Sylmar Ground Return System Replacement Project

DRAFT ENVIRONMENTAL IMPACT REPORT

Volume 3

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Sylmar Ground Return System Replacement Project

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Volume 3
Technical Appendices D4 - F

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Assessment of the Existing Sylmar Ground Return System Marine Electrode in Santa Monica Bay

Power Engineers

Sylmar Existing Electrode Assessment
Project No. 82701

January 8, 2016

Assessment of the Existing Sylmar Ground Return System Marine Electrode in Santa Monica Bay

prepared for

Power Engineers
Sylmar Existing Electrode Assessment
Los Angeles, California

Project No. 82701

January 8, 2016

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LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
%	percent
°C	degrees Celsius
°F	degrees Fahrenheit
Bight '08	Southern California Bight 2008 Regional Monitoring Program
Bight '13	Southern California Bight 2013 Regional Monitoring Program
BRI	Benthic Response Index
Burns & McDonnell	Burns & McDonnell Engineering, Inc.
cm	centimeter
COC	chain of custody
COP	California Ocean Plan
CRANE	Cooperative Resource Assessment of Nearshore Ecosystems
CTD	conductivity, temperature, depth probe
DDT	dichlorodiphenyltrichloroethane
DO	dissolved oxygen
EIR	Environmental Impact Report
ER-L	effects range – low
ER-M	effects range – medium
g	gram
HDPE	high density polyethylene
ind./100 m^2	individuals per 100 square meters
LADWP	Los Angeles Department of Water and Power

Abbreviation	Term/Phrase/Name
L	liter
m	meter
m^2	square meter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mL	milliliter
mm	millimeter
mmhos/cm	millimhos per centimeter
oz	ounce
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PDCI	Pacific Direct Current Intertie
pH	hydrogen ion concentration
ppt	parts per thousand
QA/QC	quality assurance/quality control
R/V	Research Vessel
SCAMIT	Southern California Marine Invertebrate Taxonomists
SCCWRP	Southern California Coastal Water Research Project
SGRS	Sylmar Ground Return System
SP	solid phase
TL	total length
TOC	total organic carbon

Abbreviation	Term/Phrase/Name
USEPA/EPA	U.S. Environmental Protection Agency
YOY	young-of-the-year
µg/L	micrograms per liter
µm	micrometer

1.0 INTRODUCTION

The Los Angeles Department of Water and Power (LADWP) is proposing to replace the existing cables and electrode array of the marine facility of the Sylmar Ground Return System (SGRS). The replacement facility will be located in the vicinity of the existing SGRS marine facility in Santa Monica Bay. The SGRS is an integral component of the Pacific Direct Current Intertie (PDCI) transmission system, which transmits bulk electrical power between Southern California and the Pacific Northwest. The SGRS functions as a safeguard to allow the PDCI to remain operational for a period of time when a fault occurs on the transmission line, thus preventing a complete outage of the line. The existing SGRS consists of two subsea electrical cables that connect to a series of 24 concrete vaults (collectively referred to as the electrode array), situated on the ocean floor approximately one mile from shore. The SGRS Replacement Project involves replacing the existing electrode cables and electrode array with two new cables and a re-designed electrode array located approximately two miles offshore in Santa Monica Bay.

In 2012, Burns & McDonnell Engineering, Inc. (Burns & McDonnell), sub-contracted to POWER Engineers (POWER), to conduct an assessment of potential impacts from the existing SGRS cables and electrode in Santa Monica Bay. The purpose of this SGRS Existing Electrode Assessment (Study) is to evaluate the potential impacts associated with removal of the SGRS cables and electrode versus the potential impacts of leaving the cables and electrode in place. The results of the Assessment will be used in the EIR to address potential impacts related to the Project.

2.0 STUDY DESIGN OVERVIEW

In support of the assessment process for the SGRS Replacement Project, LADWP commissioned a Study to assess the relative impacts of abandoning in place versus removing the existing SGRS cables and concrete vaults that comprise the electrode array. This Chapter presents the Study design and overview.

2.1 Study Objectives

This Study is an integral part of the assessment process for the SGRS Replacement Project. The Study objectives are to evaluate the existing SGRS cables and electrode to identify the potential impacts of leaving the existing cables and concrete vaults that comprise the electrode in place (abandonment) versus removing them (removal).

The Study has been designed to achieve these objectives by answering the following Study questions:

1. What is the condition of the existing cable(s) and existing electrode (physical, biological, chemical)?
2. Are existing cable / electrode conditions different than reference conditions?
3. Is the biological community at the existing electrode different than other rocky reefs in the area?

Answers to these questions will form the basis of an impact assessment for the EIR for the Project.

2.2 Study Location and Electrode Configuration

The location of the marine portion of the existing SGRS is shown in Figure 2-1. It is located offshore from the cities of Los Angeles and Malibu, California, in Santa Monica Bay within the Southern California Bight in the U.S. Geological Survey (USGS) 7.5-Minute Series Topanga, California Quadrangle. The marine segment of the existing SGRS starts at the Gladstone Vault in Pacific Palisades (a neighborhood in the City of Los Angeles) in a commercial parking lot adjacent to Gladstone's Restaurant on the south side of Pacific Coast Highway. From the Gladstone Vault to a point in Santa Monica Bay approximately 1,200 feet offshore, the SGRS consists of two three-conductor copper cables (known as the Santa Monica and Malibu cables) that are buried in the sediment below the ocean floor. The cables are insulated with ethylene propylene rubber and encased in a common polyvinyl chloride jacket. From this location to approximately 6,000 feet offshore, the SGRS consists of two three-conductor copper cables that are each insulated with high-density polyethylene (HDPE) and enclosed in a HDPE jacket (existing cables). The Santa Monica Cable was buried approximately 3 feet below the ocean floor during installation. The Malibu Cable was laid on the ocean floor, although it is now essentially buried below the surface as a result of currents and shifting sediments.

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Service Layer Credits: ESRI 2015

LEGEND

- Existing Electrode
- Existing Cable Route
- Existing Cable Route Underground
- Existing Electrode End Points

NORTH

1,250 625 0 1,250

Scale in Feet

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Figure 2-1:
Existing Sylmar
Ground Return System
Marine Electrode Location

Source: LADWP

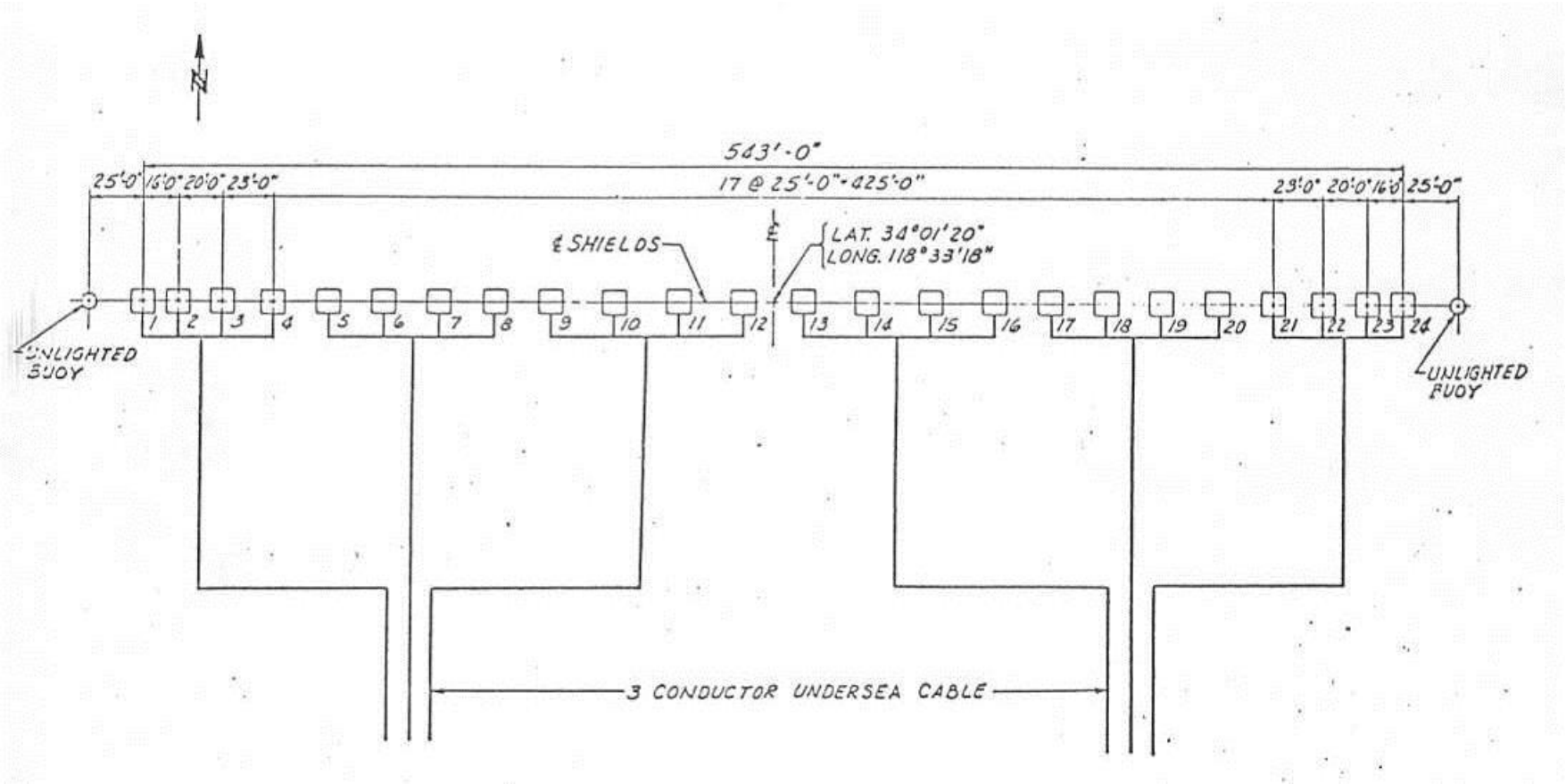
Issued: 10/26/2015

At the cable termini, each of six copper conductors (three from each cable) is spliced and divided into four conductors for a total of 24 conductors connecting to the same number of precast reinforced concrete vaults, each containing two silicon iron alloy rods. Each vault is 7 feet wide, 11 feet long, and 6 feet high. The vaults are placed from 16 to 25 feet apart, and the total length of the existing electrode array is approximately 540 feet. The existing electrode is located directly on the ocean floor, approximately 50 feet below mean lower low water. A schematic of the electrode configuration is shown on Figure 2-2.

2.3 Study Design

The Study design is based on a multiple lines of evidence approach that assesses several characteristics of the cables and electrode and compares them to conditions in other areas of Santa Monica Bay (denoted as reference areas in this Study). The Study design is summarized in Table 2-1 and a schematic of the Study design is presented on Figure 2-3.

Figure 2-2: Schematic of the Existing Sylmar Ground Return System Electrode Configuration



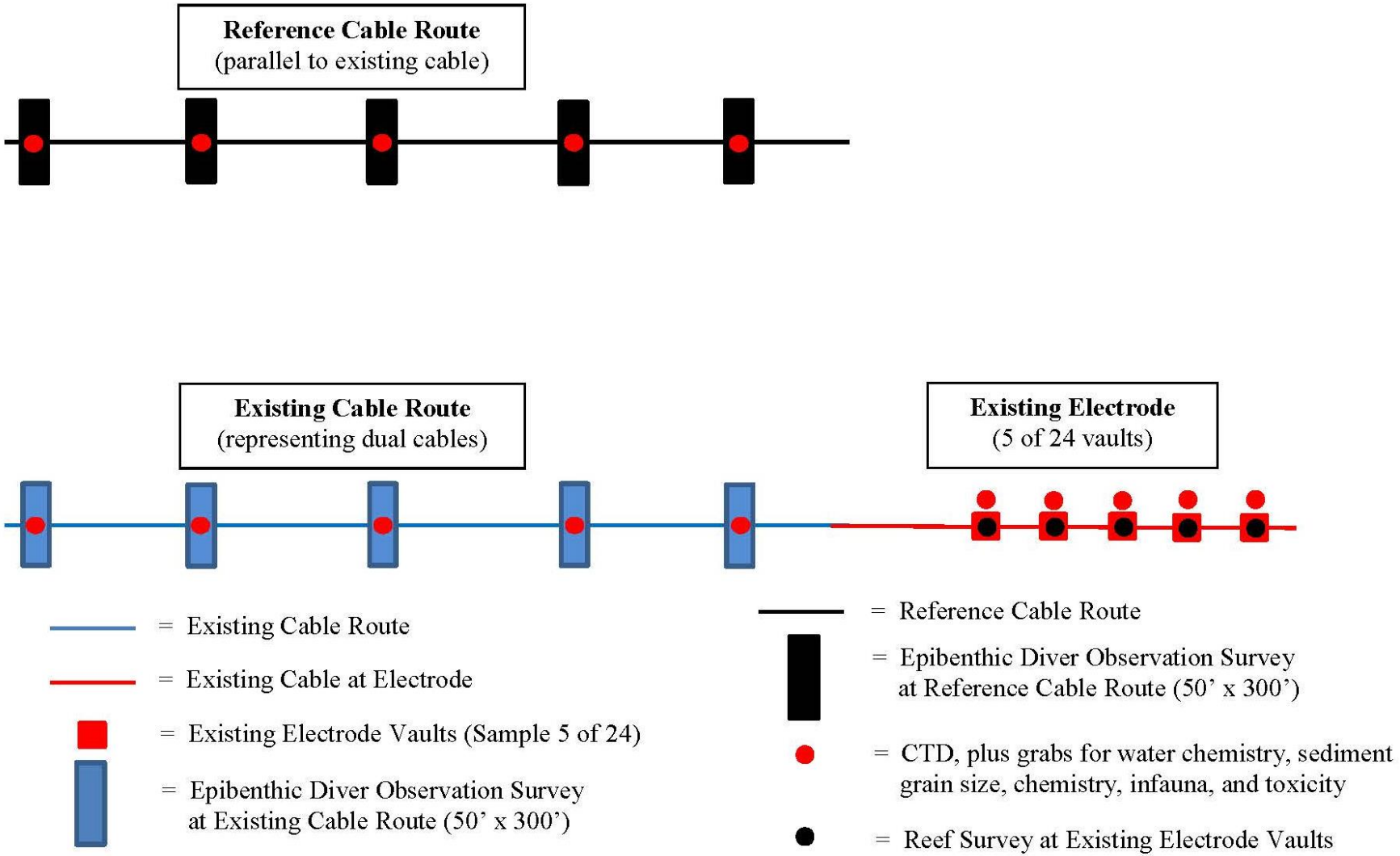
Source: LADWP personnel communication, 2015

Table 2-1: Sylmar Ground Return System Existing Electrode Assessment – Study Design Overview

Field Task	Analysis	Study Question Addressed[a]	Location / Comparison					Total # Surveys/ Samples
			Existing Cable Route	Reference Cable Route	Comparison	Existing Electrode	Comparison	
Epibenthic & Reef Surveys	Diver observations (epibenthic & reef surveys)	1, 2, 3	5 transects (50' x 300' epibenthic)	5 transects (50' x 300' epibenthic)	Existing vs. reference	5 vaults (reef survey)	Other reef surveys in the Southern California Bight	15
Marine Sediment Analysis	Chemistry	1, 2	5 grabs	5 grabs	Existing vs. reference	5 grabs (adjacent to vaults)	Existing vs. reference ER-L & ER-M[b]	15 (+ 1 QA/QC)[b]
	Grain size	1, 2	5 grabs	5 grabs	N/A	5 grabs (adjacent to vaults)	N/A	15 (+ 1 QA/QC)[b]
	Biology (infauna)	1, 2	5 grabs	5 grabs	Existing vs. reference	5 grabs (adjacent to vaults)	Existing vs. reference (statistical)	15
	Toxicity	1, 2	5 grabs	5 grabs	Existing vs. reference	5 grabs (adjacent to vaults)	Existing vs. reference (statistical)	15
Seawater Analysis	Water chemistry	1, 2	5 grabs at depth	5 grabs at depth	Existing vs. reference	5 grabs (adjacent to vaults)	Existing vs. reference (statistical)	15 (+ 1 QA/QC)[b]
	CTD[b] scans	1, 2	5 scans	5 scans	Existing vs. reference	5 scans (adjacent to vaults)	Existing vs. reference (BPJ)[b]	15

(a) Study Questions: 1. What is the condition of the existing cable(s) and electrode (physical, biological, chemical)? 2. Are existing cable / electrode conditions different than reference conditions? 3. Is the biological community at the electrode different than other rocky reefs in the area?
(b) ER-L & ER-M = effects range-low and effects range-medium; QA= quality assurance; CTD = conductivity, temperature, depth probe

Figure 2-3: Study Design Schematic



3.0 METHODS

Multiple businesses, agencies, and laboratories were involved to complete the Study as designed. LADWP staff cut off power to the electrode during diver operations. Burns & McDonnell staff provided overall Study coordination as well as processing of samples for laboratory analyses. The Vantuna Research Group (Vantuna) conducted the video analysis, epibenthic and reef surveys, and sediment and water sample collection. Samples were delivered to the following laboratories for analysis: Weck Laboratories, Inc. (Weck) (sediment and water chemistry), Aquatic Bioasssay & Consulting Laboratories, Inc. (ABC) (infauna), and Nautilus Environmental (Nautilus) (sediment toxicity). Field surveys for the Study covered a period of 3 days on January 9, 10, and 14, 2015.

3.1 Monitoring Site Locations

Three different areas were assessed as part of the Project:

- Existing cable route
- Reference cable route
- Existing electrode

The monitoring locations for these areas are presented below.

3.1.1 Cable Monitoring Sites

The locations of the monitoring sites for the existing cable and reference cable are listed in Table 3-1 and shown on Figure 3-1.

Table 3-1: Coordinates of Existing and Reference Cable Monitoring Sites

Section	Site Name	Latitude	Longitude
Existing cable	Cab-Exst-1	34.033329	-118.556123
	Cab-Exst-2	34.031372	-118.556106
	Cab-Exst-3	34.029537	-118.556090
	Cab-Exst-4	34.027579	-118.556073
	Cab-Exst-5	34.025622	-118.556056
Reference cable	Cab-Ref-1	34.033422	-118.550685
	Cab-Ref-2	34.031465	-118.550669
	Cab-Ref-3	34.029630	-118.550653
	Cab-Ref-4	34.027672	-118.550636
	Cab-Ref-5	34.025715	-118.550619

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Service Layer Credits: ESRI 2015

LEGEND

- Epibenthic Survey
- Existing Electrode End Points
- Existing Electrode
- Existing Cable Route
- Existing Cable Route Underground
- Reference Epibenthic Survey
- Referance Cable Route

NORTH

1,250 625 0 1,250

Scale in Feet

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Figure 3-1:
Study Design Schematic of Existing and Reference Cable Monitoring Sites

Source: LADWP

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3.1.2 Electrode Vault Monitoring Sites

Prior to the field work for the Study, five of the existing 24 electrode vaults were selected for assessment at random using a random numbers generator (Excel Function RANDBETWEEN). The coordinates of the five vaults are identified in Table 3-2 along with the coordinates for the buoys marking the East (Buoy A) and West (Buoy B) ends of the electrode. An aerial image of the vaults is shown on Figure 3-2.

Table 3-2: Coordinates of Existing Electrode Vault Monitoring Sites

Section	Site Name	Latitude[a]	Longitude[a]
Existing electrode	Buoy A (East)	34.023691	-118.554847
	Vault-3	34.023580	-118.555372
	Vault-5	34.023508	-118.555513
	Vault-8	34.023428	-118.555778
	Vault-11	34.023386	-118.556042
	Vault-21	34.023281	-118.556589
	Buoy B (West)	34.023691	-118.557004

(a) Locations are approximate based on aerial images

The coordinates listed in Table 3-2 are approximate based on the vault layout depicted on Figure 2-2 and the aerial imagery presented on Figure 3-2. The location of the vaults selected for the full biological assessments (discussed in Section 3.2) were determined by divers in the field who started at Vault-1 (marked by Buoy A) and continued west until each of the pre-determined vaults were located.

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Service Layer Credits: ESRI 2015

LEGEND

- Existing Electrode
- Existing Cable Route
- Existing Electrode End Points

NORTH

75 37.5 0 75

Scale in Feet

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Figure 3-2:
Aerial Image of Existing Electrode Vaults in Santa Monica Bay

Source: LADWP

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3.2 Sample Collection and Survey Methods

The field assessments conducted at each monitoring site are summarized in Table 3-3.

Table 3-3: Sampling Point Locations and Analyses

Section	Site Name	Latitude	Longitude	Analyses of Sediment Grain Size, Chemistry, Infauna, Toxicity	Water Analyses of Water Quality Parameters (CTD[a]), Chemistry
Existing cable	Cab-Exst-1	34.033329	-118.556123	X	X
	Cab-Exst-2	34.031372	-118.556106	X	X
	Cab-Exst-3	34.029537	-118.556090	X	X
	Cab-Exst-4	34.027579	-118.556073	X	X
	Cab-Exst-5	34.025622	-118.556056	X	X
Reference cable	Cab-Ref-1	34.033422	-118.550685	X	X
	Cab-Ref-2	34.031465	-118.550669	X	X
	Cab-Ref-3	34.02963	-118.550653	X	X
	Cab-Ref-4	34.027672	-118.550636	X	X
	Cab-Ref-5	34.025715	-118.550619	X	X
Existing electrode	Buoy A (East)	34.02369128	-118.554847	No samples taken	No samples taken
	Vault-3	34.02358	-118.555372	X	X
	Vault-5	34.023508	-118.555513	X	X
	Vault-8	34.023428	-118.555778	X	X
	Vault-11	34.023386	-118.556042	X	X
	Vault-21	34.023281	-118.556589	X	X
	Buoy B (West)	34.02369128	-118.557004	No samples taken	No samples taken

(a) CTD stands for conductivity, temperature, and depth collected with a CTD profiler throughout the water column

3.2.1 Marine Sediment Sampling and Analysis

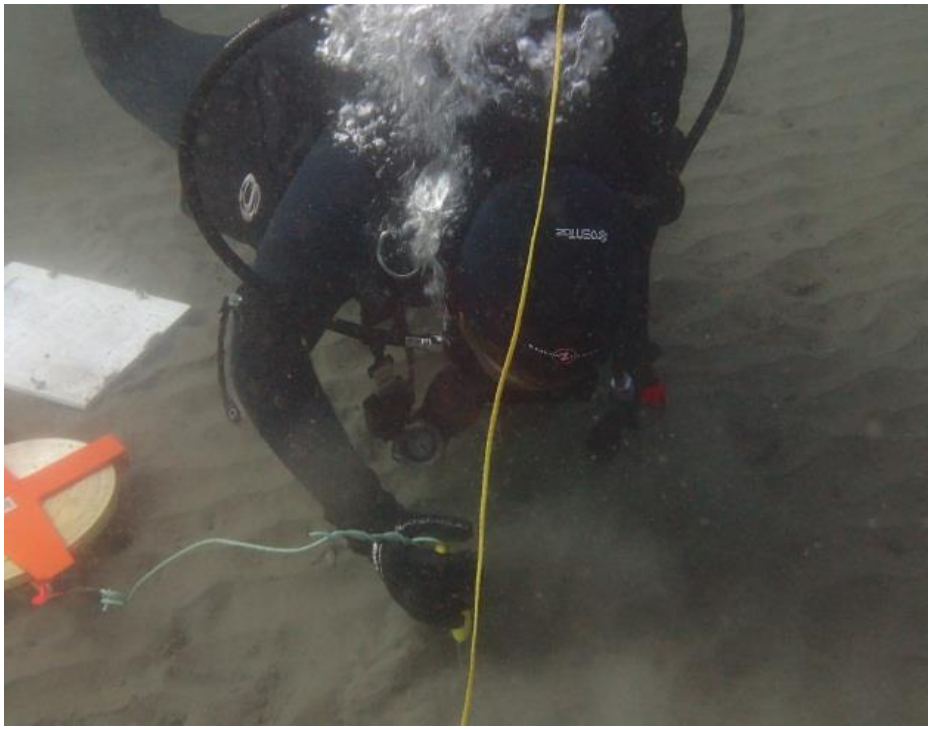
This subsection discusses the procedures used to collect, process, and analyze the marine sediments collected as part of the Study.

3.2.1.1 Sediment Sample Collection

Marine sediment sampling and analysis was performed to assess the physical, chemical, biological, and toxicological characteristics of the sediments along the existing cable route, reference cable route, and existing electrode (a schematic of the Study design is summarized in Table 2-1 and shown on Figure 2-3).

The Vantuna dive team collected sediment samples at each of the five existing cable route monitoring sites by hand using diver cores in the center of the epibenthic transect survey area (Figure 3-3).

Figure 3-3: Diver Transect at Cable Route



Source: Vantuna dive team, 2015

The diver cores consisted of polyvinyl chloride cylinders approximately 3 inches in diameter and 4 inches deep fitted with removable rubber lids on both ends (Figure 3-4). Three sets of diver cores were collected: one set for infaunal analyses; one set for sediment grain size and chemistry; and one set for toxicity analyses. A total of 18 diver cores were collected from each site (6 cores per set) and transported to the deck of the Research Vessel (R/V) Xenarcha for processing.

Along the reference cable route, sediment samples were collected following the sampling protocols described above, except the samples were collected with a Van Veen grab sampler operated from the deck of the R/V Yellowfin (Figure 3-5). Multiple Van Veen grabs were taken at each of the five reference cable route transects to collect sufficient material for grain size, chemistry, infauna, and toxicity analyses. Samples were collected from the five monitoring sites along the reference cable route for each sediment analysis (chemistry, grain size, infauna, and toxicity).

Figure 3-4: Diver Cores

Figure 3-5: Van Veen Grab Sampler

Along the existing electrode, diver cores were collected at monitoring sites adjacent to (within 25 feet) the five randomly selected existing electrode vaults that were assessed in the reef survey (see Table 3-2). A total of five samples were collected adjacent to the electrode vaults for each sediment analysis (chemistry, grain size, infauna, and toxicity).

3.2.1.2 Benthic Sample Processing

After collection, divers transported the samples to the deck of the R/V Xenarcha for processing. Sample processing was conducted following the protocols developed for the Southern California Bight 2013 Regional Marine Monitoring Survey (Bight '13 Contaminant Impact Assessment Committee, 2013). Benthic sample processing protocols are summarized in this subsection. The full report is presented in Appendix A.

A sample grab was determined to be acceptable if the surface of the grab was even, minimal surface disturbance occurred, and the penetration depth was at least 5 centimeters (cm). Rejected grabs were discarded and re-sampled. For a given site, the contents of one set of sediment grabs was used for benthic infaunal analysis, one set of grabs was used for chemistry and grain size analysis, and one set of grabs was used for evaluation of toxicity.

The Project Manager from Burns & McDonnell was responsible for collecting all of the required information associated with each monitoring station occupation and each grab sampling event.

The required station occupation information included:

- Station Identification Number
- Date
- Time of day
- Vessel name
- Weather and sea conditions
- Target depth

The required grab event information included:

- Time of day for event (when the grab was on the seafloor)
- Latitude and longitude at time of event (when grab on bottom)
- Depth of water (when grab hits bottom)
- Penetration
- Sediment odor
- Sediment color
- Presence of shell hash
- Sample types produced from the sediment grab

The field description of sediments was required following measurement of penetration depth. The sediment was characterized as coarse sand, fine sand, silt, clay, gravel, or of a mixed type. The presence of petroleum tar and shell hash was also recorded. Obvious odors, such as hydrogen sulfide (the odor of rotten eggs), petroleum, other odors, or a lack of noticeable odors were recorded. General sediment colors (i.e., black, green, brown, red, olive, or gray) were also recorded.

3.2.1.3 Benthic Infauna Samples

Samples collected for benthic infaunal analyses were rinsed through a 1.0-millimeter (mm) (0.04-inch) mesh screen and transferred to a labeled quart jar. A 7 percent magnesium sulfate seawater solution was added to the sample for approximately 30 minutes to relax the collected specimens. The magnesium sulfate solution was then decanted and replaced with a 10 percent buffered formalin solution to preserve the organisms in the sample. The benthic infaunal samples were placed in a cooler, sealed, and delivered under chain of custody (COC) procedures to ABC Laboratories in Ventura, California, within 1 week of collection.

Qualified taxonomists at ABC Laboratories identified each organism to the lowest possible taxon and tabulated species counts (the final report is presented in Appendix C). The taxonomists used the Southern California Association of Marine Invertebrate Taxonomists (SCAMIT) Edition 5 for nomenclature and orthography (SCAMIT, 2008).

Standard community measures (i.e., total abundance, number of taxa, and diversity indices) as well as the Benthic Response Index (BRI), developed by the Southern California Coastal Water Research Project SCCWRP (Smith et al., 2001), were calculated for each sample. The BRI establishes numerical criteria (i.e., community response levels) correlated with the pollution tolerance of species on an abundance-weighted average that relates to habitat quality. The BRI measure is scaled such that values less than 25 represent reference conditions and characterize a “healthy” community and good habitat quality (Table 3-4). Four levels of community response representing increasing degrees of community change are defined: marginal community deviation (BRI 25 – 34), loss of biodiversity (BRI 35 – 43), loss of community function (BRI 44 – 72), and defaunation or exclusion of most species (BRI > 72). Thus, BRI values greater than 25 represent increasing degrees of poorer habitat quality characterized by increasingly less “healthy” infaunal communities. The BRI is applicable for open coastal waters for the inner, middle, and outer shelf depth zones (i.e., 10-30 meters [m], 30-120 m, and 120-200 m, respectively).

Table 3-4: Benthic Response Index Levels, Characterization, Definition, and Thresholds

Level	Characterization	Definition	BRI Threshold
Reference	Reference	Reference conditions	< 25
Response Level 1	Marginal deviation	> 90% tolerance interval for reference index values	25 – 34
Response Level 2	Biodiversity loss	> 25% of reference species lost	35 – 43
Response Level 3	Community function loss	> 90% of echinoderm and 75% arthropod species lost	44 – 72
Response Level 4	Defaunation	> 90% of reference species lost	> 72

Source: Smith et al., 2001

3.2.1.4 Sediment Chemistry and Grain Size Samples

Sediment chemistry and grain size samples were collected from 6 of the 18 diver cores (existing electrode and cable monitoring sites) or from a single Van Veen grab (reference monitoring sites). Sediment from the dive cores or Van Veen grab were emptied into a stainless steel bowl and homogenized using a stainless steel scoop (a plastic scoop is acceptable for total organic carbon [TOC] and grain size samples). Scoops were washed with seawater and rinsed with de-ionized water between stations. For Van Veen grabs, sediment in contact with or within 1 cm of the metal sides of the grab was avoided to prevent sample contamination.

The following container types, samples sizes, and storage requirements were used; the analytical laboratory supplied all sample containers for all parameters.

- **Sediment Grain Size –** Using a stainless steel or plastic scoop, approximately 100 grams (g) of sediment material was collected at each monitoring site. The sample was placed in a 4-ounce (oz) (118 milliliter [mL]) plastic container, filling it 80 percent full, and taking care to leave an air space at the top. Samples were stored at approximately 4 degrees Celsius (°C) by placing them on wet ice or in a refrigerator until returned to the laboratory. Samples were not frozen and were returned to the analytical laboratory within 1 week of sampling.
- **Total Organic Carbon –** Using a stainless steel scoop, approximately 200 g of sediment material was collected at each monitoring site. The samples were placed in an 8-oz amber glass container with a Teflon-lined lid filling it 80 percent full, taking care to leave an air space at the top. Samples were stored at < 4 °C by placing them on wet ice.
- **Trace Metals**-- Using a stainless steel scoop, approximately 200 g of surface sediment were collected at each station. The sample was placed in an 8-oz amber glass container with a Teflon-

lined lid, filling it 80 percent full, and taking care to leave an air space at the top. Samples were stored at < 4 °C by placing them on wet ice.

- **Trace Organics –** Using a stainless steel scoop, approximately 200 g of sediment material were collected at each monitoring site. The sample was placed in an 8-oz amber glass container with a Teflon-lined lid, filling it 80 percent full, and taking care to leave an air space at the top. Samples were stored at < 4 °C by placing them on wet ice.
- **Polycyclic Aromatic Hydrocarbons (PAHs) –** Using a stainless steel scoop, approximately 200 g of sediment material were collected at each monitoring site. The sample was placed in an 8-oz amber glass container with a Teflon-lined lid, filling it 80 percent full, and taking care to leave an air space at the top. Samples were stored at < 4 °C by placing them on wet ice.

Labeling of sample containers was the responsibility of the field sampling crew. The following minimum information was required on each sample label: (1) project name; (2) monitoring site ID; (3) sampling date and time; and (4) parameter.

Sediment samples collected as part of the Study described above were analyzed for the constituents listed in Table 3-5.

Table 3-5: Sylmar Existing Electrode Assessment Marine Sediment Chemistry Analyte List

Analyte	Method
Total organic carbon	USEPA 9060M
Total solids	SM 2540 B
Grain size	Plumb, 1981
Arsenic	USEPA 6020A
Cadmium	USEPA 6020A
Chromium	USEPA 6020A
Copper	USEPA 6020A
Lead	USEPA 6020B
Mercury	USEPA 7471A
Nickel	USEPA 6020B
Silver	USEPA 6020A
Zinc	USEPA 6020A
2,4’-DDD	USEPA 8081A
2,4’-DDE	USEPA 8081A
2,4’-DDT	USEPA 8081A
4,4’-DDD	USEPA 8081A

Analyte	Method
4,4'-DDE	USEPA 8081A
4,4'-DDT	USEPA 8081A
Total Detectable DDTs	USEPA 8081A
Dieldrin	USEPA 8081A
Other chlorinated pesticides	USEPA 8081A
Individual PCB congeners	USEPA 8082
Total PCBs	Calculation
Individual PAHs	USEPA 8270C SIM
Total detectable PAHs	Calculation

3.2.1.5 Sediment Toxicity Samples

The third sediment sample was processed for sediment toxicity assessments. A minimum of 2 liters (L) of sediment was collected for toxicity and placed into 4 mm food grade-quality poly open bags (samples were double bagged). Toxicity samples were kept at 4 °C on ice in coolers until delivery to the toxicity lab (Nautilus) for toxicity assessments.

The following information was required on each sample label:

- Station number
- Sampling date
- Parameter
- Split (if required)

Each labeled container was then placed on wet ice at 4 °C (the samples were not frozen). All samples were delivered to Nautilus under proper COC procedures within 72 hours of collection.

A 10-day solid phase (SP) bioassay test using the marine amphipod *Eohaustorius estuarius* was conducted in accordance with procedures outlined in the amphipod testing manual (United States Environmental Protection Agency [USEPA], 1994) as well as guidance from the Sediment Quality Objectives Program document (SCCWRP, 2009) to establish baseline toxicity levels for sediment collected along the existing cable, reference cable, and existing electrode. Appropriate laboratory control samples were run concurrently with the amphipod test to verify the test was run within acceptable control measures. Detailed methods can be found in Appendix E.

E. estuarius and laboratory control sediment were supplied by Northwestern Aquatic Sciences of Newport, Oregon. Prior to testing, an aliquot of each sample was sieved through a 500-micrometer (μm) Nitex® mesh screen to remove native organisms and verify reliable test organism recovery, with the exception of sample Cab-Exst-1. This sample had a larger grain size compared with the other samples and was therefore sieved using a 1-mm screen. All sediments were thoroughly homogenized prior to sieving and distribution to test chambers. Composited sediment from all test areas and laboratory control sediment were placed in five replicate 1-L glass jars to a thickness of 2 cm, to which was added approximately 800 mL of 30 ± 2 parts per thousand (ppt) seawater. The test was run under continuous light at a temperature of 15 ± 2 °C and under gentle aeration.

The test was run for 10 days. On Day 0, an initial set of water quality parameter measurements were made including temperature, dissolved oxygen (DO), hydrogen ion concentration (pH), and salinity for each replicate. Ammonia was measured in the overlying water of a composite of replicates from each test area and the control. At test initiation, 20 organisms were randomly distributed to each test chamber. Animals remaining in the water column and exhibiting abnormal behavior were replaced after 1 hour. The chambers were covered with petri dishes to minimize evaporation. Daily water quality measurements including DO, temperature, salinity, and pH were taken for one replicate for each treatment, and daily observations of obvious mortality, sublethal effects, and abnormal behavior were recorded. At test termination on Day 10, the sediments from the chambers were sieved through a 0.5-mm screen and the number of survivors was recorded. Test results were compared to test acceptability criterion (i.e., 90 percent mean survival in controls at test termination).

The experimental design, bioassay procedures, and water quality measurements for the SP toxicity test using *E. estuarius* are shown in Table 3-6.

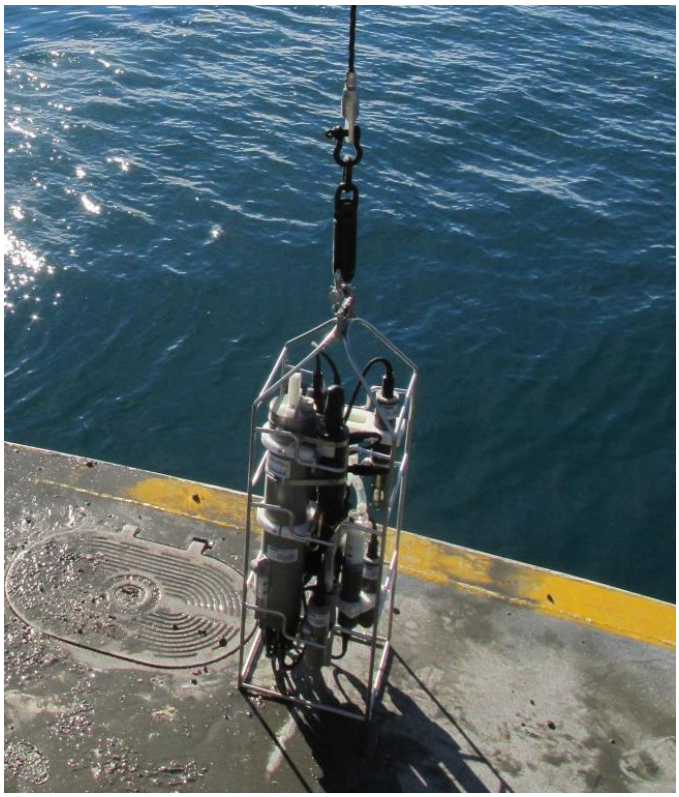
Table 3-6: Test Parameters for the 10-day Solid Phase Bioassay with *Eohaustorius estuarius*

Toxicity Test Experimental Design 10-Day Solid Phase Bioassay		
Sample identification		Cab-Exst-1, Cab-Exst-2, Cab-Exst-3, Cab-Exst-4, Cab-Exst-5, Cab-Ref-1, Cab-Ref-2, Cab-Ref-3, Cab-Ref-4, Cab-Ref-5, Buoy A (East), Vault-3, Vault-5, Vault-8, Vault-11, Vault-21, Buoy B (West)
Test species		Marine amphipod – *Eohaustorius estuarius*
Acclimation/holding time		13 days
Age/size class		3-5 mm
Test procedures		EPA 600/R-94/025 (USEPA, 1994) and SCCWRP, 2009
Test type/duration		10 days; survival
Sample storage conditions		4 °C, dark
Control water source		Natural seawater collected offshore SIO Pier in La Jolla, California. 20µm filtered. Seawater was diluted to 32 ppt with de-ionized water prior to testing.
Recommended water quality parameters	Temperature	15 ± 1 °C test-wide mean, 15 ± 3 °C instantaneous
	Salinity	30 ± 2 ppt
	Dissolved oxygen	≥ 60% saturation; ≥ 6.0 mg/L
	pH	Monitor drift
	Overlying total ammonia	No recommended concentration
	Overlying un-ionized ammonia	No recommended concentration
	Interstitial total ammonia	< 60 mg/L
	Interstitial un-ionized ammonia	< 0.8 mg/L
Photoperiod		Continuous light (24 hour)
Test chamber		1-L glass jar
Replicates/sample		20
No. of organisms/replicate		5, plus 1 surrogate test chamber for water quality readings
Exposure volume		800 mL
Feeding		Prior to test initiation only during holding period
Water renewal		None
Test acceptability criteria		≥ 90 % mean survival in lab control

3.2.2 Water Sample Collection and Water Quality Monitoring

Seawater sampling and analysis was performed to assess the physical and chemical characteristics of the water along the existing cable route, reference cable route, and existing electrode (a schematic of the study design is summarized in Table 2-1 and depicted on Figure 2-3). Seawater sampling and water quality analysis was conducted by the Vantuna dive team from the deck of the R/V Yellowfin. A conductivity, temperature, and depth (CTD) instrument was the primary tool used for determining the physical properties of seawater throughout the length of the water column. Along with conductivity, temperature, and depth, the CTD profiler used in the Study (SEACAT SBE 19plusV2; see Figure 3-6) also measured salinity, DO, pH, and transmissivity. These parameters were measured throughout the length of the water column (sea surface to within 2 m of the bottom) by lowering the CTD instrument over the side of the R/V Yellowfin. Data collected during each cast were stored in the instrument's memory and were also recorded in real time on the deck support computer. The scans were binned and averaged by 1-m depth intervals using software provided by Seacat SBE. The unit was lowered at a speed of 0.5 meters per second so that each depth interval was sampled several times. CTD scans were conducted at 15 stations: 5 along the existing cable route, 5 along the reference cable route, and 5 along the existing electrode.

Figure 3-6: SEACAT SBE 19plusV2



Field observations for CTD casts were recorded onsite and entered into a field log for ambient water quality monitoring. This field log includes station location information (i.e., site name, station, latitude, and longitude), time and date of sampling, CTD cast number, station depth, tide stage, visual observations (i.e., trash, floatable material, oil and grease, discoloration, or turbidity), odor, current speed, and direction.

Water chemistry samples were collected at the same 15 locations identified for the CTD scans (Figure 3-1 and Table 3-3). One duplicate sample was also collected at a randomly selected site for quality assurance / quality control (QA/QC) purposes. Seawater samples were collected using a 10-L acrylic Niskin bottle (Figure 3-7). The water sampler was slowly lowered to within approximately 2 m off the seafloor and then triggered to capture a water sample at depth using a weighted messenger. Care was taken to avoid disturbance of the sediment prior to triggering the sampler. Upon retrieval of the Niskin bottle, the bottle was checked to verify that the rubber stop-valve was engaged. Water samples were poured from the Niskin bottle directly into laboratory-certified, contaminant-free sample bottles and stored on ice in a cooler until delivery. The sample bottles were labeled with the following data: project name, time, date, station identification, water depth, preservative, and analysis to be performed.

Figure 3-7: Niskin Water Sampler

Water chemistry samples were analyzed by Weck Laboratories in City of Industry, California. Halogenated organic compounds and chlorine produced oxidants (measured as total residual chlorine) were targeted for analysis based upon literature reviews that revealed the potential for halogenated and chlorinated compounds to form in the vicinity of subsea electrodes during electrode operation. Background levels of metals were targeted for analysis because they are a common sediment contaminant that can be re-suspended by construction activities and have the potential to cause toxicity to marine species. A complete list of constituents analyzed from the water samples is listed in Table 3-7.

Table 3-7: Sylmar Existing Electrode Assessment Seawater Chemistry Analyte List

Analyte	Method
Arsenic	USEPA 1640
Cadmium	USEPA 1640
Chromium	USEPA 1640
Copper	USEPA 1640
Lead	USEPA 1640
Mercury	USEPA 7470A
Nickel	USEPA 1640
Silver	USEPA 1640
Zinc	USEPA 1640
Chlorine, Total Residual	SM 4500-CI-G
2,4,6-Trichlorophenol	USEPA 625
2,4-Dichlorophenol	USEPA 625
2-Chlorophenol	USEPA 625
4-Chloro 3-Methylphenol	USEPA 625
Other halogenated organics	USEPA 625

3.2.3 Epibenthic and Reef Surveys

Two types of diver surveys were conducted to characterize the epibenthic flora and fauna of the existing electrode, as well as the existing and reference cable routes. The fish sampling survey recorded fish density and size distribution along belt transects near the vaults and on the seafloor, in the mid-portion of the water column, and in the top-portion of the water column when kelp canopy was present. The invertebrate and algae survey (or swath) recorded density of large (> 2.5 cm) invertebrates and stipitate (stalked) algae (see final report in Appendix A). The sampling approach was based on monitoring protocols developed for Santa Monica Bay and the Southern California Bight (Tenera, 2006; Pondella et

al., 2015). All surveys were conducted by the Vantuna dive team, which accessed sample sites from the R/V Xenarcha.

3.2.3.1 Epibenthic Surveys

The epibenthic surveys were used to assess the biological community on the surface of the soft-bottom habitat associated with the existing cable route (see Table 3-1 and Figure 3-1). At each of the five monitoring sites along the existing cable route, replicate survey areas (transects) 300 feet in length and 50 feet in width (see Figure 3-1) were assessed by three divers from the Vantuna dive team. During each assessment, the team recorded within each of the transects all observed flora and fauna to the lowest possible taxonomic unit. Based on the survey, a list of observed species was generated and a suite of biological community metrics was calculated (e.g., fish density and biomass, macro invertebrate and algal density, and physical habitat characteristics). A second survey using these same protocols was conducted along the five monitoring sites along the reference cable route.

3.2.3.2 Reef Surveys

The reef surveys were conducted at the concrete vaults that comprise the existing electrode by the Vantuna dive team. A high level, non-quantitative visual assessment of all 24 vaults (see Figure 3-2) was conducted where divers noted whether biological communities associated with the vaults appear relatively consistent among boxes or highly variable. In addition, 5 of the 24 vaults (Table 3-2) were randomly selected for a detailed quantitative assessment prior to initiation of field work, as described below.

Fish sampling was conducted in three portions of the water column (bottom, midwater, and canopy where present) by two divers along each transect. Due to the small footprint of each individual vault, a series of five fish transects were performed over the entire length of the vault system. Divers identified, counted and sized all conspicuous fishes in each transect and recorded gender when visually distinguishable (e.g., California sheephead [*Semicossyphus pulcher*]). Total length (TL) was estimated to the nearest cm for small fish (< 30 cm TL), and to the nearest 5-cm interval for larger fish (> 30 cm TL). For schools of fish too large to size individuals, the number of fish was estimated within size bins.

Invertebrate and algae swath surveys were conducted to estimate the density of conspicuous, solitary, and mobile invertebrates as well as specific macroalgae. Individual invertebrates (> 2.5 cm) and macroalgae were counted on all five surfaces of each of five randomly pre-selected vaults (approximately 27 square meters [m^2] per vault). Cracks and crevices were searched and understory algae pushed aside. Any organism with more than half of its body inside the swath area was counted. The following minimum size criteria were also applied when counting macroalgal species:

- Giant kelp (*Macrocystis pyrifera*) taller than 1 m; number of stipes counted at 1 m above the substrate; *Macrocystis* is not subsampled
- Pom pom kelp (*Pterygophora californica*) and southern sea palm (*Eisenia arborea*) taller than 30 cm
- Oarweed (*Laminaria farlowii)* and fringed sieve kelp (*Agarum fimbriatum*) greater than 10 cm wide
- Chain bladder kelp (*Cystoseira osmundacea*) greater than 6 cm wide

These surveys followed the California Department of Fish and Wildlife's Cooperative Resource Assessment of Nearshore Ecosystems (CRANE) protocols (Tenera, 2006; Pondella et al., 2015). The CRANE surveys conducted at the electrode yielded a suite of biological metrics (fish density and biomass, macro invertebrate and algal density, and physical habitat characteristics) that was compared to those at similar reefs in the area. The biological communities of nine natural reefs along the Malibu coast were sampled from 2007-2012 (see Table 3-8 and Figure 3-8). A subset of surveys in the region was selected based on similar depths zones and comparable habitat. Each site consisted of at least 250 m of coastline, and was surveyed subtidally at approximately 15 m depth.

