constraints for resource protection. This permit is more specifically described in the application on file in the Commission offices.

The development is within the coastal zone in Ventura County at Ventura Harbor, City of San Buenaventura; Beach deposition sites in the cities of San Buenaventura and Oxnard.

Issued on behalf of the California Coastal Commission by,

PETER DOUGLAS
Executive Director

Amber Tysor
Coastal Planner

ACKNOWLEDGMENT:

The undersigned permittee acknowledges receipt of this permit and agrees to abide by all terms and conditions thereof.

The undersigned permittee acknowledges that Government Code Section 818.4 which states in pertinent part, that: "A public entity is not liable for injury caused by the issuance. . . of any permit. . . " applies to the issuance of this permit.

IMPORTANT: THIS PERMIT IS NOT VALID UNLESS AND UNTIL A COPY OF THE PERMIT WITH THE SIGNED ACKNOWLEDGEMENT HAS BEEN RETURNED TO THE COMMISSION OFFICE. 14 Cal. Admin. Code Section 13158(a).

7-28-08
Date

City Engineer
Permittee

Exhibit 8

STANDARD CONDITIONS:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

SPECIAL CONDITIONS:

1. Timing and Implementation of Project Operations

All dredging operations, including operation of equipment, spoil disposal, placement or removal of disposal pipelines, or other construction, maintenance, material removal, or activities involving mechanized equipment shall be prohibited:

(a) Within 100 yards of, and on the entire beach seaward of, the Least Tern nesting areas, identified annually by the Department of Fish and Game, or the State Park Resource Protection Area from March 15 through August 31 to avoid disturbance during the breeding season of the Least Tern.

(b) On any part of the beach and shorefront in the project area from the Friday prior to Memorial Day in May through Labor Day in September to avoid impact on public recreational use of the beach.

(c) On any part of the beach in those portions of the project area where California grunion (of any life stage, including eggs) are present during any run periods and corresponding egg incubation periods. In the event that sediment needs to be placed below the high tide line from the date of the first predicted grunion run, as listed by the California Department of Fish and Game, to August 31, the applicant shall submit evidence, for the review and approval of the Executive Director, that surveys for grunion have been conducted pursuant to Special Condition Eight (8) at the project site and that no grunion were found. No work shall occur below the high tide line between the date of the first predicted grunion run, as listed by the California Department of Fish and Game, and August 31 without the authorization of the Executive Director.

(d) Within federally designated critical habitat of the Western Snowy Plover from March 1 through September 30 to avoid adverse effects to nesting Western Snowy Plovers, or in any other area where snowy plovers may be, if they are exhibiting nesting or reproductive activity, as documented by the surveys conducted pursuant to Special Condition Seven (7) and Special Condition Thirteen (13).

2. Dredging and Disposal Operation Plan

The applicant shall submit a dredging and disposal operation plan within thirty (30) days, but no later than two (2) weeks, prior to each dredging operation for the review and approval by the Executive Director. The plan shall include at a minimum:

(a) Site map showing the area of the Ventura Keys to be dredged and receiver site(s). Nearshore disposal areas shall be plotted in latitude and longitude coordinates. All maps shall be drawn to scale.

(b) Detailed description of the dredging operation, including the method of dredging and disposal, volume of dredged spoils to be removed, and volume to be deposited at the receiver site(s).

(c) Description (e.g., size, type, capacity) of equipment to be used, including bin capacity when hopper and/or clamshell dredging is utilized.

(d) Schedule of the dredging operation's proposed beginning and ending dates.

(e) Results of a grain size and chemical analysis, pursuant to Special Condition Three (3).

(f) Evidence that local agencies were apprised of the availability of sand resources that meet beach replenishment standards and the target destination for the current year's dredging operation.

(g) Explanation of receiver site(s) priority.

(h) All relevant monitoring reports required pursuant to this permit.

(i) Debris management plan to prevent disposal of solid debris at receiver site(s). The debris management plan shall include: sources and expected types of debris, debris separation and retrieval methods, and debris disposal methods.

3. Sediment Analysis

Physical (grain size) analysis shall be conducted of a representative sample of the sediments to be dredged from the Ventura Keys channels, consistent with the Environmental Protection Agency (EPA) and California Regional Water Quality Control Board (RWQCB) criteria for beach replenishment. Testing of sediment shall be conducted upon initiation of the dredging operation. If sampling reveals that any sediment does not meet beach replenishment standards, the applicant shall cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.

Chemical and physical analysis shall be conducted of a representative sample of the sediments to be dredged from Ventura Keys channels, consistent with the requirements of the joint

EPA/Corps *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. — Testing Manual* and most recent CRWQCB waste discharge requirements. Re-testing of the Ventura Keys sediment shall be conducted a minimum of three years from the date of the previous sediment sampling survey, where samples continue to meet EPA and CRWQCB guidelines. If the EPA or CRWQCB determine that the sediment exceeds any contaminant threshold levels, sampling shall commence at least six (6) weeks prior to any dredging event for all subsequent years. The results and analysis must be submitted for the review and approval of the Executive Director, at least two (2) weeks prior to any dredging operation.

In the event of a spill, release, or similar event that has the potential to result in contamination of sediments in the project area, the applicant shall submit a written report of the event to the Executive Director within 30 days of its occurrence, and shall commence sampling at least six (6) weeks prior to any subsequent dredging event. Sampling results and analysis must be submitted for the review and approval of the Executive Director, at least two (2) weeks prior to any dredging operation.

4. **Dredge Spoil Compatibility**

A. The dredged material shall meet all applicable federal and state beach nourishment or dredge spoil discharge requirements and comply with the grain size requirements for the locations as cited below.

B. Dredged material for beach replenishment may be disposed of at Cell 1 of the Pierpont Bay Groin Field provided that the material is composed of sediment that contains 65% or more coarse-grained material (retained on a Standard U.S. Sieve Size No. 200) and the dredged material does not contain elevated concentrations of trace metals or trace organics.

C. Dredged material may be disposed of in the surf zone or nearshore waters at the mouth of the Santa Clara River provided that the river is flowing at a rate of 100 cubic feet per second as measured at the Victoria Avenue Bridge.

D. Dredged material that does not meet the physical or chemical standards for beach replenishment or spoil discharge shall not be discharged at any of the deposition sites, except as specified above. At such time, the applicant shall identify an alternate location suitable to accept contaminated sediment. Should the dumpsite be located in the Coastal Zone, a coastal development permit shall be required.

5. **Shoreline Monitoring Program**

A. The applicant shall conduct an annual shoreline monitoring program to document shoreline changes in the project vicinity. Documentation shall include but not be limited to:

(1) Annual beach profiles shall be provided by the applicant for the term of the project. The profiles shall be taken (1) by October 15 of each year and (2) in January of each year or immediately after completion of any dredging operation. The profiles shall be at the twelve locations utilized in the baseline and shall be conducted in a manner consistent with the

profile surveys conducted annually since 1989. Minimum and maximum tide levels at the time of profile survey shall be noted on the profiles.

(2) An indication of beach width and sand volume changes to the beaches within the area profiles. The applicant shall utilize aerial photographs, to the extent feasible, to prepare the summary of beach width and sand volume changes.

(3) Data detailing the annual quantity and placement of dredged material.