Table 3-8: Natural Reefs Surveyed Along the Malibu Coast by Year

Survey Year	Fish and Swath Sampling Locations[a]								
	Deep Hole West	Deep Hole East	Leo Carrillo	Nicholas Canyon West	Nicholas Canyon East	Encinal Canyon	Little Dume West	Little Dume East	Escondido
2007	F[a]	F	F/S	F/S	F/S		F/S	F/S	
2008		F/S	F/S	F/S			F/S		
2010									F/S
2011		F/S	F/S			F/S	F/S		
2012		F/S	F/S			F/S	F/S		

Source: Pondella and Williams, 2015, see Appendix A
(a) F indicates fish sampling was performed; S indicates swath sampling was performed

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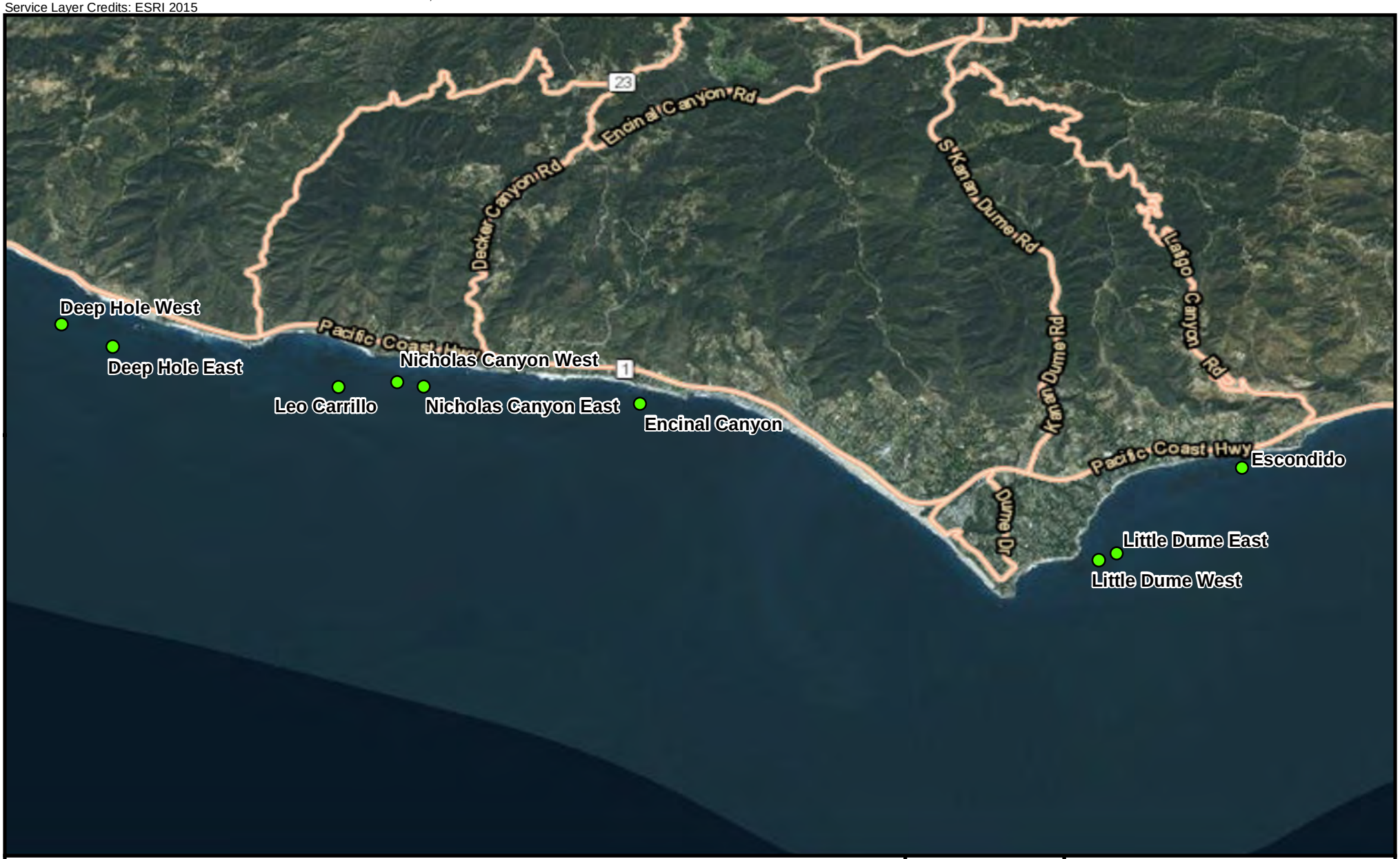

LEGEND

- Natural Reef Location

NORTH

1.75 0.875 0 1.75

Miles

BURNS McDONNELL

Figure 3-8:
Natural Reefs Surveyed Along the Malibu Coast 2007-2012

Source: LADWP; Vantuna Research Group

Issued: 10/26/2015

Prior to analysis, filter criteria were applied to remove fish species that would disproportionately weight the data toward a certain site for certain statistics. Pelagic species that are not characteristic inhabitants of rocky reef habitats or are highly mobile (e.g., northern anchovy [*Engraulis mordax*], bonito [*Sarda chiliensis*], Pacific chub mackerel [*Scomber japonicas*], Pacific barracuda [*Sphyraena argentea*]) were excluded from the data set for all analyses because they occurred infrequently, but when they were present they generally occurred in very large numbers. TL estimates were converted to biomass using standard species-specific length-weight conversions from the literature (e.g., Williams et al., 2013). Density or biomass density was then summed across all three portions (bottom, midwater, and canopy) of each transect, and then scaled to number per 100 m^2. Similarly, invertebrate and algae densities from the swath transects were also scaled to number per 100 m^2.

3.3 Quality Assurance/Quality Control

QA/QC protocols were used throughout the sample collection and analysis. For sediment analyses, a pre-cruise equipment checkout was performed on the diver cores and Van Veen sampling gear to verify that all surfaces and hinges were free of defects, rust, and missing hardware, and that all connectors, cables, and/or chains were in good condition. The "jaws" of the sampler were inspected to confirm minimal gaps existed when closed. Prior to sampler deployment and between sampling sites, decontamination of the equipment was performed. The sampler was scrubbed on the inside with Alconox and rinsed with seawater.

In addition to the sediment samples collected at the monitoring sites for the Study, one site was selected at random (Cab-Exst-5) for duplicate sediment collection and analyses. At this monitoring site, a duplicate sediment sample was collected and analyzed for the constituents listed in Table 3-7. The results were used to assess the accuracy and precision of the analytical data using the appropriate data quality objectives.

For seawater analyses, the following QA/QC protocols were followed. A pre-cruise equipment checkout and calibration of the CTD was conducted within 24 hours prior to the first survey. This checkout included a visual inspection of the equipment, battery status, and computer output tests for CTD sensors. During the survey, routine visual inspections of cast profiles were performed so immediate action could be taken to resample sites with poor data quality. Before beginning a cast, a 3-minute equilibration was performed to bring the CTD sensors to thermal equilibration with the ambient seawater. A post-cruise calibration was performed within 24 hours of the last sampling for the survey.

Prior to deployment of the Niskin bottle water sampler and between sampling sites, decontamination of the water sampling equipment was performed. The Niskin bottle was scrubbed on the inside with a

residue-free biodegradable detergent (e.g., Alconox), rinsed with site water, and rinsed three times with tap water. To assess the effectiveness of the de-contamination procedure, one field blank sample was collected at site Cab-Exst-5-BL. For the field blank, approximately 1 L of de-ionized water was poured into the decontaminated 10-L Niskin bottle, circulated throughout, then poured into the appropriate sample jars for constituent analysis in the laboratory. The field blank samples were stored on ice and in a cooler with the other samples until delivery to Weck. A duplicate water sample was also collected and analyzed from monitoring site Cab-Exst-5-BL (Cab-Exst-5-DUP).

Chemical analyses were performed at a nationally-certified laboratory (Weck Laboratories, which is certified under the National Environmental Laboratory Accreditation Program). Performance was evaluated via the use of standard reference materials or laboratory control samples, method blanks, surrogates, spiked samples, duplicate samples, and internal QC samples. Precision and accuracy objectives were established for method reporting limits, spike recoveries, and duplicate analyses.

3.4 Sample Labelling and Tracking

This section discusses the sample labeling, field data sheets, and chain of custody procedures used during the Study.

3.4.1 Labeling of Samples

Each sample was identified, labelled, and tracked following Bight ’13 protocols (Bight ’13 Contaminant Impact Assessment Committee, 2013). Labels were printed by Burns & McDonnell staff prior to the survey and included the station number, parameter, date, and split if necessary (i.e., 1 of 1, 2 of 3, etc.). Dates were reported as month/day/year. External labels were covered with clear postal tape to prevent them from falling off the container if they did not stick on some surfaces.

3.4.2 Field Data Sheets

Field data sheets were filled out for each monitoring site over the course of the surveys (the field data sheets are provided in Appendix B). Benthic data sheets and cruise logs were retained by Burns & McDonnell and Vantuna until sampling was completed. Upon completion of laboratory identifications, original data sheets were sent to Burns & McDonnell for incorporation into the final report.

3.4.3 Chains of Custody

Samples were considered to be in custody if they were: (1) in the custodian’s possession or view, (2) retained in a secured place (under lock) with restricted access, or (3) placed in a secured container. The principal documents used to identify samples and to document possession were COC records, field log

books, and field tracking forms. COC procedures were used for all samples throughout the collection, transport, and analytical process, and for all data and data documentation, whether in hard copy or electronic format.

COC procedures were initiated during sample collection. A COC record was provided with each sample or sample group. Each person who had custody of the samples signed the form and confirmed that the samples were not left unattended unless properly secured. Minimum documentation of sample handling and custody included the following:

- Sample identification
- Sample collection date and time
- Any special notations on sample characteristics
- Initials of the person collecting the sample
- Date the sample was relinquished to the laboratory
- Shipping company and waybill information

The completed COC form was placed in a sealable plastic envelope that traveled with the listed samples and was signed by the person transferring custody of the samples. The condition of the samples was recorded by the receiver. COC records were included in the final analytical report prepared by the laboratory, and are considered an integral part of that report.

4.0 RESULTS

Reef surveys were conducted on January 9, 2015, and epibenthic biological surveys were conducted on January 9 and 10, 2015. Sediment sampling was conducted on January 9, 2015 (existing cable and existing electrode site locations) and January 14, 2015 (reference cable locations). Water sampling and water quality monitoring were conducted on January 7, 2015. This chapter describes the results of the sampling events.

4.1 Water Sample Collection and Water Quality Monitoring

During seawater sampling, seas were relatively calm with 0.9 to 1.2-m (3 to 4-foot) swells out of the southwest and winds were generally light (0 to 15 mph) coming out of the west-southwest. Water depth varied among the stations and was correlated with increased distance from shore. Station ID, field coordinates, date and time of sample collection, and water depth are summarized in Table 4-1 for both sampling and water quality monitoring.

Table 4-1: Water Sample and Water Quality Monitoring Station Information

Section	Site Name	Date	Time	Latitude	Longitude	Water Depth (feet)	Water Depth (meters)
Existing cable	Cab-Exst-1	1/7/2015	1208	34.033329	-118.55612	29	8.8
	Cab-Exst-2	1/7/2015	1220	34.031372	-118.55611	35	10.7
	Cab-Exst-3	1/7/2015	1227	34.029537	-118.55609	38	11.6
	Cab-Exst-4	1/7/2015	1238	34.027579	-118.55607	40	12.2
	Cab-Exst-5	1/7/2015	1247	34.025622	-118.55606	42	12.8
Reference cable	Cab-Ref-1	1/7/2015	1030	34.033422	-118.55069	31	9.4
	Cab-Ref-2	1/7/2015	1014	34.031465	-118.55067	35	10.7
	Cab-Ref-3	1/7/2015	0958	34.029630	-118.55065	37	11.3
	Cab-Ref-4	1/7/2015	0934	34.027672	-118.55064	39	11.9
	Cab-Ref-5	1/7/2015	0910	34.025715	-118.55062	42	12.8
Existing electrode	Vault-3	1/7/2015	1306	34.023580	-118.55537	46	14.0
	Vault-5	1/7/2015	1313	34.023508	-118.55551	47	14.3
	Vault-8	1/7/2015	1348	34.023428	-118.55578	46	14.0
	Vault-11	1/7/2015	1326	34.023386	-118.55604	45	13.7
	Vault-21	1/7/2015	1335	34.023281	-118.55659	36	11.0

4.1.1 Results of Chemical Analyses of Water Samples

Summary results of chemical analyses of water samples collected from the existing cable, reference cable, and existing electrode are presented in Table 4-2. California Ocean Plan (COP) Daily Maximum and Instantaneous Maximum water quality objectives for the protection of marine aquatic life are provided for comparison to sample results. Detection limits and raw data for all water chemistry analytes are provided in Appendix D.

Concentrations of trace metals were substantially less than the most conservative COP Water Quality Objectives (Daily Maximum), with the exception of chromium collected at one of the reference cable sites (Cab-Ref-4), where the concentration (27.00 micrograms per liter [μg/L]) exceeded the COP Instantaneous Maximum Water Quality Objective (20 μg/L).

Concentrations of total residual chlorine were less than the most conservative COP standard (daily maximum) by at least two orders of magnitude at all sites and concentrations of halogenated organic compounds were below detection limit (as well as COP water quality objectives) at all sites (Table 4-2).

4.1.2 Results of Water Quality Measurements

A summary of the results of water quality parameters measured by the SEACAT SBE datalogger at the surface, along the bottom, and the range throughout the entire water column for each station monitored in the Study are provided in Table 4-3. Profiles of dissolved oxygen, temperature, pH, conductivity, salinity, and transmissivity at all sites are provided in Appendix A. Profiles of dissolved oxygen, temperature, pH, and salinity at a reference cable site (Cab-Ref-5), an existing cable site (Cab-Exst-5), and an existing electrode site (Vault-8) are shown on Figure 4-1, Figure 4-2, and Figure 4-3 for comparison.

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Table 4-2: Summary of Chemistry Analytical Results for Seawater Samples Collected from Electrode Array and Reference Areas

Analyte	Units	Methods	COP Daily Max[a]	COP Instant Max[b]	Existing Cable						Reference Cable						Existing Electrode					
					Cab-Exst-1	Cab-Exst-2	Cab-Exst-3	Cab-Exst-4	Cab-Exst-5	Mean	Cab-Ref-1	Cab-Ref-2	Cab-Ref-3	Cab-Ref-4	Cab-Ref-5	Mean	Vault-3	Vault-5	Vault-8	Vault-11	Vault-21	Mean
Trace Metals (total)																						
Arsenic	µg/L	EPA 1640	**32**	**80**	0.70	0.81	0.64	0.72	0.71	**0.72**	0.70	0.72	0.74	0.76	0.74	**0.73**	0.75	0.68	0.68	0.64	0.75	**0.70**
Cadmium	µg/L	EPA 1640	**4**	**10**	0.013	0.012	0.012	0.013	0.010	**0.012**	0.017	0.012	0.014	0.015	0.013	**0.014**	0.012	0.011	0.011	0.011	0.013	**0.012**
Chromium	µg/L	EPA 1640	**8**	**20**	5.30	5.60	6.00	2.10	12.00	**6.20**	0.28	0.29	0.63	27.00	4.30	**6.50**	0.26	1.10	1.80	1.10	1.40	**1.13**
Copper	µg/L	EPA 1640	**12**	**30**	0.52	0.36	0.51	0.59	0.58	**0.51**	0.43	0.86	1.20	1.50	1.00	**1.00**	0.39	0.56	0.42	0.30	0.42	**0.42**
Lead	µg/L	EPA 1640	**8**	**20**	0.38	0.14	0.17	0.25	0.53	**0.29**	0.21	0.41	0.74	0.84	0.36	**0.51**	0.13	0.20	1.30	0.48	0.35	**0.49**
Mercury	µg/L	EPA 7470A	**16**	**4**	ND	ND	ND	ND	ND	**0.067**	ND	0.063	ND	ND	0.071	**0.067**	ND	ND	ND	ND	ND	**ND**
Nickel	µg/L	EPA 1640	**20**	**50**	2.90	3.50	3.20	1.40	6.50	**3.50**	0.40	0.33	0.58	15.00	2.50	**3.76**	0.31	0.89	1.30	0.85	1.00	**0.87**
Silver	µg/L	EPA 1640	**28**	**7**	0.031	ND	ND	ND	ND	**0.031**	ND	ND	ND	ND	ND	**ND**	ND	ND	ND	ND	ND	**ND**
Zinc	µg/L	EPA 1640	**80**	**200**	4.80	1.30	1.80	1.30	2.50	**2.34**	18.00	0.90	9.10	8.80	3.80	**8.12**	0.52	1.60	1.00	0.78	1.70	**1.12**
Chlorine																						
Chlorine, total residual	mg/L	SM 4500Cl-G	**8**	**60**	0.014	0.022	0.034	0.019	0.035	**0.025**	0.022	0.023	0.024	0.023	0.015	**0.021**	0.019	0.016	0.019	0.020	0.026	**0.020**
Halogenated Organic Compounds (volatile and semi-volatile)																						
2,4,6-Trichlorophenol	µg/L	EPA 625	**4**	**10**	ND	ND	ND	ND	ND	**ND**	ND	ND	ND	ND	ND	**ND**	ND	ND	ND	ND	ND	**ND**
2,4-Dichlorophenol	µg/L	EPA 625	**4**	**10**	ND	ND	ND	ND	ND	**ND**	ND	ND	ND	ND	ND	**ND**	ND	ND	ND	ND	ND	**ND**
2-Chlorophenol	µg/L	EPA 625	**4**	**10**	ND	ND	ND	ND	ND	**ND**	ND	ND	ND	ND	ND	**ND**	ND	ND	ND	ND	ND	**ND**
4-Chloro-3-Methylphenol	µg/L	EPA 625	**4**	**10**	ND	ND	ND	ND	ND	**ND**	ND	ND	ND	ND	ND	**ND**	ND	ND	ND	ND	ND	**ND**
All other halogenated organic compounds were below detection limits																						

(a) California Ocean Plan Daily Maximum Water Quality Objective
(b) California Ocean Plan Instantaneous Maximum Water Quality Objective
ND = Not detected

Table 4-3: Summary of Water Quality Parameters Measured at the Surface, Bottom, and Throughout the Water Column at Each Station

Section	Site Name	Range of Values	Depth (m)	Temperature (°F)	DO (mg/L)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity
Reference Cable	Cab-Ref-1	Surface	0	61.1	5.51	8.2	42.1	33.3	--
		Bottom	10	61.1	5.43	8.2	42.1	33.3	76.7
		Range	0-10	61.0 - 61.1	5.43 - 5.51	8.2	42.1	33.3	76.7 - 90.7
	Cab-Ref-2	Surface	0	61.1	5.55	8.2	42.1	33.3	--
		Bottom	10	61.1	5.52	8.2	42.1	33.3	91.9
		Range	0-10	61.1	5.52 - 5.57	8.2	42.1	33.3	91.9 - 92.2
	Cab-Ref-3	Surface	0	61.0	5.84	8.2	42.0	33.2	--
		Bottom	11	61.2	5.64	8.2	42.2	33.3	88.9
		Range	0-11	61.0 - 61.2	5.64 - 5.86	8.2	42.0 - 42.2	33.2 - 33.3	88.9 - 92.1
	Cab-Ref-4	Surface	0	61.0	5.80	8.2	42.0	33.2	--
		Bottom	12	61.4	5.51	8.2	42.4	33.4	91
		Range	0-12	61.0 - 61.4	5.43 - 5.87	8.2	42.0 - 42.4	33.2 - 33.4	91.0 - 92.0
	Cab-Ref-5	Surface	0	61.1	5.69	8.2	42.1	33.2	-
		Bottom	12	61.2	5.56	8.2	42.3	33.4	90.8
		Range	0-12	61.0 - 61.4	5.54 - 5.81	8.2	41.1 - 42.3	33.2 - 33.4	90.8 - 91.7
Existing Cable	Cab-Exst-1	Surface	0	61.0	5.82	8.2	42.0	33.3	--
		Bottom	9	61.1	5.65	8.2	42.1	33.3	82.1
		Range	0-9	61.0 - 61.1	5.64 - 5.82	8.2	42.0 - 42.1	33.3	82.1 - 89.6
	Cab-Exst-2	Surface	0	60.9	5.80	8.2	42.0	33.3	--
		Bottom	11	61.0	5.70	8.2	42.1	33.3	86.7
		Range	0-11	60.9 - 61.0	5.70 - 5.80	8.2	42.0 - 42.1	33.3	86.7 - 91.8
	Cab-Exst-3	Surface	0	61.0	5.80	8.2	42.0	33.2	--
		Bottom	12	61.4	5.46	8.2	42.4	33.4	91.6
		Range	0-12	61.0 - 61.4	5.46 - 5.82	8.2	42.0 - 42.4	33.2 - 33.4	90.1 -91.8

Section	Site Name	Range of Values	Depth (m)	Temperature (°F)	DO (mg/L)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity
	Cab-Exst-4	Surface	0	61.0	5.84	8.2	42.0	33.2	--
		Bottom	12	61.2	5.56	8.2	42.3	33.4	90.4
		Range	0-12	61.0 - 61.3	5.55 - 5.84	8.2	42.0 - 42.3	33.2 - 33.4	90.4 - 93.0
	Cab-Exst-5	Surface	0	61.0	5.81	8.2	42.1	33.3	--
		Bottom	13	61.2	5.53	8.2	42.3	33.4	87.5
		Range	0-13	61.0 - 61.2	5.47 - 5.81	8.2	42.0 - 42.3	33.3 - 33.4	87.5 - 94.1
Existing Electrode	Vault-3	Surface	0	60.9	5.66	8.2	42.0	33.3	-
		Bottom	15	61.2	5.62	8.2	42.3	33.4	83.5
		Range	0-15	60.9 - 61.2	5.45 - 5.78	8.2	42.0 - 42.3	33.3 - 33.4	83.5 - 93.6
	Vault-5	Surface	0	61.0	5.78	8.2	42.0	33.3	-
		Bottom	15	61.2	5.49	8.2	42.3	33.4	86.3
		Range	0-15	60.9 - 61.2	5.44 - 5.78	8.2	42.0 - 42.3	33.3 - 33.4	86.3 - 94.1
	Vault-8	Surface	0	61.0	5.73	8.2	42.0	33.3	-
		Bottom	15	61.2	5.49	8.2	42.3	33.4	87.4
		Range	0-15	60.9 - 61.2	5.49 - 5.78	8.2	42.0 - 42.3	33.3 - 33.4	86.9 - 94.3
	Vault-11	Surface	0	61.0	5.77	8.2	42.0	33.3	-
		Bottom	14	61.2	5.50	8.2	42.3	33.4	87.6
		Range	0-14	60.9 - 61.2	5.50 - 5.78	8.2	42.0 - 42.3	33.3 - 33.4	87.6 - 93.1
	Vault-21	Surface	0	60.9	5.77	8.2	42.0	33.3	-
		Bottom	15	61.2	5.51	8.2	42.3	33.4	88.9
		Range	0-15	60.9 - 61.2	5.49 - 5.81	8.2	42.0 - 42.3	33.3 - 33.4	88.8 - 95.1

Figure 4-1: Water Column Measurements at Cab-Ref-5

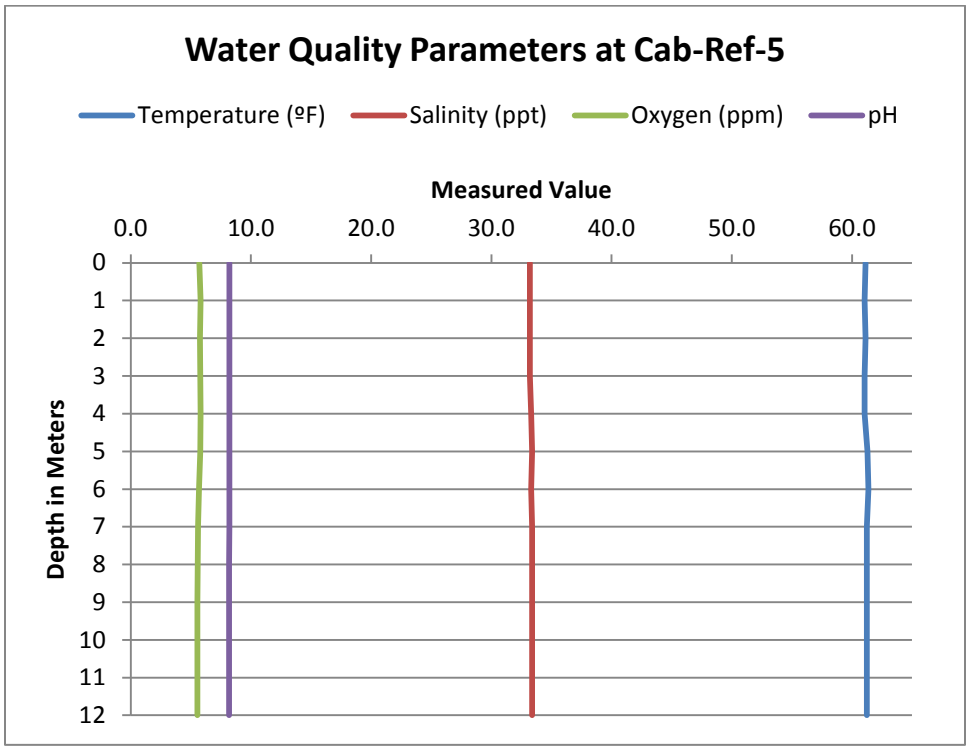


Figure 4-2: Water Column Measurements at Cab-Exst-5

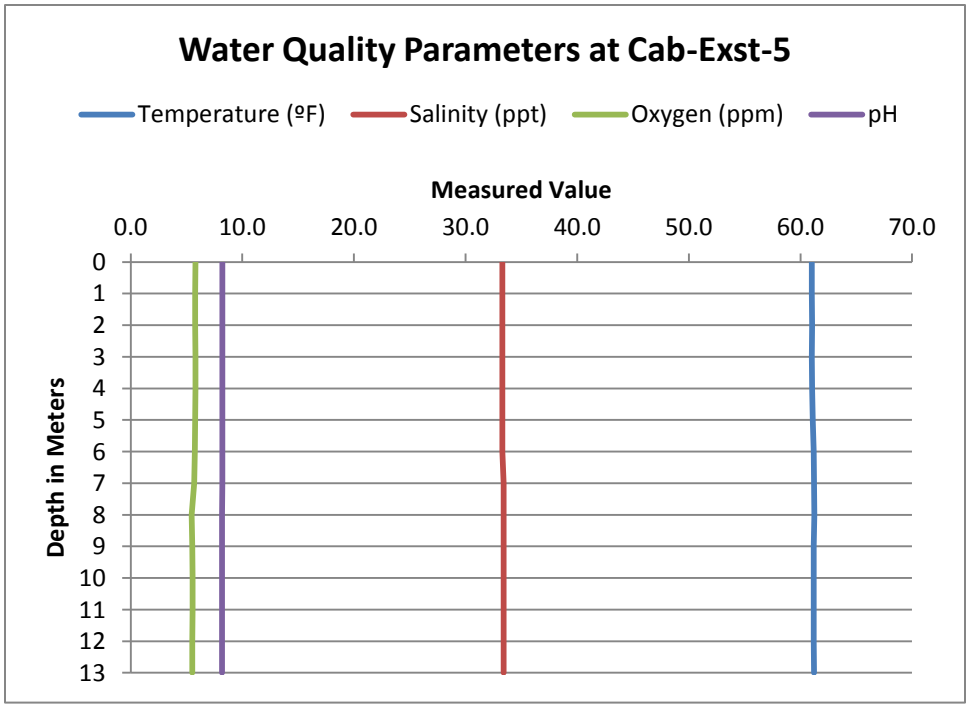
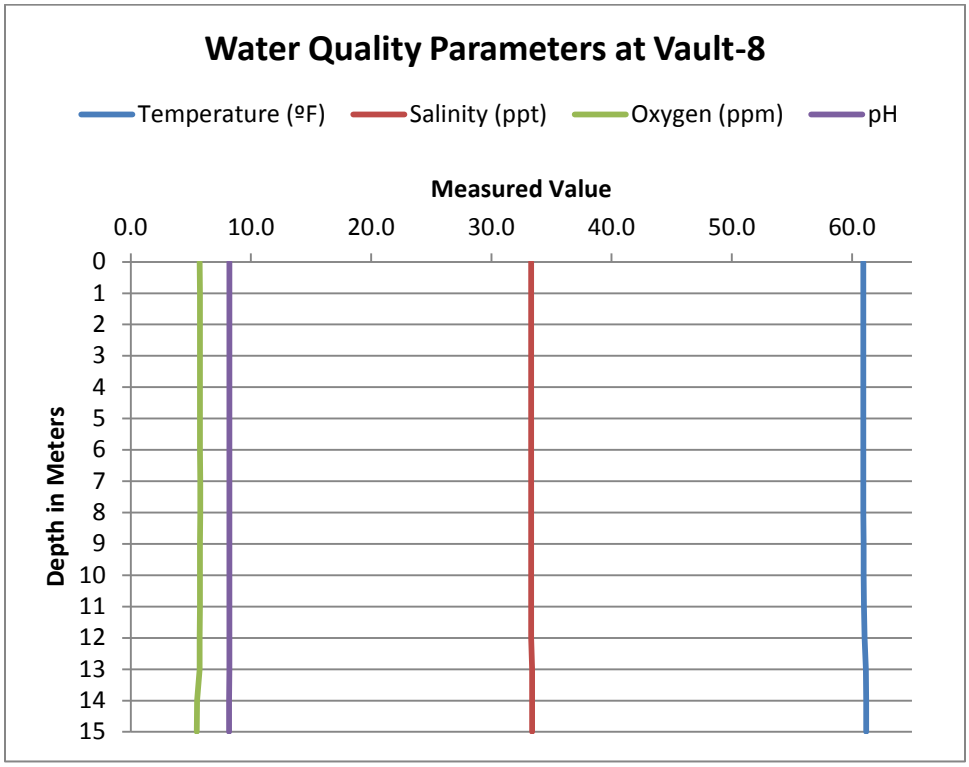


Figure 4-3: Water Column Measurements at Vault-8



4.1.2.1 Temperature

Water temperatures were consistent across all sites, and varied little with depth (Appendix A, Table 4-3). Surface temperatures ranged from 60.9 degrees Fahrenheit (°F) to 61.4 °F at existing cable sites, 61.0 °F to 61.4 °F at reference cable sites, and 60.9 °F to 61.2 °F at existing electrode sites. There were no meaningful differences in temperature among the existing cable, reference cable, and existing electrode sites.

4.1.2.2 Dissolved Oxygen

DO values were fairly consistent at all sites and depths (Appendix A, Table 4-3). DO values ranged from 5.46 to 5.84 mg/L at existing cable sites, 5.43 to 5.87 mg/L at the reference cable sites, and 5.44 to 5.81 at the existing electrode sites. There were no meaningful differences in DO concentrations among the existing cable, reference cable, and existing electrode sites.

4.1.2.3 pH

Values of pH remained constant at 8.4 throughout the water column and across all sites (Appendix A, Table 4-3).

4.1.2.4 Conductivity

Conductivity was consistent at all sites and uniform throughout the water column (Appendix A, Table 4-3). Among the 15 sites monitored, conductivity ranged from 42.0 to 42.4 millimhos per centimeter (mmhos/cm). There were no meaningful differences in conductivity among the existing cable, reference cable, and existing electrode sites.

4.1.2.5 Salinity

Salinity varied little with depth and was nearly uniform across all sites, ranging from 33.2 to 33.4 ppt (Appendix A, Table 4-3). There were no meaningful differences in salinity among the existing cable, reference cable, and existing electrode sites.

4.1.2.6 Transmissivity

Transmissivity of light was variable throughout the water column for most sites and generally decreased towards the benthos, especially at shallower sites (Appendix A). In general stations further offshore had greater transmissivity values than stations located closer to shore. For example, Cab-Exst-1 and Cab-Ref-1, located nearest to shore, had mean transmissivity values of 85.9 and 86.0 percent, respectively, while Cab-Exst-5 and Cab-Ref-5, located further offshore, had mean transmissivity values of 90.9 and 91.1 percent, respectively. The mean transmissivity at existing electrode sites ranged from 90.0 to 91.5 percent. Low light penetration can be attributed to increased turbidity in nearshore waters as a result of wave action. Transmissivity differences between the existing and reference cable sites were minimal.

4.2 Marine Sediment Sampling and Analysis

Existing cable and existing electrode sediment samples were collected by hand using diver cores in the center of the epibenthic transect survey area on January 9, 2015. Reference cable sediment samples were collected on January 14, 2015, using a Van Veen grab sampler. Samples for chemical analysis and grain size were collected from the top 5 cm of sediment while benthic infauna was collected from the entire grab (17 cm in depth).

4.2.1 Benthic Infauna Results

Benthic infauna samples were collected from each of the 15 sites: 5 along the existing cable, 5 along the reference cable, and 5 adjacent to the randomly selected existing electrode vaults. The complete infauna data set for the Study is presented in Appendix C. A summary of the benthic community metrics for each site are provided in Table 4-4. Standard benthic community measures include total abundance, number of species, dominance index (number of species comprising 70 percent or more of the total number of species at a station), evenness (proportion of abundance of different species), Shannon-Wiener Diversity

Index, and BRI. A benthic response condition is also provided for each station (refer to Subsection 3.2.1.3 for a detailed description of the BRI and how it is measured). The percentage of total abundance and number of species by taxonomic group is shown in Table 4-5.

In addition, to provide perspective for the 2015 benthic infauna results, data from this study were compared to data collected from stations that were sampled in the region surrounding the Project area from the 2008 Southern California Bight Regional Monitoring Program (Bight ’08) for identifying sediment contaminant issues throughout Southern California embayments, harbors, and nearshore and offshore ocean environments (SCCWRP, 2008). A summary of the community measures for the Bight ’08 stations is provided in Table 4-6. The percentage of total abundance and number of species by taxonomic group for the Bight ’08 stations is shown in Table 4-7.

Table 4-4: Benthic Community Measures for Stations Located Within the Proposed Cable Routes, Electrode Array Area, and Reference Area

Section	Site Name	Depth (m)	Number of Species	Total Abundance	Evenness	Margalef Richness	Schwartz Dominance Index	Shannon Diversity Index	Simpson Diversity Index	Benthic Response Index	Benthic Response Condition
Reference Cable	Cab-Ref-1	10	27	97	0.883	5.696	11	2.91	0.923	17.05	Reference
	Cab-Ref-2	10	36	129	0.818	7.202	11	2.93	0.910	20.64	Reference
	Cab-Ref-3	11	39	119	0.843	7.951	13	3.09	0.924	26.85	Response Level 1
	Cab-Ref-4	12	44	112	0.861	9.113	18	3.26	0.929	19.36	Reference
	Cab-Ref-5	12	38	98	0.838	8.070	15	3.05	0.913	19.24	Reference
	Mean ± S.E.	**11.0 ± 0.4**	**36.8 ± 2.8**	**110.0 ± 6.1**	**0.849 ± 0.011**	**7.606 ± 0.566**	**13.6 ± 1.3**	**3.05 ± 0.06**	**0.920 ± 0.004**	**20.63 ± 1.66**	**Reference**
Existing Cable	Cab-Exst-1	9	51	147	0.844	10.019	18	3.32	0.932	28.18	Response Level 1
	Cab-Exst-2	11	28	65	0.855	6.492	11	2.85	0.913	29.13	Response Level 1
	Cab-Exst-3	12	19	29	0.937	5.346	12	2.76	0.920	34.35	Response Level 2
	Cab-Exst-4	12	34	76	0.888	7.620	15	3.13	0.930	30.62	Response Level 1
	Cab-Exst-5	13	29	55	0.953	6.987	16	3.21	0.953	19.72	Reference
	Mean ± S.E.	**11.4 ± 0.7**	**32.2 ± 5.3**	**74.4 ± 19.7**	**0.895 ± 0.022**	**7.293 ± 0.777**	**14.4 ± 1.3**	**3.05 ± 0.11**	**0.930 ± 0.007**	**28.40 ± 2.41**	**Response Level 1**
Existing Electrode	Vault-3	15	40	86	0.943	8.802	20	3.48	0.963	32.43	Response Level 1
	Vault-5	15	31	65	0.946	7.187	16	3.25	0.955	28.05	Response Level 1
	Vault-8	15	60	177	0.867	11.398	23	3.55	0.948	29.57	Response Level 1
	Vault-11	14	67	198	0.870	12.517	23	3.66	0.960	32.78	Response Level 1
	Vault-21	15	62	156	0.884	12.174	27	3.65	0.957	29.70	Response Level 1
	Mean ± S.E.	**14.8 ± 0.2**	**52.0 ± 7**	**136.4 ± 25.9**	**0.902 ± 0.018**	**10.416 ± 1.037**	**21.8 ± 1.8**	**3.52 ± 0.07**	**0.957 ± 0.003**	**30.51 ± 0.91**	**Response Level 1**

Table 4-5: Percentage of Total Abundance and Number of Taxa by Taxonomic Group for Proposed Cable Routes, Electrode Array Area, and Reference Area

Section	Site Name	Depth (m)	Taxonomic Group									
			Percentage of Total Abundance					Percentage of Number of Species				
			Polychaetes (%)	Crustaceans (%)	Molluscs (%)	Echinoderms (%)	Minor Phyla (%)	Polychaetes (%)	Crustaceans (%)	Molluscs (%)	Echinoderms (%)	Minor Phyla (%)
Reference Cable	Cab-Ref-1	10	46.1	13.7	24.4	2.0	8.8	44.4	22.2	14.8	7.4	11.1
	Cab-Ref-2	10	70.1	7.5	9.0	0.0	9.7	61.1	16.7	11.1	0.0	11.1
	Cab-Ref-3	11	70.2	4.1	9.9	0.8	13.2	66.7	10.3	7.7	2.6	12.8
	Cab-Ref-4	12	68.7	7.8	5.2	1.7	13.9	61.4	15.9	6.8	2.3	13.6
	Cab-Ref-5	12	72.4	12.2	0.0	0.0	15.3	60.5	18.4	0.0	0.0	21.1
Existing Cable	Cab-Exst-1	9	41.3	3.6	36.5	1.2	5.4	47.1	7.8	25.5	3.9	15.7
	Cab-Exst-2	11	45.2	4.1	24.7	5.5	9.6	50.0	10.7	14.3	10.7	14.3
	Cab-Exst-3	12	68.8	0.0	9.4	3.1	9.4	68.4	0.0	15.8	5.3	10.5
	Cab-Exst-4	12	72.4	15.8	3.9	0.0	7.9	55.9	20.6	5.9	0.0	17.6
	Cab-Exst-5	13	60.7	21.4	3.6	0.0	12.5	55.2	20.7	6.9	0.0	17.2
Existing Electrode	Vault-3	15	59.8	19.5	3.4	1.1	14.9	47.5	27.5	2.5	2.5	20.0
	Vault-5	15	74.2	13.6	4.5	0.0	6.1	71.0	16.1	6.5	0.0	6.5
	Vault-8	15	70.9	10.4	4.9	0.0	11.0	51.7	25.0	10.0	0.0	13.3
	Vault-11	14	68.6	9.0	5.7	0.5	10.5	58.2	19.4	7.5	1.5	13.4
	Vault-21	15	52.4	18.7	10.2	1.2	11.4	48.4	22.6	11.3	3.2	14.5

Table 4-6: Benthic Community Measures for Stations Sampled During the Bight '08 Program

Bight '08 Station ID	Depth Range (m)	Number of Taxa	Total Abundance	Dominance Index	Evenness	Shannon Diversity Index	Benthic Response Index	Benthic Response Condition
7474	5-30	66	194	26	0.87	3.63	26.1	Response Level 1
7517		137	782	35	0.81	4.00	27.2	Response Level 1
7410	31-120	95	257	38	0.90	4.11	11.1	Reference
7415		118	448	37	0.86	4.10	14.5	Reference
7417		90	277	35	0.89	4.00	16.6	Reference
7426		105	281	47	0.93	4.32	8.4	Reference
7458		106	309	42	0.90	4.20	18.4	Reference
7461		117	508	36	0.86	4.09	17.4	Reference

Source: SCCWRP, 2008

Table 4-7: Percentage of Total Abundance and Number of Taxa by Taxonomic Group for Stations Sampled During the Bight '08 Program

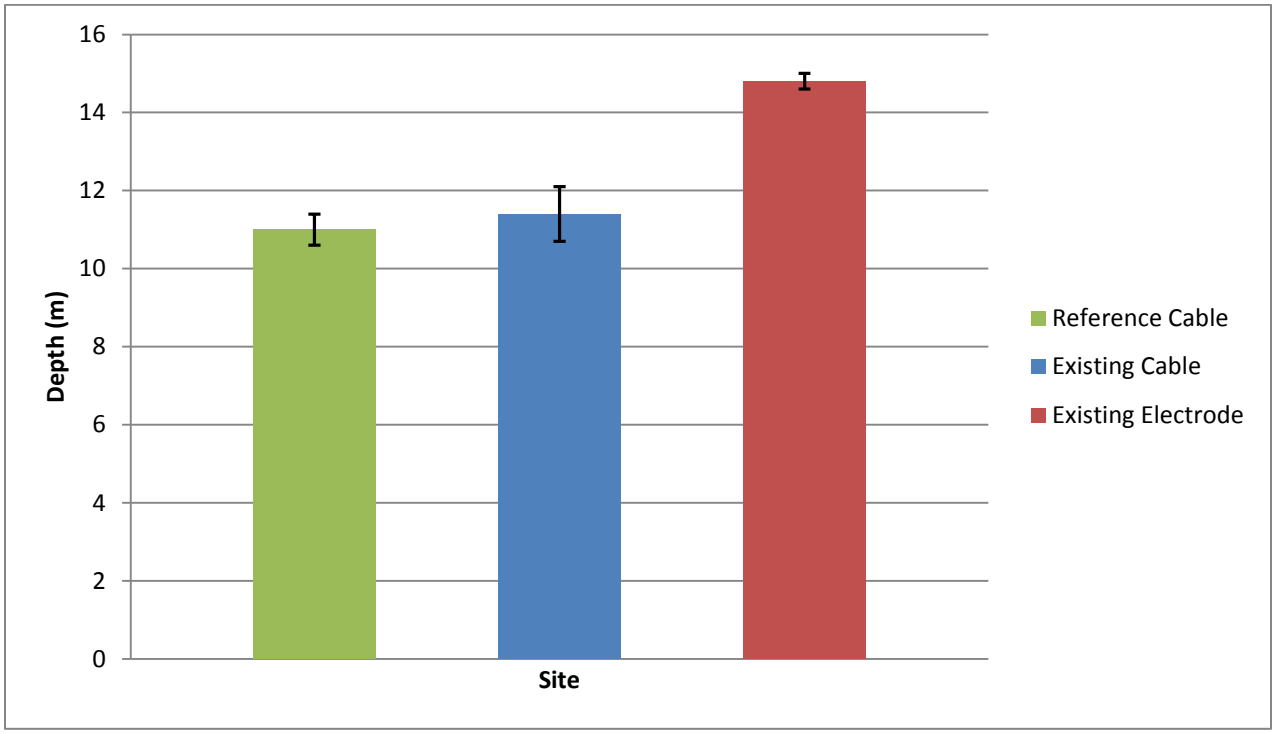
Bight '08 Station ID	Depth Range (m)	Taxonomic Group									
		Percentage of Total Abundance					Percentage of Number of Species				
		Polychaetes (%)	Crustaceans (%)	Molluscs (%)	Echinoderms (%)	Minor Phyla (%)	Polychaetes (%)	Crustaceans (%)	Molluscs (%)	Echinoderms (%)	Minor Phyla (%)
7474	5-30	65.8	13.6	1.1	16.3	3.3	56.1	18.2	15.2	3.0	7.6
7517		64.5	23.1	1.5	6.7	4.1	55.1	22.5	9.4	4.3	8.7
7410	31-120	58.6	10.8	13.1	13.5	4.1	58.9	17.9	9.4	5.3	6.3
7415		36.5	16.1	13.8	30.5	3.1	43.6	21.4	23.9	5.1	6.0
7417		58.9	15.2	8.5	14.1	3.3	53.3	20.0	16.7	3.3	6.7
7426		49.6	28.1	4.1	13.7	4.4	49.5	24.8	12.4	7.6	5.7
7458		50.3	13.3	1.0	31.7	3.7	53.8	14.2	22.6	2.8	6.6
7461		62.3	23.0	4.9	6.0	4.0	57.3	22.2	6.0	6.0	8.5

Source: SCCWRP, 2008

4.2.1.1 Depth

Depth at existing cable sites ranged from 9 m (Cab-Exst-1) to 13 m (Cab-Exst-5) (Table 4-4 and Figure 4-4). Depth at reference cable sites ranged from 10 m (Cab-Ref-1 and Cab-Ref-2) to 12 m (Cab-Ref-4 and Cab-Ref-5). Depth at existing electrode vaults ranged from 14 m at Vault-11 to 15 m at all other vaults. In general, depth increased with distance from shore, and mean depths for existing and reference cable sites were shallower than the existing electrode vaults.

Figure 4-4: Mean Depth (± 1 Standard Error)

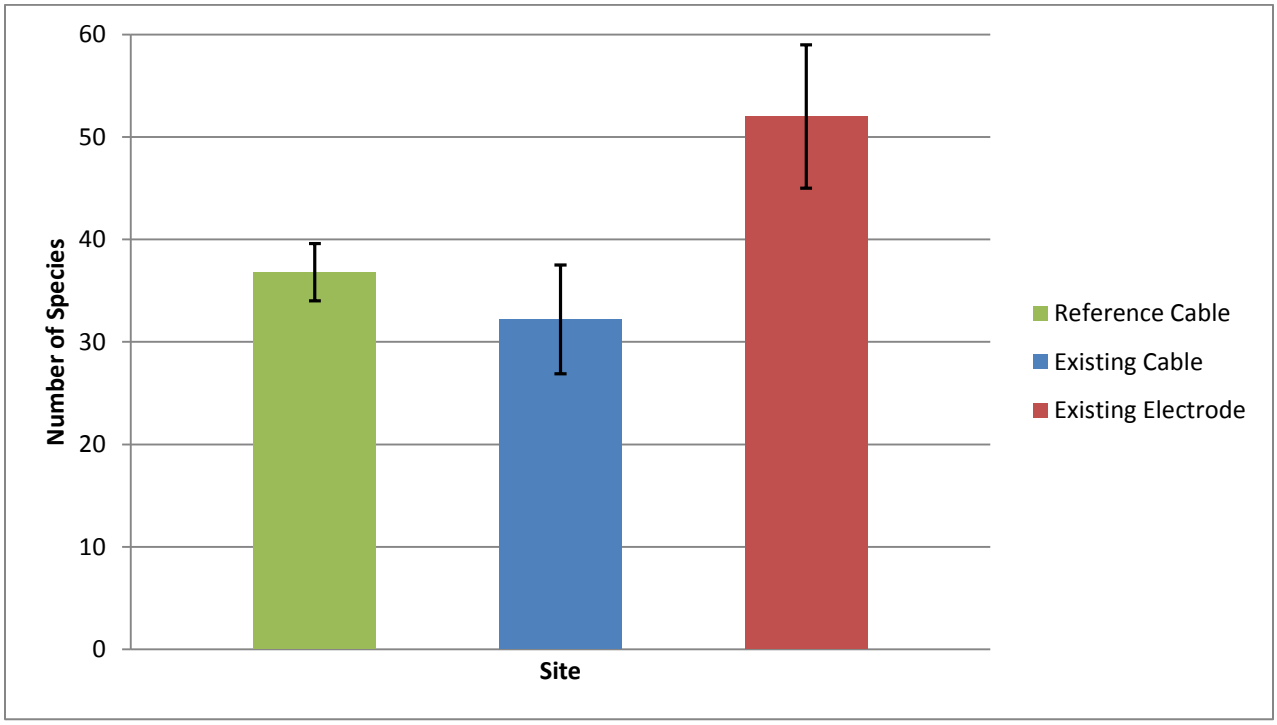


4.2.1.2 Number of Species

The number of species at existing cable sites ranged from 19 species (Cab-Exst-3) to 51 species (Cab-Exst-1) (Table 4-4 and Figure 4-5). Individual species at existing cable sites were dominated by polychaetes (47.1 to 68.4 percent), followed by molluscs at the sites closer to shore (14.3 to 25.5 percent) and crustaceans farther from shore (20.7 percent) (Table 4-5). The number of species at reference cable sites ranged from 27 (Cab-Ref-1) to 44 (Cab-Ref-4), and were dominated by polychaetes (44.4 to 66.7 percent), followed by crustaceans (10.3 to 22.2 percent). The number of species at the existing electrode sites ranged from 31 (Vault-5) to 67 (Vault-11) and were dominated by polychaetes (47.5 to 71.0 percent), followed by crustaceans (16.1 to 27.5 percent). The mean number of species was highest at the

existing electrode sites. Existing and reference cable sites had similar mean numbers of species, but reference cable sites were slightly higher and had less variability between sites.

Figure 4-5: Mean Number of Species (± 1 Standard Error)



4.2.1.3 Total Abundance

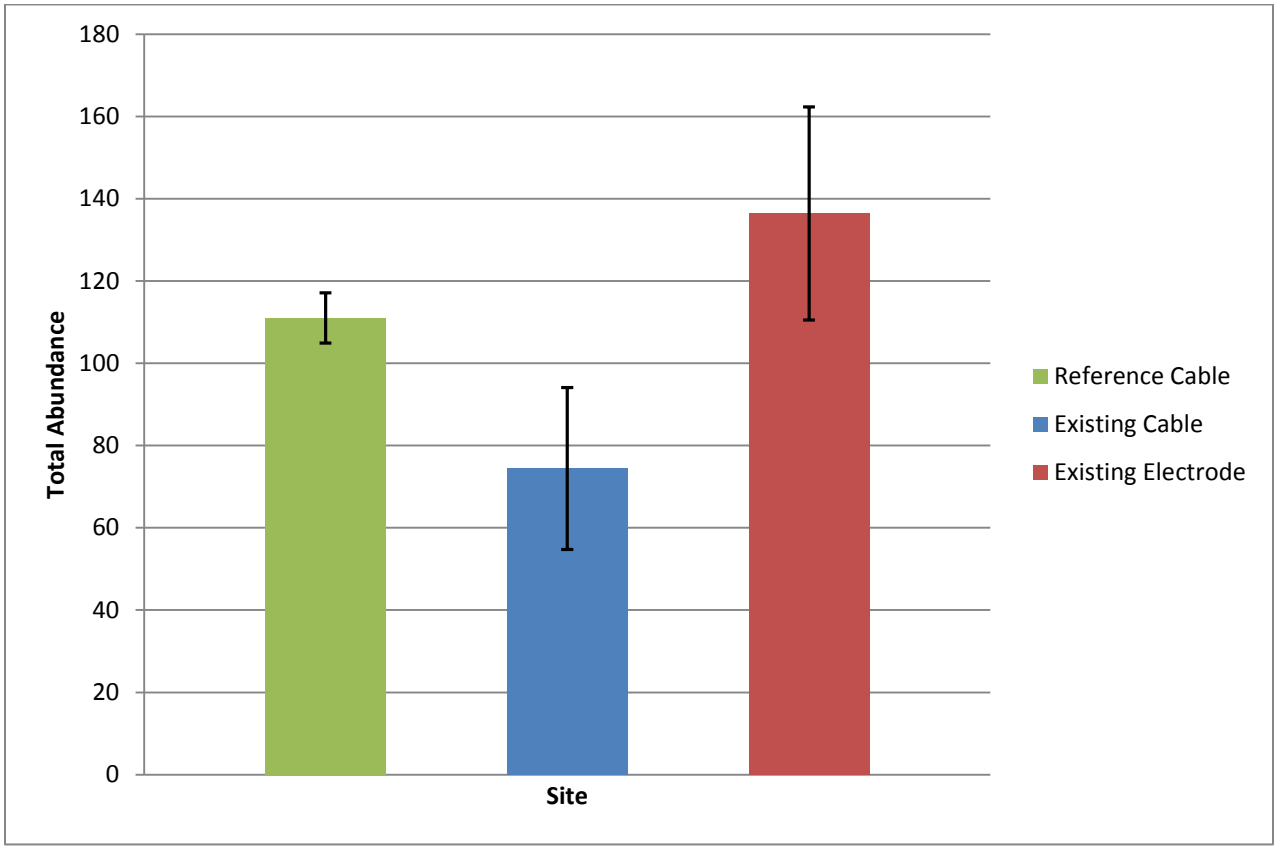
Total Abundance at existing cable sites ranged from 29 individuals at Cab-Exst-3 to 147 individuals at Cab-Exst-1 (Table 4-4 and Figure 4-6). Percentage of total abundance at existing cable sites was dominated by polychaetes at all locations (41.3 to 68.8 percent) followed by molluscs at sites nearer to shore and crustaceans at sites farther from shore (Table 4-5). Other minor phyla were present in low numbers at all existing cable sites (5.4 to 12.5 percent), and echinoderms were present in low numbers at Cab-Exst-1, Cab-Exst-2, and Cab-Exst-3 (1.2 to 5.5 percent). Echinoderms were not identified at Cab-Exst-4 or Cab-Exst-5.

Total Abundance at reference cable sites ranged from 97 at Cab-Ref-1 to 129 at Cab-Ref-2 (Table 4-4 and Figure 4-6). Percentage of total abundance was dominated by polychaetes at all reference cable sites (46.1 to 72.4 percent), followed by molluscs at sites nearer to shore and crustaceans at sites farther from shore (Table 4-5). Other minor phyla were present at all reference cable sites (8.8 to 15.3 percent), and echinoderms were present in low numbers at Cab-Ref-1, Cab-Ref-3, and Cab-Ref-4 (0.8 to 2.0 percent). Echinoderms were not observed at Cab-Ref-2 or Cab-Ref-5.

Total Abundance at existing electrode sites ranged from 65 at Vault-5 to 198 at Vault-11 (Table 4-4 and Figure 4-6). Percentage of total abundance was dominated by polychaetes at all existing electrode sites (52.4 to 74.2 percent), followed by crustaceans (9.0 to 19.5 percent) (Table 4-5). Molluscs and other minor phyla were also identified at all existing electrode sites. Echinoderms were identified in small numbers at Vault-3, Vault-11, and Vault-21.

Total Abundance was highest at existing electrode vaults, with a mean of 136.4 individuals, followed by reference cable sites, and existing cable sites, with a mean abundances of n mean of 110.0 and 74.4 individuals, respectively (Table 4-7 and Figure 4-6).

Figure 4-6: Mean Total Abundance (± 1 Standard Error)

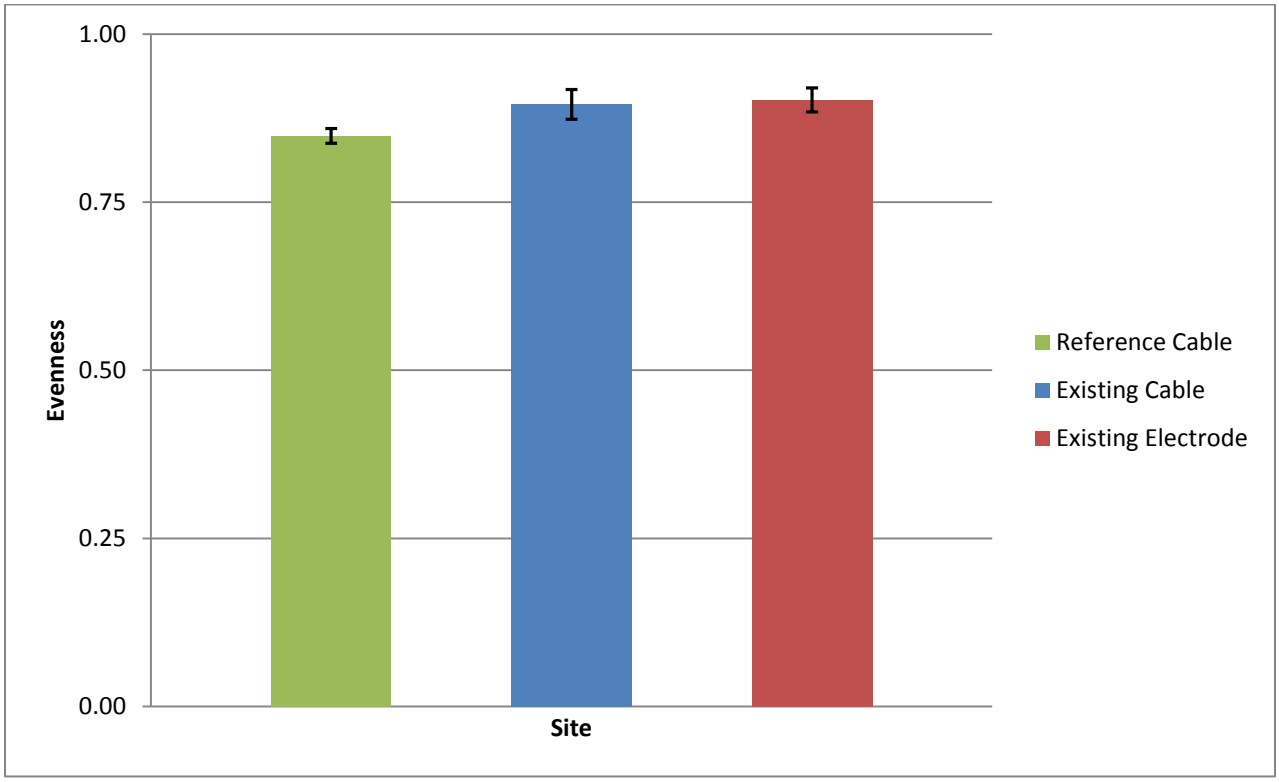


4.2.1.4 Evenness

Evenness describes how evenly distributed individuals in an environment are distributed among species. A lower score indicates greater variation in number of individuals in a species, whereas a higher score indicates less variation among species. Evenness at the existing cable sites ranged from 0.844 (Cab-Exst-1) to 0.953 (Cab-Exst-5) (Table 4-4 and Figure 4-7). Evenness at the reference cable sites ranged from

0.818 (Cab-Ref-2) to 0.883 (Cab-Ref-1). Evenness at the existing electrode vaults ranged from 0.867 (Vault-8) to 0.946 (Vault-5). In general, evenness increased slightly with depth; however, the mean evenness was similar for existing cable, reference cable, and the existing electrode vaults.

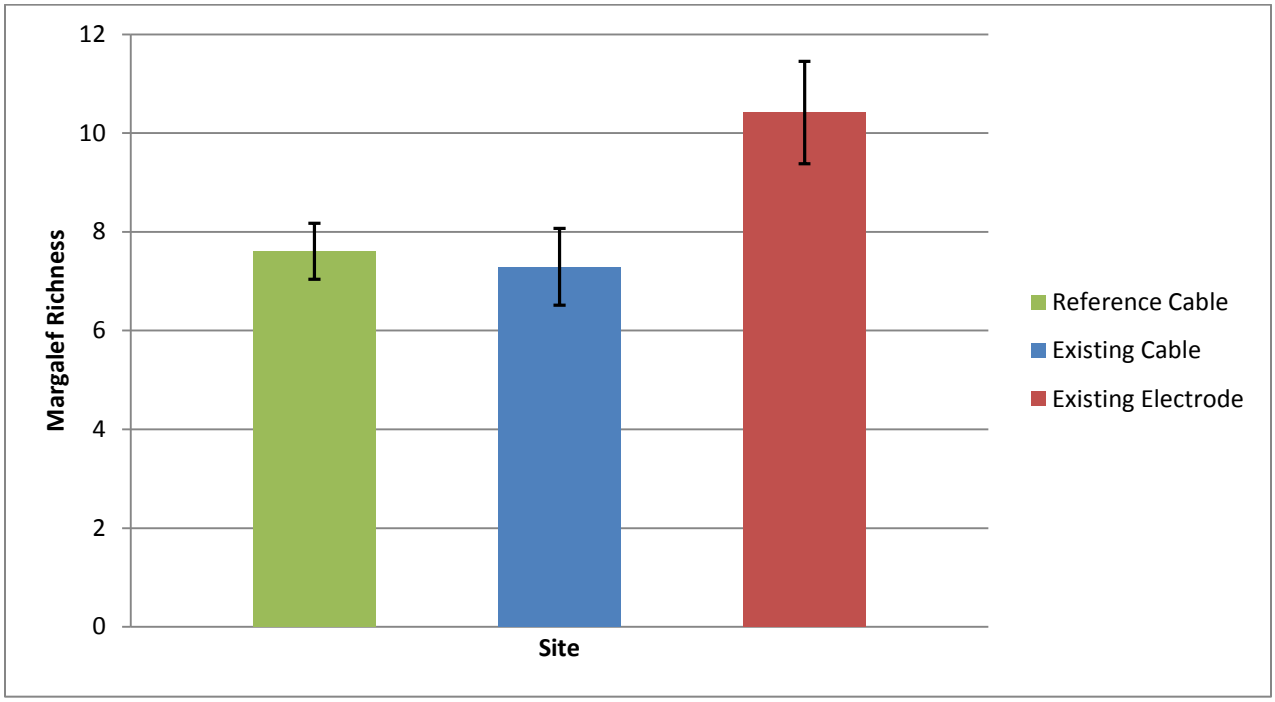
Figure 4-7: Mean Evenness (± 1 Standard Error)



4.2.1.5 Margalef Richness

Margalef Richness is a measure of species richness independent of sample size. Margalef Richness at existing cable sites ranged from 5.346 (Cab-Exst-3) to 10.019 (Cab-Exst-1) (Table 4-4 and Figure 4-8). Margalef Richness at reference cable sites ranged from 7.202 (Cab-Ref -2) to 9.113 (Cab-Ref-4). Margalef Richness at existing electrode vaults ranged from 7.187 (Vault-5) to 12.517 (Vault-11). Mean Margalef Richness was similar for existing and reference cable sites (7.293 and 7.606, respectively), but was greater at the existing electrode vaults (10.416).

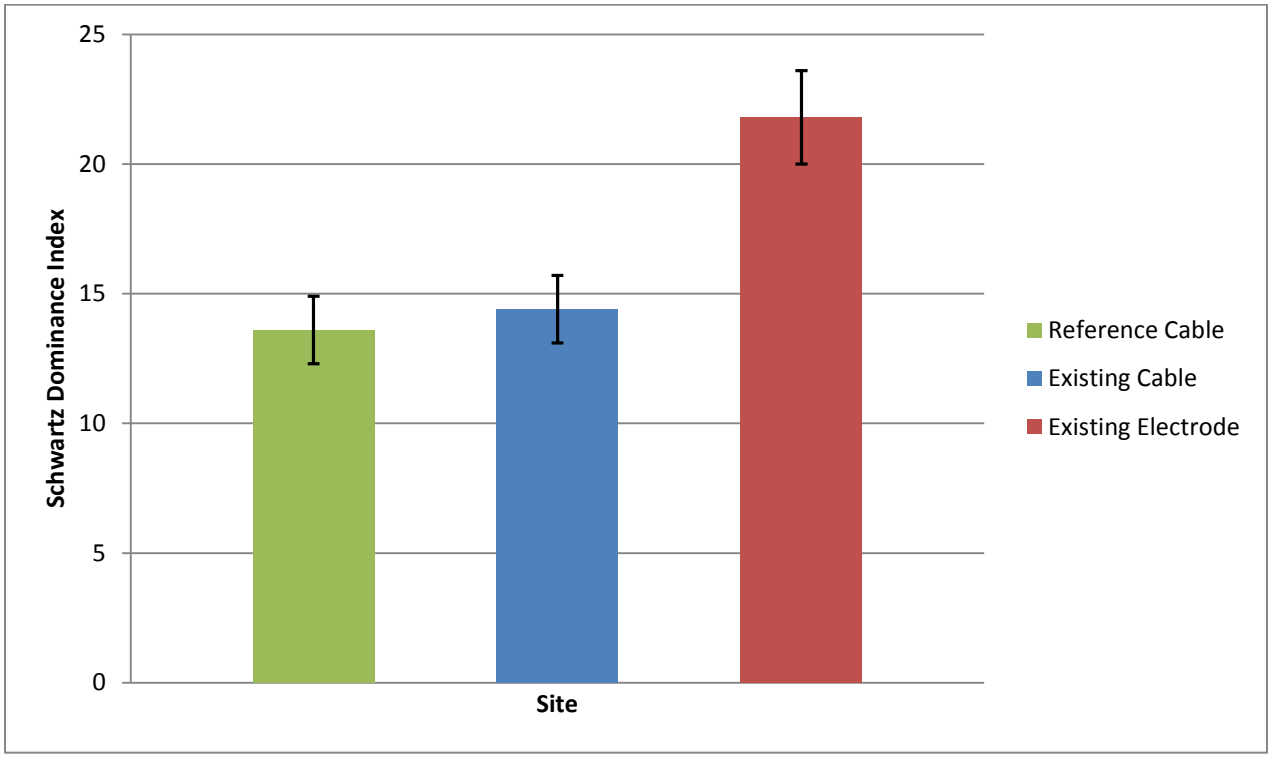
Figure 4-8: Mean Margalef Richness (± 1 Standard Error)



4.2.1.6 Schwartz Dominance Index

The Schwartz Dominance Index measures the minimum number of species comprising 75 percent of a community by abundance. Fewer species results in lower index values, indicating higher dominance. Schwartz Dominance for existing cable sites ranged from 11 (Cab-Exst-2) to 18 (Cab-Exst-1) (Table 4-4 and Figure 4-9). Schwartz Dominance for reference cable sites ranged from 11 (Cab-Ref-1 and Cab-Ref-2) to 18 (Cab-Ref-4). Schwartz Dominance for existing electrode vaults ranged from 16 (Vault-5) to 27 (Vault-21). Mean Schwartz Dominance was similar for existing and reference cable sites (13.6 and 14.4, respectively), but was considerably greater for the existing electrode vaults (21.8).

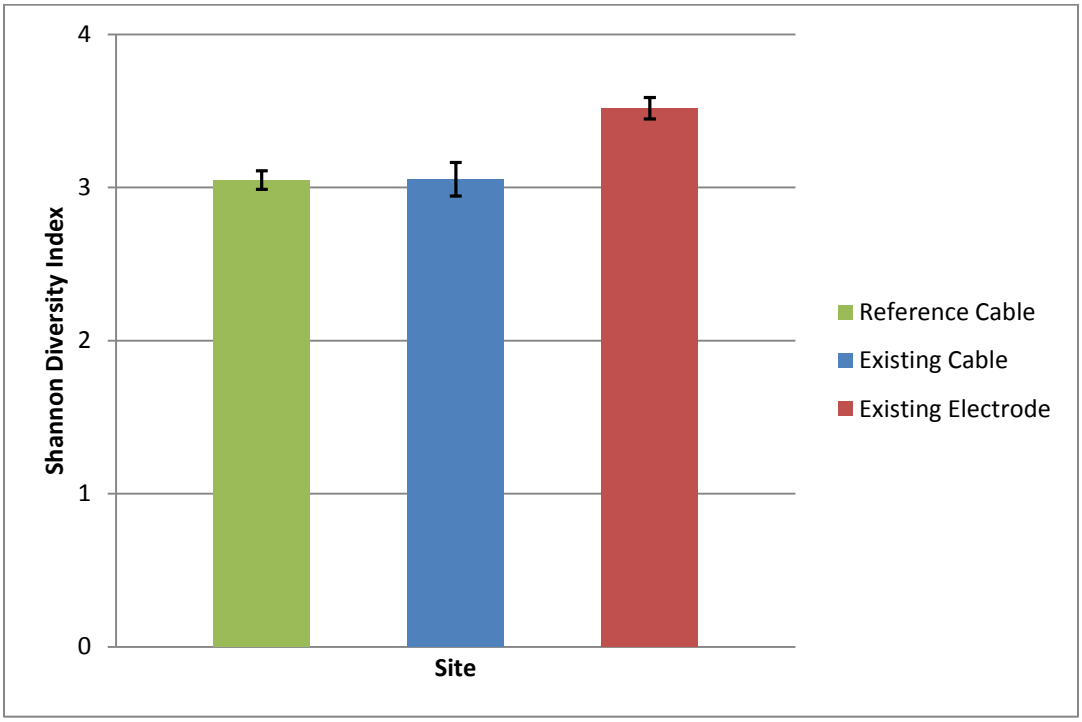
Figure 4-9: Mean Schwartz Dominance Index (± 1 Standard Error)



4.2.1.7 Shannon Diversity Index

The Shannon Diversity Index measures the number of species related to evenness. A high number of species combined with a high degree of evenness will result in a high Shannon Diversity Index value. Values for real communities typically range from 1.5 to 3.5 (SCCWRP, 2008). Shannon Diversity at existing cable sites ranged from 2.76 (Cab-Exst-3) to 3.32 (Cab-Exst-1) (Table 4-4 and Figure 4-10). Shannon Diversity at reference cable sites ranged from 2.91 (Cab-Ref-1) to 3.26 (Cab-Ref-4). Shannon Diversity at existing electrode vaults ranged from 3.25 (Vault-5) to 3.66 (Vault-11). Mean Shannon Diversity was 3.05 for the existing and reference cable sites, and it fell within the normal range. The mean Shannon Diversity index for the existing electrode vaults was slightly greater (3.52).

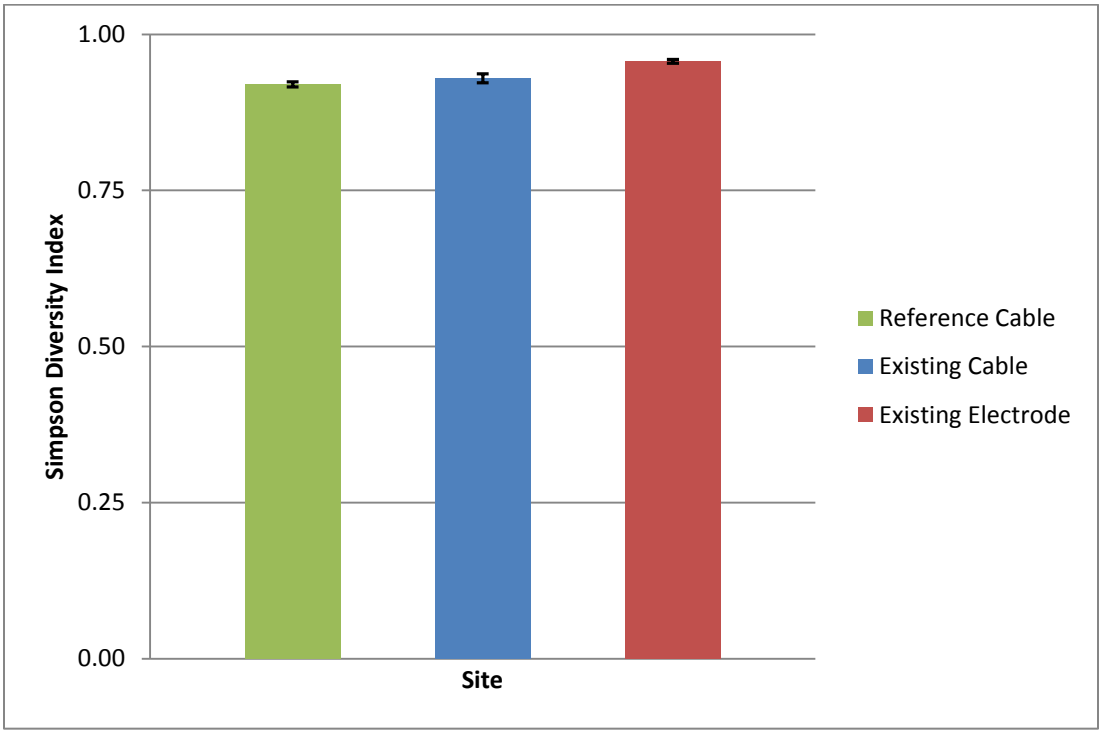
Figure 4-10: Mean Shannon Diversity Index (± 1 Standard Error)



4.2.1.8 Simpson Diversity Index

The Simpson Diversity Index measures the biodiversity of a habitat by taking into account the number of species as well as the abundance of each species. Simpson Diversity at existing cable sites ranged from 0.913 (Cab-Exst-2) to 0.953 (Cab-Exst-5) (Table 4-4 and Figure 4-11). Simpson Diversity at reference cable sites ranged from 0.910 (Cab-Ref-2) to 0.929 (Cab-Ref-4). Simpson Diversity at existing electrode sites ranged from 0.948 (Vault-8) to 0.963 (Vault-3). Mean Simpson Diversity was similar for all three groups of sites.

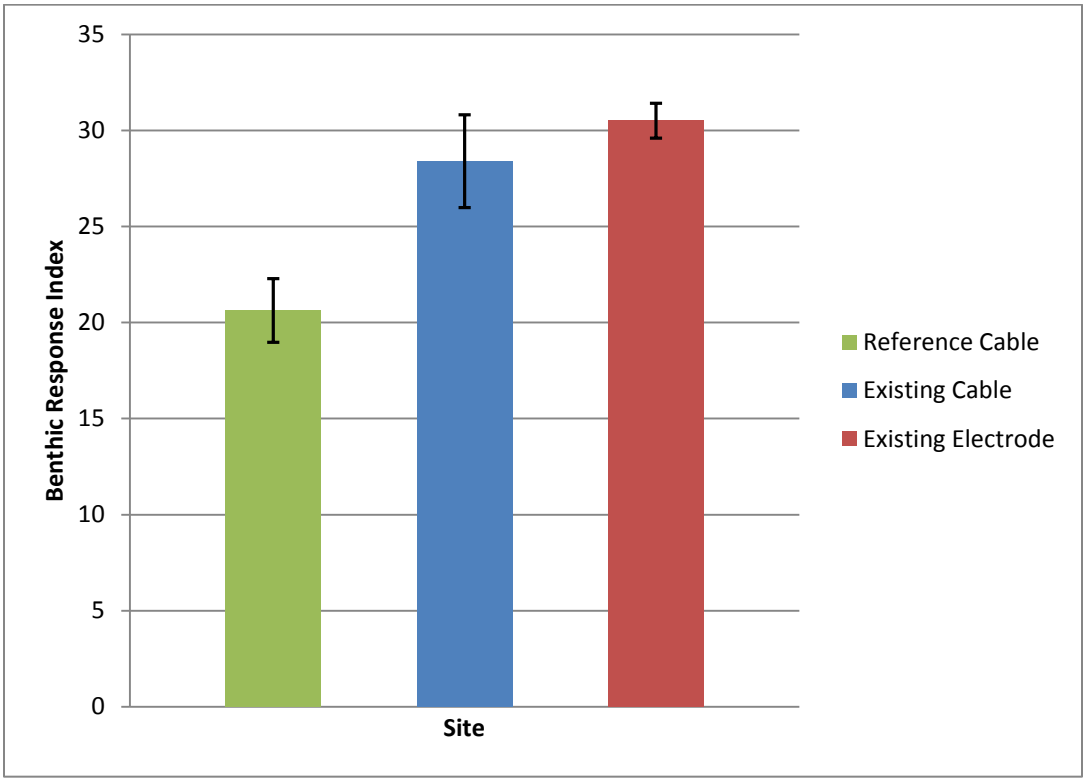
Figure 4-11: Mean Simpson Diversity Index (± 1 Standard Error)



4.2.1.9 Benthic Response Index and Response Condition

The BRI establishes numerical criteria (i.e., community response levels) correlated with the pollution tolerance of species on an abundance-weighted mean that relates to habitat quality (refer to Subsection 3.2.1.3 for a detailed description of the BRI and how it is measured). The BRI score is scaled such that values less than 25 represent BRI Reference Response Level conditions and characterize a "healthy" community and good habitat quality (Table 4-4), while BRI scores greater than 25 represent deviations from reference conditions. The BRI score at the existing cable sites ranged from 19.72 at Cab-Exst-5 (Reference Response Level) to 34.35 at Cab-Exst-3 (Response Level 2) (Table 4-4 and Figure 4-12). The BRI score at reference cable sites ranged from 17.05 at Cab-Ref-1 (Reference Response Level) to 26.85 at Cab-Ref-3 (Response Level 1). The BRI score at existing electrode sites ranged from 28.05 at Vault-5 to 32.78 at Vault-11. The mean BRI score for reference cable sites (20.63) was characterized as BRI Reference Level conditions, while the mean BRI scores for existing cable and existing electrode sites (BRI scores of 28.40 and 30. 51, respectively) were characterized as Response Level 1 (low disturbance conditions).

Figure 4-12: Mean Benthic Response Index (± 1 Standard Error)



4.2.1.10 Comparison to Bight '08 Surveys

The BRI values calculated for the benthic infauna samples collected at the existing electrode sites were compared to samples collected during Bight '08 in the surrounding region to determine if benthic community conditions were similar (Table 4-4 and Table 4-6). Existing and reference cable sites were compared to the two Santa Monica Bay stations in the Bight '08 survey that had a depth range similar to that of the existing cable and electrode vaults (Bight '08 stations 7474 and 7517). Both Bight '08 stations had a benthic response condition indicating a low disturbance (Response Level 1). Response Level 1 conditions were also observed at three of the five existing cable sites and all five existing electrode sites.

The community structure of the two Bight '08 stations used for this comparison (stations 7474 and 7517) was similar to that found at sites monitored in this Study. The Bight '08 sites were dominated by polychaetes (55.1 to 56.1 percent), followed by crustaceans (18.2 to 22.5 percent), and molluscs (9.4 to 15.2 percent). These percentages are similar to those found at the Study sites.

4.2.2 Sediment Chemistry Results

Sediment samples were analyzed for the following contaminants of concern: metals, organochlorine pesticides, PAHs, and polychlorinated biphenyl (PCB) congeners (individual compounds in the PCB

category). Physical measurements for TOC content, percent solids, and grain size were also performed. A summary of the results is presented in Table 4-8.

Results of grain size analysis were fairly consistent at all sites, with the exception of Cab-Exst-1 (Table 4-8 and Figure 4-13). The majority of sites were primarily sand (51 to 76 percent) and silt (20 to 40 percent) with the remainder composed of small amounts of clay (1 to 4 percent) and little to no gravel (0.0 to 0.07 percent). Sediments at Cab-Exst-1, however, consisted primarily of sand (84 percent) and gravel (13 percent) with small amounts of silt (1 percent) and clay (1 percent), likely due to its shallow depth and proximity to shore.

Figure 4-13: Results of Sediment Grain Size Analysis

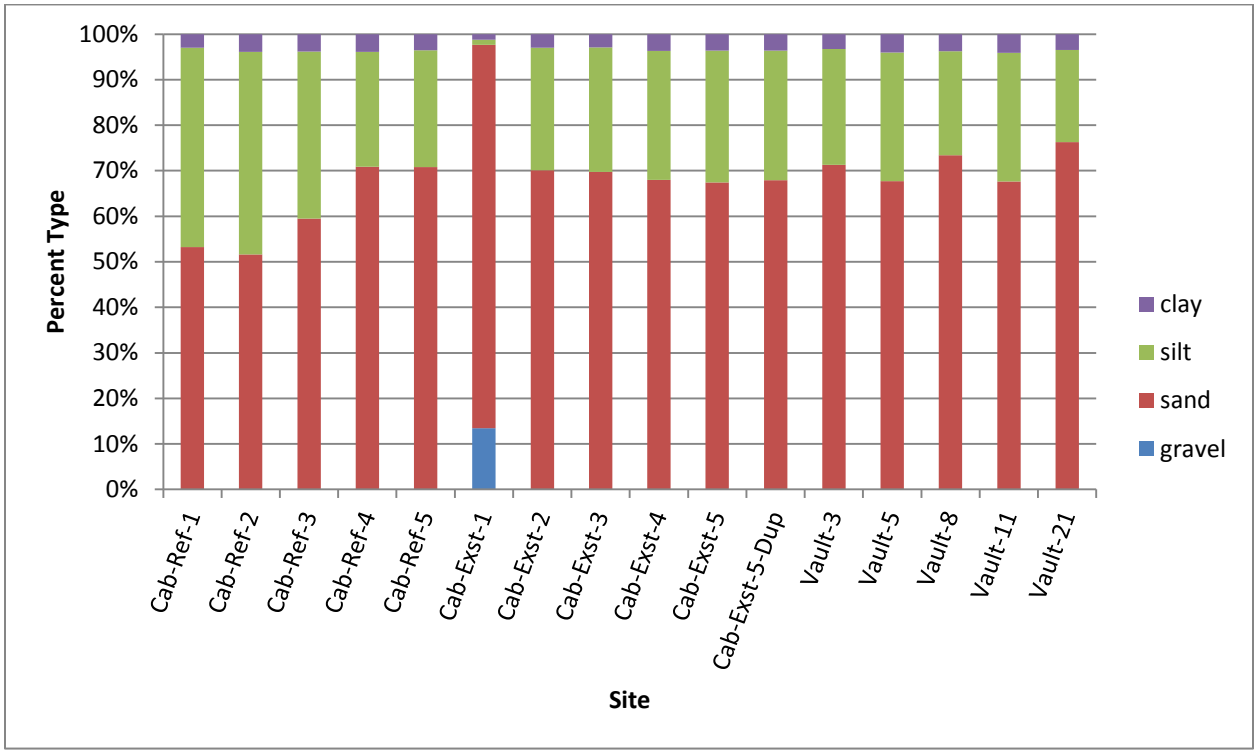


Table 4-8: Summary of Sediment Chemistry Results

Analyte	Units	Methods	ER-L[a]	ER-M[b]	Existing Cable					Reference Cable					Existing Electrode				
					Cab-Exst-1	Cab-Exst-2	Cab-Exst-3	Cab-Exst-4	Cab-Exst-5	Cab-Ref-1	Cab-Ref-2	Cab-Ref-3	Cab-Ref-4	Cab-Ref-5	Vault-3	Vault-5	Vault-8	Vault-11	Vault-21
General Chemistry																			
Carbon, Total Organic	mg/kg	EPA 9060M	--	--	475	1,730	1,840	2,410	1,640	1,520	2,000	1,760	1,350	1,480	7,590	5,910	3,430	5,460	10,300
Particle Size																			
Gravel	%	ASTM D2862	--	--	13.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.04	0.00	0.01	0.00	0.02
Sand	%	ASTM D2862	--	--	84.16	70.1	69.75	67.98	67.39	53.25	51.58	59.50	70.79	70.78	71.25	67.7	73.39	67.65	76.27
Silt	%	ASTM D2862	--	--	1.14	26.91	27.35	28.34	28.96	43.73	44.54	36.66	25.26	25.69	25.56	28.25	22.85	28.27	20.21
Clay	%	ASTM D2862	--	--	1.24	3.00	2.90	3.68	3.65	3.02	3.88	3.85	3.88	3.53	3.25	4.05	3.75	4.08	3.51
Trace Metals																			
Arsenic	mg/kg	EPA 6020A	8.2	70.0	3.7	2.2	2.6	2.7	2.6	2.5	2.6	2.5	2.6	2.9	3.2	5	3	4.3	6.6
Cadmium	mg/kg	EPA 6020A	1.2	9.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23	ND	ND	0.25
Chromium	mg/kg	EPA 6020A	81.0	370	8.1	18	17	17	17	13	15	13	14	16	16	19	16	17	16
Copper	mg/kg	EPA 6020A	34.0	270	2.5	4.4	4.2	4	4	3	3.8	2.9	2.6	3	4.3	5.6	3.9	7.5	4.9
Lead	mg/kg	EPA 6020B	46.7	218	1.9	4.5	4.1	4.6	5.1	3.3	3.5	3.4	3.7	4.5	5.4	7.2	5.1	6.4	6.7
Mercury	µg/kg	EPA 7471A	150	710	10	27	65	180	32	150	30	33	460	25	49	62	36	93	53
Nickel	mg/kg	EPA 6020B	20.9	51.6	5.8	12	12	11	12	8.5	11	9.4	8.8	10	11	14	11	12	11
Silver	mg/kg	EPA 6020A	1.0	3.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	mg/kg	EPA 6020A	150	410	13	31	25	26	26	19	22	20	20	22	27	32	29	29	26
Chlorinated Pesticides																			
4,4'-DDD	µg/kg	EPA 8081A	2	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.77	ND	ND	0.82	ND
4,4'-DDE	µg/kg	EPA 8081A	2.2	27	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	3.7	3.1	2.8	4.3	3
4,4'-DDT	µg/kg	EPA 8081A	1	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Detectable DDTs	µg/kg	EPA 8081A	1.58	46.1	ND	ND	1.30	ND	ND	ND	ND	ND	ND	ND	4.47	3.10	2.80	5.12	3.00
Dieldrin	µg/kg	EPA 8081A	0.02	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloro-meta-xylene	µg/kg	EPA 8082	--	--	105	95	95.3	89.7	81.1	94.9	102	110	102	99.4	88.3	92.3	85.7	102	92
Tetrachloro-meta-xylene	µg/kg	EPA 8081A	--	--	105	92.6	93.6	87.8	84.1	93.7	101	105	103	98.6	84.8	92.5	85.1	98.8	92.7
PCB Congeners																			
Aroclor	µg/kg	EPA 8082			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Decachlorobiphenyl	µg/kg	EPA 8081A			173	176	162	157	173	179	184	204	181	172	149	161	139	167	191
Total PCBs	µg/kg	Calculation	22.7	180	173	176	162	157	173	179	184	204	181	172	149	161	139	167	191
Polycyclic Aromatic Hydrocarbons																			
Terphenyl-d13	µg/kg	EPA 8270C SIM			888	988	1,390	1,030	1,210	911	1,010	883	812	1,250	942	935	1,160	1,310	1,150

Analyte	Units	Methods	ER-L[a]	ER-M[b]	Existing Cable					Reference Cable					Existing Electrode				
Other Individual PAHs	µg/kg	EPA 8270C SIM	--	--	112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Detectable PAHs	µg/kg	Calculation	4,022	44,792	1,000	988	1,390	1,030	1,210	911	1,010	883	812	1,250	942	935	1,160	1,310	1,150
Halogenated Organics																			
Beta BHC	µg/kg	EPA 8081A	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Fluorobiphenyl	µg/kg	EPA 8270C SIM	--	--	878	871	1,260	1,030	1,080	961	831	835	907	918	755	740	780	1,130	993
Nitrobenzene-d5	µg/kg	EPA 8270C SIM	--	--	929	1,020	1,400	1,080	1,140	990	886	894	925	943	798	789	894	1,240	1,060

(a) ER-L = Effects Range Low
(b) ER-M = Effects Range Medium

The results of chemical analyses of the sediment samples collected from the existing cable, reference cable, and existing electrode are presented in Appendix D. A summary table of the sediment chemistry results with the ER-L and ER-M sediment quality values for each analyte, where applicable, is provided in Table 4-8.

All trace metals were below ER-L values with the exception of mercury at Cab-Exst-4, Cab-Ref-1, and Cab-Ref-4. Mercury values ranged from10 to 180 µg/kg at the existing cable sites, from 25 to 460 µg/kg along the reference cable sites, and from 36 to 93 µg/kg at the existing electrode vaults (Table 4-8).

No individual chlorinated pesticide compounds, such as dichlorodiphenyltrichloroethanes (DDTs), exceeded ER-L concentrations at the existing cable, reference cable, or existing electrode sites. However, total DDTs exceeded ER-L concentrations at all of the existing electrode vaults, and tetrachloro-meta-xylene, which does not have established ER-L concentrations, was present across all sites. While ER-L concentrations for total detectable DDTs were exceeded at all existing electrode vault sites, no concentrations were greater than the ER-M.

PCB congeners were detected across all sites, but mean total PCB concentrations at the reference cable sites were somewhat higher than at the existing cable or existing electrode sites. Since no ER-Ls or ER-Ms have been established for individual PCB congeners, results were compared to ER-Ls and ER-Ms for total PCBs (Table 4-8). Concentrations of total PCBs exceeded the ER-L (22.7 µg/kg) at all sites and exceeded the ER-M (180 µg/kg) at three of the reference cable sites (Cab-Ref-2, Cab-Ref-3, and Cab-Ref-4) and one of the vault sites (Vault-21).

In general, the existing electrode vault sediments had more ER-L exceedances than either the existing or reference cable sites, likely as a result of considerably higher concentrations of TOC adjacent to the vaults. The mean TOC concentration at the electrode vaults (6,535 mg/kg) was four times greater than the mean TOC concentrations at the existing cable (1,619 mg/kg) and reference cable (1,622 mg/kg) sites. This is not surprising given the abundant biological community supported by the vaults and corresponding organic debris adjacent to them observed during the Reef Surveys (see Sub-section 4.3.2 below). Concentrations of organic compounds, including DDT and its breakdown products, are known to be strongly correlated with TOC in marine sediments (Hung et al., 2007; Yang et al., 2005; Schiff, 2000). DDT, and its breakdown product DDE, were found at levels above the ER-L at all existing electrode sites. These compounds are considered legacy contaminants in Santa Monica Bay resulting from pesticide spraying activity on land and dumping activity in nearshore waters prior to DDT being banned in 1972.

DDT and PCB distribution is considered widespread in marine sediments throughout Santa Monica Bay (Bay et al. 2003; Schiff, 2000).

4.2.3 Sediment Toxicity Results

The sediment toxicity results are presented in Appendix E and summarized in Table 4-9. Mean percent survival of *E. estuarius* was 97 percent in the laboratory control, which met the minimum acceptable control survival criterion (> 90 percent). Acceptable percent survival was achieved across all sites and ranged from 96 percent survival at Cab-Exst-1 to 100 percent survival at Vault-5 and Vault-11.

Table 4-9: Results of Solid Phase ToxicityTest Using *Eohaustorius estuarius*

Section	Composite Area ID	Amphipods (*Eohaustorius estuarius*) Percent Survival
Lab control	Lab Control	96%
Existing cable	Cab-Exst-1	96%
	Cab-Exst-2	99%
	Cab-Exst-3	98%
	Cab-Exst-4	98%
	Cab-Exst-5	98%
Reference cable	Cab-Ref-1	99%
	Cab-Ref-2	98%
	Cab-Ref-3	99%
	Cab-Ref-4	99%
	Cab-Ref-5	97%
Existing electrode	Vault-3	98%
	Vault-5	100%
	Vault-8	99%
	Vault-11	100%
	Vault-21	98%

4.3 Epibenthic and Reef Surveys

The complete report for the epibenthic and reef surveys is presented in Appendix A. A list of species observed during fish and swath surveys along the existing cable, reference cable, and existing electrode are provided in Table 4-10, and photographs of selected species observed during the surveys are presented on Figure 4-14.

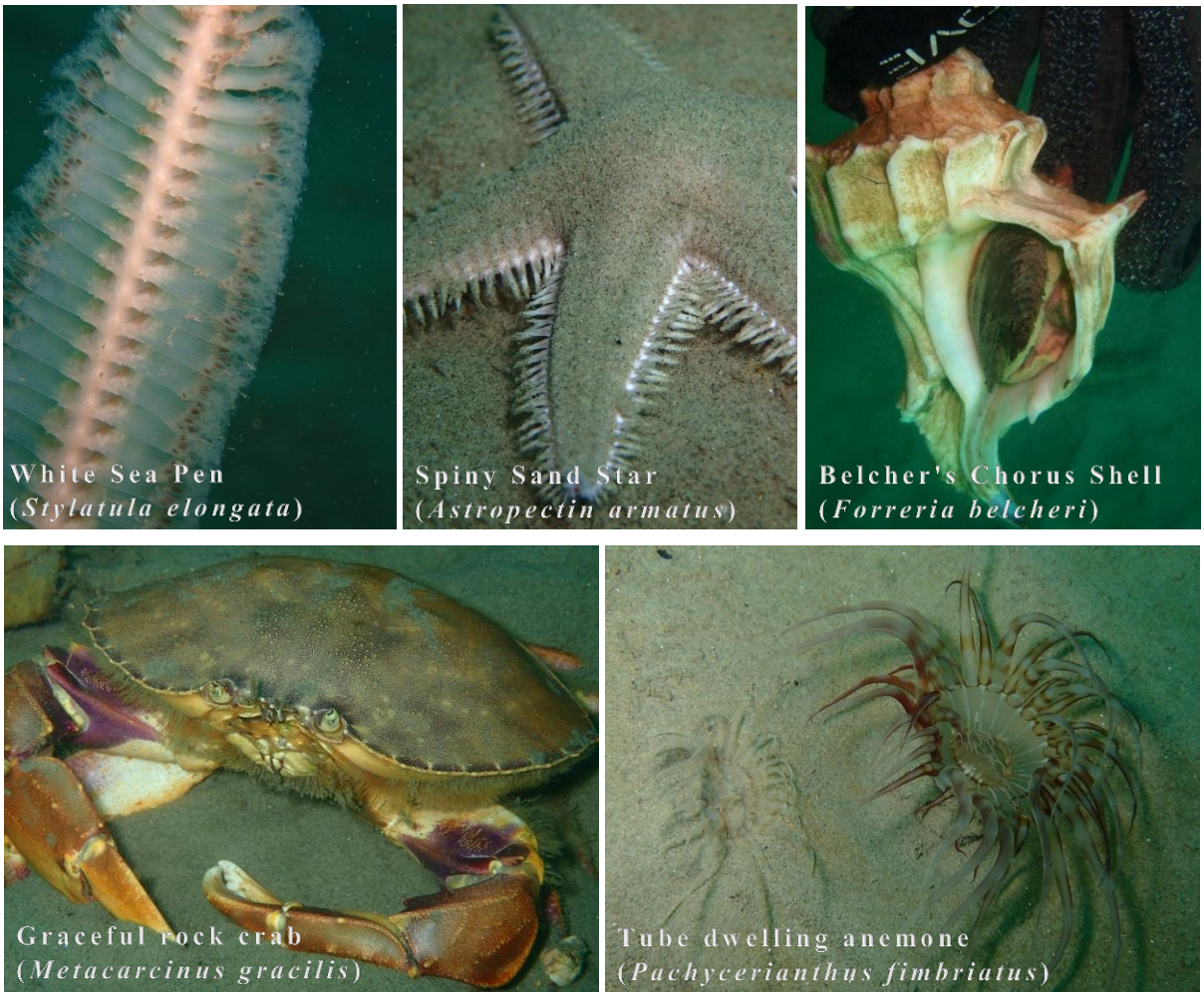
Table 4-10: Observed Species

Scientific Name	Common Name	Existing Cable	Reference Cable	Existing Electrode
Vertebrates				
Chromis punctipinnis	Blacksmith			X
Embiotoca jacksoni	Black perch			X
Halichoeres semicinctus	Rock wrasse	X	X	X
Heterodontus francisci	Horn shark		X	
Hypsypops rubicundus	Garibaldi			X
Medialuna californiensis	Halfmoon			X
Myliobatis californica	Bat ray		X	
Oxyjulis californica	Señorita	X		
Paralabrax clathratus	Kelp bass			X
Paralabrax nebulifer	Barred sand bass	X	X	X
Raja inornata	California skate		X	
Rhacochilus toxotes	Rubberlip seaperch			X
Scorpaena guttata	California scorpionfish			X
Scorpaenichthys marmoratus	Cabezon			X
Sebastes auriculatus	Brown rockfish		X	X
Semicossyphus pulcher	California sheephead			X
Syngnathus californiensis	Kelp pipefish		X	
Synodus lucioceps	California lizardfish	X	X	
Urobatis halleri	Round stingray		X	
Xystreurys liolepis	Fantail sole		X	
Invertebrates				
Astropectin armatus	Spiny sand star	X	X	
Cypraea spadicea	Chestnut cowry	X		
Flabellina iodinea	Spanish shawl		X	
Forreria belcheri	Belcher's chorus shell		X	
Hemisquilla ensigera	Peacock mantis		X	
Heterocrypta occidentalis	Sandflat elbow crab	X	X	
Kelletia kelletii	Kellet's whelk	X	X	
Leptogorgia chilensis	Red gorgonian			X
Megastraea undosa	Wavy turban	X		
Metacarcinus gracilis	Graceful rock crab		X	
Muricea californica	California golden gorgonian	X	X	X
Muricea fruticosa	Brown gorgonian			X
Pachycerianthus fimbriatus	Tube dwelling anemone	X	X	

Scientific Name	Common Name	Existing Cable	Reference Cable	Existing Electrode
Panulirus interruptus	California spiny lobster	X	X	
Parastichopus parvimensis	Warty sea cucumber			X
Patiria miniata	Bat star	X		X
Phyllactis bradleyi	Actinarians		X	
Strongylocentrotus franciscanus	Red sea urchin	X		X
Strongylocentrotus purpuratus	Purple sea urchin	X		
Stylatula elongata	Sea pen	X	X	
Algae				
Macrocystis pyrifera	Giant kelp	X	X	X
Pterogophora californica	Old growth kelp	X		X
Cystoseira osmundacea	Bladder chain kelp			X
Eisenia arborea	Palm kelp			X
Laminaria farlowii	N/A			X

Source: Pondella and Williams, 2015

Figure 4-14: Photographs of Select Observed Species



Source: Pondella and Williams, 2015

4.3.1 Epibenthic Surveys

Based on diver observations, the habitats along the cable route and reference route were very similar. Substrate at transects 3, 4, and 5 along both the existing and reference routes (Figure 3-1) consisted nearly entirely of sand. Transects 1 and 2 along both routes had moderate amounts of cobble and an occasional small boulder. The low ecological value of these habitats was reflected in the generally low level of fish encountered along the transects (the full report is presented in Appendix A; summarized in Table 4-11). A large school of young-of-the-year (YOY) señorita (*Oxyjulis californica*) heavily influenced the numerical density along the cable route, and a single large bat ray (*Myliobatis californica*) heavily influenced the biomass density along the reference route. When YOY señorita are removed from the density estimates, fish density at the cable route (0.2 individuals per 100 square meters [ind./100 m^2]) was very similar to that found at the reference route (0.3 ind./100 m^2). Similarly, when the single bat ray is removed from the

biomass density estimate, fish biomass at the existing cable route (14.4 g/100 m^2) was similar to that found at the reference cable route (17.9 g/100 m^2).