B. The monitoring information shall be submitted to the Executive Director by July 1 of each year as well as to other public and federal, state, and local entities who wish to obtain such information. At a minimum, the annual reports shall be furnished to the Executive Director of the Commission, the Cities of Ventura and Oxnard, the Army Corps of Engineers (Los Angeles District) and BEACON.

6. **Caulerpa Surveys and Monitoring**

A. Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any development authorized under this coastal development permit, the applicant shall undertake a survey of the project area and a buffer area at least 35 feet beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate and inspection of dredging equipment.

B. The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Game, and the National Marine Fisheries Service.

C. Within two (2) weeks of completion of the survey, the applicant shall submit the results of the survey:

(1) for the review and approval of the Executive Director; and

(2) to the Surveillance Subcommittee to the Southern California Caulerpa Action Team (SCCAT).

D. Unless the Executive Director otherwise determines, if the survey identifies any *Caulerpa taxifolia* within the project area, the applicant shall submit to the Commission an application for a new coastal development permit or an amendment to this permit authorizing measures formulated to avoid, minimize and otherwise mitigate impacts that the proposed development might have resulting from the dispersal of *Caulerpa taxifolia* in the project area. The applicant shall: 1) refrain from commencement of the project until a valid permit or amendment is obtained, and 2) upon authorization of the permit or amendment, implement the approved mitigation measures in the manner and within the timeframe(s) specified in the approval.

7. **Sensitive Species Surveys and Monitoring**

A. The applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director, prior to commencement of dredging or discharge activities. The environmental resource specialist shall conduct a survey of the project site, to determine presence and behavior of sensitive species, one day prior to commencement of installation or removal of the discharge pipeline, or any grading activities on the beach. In the event that any sensitive wildlife species (including but not limited to California least tern, western snowy plover, California grunion) exhibit reproductive or nesting behavior, the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.

B. The applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director, prior to any dredging or discharge activities from the date of the first predicted grunion run, as listed by the California Department of Fish and Game, through August. The environmental resource specialist shall conduct a survey of the project site, to determine presence of California grunion during the seasonally predicted run period and egg incubation period, as identified by the California Department of Fish and Game. If any grunion spawning activity and/or if grunion are present in or adjacent to (within 100 yards of) the project site in any life stage, no construction, maintenance, or any grading and grooming activities on the beach or other project activities shall occur until the next predicted run in which no grunion are observed. Surveys shall be conducted for all seasonally predicted run periods in which material is proposed to be placed at any of the above sites. If material is in the process of being placed, the material shall be rough graded and returned to contours that will enhance the habitat for grunion prior to the run period. Furthermore, placement activities shall cease in order to determine whether grunion are using the beach during the following run period. The resource specialist shall provide inspection reports after each grunion run observed and shall immediately provide copies of such reports to the Executive Director and to the California Department of Fish and Game.

C. The applicant shall immediately submit documentation, prepared by the biologist or environmental specialist, which indicates the results of each pre-construction survey, including if any sensitive species were observed and associated behaviors or activities. Location of any nests observed shall be mapped.

D. The environmental specialist shall be present during the installation and removal of the discharge pipeline, and during grading of the beach. The environmental resource specialist shall require the applicant to cease work should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. The biological monitor(s) shall immediately notify the Executive Director if activities outside of the scope of Coastal Development Permit 4-07-118 occur or if habitat is removed or impacted beyond the scope of the work indicated in Coastal Development Permit 4-07-118. If significant impacts or damage occur to sensitive wildlife species, the applicant shall be required to submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.

8. **Operational Responsibilities**

It shall be the applicant's responsibility to assure that the following occurs concurrent with, and after completion of, all project operations:

(a) At the completion of each year's dredging and deposition, but prior to the timing restrictions specified in Special Condition One (1) above, the sand deposited on the beach shall be rough graded to natural beach contours to restore the dynamic shoreline habitat and to facilitate recreational use.

(b) All pipeline operations and vehicle traffic shall be limited to the 50-foot wide corridor along the proposed pipeline route.

(c) All vehicle traffic associated with placement of the pipeline, including the movement of sections of the pipeline, must be preceded by a designated individual walking ahead of the equipment being moved to ensure that no snowy plovers or other sensitive species are at risk from vehicle or equipment movement.

(d) No pipes or any other equipment shall be stored on the beach consistent with timing constraints identified pursuant to Special Condition One (1).

(e) The disposal pipeline, access routes, and equipment corridor shall not cross or disturb sand dunes and shall minimize crossings or disturbance of the wrack zone. Wrack shall be separated and retained, to the maximum extent feasible, in areas where discharge operations will result in the loss or disturbance of wrack. Wrack shall be moved to the side during discharge operations, pipeline placement, and other project activities, and replaced in its original location/configuration, to the maximum extent feasible, at the completion of project operations where possible.

(f) At no time shall disposal or associated activities interfere with the breaching or retention of flow within the Santa Clara River estuary in such a way as to cause or threaten flooding on adjacent lands.

9. **Operation Staging**

A. At least two (2) weeks prior to commencement of any dredging operation, the applicant shall submit to the Executive Director for review and approval, final staging plans that include the following:

1. A map of the location of the project construction headquarter(s).

2. Site plans for all construction staging areas and access routes, including stockpile areas for pipe and the access corridor necessary for placement of the pipeline.

3. Special staging and parking needs for heavy equipment.

B. The plan shall be consistent with the following criteria:

1. Staging areas shall be used only during active construction operations and will not be used to store materials or equipment between operations.

2. The applicant shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the intertidal zone at any time, except for the minimum necessary to implement the project.
3. Construction equipment shall not be cleaned on the beach or in the beach parking lots.
4. Construction debris and sediment shall be properly contained and secured on site with BMPs to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking.
5. Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
6. The applicant shall be responsible for removing all unsuitable material or debris within the area of placement should the material be found to be unsuitable for any reason, at any time, when unsuitable material/debris can reasonably be associated with the placement material. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
7. Stockpiled materials shall be located as far from tidal areas on the designated site(s) as feasible and in no event shall materials be stockpiled less than 30 ft. in distance from the area of tidal action or water edge.
8. Temporary erosion control measures, such as sand bag barriers, silt fencing; and/or swales, shall be implemented for all stockpiled material. These temporary erosion control measures shall be required at the site(s) prior to or concurrent with the initial grading operations and shall be monitored and maintained until all stockpiled fill has been removed from the project site. Successful implementation of erosion control measures will ensure that the material is completely stabilized and held on site.

C. The applicant shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

10. Agency Coordination

Within sixty (60) days, and no less than four (4) weeks, prior to commencement of each dredging operation, the applicant shall provide notice to local agencies and any other known interested parties of the volume and quality of shoal material, which meets beach replenishment requirements as specified in Special Condition Four, to be extracted and the reason(s) for prioritization of the target site(s). Those parties that shall receive notice include, but are not limited to, the cities of San Buenaventura and Oxnard, California Parks and Recreation, Army

Corp of Engineers, Regional Water Quality Board, BEACON, and the Executive Director of the Coastal Commission.

11. Public Access Program

Within thirty (30) days, but no later than two (2) weeks, prior to each dredging operation the applicant shall submit, for review and approval of the Executive Director, a report which describes the methods (including signs, fencing, posting of security guards, etc.) by which safe public access to or around the beach deposition sites and/or staging areas shall be maintained during dredging and discharge operations.