Table 4-11: Numerical and Biomass Density of Fishes Along Existing Cable and Reference Cable Routes

Scientific Name	Common Name	Reference Cable		Existing Cable	
		Density (#/100 m^2)	Biomass (g/100 m^2)	Density (#/100 m^2)	Biomass (g/100 m^2)
Halichoeres semicinctus	Rock wrasse	< 0.1	< 0.1	0.1	0.3
Heterodontus francisci	Horn shark	< 0.1	5.3		
Myliobatis californica	Bat ray	< 0.1	167.0		
Oxyjulis californica	Senorita			1.1	0.4
Paralabrax nebulifer	Barred sand bass	0.1	6.2	0.1	14.1
Raja inornata	California skate	< 0.1	1.3		
Sebastes auriculatus	Brown rockfish	< 0.1	1.8		
Syngnathus californiensis	Kelp pipefish	< 0.1	< 0.1		
Synodus lucioceps	California lizardfish	< 0.1	< 0.1	< 0.1	< 0.1
Urobatis halleri	Round stingray	< 0.1	3.1		
Xystreurys liolepis	Fantail sole	< 0.1	0.3		
Fish total:		**0.3**	**184.9**	**1.2**	**14.9**
No bat ray[a] / señorita[b]:		**0.3**	**17.9[a]**	**0.2 [b]**	**14.4**

(a) A single large bay ray heavily influenced biomass and was removed from the biomass calculation for comparison
(b) A school of juvenile señorita heavily influenced density and was removed from the density calculation for comparison

The macroinvertebrate and macroalgae data collected during the epibenthic surveys are presented in Appendix A and summarized in Table 4-12.

Table 4-12: Density of Macroinvertebrates and Stipitate Algae Along Existing Cable and Reference Cable Routes

Species	Existing Cable Density (#/100 m^2)	Reference Cable Density (#/100 m^2)
Invertebrates		
Astropectin armatus	2.6	7.8
Cypraea spadicea	< 0.1	
Flabellina iodinea		0.2
Forreria belcheri		< 0.1
Hemisquilla ensigera		< 0.1
Heterocrypta occidentalis	< 0.1	< 0.1
Kelletia kelletii	0.2	0.1
Megastraea undosa	0.1	
Metacarcinus gracilis		< 0.1
Muricea californica	7.7	1.2
Pachycerianthus fimbriatus	< 0.1	< 0.1
Panulirus interruptus	0.1	< 0.1
Patiria miniata	< 0.1	
Phyllactis bradleyi		0.1
Strongylocentrotus purpuratus	< 0.1	
Strongyocentrotus franciscanus	1.0	
Stylatula elongata	0.3	20.8
Macroinvertebrate total:	**11.9**	**30.3**
Macroinvertebrate total without sea pens:	**11.6**	**9.5**
Macroalgae		
Macrocystis pyrifera	0.2	< 0.1
Pterogophora californica	< 0.1	
Macroalgae total:	**0.2**	**< 0.1**

Source: Pondella and Williams, 2015

A total of 17 macroinvertebrate species were identified at the existing and reference cable sites. In general, the community composition was similar among the existing and reference cable routes and was dominated by spiny sea stars (*Astropectin armatus)*, California golden gorgonians (*Muricea californica*), and white sea pens (*Stylatula elongata*). California golden gorgonians were more abundant along the existing cable route than the reference cable route (7.7 ind./100 m^2 and 1.2 ind./100 m^2, respectively). This difference is likely a result of the higher number of individuals on cobble substrate that was present at Cab-Exst-1. In contrast, a slightly higher density of spiny sand stars (*Astropecten armatus*) was along

the reference route (7.8 ind./100 m^2) as compared to the existing cable route (2.6 ind./100 m^2). The primary contributing factor to the difference in total density of invertebrates was the number of white sea pens along the reference cable route; Cab-Ref-4 and Cab-Ref-5 had approximately 750 individuals of this species present, resulting in a total density of 20.9 ind./100 m^2 along the reference cable route compared to 0.3 ind./m^2 along the existing cable route. If those large groups of sea pens are removed from the totals, the overall density of macroinvertebrates at the existing cable sites (11.6 ind./100 m^2) was similar to that at the reference cable sites (9.5 ind./100 m^2). Very few individual stipitate macroalgae were encountered along the transects within the existing and reference cable survey areas.

4.3.2 Reef Surveys

The density of fish at the existing electrode vaults was 79.7 ind./100 m^2 (the full report is presented in Appendix A; summarized in Table 4-13).

Table 4-13: Density and Biomass of Fishes at Existing Sylmar Electrode Vaults Compared to Other Natural Reefs Along the Malibu Coast

Location	Total Fish Density (individuals/100 m^2)	Total Fish Biomass (grams/100 m^2)
Sylmar Vaults	79.7	42,198.0
Deep Hole West	125.4	10,769.6
Deep Hole East	43.5	5,884.4
Leo Carrillo	134.8	15,114.0
Nicholas Canyon West	282.5	26,193.8
Nicholas Canyon East	104.6	31,308.1
Encinal Canyon	65.3	19,914.9
Little Dume West	44.3	10,215.6
Little Dume East	40.4	2,456.4
Escondido	37.9	2,610.8

Source: Pondella and Williams, 2015

This value was compared to nine other natural reefs along the Malibu Coast (see Figure 3-8) where similar surveys have been conducted in the past (Vantuna, unpublished data). Fish density at the existing electrode vaults was moderate compared to fish densities found at natural reefs at comparable depths in the region (range: 37.9 to 282.5 ind./100 m^2; mean: 97.6 ind./100 m^2). However, fish biomass at the existing electrode vaults was 42,198 g/100 m^2, which is considerably greater than the fish biomass found at natural reefs in the region (range: 2,610.8 to 31,308.1 g/100 m^2; mean: 13,829.7 g/100 m^2). Nearly half the biomass identified at the existing vaults can be attributed to several large barred sand bass (*Paralabrax nebulifer*), kelp bass (*Paralabrax clathratus*), and California sheephead swimming over and

among the vaults, though numerous additional species were also observed. The high biomass value at the vaults (relative to other natural reefs in the region) is even more impressive considering the highest biomass value among natural reefs (31,308.1 g/100 m^2 at Nicholas Canyon East) was largely a product of a single giant sea bass (*Stereolepis gigas*) (see Appendix A).

The density of macroinvertebrates and macroalgae at the Sylmar electrode vaults is compared to other natural reefs along the Malibu Coast in Table 4-14 (the full report is presented in Appendix A). Total macroinvertebrate density at the Sylmar vaults (162.2 ind./100 m^2) was low, but within the range of densities observed at other natural reefs in the area (range of 162.2 to 1,740.3 ind./100 m^2; mean of 742.7 ind./100 m^2). The vaults also had a few resident red sea urchins (*Strongylocentrotus franciscanus*; 5.2 ind./100 m^2) at the vault/sand interface, though in fewer numbers than were found at natural reefs (range: 7.9 to 596.4 ind./100 m^2; mean: 211.1 ind./100 m^2). Only four other species of macroinvertebrates were encountered on the vaults, including two more species of gorgonians (see Appendix A).

Table 4-14: Density of Macroinvertebrates and Stipitate Algae at Existing Sylmar Electrode Vaults Compared to Other Natural Reefs Along the Malibu Coast

Location	Total Macroinvertebrate Density (individuals/100 m^2)	Total Macroalgae Density (individuals/100 m^2)
Sylmar Vaults	162.2	0.0
Deep Hole East	1,740.3	6.1
Leo Carrillo	732.5	17.5
Nicholas Canyon West	501.3	30.4
Nicholas Canyon East	274.2	19.2
Encinal Canyon	1,626.2	9.6
Little Dume West	516.0	75.0
Little Dume East	50.4	45.0
Escondido	500.8	15.8

Source: Pondella and Williams, 2015

While moderate densities of giant kelp exist at the surveyed natural reefs, no kelps of any kind were encountered during the survey of the vaults. Recent surveys of artificial reefs in Santa Monica Bay (shown on the map on (Figure 3-8) have shown that growth of kelp rarely occurs on cement structures, including pier pilings at both Redondo and Hermosa Beach piers, and manufactured concrete reef boxes at Hermosa Beach Artificial Reef (Vantuna, unpublished data). Instead, the surfaces of the vaults, like other concrete structures in Santa Monica Bay, were dominated by erect red algae and California golden gorgonians (*Muricea californica*; 152.6 ind./100 m^2), though heavy cover of California golden gorgonians on natural reefs (range: 9.2 to 127.9 ind./100 m^2; mean: 47.7 ind./100 m^2) is not uncommon.

Images captured from the videos taken during the reef surveys are presented on Figure 4-15. They demonstrate the abundant growth covering the existing SGRS vault structures in Santa Monica Bay and the associated organic debris adjacent to the vaults. In addition to the abundant growth on the existing vaults, there was no evidence of fishing activity (e.g., fishing line, sinkers, lures, etc.) on any of the 24 vaults observed during the reef surveys. This is in contrast to other natural and man-made reefs in the region, where fishing gear on reef structures is not uncommon (Pondella, personal communication) and suggests that fishing pressure may be minimal on the existing SGRS vault structures.

Figure 4-15. Images of Existing Sylmar Ground Return Vaults in Santa Monica Bay

Source: Captured images from videos taken during reef surveys, January 9, 2015

5.0 CONCLUSIONS

Based on the results, several conclusions can be drawn from the Study.

The results of seawater chemistry, sediment chemistry, toxicity, and infaunal assessments indicate minor differences between sediment at the existing cable and those at the reference cable sites. Conditions at the existing cable site were also similar to conditions found elsewhere in Santa Monica Bay. The results suggest that the SGRS marine cables have not impacted the adjacent sediments (based on the data collected in this Study) and are unlikely to do so in the future.

The results of the data collected from the existing electrode vaults indicate that sediment adjacent to the vaults had higher levels of TOC and some chemical constituents compared to the reference cable site. However, concentrations were similar to those found elsewhere in Santa Monica Bay and there was no toxicity associated with sediments from any site monitored in the Study. The biological community associated with the existing electrode vault is rich and similar to conditions found at other natural and man-made reefs throughout the region.

The existing electrode vaults support a rich biological community, and the results of the Study indicate no impact associated with leaving them in place.

6.0 REFERENCES

American Society for Testing and Materials (ASTM). (2007). E1367-03 Test Methods for Measuring the Toxicity of Sediment-Associated Contaminants with Estuarine and Marine Invertebrates. *Annual Book of Standards, Water and Environmental Technology,* Vol. 11.06, West Conshohocken, PA.

Bay, S.M., E.Y. Zeng, T.D. Lorenson, K. Tran, and C. Alexander (2003). Temporal and spatial distributions of contaminants in sediments of Santa Monica Bay, California. Marine Environment Research 56(1-2): 255-276.

Bight'13 Benthic Contaminant Impact Assessment Committee. (2013). Southern California Bight 2013 Regional marine Monitoring Survey (Bight'13) Quality Assurance Manual. Prepared for Bight'13 Contaminant Impact Assessment Committee, June 2013.

Hung, C.C., G.C. Gong, H.Y. Chen, H.L. Hsieh, P.H. Santschi, T.L. Wade, and J.L. Sericano. (2007). Relationship between pesticides and organic carbon fractions in sediments of the Sanshui River estuary and adjacent coastal areas of Taiwan. *Environ. Pollut*ion. 184(2): 546-554.

Long, E.R., D.D. MacDonald, S.L. Smith, and F.D. Calder. (1995). Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuarine sediments. *Environmental Management*, 19:81-97.

Plumb, R. H., Jr. (1981). *Procedure for handling and chemical analysis of sediment and water samples. Technical Report EPA/CE-81-1*. U.S. Environmental Protection Agency/U.S. Army Corps of Engineers Technical Committee on criteria for dredged and fill material. Vicksburg, MS: U.S. Army Waterways Experimental Station.

Pondella, D.J., J.E. Caselle, J.T. Claisse, J.P. Williams, K. Davis, C.M. Williams, & L.A. Zahn. (2015). South Coast Baseline Program Final Report: Kelp and Shallow Rock Ecosystems. *California Sea Grant and MPA Monitoring Enterprise*, San Diego, CA. 308p.

Pondella, D.J. II, & J. Williams. (2015). Biological and physical characteristics of the Sylmar Ground Return System cable and electrode, with comparisons to natural nearshore environments of the Malibu Coast. Prepared for the Los Angeles Department of Water and Power.

Schiff, K. (2000). Sediment chemistry on the mainland shelf of the Southern California Bight. *Marine Pollution Bulletin,* 40: 267-276.

Smith, R.W., M. Bergen, S.B. Weisberg, D. Cadien, A. Dalkey, D. Montagne, et al. (2001). Benthic response index for assessing infaunal communities of the mainland shelf of Southern California. *Ecological Applications*, 11:1073-1087.

Southern California Coastal Water Research Project (SCCWRP). (2008). *Southern California Bight 2008 Regional Marine Monitoring Survey, Coastal Ecology Field Operations Manual*. Prepared by the Bight '08 Field Sampling & Logistics Committee. Prepared for the Commission of Southern California Coastal Water Research Project, Costa Mesa, CA.

Southern California Marine Invertebrate Taxonomists (SCAMIT). (2008). *A taxonomic listing of Macro- and Mega-invertebrates from Infaunal & Epibenthic Monitoring Programs in the Southern California Bight*. Edition 5. Prepared by The Southern California Association of Marine

Invertebrate Taxonomists and the Natural History Museum of Los Angeles County Research & Collections, Los Angeles, CA.

Tenera Environmental. (2006). Compilation and Analysis of CIAP Nearshore Survey Data. San Louis Obispo, CA. 107p.

U.S. Environmental Protection Agency (USEPA). (1994). *Methods for Assessing Toxicity of Sediment-Associated Contaminants With Estuarine and Marine Amphipods*. EPA/600/R-94/025. Narragansett, RI: EPA Office of Research and Development.

Williams, C. M., J. P. Williams, J. T. Claisse, D. J. Pondella, M. L. Domeier, L. A. Zahn. (2013). Morphometric relationships of marine fishes common to central California and the Southern California Bight. *Bulletin of the Southern California Academy of Sciences* 112(3): 217-227.

Yang, R.Q., G.B. Jiang, A.F. Zhou, C.g. Yuan, and J.B. Shi. (2005). Occurrence and distribute of organochlorine pesticides (HCH and DDT) in sediments collected from East China Sea. *Environ. Int.* 2005 Aug; 31(6): 799-804.

APPENDIX A - BIOLOGICAL SURVEY RESULTS

Biological and Physical Characteristics of the Sylmar Ground Return System Cable and Electrode, with Comparisons to Natural Nearshore Environments of the Malibu Coast

A report to the:

The Los Angeles Department of Water and Power

2015

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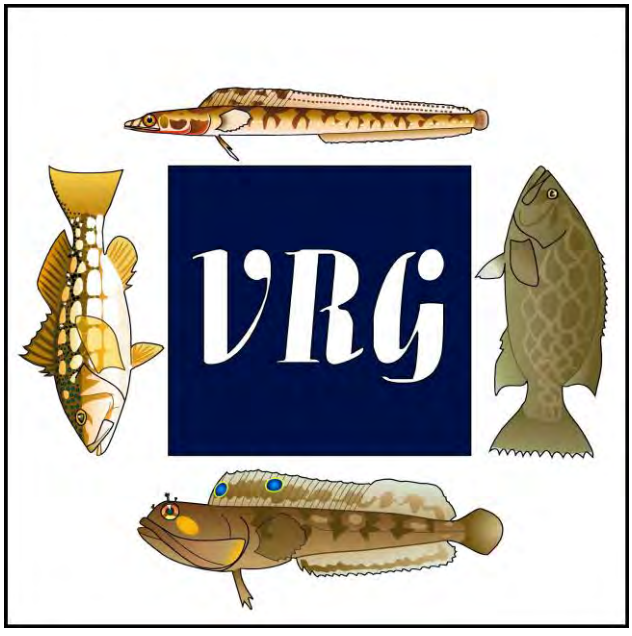

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Background

The Los Angeles Department of Water and Power (LADWP) is engaged in studies to support the proposed upgrading of its Pacific direct current (DC) Intertie (PDCI) by approximately 600MW to accommodate the transfer of wind power as well as hydroelectric power. The PDCI involves enhancements to the existing PDCI ocean electrode system located off the coast of Santa Monica, California in Santa Monica Bay, known as the Sylmar Ground Return System (SGRS). The ocean-based enhancement includes replacement and relocation of two existing subsea electrical cables, which currently extend seaward from the coast to the seafloor in northern Santa Monica Bay. In addition, a new electrode array, consisting of a series of concrete vaults will be deposited on the seafloor at the termini of the subsea cables as part of the enhancement.

The existing marine portion of the SGRS starts at the Gladstone Vault in Santa Monica in a commercial parking lot on the south side of Pacific Coast Highway. From the Gladstone Vault to a point in Santa Monica Bay approximately 300 meters (m) offshore, the SGRS consists of two 3-conductor copper cables that are buried in the sediment below the ocean floor (known as the Santa Monica and Malibu cables). The cables are insulated with ethylene propylene rubber and encased in a common polyvinyl chloride jacket. From this location to approximately 1,800 m offshore, the SGRS consists of two 3-conductor copper cables that are each insulated with high-density polyethylene (HDPE) and enclosed in a HDPE jacket (existing cables). The Santa Monica cable was buried approximately 1 m below the ocean floor during installation. The Malibu cable was laid on the ocean floor, although some segments are now buried below the surface as a result of currents and shifting sediments.

At the cable termini, approximately 1,800 m offshore, each of the six copper conductors (three from each cable) is spliced and divided into four conductors for a total of 24 conductors connecting to the same number of precast reinforced concrete vaults, each containing two silicon iron alloy rods. Each vault is 2.1 m wide, 3.3 m long, and 1.8 m high; the vaults are typically placed from 3 to 7 m apart. The length of the total electrode array (existing electrode) is approximately 160 m. The existing electrode is located directly on the ocean floor, approximately 15 m below mean lower low water.

As part of the Environmental Impact Report for the SGRS enhancement, Burns & McDonnell Engineering Inc. (Burns & McDonnell) is conducting a study to determine the potential impacts related to leaving the existing subsea cables and vaults in place (abandonment) verses removing them from the seafloor after the new SGRS is constructed (SGRS Existing Electrode Assessment; Burns & McDonnell 2015). The Vantuna Research Group (VRG) at Occidental College was contracted to assist with multiple tasks that assess these potential impacts by comparing the area surrounding the existing cables to a reference area and the electrode vaults to natural reefs along the Malibu coast.

Methods

Biological Sampling

The sampling approach employed for this survey is based upon long-term monitoring protocols developed for the Cooperative Research and Assessment of Nearshore Ecosystems (CRANE) program (Tenera 2006), adapted by the VRG for use in Santa Monica Bay and the rest of the Southern California Bight (Pondella et al. 2015a), and further adapted to suit the physical characteristics of the various habitats in this study. All surveys were conducted by teams of SCUBA divers that accessed sample sites from research vessels. We conducted surveys to characterize the epibenthic flora and fauna of the vaults and natural reefs in the study area, as well as the cable and reference areas, in the following manner:

Fish: Divers identified, counted, and sized all conspicuous fishes along belt transects, with each transect sampling the fish along the bottom 2 m of the water column. Divers estimated total length (TL) of small fish (< 30 cm TL) to the nearest cm, and larger fish (> 30 cm) to the nearest 5 cm interval. If a school of fish was encountered that was too large to size individuals, the number of fish was estimated within size bins. Width and length of the transects varied by survey area according to available substrate and is described below.

Swath: Abundance of invertebrates and stipitate (stalked) algae were recorded along benthic belt transects. Individual invertebrates (larger than 2.5 cm) and macroalgae are counted along the entire transect. Cracks and crevices were searched and understory algae was pushed aside for observation. Any organism with more than half of its body inside the swath area was counted. The following minimum size criteria were also applied when counting macroalgal species:

- Giant Kelp (*Macrocystis pyrifera*) taller than 1 m
- Pom Pom Kelp (*Pterygophora californica*) and Southern Sea Palm (*Eisenia arborea*) taller than 30 cm
- Oarweed (*Laminaria farlowii)* and Fringed Sieve Kelp (*Agarum fimbriatum*) greater than 10 cm wide
- Chain Bladder Kelp (*Cystoseira osmundacea*) greater than 6 cm wide

Width and length of the swath transects varied by survey area according to available substrate and is described below.

Biological Sampling Areas

Natural Reefs:

The biological communities at nine natural reefs along the Malibu coast were sampled from 2007-2012 (Table 1, Figure 1). Surveys were performed subtidally at a similar depth to that of the vaults (~15 m) and at reefs with comparable benthic relief. Four 30-m x 2-m x 2-m fish transects and two 30-m x 2-m swath transects were performed at each reef during each survey year in which they were sampled (as noted in Table 1).

Table 1. Natural reefs surveyed along the Malibu coast by year. F indicates fish sampling was performed, S indicates swath sampling was performed.

Survey Year	Deep Hole West	Deep Hole East	Leo Carrillo	Nicholas Canyon West	Nicholas Canyon East	Encinal Canyon	Little Dume West	Little Dume East	Escondido
2007	F	F	F/S	F/S	F/S		F/S	F/S	
2008		F/S	F/S	F/S			F/S		
2010									F/S
2011		F/S	F/S			F/S	F/S		
2012		F/S	F/S			F/S	F/S		

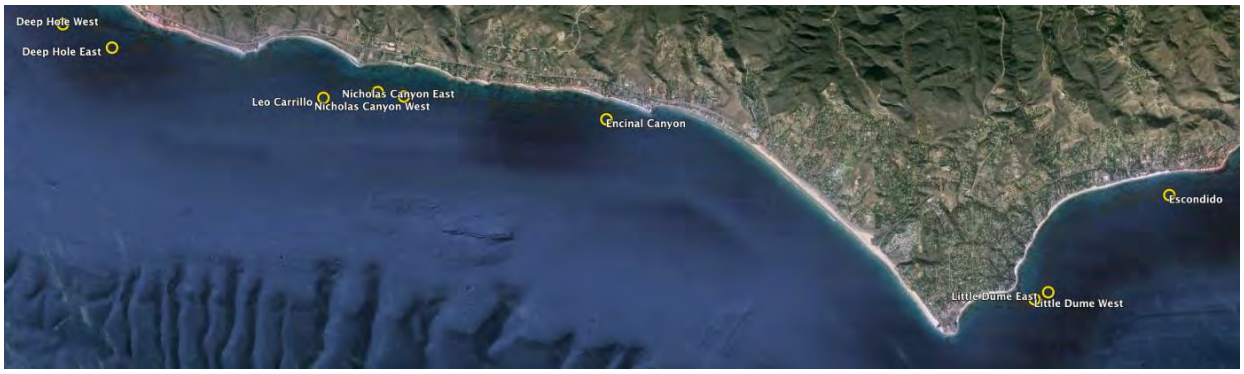


Figure 1. Natural reefs surveyed along the Malibu coast from 2007-2012.

Vaults:

Due to the small size of each individual vault, a series of ten 30-m x 2-m x 2-m fish transects were performed over the entire length of the vault system, including the sandy gaps between each vault. Swath data were gathered by identifying and enumerating invertebrates and stipitate macroalgae on all five surfaces of each of five randomly pre-selected vaults (Vaults 3, 5, 8, 11 and 21; Figure 2), which constitutes a 27-m^2 sample per vault. These surveys were completed on January 9th, 2015.

Existing Cable/Reference:

The biological community on the surface of the soft-bottom habitat associated with the existing cables was assessed by surveying five replicate survey areas of approximately 90 m in length and 15 m in width along the existing electrode cables (Figure 2). Survey areas were positioned along the existing cable route to be consistent with the SGRS Existing Electrode Assessment (Burns & McDonnell 2015). A second survey using the same protocols was conducted along a reference cable route located parallel to the existing cable route, approximately 1⁄4 mile to the east, over a similar depth range (Figure 2). Each of the ten areas were sampled completely by using six 45-m x 5-m transects to fill the entire survey area. The surveys along the existing cable route were completed on January 9th, 2015 and the surveys along the reference route were completed on January 14th, 2015. Each sampling day had excellent conditions, with sunny skies, calm seas, and excellent visibility underwater.

Figure 2. Location of cable and reference route replicate sampling areas and sampled electrode vaults.

Biological Data Processing

Prior to analysis, filter criteria were applied to remove fish species that would disproportionately weight the data toward a certain site for certain statistics. Pelagic species that are not characteristic inhabitants of rocky reef habitats or are highly mobile [e.g., Northern Anchovy *(Engraulis mordax*), Bonito (*Sarda chiliensis*), Pacific Chub Mackerel (*Scomber japonicus*), Pacific Barracuda (*Sphyraena argentea*)] were excluded from the data set for all analyses because they occurred infrequently, but when they were present they generally occurred in very large numbers. Total length (TL) estimates were converted to biomass using standard species-specific length-weight conversions from the literature (e.g., Williams et al. 2013), and density and biomass density were then scaled to number per 100 m^2 of seafloor. Similarly, invertebrate and algae densities from swath transects were also scaled to number per 100 m^2.

Water Sampling

Water quality parameters were measured at each of the five cable route replicate areas, five reference route replicate areas, and five randomly pre-selected vaults on January 14th, 2015 from the R/V Xenarcha. Conditions were excellent, with sunny skies and virtually no swell or wind. A Sea-Bird oceanographic profiler (Model SEACAT SBE 19*plus*V2) was lowered from surface to bottom at a rate of 0.5 m/s and recorded dissolved oxygen, temperature, pH, conductivity, salinity, and transmissivity values at a rate of 4 Hz. Data for each cast were binned and averaged in one-meter increments.

Water samples were taken at each of the five cable route replicate areas, five reference route replicate areas, and five randomly pre-selected vaults from the R/V Yellowfin on January 7th, 2015. Samples were grabbed at depth by deploying a Niskin bottle to approximately 1 m from the ocean floor and triggering the release.

Sediment Sampling

Marine sediment sampling and analysis was performed to assess the physical, chemical, biological, and toxicological characteristics of the sediments along the existing cable route, reference cable route, and existing electrode [a schematic of the study design is summarized in Table 2-1 and shown in Figure 2-3 of the SGRS Existing Electrode Assessment (Burns & McDonnell 2015)]. Divers collected sediment samples at each of the five existing cable route monitoring sites and directly adjacent to the five randomly pre-selected vaults by hand using 1-L PVC diver cores in the center of the epibenthic transect survey area. Three sets of diver cores were collected, one set for infaunal analyses, one set for sediment grain size and chemistry, and one set for toxicity analyses. A total of 18 diver cores were collected from each site (six cores per set) and transported to the deck of the R/V Xenarcha for processing.

Along the Reference Cable Route, sediment samples were collected following the sample protocols as those described above, except the samples were collected with a VanVeen Grab operated from the deck of the R/V Yellowfin. Multiple VanVeen grabs were taken at each of the five reference cable route transects to collect sufficient material for grain size, chemistry, infauna, and toxicity analyses. Samples were collected from the five monitoring sites along the Reference Cable Route for each sediment analysis (chemistry, grain size, infauna, and toxicity). Benthic Sample Processing details can be found in Burns & McDonnell (2015).

Results

Biological Sampling

Vaults/Natural Reefs:

The density of fish at the existing electrode vaults was 79.7 individuals/100 m^2 (summarized in Table 2; complete data set can be found in Appendix I). This value was compared to nine other natural reefs along the Malibu Coast where similar surveys have been conducted. Fish density at the existing electrode vaults was moderate compared to fish densities found at natural reefs at comparable depths in the region (range: 37.9 to 282.5 individuals/100 m^2; mean: 97.6 individuals/100 m^2). Fish biomass at the existing electrode vaults was 42,198 g/100 m^2, which is considerably greater than the fish biomass found at natural reefs in the region (range: 15,114 to 31,308 g/100 m^2; mean: 13,830 g/100 m^2). Nearly half of the biomass identified at the existing vaults can be attributed to several large Barred Sand Bass (*Paralabrax nebulifer*), Kelp Bass (*Paralabrax clathratus*), and California Sheephead (*Semicossyphus pulcher*) swimming over and among the vaults, though nine additional species were observed on transect (see Appendix I). The biomass value at the vaults is even more impressive considering the highest biomass value among natural reefs (31,308 g/100 m^2 at Nicholas Canyon East) was largely a product of a single Giant Sea Bass (*Stereolepis gigas*).

Table 2. Fish density and biomass at the Sylmar electrode Vaults compared to natural reefs previously surveyed along the Malibu coast.

Site	Years Surveyed	Total Density (#/100 m^2)	Total Biomass (g/100 m^2)
Sylmar Vaults	2015	79.7	42,198
Deep Hole West	2007	125.4	10,770
Deep Hole East	2007, 2008, 2011, 2012	43.5	5,884
Leo Carrillo	2007, 2008, 2011, 2012	134.8	15,114
Nicholas Canyon West	2007, 2008	282.5	26,194
Nicholas Canyon East	2007, 2008, 2011, 2012	104.6	31,308
Encinal Canyon	2011, 2012	65.3	19,915
Little Dume West	2007, 2008, 2011, 2012	44.3	10,216
Little Dume East	2007	40.4	2,456
Escondido	2010	37.9	2,611

While moderate densities of giant kelp (*Macrocystis pyrifera*) exist at the surveyed natural reefs (Appendix II), no kelps of any kind were encountered during the survey of the vaults. Recent surveys of artificial reefs in Santa Monica Bay have shown that growth of kelp rarely occurs on cement structures, including pier pilings at both Redondo and Hermosa Beach Artificial Reefs and manufactured concrete reef boxes at Hermosa Beach Artificial Reef (VRG, unpublished data). Instead, the surfaces of the vaults, like other concrete structures in Santa Monica Bay, were dominated by erect red algae and California Golden Gorgonians (*Muricea californica*; 152.6 individuals/100 m^2), though heavy cover of California Golden Gorgonians on natural reefs (range: 9.2-127.9 individuals/100 m^2; mean: 47.7 individuals/100 m^2) was not uncommon. The vaults also had a few resident Red Sea Urchins (*Strongylocentrotus franciscanus*; 5.2 individuals/100 m^2) at the vault/sand interface, though in far fewer numbers than were found at natural reefs (range: 7.9-596.4 individuals/100 m^2; mean: 211.1 individuals/100 m^2). Only four other species of macroinvertebrates were encountered on the vaults, including two more species of gorgonians (see Appendix II).

Table 3. Macroinvertebrate and macroalgae density at the Sylmar electrode vaults compared to natural reefs previously surveyed along the Malibu Coast.

Site	Years Surveyed	Total Macroinvertebrate Density (#/100 m^2)	Total Macroalgae Density (#/100 m^2)
Sylmar Vaults	2015	162.2	0.0
Deep Hole East	2008, 2011, 2012	1,740.3	6.1
Leo Carrillo	2007, 2008, 2011, 2012	732.5	17.5
Nicholas Canyon West	2007, 2008	501.3	30.4
Nicholas Canyon East	2007, 2008, 2011, 2012	274.2	19.2
Encinal Canyon	2011, 2012	1,626.2	9.6
Little Dume West	2007, 2008, 2011, 2012	516.0	75.0
Little Dume East	2007	50.4	45.0
Escondido	2010	500.8	15.8

Existing Cable/Reference:

The habitats along the cable route and reference route were very similar. Substrate in replicate areas 3, 4 and 5 (Figure 2) consisted nearly entirely of sand. Replicate areas 1 and 2 had moderate amounts of cobble and an occasional small boulder. The low ecological value of these habitats was reflected in the generally low level of fish encountered on transect. A large school of young-of-the-year (YOY) Señorita (*Oxyjulis californica*) heavily influenced the numerical density along the cable route and a single large Bat Ray (*Myliobatis californica*) heavily influenced the biomass density along the reference route (Table 4). When YOY Señorita are removed from the density estimates, fish density at the cable route (0.2 individuals/100 m^2) was very similar to that found at the reference route (0.3 individuals/100 m^2). Similarly, when the single Bat Ray is removed from the biomass density estimate, fish biomass at the cable site (14.4 g/100 m^2) was similar to that found at the reference site (17.9 g/100 m^2).

Table 4. Numerical and biomass density of fishes along reference and cable routes with complete total values as well as total values without Bat Rays or YOY Señorita.

		Reference		Cable	
Species	**Common Name**	**Density** (#/100 m2)	**Biomass** (g/100 m2)	**Density** (#/100 m2)	**Biomass** (g/100 m2)
Halichoeres semicinctus	Rock Wrasse	< 0.1	< 0.1	0.1	0.3
Heterodontus francisci	Horn Shark	< 0.1	5.3		
Myliobatis californica	Bat Ray	< 0.1	167.0		
Oxyjulis californica	Senorita			1.1	0.4
Paralabrax nebulifer	Barred Sand Bass	0.1	6.2	0.1	14.1
Raja inornata	California Skate	< 0.1	1.3		
Sebastes auriculatus	Brown Rockfish	< 0.1	1.8		
Syngnathus californiensis	Kelp Pipefish	< 0.1	< 0.1		
Synodus lucioceps	California Lizardfish	< 0.1	< 0.1	< 0.1	< 0.1
Urobatis halleri	Round Stingray	< 0.1	3.1		
Xystreurys liolepis	Fantail Sole	< 0.1	0.3		
	Total:	**0.3**	**184.9**	**1.2**	**14.9**
	No Bat Ray/Senorita:	**0.3**	**17.9**	**0.2**	**14.4**

Only a few individuals of stipitate macroalgae (*Macrocysits pyrifera* and *Pterogophora californica*) were encountered along transects and they were not significant contributors to the benthic community in either the cable or reference route survey areas (Table 5). There was a greater number of California Golden Gorgonians (*Muricea californica*) along the cable route (7.7 individuals/100 m^2) compared to the reference route (1.2 individuals/100 m^2), a difference that can be attributed to the exceptionally high number of individuals on boulders in replicate area 1 of the cable route. In contrast, there was a slightly higher density of Spiny Sand Stars (*Astropecten armatus*) along the reference route (7.8 individuals/100 m^2) compared to the cable route (2.6 individuals/100 m^2). The main driver of the difference in total density of invertebrates between the two areas comes from the White Sea Pen (*Stylatula elongata*), a common and patchily distributed soft-bottom species. The reference route survey areas 4 and 5 had up to 750 individuals present, which translates to a total density of 20.8 individuals/100 m^2 along the reference route and just 0.3 individuals/100 m^2 along the cable route.

Table 5. Density of invertebrates and stipitate algae along reference and cable routes.

	Species	Reference Density (#/100 m2)	Cable Density (#/100 m2)
Invertebrates	*Astropectin armatus*	7.8	2.6
	Cypraea spadicea		< 0.1
	Flabellina iodinea	0.2	
	Forreria belcheri	< 0.1	
	Hemisquilla ensigera	< 0.1	
	Heterocrypta occidentalis	< 0.1	< 0.1
	Kelletia kelletii	0.1	0.2
	Megastraea undosa		0.1
	Metacarcinus gracilis	< 0.1	
	Muricea californica	1.2	7.7
	Pachycerianthus fimbriatus	< 0.1	< 0.1
	Panulirus interruptus	< 0.1	0.1
	Patiria miniata		< 0.1
	Phyllactis bradleyi	0.1	
	Strongylocentrotus purpuratus		< 0.1
	Strongyocentrotus franciscanus		1.0
	Stylatula elongata	20.8	0.3
	Macroinvertebrate Total:	**30.3**	**11.9**
Algae	*Macrocystis pyrifera*	< 0.1	0.2
	Pterogophora californica		< 0.1
	Macroalgae Total:	**< 0.1**	**0.2**

Water Quality

Water quality parameters, including dissolved oxygen, temperature, pH, conductivity, salinity, and transmissivity, were all fairly typical of the region (see results in Appendix III). Though temperature was elevated for January (approximately 61^{o}F) and there appears to be a very slight and somewhat inverted thermocline, these values are consistent with other observations in Santa Monica Bay during this time period (Pondella et al. 2015b). With calm seas and little wind or storm activity prior to or during sampling, these shallow nearshore waters were not subject to the upwelling typical of this area, and stratification of the water column was not evident. In fact, there was almost no change in any parameter at any sampling area or any depth with the exception of transmissivity. This region of the coast is well known for its turbid waters, though this sampling period was an odd exception with high transmissivity rates throughout the study region. Unsurprisingly, transmissivity clearly decreased towards the benthos and especially at shallower survey areas, as was confirmed during the scuba surveys.

Water Chemistry & Sediment Analyses

The results of the water chemistry and physical, chemical, biological, and toxicological sediment analyses were not included as part of this project. The results can be found in Burns & McDonnell (2015).

Conclusions

Comparison of Electrode Vaults to Natural Reefs

The results of the surveys at the existing electrode vaults and natural rock reefs along the nearby Malibu coast show that the vaults are exceptionally productive for fish. The density of fishes at the electrode vaults was slightly below the mean of the density of the natural reefs. However, **biomass density at the electrode vaults was higher than *any* natural reef on the Malibu coast at comparable depths, which is more than three times the mean biomass density of the natural reefs**. Perhaps most importantly, the dominant contributors to biomass at the electrode vaults are three of the most important recreationally fished species in the region:

- Kelp Bass (*Paralabrax clathratus*; 1.75x the mean natural reef biomass density)
- Barred Sand Bass (*Paralabrax nebulifer*; 9.1x)
- California Sheephead (*Semicossyphus pulcher*; 9.3x)

In contrast to the natural reefs along the Malibu coastline, the electrode vaults are nearly devoid of non-gorgonian invertebrates and completely devoid of stipitate macroalgae. This is similar to other concrete structures in Santa Monica Bay, but natural reefs in the region are characterized by a wide array and large quantity of both invertebrates and macroalgae, including commercially harvestable Red Sea Urchins (*Strongylocentrotus franciscanus*) and habitat forming kelps (e.g. *Macrocystis pyrifera* and *Pterygophora californica*).

Water quality was not assessed at the natural reef sites along the Malibu coast, but parameters at the electrode vaults were typical of other locations in Santa Monica Bay during the same time period and **did not show any unusual effects due to the existence of the concrete vaults or electrode activity**.

Comparison of Electrode Cable to Reference Site

Fish density and biomass density were nearly identical at the reference and existing cable replicate areas. In general, very few fishes were observed while surveying either area. There were more species observed at the reference area versus the existing cable area (10 and 4, respectively), however most of these species observations were of single individuals. It is of our opinion that any differences in fish community structure between the reference and existing cable areas are minimal and likely entirely due to the existence of occasional bits of fractured rocky substrate in shallower areas, and *not* due to presence of the buried electrode cable.

Invertebrate and macroalgae density is also generally low at both the existing cable and reference areas. The same number of invertebrate species (12) was encountered at both areas. Gorgonians colonized the occasional piece of rocky substrate at both survey areas and White Sea Pens dominated the soft-bottom habitat at the reference area. Typical of soft-bottom habitat, kelps were virtually non-existent in both survey areas.

All water quality parameters were nearly identical at the existing cable route and reference replicate areas. Dissolved oxygen, temperature, pH, conductivity, salinity, and transmissivity values were typical for the region during this time period.

Literature Cited

Burns & McDonnell 2015. Assessment of the Existing Sylmar Ground Return System Marine Electrode in Santa Monica Bay. In Prep.

Pondella, D.J., J.E. Caselle, J.T. Claisse, J.P. Williams, K. Davis, C.M. Williams, and L.A. Zahn. 2015a. South Coast Baseline Program Final Report: Kelp and Shallow Rock Ecosystems. California Sea Grant and MPA Monitoring Enterprise, San Diego, CA. 308p.

Pondella, D.J., J.P. Williams, and L.A. Zahn. 2015b. Semi-Annual Receiving Water Monitoring Report, Winter 2015. Chevron Products Company, El Segundo Refinery (NPDES permit No. CA000337). 211p.

Tenera Environmental. 2006. Compilation and Analysis of CIAP Nearshore Survey Data. San Louis Obispo, CA. 107p.

Williams, C. M., J. P. Williams, J. T. Claisse, D. J. Pondella, M. L. Domeier, L. A. Zahn. 2013. Morphometric relationships of marine fishes common to central California and the Southern California Bight. Bulletin of the Southern California Academy of Sciences 112(3): 217-227

Appendix I

Fish Density and Biomass Density Estimates by Species and Reef

		Sylmar Vaults		Deep Hole West	
Species	**Common Name**	**Density** (#/100 m2)	**Biomass** (g/100 m2)	**Density** (#/100 m2)	**Biomass** (g/100 m2)
Anisotremus davidsonii	Sargo				
Brachyistius frenatus	Kelp Perch			0.4	3.0
Caulolatilus princeps	Ocean Whitefish				
Chromis punctipinnis	Blacksmith	9.7	111.6	28.8	344.0
Cymatogaster aggregata	Shiner Perch				
Damalichthys vacca	Pile Perch			2.5	630.8
Embiotoca jacksoni	Black Perch	2.8	1,100.3	0.8	242.5
Girella nigricans	Opaleye				
Halichoeres semicinctus	Rock Wrasse	0.2	0.8		
Hermosilla azurea	Zebraperch				
Heterostichus rostratus	Giant Kelpfish			1.3	0.5
Hexagrammos decagrammus	Kelp Greenling				
Hypsurus caryi	Rainbow Seaperch			4.6	770.6
Hypsypops rubicundus	Garibaldi	0.2	2.3		
Medialuna californiensis	Halfmoon	0.8	258.4		
Myliobatis californica	Bat Ray				
Oxyjulis californica	Senorita			70.0	1,383.6
Oxylebius pictus	Painted Greenling			0.8	29.8
Paralabrax clathratus	Kelp Bass	23.8	4,592.0	3.3	2,244.5
Paralabrax nebulifer	Barred Sand Bass	21.2	20,613.2	2.9	2,299.3
Paralichthys californicus	California Halibut				
Phanerodon atripes	Sharpnose Seaperch				
Phanerodon furcatus	White Seaperch			2.1	170.1
Rhacochilus toxotes	Rubberlip Seaperch	3.5	1,881.6		
Rhinogobiops nicholsii	Blackeye Goby			1.3	9.5
Scorpaena guttata	California Scorpionfish	0.2	80.6		
Scorpaenichthys marmoratus	Cabezon	0.3	142.2		
Sebastes atrovirens	Kelp Rockfish			0.8	138.4
Sebastes auriculatus	Brown Rockfish	0.5	256.1	1.3	2.3
Sebastes carnatus	Gopher Rockfish			1.3	328.0
Sebastes caurinus	Copper Rockfish				
Sebastes chrysomelas	Black-and-Yellow Rockfish				
Sebastes dallii	Calico Rockfish				
Sebastes miniatus	Vermilion Rockfish				
Sebastes mystinus	Blue Rockfish				
Sebastes serranoides	Olive Rockfish				
Sebastes serriceps	Treefish				
Semicossyphus pulcher	California Sheephead	16.5	13,159.0	3.3	2,172.7
Stereolepis gigas	Giant Sea Bass				
Trachurus symmetricus	Jack Mackerel				
Urobatis halleri	Round Stingray				
	Total:	**79.7**	**42,198.0**	**125.4**	**10,769.6**

		Deep Hole East		Leo Carrillo	
		Density	**Biomass**	**Density**	**Biomass**
Species	**Common Name**	(#/100 m2)	(g/100 m2)	(#/100 m2)	(g/100 m2)
Anisotremus davidsonii	Sargo	0.1	64.9		
Brachyistius frenatus	Kelp Perch	0.1	0.4	8.0	113.7
Caulolatilus princeps	Ocean Whitefish	0.1	34.3		
Chromis punctipinnis	Blacksmith	16.3	436.7	12.4	397.1
Cymatogaster aggregata	Shiner Perch			0.2	4.5
Damalichthys vacca	Pile Perch	0.8	227.1	3.0	1,127.4
Embiotoca jacksoni	Black Perch	3.3	1,206.0	7.4	1,563.2
Girella nigricans	Opaleye	0.6	177.0		
Halichoeres semicinctus	Rock Wrasse	0.1	10.0	0.1	20.2
Hermosilla azurea	Zebraperch			0.2	41.8
Heterostichus rostratus	Giant Kelpfish				
Hexagrammos decagrammus	Kelp Greenling				
Hypsurus caryi	Rainbow Seaperch	0.2	48.2	4.3	344.2
Hypsypops rubicundus	Garibaldi	1.2	385.9		
Medialuna californiensis	Halfmoon	3.0	469.6		
Myliobatis californica	Bat Ray				
Oxyjulis californica	Senorita	5.0	157.1	67.7	1,987.4
Oxylebius pictus	Painted Greenling	1.9	35.1	2.1	46.0
Paralabrax clathratus	Kelp Bass	1.9	737.9	9.3	3,465.8
Paralabrax nebulifer	Barred Sand Bass	1.1	590.4	2.4	2,094.3
Paralichthys californicus	California Halibut	0.1	29.9		
Phanerodon atripes	Sharpnose Seaperch			0.8	55.1
Phanerodon furcatus	White Seaperch	0.1	19.5	3.7	453.3
Rhacochilus toxotes	Rubberlip Seaperch	0.2	126.0	0.2	143.4
Rhinogobiops nicholsii	Blackeye Goby	0.5	1.4	0.2	1.0
Scorpaena guttata	California Scorpionfish				
Scorpaenichthys marmoratus	Cabezon				
Sebastes atrovirens	Kelp Rockfish	0.7	216.1	2.5	393.9
Sebastes auriculatus	Brown Rockfish	0.1	31.7		
Sebastes carnatus	Gopher Rockfish	0.1	41.2	0.6	143.6
Sebastes caurinus	Copper Rockfish			0.6	133.2
Sebastes chrysomelas	Black-and-Yellow Rockfish	0.1	44.2	0.1	16.6
Sebastes dallii	Calico Rockfish			0.1	0.6
Sebastes miniatus	Vermilion Rockfish	0.1	2.8	0.1	83.8
Sebastes mystinus	Blue Rockfish	0.7	6.1	0.7	64.2
Sebastes serranoides	Olive Rockfish	0.5	76.3	1.7	313.9
Sebastes serriceps	Treefish	0.1	29.8		
Semicossyphus pulcher	California Sheephead	1.2	600.4	4.3	2,085.2
Stereolepis gigas	Giant Sea Bass				
Trachurus symmetricus	Jack Mackerel	3.0	78.4	1.9	20.4
Urobatis halleri	Round Stingray				
	Total:	**43.5**	**5,884.4**	**134.8**	**15,114.0**

		Nicholas Canyon West		Nicholas Canyon East	
		Density	**Biomass**	**Density**	**Biomass**
Species	**Common Name**	(#/100 m2)	(g/100 m2)	(#/100 m2)	(g/100 m2)
Anisotremus davidsonii	Sargo				
Brachyistius frenatus	Kelp Perch	29.6	295.3	5.4	69.6
Caulolatilus princeps	Ocean Whitefish				
Chromis punctipinnis	Blacksmith	43.1	1,619.5	19.6	882.3
Cymatogaster aggregata	Shiner Perch				
Damalichthys vacca	Pile Perch	5.8	582.4	2.5	216.2
Embiotoca jacksoni	Black Perch	0.8	302.7	2.9	649.3
Girella nigricans	Opaleye				
Halichoeres semicinctus	Rock Wrasse				
Hermosilla azurea	Zebraperch				
Heterostichus rostratus	Giant Kelpfish			0.4	1.1
Hexagrammos decagrammus	Kelp Greenling				
Hypsurus caryi	Rainbow Seaperch	18.1	935.2	16.7	217.2
Hypsypops rubicundus	Garibaldi	0.4	200.5		
Medialuna californiensis	Halfmoon				
Myliobatis californica	Bat Ray				
Oxyjulis californica	Senorita	124.2	3,093.0	31.3	496.9
Oxylebius pictus	Painted Greenling	1.7	71.5		
Paralabrax clathratus	Kelp Bass	22.7	7,155.6	10.8	5,449.7
Paralabrax nebulifer	Barred Sand Bass	14.4	9,637.6	2.1	1,343.1
Paralichthys californicus	California Halibut				
Phanerodon atripes	Sharpnose Seaperch			1.3	52.3
Phanerodon furcatus	White Seaperch	2.5	157.2	1.7	70.1
Rhacochilus toxotes	Rubberlip Seaperch	0.4	369.9		
Rhinogobiops nicholsii	Blackeye Goby	0.6	6.3		
Scorpaena guttata	California Scorpionfish				
Scorpaenichthys marmoratus	Cabezon				
Sebastes atrovirens	Kelp Rockfish	8.3	363.0	8.8	191.9
Sebastes auriculatus	Brown Rockfish				
Sebastes carnatus	Gopher Rockfish				
Sebastes caurinus	Copper Rockfish			0.4	106.6
Sebastes chrysomelas	Black-and-Yellow Rockfish				
Sebastes dallii	Calico Rockfish				
Sebastes miniatus	Vermilion Rockfish				
Sebastes mystinus	Blue Rockfish	0.4	6.4		
Sebastes serranoides	Olive Rockfish	3.1	12.1		
Sebastes serriceps	Treefish				
Semicossyphus pulcher	California Sheephead	3.1	1,220.1	0.4	104.7
Stereolepis gigas	Giant Sea Bass			0.4	21,457.1
Trachurus symmetricus	Jack Mackerel	3.1	165.4		
Urobatis halleri	Round Stingray				
	Total:	**282.5**	**26,193.8**	**104.6**	**31,308.1**