12. Required Approvals

Prior to commencement of any sediment management activities authorized by this coastal development permit, the applicant shall provide evidence to the Executive Director of receipt of all necessary State and Federal permits including, but not limited to, the U.S. Army Corps of Engineers, the California State Lands Commission, and the California Regional Water Quality Control Board.

13. Snowy Plover and Least Tern Monitoring

A biologist(s) or environmental specialist(s) with appropriate qualifications acceptable to the Executive Director shall conduct a survey(s) of western snowy plover and California least tern in all shorefront portions of the project area, from the northernmost point at the Cell 1 of the Pierpont Groinfield deposition site to the southernmost project limit in the vicinity of Santa Clara River. Survey(s) shall commence at least two (2) weeks prior to any dredging activities and extend at least two (2) weeks after the final dredging activity is completed. Prior to the commencement of the survey(s), the biologist(s) or environmental specialist(s) shall submit a survey methodology report for the review and approval of the Executive Director. The report shall include, at a minimum, an illustration of monitoring sites/transects, survey dates and times, names of surveyors, and survey protocol. The survey(s) shall be conducted a minimum of twice weekly and shall be designed to assess the abundance, distribution, behavior, and any disturbances to snowy plovers and least terns foraging, roosting, or nesting in the survey area. If any snowy plover or least tern exhibits reproductive or nesting behavior, then the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.

The applicant shall submit the weekly western snowy plover and California least tern monitoring reports and a comprehensive report to the Executive Director for review and approval by July 1 of each year that dredging was conducted pursuant to this permit during the prior 12 month period. The comprehensive monitoring report shall be prepared by a qualified biologist and shall at a minimum include, but not be limited to, the following components: 1) population and trend analysis; 2) analysis and illustration of population density and spatial distribution before, during, and after each dredging operation; 3) documentation of all known incidents of snowy plover and least tern disturbance (including incidents resulting in mortality, citing the probable cause of mortality) including dates, times, location, degree of plover disturbance (e.g., plover behavior such as moving, running, or flying from a disturbance or other actions such as elevating wings), source of disturbance (e.g., pedestrians, vehicles, dogs on or off leash, equestrians, predation,

spills, dredging operations and support activities including pipeline installation and removal and any beach grading or grooming activities, or vandalism of unknown origin), length of time of disturbance, level of disturbance (i.e., how many plovers made to fly or move and how far plovers were displaced), and the approximate distance between the source and plovers which resulted in the disturbance; 4) analysis of any other activities with the potential to impact the species' population in the project area, such as use patterns (e.g., public recreation), weather patterns, and habitat changes; and 5) conclusions regarding the impact of the dredging operations on the snowy plover and least tern populations and habitat.

If the Executive Director determines that adverse impacts have occurred to the species' population or habitat as a result of the dredging operations, the Executive Director shall provide written notice to the applicant of such determination. The applicant shall cease work (if work is underway) and shall notify local resource agencies in a timely manner. The applicant shall be required to submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit. Project activities shall resume only upon written approval of the Executive Director.

14. **Water Quality Monitoring**

The applicant shall conduct a water quality monitoring program that will analyze potential adverse impacts on the near-shore and offshore marine environment resulting from disposal of dredged materials into the intertidal zone. The monitoring program will be conducted each time dredged materials are deposited into or graded near the intertidal zone and will contain the following components:

(a) The applicant shall retain the services of a qualified biologist(s) or environmental resources specialist(s) with appropriate qualifications acceptable to the Executive Director. The environmental resource specialist shall monitor and document the turbidity of coastal waters during all project activities consistent with the California Regional Water Quality Control Board (RWQCB) Monitoring and Reporting Program No. 7855 for City of San Buenaventura (Ventura Keys Maintenance Dredging) (File No. 97-127). The applicant shall submit, for the review of the Executive Director, all weekly monitoring reports that indicate non-compliance with the waste discharge requirements outlined in the Monitoring and Reporting Program. The weekly reports shall be submitted within 10 days of completion of each weekly sampling period for which non-compliance is found. In addition, the applicant shall submit, for the review of the Executive Director, a final report, summarizing the weekly monitoring, within 30 days of the completion of each dredging operation.

(b) Should the water quality monitoring program yield results that indicate sediment disposal into the intertidal zone causes a significant adverse impact on water quality or the marine environment the applicant is required to submit, for review and approval by the Executive Director, a mitigation plan exploring feasible alternatives, mitigation measures, and/or alternative disposal locations for sediment disposal in the intertidal zone prior to any future deposition activities in the intertidal zone. Should the mitigation plan identify mitigation measures and/or project alternatives to minimize water quality impacts which results in a substantial change in the proposed development approved by the Commission, an amendment to the permit or a new coastal permit shall be required.

15. Assumption of Risk

By acceptance of Coastal Development Permit 4-07-118, the applicant acknowledges and agrees (i) that the project site may be subject to hazards from erosion and flooding; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

16. Project Term

All development approved pursuant to this coastal development permit shall be completed by June 11, 2018.

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

PAUL D. THAYER, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
Relay Service From TDD Phone **1-800-735-2929**
from Voice Phone **1-800-735-2922**

Contact Phone: **(916) 574-1925**
Contact FAX: **(916) 574-2555**

DEC 17 2008

File Ref: PRC 8786.9

Richard Parsons
Dredging Program Manager
City of Ventura
2271 Los Encinos Road
Ojai, CA 93023

Dear Mr. Parsons:

SUBJECT: General Lease – Public Agency Use PRC 8786.9 for the Deposition of Dredge Spoils from Ventura Keys, City of Ventura, Ventura County

Enclosed is a copy of the fully executed Lease No. PRC 8786.9, which was authorized by the California State Lands Commission at its June 24, 2008 meeting.

As specified in the Lease Special Provisions, Section 2, paragraphs 1 and 2(b) and (c), please provide the following information as required:

- Copies of all final permits and approvals at least 30 days prior to the start of any deposition activities, including temporary Right of Entry Permits issued periodically by the Department of Parks and Recreation.
- Copies of annual shoreline monitoring reports by July 1 of each year.
- Notice of the volume and quality of dredged material meeting beach replenishment standards prior to each dredging/disposal operation.
- Copy of a Dredging Disposal and Operation Plan as approved by the California Coastal Commission Executive Director prior to each dredging/disposal operation.

Our Accounting Office will be notifying you regarding a refund due or balance outstanding on this project within 60 days from the date of this letter.

The Commission appreciates your cooperation and patience in helping to complete this transaction. Please feel free to call me at (916) 574-2555 if you have any questions.

Sincerely,

Kenneth Foster
Public Land Management Specialist

Enclosure
cc: Accounting

Exhibit 9

RECORDED AT THE REQUEST OF
AND WHEN RECORDED MAIL TO:
STATE OF CALIFORNIA
California State Lands Commission
Attn: Title Unit
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

STATE OF CALIFORNIA
OFFICIAL BUSINESS
Document entitled to free recordation
pursuant to Government Code Section 27383

SPACE ABOVE THIS LINE FOR RECORDER'S USE

A.P.N. various
County: Ventura

W 26280

LEASE PRC 8786.9

This Lease consists of this summary and the following attached and incorporated parts:

Section 1	Basic Provisions
Section 2	Special Provisions Amending or Supplementing Section 1 or 4
Section 3	Description of Lease Premises
Section 4	General Provisions
Exhibit A	Location and Site Map

SECTION 1

BASIC PROVISIONS

THE STATE OF CALIFORNIA, hereinafter referred to as Lessor acting by and through the **CALIFORNIA STATE LANDS COMMISSION** (100 Howe Avenue, Suite 100-South, Sacramento, California 95825-8202), pursuant to Division 6 of the Public Resources Code and Title 2, Division 3 of the California Code of Regulations, and for consideration specified in this Lease, does hereby lease, demise and let to **the city of San Buenaventura** (aka: city of Ventura), hereinafter referred to as Lessee, those certain lands described in Section 3 subject to the reservations, terms, covenants and conditions of this Lease.

MAILING ADDRESS: 501 Poli Street, P.O. Box 99
Ventura, CA 93002

LEASE TYPE: General Lease – Public Agency Use

LAND TYPE: Filled and Submerged Sovereign Lands

LOCATION: Pierpont Bay groin field cell #1, Santa Clara River mouth surf zone, and the Santa Clara River mouth near shore zone, as shown on Exhibit A attached and by this reference made a part hereof, in the Pacific Ocean, near the city of Ventura, Ventura County

LAND USE OR PURPOSE: Deposition of dredge spoils from Ventura Keys, of up to a maximum of 100,000 cubic yards annually, not to exceed 350,000 cubic yards over the term of this Lease.

TERM: Ten years; beginning June 24, 2008; ending June 23, 2018, unless sooner terminated as provided under this Lease.

CONSIDERATION: The public use and benefit, with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interest; subject to modification by Lessor as specified in Paragraph 2(b) of Section 4 - General Provisions.

AUTHORIZED IMPROVEMENTS: N/A

LIABILITY INSURANCE: Coverage of no less than $1,000,000

SURETY BOND OR OTHER SECURITY: N/A

SECTION 2
SPECIAL PROVISIONS

BEFORE THE EXECUTION OF THIS LEASE, ITS PROVISIONS ARE AMENDED, REVISED OR SUPPLEMENTED AS FOLLOWS:

1. At least 30 days prior to the start of the deposition of any dredge spoils at any of the receiver sites shown in Exhibit A, Lessee shall provide Lessor with copies of all permits and approvals from all other agencies with jurisdiction over such activity.

2. Lessee shall comply with all Special Conditions of California Coastal Commission (CCC) Coastal Development Permit 4-07-118 (CDP), including, but not limited to:
   a. The physical and chemical analysis of sediment samples. Upon initiation of dredging activities, Lessee shall conduct physical and chemical analysis of a representative sample of sediments to be dredged from within Ventura Keys. The sample must meet current Environmental Protection Agency, California Regional Water Quality Control Board, and US Army Corps of Engineers beach replenishment standards. If any sample does not

comply with current standards, dredging operations must cease immediately and may only resume upon written approval of the CCC Executive Director, which approval shall be conveyed to Lessor. Re-testing shall be conducted at a minimum of three years from the date of the previous sampling for samples meeting current testing guidelines. For samples exceeding any contaminant thresholds, sampling must commence at least six weeks prior to any dredging activity for all subsequent years, and results must be reviewed and approved by the CCC Executive Director prior to dredging, which approval shall be conveyed to Lessor. Lessee shall provide all sampling results to Lessor upon request.

b. Shoreline monitoring. Applicant shall submit annual shoreline monitoring reports to Lessor by July 1 of each year.

c. Volume and quality notice. Lessee shall submit notice to Lessor of the volume and quality of dredged material meeting beach replenishment standards, and shall submit to Lessor a Dredging Disposal and Operation Plan, approved by the CCC Executive Director, prior to each dredging/disposal operation.

d. Physical and timing limitations. Lessee is prohibited from conducting any deposition activities under the following conditions and time periods:
   1. Within 100 yards of, and on the entire beach seaward of, identified Least Tern nesting areas from March 15 through August 31.
   2. On the beach and shorefront from the Friday before Memorial Day in May, through Labor Day in September to avoid impacts on public recreational use.
   3. On any part of the beach from the date of the first predicted California Grunion run through August 31, unless otherwise approved by the CCC Executive Director, which approval shall be conveyed to Lessor.
   4. Within federally designated Snowy Plover habitat, or any other area Snowy Plover are exhibiting nesting/breeding activity, from March 1 through September 30.

3. All tools, equipment or other property taken onto or placed within the Lease Premises or lands subject to Lessor's jurisdiction shall remain the property of the Lessee and/or its authorized contractors (collectively, Lessee). Such property shall be promptly and properly removed by Lessee, at its sole risk and expense.

4. Lessor does not accept any responsibility for any damages to any property, including any equipment, tools or machinery within the Lease Premises or lands subject to Lessor's jurisdiction.

5. No equipment or vehicle repairs will be permitted within the Lease Premises or lands subject to Lessor's jurisdiction.

6. All waste material and debris created by Lessee shall be entirely removed from the Lease Premises or lands subject to Lessor's jurisdiction.

7. All deposition activities shall be carried out in accordance with all applicable safety regulations, permits and conditions of other involved agencies.

8. Lessee agrees that printed material, such as handouts and signs or other types of printed notices installed to provide notification of the public use and benefit of the project as set forth herein shall contain and reasonably display a statement acknowledging the California State Lands Commission

as having contributed lands for the project. The statement may read as follows: "A portion of the land required for this Beach Replenishment Project was contributed by the California State Lands Commission."

9. Lessee acknowledges and agrees:
   a. The site may be subject to hazards from natural geophysical phenomena including, but not limited to waves, storm waves, tsunamis, earthquakes, flooding and erosion.

   b. To assume the risks to the Lessee and to the property that is the subject of any CDP that is issued to Lessee for development on the leased property, of injury and damage from such hazards in connection with the permitted development and use.

   c. To unconditionally waive any claim or damage or liability against the State of California, its agencies, officers, agents, and employees for injury or damage from such hazards.

   d. In addition to Section 4, Paragraph 7 "**Indemnity**" and with regard to the California Coastal Commission and the Costal Development Permit: To indemnify, hold harmless and, at the option of the California Coastal Commission, defend the State of California, its agencies, officers, agents, and employees, against and for any and all liability, claims, demands, damages, injuries, or costs of any kind and from any cause (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any alleged or actual injury, damage or claim due to site hazards or connected in any way with respect to the approval of any CDP involving this property or issuance of this Lease, any new lease, renewal, amendment, or assignment by Lessor.

10. In the event of any conflict between the provisions of Section 2 and Section 4 of this Lease, the provisions of Section 2 shall prevail.

SECTION 3

W 26280

LAND DESCRIPTION

Three parcels of tide and or submerged land situate in the bed of Pierpont Bay, in the Pacific Ocean, Ventura County, California, more particularly described as follows:

PARCEL 1

A parcel, bounded on the north by the centerline of Pierpont Groin No. 2; bounded on east by the ordinary high water mark of said bay; bounded on the south by the centerline of Pierpont Groin No. 1; and bounded on the west by a line between the waterward terminus of said centerline of Pierpont Groin No. 1 and the waterward terminus of said centerline of Pierpont Groin No. 2.