		Encinal Canyon		Little Dume West	
		Density	**Biomass**	**Density**	**Biomass**
Species	**Common Name**	(#/100 m2)	(g/100 m2)	(#/100 m2)	(g/100 m2)
Anisotremus davidsonii	Sargo			1.0	501.9
Brachyistius frenatus	Kelp Perch	2.5	48.3	1.1	3.4
Caulolatilus princeps	Ocean Whitefish	0.6	591.2		
Chromis punctipinnis	Blacksmith	7.2	309.1	4.8	52.7
Cymatogaster aggregata	Shiner Perch				
Damalichthys vacca	Pile Perch	0.6	316.0	1.0	273.5
Embiotoca jacksoni	Black Perch	1.9	553.7	2.3	289.3
Girella nigricans	Opaleye			3.2	1,635.7
Halichoeres semicinctus	Rock Wrasse	0.6	122.8	0.7	136.9
Hermosilla azurea	Zebraperch				
Heterostichus rostratus	Giant Kelpfish				
Hexagrammos decagrammus	Kelp Greenling	0.3	8.1		
Hypsurus caryi	Rainbow Seaperch	0.6	80.0	1.4	75.9
Hypsypops rubicundus	Garibaldi			1.1	447.6
Medialuna californiensis	Halfmoon				
Myliobatis californica	Bat Ray	0.3	6,572.6		
Oxyjulis californica	Senorita	20.0	912.1	11.8	408.1
Oxylebius pictus	Painted Greenling	3.1	76.8	0.6	11.6
Paralabrax clathratus	Kelp Bass	5.0	2,502.5	3.9	1,177.2
Paralabrax nebulifer	Barred Sand Bass	3.1	3,421.6	0.6	448.5
Paralichthys californicus	California Halibut				
Phanerodon atripes	Sharpnose Seaperch				
Phanerodon furcatus	White Seaperch	6.9	867.6		
Rhacochilus toxotes	Rubberlip Seaperch			0.6	346.1
Rhinogobiops nicholsii	Blackeye Goby			0.1	0.2
Scorpaena guttata	California Scorpionfish				
Scorpaenichthys marmoratus	Cabezon				
Sebastes atrovirens	Kelp Rockfish	3.9	1,249.3	1.5	358.8
Sebastes auriculatus	Brown Rockfish	0.6	5.1		
Sebastes carnatus	Gopher Rockfish	0.6	107.8	0.2	27.0
Sebastes caurinus	Copper Rockfish	0.8	85.6		
Sebastes chrysomelas	Black-and-Yellow Rockfish				
Sebastes dallii	Calico Rockfish				
Sebastes miniatus	Vermilion Rockfish				
Sebastes mystinus	Blue Rockfish	3.3	24.7	0.2	1.5
Sebastes serranoides	Olive Rockfish	0.3	17.3	0.4	22.4
Sebastes serriceps	Treefish				
Semicossyphus pulcher	California Sheephead	3.3	2,042.8	7.9	3,997.3
Stereolepis gigas	Giant Sea Bass				
Trachurus symmetricus	Jack Mackerel				
Urobatis halleri	Round Stingray				
	Total:	**65.3**	**19,914.9**	**44.3**	**10,215.6**

		Little Dume East		Escondido	
		Density	**Biomass**	**Density**	**Biomass**
Species	**Common Name**	(#/100 m2)	(g/100 m2)	(#/100 m2)	(g/100 m2)
Anisotremus davidsonii	Sargo	0.8	153.8		
Brachyistius frenatus	Kelp Perch	2.1	21.5	12.9	17.1
Caulolatilus princeps	Ocean Whitefish				
Chromis punctipinnis	Blacksmith	9.6	80.2	0.4	20.1
Cymatogaster aggregata	Shiner Perch				
Damalichthys vacca	Pile Perch				
Embiotoca jacksoni	Black Perch	2.1	618.0	2.1	809.8
Girella nigricans	Opaleye				
Halichoeres semicinctus	Rock Wrasse				
Hermosilla azurea	Zebraperch				
Heterostichus rostratus	Giant Kelpfish				
Hexagrammos decagrammus	Kelp Greenling				
Hypsurus caryi	Rainbow Seaperch	0.4	1.2	2.9	89.3
Hypsypops rubicundus	Garibaldi			0.4	570.8
Medialuna californiensis	Halfmoon				
Myliobatis californica	Bat Ray				
Oxyjulis californica	Senorita	17.9	64.4	12.9	236.1
Oxylebius pictus	Painted Greenling				
Paralabrax clathratus	Kelp Bass	2.9	414.3	1.3	167.7
Paralabrax nebulifer	Barred Sand Bass			1.3	446.1
Paralichthys californicus	California Halibut				
Phanerodon atripes	Sharpnose Seaperch				
Phanerodon furcatus	White Seaperch	3.3	122.6		
Rhacochilus toxotes	Rubberlip Seaperch				
Rhinogobiops nicholsii	Blackeye Goby				
Scorpaena guttata	California Scorpionfish				
Scorpaenichthys marmoratus	Cabezon				
Sebastes atrovirens	Kelp Rockfish			2.9	75.9
Sebastes auriculatus	Brown Rockfish				
Sebastes carnatus	Gopher Rockfish				
Sebastes caurinus	Copper Rockfish				
Sebastes chrysomelas	Black-and-Yellow Rockfish				
Sebastes dallii	Calico Rockfish				
Sebastes miniatus	Vermilion Rockfish				
Sebastes mystinus	Blue Rockfish				
Sebastes serranoides	Olive Rockfish				
Sebastes serriceps	Treefish				
Semicossyphus pulcher	California Sheephead	0.8	267.8	0.8	178.0
Stereolepis gigas	Giant Sea Bass				
Trachurus symmetricus	Jack Mackerel				
Urobatis halleri	Round Stingray	0.4	712.7		
	Total:	**40.4**	**2,456.4**	**37.9**	**2,610.8**

Appendix II

Invertebrate and Macroalgae Density Estimates by Species and Reef

	Species	Sylmar Vaults Density (#/100 m2)	Deep Hole East Density (#/100 m2)	Leo Carrillo Density (#/100 m2)
Invertebrates	*Anthopleura sola*		13.1	0.4
	Aplysia californica		0.8	
	Astropectin armatus			
	Cancer antennarius		0.3	
	Centrostephanus coronatus		1.4	1.7
	Crassedoma giganteum		1.1	0.6
	Cypraea spadicea		10.0	8.5
	Dermasterias imbricata			2.3
	Haliotis kamtschatkana assimilis			0.2
	Henricia leviuscula			4.0
	Kelletia kelletii		9.2	12.5
	Leptogorgia chilensis	1.5	3.1	7.1
	Loxorhynchus grandis			
	Lytechinus anamesus		1.4	0.8
	Megastraea undosa		0.8	0.4
	Megathura crenulata		4.7	5.8
	Muricea californica	152.6	90.3	41.0
	Muricea fruticosa	1.5	4.4	1.5
	Pachycerianthus fimbriatus		6.1	5.2
	Panulirus interruptus			
	Parastichopus californicus			
	Parastichopus parvimensis	0.7	2.8	9.4
	Patiria miniata	0.7	83.3	225.2
	Peltodoris nobilis			
	Pisaster brevispinus			
	Pisaster giganteus		40.6	24.4
	Pisaster ochraceus			
	Pycnopodia helianthoides		0.3	
	Strongylocentrotus franciscanus	5.2	596.4	188.8
	Strongylocentrotus purpuratus		849.4	157.1
	Styela montereyensis		4.2	5.0
	Tethya californiana		16.4	29.8
	Tetilla sp B			0.4
	Urticina columbiana			0.2
	Urticina mcpeaki		0.3	0.2
	Macroinvertebrate Total:	**162.2**	**1740.3**	**732.5**
Algae	*Cystoseira osmundacea*			0.4
	Eisenia arborea			
	Laminaria farlowii			0.2
	Macrocystis pyrifera		2.5	16.9
	Pterygophora californica		3.6	
	Macroalgae Total:	**0.0**	**6.1**	**17.5**

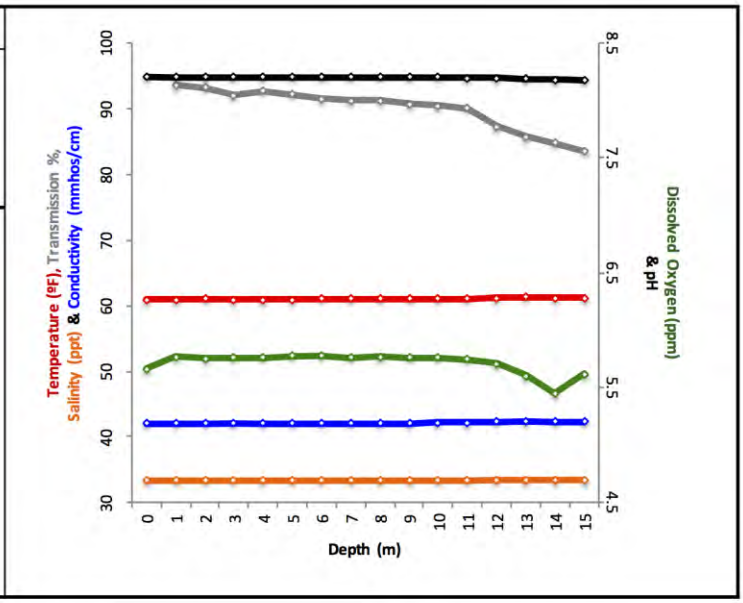
	Species	Nicholas Canyon West Density (#/100 m2)	Nicholas Canyon East Density (#/100 m2)	Encinal Canyon Density (#/100 m2)
Invertebrates	*Anthopleura sola*	2.5		6.3
	Aplysia californica			
	Astropectin armatus			
	Cancer antennarius			0.8
	Centrostephanus coronatus			
	Crassedoma giganteum	0.8		0.8
	Cypraea spadicea			10.8
	Dermasterias imbricata		0.8	0.8
	Haliotis kamtschatkana assimilis			
	Henricia leviuscula			
	Kelletia kelletii	3.8	13.3	15.4
	Leptogorgia chilensis	3.8	8.3	5.4
	Loxorhynchus grandis	0.4		0.8
	Lytechinus anamesus			0.8
	Megastraea undosa	0.8		
	Megathura crenulata			0.4
	Muricea californica	45.4	55.8	127.9
	Muricea fruticosa	2.1	0.8	6.3
	Pachycerianthus fimbriatus	2.5	4.2	36.7
	Panulirus interruptus	0.4		
	Parastichopus californicus			
	Parastichopus parvimensis	1.3	5.8	7.5
	Patiria miniata	60.0	57.5	149.6
	Peltodoris nobilis	0.4		
	Pisaster brevispinus	2.1		5.4
	Pisaster giganteus	8.8	13.3	65.8
	Pisaster ochraceus			
	Pycnopodia helianthoides			
	Strongylocentrotus franciscanus	250.8	55.0	322.9
	Strongylocentrotus purpuratus	99.2	20.8	837.9
	Styela montereyensis	5.8	10.8	3.3
	Tethya californiana	10.4	27.5	20.4
	Tetilla sp B			
	Urticina columbiana			
	Urticina mcpeaki			
	Macroinvertebrate Total:	**501.3**	**274.2**	**1626.2**
Algae	*Cystoseira osmundacea*			
	Eisenia arborea			
	Laminaria farlowii			
	Macrocystis pyrifera	30.0	19.2	9.6
	Pterygophora californica	0.4		
	Macroalgae Total:	**30.4**	**19.2**	**9.6**

	Species	Little Dume West Density (#/100 m2)	Little Dume East Density (#/100 m2)	Escondido Density (#/100 m2)
Invertebrates	*Anthopleura sola*	0.6		
	Aplysia californica		1.3	
	Astropectin armatus	0.2		
	Cancer antennarius			
	Centrostephanus coronatus	1.9		
	Crassedoma giganteum	0.4		0.8
	Cypraea spadicea	1.7		
	Dermasterias imbricata			
	Haliotis kamtschatkana assimilis			
	Henricia leviuscula			0.8
	Kelletia kelletii	14.2	6.7	37.5
	Leptogorgia chilensis			4.2
	Loxorhynchus grandis	0.4	0.4	
	Lytechinus anamesus	24.6		
	Megastraea undosa	0.4		
	Megathura crenulata	3.8		
	Muricea californica	23.5	9.2	35.8
	Muricea fruticosa	2.3	3.8	36.7
	Pachycerianthus fimbriatus	27.1		
	Panulirus interruptus	0.6		
	Parastichopus californicus			0.8
	Parastichopus parvimensis	1.0	1.3	20.8
	Patiria miniata	78.1	7.5	85.8
	Peltodoris nobilis			
	Pisaster brevispinus	5.6		30.0
	Pisaster giganteus	16.3	3.3	42.5
	Pisaster ochraceus		0.4	
	Pycnopodia helianthoides	1.0		0.8
	Strongylocentrotus franciscanus	126.7	7.9	140.0
	Strongylocentrotus purpuratus	162.5		25.0
	Styela montereyensis	19.4	7.9	14.2
	Tethya californiana	3.8	0.8	25.0
	Tetilla sp B			
	Urticina columbiana			
	Urticina mcpeaki			
	Macroinvertebrate Total:	**516.0**	**50.4**	**500.8**
Algae	*Cystoseira osmundacea*	0.2	1.3	
	Eisenia arborea	3.1		
	Laminaria farlowii	13.5	2.1	
	Macrocystis pyrifera	13.8	19.6	15.8
	Pterygophora californica	44.4	22.1	
	Macroalgae Total:	**75.0**	**45.0**	**15.8**

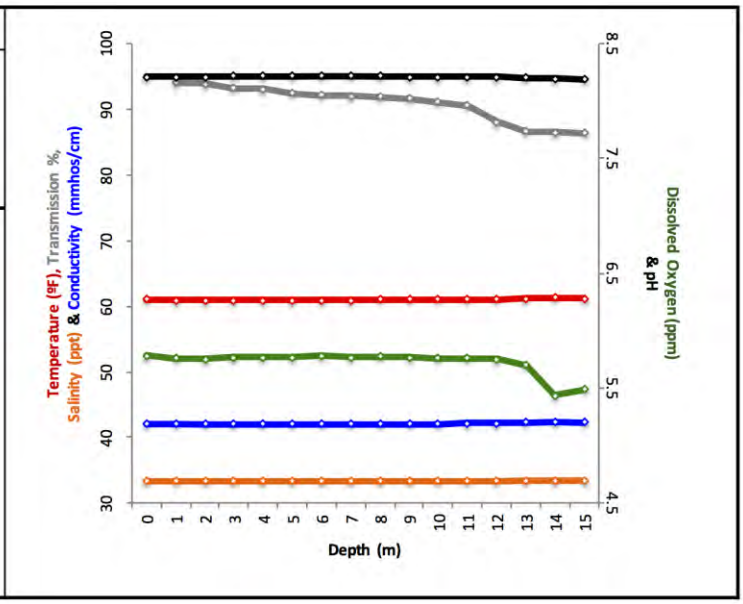
Appendix III

Water Quality Parameters by Sampling Location

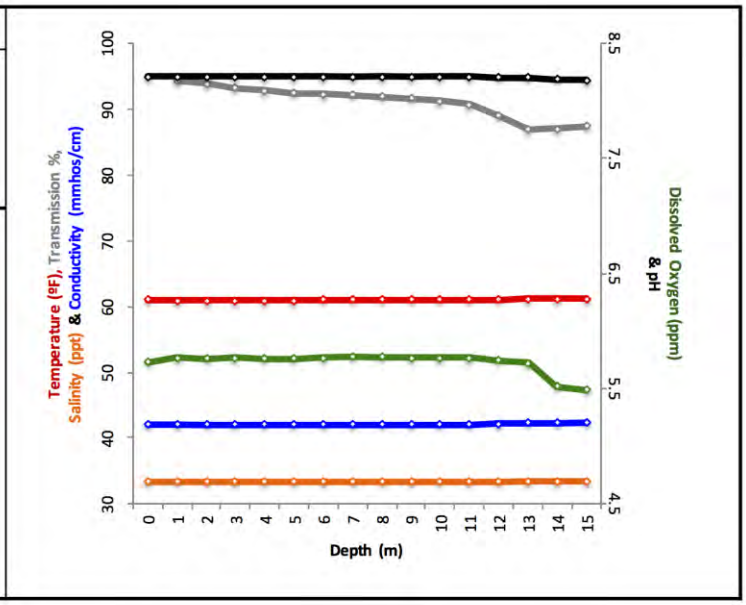
Vault 3	1/14/15	8:20 AM				
Depth (m)	Temperature (°F)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	60.9	5.66	8.2	42.0	33.3	
1	60.9	5.76	8.2	42.0	33.3	93.6
2	61.0	5.75	8.2	42.0	33.3	93.2
3	60.9	5.76	8.2	42.0	33.3	92.1
4	60.9	5.76	8.2	42.0	33.3	92.6
5	61.0	5.77	8.2	42.0	33.3	92.2
6	61.0	5.78	8.2	42.0	33.3	91.5
7	61.0	5.76	8.2	42.0	33.3	91.3
8	61.0	5.77	8.2	42.0	33.3	91.3
9	61.0	5.76	8.2	42.1	33.3	90.7
10	61.0	5.76	8.2	42.1	33.3	90.4
11	61.1	5.74	8.2	42.2	33.3	90.1
12	61.2	5.71	8.2	42.3	33.4	87.2
13	61.2	5.60	8.2	42.3	33.4	85.7
14	61.2	5.45	8.2	42.3	33.4	84.8
15	61.2	5.62	8.2	42.3	33.4	83.5



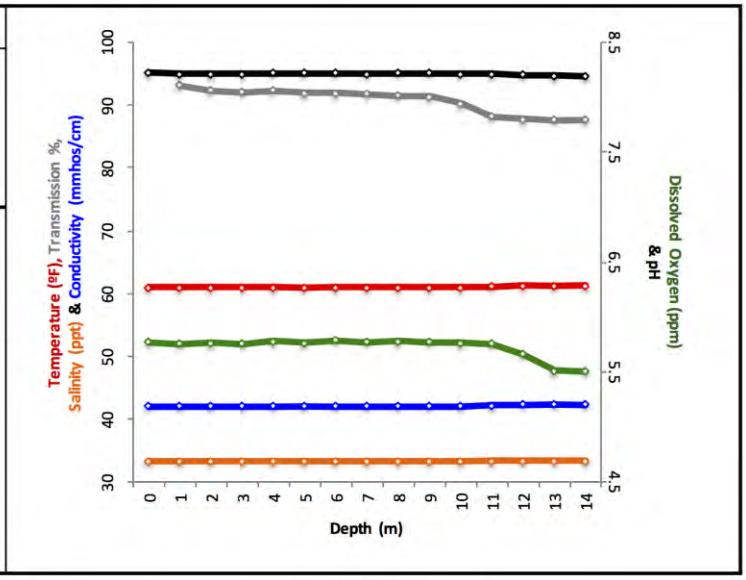
Vault 5	1/14/15	8:25 AM				
Depth (m)	Temperature (°F)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.0	5.78	8.2	42.0	33.3	
1	60.9	5.76	8.2	42.0	33.3	94.1
2	60.9	5.75	8.2	42.0	33.3	93.8
3	60.9	5.77	8.2	42.0	33.3	93.2
4	60.9	5.76	8.2	42.0	33.3	93.0
5	60.9	5.77	8.2	42.0	33.3	92.4
6	60.9	5.78	8.2	42.0	33.3	92.1
7	60.9	5.77	8.2	42.0	33.3	92.0
8	61.0	5.77	8.2	42.0	33.3	91.9
9	61.0	5.77	8.2	42.0	33.3	91.6
10	61.0	5.76	8.2	42.1	33.3	91.1
11	61.0	5.76	8.2	42.1	33.3	90.6
12	61.1	5.75	8.2	42.2	33.3	88.1
13	61.2	5.70	8.2	42.3	33.4	86.6
14	61.2	5.44	8.2	42.3	33.4	86.4
15	61.2	5.49	8.2	42.3	33.4	86.3



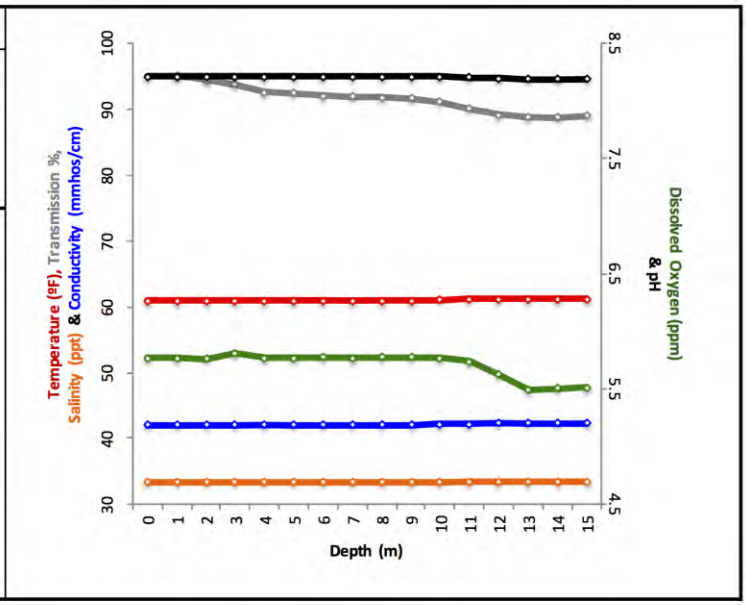
Vault 8	1/14/15	8:30 AM				
Depth (m)	Temperature (°F)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.0	5.73	8.2	42.0	33.3	
1	60.9	5.77	8.2	42.0	33.3	94.3
2	60.9	5.76	8.2	42.0	33.3	93.8
3	60.9	5.76	8.2	42.0	33.3	93.1
4	60.9	5.76	8.2	42.0	33.3	92.8
5	61.0	5.76	8.2	42.0	33.3	92.4
6	61.0	5.77	8.2	42.0	33.3	92.3
7	61.0	5.78	8.2	42.0	33.3	92.2
8	61.0	5.78	8.2	42.0	33.3	91.9
9	61.0	5.76	8.2	42.0	33.3	91.7
10	61.0	5.77	8.2	42.0	33.3	91.2
11	61.0	5.77	8.2	42.1	33.3	90.7
12	61.1	5.74	8.2	42.1	33.3	88.9
13	61.2	5.72	8.2	42.3	33.4	86.9
14	61.2	5.52	8.2	42.3	33.4	87.0
15	61.2	5.49	8.2	42.3	33.4	87.4



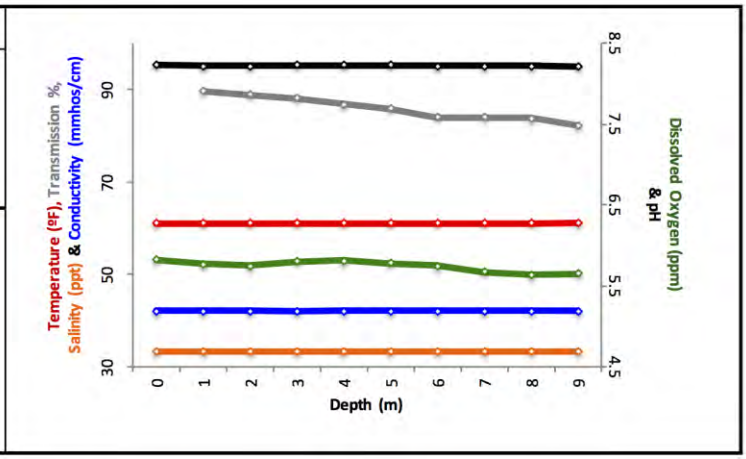
Vault 11	1/14/15	8:36 AM				
Depth (m)	Temperature (°F)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.0	5.77	8.2	42.0	33.3	
1	60.9	5.76	8.2	42.0	33.3	93.1
2	60.9	5.76	8.2	42.0	33.3	92.4
3	60.9	5.76	8.2	42.0	33.3	92.0
4	60.9	5.78	8.2	42.0	33.3	92.3
5	60.9	5.77	8.2	42.0	33.3	92.0
6	60.9	5.78	8.2	42.0	33.3	91.9
7	60.9	5.78	8.2	42.0	33.3	91.8
8	60.9	5.78	8.2	42.0	33.3	91.5
9	60.9	5.77	8.2	42.0	33.3	91.4
10	61.0	5.77	8.2	42.1	33.3	90.3
11	61.1	5.75	8.2	42.2	33.4	88.2
12	61.2	5.66	8.2	42.3	33.4	87.8
13	61.2	5.51	8.2	42.3	33.4	87.7
14	61.2	5.50	8.2	42.3	33.4	87.6



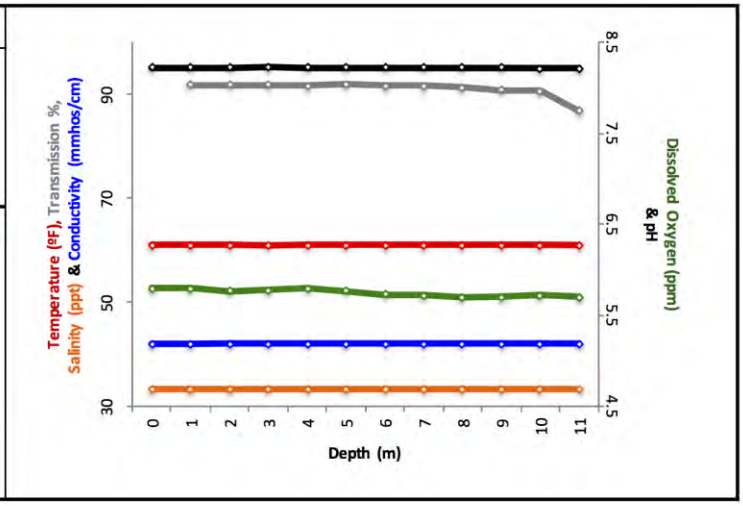
Vault 21	1/14/15	8:45 AM				
Depth (m)	**Temperature** (ºF)	**Oxygen** (ppm)	**pH**	**Conductivity** (mmhos/cm)	**Salinity** (ppt)	**Transmissivity** % transmission
0	60.9	5.77	8.2	42.0	33.3	
1	60.9	5.77	8.2	42.0	33.3	95.1
2	60.9	5.76	8.2	42.0	33.3	94.4
3	60.9	5.81	8.2	42.0	33.3	93.7
4	60.9	5.77	8.2	42.0	33.3	92.5
5	60.9	5.77	8.2	42.0	33.3	92.4
6	60.9	5.77	8.2	42.0	33.3	92.0
7	60.9	5.77	8.2	42.0	33.3	91.9
8	60.9	5.78	8.2	42.0	33.3	91.8
9	60.9	5.78	8.2	42.0	33.3	91.6
10	61.0	5.77	8.2	42.1	33.3	91.1
11	61.1	5.74	8.2	42.2	33.4	90.1
12	61.2	5.62	8.2	42.3	33.4	89.2
13	61.2	5.49	8.2	42.3	33.4	88.8
14	61.2	5.51	8.2	42.3	33.4	88.8
15	61.2	5.51	8.2	42.3	33.4	88.9



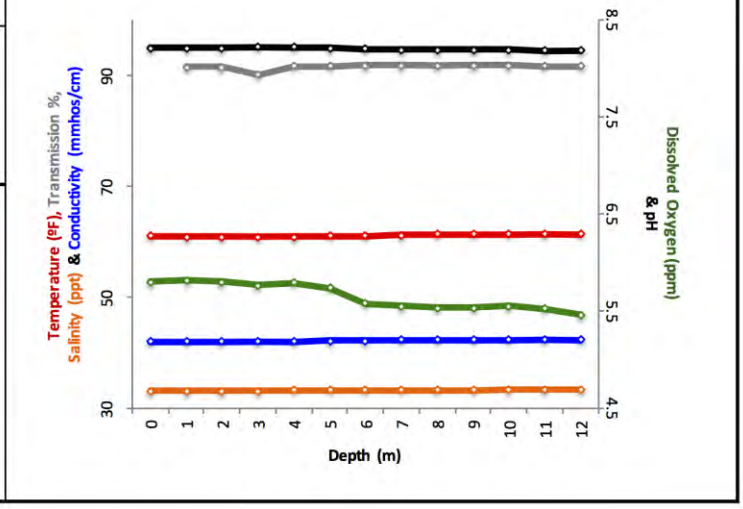
Cable 1	1/14/15	8:52 AM				
Depth (m)	**Temperature** (ºF)	**Oxygen** (ppm)	**pH**	**Conductivity** (mmhos/cm)	**Salinity** (ppt)	**Transmissivity** % transmission
0	61.0	5.82	8.2	42.0	33.3	
1	61.0	5.76	8.2	42.0	33.3	89.6
2	61.0	5.75	8.2	42.1	33.3	88.9
3	61.0	5.80	8.2	42.0	33.3	88.1
4	61.0	5.81	8.2	42.1	33.3	86.8
5	61.0	5.78	8.2	42.1	33.3	85.8
6	61.1	5.75	8.2	42.1	33.3	84.0
7	61.1	5.67	8.2	42.1	33.3	84.0
8	61.1	5.64	8.2	42.1	33.3	83.8
9	61.1	5.65	8.2	42.1	33.3	82.1



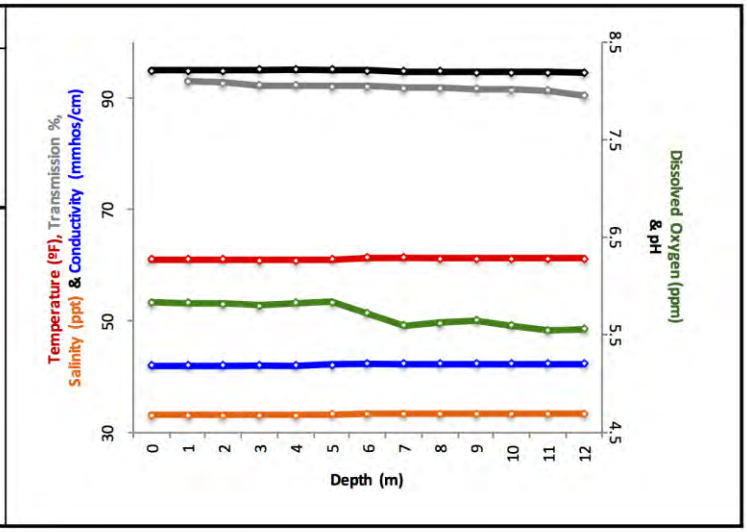
Cable 2	1/14/15	8:58 AM				
Depth (m)	Temperature (ºF)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	60.9	5.80	8.2	42.0	33.3	
1	60.9	5.80	8.2	42.0	33.3	91.8
2	60.9	5.76	8.2	42.0	33.3	91.7
3	60.9	5.78	8.2	42.0	33.3	91.7
4	60.9	5.80	8.2	42.0	33.3	91.6
5	61.0	5.77	8.2	42.0	33.3	91.9
6	61.0	5.73	8.2	42.0	33.3	91.6
7	61.0	5.72	8.2	42.1	33.3	91.5
8	61.0	5.70	8.2	42.1	33.3	91.3
9	61.0	5.70	8.2	42.1	33.3	90.7
10	61.0	5.72	8.2	42.0	33.3	90.6
11	61.0	5.70	8.2	42.1	33.3	86.7



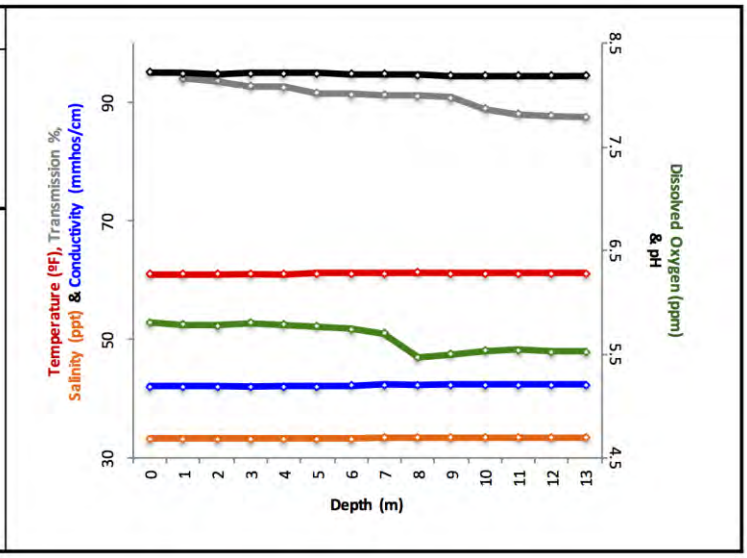
Cable 3	1/14/15	9:03 AM				
Depth (m)	Temperature (ºF)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.0	5.80	8.2	42.0	33.2	
1	61.0	5.82	8.2	42.0	33.2	91.5
2	61.0	5.80	8.2	42.0	33.2	91.5
3	61.0	5.77	8.2	42.0	33.2	90.1
4	61.0	5.80	8.2	42.1	33.3	91.7
5	61.1	5.74	8.2	42.1	33.3	91.6
6	61.1	5.58	8.2	42.2	33.3	91.8
7	61.3	5.56	8.2	42.3	33.3	91.8
8	61.3	5.53	8.2	42.3	33.3	91.8
9	61.3	5.54	8.2	42.3	33.3	91.8
10	61.3	5.56	8.2	42.3	33.4	91.8
11	61.4	5.52	8.2	42.4	33.4	91.6
12	61.4	5.46	8.2	42.4	33.4	91.6



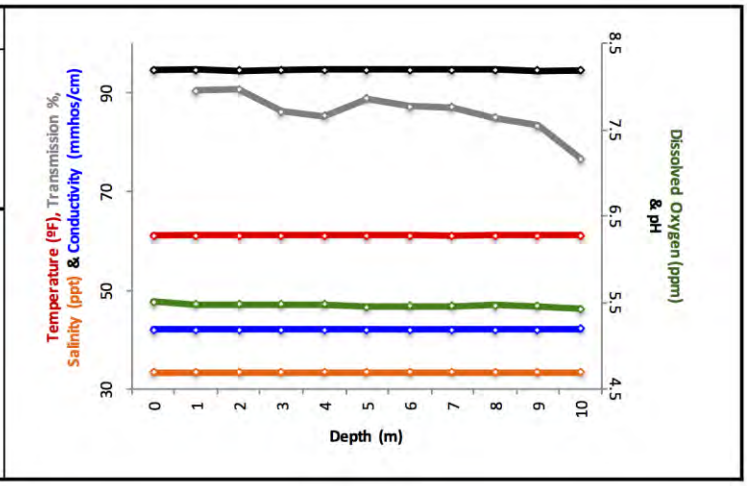
Cable 4	1/14/15	9:08 AM				
Depth (m)	Temperature (ºF)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.0	5.84	8.2	42.0	33.2	
1	61.0	5.83	8.2	42.0	33.2	93.0
2	61.0	5.82	8.2	42.0	33.2	92.7
3	61.0	5.81	8.2	42.0	33.2	92.3
4	61.0	5.83	8.2	42.0	33.2	92.2
5	61.0	5.84	8.2	42.1	33.3	92.1
6	61.3	5.73	8.2	42.3	33.4	92.1
7	61.3	5.60	8.2	42.3	33.4	91.8
8	61.2	5.62	8.2	42.3	33.4	91.7
9	61.2	5.65	8.2	42.3	33.4	91.7
10	61.2	5.60	8.2	42.3	33.4	91.5
11	61.2	5.55	8.2	42.3	33.4	91.4
12	61.2	5.56	8.2	42.3	33.4	90.4



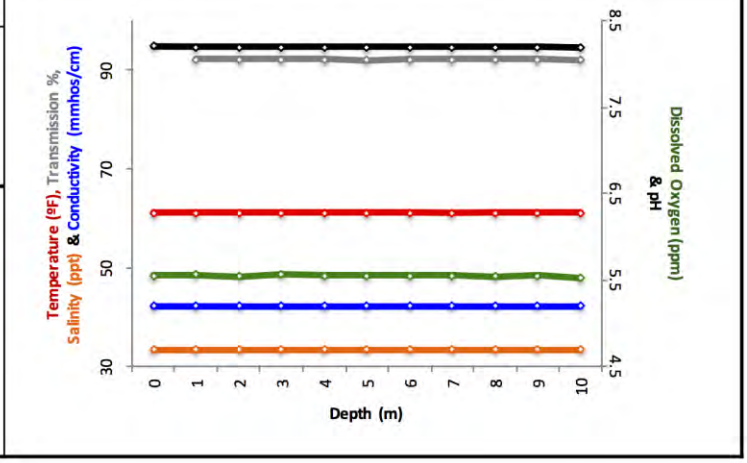
Cable 5	1/14/15	9:14 AM				
Depth (m)	Temperature (ºF)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.0	5.81	8.2	42.1	33.3	
1	61.0	5.78	8.2	42.1	33.3	94.1
2	61.0	5.77	8.2	42.1	33.3	93.6
3	61.0	5.80	8.2	42.0	33.3	92.8
4	61.0	5.79	8.2	42.1	33.3	92.5
5	61.1	5.77	8.2	42.1	33.3	91.6
6	61.2	5.75	8.2	42.2	33.3	91.4
7	61.2	5.70	8.2	42.3	33.4	91.2
8	61.2	5.47	8.2	42.3	33.4	91.1
9	61.2	5.50	8.2	42.3	33.4	90.8
10	61.2	5.54	8.2	42.3	33.4	88.9
11	61.2	5.54	8.2	42.3	33.4	88.1
12	61.2	5.53	8.2	42.3	33.4	87.7
13	61.2	5.53	8.2	42.3	33.4	87.5



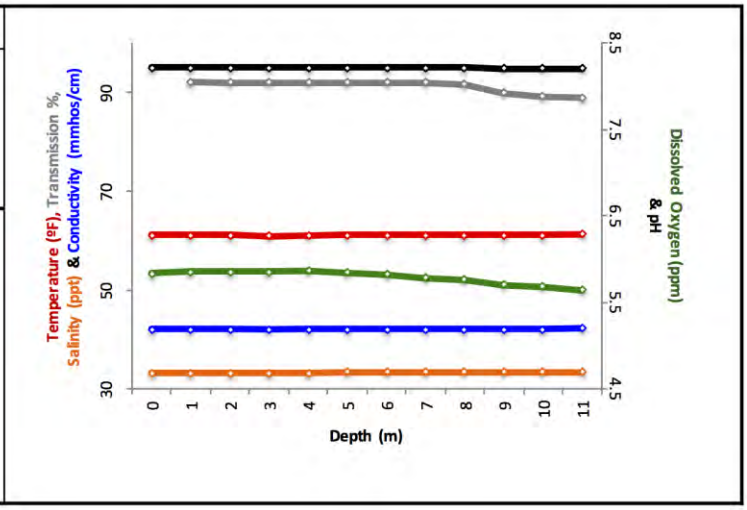
Reference 1	1/14/15	9:21 AM				
Depth (m)	Temperature (ºF)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.1	5.51	8.2	42.1	33.3	
1	61.1	5.48	8.2	42.1	33.3	90.4
2	61.1	5.48	8.2	42.1	33.3	90.7
3	61.1	5.48	8.2	42.1	33.3	86.1
4	61.1	5.48	8.2	42.1	33.3	85.2
5	61.1	5.45	8.2	42.1	33.3	88.8
6	61.0	5.46	8.2	42.1	33.3	87.2
7	61.0	5.46	8.2	42.1	33.3	87.0
8	61.1	5.47	8.2	42.1	33.3	84.9
9	61.1	5.46	8.2	42.1	33.3	83.4
10	61.1	5.43	8.2	42.1	33.3	76.7



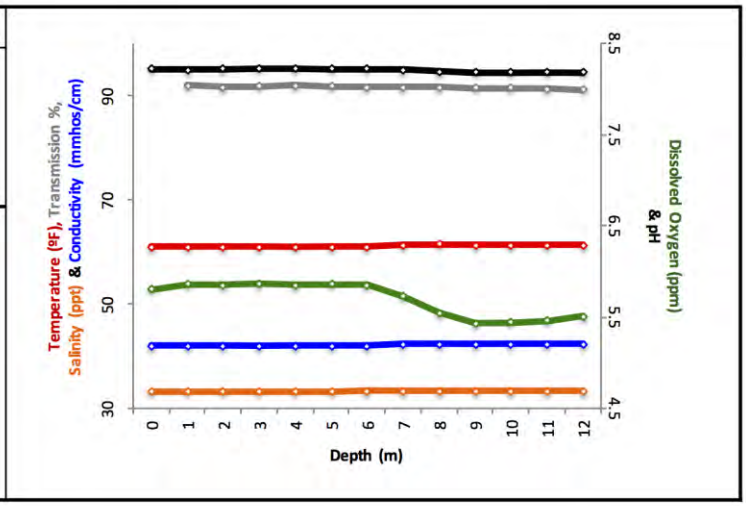
Reference 2	1/14/15	9:27 AM				
Depth (m)	Temperature (ºF)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.1	5.55	8.2	42.1	33.3	
1	61.1	5.56	8.2	42.1	33.3	92.2
2	61.1	5.54	8.2	42.1	33.3	92.1
3	61.1	5.57	8.2	42.1	33.3	92.1
4	61.1	5.55	8.2	42.1	33.3	92.1
5	61.1	5.55	8.2	42.1	33.3	92.0
6	61.1	5.55	8.2	42.1	33.3	92.2
7	61.1	5.55	8.2	42.1	33.3	92.2
8	61.1	5.54	8.2	42.1	33.3	92.1
9	61.1	5.55	8.2	42.1	33.3	92.1
10	61.1	5.52	8.2	42.1	33.3	91.9



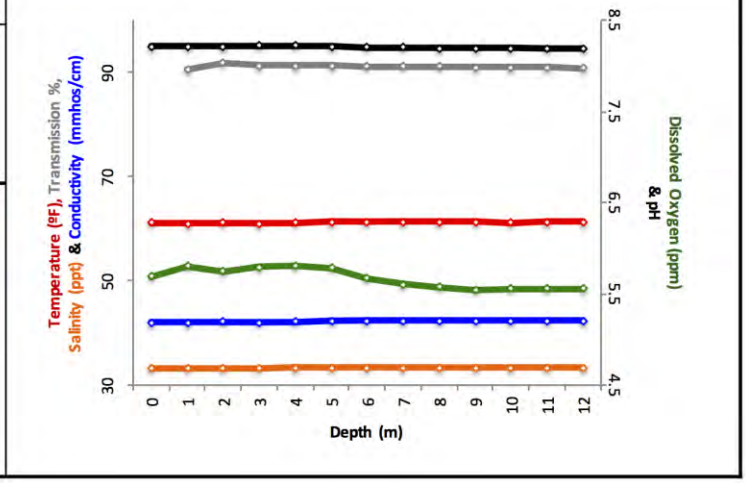
Reference 3	1/14/15	9:32 AM				
Depth (m)	Temperature (ºF)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.0	5.84	8.2	42.0	33.2	
1	61.0	5.85	8.2	42.0	33.2	92.1
2	61.0	5.85	8.2	42.0	33.2	91.9
3	61.0	5.85	8.2	42.0	33.2	91.9
4	61.0	5.86	8.2	42.0	33.2	92.0
5	61.0	5.84	8.2	42.0	33.3	92.0
6	61.0	5.82	8.2	42.1	33.3	92.0
7	61.0	5.78	8.2	42.1	33.3	92.0
8	61.0	5.76	8.2	42.1	33.3	91.7
9	61.0	5.70	8.2	42.1	33.3	89.8
10	61.1	5.68	8.2	42.1	33.3	89.2
11	61.2	5.64	8.2	42.2	33.3	88.9



Reference 4	1/14/15	9:38 AM				
Depth (m)	Temperature (°F)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.0	5.80	8.2	42.0	33.2	
1	61.0	5.86	8.2	42.0	33.2	92.0
2	61.0	5.85	8.2	42.0	33.2	91.6
3	61.0	5.87	8.2	42.0	33.2	91.7
4	61.0	5.85	8.2	42.0	33.2	91.9
5	61.0	5.86	8.2	42.0	33.2	91.7
6	61.0	5.85	8.2	42.1	33.3	91.6
7	61.3	5.73	8.2	42.3	33.4	91.6
8	61.4	5.55	8.2	42.4	33.4	91.6
9	61.4	5.43	8.2	42.4	33.4	91.5
10	61.4	5.45	8.2	42.4	33.4	91.4
11	61.4	5.46	8.2	42.4	33.4	91.3
12	61.4	5.51	8.2	42.4	33.4	91.0



Reference 5	1/14/15	9:44 AM				
Depth (m)	Temperature (°F)	Oxygen (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)	Transmissivity % transmission
0	61.1	5.69	8.2	42.1	33.2	
1	61.0	5.80	8.2	42.1	33.2	90.5
2	61.1	5.75	8.2	42.1	33.2	91.7
3	61.0	5.80	8.2	42.1	33.2	91.3
4	61.1	5.81	8.2	42.1	33.3	91.3
5	61.3	5.79	8.2	42.3	33.4	91.2
6	61.4	5.67	8.2	42.3	33.3	91.1
7	61.2	5.61	8.2	42.3	33.4	91.1
8	61.2	5.58	8.2	42.3	33.4	91.0
9	61.2	5.54	8.2	42.3	33.4	90.9
10	61.2	5.55	8.2	42.3	33.4	91.0
11	61.2	5.56	8.2	42.3	33.4	90.9
12	61.2	5.56	8.2	42.3	33.4	90.8



APPENDIX B - FIELD DATA SHEETS

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 1:48

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Vault-8

Date: 1/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): _____

Direction (4): XX

Swell

Period (s): 0

Height (ft): _____

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	
Tandem Van Veen	

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1:48	34.023428	-118.557846 ft													
	Grab Event Comments: Seabird + niskin drop															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code VRG

Vessel Name Yellowfin

Arrival Time (hh:mm) 1:35

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt) — At estuary Sites only

Station ID Vault -2

Date 1/7/15

Abandoned site? Y or N (If Y explain in comments)

Station Fail Code

Wind

Speed (kts) 0

Direction (4) XX

Swell

Period (s)

Height (ft) 0

Direction (4)

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	
Tandem Van Veen	

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1:35	34.023281	118.5[illegible]589	36ft												
	Grab Event Comments: Seabird + nisken drop															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 1:26

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Vault-11

Date: 11/7/15

Abandoned site? Y or N (If Y explain in comments): _____

Station Fail Code: _____

Wind

Speed (kts): _____

Direction (4): XX

Swell

Period (s): _____

Height (ft): 0

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	
Tandem Van Veen	

Station Comments:

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1:26	34.023386	118.556042	45ft												
	Grab Event Comments: Nisqui Seabird															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed

2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)

3 Sediment Color: Brown, Gray, Black, Olive green, Red

4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm

5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)

6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 1:13

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Vault-5

Date: 1/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): _____

Direction (4): XX

Swell

Period (s): _____

Height (ft): flat

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	
Tandem Van Veen	

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmm)	Longitude (DD°MM.mmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1:13	34.023508	118.555513	47ft												
	Grab Event Comments: Seabird - miskin															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 1060 PM

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Vault-3

Date: 1/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): _____

Direction (4): XX

Swell

Period (s): _____

Height (ft): 0

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	
Tandem Van Veen	

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1060m	34.023580	118.555372	40ft												
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 1208

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Cable-1

Date: 1/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): _____

Direction (4): XX

Swell

Period (s): _____

Height (ft): 0

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	
Tandem Van Veen	

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1209	34.033329	-118.556123	29ft												
Grab Event Comments: Seabirds: n:skim drop																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 1220

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Cable-7

Date: 1/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): 0

Direction (4): _____

Swell

Period (s): _____

Height (ft): ~.5ft

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	
Tandem Van Veen	

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1220	34.031372	-118.556106	35ft												
Grab Event Comments:	Seabird + n.skin															
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed

2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)

3 Sediment Color: Brown, Gray, Black, Olive green, Red

4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm

5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)

6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 1227

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Cable-3

Date: 1/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): _____

Direction (4): XX

Swell

Period (s): _____

Height (ft): 0

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	
Tandem Van Veen	

Station Comments

All water chem done 1/7/15 @ all stations.

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1227	34.029537	-118.55609	38ft												
	Grab Event Comments: Seabird & niskin drop															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed

2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)

3 Sediment Color: Brown, Gray, Black, Olive green, Red

4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm

5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)

6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 1238

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Cable 4

Date: 11/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): _____

Direction (4): XX

Swell

Period (s): _____

Height (ft): 0

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	
Tandem Van Veen	

Station Comments

GRAB EVENTS

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
												Sample types (Chk all that apply)				
	1238	34.027579	118.556073	40ft												
Grab Event Comments: Seabird & niskin																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code VRG

Vessel Name Yellowfin

Arrival Time (hh:mm) 1247

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt) _____ At estuary Sites only

Station ID Cable-5

Date 1/7/15

Abandoned site? Y or N (If Y explain in comments) _____

Station Fail Code _____

Wind

Speed (kts) _____

Direction (4) XX

Swell

Period (s) _____

Height (ft) 0

Direction (4) _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	
Tandem Van Veen	

Station Comments

+ QA station

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmm)	Longitude (DD°MM.mmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1247	34.025622	118.552056	42ft												
	Grab Event Comments: Seabird + niskin															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 10:30

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Ref 1

Date: 1/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): ~5kn

Direction (4): XX

Swell

Period (s): _____

Height (ft): ~0ft

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	X
Tandem Van Veen	

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	10:30am	34.033422	118.550685	31ft				silt/clay	0	Brown	N	X				
	Grab Event Comments: 5L															
	10:36am	"	"	31ft				silt/clay					X		X	
	Grab Event Comments:															
	10:58	"		30ft												
	Grab Event Comments: Nisky + Seabird															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 10:14am

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Ref-2

Date: 1/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): 5 kn

Direction (4): XX

Swell

Period (s): _____

Height (ft): ~1 ft

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	X
Tandem Van Veen	

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	10:14am	34.031465	118.550169	35ft				silt/clay	O	Brown	N		X		X	
	Grab Event Comments: ~10L															
	10:18am	"	"	35ft				silt/clay	O	Brown	Y	X				
	Grab Event Comments: 9.5L totzl															
	11:10 am															
	Grab Event Comments: Seabird + miscinfoo															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 958am

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): At estuary Sites only

Station ID: Ref-3

Date: 1/7/15

Abandoned site? Y or N (If Y explain in comments):

Station Fail Code:

Wind

Speed (kts): ~5kn

Direction (4): XX

Swell

Period (s):

Height (ft): ~1ft

Direction (4):

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	X
Tandem Van Veen	

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	9:58am	34.029163	118.550653	37ft				silt	0	Brown	N	X				
	Grab Event Comments: 5L Biosolid present															
	1004		"	37ft				silt	0	Brown	N		X		X	
	Grab Event Comments:															
	1122am			30ft												
	Grab Event Comments: Seabird + niskin drop															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 9:34am

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Ref-4

Date: 1/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): _____

Direction (4): _____

Swell

Period (s): _____

Height (ft): _____

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	X
Tandem Van Veen	

Station Comments

GRAB EVENTS

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
												Sample types (Chk all that apply)				
	9:37am	34.027672	119.550626	(39ft)				Silt	0	Brown/ olive	N	X				
	Grab Event Comments:		4.5L													
	9:45am	"	"	39ft				Silt	0	Brown	N		X		X	
	Grab Event Comments:															
	113am			30ft												
	Grab Event Comments:	Seabird & niskin														
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed

2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)

3 Sediment Color: Brown, Gray, Black, Olive green, Red

4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm

5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)

6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code: VRG

Vessel Name: Yellowfin

Arrival Time (hh:mm): 9:58am

Weather

Clear	X	Rain	
Overcast		Thunderstorm	
Partly cloudy		Fog	
Drizzle			

Sea State

Calm	X
Choppy	
Rough	

Salinity (ppt): _____ (At estuary Sites only)

Station ID: Gab- Ref-5

Date: 1/7/15

Abandoned site? (Y or N (If Y explain in comments)): _____

Station Fail Code: _____

Wind

Speed (kts): 2

Direction (4): XX

Swell

Period (s): _____

Height (ft): 1

Direction (4): _____

Nav Type

DGPS	
GPS	X

Equipment Type

Van Veen	X
Tandem Van Veen	

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
TL	9:10am	3402571S	118.55069	(42ft)				silt/clay	O	Brown/Olive	N	X				
	Grab Event Comments:		7L total													
	9:18am	"	"	42ft				silt/clay	O	Brown	N		X		X	
	Grab Event Comments:															
	11:42am	Scabird	inisk in drop	42ft												
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

3 4 liters of material

BIGHT'13

STATION OCCUPATION

Agency Code

Vessel Name Xenakeda

Arrival Time (hh:mm) 0830

Weather

Clear		Rain	
Overcast		Thunderstorm	
Partly cloudy	✓	Fog	
Drizzle			

Sea State

Calm	✓
Choppy	
Rough	

Salinity (ppt) — At estuary Sites only

Station ID VAULT-3

Date 1/9/15

Abandoned site? Y or N (If Y explain in comments)

Station Fail Code

Wind

Speed (kts) 0-5

Direction (4) SW

Swell

Period (s) NA

Height (ft)

Direction (4)

Nav Type

DGPS	
GPS	✓

Equipment Type

Van Veen	
Tandem Van Veen	

Diver Cores

Station Comments

Started @ East Buoy location. Buoys were missing @ both E + W ends. Took ~~milked~~ Diver cores @ each of 5 Van Vts (3, 5, 8, 11, #21) East to west

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	0900	34.023580	118.555372	15												
Grab Event Comments:	Grabs collected by divers w/multiple cores															
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed

2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)

3 Sediment Color: Brown, Gray, Black, Olive green, Red

4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm

5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)

6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code

Vessel Name Renarcha

Arrival Time (hh:mm)

Weather
- Clear
- Overcast
- Partly cloudy ✓
- Drizzle
- Rain
- Thunderstorm
- Fog

Sea State
- Calm ✓
- Choppy
- Rough

Salinity (ppt) — At estuary Sites only

Station ID Vault 5

Date 1/9/15

Abandoned site? Y or N (If Y explain in comments)

Station Fail Code

Wind
- Speed (kts) 0-5
- Direction (4) SW

Swell
- Period (s) NA
- Height (ft)
- Direction (4)

Nav Type
- DGPS
- GPS ✓

Equipment Type
- Van Veen
- Tandem Van Veen

Dmr cores

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	9:10	34.03508	118.55813	15												
Grab Event Comments:	Grabs collected by divers w/manual hydro corers															
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code

Vessel Name Komarch

Arrival Time (hh:mm)

Weather

Clear		Rain	
Overcast		Thunderstorm	
Partly cloudy	✓	Fog	
Drizzle			

Sea State

Calm	✓
Choppy	
Rough	

Salinity (ppt) — At estuary Sites only

Station ID Var. 14-8

Date 1/9/15

Abandoned site? Y or N (If Y explain in comments)

Station Fail Code

Wind

Speed (kts) 05

Direction (4) S

Swell

Period (s)

Height (ft)

Direction (4)

Nav Type

DGPS	
GPS	✓

Equipment Type

Van Veen	
Tandem Van Veen	

Draw Cores

Station Comments

GRAB EVENTS

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Sample types (Chk all that apply) Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	0900	34.05[illegible]	-118.55784[illegible]	14												
	Grab Event Comments:	Grabs on bedrock, shells, small pebble rocks														
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed

2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)

3 Sediment Color: Brown, Gray, Black, Olive green, Red

4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm

5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)

6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code

Vessel Name Xpnaroha

Arrival Time (hh:mm)

Weather

Clear		Rain	
Overcast		Thunderstorm	
Partly cloudy	✓	Fog	
Drizzle			

Sea State

Calm	✓
Choppy	
Rough	

Salinity (ppt)

At estuary Sites only

Station ID Van 4-11

Date 1/9/13

Abandoned site?
Y or N (If Y explain in comments)

Station Fail Code

Wind

Speed (kts) 0-5

Direction (4) Calm

Swell

Period (s) n/a

Height (ft)

Direction (4)

Nav Type

DGPS	
GPS	✓

Equipment Type

Van Veen	
Tandem Van Veen	

Dbl Cores

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	0900	34.02136	118.55604 2	19												
	Grab Event Comments:	Grab collected w/ double corers														
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code

Vessel Name Nemarcha

Arrival Time (hh:mm)

Weather
- Clear
- Overcast
- Partly cloudy ✓
- Drizzle
- Rain
- Thunderstorm
- Fog

Sea State
- Calm ✓
- Choppy
- Rough

Salinity (ppt) — At estuary Sites only

Station ID Vac1+-21

Date 01/9/13

Abandoned site? Y or N (If Y explain in comments)

Station Fail Code

Wind
- Speed (kts) 0-5
- Direction (4) Sw

Swell
- Period (s) n/a
- Height (ft)
- Direction (4)

Nav Type
- DGPS
- GPS ✓

Equipment Type
- Van Veen
- Tandem Van Veen

Diver Cores

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	0900	34.02.31	118.55.58	15												
	Grab Event Comments:	Core collected by divers w/manual push cores														
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code

Vessel Name: Conviction

Arrival Time (hh:mm): 1405

Weather

Clear		Rain	
Overcast		Thunderstorm	
Partly cloudy	✓	Fog	
Drizzle			

Sea State

Calm	✓
Choppy	
Rough	

Salinity (ppt): At estuary Sites only

Station ID: CoS-EXS-1

Date: 1/9/15

Abandoned site? Y or N (If Y explain in comments)

Station Fail Code

Wind

Speed (kts): 0-5

Direction (4): SW

Swell

Period (s): NA

Height (ft):

Direction (4):

Nav Type

DGPS	
GPS	✓

Equipment Type

Van Veen	
Tandem Van Veen	

Diver Grabs

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1405	34.033320	-118.551120	9												
Grab Event Comments:	Grabs collected by divers and multiple cores															
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code

Vessel Name Remarcha

Arrival Time (hh:mm) 1330

Weather

Clear		Rain	
Overcast		Thunderstorm	
Partly cloudy	✓	Fog	
Drizzle			

Sea State

Calm	✓
Choppy	
Rough	

Salinity (ppt) — At estuary Sites only

Station ID CAL-EMA-2

Date 1/9/15

Abandoned site? Y or N (If Y explain in comments)

Station Fail Code

Wind

Speed (kts) 10-15

Direction (4) XW

Swell

Period (s) ~~10~~ 04

Height (ft)

Direction (4)

Nav Type

DGPS	
GPS	✓

Equipment Type

Van Veen	
Tandem Van Veen	

Dual cores

Station Comments

GRAB EVENTS

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
												Sample types (Chk all that apply)				
1	1330	34°03.136	118°55.111	11												
	Grab Event Comments:	Grabs collected & given and multiple cores														
2																
	Grab Event Comments:															
3																
	Grab Event Comments:															
4																
	Grab Event Comments:															
5																
	Grab Event Comments:															
6																
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code

Vessel Name Kenarika

Arrival Time (hh:mm) 1245

Weather

Clear		Rain	
Overcast		Thunderstorm	
Partly cloudy	✓	Fog	
Drizzle			

Sea State

Calm	✓
Choppy	
Rough	

Salinity (ppt) — At estuary Sites only

Station ID CAL-EXP-3

Date 1/9/13

Abandoned site? Y or N (If Y explain in comments)

Station Fail Code

Wind

Speed (kts) 10-15

Direction (4) SW

Swell

Period (s) NA

Height (ft)

Direction (4)

Nav Type

DGPS	
GPS	✓

Equipment Type

Van Veen	
Tandem Van Veen	

1 Diver cores

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1245	34.029529	-118.56609	12												
Grab Event Comments:	Grabs recorded by divers w/ multiple cores															
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code

Vessel Name Xenacha

Arrival Time 1209 (hh:mm)

Weather

Clear		Rain	
Overcast		Thunderstorm	
Partly cloudy	✓	Fog	
Drizzle			

Sea State

Calm	✓
Choppy	
Rough	

Salinity (ppt) _____ At estuary Sites only

Station ID CALCOFI-4

Date 1/9/15

Abandoned site? Y or N (If Y explain in comments)

Station Fail Code

Wind

Speed (kts) 10-15

Direction (4) SW

Swell

Period (s) NA

Height (ft)

Direction (4)

Nav Type

DGPS	
GPS	✓

Equipment Type

Van Veen	
Tandem Van Veen	

Diver wires

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
	1209	34.02758	-118.56179	12												
	Grab Event Comments: Grabs collected by divers w/ handheld cores															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															
	Grab Event Comments:															

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

STATION OCCUPATION

BIGHT'13

Agency Code

Vessel Name Xenarchus

Arrival Time (hh:mm) 1100

Weather

Clear		Rain	
Overcast		Thunderstorm	
Partly cloudy	✓	Fog	
Drizzle			

Sea State

Calm	✓
Choppy	
Rough	

Salinity (ppt) — At estuary Sites only

Station ID CAS-RMS-5

Date 1/9/15

Abandoned site? Y or N (If Y explain in comments)

Station Fail Code

Wind

Speed (kts) 10-15

Direction (4) SW

Swell

Period (s) NA

Height (ft)

Direction (4)

Nav Type

DGPS	
GPS	✓

Equipment Type

Van Veen	
Tandem Van Veen	

Diver Cores

Station Comments

GRAB EVENTS

Sample types (Chk all that apply)

#	Time (hh:mm)	Latitude (DD°MM.mmmm)	Longitude (DD°MM.mmmm)	Depth (m)	Distance to target (m)	Grab Fail Code (6)	Penetration (cm)	Composition (1)	Odor (2)	Color (3)	Shell Hash (Y/N)	Infauna	Sed Chem	Grain Size	Sed Tox	Debris (Y/N)
WP0		34.525627	-118.552057	13												
Grab Event Comments:	Grabs collected by diver w/ multiple cores - DNC also collected here															
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																
Grab Event Comments:																

1 Sediment Composition: Coarse sand, Fine sand, Silt/clay, Gravel, Cobble, Mixed
2 Sediment Odor: None (N), Petroleum (P), Hydrogen sulfide (HS), Humic (HU), Other (O, describe in comments)
3 Sediment Color: Brown, Gray, Black, Olive green, Red
4 Directions: N, NE, E, SE, S, SW, W, NW, or XX for calm
5 Station Fail codes: None, Temporary - sea conditions (comment req.), Temporary - atmosphere (comment req.), Temporary - mechanical (comment req.), Pre-abandoned (comment req.), Site On Land (comment req.), Vessel safety (comment req.), No Access Allowed (comment req.), Prolonged rough seas, Bottom salinity <25psu, Too Shallow (comment req.), Too many Event Failures (comment req.), Anthropogenic obstruction (comment req.), Natural hard bottom obstructions (comment req.), Not sampleable - other (comment req.)
6 Grab Fail codes: None, Outside Radius Limit, Outside Target Depth, Premature closure, Flipped, Rocks/gravel, Dead shell, Live animal (comment req.), Debris (comment req.), Poor closure - other (comment req.), Heavily Canted, Large Humping, Washed, Disturbed Surface, < 5 cm Penetration, <= 7 cm Penetration - biology only

APPENDIX C - BENTHIC INFAUNA RESULTS

aquatic bioassay & consulting laboratories, inc

May 14th, 2015

Court Morgan
Power Engineers
731 East Ball Road, Suite 100
Anaheim, CA 92805

Dear Mr. Morgan:

Aquatic Bioassay & Consulting Laboratories is pleased to provide you with the enclosed infauna report for samples collected in January, 2015.

Please contact me with any questions or issues you may have regarding this report.

Yours very truly,

Scott Johnson
Environmental Programs
(805) 643-5621 ex.11

Benthic Infauna Taxonomic Abundances

Phylum	Species	Cab-Exst-1	Cab-Exst-2	Cab-Exst-3	Cab-Exst-4	Cab-Exst-5	Cab-REF-1	Cab-REF-2	Cab-REF-3	Cab-REF-4	Cab-REF-5	Vault-11	Vault-21	Vault-3	Vault-5	Vault-8
Annelida	Amaeana occidentalis						1		1							
	Ampharete labrops								4	1			5	1		
	Amphicteis scaphobranchiata				1						1				2	5
	Ancistrosyllis groenlandica											1	1	2	1	
	Anotomastus gordiodes		1		3	2		5	2	4	7		2	2	5	3
	Aphelochaeta glandaria Cmplx											1				3
	Apistobranchus ornatus											1				
	Apoprionospio pygmaea			2	1	1	5	1	1		2	2	1	3	2	4
	Aricidea (Acmira) catherinae		2	1	1			1				4	2		3	2
	Aricidea (Acmira) horikoshii			1												
	Aricidea (Aricidea) sp B												1			
	Aricidea (Aricidea) wassi				1							5	2			5
	Bipalponephtys cornuta							1						1		1
	Chaetozone columbiana		4		3					1		1	3	2		2
	Chaetozone corona			1	1	3			1			9	3	5	3	6
	Chaetozone hedgpethi						3	3								
	Chaetozone sp SD3									2						
	Cirrophorus furcatus										1		1			
	Cossura sp A		1					1								
	Diopatra splendidissima								2	2	1					
	Dipolydora bidentata	1														
	Drilonereis sp					1					1					
	Drilonereis sp LA1														1	
	Exogone lourei	3							1							
	Glycera americana								1		2	1	1		1	
	Glycera macrobranchia						2		1	1	1					1
	Glycinde armigera											1	1			1
	Goniada littorea	1	7	5	7	4	8	29	25	24	13		1	1		3
	Goniada maculata							1								
	Laonice cirrata				2	2			1	1	2	1			1	
	Leitoscoloplos pugettensis												2			
	Levinsenia gracilis							1		2		7		2	4	5
	Lumbrineris ligulata											2			3	
	Lumbrineris sp	4										1				
	Magelona hartmanae							1		1	1	3			4	4
	Magelona sacculata				2	3				2	1	2			1	1
	Mediomastus acutus		1		1							10	1	3	2	3
	Mediomastus sp	2	2	1	3		1	6	5		1	22	22	5	5	30
	Megalomma pigmentum															1
	Metasychis disparidentatus					2										1
	Monticellina cryptica		8		6	3	5	13	8	4	1	9	3	7		6
	Monticellina siblina		1	2	2	3		1	2	3	3	8	4	3	4	3
	Nephtys caecoides		2						1				2			
	Nereis latescens								1	1						

Benthic Infauna Taxonomic Abundances(Continued)

Phylum	Species	Cab-Exst-1	Cab-Exst-2	Cab-Exst-3	Cab-Exst-4	Cab-Exst-5	Cab-REF-1	Cab-REF-2	Cab-REF-3	Cab-REF-4	Cab-REF-5	Vault-11	Vault-21	Vault-3	Vault-5	Vault-8
	Nereis sp A		1		2	1			4	8	2	17	11	2	2	15
	Notomastus hemipodus											3	1	4	1	
	Notomastus lineatus	7														
	Odontosyllis phosphorea	1										1	1			2
	Onuphis sp A								1			1				
	Owenia collaris	2		1								2				
	Paradialychone paramollis														1	
	Paraprionospio alata			4	15	3	6	14	10	8	22	6	5	5		8
	Pista wui		1						1							
	Platynereis bicanaliculata								3				1			
	Podarkeopsis glabrus		1	1		1			1			1	2			
	Podarkeopsis sp A											1				
	Polycirrus sp	1						2								
	Polydora cirrosa								5	3						
	Praxillella pacifica											1				
	Prionospio (Minuspio) lighti			1	1					1		1	2			3
	Prionospio (Prionospio) jubata											5	1	2		2
	Protodorvillea gracilis	2														
	Scoletoma sp											1				
	Scoletoma tetraura Cmplx				2		4			2	2	3	1		1	2
	Sigalion spinosus					1		2	1	1	1			1	1	
	Spiophanes duplex			1		2	2	1			3	3	2		1	4
	Spiophanes norrisi			1			4	2	1	1	1					1
	Sthenelanella uniformis				1					1						
	Tenonia priops							1				1				
	Typosyllis farallonensis		1			2				1						1
	Hemipodia borealis	11														
	Nephtys simoni	1														
	Hesionura coineaui difficilis	6														
	Pisione sp	5														
	Brania brevipharyngea	1														
	Pareurythoe californica	8														
	Caulleriella hamata	4														
	Sabellinae	1									1					
	Aonides sp A	1														
	Boccardia sp	1														
	Prionospio (Prionospio) heterobranchia	3														
	Prionospio sp	1														
	Polyophthalmus pictus	1														
	Saccocirrus sp	1														
	Leitoscoloplos sp A						6	6		1		3		1		
	Onuphis eremita parva							1	1	1						
	Ampharetidae							1				1				1
	Phyllodocidae									1						

Benthic Infauna Taxonomic Abundances (Continued)

Identified Taxa	Tol Val (TV)	Func Feed Grp	Station and Field Replicate												
			LB-RA 1	LB-RA 2	LB-RA1 1	LB-RA1 2	LC-R4 1	LC-R5 1	POM-RC 1	POM-RD 1	SJC-C1 Alt 1	VA-RC 1	Va-RD 1	WN-RD 1	WN-RD1 1
Insecta Taxa															
Ephemeroptera															
Baetis	5	cg											84		
Fallceon	4	cg					39	41			1	7	17		
Tricorythodes explicatus	4	cg							7		1	172	71	3	
Odonata															
Argia	7	p										1	2		
Brechmorhoga mendax	9	p											1		
Hetaerina americana	6	p										1	1		
Hemiptera															
Corixidae	8	p	1								5				
Trichoptera															
Hydropsyche	4	cf											64		
Hydropsychidae	4	cf											3		
Hydroptila	6	ph		1	1		4	4	3			66	11		
Hydroptilidae	4	ph	2	4											
Ochrotrichia	4	ph											1		
Coleoptera															
Hygrotus	5	p												1	
Optioservus	4	sc										3	2		
Diptera															
Caloparyphus/Euparyphus	8	cg				1			4		1	68	4		
Chironomidae	6	cg	47	80	56	54	381	412	279	12	26	77	96	216	236
Culicoides	6	p													3
Dasyhelea	6	cg	1	1					1						
Empididae	6	p							5				2		
Ephydridae	6					1									
Euparyphus	8	cg							3			4			
Hemerodromia	6	p							37				18		
Pericoma/Telmatoscopus	4	cg							1						1
Psychodidae		cg					1						1		
Simulium	6	cf										3	16		
Stratiomyidae	8	cg										1			
Tipula	4	om										3			
Lepidoptera															
Petrophila	5	sc					18						20		

Benthic Infauna Metrics

Station ID	Number of Species	Total Abundance	Evenness	Margalef Richness	Schwartz Dominance	Shannon Diversity	Simpson Diversity	BRI	ITI
Cab-Exst-1	51	147	0.844	10.019	18	3.32	0.932	28.18	68.2
Cab-Exst-2	28	65	0.855	6.492	11	2.85	0.913	29.13	70.9
Cab-Exst-3	19	29	0.937	5.346	12	2.76	0.92	34.35	68.4
Cab-Exst-4	34	76	0.888	7.62	15	3.13	0.93	30.62	72
Cab-Exst-5	29	55	0.953	6.987	16	3.21	0.953	19.72	75.9
Cab-REF-1	27	97	0.883	5.696	11	2.91	0.923	17.05	69.7
Cab-REF-2	36	129	0.818	7.202	11	2.93	0.91	20.64	69.3
Cab-REF-3	39	119	0.843	7.951	13	3.09	0.924	26.85	70.3
Cab-REF-4	44	112	0.861	9.113	18	3.26	0.929	19.36	67.1
Cab-REF-5	38	98	0.838	8.07	15	3.05	0.913	19.24	72.8
Vault-11	67	198	0.87	12.517	23	3.66	0.96	32.78	67
Vault-21	62	156	0.884	12.174	27	3.65	0.957	29.7	66.7
Vault-3	40	86	0.943	8.802	20	3.48	0.963	32.43	70.4
Vault-5	31	65	0.946	7.187	16	3.25	0.955	28.05	71.7
Vault-8	60	177	0.867	11.398	23	3.55	0.948	29.57	67.8

Quality Assurance/Quality Control

Taxonomic Quality Control Report: Taxonomic Quality Control Report Sylmar Program January 2015 survey.

Submitted by: Lawrence L. Lovell, Senior Projects Manager, Dancing Coyote Environmental

Date: May 7, 2015

Two samples, CAB-REF-2 and VAULT-3, from the Sylmar January 2015 survey program were selected for taxonomic quality control (QC) assessment. Dancing Coyote Environmental (DCE) was instructed to follow the SCCWRP EPA Bight '13 Benthic Program protocols. Those protocols are found in the Macrobenthic (Infaunal) Sample Analysis Laboratory Manual at the Southern California Coastal Water Research Program (SCCWRP) website link: http://www.sccwrp.org/Documents/BightDocuments/Bight13Documents/Bight13PlanningDocuments.aspx. The results covering addition QC samples for the CLAEMD SMB program will be presented in a subsequent report.

DCE staff performed the following tasks according to the protocols described in the document referenced above: taxonomic re-identification with comparison of original and QC datasets, resolution of non-matching species identifications and counts of individuals, presentation of final resolved dataset, and calculation of QC efficiencies for taxonomy. DCE provided independent teams of taxonomists to perform the primary and QC taxonomy. ABC Labs provided data support. In addition to this report, supporting documentation is presented in Attachment 1 and Tables 1, 2, and 3 contained in an Excel spreadsheet.

Taxonomic QC was performed on the above referenced samples. The results of the taxonomic QC comparison and resolution process for each station are presented in Tables 1 and 2. These tables are Excel spreadsheets that have been modified to include information contained in prior Bight '08 Benthic Laboratory Manual forms: Discrepancy Report and Discrepancy Resolution Report found at http://www.sccwrp.org/Documents/BightDocuments/Bight08Documents/Bight08PlanningDocuments.aspx. This spreadsheet format has be slightly modified by the separation match/not-match comparisons into separate columns for Taxa Match and Count Match to more easily delineate the discrepancy cause.

Columns A-F of Tables 1 and 2 present the station and original taxonomic data: station name, phyla, original species ID, abundance, voucher count, and comments. Columns G-I present QC data: QC species ID, abundance, and comments. The taxa (species names) and counts (abundance) for the two datasets (primary/QC) are compared in column J with Match or Not-Match comparisons noted. Columns K-O contain the resolution information for the two datasets; including lines involved in resolution, discrepancy classification, resolution (resolve) code, taxa changed (add/removed) and abundance changes (+/-). Lines involved in resolution notes which worksheet line(s) is involved in the resolution of non-match taxa or counts. Discrepancy classifications codes and resolution codes are presented in Attachment 1. Columns P-R note lines where taxa were changed (added or removed), # of individuals that were mis-ID'd, and # of individuals mis-counted. Columns S-U present the final resolved species names, abundance, and comments.

Taxonomic efficiency calculation equations, presented in Table 3, assess four criteria: # of Taxa Discriminated, Total Organism Count, Identification Accuracy, and Abundance Accuracy. The taxonomic efficiency target for all assessment criteria is $\geq$ 90.0% or $\leq$ 10.0% error. This report presents the results as error rates with $\leq$ 10.0% a passing QC efficiency score. The first three efficiency equations have been historically use in all Bight programs. The fourth equation, Abundance Accuracy, was developed during the Bight '08 to better assess the efficiency of abundance counting. It was included in the Bight '08 final report and is being used in Bight '13 QC assessment.

Taxonomic efficiency errors for the four assessment equations ranged between 0.0 - 3.9% for all stations, with all stations passing all assessments. Efficiencies at station CAB-REF-2 ranged from 2.8 - 3.9%. Efficiencies at station VAULT-3 ranged from 0.0 - 2.3 %. Average taxonomic efficiencies across the four stations ranged from 1.4 - 3.1%. Taxonomic performance at both stations was well above passing. The fauna at the Sylmar stations at these shallow shelf depths are typically of moderate diversity and abundance.

Attachment 1:

Discrepancy Classifications and Resolution Codes rev. 11MAR2015 LL

Discrepancy Classifications:

E = Error (identification or count)

J = Judgmental difference (difference level of expertise)

N = Nomenclatural difference (naming convention usage)

L = Apparent specimen loss (sample handling)

P = Processing error (data entry, animal from another vial)

Resolution codes:	**Error type**	**Action**
1 = Primary taxonomist misidentification	True	TRC, Training
2 = QC taxonomist misidentification	True	Training
3 = Primary taxonomist miscount	True	TRC, Review best practices
4 = QC taxonomist miscount	True	Review best practices
5 = Primary taxonomist data entry error	Random	TRC, Review best practices
6 = QC taxonomist data entry error	Random	Review best practices
7 = Primary naming convention discrepancy	True	TRC, Review best practices
8 = QC naming convention discrepancy	True	Review best practices
9 = Primary variation in level of expertise	Non-Error	Training
10 = QC variation in level of expertise	Non-Error	Training
11 = organism added from another vial	Random	Review best practices
12=specimen lost	Random	Review best practices
13= specimen vouchered	Non-Error	Data tracking
14= specimen damaged during primary ID, not identifiable by QC taxonomist	Non-Error	No Action

Chain-of-Custody

Chain o. ustody

From:				To:		
Burns & McDonnell	**Phone:**	(805) 643-5621		**Company:**	Aquatic Bioassay & Consulting
4225 Executive Square	**Fax:**	(805) 643-2930		**Address:**	29 N. Olive St.
Suite 500	**Project ID:**	**Sylmar Project**			Ventura, CA 93001
La Jolla, CA 92037				**Phone:**	**(805) 643-5621**

Sample I.D. No.	Sample Date	Time	Matrix	No./ Volume	Rep	ANALYSIS: Infauna Sorting and Identification									
Vault-3	1/9/15	0900	Sed	1 Qt	1	Y									
Vault-5		0900			1	Y									
Vault-8		0900			1	Y									
Vault-11		0900			1	Y									
Vault-21		0900			1	Y									
Cab-Exst-1		1405			2	Y									
Cab-Exst-2		1330			1	Y									
Cab-Exst-3		1245			1	Y									
Cab-Exst-4		1200			1	Y									
Cab-Exst-5		1100			1	Y									

Special Instructions:

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:	RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
[signature]	1/12/15	1100	[signature]	1-12-15	13:20						

Chain of Custody

From:	Burns & McDonnell 4225 Executive Square Suite 500 La Jolla, CA 92037	**Phone:** **Fax:** **Project ID:**	(805) 643-5621 (805) 643-2930 **Sylmar Project**
To:	**Company:** **Address:** **Phone:**	Aquatic Bioassay & Consulting 29 N. Olive St. Ventura, CA 93001 **(805) 643-5621**	

Sample I.D. No.	Sample Date	Time	Matrix	No./ Volume	Rep	ANALYSIS: Infauna Sorting and Identification									
CAB-REF-1	1/7/15	10:36	Sed	1	1	X									
CAB-REF-2	1/7/15	10:14	Sed	1	1	X									
CAB-REF-3	1/7/15	10:04	Sed	1	1	X									
CAB-REF-4	1/7/15	9:45	Sed	1	1	X									
CAB-REF-5	1/7/15	9:18	Sed	1	1	X									

Special Instructions:

RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:	DATE: TIME:	RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:	DATE: TIME:
		Albert Mdg	01-08-15 11:07 AM				1/9/15 1135

APPENDIX D - SEAWATER AND SEDIMENT CHEMISTRY RESULTS

CERTIFICATE OF ANALYSIS

Client:	Power Engineers, Inc. 731 East Ball Rd., Ste. 100 Anaheim CA, 92805	**Report Date:**	03/09/15 12:32
		Received Date:	01/08/15 17:20
		Turn Around:	Normal
Attention:	Court Morgan	**Client Project:**	Sylmar Cable Assessment
Phone:	(714) 507-2764		
Fax:	(714) 507-2799		
Work Order(s):	5A08071		

NELAP #04229CA ELAP#1132 NEVADA #CA211 HAWAII LACSD #10143

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. Weck Laboratories, Inc. certifies that the test results meet all NELAC requirements unless noted in the case narrative. This analytical report is confidential and is only intended for the use of Weck Laboratories, Inc. and its client. This report contains the Chain of Custody document, which is an integral part of it, and can only be reproduced in full with the authorization of Weck Laboratories, Inc.

Dear Court Morgan :

Enclosed are the results of analyses for samples received 01/08/15 17:20 with the Chain of Custody document. The samples were received in good condition, at 4.1 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Case Narrative:

Reviewed by:

Hai Van Nguyen
Project Manager

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Lab ID	Matrix	Date Sampled
CAB-EXST-1	VRG		5A08071-01	water	01/07/15 12:08
CAB-EXST-2	VRG		5A08071-02	water	01/07/15 12:20
CAB-EXST-3	VRG		5A08071-03	water	01/07/15 12:27
CAB-EXST-4	VRG		5A08071-04	water	01/07/15 12:38
CAB-EXST-5	VRG		5A08071-05	water	01/07/15 12:47
CAB-EXST-5-DUP	VRG		5A08071-06	water	01/07/15 12:47
VAULT-3	VRG		5A08071-07	water	01/07/15 13:06
VAULT-5	VRG		5A08071-08	water	01/07/15 13:13
VAULT-8	VRG		5A08071-09	water	01/07/15 13:48
VAULT-11	VRG		5A08071-10	water	01/07/15 13:26
VAULT-21	VRG		5A08071-11	water	01/07/15 13:35
CAB-REF-1	VRG		5A08071-12	water	01/07/15 10:58
CAB-REF-1	VRG		5A08071-13	Solid	01/07/15 10:36
CAB-REF-2	VRG		5A08071-14	water	01/07/15 11:10
CAB-REF-2	VRG		5A08071-15	Solid	01/07/15 10:14
CAB-REF-3	VRG		5A08071-16	water	01/07/15 11:22
CAB-REF-3	VRG		5A08071-17	Solid	01/07/15 10:04
CAB-REF-4	VRG		5A08071-18	water	01/07/15 11:31
CAB-REF-4	VRG		5A08071-19	Solid	01/07/15 09:45
CAB-REF-5	VRG		5A08071-20	water	01/07/15 11:42
CAB-REF-5	VRG		5A08071-21	Solid	01/07/15 09:18

ANALYSES

Acid and Base/Neutral Extractables by EPA Method 625

Chlorinated Pesticides and/or PCBs

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Metals - Low Level by 1600 Series Methods

Metals (Aqueous) by EPA 6000/7000 Series Methods

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Polychlorinated Biphenyls by EPA Method 8082

Semivolatile Organics - Low Level by GC/MS SIM Mode

Volatile Organics by EPA Method 624

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-01 CAB-EXST-1

Sampled: 01/07/15 12:08 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 21:17	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/13/15 21:17	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/13/15 21:17	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/13/15 21:17	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 21:17	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/13/15 21:17	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/13/15 21:17	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/13/15 21:17	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/13/15 21:17	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/13/15 21:17	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/13/15 21:17	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/13/15 21:17	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/13/15 21:17	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/13/15 21:17	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/13/15 21:17	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/13/15 21:17	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/13/15 21:17	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/13/15 21:17	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/13/15 21:17	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/13/15 21:17	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/13/15 21:17	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/13/15 21:17	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/13/15 21:17	
Anthracene	ND	0.34	1.0	ug/l	1	01/13/15 21:17	
Benzidine	ND	3.7	10	ug/l	1	01/13/15 21:17	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/13/15 21:17	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/13/15 21:17	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/13/15 21:17	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/13/15 21:17	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 21:17	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 21:17	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/13/15 21:17	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/13/15 21:17	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/13/15 21:17	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/13/15 21:17	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 21:17	
Chrysene	ND	0.19	1.0	ug/l	1	01/13/15 21:17	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/13/15 21:17	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/13/15 21:17	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 21:17	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-01 CAB-EXST-1

Sampled: 01/07/15 12:08 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/13/15 21:17	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/13/15 21:17	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 21:17	
Fluorene	ND	0.35	1.0	ug/l	1	01/13/15 21:17	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/13/15 21:17	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/13/15 21:17	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/13/15 21:17	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/13/15 21:17	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/13/15 21:17	
Isophorone	ND	0.21	1.0	ug/l	1	01/13/15 21:17	
Naphthalene	ND	0.49	1.0	ug/l	1	01/13/15 21:17	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/13/15 21:17	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/13/15 21:17	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/13/15 21:17	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/13/15 21:17	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/13/15 21:17	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/13/15 21:17	
Phenol	ND	0.16	1.0	ug/l	1	01/13/15 21:17	
Pyrene	ND	0.25	1.0	ug/l	1	01/13/15 21:17	
Surr: 2,4,6-Tribromophenol	*74 %*	Conc:*36.8*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*73 %*	Conc:*18.2*	*22-107*	%			
Surr: 2-Fluorophenol	*48 %*	Conc:*24.2*	*3-74*	%			
Surr: Nitrobenzene-d5	*76 %*	Conc:*19.0*	*27-111*	%			
Surr: Phenol-d5	*41 %*	Conc:*20.4*	*0.1-53*	%			
Surr: Terphenyl-d14	*87 %*	Conc:*21.8*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.014**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.70**	0.012	0.050	ug/l	1	01/22/15 13:05	
Chromium, Total	**5.3**	0.034	0.30	ug/l	1	01/22/15 13:05	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	**0.031**	0.018	0.050	ug/l	1	01/26/15 14:45	J

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-01 CAB-EXST-1

Sampled: 01/07/15 12:08 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.013**	0.0017	0.010	ug/l	1	01/22/15 22:58	
Copper, Total	**0.52**	0.0038	0.010	ug/l	1	01/22/15 22:58	
Lead, Total	**0.38**	0.0014	0.010	ug/l	1	01/22/15 22:58	
Nickel, Total	**2.9**	0.0040	0.010	ug/l	1	01/22/15 22:58	
Zinc, Total	**4.8**	0.036	0.20	ug/l	1	01/22/15 22:58	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/13/15 19:40	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/13/15 19:40	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/13/15 19:40	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/13/15 19:40	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/13/15 19:40	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/13/15 19:40	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/13/15 19:40	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/13/15 19:40	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/13/15 19:40	
Acrolein	ND	2.2	5.0	ug/l	1	01/13/15 19:40	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/13/15 19:40	
Benzene	ND	0.23	1.0	ug/l	1	01/13/15 19:40	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/13/15 19:40	
Bromoform	ND	0.32	1.0	ug/l	1	01/13/15 19:40	
Bromomethane	ND	0.47	1.0	ug/l	1	01/13/15 19:40	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/13/15 19:40	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/13/15 19:40	
Chloroethane	ND	0.23	1.0	ug/l	1	01/13/15 19:40	
Chloroform	ND	0.25	1.0	ug/l	1	01/13/15 19:40	
Chloromethane	ND	0.26	1.0	ug/l	1	01/13/15 19:40	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/13/15 19:40	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/13/15 19:40	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/13/15 19:40	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/13/15 19:40	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/13/15 19:40	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-01 CAB-EXST-1

Sampled: 01/07/15 12:08 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/13/15 19:40	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/13/15 19:40	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/13/15 19:40	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/13/15 19:40	
o-Xylene	ND	0.32	1.0	ug/l	1	01/13/15 19:40	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/13/15 19:40	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/13/15 19:40	
Toluene	ND	0.22	1.0	ug/l	1	01/13/15 19:40	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/13/15 19:40	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/13/15 19:40	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/13/15 19:40	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/13/15 19:40	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/13/15 19:40	
Surr: 1,2-Dichloroethane-d4	*91 %*	Conc:*45.5*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*100 %*	Conc:*49.8*	*88-108*	%			
Surr: Toluene-d8	*101 %*	Conc:*50.4*	*92-112*	%			

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Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-02 CAB-EXST-2

Sampled: 01/07/15 12:20 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 21:47	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/13/15 21:47	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/13/15 21:47	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/13/15 21:47	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 21:47	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/13/15 21:47	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/13/15 21:47	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/13/15 21:47	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/13/15 21:47	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/13/15 21:47	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/13/15 21:47	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/13/15 21:47	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/13/15 21:47	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/13/15 21:47	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/13/15 21:47	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/13/15 21:47	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/13/15 21:47	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/13/15 21:47	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/13/15 21:47	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/13/15 21:47	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/13/15 21:47	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/13/15 21:47	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/13/15 21:47	
Anthracene	ND	0.34	1.0	ug/l	1	01/13/15 21:47	
Benzidine	ND	3.7	10	ug/l	1	01/13/15 21:47	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/13/15 21:47	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/13/15 21:47	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/13/15 21:47	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/13/15 21:47	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 21:47	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 21:47	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/13/15 21:47	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/13/15 21:47	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/13/15 21:47	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/13/15 21:47	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 21:47	
Chrysene	ND	0.19	1.0	ug/l	1	01/13/15 21:47	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/13/15 21:47	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/13/15 21:47	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 21:47	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-02 CAB-EXST-2

Sampled: 01/07/15 12:20 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/13/15 21:47	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/13/15 21:47	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 21:47	
Fluorene	ND	0.35	1.0	ug/l	1	01/13/15 21:47	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/13/15 21:47	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/13/15 21:47	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/13/15 21:47	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/13/15 21:47	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/13/15 21:47	
Isophorone	ND	0.21	1.0	ug/l	1	01/13/15 21:47	
Naphthalene	ND	0.49	1.0	ug/l	1	01/13/15 21:47	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/13/15 21:47	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/13/15 21:47	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/13/15 21:47	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/13/15 21:47	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/13/15 21:47	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/13/15 21:47	
Phenol	ND	0.16	1.0	ug/l	1	01/13/15 21:47	
Pyrene	ND	0.25	1.0	ug/l	1	01/13/15 21:47	
Surr: 2,4,6-Tribromophenol	*69 %*	Conc:*34.5*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*70 %*	Conc:*17.4*	*22-107*	%			
Surr: 2-Fluorophenol	*50 %*	Conc:*24.8*	*3-74*	%			
Surr: Nitrobenzene-d5	*73 %*	Conc:*18.4*	*27-111*	%			
Surr: Phenol-d5	*43 %*	Conc:*21.7*	*0.1-53*	%			
Surr: Terphenyl-d14	*79 %*	Conc:*19.7*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.022**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.81**	0.012	0.050	ug/l	1	01/22/15 13:10	
Chromium, Total	**5.6**	0.034	0.30	ug/l	1	01/22/15 13:10	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 14:49	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-02 CAB-EXST-2

Sampled: 01/07/15 12:20 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.012**	0.0017	0.010	ug/l	1	01/22/15 23:12	
Copper, Total	**0.36**	0.0038	0.010	ug/l	1	01/22/15 23:12	
Lead, Total	**0.14**	0.0014	0.010	ug/l	1	01/22/15 23:12	
Nickel, Total	**3.5**	0.0040	0.010	ug/l	1	01/22/15 23:12	
Zinc, Total	**1.3**	0.036	0.20	ug/l	1	01/22/15 23:12	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/13/15 20:11	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/13/15 20:11	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/13/15 20:11	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/13/15 20:11	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/13/15 20:11	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/13/15 20:11	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/13/15 20:11	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/13/15 20:11	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/13/15 20:11	
Acrolein	ND	2.2	5.0	ug/l	1	01/13/15 20:11	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/13/15 20:11	
Benzene	ND	0.23	1.0	ug/l	1	01/13/15 20:11	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/13/15 20:11	
Bromoform	ND	0.32	1.0	ug/l	1	01/13/15 20:11	
Bromomethane	ND	0.47	1.0	ug/l	1	01/13/15 20:11	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/13/15 20:11	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/13/15 20:11	
Chloroethane	ND	0.23	1.0	ug/l	1	01/13/15 20:11	
Chloroform	ND	0.25	1.0	ug/l	1	01/13/15 20:11	
Chloromethane	ND	0.26	1.0	ug/l	1	01/13/15 20:11	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/13/15 20:11	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/13/15 20:11	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/13/15 20:11	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/13/15 20:11	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/13/15 20:11	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-02 CAB-EXST-2

Sampled: 01/07/15 12:20 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/13/15 20:11	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/13/15 20:11	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/13/15 20:11	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/13/15 20:11	
o-Xylene	ND	0.32	1.0	ug/l	1	01/13/15 20:11	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/13/15 20:11	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/13/15 20:11	
Toluene	ND	0.22	1.0	ug/l	1	01/13/15 20:11	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/13/15 20:11	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/13/15 20:11	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/13/15 20:11	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/13/15 20:11	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/13/15 20:11	
Surr: 1,2-Dichloroethane-d4	*88 %*	Conc:*43.9*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*99 %*	Conc:*49.4*	*88-108*	%			
Surr: Toluene-d8	*99 %*	Conc:*49.7*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-03 CAB-EXST-3

Sampled: 01/07/15 12:27 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 22:18	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/13/15 22:18	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/13/15 22:18	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/13/15 22:18	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 22:18	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/13/15 22:18	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/13/15 22:18	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/13/15 22:18	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/13/15 22:18	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/13/15 22:18	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/13/15 22:18	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/13/15 22:18	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/13/15 22:18	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/13/15 22:18	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/13/15 22:18	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/13/15 22:18	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/13/15 22:18	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/13/15 22:18	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/13/15 22:18	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/13/15 22:18	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/13/15 22:18	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/13/15 22:18	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/13/15 22:18	
Anthracene	ND	0.34	1.0	ug/l	1	01/13/15 22:18	
Benzidine	ND	3.7	10	ug/l	1	01/13/15 22:18	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/13/15 22:18	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/13/15 22:18	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/13/15 22:18	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/13/15 22:18	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 22:18	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 22:18	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/13/15 22:18	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/13/15 22:18	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/13/15 22:18	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/13/15 22:18	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 22:18	
Chrysene	ND	0.19	1.0	ug/l	1	01/13/15 22:18	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/13/15 22:18	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/13/15 22:18	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 22:18	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-03 CAB-EXST-3

Sampled: 01/07/15 12:27 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/13/15 22:18	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/13/15 22:18	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 22:18	
Fluorene	ND	0.35	1.0	ug/l	1	01/13/15 22:18	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/13/15 22:18	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/13/15 22:18	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/13/15 22:18	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/13/15 22:18	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/13/15 22:18	
Isophorone	ND	0.21	1.0	ug/l	1	01/13/15 22:18	
Naphthalene	ND	0.49	1.0	ug/l	1	01/13/15 22:18	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/13/15 22:18	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/13/15 22:18	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/13/15 22:18	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/13/15 22:18	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/13/15 22:18	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/13/15 22:18	
Phenol	ND	0.16	1.0	ug/l	1	01/13/15 22:18	
Pyrene	ND	0.25	1.0	ug/l	1	01/13/15 22:18	
Surr: 2,4,6-Tribromophenol	*66 %*	Conc:*33.2*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*68 %*	Conc:*17.0*	*22-107*	%			
Surr: 2-Fluorophenol	*46 %*	Conc:*22.9*	*3-74*	%			
Surr: Nitrobenzene-d5	*70 %*	Conc:*17.5*	*27-111*	%			
Surr: Phenol-d5	*40 %*	Conc:*20.1*	*0.1-53*	%			
Surr: Terphenyl-d14	*76 %*	Conc:*18.9*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.034**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.64**	0.012	0.050	ug/l	1	01/22/15 13:15	
Chromium, Total	**6.0**	0.034	0.30	ug/l	1	01/22/15 13:15	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 14:54	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-03 CAB-EXST-3

Sampled: 01/07/15 12:27 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.012**	0.0017	0.010	ug/l	1	01/22/15 23:26	
Copper, Total	**0.51**	0.0038	0.010	ug/l	1	01/22/15 23:26	
Lead, Total	**0.17**	0.0014	0.010	ug/l	1	01/22/15 23:26	
Nickel, Total	**3.2**	0.0040	0.010	ug/l	1	01/22/15 23:26	
Zinc, Total	**1.8**	0.036	0.20	ug/l	1	01/22/15 23:26	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/13/15 20:41	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/13/15 20:41	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/13/15 20:41	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/13/15 20:41	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/13/15 20:41	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/13/15 20:41	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/13/15 20:41	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/13/15 20:41	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/13/15 20:41	
Acrolein	ND	2.2	5.0	ug/l	1	01/13/15 20:41	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/13/15 20:41	
Benzene	ND	0.23	1.0	ug/l	1	01/13/15 20:41	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/13/15 20:41	
Bromoform	ND	0.32	1.0	ug/l	1	01/13/15 20:41	
Bromomethane	ND	0.47	1.0	ug/l	1	01/13/15 20:41	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/13/15 20:41	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/13/15 20:41	
Chloroethane	ND	0.23	1.0	ug/l	1	01/13/15 20:41	
Chloroform	ND	0.25	1.0	ug/l	1	01/13/15 20:41	
Chloromethane	ND	0.26	1.0	ug/l	1	01/13/15 20:41	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/13/15 20:41	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/13/15 20:41	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/13/15 20:41	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/13/15 20:41	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/13/15 20:41	

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5A08071-03 **CAB-EXST-3**

Sampled: 01/07/15 12:27 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/13/15 20:41	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/13/15 20:41	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/13/15 20:41	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/13/15 20:41	
o-Xylene	ND	0.32	1.0	ug/l	1	01/13/15 20:41	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/13/15 20:41	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/13/15 20:41	
Toluene	ND	0.22	1.0	ug/l	1	01/13/15 20:41	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/13/15 20:41	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/13/15 20:41	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/13/15 20:41	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/13/15 20:41	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/13/15 20:41	
Surr: 1,2-Dichloroethane-d4	*90 %*	Conc:*45.2*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*99 %*	Conc:*49.3*	*88-108*	%			
Surr: Toluene-d8	*101 %*	Conc:*50.3*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-04 CAB-EXST-4