PARCEL 2

A 600 feet wide parcel, being bounded on the north by a line 900 feet North of the mouth of the Santa Clara River and perpendicular to the ordinary high water mark of said bay; bounded on east by said ordinary high water mark of said bay; bounded on the south by a line parallel to and 600 feet from said north line; and bounded on the west by a line 200 feet westerly of and running parallel to said ordinary high water mark.

PARCEL 3

A 4000 feet wide parcel, being bounded on the north by a line 500 feet South of the mouth of the Santa Clara River and perpendicular to the ordinary high water mark of said bay; bounded on east by the a line of elevation 15 feet below mean lower low water; bounded on the south by a line parallel to and 4000 feet from said north line; and bounded on the west by a line of elevation 30 feet below mean lower low water.

EXCEPTING THEREFROM any portion located landward of said ordinary high water mark of said bay.

END OF DESCRIPTION

PREPARED 5/28/08 BY THE CALIFORNIA STATE LANDS COMMISSION BOUNDARY UNIT

SECTION 4

GENERAL PROVISIONS

1. **GENERAL**

These provisions are applicable to all leases, permits, rights-of-way, easements, or licenses or other interests in real property conveyed by the State Lands Commission.

2. **CONSIDERATION**

(a) **Categories**

(1) **Rental**

Lessee shall pay the annual rental as stated in this Lease to Lessor without deduction, delay, or offset, on or before the beginning date of this Lease and on or before each anniversary of its beginning date during each year of the Lease term.

(2) **Non-Monetary Consideration**

If the consideration to Lessor for this Lease is the public use, benefit, health, or safety, Lessor shall have the right to review such consideration at any time and set a monetary rental if the State Lands Commission, at its sole discretion, determines that such action is in the best interest of the State.

(b) **Modification**

Lessor may modify the method, amount, or rate of consideration effective on each fifth anniversary of the beginning date of this Lease. Should Lessor fail to exercise such right effective on any fifth anniversary it may do so effective on any one (1) of the next four (4) anniversaries following such fifth anniversary, without prejudice to its right to effect such modification on the next or any succeeding fifth anniversary. No such modification shall become effective unless Lessee is given at least thirty (30) days notice prior to the effective date.

(c) **Penalty and Interest**

Any installments of rental accruing under this Lease not paid when due shall be subject to a penalty and shall bear interest as specified in Public Resources Code Section 6224 and the Lessor's then existing administrative regulations governing penalty and interest.

3. **BOUNDARIES**

This Lease is not intended to establish the State's boundaries and is made without prejudice to either party regarding any boundary claims which may be asserted presently or in the future.

4. **LAND USE**

(a) **General**

Lessee shall use the Lease Premises only for the purpose or purposes stated in this Lease and only for the operation and maintenance of the improvements expressly authorized in this Lease. Lessee shall commence use of the Lease Premises within ninety (90) days of the beginning date of this Lease or within ninety (90) days of the date set for construction to commence as set forth in this Lease, whichever is later. Lessee shall notify Lessor within ten (10) days after commencing the construction of authorized improvements and within sixty (60) days after completing them. Lessee's discontinuance of such use for a period of ninety (90) days shall be conclusively presumed to be an abandonment.

(b) **Continuous Use**

Lessee's use of the Lease Premises shall be continuous from commencement of the Lease until its expiration.

(c) **Repairs and Maintenance**

Lessee shall, at its own expense, keep and maintain the Lease Premises and all improvements in good order and repair and in safe condition. Lessor shall have no obligation for such repair and maintenance.

(d) **Additions, Alterations, and Removal**

(1) Additions - No improvements other than those expressly authorized in this Lease shall be constructed by the Lessee on the Lease Premises without the prior written consent of Lessor.

(2) Alteration or Removal - Except as provided under this Lease, no alteration or removal of improvements on or natural features of the Lease Premises shall be undertaken without the prior written consent of Lessor.

(e) **Conservation**

Lessee shall practice conservation of water, energy, and other natural resources and shall prevent pollution and harm to the environment. Lessee shall not violate any law or regulation whose purpose is to conserve resources or to protect the environment. Violation of this section shall constitute grounds for termination of the Lease. Lessor, by its executive officer, shall notify Lessee, when in his or her opinion, Lessee has violated the provisions of this section and Lessee shall respond and discontinue the conduct or remedy the condition within 30 days.

(f) **Toxics**

Lessee shall not manufacture or generate hazardous wastes on the Lease Premises unless specifically authorized under other terms of this Lease. Lessee shall be fully responsible for any hazardous wastes, substances or materials as defined under federal, state or local law, regulation, or ordinance that are manufactured, generated, used, placed, disposed, stored, or transported on the Lease Premises during the Lease term and shall comply with and be bound by all applicable provisions of such federal, state or local law, regulation or ordinance dealing with such wastes, substances or materials. Lessee shall notify Lessor and the appropriate governmental emergency response agency(ies) immediately in the event of any release or threatened release of any such wastes, substances, or materials.

(g) **Enjoyment**

Subject to the provisions of paragraph 5 (a) (2) below, nothing in this Lease shall preclude Lessee from excluding persons from the Lease Premises when their presence or activity constitutes a material interference with Lessee's use

and enjoyment of the Lease Premises as provided under this Lease.

(h) **Discrimination**

Lessee in its use of the Lease Premises shall not discriminate against any person or class of persons on the basis of race, color, creed, religion, national origin, sex, age, or handicap.

(i) **Residential Use**

No portion of the Lease Premises shall be used as a location for a residence or for the purpose of mooring a structure which is used as a residence. For purposes of this Lease, a residence or floating residence includes but is not limited to boats, barges, houseboats, trailers, cabins, or combinations of such facilities or other such structures which provide overnight accommodations to the Lessee or others.

5. **RESERVATIONS, ENCUMBRANCES, AND RIGHTS-OF-WAY**

(a) **Reservations**

(1) Lessor expressly reserves all natural resources in or on the Lease Premises, including but not limited to timber and minerals as defined under Public Resources Code Sections 6401 and 6407, as well as the right to grant leases in and over the Lease Premises for the extraction of such natural resources; however, such leasing shall be neither inconsistent nor incompatible with the rights or privileges of Lessee under this Lease.

(2) Lessor expressly reserves a right to go on the Lease Premises and all improvements for any purpose associated with this Lease or for carrying out any function required by law, or the rules, regulations or management policies of the State Lands Commission. Lessor shall have a right of reasonable access to the Lease Premises across Lessee owned or occupied lands adjacent to the Lease Premises for any purpose associated with this Lease.

(3) Lessor expressly reserves to the public an easement for convenient access across the Lease Premises to other State-owned lands located near or adjacent to the Lease Premises and a right of reasonable passage across and along any right-of-way granted by this Lease; however, such easement or right- of-way shall be neither inconsistent nor incompatible with the rights or privileges of Lessee under this Lease.

(4) Lessor expressly reserves the right to lease, convey, or encumber the Lease Premises, in whole or in part, during the Lease term for any purpose not inconsistent or incompatible with the rights or privileges of Lessee under this Lease.

(b) **Encumbrances**

This Lease may be subject to pre-existing contracts, leases, licenses, easements, encumbrances, and claims and is made without warranty by Lessor of title, condition, or fitness of the land for the stated or intended purpose.