Sampled: 01/07/15 12:38 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 22:48	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/13/15 22:48	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/13/15 22:48	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/13/15 22:48	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 22:48	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/13/15 22:48	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/13/15 22:48	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/13/15 22:48	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/13/15 22:48	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/13/15 22:48	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/13/15 22:48	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/13/15 22:48	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/13/15 22:48	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/13/15 22:48	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/13/15 22:48	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/13/15 22:48	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/13/15 22:48	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/13/15 22:48	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/13/15 22:48	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/13/15 22:48	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/13/15 22:48	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/13/15 22:48	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/13/15 22:48	
Anthracene	ND	0.34	1.0	ug/l	1	01/13/15 22:48	
Benzidine	ND	3.7	10	ug/l	1	01/13/15 22:48	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/13/15 22:48	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/13/15 22:48	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/13/15 22:48	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/13/15 22:48	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 22:48	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 22:48	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/13/15 22:48	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/13/15 22:48	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/13/15 22:48	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/13/15 22:48	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 22:48	
Chrysene	ND	0.19	1.0	ug/l	1	01/13/15 22:48	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/13/15 22:48	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/13/15 22:48	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 22:48	

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5A08071-04 CAB-EXST-4

Sampled: 01/07/15 12:38 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/13/15 22:48	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/13/15 22:48	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 22:48	
Fluorene	ND	0.35	1.0	ug/l	1	01/13/15 22:48	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/13/15 22:48	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/13/15 22:48	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/13/15 22:48	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/13/15 22:48	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/13/15 22:48	
Isophorone	ND	0.21	1.0	ug/l	1	01/13/15 22:48	
Naphthalene	ND	0.49	1.0	ug/l	1	01/13/15 22:48	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/13/15 22:48	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/13/15 22:48	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/13/15 22:48	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/13/15 22:48	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/13/15 22:48	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/13/15 22:48	
Phenol	ND	0.16	1.0	ug/l	1	01/13/15 22:48	
Pyrene	ND	0.25	1.0	ug/l	1	01/13/15 22:48	
Surr: 2,4,6-Tribromophenol	*59 %*	Conc:*29.6*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*65 %*	Conc:*16.3*	*22-107*	%			
Surr: 2-Fluorophenol	*45 %*	Conc:*22.3*	*3-74*	%			
Surr: Nitrobenzene-d5	*69 %*	Conc:*17.3*	*27-111*	%			
Surr: Phenol-d5	*39 %*	Conc:*19.3*	*0.1-53*	%			
Surr: Terphenyl-d14	*72 %*	Conc:*18.0*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.019**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.72**	0.012	0.050	ug/l	1	01/22/15 13:20	
Chromium, Total	**2.1**	0.034	0.30	ug/l	1	01/22/15 13:20	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 14:58	

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Date Reported: 03/09/15 12:32

5A08071-04 CAB-EXST-4

Sampled: 01/07/15 12:38 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.013**	0.0017	0.010	ug/l	1	01/22/15 23:40	
Copper, Total	**0.59**	0.0038	0.010	ug/l	1	01/22/15 23:40	
Lead, Total	**0.25**	0.0014	0.010	ug/l	1	01/22/15 23:40	
Nickel, Total	**1.4**	0.0040	0.010	ug/l	1	01/22/15 23:40	
Zinc, Total	**1.3**	0.036	0.20	ug/l	1	01/22/15 23:40	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/13/15 21:12	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/13/15 21:12	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/13/15 21:12	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/13/15 21:12	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/13/15 21:12	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/13/15 21:12	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/13/15 21:12	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/13/15 21:12	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/13/15 21:12	
Acrolein	ND	2.2	5.0	ug/l	1	01/13/15 21:12	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/13/15 21:12	
Benzene	ND	0.23	1.0	ug/l	1	01/13/15 21:12	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/13/15 21:12	
Bromoform	ND	0.32	1.0	ug/l	1	01/13/15 21:12	
Bromomethane	ND	0.47	1.0	ug/l	1	01/13/15 21:12	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/13/15 21:12	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/13/15 21:12	
Chloroethane	ND	0.23	1.0	ug/l	1	01/13/15 21:12	
Chloroform	ND	0.25	1.0	ug/l	1	01/13/15 21:12	
Chloromethane	ND	0.26	1.0	ug/l	1	01/13/15 21:12	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/13/15 21:12	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/13/15 21:12	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/13/15 21:12	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/13/15 21:12	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/13/15 21:12	

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Date Reported: 03/09/15 12:32

5A08071-04 **CAB-EXST-4**

Sampled: 01/07/15 12:38 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/13/15 21:12	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/13/15 21:12	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/13/15 21:12	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/13/15 21:12	
o-Xylene	ND	0.32	1.0	ug/l	1	01/13/15 21:12	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/13/15 21:12	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/13/15 21:12	
Toluene	ND	0.22	1.0	ug/l	1	01/13/15 21:12	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/13/15 21:12	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/13/15 21:12	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/13/15 21:12	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/13/15 21:12	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/13/15 21:12	
Surr: 1,2-Dichloroethane-d4	*90 %*	Conc:*45.1*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*99 %*	Conc:*49.3*	*88-108*	%			
Surr: Toluene-d8	*101 %*	Conc:*50.7*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-05 **CAB-EXST-5**

Sampled: 01/07/15 12:47 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 23:18	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/13/15 23:18	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/13/15 23:18	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/13/15 23:18	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 23:18	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/13/15 23:18	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/13/15 23:18	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/13/15 23:18	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/13/15 23:18	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/13/15 23:18	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/13/15 23:18	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/13/15 23:18	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/13/15 23:18	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/13/15 23:18	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/13/15 23:18	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/13/15 23:18	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/13/15 23:18	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/13/15 23:18	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/13/15 23:18	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/13/15 23:18	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/13/15 23:18	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/13/15 23:18	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/13/15 23:18	
Anthracene	ND	0.34	1.0	ug/l	1	01/13/15 23:18	
Benzidine	ND	3.7	10	ug/l	1	01/13/15 23:18	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/13/15 23:18	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/13/15 23:18	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/13/15 23:18	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/13/15 23:18	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 23:18	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 23:18	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/13/15 23:18	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/13/15 23:18	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/13/15 23:18	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/13/15 23:18	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 23:18	
Chrysene	ND	0.19	1.0	ug/l	1	01/13/15 23:18	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/13/15 23:18	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/13/15 23:18	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 23:18	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-05 CAB-EXST-5

Sampled: 01/07/15 12:47 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/13/15 23:18	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/13/15 23:18	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 23:18	
Fluorene	ND	0.35	1.0	ug/l	1	01/13/15 23:18	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/13/15 23:18	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/13/15 23:18	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/13/15 23:18	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/13/15 23:18	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/13/15 23:18	
Isophorone	ND	0.21	1.0	ug/l	1	01/13/15 23:18	
Naphthalene	ND	0.49	1.0	ug/l	1	01/13/15 23:18	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/13/15 23:18	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/13/15 23:18	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/13/15 23:18	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/13/15 23:18	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/13/15 23:18	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/13/15 23:18	
Phenol	ND	0.16	1.0	ug/l	1	01/13/15 23:18	
Pyrene	ND	0.25	1.0	ug/l	1	01/13/15 23:18	
Surr: 2,4,6-Tribromophenol	*64 %*	Conc:*31.8*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*70 %*	Conc:*17.5*	*22-107*	%			
Surr: 2-Fluorophenol	*47 %*	Conc:*23.4*	*3-74*	%			
Surr: Nitrobenzene-d5	*75 %*	Conc:*18.9*	*27-111*	%			
Surr: Phenol-d5	*41 %*	Conc:*20.4*	*0.1-53*	%			
Surr: Terphenyl-d14	*80 %*	Conc:*20.1*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.035**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.71**	0.012	0.050	ug/l	1	01/22/15 13:24	
Chromium, Total	**12**	0.034	0.30	ug/l	1	01/22/15 13:24	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 15:02	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-05 CAB-EXST-5

Sampled: 01/07/15 12:47 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.010**	0.0017	0.010	ug/l	1	01/23/15 00:36	
Copper, Total	**0.58**	0.0038	0.010	ug/l	1	01/23/15 00:36	
Lead, Total	**0.53**	0.0014	0.010	ug/l	1	01/23/15 00:36	
Nickel, Total	**6.5**	0.0040	0.010	ug/l	1	01/23/15 00:36	
Zinc, Total	**2.5**	0.036	0.20	ug/l	1	01/23/15 00:36	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/13/15 21:42	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/13/15 21:42	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/13/15 21:42	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/13/15 21:42	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/13/15 21:42	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/13/15 21:42	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/13/15 21:42	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/13/15 21:42	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/13/15 21:42	
Acrolein	ND	2.2	5.0	ug/l	1	01/13/15 21:42	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/13/15 21:42	
Benzene	ND	0.23	1.0	ug/l	1	01/13/15 21:42	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/13/15 21:42	
Bromoform	ND	0.32	1.0	ug/l	1	01/13/15 21:42	
Bromomethane	ND	0.47	1.0	ug/l	1	01/13/15 21:42	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/13/15 21:42	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/13/15 21:42	
Chloroethane	ND	0.23	1.0	ug/l	1	01/13/15 21:42	
Chloroform	ND	0.25	1.0	ug/l	1	01/13/15 21:42	
Chloromethane	ND	0.26	1.0	ug/l	1	01/13/15 21:42	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/13/15 21:42	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/13/15 21:42	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/13/15 21:42	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/13/15 21:42	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/13/15 21:42	

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Date Reported: 03/09/15 12:32

5A08071-05 CAB-EXST-5

Sampled: 01/07/15 12:47 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/13/15 21:42	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/13/15 21:42	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/13/15 21:42	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/13/15 21:42	
o-Xylene	ND	0.32	1.0	ug/l	1	01/13/15 21:42	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/13/15 21:42	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/13/15 21:42	
Toluene	ND	0.22	1.0	ug/l	1	01/13/15 21:42	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/13/15 21:42	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/13/15 21:42	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/13/15 21:42	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/13/15 21:42	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/13/15 21:42	
Surr: 1,2-Dichloroethane-d4	*78 %*	Conc:*38.9*	*82-125*	%			*S-04*
Surr: 4-Bromofluorobenzene	*96 %*	Conc:*48.0*	*88-108*	%			
Surr: Toluene-d8	*100 %*	Conc:*49.8*	*92-112*	%			

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Date Reported: 03/09/15 12:32

5A08071-06 CAB-EXST-5-DUP

Sampled: 01/07/15 12:47 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 23:49	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/13/15 23:49	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/13/15 23:49	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/13/15 23:49	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/13/15 23:49	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/13/15 23:49	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/13/15 23:49	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/13/15 23:49	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/13/15 23:49	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/13/15 23:49	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/13/15 23:49	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/13/15 23:49	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/13/15 23:49	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/13/15 23:49	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/13/15 23:49	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/13/15 23:49	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/13/15 23:49	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/13/15 23:49	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/13/15 23:49	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/13/15 23:49	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/13/15 23:49	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/13/15 23:49	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/13/15 23:49	
Anthracene	ND	0.34	1.0	ug/l	1	01/13/15 23:49	
Benzidine	ND	3.7	10	ug/l	1	01/13/15 23:49	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/13/15 23:49	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/13/15 23:49	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/13/15 23:49	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/13/15 23:49	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 23:49	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 23:49	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/13/15 23:49	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/13/15 23:49	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/13/15 23:49	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/13/15 23:49	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 23:49	
Chrysene	ND	0.19	1.0	ug/l	1	01/13/15 23:49	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/13/15 23:49	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/13/15 23:49	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/13/15 23:49	

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5A08071-06 CAB-EXST-5-DUP

Sampled: 01/07/15 12:47 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/13/15 23:49	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/13/15 23:49	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/13/15 23:49	
Fluorene	ND	0.35	1.0	ug/l	1	01/13/15 23:49	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/13/15 23:49	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/13/15 23:49	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/13/15 23:49	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/13/15 23:49	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/13/15 23:49	
Isophorone	ND	0.21	1.0	ug/l	1	01/13/15 23:49	
Naphthalene	ND	0.49	1.0	ug/l	1	01/13/15 23:49	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/13/15 23:49	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/13/15 23:49	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/13/15 23:49	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/13/15 23:49	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/13/15 23:49	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/13/15 23:49	
Phenol	ND	0.16	1.0	ug/l	1	01/13/15 23:49	
Pyrene	ND	0.25	1.0	ug/l	1	01/13/15 23:49	
Surr: 2,4,6-Tribromophenol	*63 %*	Conc:*31.7*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*66 %*	Conc:*16.5*	*22-107*	%			
Surr: 2-Fluorophenol	*42 %*	Conc:*21.2*	*3-74*	%			
Surr: Nitrobenzene-d5	*71 %*	Conc:*17.8*	*27-111*	%			
Surr: Phenol-d5	*38 %*	Conc:*18.8*	*0.1-53*	%			
Surr: Terphenyl-d14	*81 %*	Conc:*20.2*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.034**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.68**	0.012	0.050	ug/l	1	01/22/15 13:29	
Chromium, Total	**0.23**	0.034	0.30	ug/l	1	01/22/15 13:29	J

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 15:07	

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Date Reported: 03/09/15 12:32

5A08071-06 CAB-EXST-5-DUP

Sampled: 01/07/15 12:47 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.011**	0.0017	0.010	ug/l	1	01/23/15 00:50	
Copper, Total	**0.19**	0.0038	0.010	ug/l	1	01/23/15 00:50	
Lead, Total	**0.099**	0.0014	0.010	ug/l	1	01/23/15 00:50	
Nickel, Total	**0.29**	0.0040	0.010	ug/l	1	01/23/15 00:50	
Zinc, Total	**0.40**	0.036	0.20	ug/l	1	01/23/15 00:50	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/13/15 22:13	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/13/15 22:13	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/13/15 22:13	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/13/15 22:13	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/13/15 22:13	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/13/15 22:13	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/13/15 22:13	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/13/15 22:13	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/13/15 22:13	
Acrolein	ND	2.2	5.0	ug/l	1	01/13/15 22:13	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/13/15 22:13	
Benzene	ND	0.23	1.0	ug/l	1	01/13/15 22:13	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/13/15 22:13	
Bromoform	ND	0.32	1.0	ug/l	1	01/13/15 22:13	
Bromomethane	ND	0.47	1.0	ug/l	1	01/13/15 22:13	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/13/15 22:13	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/13/15 22:13	
Chloroethane	ND	0.23	1.0	ug/l	1	01/13/15 22:13	
Chloroform	ND	0.25	1.0	ug/l	1	01/13/15 22:13	
Chloromethane	ND	0.26	1.0	ug/l	1	01/13/15 22:13	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/13/15 22:13	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/13/15 22:13	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/13/15 22:13	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/13/15 22:13	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/13/15 22:13	

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Date Reported: 03/09/15 12:32

5A08071-06 CAB-EXST-5-DUP

Sampled: 01/07/15 12:47 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/13/15 22:13	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/13/15 22:13	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/13/15 22:13	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/13/15 22:13	
o-Xylene	ND	0.32	1.0	ug/l	1	01/13/15 22:13	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/13/15 22:13	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/13/15 22:13	
Toluene	ND	0.22	1.0	ug/l	1	01/13/15 22:13	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/13/15 22:13	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/13/15 22:13	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/13/15 22:13	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/13/15 22:13	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/13/15 22:13	
Surr: 1,2-Dichloroethane-d4	*88 %*	Conc:*44.2*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*98 %*	Conc:*48.9*	*88-108*	%			
Surr: Toluene-d8	*102 %*	Conc:*50.8*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-07 VAULT-3

Sampled: 01/07/15 13:06 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 00:19	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/14/15 00:19	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/14/15 00:19	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/14/15 00:19	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 00:19	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/14/15 00:19	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/14/15 00:19	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/14/15 00:19	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/14/15 00:19	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/14/15 00:19	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/14/15 00:19	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/14/15 00:19	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/14/15 00:19	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/14/15 00:19	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/14/15 00:19	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/14/15 00:19	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/14/15 00:19	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/14/15 00:19	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/14/15 00:19	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/14/15 00:19	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/14/15 00:19	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/14/15 00:19	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/14/15 00:19	
Anthracene	ND	0.34	1.0	ug/l	1	01/14/15 00:19	
Benzidine	ND	3.7	10	ug/l	1	01/14/15 00:19	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/14/15 00:19	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/14/15 00:19	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/14/15 00:19	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/14/15 00:19	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 00:19	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 00:19	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/14/15 00:19	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/14/15 00:19	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/14/15 00:19	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/14/15 00:19	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 00:19	
Chrysene	ND	0.19	1.0	ug/l	1	01/14/15 00:19	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/14/15 00:19	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/14/15 00:19	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 00:19	

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5A08071-07 VAULT-3

Sampled: 01/07/15 13:06 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/14/15 00:19	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/14/15 00:19	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 00:19	
Fluorene	ND	0.35	1.0	ug/l	1	01/14/15 00:19	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/14/15 00:19	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/14/15 00:19	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/14/15 00:19	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/14/15 00:19	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/14/15 00:19	
Isophorone	ND	0.21	1.0	ug/l	1	01/14/15 00:19	
Naphthalene	ND	0.49	1.0	ug/l	1	01/14/15 00:19	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/14/15 00:19	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/14/15 00:19	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/14/15 00:19	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/14/15 00:19	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/14/15 00:19	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/14/15 00:19	
Phenol	ND	0.16	1.0	ug/l	1	01/14/15 00:19	
Pyrene	ND	0.25	1.0	ug/l	1	01/14/15 00:19	
Surr: 2,4,6-Tribromophenol	*70 %*	Conc:*35.1*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*70 %*	Conc:*17.4*	*22-107*	%			
Surr: 2-Fluorophenol	*46 %*	Conc:*23.0*	*3-74*	%			
Surr: Nitrobenzene-d5	*74 %*	Conc:*18.5*	*27-111*	%			
Surr: Phenol-d5	*41 %*	Conc:*20.5*	*0.1-53*	%			
Surr: Terphenyl-d14	*90 %*	Conc:*22.5*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.019**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.75**	0.012	0.050	ug/l	1	01/22/15 13:34	
Chromium, Total	**0.26**	0.034	0.30	ug/l	1	01/22/15 13:34	J

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 15:11	

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5A08071-07 VAULT-3
Sampled: 01/07/15 13:06 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.012**	0.0017	0.010	ug/l	1	01/23/15 01:04	
Copper, Total	**0.39**	0.0038	0.010	ug/l	1	01/23/15 01:04	
Lead, Total	**0.13**	0.0014	0.010	ug/l	1	01/23/15 01:04	
Nickel, Total	**0.31**	0.0040	0.010	ug/l	1	01/23/15 01:04	
Zinc, Total	**0.52**	0.036	0.20	ug/l	1	01/23/15 01:04	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/13/15 22:43	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/13/15 22:43	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/13/15 22:43	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/13/15 22:43	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/13/15 22:43	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/13/15 22:43	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/13/15 22:43	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/13/15 22:43	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/13/15 22:43	
Acrolein	ND	2.2	5.0	ug/l	1	01/13/15 22:43	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/13/15 22:43	
Benzene	ND	0.23	1.0	ug/l	1	01/13/15 22:43	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/13/15 22:43	
Bromoform	ND	0.32	1.0	ug/l	1	01/13/15 22:43	
Bromomethane	ND	0.47	1.0	ug/l	1	01/13/15 22:43	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/13/15 22:43	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/13/15 22:43	
Chloroethane	ND	0.23	1.0	ug/l	1	01/13/15 22:43	
Chloroform	ND	0.25	1.0	ug/l	1	01/13/15 22:43	
Chloromethane	ND	0.26	1.0	ug/l	1	01/13/15 22:43	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/13/15 22:43	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/13/15 22:43	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/13/15 22:43	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/13/15 22:43	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/13/15 22:43	

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Date Reported: 03/09/15 12:32

5A08071-07 VAULT-3

Sampled: 01/07/15 13:06 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/13/15 22:43	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/13/15 22:43	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/13/15 22:43	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/13/15 22:43	
o-Xylene	ND	0.32	1.0	ug/l	1	01/13/15 22:43	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/13/15 22:43	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/13/15 22:43	
Toluene	ND	0.22	1.0	ug/l	1	01/13/15 22:43	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/13/15 22:43	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/13/15 22:43	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/13/15 22:43	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/13/15 22:43	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/13/15 22:43	
Surr: 1,2-Dichloroethane-d4	*84 %*	Conc:*41.9*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*98 %*	Conc:*49.0*	*88-108*	%			
Surr: Toluene-d8	*101 %*	Conc:*50.3*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-08 VAULT-5

Sampled: 01/07/15 13:13 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 00:50	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/14/15 00:50	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/14/15 00:50	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/14/15 00:50	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 00:50	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/14/15 00:50	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/14/15 00:50	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/14/15 00:50	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/14/15 00:50	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/14/15 00:50	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/14/15 00:50	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/14/15 00:50	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/14/15 00:50	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/14/15 00:50	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/14/15 00:50	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/14/15 00:50	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/14/15 00:50	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/14/15 00:50	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/14/15 00:50	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/14/15 00:50	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/14/15 00:50	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/14/15 00:50	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/14/15 00:50	
Anthracene	ND	0.34	1.0	ug/l	1	01/14/15 00:50	
Benzidine	ND	3.7	10	ug/l	1	01/14/15 00:50	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/14/15 00:50	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/14/15 00:50	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/14/15 00:50	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/14/15 00:50	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 00:50	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 00:50	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/14/15 00:50	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/14/15 00:50	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/14/15 00:50	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/14/15 00:50	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 00:50	
Chrysene	ND	0.19	1.0	ug/l	1	01/14/15 00:50	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/14/15 00:50	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/14/15 00:50	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 00:50	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-08 VAULT-5

Sampled: 01/07/15 13:13 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/14/15 00:50	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/14/15 00:50	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 00:50	
Fluorene	ND	0.35	1.0	ug/l	1	01/14/15 00:50	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/14/15 00:50	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/14/15 00:50	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/14/15 00:50	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/14/15 00:50	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/14/15 00:50	
Isophorone	ND	0.21	1.0	ug/l	1	01/14/15 00:50	
Naphthalene	ND	0.49	1.0	ug/l	1	01/14/15 00:50	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/14/15 00:50	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/14/15 00:50	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/14/15 00:50	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/14/15 00:50	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/14/15 00:50	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/14/15 00:50	
Phenol	ND	0.16	1.0	ug/l	1	01/14/15 00:50	
Pyrene	ND	0.25	1.0	ug/l	1	01/14/15 00:50	
Surr: 2,4,6-Tribromophenol	*67 %*	Conc:*33.4*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*64 %*	Conc:*16.1*	*22-107*	%			
Surr: 2-Fluorophenol	*47 %*	Conc:*23.4*	*3-74*	%			
Surr: Nitrobenzene-d5	*69 %*	Conc:*17.2*	*27-111*	%			
Surr: Phenol-d5	*40 %*	Conc:*20.1*	*0.1-53*	%			
Surr: Terphenyl-d14	*72 %*	Conc:*17.9*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.016**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.68**	0.012	0.050	ug/l	1	01/22/15 13:39	
Chromium, Total	**1.1**	0.034	0.30	ug/l	1	01/22/15 13:39	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 15:15	

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Date Reported: 03/09/15 12:32

5A08071-08 VAULT-5

Sampled: 01/07/15 13:13 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.011**	0.0017	0.010	ug/l	1	01/23/15 01:18	
Copper, Total	**0.56**	0.0038	0.010	ug/l	1	01/23/15 01:18	
Lead, Total	**0.20**	0.0014	0.010	ug/l	1	01/23/15 01:18	
Nickel, Total	**0.89**	0.0040	0.010	ug/l	1	01/23/15 01:18	
Zinc, Total	**1.6**	0.036	0.20	ug/l	1	01/23/15 01:18	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/13/15 23:13	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/13/15 23:13	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/13/15 23:13	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/13/15 23:13	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/13/15 23:13	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/13/15 23:13	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/13/15 23:13	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/13/15 23:13	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/13/15 23:13	
Acrolein	ND	2.2	5.0	ug/l	1	01/13/15 23:13	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/13/15 23:13	
Benzene	ND	0.23	1.0	ug/l	1	01/13/15 23:13	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/13/15 23:13	
Bromoform	ND	0.32	1.0	ug/l	1	01/13/15 23:13	
Bromomethane	ND	0.47	1.0	ug/l	1	01/13/15 23:13	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/13/15 23:13	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/13/15 23:13	
Chloroethane	ND	0.23	1.0	ug/l	1	01/13/15 23:13	
Chloroform	ND	0.25	1.0	ug/l	1	01/13/15 23:13	
Chloromethane	ND	0.26	1.0	ug/l	1	01/13/15 23:13	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/13/15 23:13	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/13/15 23:13	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/13/15 23:13	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/13/15 23:13	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/13/15 23:13	

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5A08071-08 VAULT-5

Sampled: 01/07/15 13:13 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/13/15 23:13	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/13/15 23:13	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/13/15 23:13	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/13/15 23:13	
o-Xylene	ND	0.32	1.0	ug/l	1	01/13/15 23:13	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/13/15 23:13	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/13/15 23:13	
Toluene	ND	0.22	1.0	ug/l	1	01/13/15 23:13	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/13/15 23:13	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/13/15 23:13	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/13/15 23:13	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/13/15 23:13	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/13/15 23:13	
Surr: 1,2-Dichloroethane-d4	*88 %*	Conc:*43.9*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*95 %*	Conc:*47.7*	*88-108*	%			
Surr: Toluene-d8	*101 %*	Conc:*50.4*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-09 VAULT-8

Sampled: 01/07/15 13:48 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 01:20	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/14/15 01:20	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/14/15 01:20	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/14/15 01:20	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 01:20	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/14/15 01:20	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/14/15 01:20	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/14/15 01:20	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/14/15 01:20	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/14/15 01:20	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/14/15 01:20	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/14/15 01:20	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/14/15 01:20	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/14/15 01:20	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/14/15 01:20	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/14/15 01:20	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/14/15 01:20	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/14/15 01:20	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/14/15 01:20	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/14/15 01:20	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/14/15 01:20	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/14/15 01:20	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/14/15 01:20	
Anthracene	ND	0.34	1.0	ug/l	1	01/14/15 01:20	
Benzidine	ND	3.7	10	ug/l	1	01/14/15 01:20	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/14/15 01:20	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/14/15 01:20	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/14/15 01:20	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/14/15 01:20	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 01:20	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 01:20	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/14/15 01:20	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/14/15 01:20	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/14/15 01:20	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/14/15 01:20	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 01:20	
Chrysene	ND	0.19	1.0	ug/l	1	01/14/15 01:20	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/14/15 01:20	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/14/15 01:20	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 01:20	

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5A08071-09 VAULT-8

Sampled: 01/07/15 13:48 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/14/15 01:20	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/14/15 01:20	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 01:20	
Fluorene	ND	0.35	1.0	ug/l	1	01/14/15 01:20	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/14/15 01:20	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/14/15 01:20	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/14/15 01:20	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/14/15 01:20	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/14/15 01:20	
Isophorone	ND	0.21	1.0	ug/l	1	01/14/15 01:20	
Naphthalene	ND	0.49	1.0	ug/l	1	01/14/15 01:20	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/14/15 01:20	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/14/15 01:20	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/14/15 01:20	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/14/15 01:20	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/14/15 01:20	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/14/15 01:20	
Phenol	ND	0.16	1.0	ug/l	1	01/14/15 01:20	
Pyrene	ND	0.25	1.0	ug/l	1	01/14/15 01:20	
Surr: 2,4,6-Tribromophenol	*70 %*	Conc:*34.8*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*75 %*	Conc:*18.8*	*22-107*	%			
Surr: 2-Fluorophenol	*50 %*	Conc:*25.2*	*3-74*	%			
Surr: Nitrobenzene-d5	*78 %*	Conc:*19.5*	*27-111*	%			
Surr: Phenol-d5	*45 %*	Conc:*22.6*	*0.1-53*	%			
Surr: Terphenyl-d14	*84 %*	Conc:*21.0*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.019**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.68**	0.012	0.050	ug/l	1	01/22/15 14:03	
Chromium, Total	**1.8**	0.034	0.30	ug/l	1	01/22/15 14:03	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 15:37	

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5A08071-09 VAULT-8

Sampled: 01/07/15 13:48 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.011**	0.0017	0.010	ug/l	1	01/23/15 01:32	
Copper, Total	**0.42**	0.0038	0.010	ug/l	1	01/23/15 01:32	
Lead, Total	**1.3**	0.0014	0.010	ug/l	1	01/23/15 01:32	
Nickel, Total	**1.3**	0.0040	0.010	ug/l	1	01/23/15 01:32	
Zinc, Total	**1.0**	0.036	0.20	ug/l	1	01/23/15 01:32	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/13/15 23:44	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/13/15 23:44	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/13/15 23:44	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/13/15 23:44	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/13/15 23:44	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/13/15 23:44	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/13/15 23:44	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/13/15 23:44	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/13/15 23:44	
Acrolein	ND	2.2	5.0	ug/l	1	01/13/15 23:44	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/13/15 23:44	
Benzene	ND	0.23	1.0	ug/l	1	01/13/15 23:44	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/13/15 23:44	
Bromoform	ND	0.32	1.0	ug/l	1	01/13/15 23:44	
Bromomethane	ND	0.47	1.0	ug/l	1	01/13/15 23:44	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/13/15 23:44	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/13/15 23:44	
Chloroethane	ND	0.23	1.0	ug/l	1	01/13/15 23:44	
Chloroform	ND	0.25	1.0	ug/l	1	01/13/15 23:44	
Chloromethane	ND	0.26	1.0	ug/l	1	01/13/15 23:44	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/13/15 23:44	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/13/15 23:44	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/13/15 23:44	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/13/15 23:44	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/13/15 23:44	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-09 VAULT-8

Sampled: 01/07/15 13:48 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/13/15 23:44	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/13/15 23:44	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/13/15 23:44	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/13/15 23:44	
o-Xylene	ND	0.32	1.0	ug/l	1	01/13/15 23:44	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/13/15 23:44	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/13/15 23:44	
Toluene	ND	0.22	1.0	ug/l	1	01/13/15 23:44	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/13/15 23:44	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/13/15 23:44	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/13/15 23:44	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/13/15 23:44	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/13/15 23:44	
Surr: 1,2-Dichloroethane-d4	*86 %*	Conc:*43.2*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*100 %*	Conc:*50.1*	*88-108*	%			
Surr: Toluene-d8	*102 %*	Conc:*51.0*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-10 VAULT-11

Sampled: 01/07/15 13:26 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 01:50	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/14/15 01:50	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/14/15 01:50	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/14/15 01:50	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 01:50	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/14/15 01:50	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/14/15 01:50	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/14/15 01:50	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/14/15 01:50	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/14/15 01:50	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/14/15 01:50	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/14/15 01:50	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/14/15 01:50	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/14/15 01:50	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/14/15 01:50	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/14/15 01:50	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/14/15 01:50	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/14/15 01:50	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/14/15 01:50	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/14/15 01:50	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/14/15 01:50	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/14/15 01:50	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/14/15 01:50	
Anthracene	ND	0.34	1.0	ug/l	1	01/14/15 01:50	
Benzidine	ND	3.7	10	ug/l	1	01/14/15 01:50	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/14/15 01:50	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/14/15 01:50	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/14/15 01:50	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/14/15 01:50	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 01:50	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 01:50	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/14/15 01:50	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/14/15 01:50	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/14/15 01:50	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/14/15 01:50	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 01:50	
Chrysene	ND	0.19	1.0	ug/l	1	01/14/15 01:50	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/14/15 01:50	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/14/15 01:50	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 01:50	

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5A08071-10 VAULT-11

Sampled: 01/07/15 13:26 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/14/15 01:50	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/14/15 01:50	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 01:50	
Fluorene	ND	0.35	1.0	ug/l	1	01/14/15 01:50	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/14/15 01:50	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/14/15 01:50	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/14/15 01:50	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/14/15 01:50	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/14/15 01:50	
Isophorone	ND	0.21	1.0	ug/l	1	01/14/15 01:50	
Naphthalene	ND	0.49	1.0	ug/l	1	01/14/15 01:50	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/14/15 01:50	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/14/15 01:50	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/14/15 01:50	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/14/15 01:50	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/14/15 01:50	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/14/15 01:50	
Phenol	ND	0.16	1.0	ug/l	1	01/14/15 01:50	
Pyrene	ND	0.25	1.0	ug/l	1	01/14/15 01:50	
Surr: 2,4,6-Tribromophenol	*78 %*	Conc:*39.1*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*77 %*	Conc:*19.2*	*22-107*	%			
Surr: 2-Fluorophenol	*48 %*	Conc:*23.8*	*3-74*	%			
Surr: Nitrobenzene-d5	*76 %*	Conc:*19.1*	*27-111*	%			
Surr: Phenol-d5	*41 %*	Conc:*20.4*	*0.1-53*	%			
Surr: Terphenyl-d14	*81 %*	Conc:*20.1*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.020**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.64**	0.012	0.050	ug/l	1	01/22/15 14:08	
Chromium, Total	**1.1**	0.034	0.30	ug/l	1	01/22/15 14:08	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 15:41	

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5A08071-10 VAULT-11

Sampled: 01/07/15 13:26 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.011**	0.0017	0.010	ug/l	1	01/23/15 01:45	
Copper, Total	**0.30**	0.0038	0.010	ug/l	1	01/23/15 01:45	
Lead, Total	**0.48**	0.0014	0.010	ug/l	1	01/23/15 01:45	
Nickel, Total	**0.85**	0.0040	0.010	ug/l	1	01/23/15 01:45	
Zinc, Total	**0.78**	0.036	0.20	ug/l	1	01/23/15 01:45	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/14/15 00:14	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/14/15 00:14	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/14/15 00:14	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/14/15 00:14	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/14/15 00:14	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/14/15 00:14	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/14/15 00:14	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/14/15 00:14	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/14/15 00:14	
Acrolein	ND	2.2	5.0	ug/l	1	01/14/15 00:14	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/14/15 00:14	
Benzene	ND	0.23	1.0	ug/l	1	01/14/15 00:14	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/14/15 00:14	
Bromoform	ND	0.32	1.0	ug/l	1	01/14/15 00:14	
Bromomethane	ND	0.47	1.0	ug/l	1	01/14/15 00:14	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/14/15 00:14	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/14/15 00:14	
Chloroethane	ND	0.23	1.0	ug/l	1	01/14/15 00:14	
Chloroform	ND	0.25	1.0	ug/l	1	01/14/15 00:14	
Chloromethane	ND	0.26	1.0	ug/l	1	01/14/15 00:14	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/14/15 00:14	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/14/15 00:14	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/14/15 00:14	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/14/15 00:14	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/14/15 00:14	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-10 VAULT-11

Sampled: 01/07/15 13:26 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/14/15 00:14	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/14/15 00:14	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/14/15 00:14	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/14/15 00:14	
o-Xylene	ND	0.32	1.0	ug/l	1	01/14/15 00:14	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/14/15 00:14	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/14/15 00:14	
Toluene	ND	0.22	1.0	ug/l	1	01/14/15 00:14	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/14/15 00:14	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/14/15 00:14	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/14/15 00:14	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/14/15 00:14	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/14/15 00:14	
Surr: 1,2-Dichloroethane-d4	*79 %*	Conc:*39.4*	*82-125*	%			*S-04*
Surr: 4-Bromofluorobenzene	*105 %*	Conc:*52.4*	*88-108*	%			
Surr: Toluene-d8	*101 %*	Conc:*50.4*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-11 VAULT-21

Sampled: 01/07/15 13:35 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 02:20	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/14/15 02:20	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/14/15 02:20	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/14/15 02:20	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 02:20	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/14/15 02:20	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/14/15 02:20	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/14/15 02:20	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/14/15 02:20	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/14/15 02:20	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/14/15 02:20	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/14/15 02:20	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/14/15 02:20	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/14/15 02:20	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/14/15 02:20	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/14/15 02:20	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/14/15 02:20	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/14/15 02:20	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/14/15 02:20	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/14/15 02:20	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/14/15 02:20	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/14/15 02:20	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/14/15 02:20	
Anthracene	ND	0.34	1.0	ug/l	1	01/14/15 02:20	
Benzidine	ND	3.7	10	ug/l	1	01/14/15 02:20	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/14/15 02:20	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/14/15 02:20	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/14/15 02:20	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/14/15 02:20	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 02:20	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 02:20	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/14/15 02:20	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/14/15 02:20	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/14/15 02:20	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/14/15 02:20	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 02:20	
Chrysene	ND	0.19	1.0	ug/l	1	01/14/15 02:20	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/14/15 02:20	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/14/15 02:20	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 02:20	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-11 VAULT-21

Sampled: 01/07/15 13:35 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/14/15 02:20	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/14/15 02:20	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 02:20	
Fluorene	ND	0.35	1.0	ug/l	1	01/14/15 02:20	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/14/15 02:20	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/14/15 02:20	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/14/15 02:20	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/14/15 02:20	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/14/15 02:20	
Isophorone	ND	0.21	1.0	ug/l	1	01/14/15 02:20	
Naphthalene	ND	0.49	1.0	ug/l	1	01/14/15 02:20	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/14/15 02:20	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/14/15 02:20	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/14/15 02:20	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/14/15 02:20	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/14/15 02:20	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/14/15 02:20	
Phenol	ND	0.16	1.0	ug/l	1	01/14/15 02:20	
Pyrene	ND	0.25	1.0	ug/l	1	01/14/15 02:20	
Surr: 2,4,6-Tribromophenol	*73 %*	Conc:*36.7*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*77 %*	Conc:*19.3*	*22-107*	%			
Surr: 2-Fluorophenol	*50 %*	Conc:*25.2*	*3-74*	%			
Surr: Nitrobenzene-d5	*80 %*	Conc:*19.9*	*27-111*	%			
Surr: Phenol-d5	*45 %*	Conc:*22.6*	*0.1-53*	%			
Surr: Terphenyl-d14	*86 %*	Conc:*21.5*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.026**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.75**	0.012	0.050	ug/l	1	01/22/15 14:13	
Chromium, Total	**1.4**	0.034	0.30	ug/l	1	01/22/15 14:13	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 15:45	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-11 VAULT-21

Sampled: 01/07/15 13:35 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.013**	0.0017	0.010	ug/l	1	01/23/15 02:41	
Copper, Total	**0.42**	0.0038	0.010	ug/l	1	01/23/15 02:41	
Lead, Total	**0.35**	0.0014	0.010	ug/l	1	01/23/15 02:41	
Nickel, Total	**1.0**	0.0040	0.010	ug/l	1	01/23/15 02:41	
Zinc, Total	**1.7**	0.036	0.20	ug/l	1	01/23/15 02:41	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/14/15 00:45	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/14/15 00:45	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/14/15 00:45	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/14/15 00:45	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/14/15 00:45	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/14/15 00:45	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/14/15 00:45	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/14/15 00:45	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/14/15 00:45	
Acrolein	ND	2.2	5.0	ug/l	1	01/14/15 00:45	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/14/15 00:45	
Benzene	ND	0.23	1.0	ug/l	1	01/14/15 00:45	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/14/15 00:45	
Bromoform	ND	0.32	1.0	ug/l	1	01/14/15 00:45	
Bromomethane	ND	0.47	1.0	ug/l	1	01/14/15 00:45	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/14/15 00:45	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/14/15 00:45	
Chloroethane	ND	0.23	1.0	ug/l	1	01/14/15 00:45	
Chloroform	ND	0.25	1.0	ug/l	1	01/14/15 00:45	
Chloromethane	ND	0.26	1.0	ug/l	1	01/14/15 00:45	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/14/15 00:45	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/14/15 00:45	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/14/15 00:45	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/14/15 00:45	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/14/15 00:45	

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5A08071-11 VAULT-21

Sampled: 01/07/15 13:35 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/14/15 00:45	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/14/15 00:45	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/14/15 00:45	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/14/15 00:45	
o-Xylene	ND	0.32	1.0	ug/l	1	01/14/15 00:45	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/14/15 00:45	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/14/15 00:45	
Toluene	ND	0.22	1.0	ug/l	1	01/14/15 00:45	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/14/15 00:45	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/14/15 00:45	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/14/15 00:45	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/14/15 00:45	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/14/15 00:45	
Surr: 1,2-Dichloroethane-d4	*88 %*	Conc:*44.2*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*97 %*	Conc:*48.6*	*88-108*	%			
Surr: Toluene-d8	*101 %*	Conc:*50.6*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-12 CAB-REF-1

Sampled: 01/07/15 10:58 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 02:50	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/14/15 02:50	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/14/15 02:50	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/14/15 02:50	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 02:50	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/14/15 02:50	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/14/15 02:50	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/14/15 02:50	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/14/15 02:50	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/14/15 02:50	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/14/15 02:50	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/14/15 02:50	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/14/15 02:50	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/14/15 02:50	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/14/15 02:50	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/14/15 02:50	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/14/15 02:50	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/14/15 02:50	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/14/15 02:50	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/14/15 02:50	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/14/15 02:50	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/14/15 02:50	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/14/15 02:50	
Anthracene	ND	0.34	1.0	ug/l	1	01/14/15 02:50	
Benzidine	ND	3.7	10	ug/l	1	01/14/15 02:50	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/14/15 02:50	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/14/15 02:50	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/14/15 02:50	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/14/15 02:50	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 02:50	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 02:50	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/14/15 02:50	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/14/15 02:50	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/14/15 02:50	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/14/15 02:50	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 02:50	
Chrysene	ND	0.19	1.0	ug/l	1	01/14/15 02:50	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/14/15 02:50	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/14/15 02:50	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 02:50	

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5A08071-12 CAB-REF-1

Sampled: 01/07/15 10:58 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/14/15 02:50	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/14/15 02:50	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 02:50	
Fluorene	ND	0.35	1.0	ug/l	1	01/14/15 02:50	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/14/15 02:50	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/14/15 02:50	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/14/15 02:50	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/14/15 02:50	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/14/15 02:50	
Isophorone	ND	0.21	1.0	ug/l	1	01/14/15 02:50	
Naphthalene	ND	0.49	1.0	ug/l	1	01/14/15 02:50	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/14/15 02:50	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/14/15 02:50	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/14/15 02:50	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/14/15 02:50	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/14/15 02:50	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/14/15 02:50	
Phenol	ND	0.16	1.0	ug/l	1	01/14/15 02:50	
Pyrene	ND	0.25	1.0	ug/l	1	01/14/15 02:50	
Surr: 2,4,6-Tribromophenol	*50 %*	Conc:*24.8*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*59 %*	Conc:*14.7*	*22-107*	%			
Surr: 2-Fluorophenol	*39 %*	Conc:*19.5*	*3-74*	%			
Surr: Nitrobenzene-d5	*61 %*	Conc:*15.3*	*27-111*	%			
Surr: Phenol-d5	*34 %*	Conc:*17.0*	*0.1-53*	%			
Surr: Terphenyl-d14	*65 %*	Conc:*16.2*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.022**	0.0015	0.050	mg/l	1	01/09/15 11:42	O-14, J

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.70**	0.012	0.050	ug/l	1	01/22/15 14:17	
Chromium, Total	**0.28**	0.034	0.30	ug/l	1	01/22/15 14:17	J

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 15:49	

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5A08071-12 **CAB-REF-1**

Sampled: 01/07/15 10:58 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.017**	0.0017	0.010	ug/l	1	01/23/15 02:55	
Copper, Total	**0.43**	0.0038	0.010	ug/l	1	01/23/15 02:55	
Lead, Total	**0.21**	0.0014	0.010	ug/l	1	01/23/15 02:55	
Nickel, Total	**0.40**	0.0040	0.010	ug/l	1	01/23/15 02:55	
Zinc, Total	**18**	0.036	0.20	ug/l	1	01/23/15 02:55	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/14/15 01:15	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/14/15 01:15	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/14/15 01:15	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/14/15 01:15	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/14/15 01:15	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/14/15 01:15	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/14/15 01:15	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/14/15 01:15	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/14/15 01:15	
Acrolein	ND	2.2	5.0	ug/l	1	01/14/15 01:15	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/14/15 01:15	
Benzene	ND	0.23	1.0	ug/l	1	01/14/15 01:15	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/14/15 01:15	
Bromoform	ND	0.32	1.0	ug/l	1	01/14/15 01:15	
Bromomethane	ND	0.47	1.0	ug/l	1	01/14/15 01:15	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/14/15 01:15	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/14/15 01:15	
Chloroethane	ND	0.23	1.0	ug/l	1	01/14/15 01:15	
Chloroform	ND	0.25	1.0	ug/l	1	01/14/15 01:15	
Chloromethane	ND	0.26	1.0	ug/l	1	01/14/15 01:15	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/14/15 01:15	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/14/15 01:15	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/14/15 01:15	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/14/15 01:15	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/14/15 01:15	

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Date Reported: 03/09/15 12:32

5A08071-12 **CAB-REF-1**

Sampled: 01/07/15 10:58 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/14/15 01:15	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/14/15 01:15	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/14/15 01:15	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/14/15 01:15	
o-Xylene	ND	0.32	1.0	ug/l	1	01/14/15 01:15	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/14/15 01:15	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/14/15 01:15	
Toluene	ND	0.22	1.0	ug/l	1	01/14/15 01:15	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/14/15 01:15	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/14/15 01:15	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/14/15 01:15	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/14/15 01:15	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/14/15 01:15	
Surr: 1,2-Dichloroethane-d4	*86 %*	Conc:*43.1*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*99 %*	Conc:*49.5*	*88-108*	%			
Surr: Toluene-d8	*101 %*	Conc:*50.5*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-13 CAB-REF-1

Sampled: 01/07/15 10:36 **Sampled By:** VRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0425 Prepared: 01/12/15 08:22 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.78	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
4,4'-DDE	ND	1.3	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
4,4'-DDT	ND	0.89	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Aldrin	ND	1.9	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
alpha-BHC	ND	2.4	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
beta-BHC	ND	1.3	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Chlordane (tech)	ND	17	81	ug/kg	1	02/25/15 22:27	M-02, O-12
delta-BHC	ND	0.93	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Dieldrin	ND	1.2	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Endosulfan I	ND	0.93	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Endosulfan II	ND	0.52	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Endosulfan sulfate	ND	0.89	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Endrin	ND	2.2	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Endrin aldehyde	ND	1.1	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
gamma-BHC (Lindane)	ND	2.1	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Heptachlor	ND	2.2	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Heptachlor epoxide	ND	1.5	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Methoxychlor	ND	0.89	4.1	ug/kg	1	02/25/15 22:27	M-02, O-12
Toxaphene	ND	14	120	ug/kg	1	02/25/15 22:27	M-02, O-12
Surr: Decachlorobiphenyl	*88 %*	Conc:*179*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*46 %*	Conc:*93.7*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**2.5**	0.20	0.50	mg/kg	1	01/14/15 19:12	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/14/15 19:12	
Chromium, Total	**13**	0.23	1.0	mg/kg	1	01/14/15 19:12	
Copper, Total	**3.0**	0.29	0.50	mg/kg	1	01/14/15 19:12	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 14:40	
Zinc, Total	**19**	2.3	5.0	mg/kg	1	01/14/15 19:12	

Method: EPA 6020B Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**3.3**	0.21	0.50	mg/kg	1	01/14/15 19:12	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-13 CAB-REF-1

Sampled: 01/07/15 10:36 **Sampled By:** VRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0475 | Prepared: 01/12/15 15:16 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**8.5**	0.45	1.0	mg/kg	1	01/14/15 19:12	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**150**	0.73	9.1	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0710 | Prepared: 01/15/15 07:17 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**1520**	36.0	200	mg/kg dry wt	1	01/15/15 07:54	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0426 | Prepared: 01/12/15 08:24 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	28	81	ug/kg	1	02/25/15 22:27	M-02, O-12
Aroclor 1221	ND	49	81	ug/kg	1	02/25/15 22:27	M-02, O-12
Aroclor 1232	ND	34	81	ug/kg	1	02/25/15 22:27	M-02, O-12
Aroclor 1242	ND	39	81	ug/kg	1	02/25/15 22:27	M-02, O-12
Aroclor 1248	ND	62	81	ug/kg	1	02/25/15 22:27	M-02, O-12
Aroclor 1254	ND	42	81	ug/kg	1	02/25/15 22:27	M-02, O-12
Aroclor 1260	ND	7.0	81	ug/kg	1	02/25/15 22:27	M-02, O-12
Surr: Decachlorobiphenyl	*91 %*	Conc:*186*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*47 %*	Conc:*94.9*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	14	68	ug/kg	1	01/15/15 13:40	
2-Methylnaphthalene	ND	14	68	ug/kg	1	01/15/15 13:40	
Acenaphthene	ND	14	68	ug/kg	1	01/15/15 13:40	
Acenaphthylene	ND	14	68	ug/kg	1	01/15/15 13:40	
Anthracene	ND	14	68	ug/kg	1	01/15/15 13:40	
Benzo (a) anthracene	ND	14	68	ug/kg	1	01/15/15 13:40	
Benzo (a) pyrene	ND	14	68	ug/kg	1	01/15/15 13:40	
Benzo (b) fluoranthene	ND	14	68	ug/kg	1	01/15/15 13:40	
Benzo (g,h,i) perylene	ND	14	68	ug/kg	1	01/15/15 13:40	
Benzo (k) fluoranthene	ND	14	68	ug/kg	1	01/15/15 13:40	
Chrysene	ND	14	68	ug/kg	1	01/15/15 13:40	
Dibenzo (a,h) anthracene	ND	14	68	ug/kg	1	01/15/15 13:40	
Fluoranthene	ND	14	68	ug/kg	1	01/15/15 13:40	