6. **RULES, REGULATIONS, AND TAXES**

(a) Lessee shall comply with and be bound by all presently existing or subsequently enacted rules, regulations, statutes or ordinances of the State Lands Commission or any other governmental agency or entity having lawful authority and jurisdiction.

(b) Lessee understands and agrees that a necessary condition for the granting and continued existence of this Lease is that Lessee obtains and maintains all permits or other entitlements.

(c) Lessee accepts responsibility for and agrees to pay any and all possessory interest taxes, assessments, user fees or service charges imposed on or associated with the leasehold interest, improvements or the Lease Premises, and such payment shall not reduce rental due Lessor under this Lease and Lessor shall have no liability for such payment.

7. **INDEMNITY**

(a) Lessor shall not be liable and Lessee shall indemnify, hold harmless and, at the option of Lessor, defend Lessor, its officers, agents, and employees against and for any and all liability, claims, damages or injuries of any kind and from any cause, arising out of or connected in any way with the issuance, enjoyment or breach of this Lease or Lessee's use of the Lease Premises except for any such liability, claims, damage or injury solely caused by the negligence of Lessor, its officers, agents and employees.

(b) Lessee shall notify Lessor immediately in case of any accident, injury, or casualty on the Lease Premises.

8. **INSURANCE**

(a) Lessee shall obtain and maintain in full force and effect during the term of this Lease comprehensive general liability insurance and property damage insurance, with such coverage and limits as may be reasonably requested by Lessor from time to time, but in no event for less than the sum(s) specified, insuring Lessee and Lessor against any and all claims or liability arising out of the ownership, use, occupancy, condition or maintenance of the Lease Premises and all improvements.

(b) The insurance policy or policies shall name the State of California, its officers, employees and volunteers as insureds as to the Lease Premises and shall identify the Lease by its assigned number. Lessee shall provide Lessor with a certificate of such insurance and shall keep such certificate current. The policy (or endorsement) must provide that the insurer will not cancel the insured's coverage without thirty (30) days prior written notice to Lessor. Lessor will not be responsible for any premiums or other assessments on the

policy. The coverage provided by the insured (Lessee) shall be primary and non-contributing.

(c) The insurance coverage specified in this Lease shall be in effect at all times during the Lease term and subsequently until all of the Lease Premises have been either accepted as improved, by Lessor, or restored by Lessee as provided elsewhere in this Lease.

9. **SURETY BOND**

(a) Lessee shall provide a surety bond or other security device acceptable to Lessor, for the specified amount, and naming the State of California as the assured, to guarantee to Lessor the faithful observance and performance by Lessee of all of the terms, covenants, and conditions of this Lease.

(b) Lessor may require an increase in the amount of the surety bond or other security device to cover any additionally authorized improvements, alterations or purposes and any modification of consideration.

(c) The surety bond or other security device shall be maintained in full force and effect at all times during the Lease term and subsequently until all of the Lease Premises have been either accepted as improved, by Lessor, or restored by Lessee as provided elsewhere in this Lease.

10. **ASSIGNMENT, ENCUMBRANCING OR SUBLETTING**

(a) Lessee shall not either voluntarily or by operation of law, assign, transfer, mortgage, pledge, hypothecate or encumber this Lease and shall not sublet the Lease Premises, in whole or in part, or allow any person other than the Lessee's employees, agents, servants and invitees to occupy or use all or any portion of the Lease Premises without the prior written consent of Lessor, which consent shall not be unreasonably withheld.

(b) The following shall be deemed to be an assignment or transfer within the meaning of this Lease:

(1) If Lessee is a corporation, any dissolution, merger, consolidation or other reorganization of Lessee or sale or other transfer of a percentage of capital stock of Lessee which results in a change of controlling persons, or the sale or other transfer of substantially all the assets of Lessee;

(2) If Lessee is a partnership, a transfer of any interest of a general partner, a withdrawal of any general partner from the partnership, or the dissolution of the partnership.

(c) If this Lease is for sovereign lands, it shall be appurtenant to adjoining littoral or riparian land and Lessee shall not transfer or assign its ownership interest or use rights in such adjoining lands separately from the leasehold rights granted herein without the prior written consent of Lessor.

(d) If Lessee desires to assign, sublet, encumber or otherwise transfer all or any portion of the Lease Premises, Lessee shall do all of the following:

(1) Give prior written notice to Lessor;

(2) Provide the name and complete business organization and operational structure of the proposed assignee, sublessee, secured third party, or other transferee; and the nature of the use of and interest in the Lease Premises proposed by the assignee, sublessee, secured third party or other transferee. If the proposed assignee, sublessee, or secured third party is a general or limited partnership, or a joint venture, provide a copy of the partnership agreement or joint venture agreement, as applicable;

(3) Provide the terms and conditions of the proposed assignment, sublease, or encumbrance or other transfer;

(4) Provide audited financial statements for the two most recently completed fiscal years of the proposed assignee, sublessee, secured party or other transferee; and provide pro forma financial statements showing the projected income, expense and financial condition resulting from use of the Lease Premises; and

(5) Provide such additional or supplemental information as Lessor may reasonably request concerning the proposed assignee, sublessee, secured party or other transferee.

Lessor will evaluate proposed assignees, sublessees, secured third parties and other transferees and grant approval or disapproval according to standards of commercial reasonableness considering the following factors within the context of the proposed use: the proposed party's financial strength and reliability, their business experience and expertise, their personal and business reputation, their managerial and operational skills, their proposed use and projected rental, as well as other relevant factors.

(e) Lessor shall have a reasonable period of time from the receipt of all documents and other information required under this provision to grant or deny its approval of the proposed party.

(f) Lessee's mortgage or hypothecation of this Lease, if approved by Lessor, shall be subject to terms and conditions found in a separately drafted standard form (Agreement and Consent to Encumbrancing of Lease) available from Lessor upon request.

(g) Upon the express written assumption of all obligations and duties under this Lease by an assignee approved by Lessor, the Lessee may be released from all liability under this Lease arising after the effective date of assignment and not associated with Lessee's use, possession or occupation of

or activities on the Lease Premises; except as to any hazardous wastes, substances or materials as defined under federal, state or local law, regulation or ordinance manufactured, generated, used, placed, disposed, stored or transported on the Lease Premises.

(h) If the Lessee files a petition or an order for relief is entered against Lessee, under Chapters 7,9,11 or 13 of the Bankruptcy Code (11 USC Sect. 101, et seq.) then the trustee or debtor-in-possession must elect to assume or reject this Lease within sixty (60) days after filing of the petition or appointment of the trustee, or the Lease shall be deemed to have been rejected, and Lessor shall be entitled to immediate possession of the Lease Premises. No assumption or assignment of this Lease shall be effective unless it is in writing and unless the trustee or debtor-in-possession has cured all defaults under this Lease (monetary and non-monetary) or has provided Lessor with adequate assurances (1) that within ten (10) days from the date of such assumption or assignment, all monetary defaults under this Lease will be cured; and (2) that within thirty (30) days from the date of such assumption, all non-monetary defaults under this Lease will be cured; and (3) that all provisions of this Lease will be satisfactorily performed in the future.

11. **DEFAULT AND REMEDIES**

(a) **Default**

The occurrence of any one or more of the following events shall immediately and without further notice constitute a default or breach of the Lease by Lessee:

(1) Lessee's failure to make any payment of rental, royalty, or other consideration as required under this Lease;

(2) Lessee's failure to obtain or maintain liability insurance or a surety bond or other security device as required under this Lease;

(3) Lessee's vacation or abandonment of the Lease Premises (including the covenant for continuous use as provided for in paragraph 4) during the Lease term;

(4) Lessee's failure to obtain and maintain all necessary governmental permits or other entitlements;

(5) Lessee's failure to comply with all applicable provisions of federal, state or local law, regulation or ordinance dealing with hazardous waste, substances or materials as defined under such law;

(6) Lessee's Failure to commence to construct and to complete construction of the improvements authorized by this Lease within the time limits specified in this Lease; and/or

(7) Lessee's failure to comply with applicable provisions of federal, state or local laws or ordinances relating to issues of Health and Safety, or whose purpose is to conserve resources or to protect the environment.

(b) Lessee's failure to observe or perform any other term, covenant or condition of this Lease to be observed or performed by the Lessee when such failure shall continue for a period of thirty (30) days after Lessor's giving written notice; however, if the nature of Lessee's default or breach under this paragraph is such that more than thirty (30) days are reasonably required for its cure, then Lessee shall not be deemed to be in default or breach if Lessee commences such cure within such thirty (30) day period and diligently proceeds with such cure to completion.

(c) **Remedies**

In the event of a default or breach by Lessee and Lessee's failure to cure such default or breach, Lessor may at any time and with or without notice do any one or more of the following:

(1) Re-enter the Lease Premises, remove all persons and property, and repossess and enjoy such premises;

(2) Terminate this Lease and Lessee's right of possession of the Lease Premises. Such termination shall be effective upon Lessor's giving written notice and upon receipt of such notice, Lessee shall immediately surrender possession of the Lease Premises to Lessor;

(3) Maintain this Lease in full force and effect and recover any rental, royalty, or other consideration as it becomes due without terminating Lessee's right of possession regardless of whether Lessee shall have abandoned the Lease Premises; and/or

(4) Exercise any other right or remedy which Lessor may have at law or equity.

12. **RESTORATION OF LEASE PREMISES**

(a) Upon expiration or sooner termination of this Lease, Lessor upon written notice may take title to any or all improvements, including fills, or Lessor may require Lessee to remove all or any such improvements at its sole expense and risk; or Lessor may itself remove or have removed all or any portion of such improvements at Lessee's sole expense. Lessee shall deliver to Lessor such documentation as may be necessary to convey title to such improvements to Lessor free and clear of any liens, mortgages, loans or any other encumbrances.

(b) In removing any such improvements Lessee shall restore the Lease Premises as nearly as possible to the conditions existing prior to their installation or construction.

(c) All plans for and subsequent removal and restoration shall be to the satisfaction of Lessor and shall be completed within ninety (90) days after the expiration or sooner termination of this Lease or after compliance with paragraph 12(d), whichever is the lesser.

(d) In removing any or all the improvements Lessee shall be required to obtain any permits or other governmental approvals as may then be required by lawful authority.

(e) Lessor may at any time during the Lease term require Lessee to conduct at its own expense and by a contractor approved by Lessor an independent environmental site assessment or inspection for the presence or suspected presence of hazardous wastes, substances or materials as defined under federal, state or local law, regulation or ordinance manufactured, generated, used, placed, disposed, stored or transported on the Lease Premises during the term of the Lease. Lessee shall provide the results of the assessment or inspection to Lessor and the appropriate governmental response agency(ies) and shall further be responsible for removing or taking other appropriate remedial action regarding such wastes, substances or materials in accordance with applicable federal, state or local law regulation or ordinance.

13. **QUITCLAIM**

Lessee shall, within ninety (90) days of the expiration or sooner termination of this Lease, execute and deliver to Lessor in a form provided by Lessor a good and sufficient release of all rights under this Lease. Should Lessee fail or refuse to deliver such a release, a written notice by Lessor reciting such failure or refusal shall, from the date of its recordation, be conclusive evidence against Lessee of the termination of this Lease and all other claimants.

14. **HOLDING-OVER**

Any holding-over by Lessee after the expiration of the Lease term, with or without the express or implied consent of Lessor, shall constitute a tenancy from month to month and not an extension of the Lease term and shall be on the terms, covenants, and conditions of this Lease, except that the annual rental then in effect shall be increased by twenty-five percent (25%).

15. **ADDITIONAL PROVISIONS**

(a) **Waiver**

(1) No term, covenant, or condition of this Lease and no default or breach of any such term, covenant or condition shall be deemed to have been waived, by Lessor's acceptance of a late or nonconforming performance or otherwise, unless such a waiver is expressly acknowledged by Lessor in writing.

(2) Any such waiver shall not be deemed to be a waiver of any other term, covenant or condition of any other default or breach of any term, covenant or condition of this Lease.

(b) **Time**

Time is of the essence of this Lease and each and all of its terms, covenants or conditions in which performance is a factor.

(c) **Notice**

All notices required to be given under this Lease shall be given in writing, sent by U.S. Mail with postage prepaid, to Lessor at the offices of the State Lands Commission and the Lessee at the address specified in this Lease. Lessee shall give Lessor notice of any change in its name or address.

(d) **Consent**

Where Lessor's consent is required under this Lease its consent for one transaction or event shall not be deemed to be a consent to any subsequent occurrence of the same or any other transaction or event.

(e) **Changes**

This Lease may be terminated and its term, covenants and conditions amended, revised or supplemented only by mutual written agreement of the parties.

(f) **Successors**

The terms, covenants and conditions of this Lease shall extend to and be binding upon and inure to the benefit of the heirs, successors, and assigns of the respective parties.

(g) **Joint and Several Obligation**

If more than one Lessee is a party to this Lease, the obligations of the Lessees shall be joint and several.

(h) **Captions**

The captions of this Lease are not controlling and shall have no effect upon its construction or interpretation.

(i) **Severability**

If any term, covenant or condition of this Lease is determined by a court of competent jurisdiction to be invalid, it shall be considered deleted and shall not invalidate any of the remaining terms, covenants and conditions.

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STATE OF CALIFORNIA - STATE LANDS COMMISSION

LEASE NO. PRC 8786.9

This Lease shall become effective only when approved by and executed on behalf of the State Lands Commission of the State of California and a duly executed copy has been delivered to Lessee. The submission of this Lease by Lessor, its agent or representative for examination by Lessee does not constitute an option or offer to lease the Lease Premises upon the terms and conditions contained herein, or a reservation of the Lease Premises in favor of Lessee. Lessee's submission of an executed copy of this Lease to Lessor shall constitute an offer to Lessor to lease the Lease Premises on the terms and conditions set forth herein.

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the date hereafter affixed.

LESSEE:

CITY OF SAN BUENAVENTURA

City Engineer

6-17-08

LESSOR:

STATE OF CALIFORNIA
STATE LANDS COMMISSION

By:

Title: Chief, Division of Land Management

DEC 17 2008

Date:

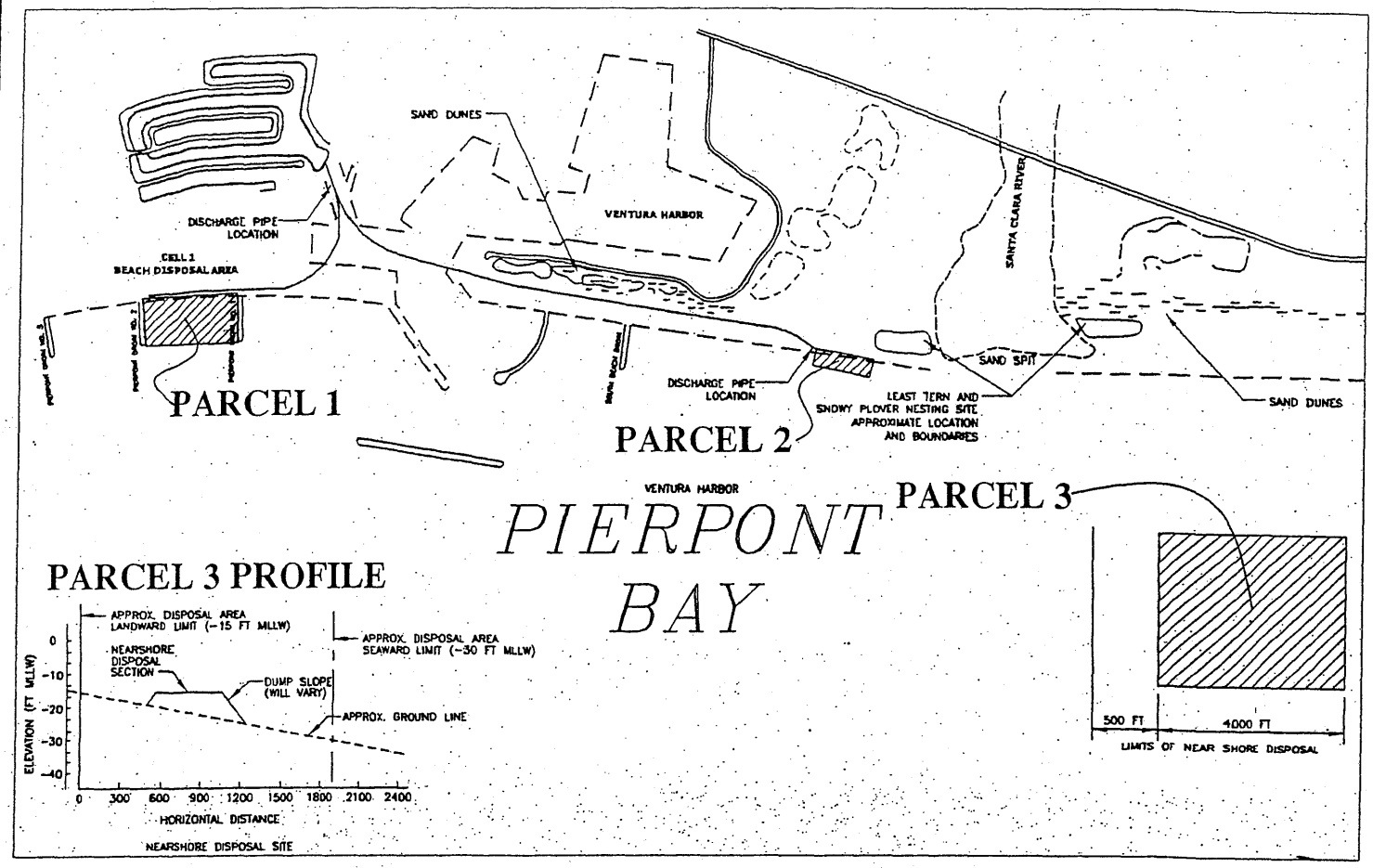
ACKNOWLEDGEMENT

This Lease was authorized by the California State Lands Commission on

JUNE 24, 2008
(Month Day Year)

SITE

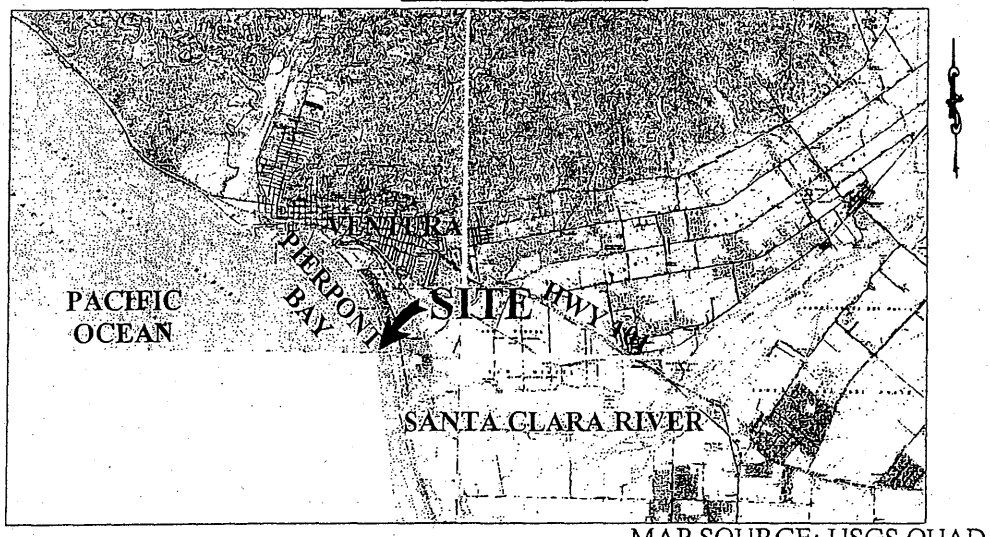
NOT TO SCALE



Deposition Sites of Excavated Material
Ventura Keys, Pierpont Bay

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

Exhibit A

W 26280
CITY OF VENTURA
GENERAL LEASE
PUBLIC AGENCY USE
VENTURA COUNTY

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

MJF 5/22/08

ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of VENTURA } SS.

On 6/17/08 (DATE), before me, Robin A. Savage, Notary Public,

personally appeared Rick Raives, who proved to me on the basis of satisfactory evidence to be the person~~(s)~~ whose name~~(s)~~ is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity~~(ies)~~, and that by his/~~her/their~~ signature~~(s)~~ on the instrument the person~~(s)~~, or the entity upon behalf of which the person~~(s)~~ acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

ROBIN A. SAVAGE
Commission # 1700898
Notary Public - California
Ventura County
My Comm. Expires Nov 1, 2010

WITNESS my hand and official seal.

Robin A. Savage
NOTARY'S SIGNATURE

PLACE NOTARY SEAL IN ABOVE SPACE

OPTIONAL INFORMATION

The information below is optional. However, it may prove valuable and could prevent fraudulent attachment of this form to an unauthorized document.

CAPACITY CLAIMED BY SIGNER (PRINCIPAL)

- ☐ INDIVIDUAL
- ☐ CORPORATE OFFICER _____ TITLE(S)
- ☐ PARTNER(S)
- ☐ ATTORNEY-IN-FACT
- ☐ TRUSTEE(S)
- ☐ GUARDIAN/CONSERVATOR
- ☐ OTHER: _____

DESCRIPTION OF ATTACHED DOCUMENT

Lease PRC
TITLE OR TYPE OF DOCUMENT

NUMBER OF PAGES

DATE OF DOCUMENT

OTHER

SIGNER (PRINCIPAL) IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)

RIGHT THUMBPRINT OF SIGNER

Top of thumbprint here