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Sampled: 01/07/15 10:36 **Sampled By:** VRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	14	68	ug/kg	1	01/15/15 13:40	
Indeno (1,2,3-cd) pyrene	ND	14	68	ug/kg	1	01/15/15 13:40	
Naphthalene	ND	14	68	ug/kg	1	01/15/15 13:40	
Phenanthrene	ND	14	68	ug/kg	1	01/15/15 13:40	
Pyrene	ND	14	68	ug/kg	1	01/15/15 13:40	
Surr: 2-Fluorobiphenyl	*42 %*	Conc:*961*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*44 %*	Conc:*990*	*0.1-107*	%			
Surr: Terphenyl-d14	*40 %*	Conc:*911*	*28-128*	%			

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5A08071-14 CAB-REF-2

Sampled: 01/07/15 11:10 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 03:21	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/14/15 03:21	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/14/15 03:21	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/14/15 03:21	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 03:21	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/14/15 03:21	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/14/15 03:21	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/14/15 03:21	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/14/15 03:21	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/14/15 03:21	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/14/15 03:21	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/14/15 03:21	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/14/15 03:21	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/14/15 03:21	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/14/15 03:21	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/14/15 03:21	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/14/15 03:21	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/14/15 03:21	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/14/15 03:21	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/14/15 03:21	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/14/15 03:21	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/14/15 03:21	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/14/15 03:21	
Anthracene	ND	0.34	1.0	ug/l	1	01/14/15 03:21	
Benzidine	ND	3.7	10	ug/l	1	01/14/15 03:21	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/14/15 03:21	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/14/15 03:21	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/14/15 03:21	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/14/15 03:21	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 03:21	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 03:21	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/14/15 03:21	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/14/15 03:21	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/14/15 03:21	
Bis(2-ethylhexyl)phthalate	**3.7**	2.3	5.0	ug/l	1	01/14/15 03:21	J
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 03:21	
Chrysene	ND	0.19	1.0	ug/l	1	01/14/15 03:21	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/14/15 03:21	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/14/15 03:21	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 03:21	

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Sampled: 01/07/15 11:10 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/14/15 03:21	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/14/15 03:21	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 03:21	
Fluorene	ND	0.35	1.0	ug/l	1	01/14/15 03:21	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/14/15 03:21	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/14/15 03:21	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/14/15 03:21	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/14/15 03:21	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/14/15 03:21	
Isophorone	ND	0.21	1.0	ug/l	1	01/14/15 03:21	
Naphthalene	ND	0.49	1.0	ug/l	1	01/14/15 03:21	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/14/15 03:21	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/14/15 03:21	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/14/15 03:21	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/14/15 03:21	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/14/15 03:21	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/14/15 03:21	
Phenol	ND	0.16	1.0	ug/l	1	01/14/15 03:21	
Pyrene	ND	0.25	1.0	ug/l	1	01/14/15 03:21	
Surr: 2,4,6-Tribromophenol	*69 %*	Conc:*34.5*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*69 %*	Conc:*17.3*	*22-107*	%			
Surr: 2-Fluorophenol	*47 %*	Conc:*23.4*	*3-74*	%			
Surr: Nitrobenzene-d5	*73 %*	Conc:*18.2*	*27-111*	%			
Surr: Phenol-d5	*41 %*	Conc:*20.6*	*0.1-53*	%			
Surr: Terphenyl-d14	*85 %*	Conc:*21.3*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.023**	0.0015	0.050	mg/l	1	01/09/15 11:42	J, O-14

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.72**	0.012	0.050	ug/l	1	01/22/15 14:22	
Chromium, Total	**0.29**	0.034	0.30	ug/l	1	01/22/15 14:22	J

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 15:54	

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5A08071-14 CAB-REF-2

Sampled: 01/07/15 11:10 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.012**	0.0017	0.010	ug/l	1	01/23/15 03:09	
Copper, Total	**0.86**	0.0038	0.010	ug/l	1	01/23/15 03:09	
Lead, Total	**0.41**	0.0014	0.010	ug/l	1	01/23/15 03:09	
Nickel, Total	**0.33**	0.0040	0.010	ug/l	1	01/23/15 03:09	
Zinc, Total	**0.90**	0.036	0.20	ug/l	1	01/23/15 03:09	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**0.063**	0.0035	0.10	ug/l	1	01/13/15 15:59	J

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/14/15 01:46	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/14/15 01:46	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/14/15 01:46	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/14/15 01:46	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/14/15 01:46	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/14/15 01:46	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/14/15 01:46	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/14/15 01:46	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/14/15 01:46	
Acrolein	ND	2.2	5.0	ug/l	1	01/14/15 01:46	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/14/15 01:46	
Benzene	ND	0.23	1.0	ug/l	1	01/14/15 01:46	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/14/15 01:46	
Bromoform	ND	0.32	1.0	ug/l	1	01/14/15 01:46	
Bromomethane	ND	0.47	1.0	ug/l	1	01/14/15 01:46	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/14/15 01:46	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/14/15 01:46	
Chloroethane	ND	0.23	1.0	ug/l	1	01/14/15 01:46	
Chloroform	ND	0.25	1.0	ug/l	1	01/14/15 01:46	
Chloromethane	ND	0.26	1.0	ug/l	1	01/14/15 01:46	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/14/15 01:46	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/14/15 01:46	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/14/15 01:46	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/14/15 01:46	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/14/15 01:46	

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5A08071-14 **CAB-REF-2**

Sampled: 01/07/15 11:10 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/14/15 01:46	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/14/15 01:46	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/14/15 01:46	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/14/15 01:46	
o-Xylene	ND	0.32	1.0	ug/l	1	01/14/15 01:46	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/14/15 01:46	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/14/15 01:46	
Toluene	ND	0.22	1.0	ug/l	1	01/14/15 01:46	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/14/15 01:46	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/14/15 01:46	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/14/15 01:46	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/14/15 01:46	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/14/15 01:46	
Surr: 1,2-Dichloroethane-d4	*89 %*	Conc:*44.3*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*99 %*	Conc:*49.6*	*88-108*	%			
Surr: Toluene-d8	*102 %*	Conc:*51.1*	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-15 CAB-REF-2

Sampled: 01/07/15 10:14 **Sampled By:** VRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0425 Prepared: 01/12/15 08:22 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.84	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
4,4'-DDE	ND	1.3	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
4,4'-DDT	ND	0.96	4.4	ug/kg	1	02/25/15 22:58	O-12, M-02
Aldrin	ND	2.0	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
alpha-BHC	ND	2.6	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
beta-BHC	ND	1.4	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
Chlordane (tech)	ND	18	87	ug/kg	1	02/25/15 22:58	M-02, O-12
delta-BHC	ND	1.0	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
Dieldrin	ND	1.3	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
Endosulfan I	ND	1.0	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
Endosulfan II	ND	0.56	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
Endosulfan sulfate	ND	0.96	4.4	ug/kg	1	02/25/15 22:58	O-12, M-02
Endrin	ND	2.3	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
Endrin aldehyde	ND	1.2	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
gamma-BHC (Lindane)	ND	2.3	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
Heptachlor	ND	2.4	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
Heptachlor epoxide	ND	1.6	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
Methoxychlor	ND	0.96	4.4	ug/kg	1	02/25/15 22:58	M-02, O-12
Toxaphene	ND	15	130	ug/kg	1	02/25/15 22:58	M-02, O-12
Surr: Decachlorobiphenyl	*84 %*	Conc:*184*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*46 %*	Conc:*101*	*18-112*	%			*O-12, M-02*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**2.6**	0.20	0.50	mg/kg	1	01/14/15 19:20	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/14/15 19:20	
Chromium, Total	**15**	0.23	1.0	mg/kg	1	01/14/15 19:20	
Copper, Total	**3.8**	0.29	0.50	mg/kg	1	01/14/15 19:20	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 14:42	
Zinc, Total	**22**	2.3	5.0	mg/kg	1	01/14/15 19:20	

Method: EPA 6020B Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**3.5**	0.21	0.50	mg/kg	1	01/14/15 19:20	

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5A08071-15 CAB-REF-2

Sampled: 01/07/15 10:14 **Sampled By:** VRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0475 | Prepared: 01/12/15 15:16 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**11**	0.45	1.0	mg/kg	1	01/14/15 19:20	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**30**	0.80	10	ug/kg	1	01/26/15 12:25	

Organic Carbon in Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0710 | Prepared: 01/15/15 07:17 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**2000**	36.0	200	mg/kg dry wt	1	01/15/15 07:54	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0426 | Prepared: 01/12/15 08:24 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	30	87	ug/kg	1	02/25/15 22:58	M-02, O-12
Aroclor 1221	ND	52	87	ug/kg	1	02/25/15 22:58	M-02, O-12
Aroclor 1232	ND	37	87	ug/kg	1	02/25/15 22:58	M-02, O-12
Aroclor 1242	ND	42	87	ug/kg	1	02/25/15 22:58	M-02, O-12
Aroclor 1248	ND	66	87	ug/kg	1	02/25/15 22:58	M-02, O-12
Aroclor 1254	ND	45	87	ug/kg	1	02/25/15 22:58	M-02, O-12
Aroclor 1260	ND	7.5	87	ug/kg	1	02/25/15 22:58	M-02, O-12
Surr: Decachlorobiphenyl	*87 %*	Conc:*191*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*47 %*	Conc:*102*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	12	60	ug/kg	1	01/15/15 14:15	
2-Methylnaphthalene	ND	12	60	ug/kg	1	01/15/15 14:15	
Acenaphthene	ND	12	60	ug/kg	1	01/15/15 14:15	
Acenaphthylene	ND	12	60	ug/kg	1	01/15/15 14:15	
Anthracene	ND	12	60	ug/kg	1	01/15/15 14:15	
Benzo (a) anthracene	ND	12	60	ug/kg	1	01/15/15 14:15	
Benzo (a) pyrene	ND	12	60	ug/kg	1	01/15/15 14:15	
Benzo (b) fluoranthene	ND	12	60	ug/kg	1	01/15/15 14:15	
Benzo (g,h,i) perylene	ND	12	60	ug/kg	1	01/15/15 14:15	
Benzo (k) fluoranthene	ND	12	60	ug/kg	1	01/15/15 14:15	
Chrysene	ND	12	60	ug/kg	1	01/15/15 14:15	
Dibenzo (a,h) anthracene	ND	12	60	ug/kg	1	01/15/15 14:15	
Fluoranthene	ND	12	60	ug/kg	1	01/15/15 14:15	

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5A08071-15 CAB-REF-2

Sampled: 01/07/15 10:14 **Sampled By:** VRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	12	60	ug/kg	1	01/15/15 14:15	
Indeno (1,2,3-cd) pyrene	ND	12	60	ug/kg	1	01/15/15 14:15	
Naphthalene	ND	12	60	ug/kg	1	01/15/15 14:15	
Phenanthrene	ND	12	60	ug/kg	1	01/15/15 14:15	
Pyrene	ND	12	60	ug/kg	1	01/15/15 14:15	
Surr: 2-Fluorobiphenyl	*42 %*	Conc:*831*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*45 %*	Conc:*886*	*0.1-107*	%			
Surr: Terphenyl-d14	*51 %*	Conc:*1010*	*28-128*	%			

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5A08071-16 **CAB-REF-3**

Sampled: 01/07/15 11:22 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 03:51	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/14/15 03:51	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/14/15 03:51	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/14/15 03:51	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 03:51	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/14/15 03:51	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/14/15 03:51	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/14/15 03:51	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/14/15 03:51	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/14/15 03:51	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/14/15 03:51	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/14/15 03:51	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/14/15 03:51	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/14/15 03:51	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/14/15 03:51	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/14/15 03:51	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/14/15 03:51	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/14/15 03:51	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/14/15 03:51	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/14/15 03:51	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/14/15 03:51	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/14/15 03:51	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/14/15 03:51	
Anthracene	ND	0.34	1.0	ug/l	1	01/14/15 03:51	
Benzidine	ND	3.7	10	ug/l	1	01/14/15 03:51	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/14/15 03:51	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/14/15 03:51	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/14/15 03:51	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/14/15 03:51	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 03:51	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 03:51	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/14/15 03:51	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/14/15 03:51	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/14/15 03:51	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/14/15 03:51	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 03:51	
Chrysene	ND	0.19	1.0	ug/l	1	01/14/15 03:51	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/14/15 03:51	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/14/15 03:51	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 03:51	

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5A08071-16 CAB-REF-3

Sampled: 01/07/15 11:22 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/14/15 03:51	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/14/15 03:51	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 03:51	
Fluorene	ND	0.35	1.0	ug/l	1	01/14/15 03:51	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/14/15 03:51	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/14/15 03:51	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/14/15 03:51	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/14/15 03:51	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/14/15 03:51	
Isophorone	ND	0.21	1.0	ug/l	1	01/14/15 03:51	
Naphthalene	ND	0.49	1.0	ug/l	1	01/14/15 03:51	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/14/15 03:51	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/14/15 03:51	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/14/15 03:51	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/14/15 03:51	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/14/15 03:51	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/14/15 03:51	
Phenol	ND	0.16	1.0	ug/l	1	01/14/15 03:51	
Pyrene	ND	0.25	1.0	ug/l	1	01/14/15 03:51	
Surr: 2,4,6-Tribromophenol	*59 %*	Conc:*29.5*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*63 %*	Conc:*15.8*	*22-107*	%			
Surr: 2-Fluorophenol	*38 %*	Conc:*19.1*	*3-74*	%			
Surr: Nitrobenzene-d5	*64 %*	Conc:*16.1*	*27-111*	%			
Surr: Phenol-d5	*32 %*	Conc:*15.9*	*0.1-53*	%			
Surr: Terphenyl-d14	*74 %*	Conc:*18.5*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.024**	0.0015	0.050	mg/l	1	01/09/15 11:42	J, O-14

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.74**	0.012	0.050	ug/l	1	01/22/15 14:27	
Chromium, Total	**0.63**	0.034	0.30	ug/l	1	01/22/15 14:27	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 15:58	

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5A08071-16 CAB-REF-3

Sampled: 01/07/15 11:22 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.014**	0.0017	0.010	ug/l	1	01/23/15 03:23	
Copper, Total	**1.2**	0.0038	0.010	ug/l	1	01/23/15 03:23	
Lead, Total	**0.74**	0.0014	0.010	ug/l	1	01/23/15 03:23	
Nickel, Total	**0.58**	0.0040	0.010	ug/l	1	01/23/15 03:23	
Zinc, Total	**9.1**	0.036	0.20	ug/l	1	01/23/15 03:23	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/14/15 02:16	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/14/15 02:16	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/14/15 02:16	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/14/15 02:16	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/14/15 02:16	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/14/15 02:16	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/14/15 02:16	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/14/15 02:16	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/14/15 02:16	
Acrolein	ND	2.2	5.0	ug/l	1	01/14/15 02:16	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/14/15 02:16	
Benzene	ND	0.23	1.0	ug/l	1	01/14/15 02:16	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/14/15 02:16	
Bromoform	ND	0.32	1.0	ug/l	1	01/14/15 02:16	
Bromomethane	ND	0.47	1.0	ug/l	1	01/14/15 02:16	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/14/15 02:16	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/14/15 02:16	
Chloroethane	ND	0.23	1.0	ug/l	1	01/14/15 02:16	
Chloroform	ND	0.25	1.0	ug/l	1	01/14/15 02:16	
Chloromethane	ND	0.26	1.0	ug/l	1	01/14/15 02:16	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/14/15 02:16	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/14/15 02:16	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/14/15 02:16	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/14/15 02:16	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/14/15 02:16	

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5A08071-16 **CAB-REF-3**

Sampled: 01/07/15 11:22 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/14/15 02:16	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/14/15 02:16	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/14/15 02:16	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/14/15 02:16	
o-Xylene	ND	0.32	1.0	ug/l	1	01/14/15 02:16	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/14/15 02:16	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/14/15 02:16	
Toluene	ND	0.22	1.0	ug/l	1	01/14/15 02:16	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/14/15 02:16	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/14/15 02:16	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/14/15 02:16	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/14/15 02:16	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/14/15 02:16	
Surr: 1,2-Dichloroethane-d4	*78 %*	Conc:39.2	*82-125*	%			*S-04*
Surr: 4-Bromofluorobenzene	*105 %*	Conc:52.5	*88-108*	%			
Surr: Toluene-d8	*102 %*	Conc:50.9	*92-112*	%			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-17 CAB-REF-3

Sampled: 01/07/15 10:04 **Sampled By:** VRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0425 Prepared: 01/12/15 08:22 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.94	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
4,4'-DDE	ND	1.5	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
4,4'-DDT	ND	1.1	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Aldrin	ND	2.3	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
alpha-BHC	ND	2.9	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
beta-BHC	ND	1.5	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Chlordane (tech)	ND	20	98	ug/kg	1	02/25/15 23:29	M-02, O-12
delta-BHC	ND	1.1	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Dieldrin	ND	1.5	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Endosulfan I	ND	1.1	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Endosulfan II	ND	0.63	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Endosulfan sulfate	ND	1.1	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Endrin	ND	2.6	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Endrin aldehyde	ND	1.4	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
gamma-BHC (Lindane)	ND	2.6	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Heptachlor	ND	2.7	4.9	ug/kg	1	02/25/15 23:29	O-12, M-02
Heptachlor epoxide	ND	1.8	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Methoxychlor	ND	1.1	4.9	ug/kg	1	02/25/15 23:29	M-02, O-12
Toxaphene	ND	17	150	ug/kg	1	02/25/15 23:29	M-02, O-12
Surr: Decachlorobiphenyl	*83 %*	Conc:*204*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*43 %*	Conc:*105*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**2.5**	0.20	0.50	mg/kg	1	01/14/15 19:27	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/14/15 19:27	
Chromium, Total	**13**	0.23	1.0	mg/kg	1	01/14/15 19:27	
Copper, Total	**2.9**	0.29	0.50	mg/kg	1	01/14/15 19:27	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 14:45	
Zinc, Total	**20**	2.3	5.0	mg/kg	1	01/14/15 19:27	

Method: EPA 6020B Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**3.4**	0.21	0.50	mg/kg	1	01/14/15 19:27	

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5A08071-17 **CAB-REF-3**

Sampled: 01/07/15 10:04 **Sampled By:** VRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0475 | Prepared: 01/12/15 15:16 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**9.4**	0.45	1.0	mg/kg	1	01/14/15 19:27	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**33**	0.80	10	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0710 | Prepared: 01/15/15 07:17 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**1760**	36.0	200	mg/kg dry wt	1	01/15/15 07:54	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0426 | Prepared: 01/12/15 08:24 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	33	98	ug/kg	1	02/25/15 23:29	M-02, O-12
Aroclor 1221	ND	59	98	ug/kg	1	02/25/15 23:29	M-02, O-12
Aroclor 1232	ND	41	98	ug/kg	1	02/25/15 23:29	M-02, O-12
Aroclor 1242	ND	47	98	ug/kg	1	02/25/15 23:29	M-02, O-12
Aroclor 1248	ND	75	98	ug/kg	1	02/25/15 23:29	M-02, O-12
Aroclor 1254	ND	51	98	ug/kg	1	02/25/15 23:29	M-02, O-12
Aroclor 1260	ND	8.4	98	ug/kg	1	02/25/15 23:29	M-02, O-12
Surr: Decachlorobiphenyl	*86 %*	Conc:*211*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*45 %*	Conc:*110*	*21-119*	%			*O-12, M-02*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	13	65	ug/kg	1	01/15/15 14:50	
2-Methylnaphthalene	ND	13	65	ug/kg	1	01/15/15 14:50	
Acenaphthene	ND	13	65	ug/kg	1	01/15/15 14:50	
Acenaphthylene	ND	13	65	ug/kg	1	01/15/15 14:50	
Anthracene	ND	13	65	ug/kg	1	01/15/15 14:50	
Benzo (a) anthracene	ND	13	65	ug/kg	1	01/15/15 14:50	
Benzo (a) pyrene	ND	13	65	ug/kg	1	01/15/15 14:50	
Benzo (b) fluoranthene	ND	13	65	ug/kg	1	01/15/15 14:50	
Benzo (g,h,i) perylene	ND	13	65	ug/kg	1	01/15/15 14:50	
Benzo (k) fluoranthene	ND	13	65	ug/kg	1	01/15/15 14:50	
Chrysene	ND	13	65	ug/kg	1	01/15/15 14:50	
Dibenzo (a,h) anthracene	ND	13	65	ug/kg	1	01/15/15 14:50	
Fluoranthene	ND	13	65	ug/kg	1	01/15/15 14:50	

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5A08071-17 **CAB-REF-3**

Sampled: 01/07/15 10:04 **Sampled By:** VRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	13	65	ug/kg	1	01/15/15 14:50	
Indeno (1,2,3-cd) pyrene	ND	13	65	ug/kg	1	01/15/15 14:50	
Naphthalene	ND	13	65	ug/kg	1	01/15/15 14:50	
Phenanthrene	ND	13	65	ug/kg	1	01/15/15 14:50	
Pyrene	ND	13	65	ug/kg	1	01/15/15 14:50	
Surr: 2-Fluorobiphenyl	*39 %*	Conc:*835*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*41 %*	Conc:*894*	*0.1-107*	%			
Surr: Terphenyl-d14	*41 %*	Conc:*883*	*28-128*	%			

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5A08071-18 CAB-REF-4

Sampled: 01/07/15 11:31 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 04:21	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/14/15 04:21	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/14/15 04:21	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/14/15 04:21	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 04:21	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/14/15 04:21	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/14/15 04:21	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/14/15 04:21	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/14/15 04:21	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/14/15 04:21	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/14/15 04:21	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/14/15 04:21	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/14/15 04:21	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/14/15 04:21	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/14/15 04:21	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/14/15 04:21	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/14/15 04:21	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/14/15 04:21	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/14/15 04:21	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/14/15 04:21	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/14/15 04:21	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/14/15 04:21	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/14/15 04:21	
Anthracene	ND	0.34	1.0	ug/l	1	01/14/15 04:21	
Benzidine	ND	3.7	10	ug/l	1	01/14/15 04:21	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/14/15 04:21	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/14/15 04:21	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/14/15 04:21	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/14/15 04:21	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 04:21	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 04:21	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/14/15 04:21	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/14/15 04:21	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/14/15 04:21	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/14/15 04:21	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 04:21	
Chrysene	ND	0.19	1.0	ug/l	1	01/14/15 04:21	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/14/15 04:21	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/14/15 04:21	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 04:21	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-18 CAB-REF-4

Sampled: 01/07/15 11:31 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/14/15 04:21	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/14/15 04:21	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 04:21	
Fluorene	ND	0.35	1.0	ug/l	1	01/14/15 04:21	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/14/15 04:21	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/14/15 04:21	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/14/15 04:21	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/14/15 04:21	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/14/15 04:21	
Isophorone	ND	0.21	1.0	ug/l	1	01/14/15 04:21	
Naphthalene	ND	0.49	1.0	ug/l	1	01/14/15 04:21	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/14/15 04:21	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/14/15 04:21	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/14/15 04:21	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/14/15 04:21	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/14/15 04:21	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/14/15 04:21	
Phenol	ND	0.16	1.0	ug/l	1	01/14/15 04:21	
Pyrene	ND	0.25	1.0	ug/l	1	01/14/15 04:21	
Surr: 2,4,6-Tribromophenol	*68 %*	Conc:*34.0*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*68 %*	Conc:*17.1*	*22-107*	%			
Surr: 2-Fluorophenol	*45 %*	Conc:22.3	*3-74*	%			
Surr: Nitrobenzene-d5	*69 %*	Conc:*17.2*	*27-111*	%			
Surr: Phenol-d5	*37 %*	Conc:*18.7*	*0.1-53*	%			
Surr: Terphenyl-d14	*84 %*	Conc:*20.9*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.023**	0.0015	0.050	mg/l	1	01/09/15 11:42	J, O-14

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.76**	0.012	0.050	ug/l	1	01/22/15 14:32	
Chromium, Total	**27**	0.034	0.30	ug/l	1	01/22/15 14:32	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 16:02	

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5A08071-18 CAB-REF-4

Sampled: 01/07/15 11:31 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.015**	0.0017	0.010	ug/l	1	01/23/15 03:37	
Copper, Total	**1.5**	0.0038	0.010	ug/l	1	01/23/15 03:37	
Lead, Total	**0.84**	0.0014	0.010	ug/l	1	01/23/15 03:37	
Nickel, Total	**15**	0.0040	0.010	ug/l	1	01/23/15 03:37	
Zinc, Total	**8.8**	0.036	0.20	ug/l	1	01/23/15 03:37	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	ND	0.0035	0.10	ug/l	1	01/13/15 15:59	

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/14/15 02:46	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/14/15 02:46	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/14/15 02:46	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/14/15 02:46	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/14/15 02:46	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/14/15 02:46	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/14/15 02:46	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/14/15 02:46	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/14/15 02:46	
Acrolein	ND	2.2	5.0	ug/l	1	01/14/15 02:46	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/14/15 02:46	
Benzene	ND	0.23	1.0	ug/l	1	01/14/15 02:46	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/14/15 02:46	
Bromoform	ND	0.32	1.0	ug/l	1	01/14/15 02:46	
Bromomethane	ND	0.47	1.0	ug/l	1	01/14/15 02:46	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/14/15 02:46	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/14/15 02:46	
Chloroethane	ND	0.23	1.0	ug/l	1	01/14/15 02:46	
Chloroform	ND	0.25	1.0	ug/l	1	01/14/15 02:46	
Chloromethane	ND	0.26	1.0	ug/l	1	01/14/15 02:46	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/14/15 02:46	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/14/15 02:46	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/14/15 02:46	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/14/15 02:46	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/14/15 02:46	

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

5A08071-18 CAB-REF-4

Sampled: 01/07/15 11:31 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/14/15 02:46	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/14/15 02:46	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/14/15 02:46	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/14/15 02:46	
o-Xylene	ND	0.32	1.0	ug/l	1	01/14/15 02:46	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/14/15 02:46	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/14/15 02:46	
Toluene	ND	0.22	1.0	ug/l	1	01/14/15 02:46	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/14/15 02:46	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/14/15 02:46	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/14/15 02:46	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/14/15 02:46	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/14/15 02:46	
Surr: 1,2-Dichloroethane-d4	*87 %*	Conc:*43.4*	*82-125*	%			
Surr: 4-Bromofluorobenzene	*98 %*	Conc:*49.0*	*88-108*	%			
Surr: Toluene-d8	*101 %*	Conc:*50.4*	*92-112*	%			

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Date Reported: 03/09/15 12:32

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Sampled: 01/07/15 09:45 **Sampled By:** VRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0425 Prepared: 01/12/15 08:22 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.81	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
4,4'-DDE	ND	1.3	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
4,4'-DDT	ND	0.93	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Aldrin	ND	2.0	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
alpha-BHC	ND	2.5	4.2	ug/kg	1	02/25/15 23:59	O-12, M-02
beta-BHC	ND	1.3	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Chlordane (tech)	ND	17	85	ug/kg	1	02/25/15 23:59	M-02, O-12
delta-BHC	ND	0.97	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Dieldrin	ND	1.3	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Endosulfan I	ND	0.97	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Endosulfan II	ND	0.54	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Endosulfan sulfate	ND	0.93	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Endrin	ND	2.3	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Endrin aldehyde	ND	1.2	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
gamma-BHC (Lindane)	ND	2.2	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Heptachlor	ND	2.3	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Heptachlor epoxide	ND	1.5	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Methoxychlor	ND	0.93	4.2	ug/kg	1	02/25/15 23:59	M-02, O-12
Toxaphene	ND	15	130	ug/kg	1	02/25/15 23:59	M-02, O-12
Surr: Decachlorobiphenyl	*85 %*	Conc:*181*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*48 %*	Conc:*103*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**2.6**	0.20	0.50	mg/kg	1	01/14/15 19:34	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/14/15 19:34	
Chromium, Total	**14**	0.23	1.0	mg/kg	1	01/14/15 19:34	
Copper, Total	**2.6**	0.29	0.50	mg/kg	1	01/14/15 19:34	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 14:47	
Zinc, Total	**20**	2.3	5.0	mg/kg	1	01/14/15 19:34	

Method: EPA 6020B Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**3.7**	0.21	0.50	mg/kg	1	01/14/15 19:34	

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Sampled: 01/07/15 09:45 **Sampled By:** VRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**8.8**	0.45	1.0	mg/kg	1	01/14/15 19:34	

Method: EPA 7471A Batch: W5A0911 Prepared: 01/20/15 16:20 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**460**	3.2	40	ug/kg	4	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M Batch: W5A0710 Prepared: 01/15/15 07:17 Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**1350**	36.0	200	mg/kg dry wt	1	01/15/15 07:54	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 Batch: W5A0426 Prepared: 01/12/15 08:24 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	29	85	ug/kg	1	02/25/15 23:59	M-02, O-12
Aroclor 1221	ND	51	85	ug/kg	1	02/25/15 23:59	M-02, O-12
Aroclor 1232	ND	36	85	ug/kg	1	02/25/15 23:59	M-02, O-12
Aroclor 1242	ND	41	85	ug/kg	1	02/25/15 23:59	O-12, M-02
Aroclor 1248	ND	64	85	ug/kg	1	02/25/15 23:59	M-02, O-12
Aroclor 1254	ND	44	85	ug/kg	1	02/25/15 23:59	M-02, O-12
Aroclor 1260	ND	7.3	85	ug/kg	1	02/25/15 23:59	M-02, O-12
Surr: Decachlorobiphenyl	*88 %*	Conc:*187*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*48 %*	Conc:*102*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	13	64	ug/kg	1	01/15/15 15:24	
2-Methylnaphthalene	ND	13	64	ug/kg	1	01/15/15 15:24	
Acenaphthene	ND	13	64	ug/kg	1	01/15/15 15:24	
Acenaphthylene	ND	13	64	ug/kg	1	01/15/15 15:24	
Anthracene	ND	13	64	ug/kg	1	01/15/15 15:24	
Benzo (a) anthracene	ND	13	64	ug/kg	1	01/15/15 15:24	
Benzo (a) pyrene	ND	13	64	ug/kg	1	01/15/15 15:24	
Benzo (b) fluoranthene	ND	13	64	ug/kg	1	01/15/15 15:24	
Benzo (g,h,i) perylene	ND	13	64	ug/kg	1	01/15/15 15:24	
Benzo (k) fluoranthene	ND	13	64	ug/kg	1	01/15/15 15:24	
Chrysene	ND	13	64	ug/kg	1	01/15/15 15:24	
Dibenzo (a,h) anthracene	ND	13	64	ug/kg	1	01/15/15 15:24	
Fluoranthene	ND	13	64	ug/kg	1	01/15/15 15:24	

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5A08071-19 **CAB-REF-4**

Sampled: 01/07/15 09:45 **Sampled By:** VRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	13	64	ug/kg	1	01/15/15 15:24	
Indeno (1,2,3-cd) pyrene	ND	13	64	ug/kg	1	01/15/15 15:24	
Naphthalene	ND	13	64	ug/kg	1	01/15/15 15:24	
Phenanthrene	ND	13	64	ug/kg	1	01/15/15 15:24	
Pyrene	ND	13	64	ug/kg	1	01/15/15 15:24	
Surr: 2-Fluorobiphenyl	*43 %*	Conc:*907*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*43 %*	Conc:*925*	*0.1-107*	%			
Surr: Terphenyl-d14	*38 %*	Conc:*812*	*28-128*	%			

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Date Received: 01/08/15 17:20
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5A08071-20 CAB-REF-5

Sampled: 01/07/15 11:42 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 04:50	
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l	1	01/14/15 04:50	
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l	1	01/14/15 04:50	
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l	1	01/14/15 04:50	
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l	1	01/14/15 04:50	
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l	1	01/14/15 04:50	
2,4-Dichlorophenol	ND	0.26	1.0	ug/l	1	01/14/15 04:50	
2,4-Dimethylphenol	ND	0.30	1.0	ug/l	1	01/14/15 04:50	
2,4-Dinitrophenol	ND	1.6	10	ug/l	1	01/14/15 04:50	
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l	1	01/14/15 04:50	
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l	1	01/14/15 04:50	
2-Chloronaphthalene	ND	0.45	1.0	ug/l	1	01/14/15 04:50	
2-Chlorophenol	ND	0.28	1.0	ug/l	1	01/14/15 04:50	
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l	1	01/14/15 04:50	
2-Nitrophenol	ND	0.26	1.0	ug/l	1	01/14/15 04:50	
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l	1	01/14/15 04:50	
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l	1	01/14/15 04:50	
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l	1	01/14/15 04:50	
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l	1	01/14/15 04:50	
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l	1	01/14/15 04:50	
4-Nitrophenol	ND	0.45	5.0	ug/l	1	01/14/15 04:50	
Acenaphthene	ND	0.38	1.0	ug/l	1	01/14/15 04:50	
Acenaphthylene	ND	0.40	1.0	ug/l	1	01/14/15 04:50	
Anthracene	ND	0.34	1.0	ug/l	1	01/14/15 04:50	
Benzidine	ND	3.7	10	ug/l	1	01/14/15 04:50	
Benzo (a) anthracene	ND	0.19	1.0	ug/l	1	01/14/15 04:50	
Benzo (a) pyrene	ND	0.13	1.0	ug/l	1	01/14/15 04:50	
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l	1	01/14/15 04:50	
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l	1	01/14/15 04:50	
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 04:50	
Benzyl butyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 04:50	
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l	1	01/14/15 04:50	
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l	1	01/14/15 04:50	
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l	1	01/14/15 04:50	
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l	1	01/14/15 04:50	
Butyl benzyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 04:50	
Chrysene	ND	0.19	1.0	ug/l	1	01/14/15 04:50	
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l	1	01/14/15 04:50	
Diethyl phthalate	ND	0.15	1.0	ug/l	1	01/14/15 04:50	
Dimethyl phthalate	ND	0.18	1.0	ug/l	1	01/14/15 04:50	

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Sampled: 01/07/15 11:42 **Sampled By:** VRG **Matrix:** water

Acid and Base/Neutral Extractables by EPA Method 625

Method: EPA 625 Batch: W5A0403 Prepared: 01/10/15 08:16 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Di-n-butyl phthalate	ND	0.24	1.0	ug/l	1	01/14/15 04:50	
Di-n-octyl phthalate	ND	0.19	1.0	ug/l	1	01/14/15 04:50	
Fluoranthene	ND	0.22	1.0	ug/l	1	01/14/15 04:50	
Fluorene	ND	0.35	1.0	ug/l	1	01/14/15 04:50	
Hexachlorobenzene	ND	0.49	1.0	ug/l	1	01/14/15 04:50	
Hexachlorobutadiene	ND	0.47	1.0	ug/l	1	01/14/15 04:50	
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l	1	01/14/15 04:50	
Hexachloroethane	ND	0.52	1.0	ug/l	1	01/14/15 04:50	
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l	1	01/14/15 04:50	
Isophorone	ND	0.21	1.0	ug/l	1	01/14/15 04:50	
Naphthalene	ND	0.49	1.0	ug/l	1	01/14/15 04:50	
Nitrobenzene	ND	0.36	1.0	ug/l	1	01/14/15 04:50	
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l	1	01/14/15 04:50	
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l	1	01/14/15 04:50	
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l	1	01/14/15 04:50	
Pentachlorophenol	ND	0.19	1.0	ug/l	1	01/14/15 04:50	
Phenanthrene	ND	0.32	1.0	ug/l	1	01/14/15 04:50	
Phenol	ND	0.16	1.0	ug/l	1	01/14/15 04:50	
Pyrene	ND	0.25	1.0	ug/l	1	01/14/15 04:50	
Surr: 2,4,6-Tribromophenol	*64 %*	Conc:*31.9*	*25-102*	%			
Surr: 2-Fluorobiphenyl	*75 %*	Conc:*18.7*	*22-107*	%			
Surr: 2-Fluorophenol	*44 %*	Conc:*22.0*	*3-74*	%			
Surr: Nitrobenzene-d5	*76 %*	Conc:*19.1*	*27-111*	%			
Surr: Phenol-d5	*38 %*	Conc:*19.2*	*0.1-53*	%			
Surr: Terphenyl-d14	*85 %*	Conc:*21.2*	*28-113*	%			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: SM 4500Cl-G Batch: W5A0348 Prepared: 01/09/15 10:17 Analyst: Lin Chai

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Chlorine Residual, Total	**0.015**	0.0015	0.050	mg/l	1	01/09/15 11:42	J, O-14

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0551 Prepared: 01/13/15 16:03 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**0.74**	0.012	0.050	ug/l	1	01/22/15 14:37	
Chromium, Total	**4.3**	0.034	0.30	ug/l	1	01/22/15 14:37	

Method: EPA 1640 Batch: W5A0708 Prepared: 01/15/15 17:55 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Silver, Total	ND	0.018	0.050	ug/l	1	01/26/15 16:07	

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5A08071-20 CAB-REF-5

Sampled: 01/07/15 11:42 **Sampled By:** VRG **Matrix:** water

Metals - Low Level by 1600 Series Methods

Method: EPA 1640 Batch: W5A0864 Prepared: 01/20/15 09:27 Analyst: Gary Zhou

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Cadmium, Total	**0.013**	0.0017	0.010	ug/l	1	01/23/15 03:51	
Copper, Total	**1.0**	0.0038	0.010	ug/l	1	01/23/15 03:51	
Lead, Total	**0.36**	0.0014	0.010	ug/l	1	01/23/15 03:51	
Nickel, Total	**2.5**	0.0040	0.010	ug/l	1	01/23/15 03:51	
Zinc, Total	**3.8**	0.036	0.20	ug/l	1	01/23/15 03:51	

Metals (Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 7470A Batch: W5A0468 Prepared: 01/12/15 13:04 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**0.071**	0.0035	0.10	ug/l	1	01/13/15 15:59	J

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l	1	01/14/15 03:17	
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l	1	01/14/15 03:17	
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l	1	01/14/15 03:17	
1,1-Dichloroethane	ND	0.21	1.0	ug/l	1	01/14/15 03:17	
1,1-Dichloroethene	ND	0.39	1.0	ug/l	1	01/14/15 03:17	
1,2-Dichloroethane	ND	0.24	1.0	ug/l	1	01/14/15 03:17	
1,2-Dichloropropane	ND	0.18	1.0	ug/l	1	01/14/15 03:17	
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l	1	01/14/15 03:17	
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l	1	01/14/15 03:17	
Acrolein	ND	2.2	5.0	ug/l	1	01/14/15 03:17	
Acrylonitrile	ND	1.8	2.0	ug/l	1	01/14/15 03:17	
Benzene	ND	0.23	1.0	ug/l	1	01/14/15 03:17	
Bromodichloromethane	ND	0.28	1.0	ug/l	1	01/14/15 03:17	
Bromoform	ND	0.32	1.0	ug/l	1	01/14/15 03:17	
Bromomethane	ND	0.47	1.0	ug/l	1	01/14/15 03:17	
Carbon tetrachloride	ND	0.33	1.0	ug/l	1	01/14/15 03:17	
Chlorobenzene	ND	0.21	1.0	ug/l	1	01/14/15 03:17	
Chloroethane	ND	0.23	1.0	ug/l	1	01/14/15 03:17	
Chloroform	ND	0.25	1.0	ug/l	1	01/14/15 03:17	
Chloromethane	ND	0.26	1.0	ug/l	1	01/14/15 03:17	
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l	1	01/14/15 03:17	
Dibromochloromethane	ND	0.38	1.0	ug/l	1	01/14/15 03:17	
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l	1	01/14/15 03:17	
Ethylbenzene	ND	0.17	1.0	ug/l	1	01/14/15 03:17	
m,p-Xylene	ND	0.70	1.0	ug/l	1	01/14/15 03:17	

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Date Reported: 03/09/15 12:32

5A08071-20 CAB-REF-5

Sampled: 01/07/15 11:42 **Sampled By:** VRG **Matrix:** water

Volatile Organics by EPA Method 624

Method: EPA 624 Batch: W5A0528 Prepared: 01/13/15 14:00 Analyst: Ruth Hortencia Ramon

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
m-Dichlorobenzene	ND	0.35	1.0	ug/l	1	01/14/15 03:17	
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l	1	01/14/15 03:17	
Methylene chloride	ND	0.25	1.0	ug/l	1	01/14/15 03:17	
o-Dichlorobenzene	ND	0.33	1.0	ug/l	1	01/14/15 03:17	
o-Xylene	ND	0.32	1.0	ug/l	1	01/14/15 03:17	
p-Dichlorobenzene	ND	0.37	1.0	ug/l	1	01/14/15 03:17	
Tetrachloroethene	ND	0.27	1.0	ug/l	1	01/14/15 03:17	
Toluene	ND	0.22	1.0	ug/l	1	01/14/15 03:17	
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l	1	01/14/15 03:17	
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l	1	01/14/15 03:17	
Trichloroethene	ND	0.37	1.0	ug/l	1	01/14/15 03:17	
Trichlorofluoromethane	ND	0.53	1.0	ug/l	1	01/14/15 03:17	
Vinyl chloride	ND	0.33	1.0	ug/l	1	01/14/15 03:17	
Surr: 1,2-Dichloroethane-d4	*78 %*	Conc:*39.0*	*82-125*	%			*S-04*
Surr: 4-Bromofluorobenzene	*96 %*	Conc:*47.9*	*88-108*	%			
Surr: Toluene-d8	*90 %*	Conc:*44.9*	*92-112*	%			*S-04*

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Date Received: 01/08/15 17:20
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5A08071-21 CAB-REF-5

Sampled: 01/07/15 09:18 **Sampled By:** VRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0425 Prepared: 01/12/15 08:22 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.86	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
4,4'-DDE	ND	1.4	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
4,4'-DDT	ND	0.99	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Aldrin	ND	2.1	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
alpha-BHC	ND	2.6	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
beta-BHC	ND	1.4	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Chlordane (tech)	ND	18	90	ug/kg	1	02/26/15 00:30	M-02, O-12
delta-BHC	ND	1.0	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Dieldrin	ND	1.3	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Endosulfan I	ND	1.0	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Endosulfan II	ND	0.57	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Endosulfan sulfate	ND	0.99	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Endrin	ND	2.4	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Endrin aldehyde	ND	1.3	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
gamma-BHC (Lindane)	ND	2.3	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Heptachlor	ND	2.4	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Heptachlor epoxide	ND	1.6	4.5	ug/kg	1	02/26/15 00:30	O-12, M-02
Methoxychlor	ND	0.99	4.5	ug/kg	1	02/26/15 00:30	M-02, O-12
Toxaphene	ND	15	130	ug/kg	1	02/26/15 00:30	M-02, O-12
Surr: Decachlorobiphenyl	*77 %*	Conc:*172*	*21-125*	%			*O-12, M-02*
Surr: Tetrachloro-meta-xylene	*44 %*	Conc:*98.6*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**2.9**	0.20	0.50	mg/kg	1	01/14/15 19:41	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/14/15 19:41	
Chromium, Total	**16**	0.23	1.0	mg/kg	1	01/14/15 19:41	
Copper, Total	**3.0**	0.29	0.50	mg/kg	1	01/14/15 19:41	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 14:49	
Zinc, Total	**22**	2.3	5.0	mg/kg	1	01/14/15 19:41	

Method: EPA 6020B Batch: W5A0475 Prepared: 01/12/15 15:16 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**4.5**	0.21	0.50	mg/kg	1	01/14/15 19:41	

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Date Received: 01/08/15 17:20
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5A08071-21 CAB-REF-5

Sampled: 01/07/15 09:18 **Sampled By:** VRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0475 | Prepared: 01/12/15 15:16 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**10**	0.45	1.0	mg/kg	1	01/14/15 19:41	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**25**	0.80	10	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0710 | Prepared: 01/15/15 07:17 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**1480**	36.0	200	mg/kg dry wt	1	01/15/15 07:54	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0426 | Prepared: 01/12/15 08:24 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	30	90	ug/kg	1	02/26/15 00:30	M-02, O-12
Aroclor 1221	ND	54	90	ug/kg	1	02/26/15 00:30	M-02, O-12
Aroclor 1232	ND	38	90	ug/kg	1	02/26/15 00:30	M-02, O-12
Aroclor 1242	ND	43	90	ug/kg	1	02/26/15 00:30	M-02, O-12
Aroclor 1248	ND	68	90	ug/kg	1	02/26/15 00:30	M-02, O-12
Aroclor 1254	ND	47	90	ug/kg	1	02/26/15 00:30	M-02, O-12
Aroclor 1260	ND	7.7	90	ug/kg	1	02/26/15 00:30	M-02, O-12
Surr: Decachlorobiphenyl	*80 %*	Conc:*178*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*44 %*	Conc:*99.4*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	14	71	ug/kg	1	01/15/15 15:59	
2-Methylnaphthalene	ND	14	71	ug/kg	1	01/15/15 15:59	
Acenaphthene	ND	14	71	ug/kg	1	01/15/15 15:59	
Acenaphthylene	ND	14	71	ug/kg	1	01/15/15 15:59	
Anthracene	ND	14	71	ug/kg	1	01/15/15 15:59	
Benzo (a) anthracene	ND	14	71	ug/kg	1	01/15/15 15:59	
Benzo (a) pyrene	ND	14	71	ug/kg	1	01/15/15 15:59	
Benzo (b) fluoranthene	ND	14	71	ug/kg	1	01/15/15 15:59	
Benzo (g,h,i) perylene	ND	14	71	ug/kg	1	01/15/15 15:59	
Benzo (k) fluoranthene	ND	14	71	ug/kg	1	01/15/15 15:59	
Chrysene	ND	14	71	ug/kg	1	01/15/15 15:59	
Dibenzo (a,h) anthracene	ND	14	71	ug/kg	1	01/15/15 15:59	
Fluoranthene	ND	14	71	ug/kg	1	01/15/15 15:59	

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Date Received: 01/08/15 17:20
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5A08071-21 **CAB-REF-5**

Sampled: 01/07/15 09:18 **Sampled By:** VRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	14	71	ug/kg	1	01/15/15 15:59	
Indeno (1,2,3-cd) pyrene	ND	14	71	ug/kg	1	01/15/15 15:59	
Naphthalene	ND	14	71	ug/kg	1	01/15/15 15:59	
Phenanthrene	ND	14	71	ug/kg	1	01/15/15 15:59	
Pyrene	ND	14	71	ug/kg	1	01/15/15 15:59	
Surr: 2-Fluorobiphenyl	*39 %*	Conc:*918*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*40 %*	Conc:*943*	*0.1-107*	%			
Surr: Terphenyl-d14	*52 %*	Conc:*1250*	*28-128*	%			

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QUALITY CONTROL SECTION

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

Acid and Base/Neutral Extractables by EPA Method 625 - Quality Control

Batch W5A0403 - EPA 625

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0403-BLK1)					Analyzed: 01/13/15 19:46						
1,2,4-Trichlorobenzene	ND	0.55	1.0	ug/l							
1,2-Dichlorobenzene	ND	0.57	1.0	ug/l							
1,2-Diphenylhydrazine/Azobenzene	ND	0.25	1.0	ug/l							
1,3-Dichlorobenzene	ND	0.53	1.0	ug/l							
1,4-Dichlorobenzene	ND	0.55	1.0	ug/l							
2,4,6-Trichlorophenol	ND	0.22	1.0	ug/l							
2,4-Dichlorophenol	ND	0.26	1.0	ug/l							
2,4-Dimethylphenol	ND	0.30	1.0	ug/l							
2,4-Dinitrophenol	ND	1.6	10	ug/l							
2,4-Dinitrotoluene	ND	0.18	1.0	ug/l							
2,6-Dinitrotoluene	ND	0.27	1.0	ug/l							
2-Chloronaphthalene	ND	0.45	1.0	ug/l							
2-Chlorophenol	ND	0.28	1.0	ug/l							
2-Methyl-4,6-dinitrophenol	ND	1.7	5.0	ug/l							
2-Nitrophenol	ND	0.26	1.0	ug/l							
3,3'-Dichlorobenzidine	ND	1.2	5.0	ug/l							
4,6-Dinitro-2-methylphenol	ND	1.7	5.0	ug/l							
4-Bromophenyl phenyl ether	ND	0.36	1.0	ug/l							
4-Chloro-3-methylphenol	ND	0.23	1.0	ug/l							
4-Chlorophenyl phenyl ether	ND	0.41	1.0	ug/l							
4-Nitrophenol	ND	0.45	5.0	ug/l							
Acenaphthene	ND	0.38	1.0	ug/l							
Acenaphthylene	ND	0.40	1.0	ug/l							
Anthracene	ND	0.34	1.0	ug/l							
Benzidine	ND	3.7	10	ug/l							
Benzo (a) anthracene	ND	0.19	1.0	ug/l							
Benzo (a) pyrene	ND	0.13	1.0	ug/l							
Benzo (b) fluoranthene	ND	0.14	1.0	ug/l							
Benzo (g,h,i) perylene	ND	0.10	2.0	ug/l							
Benzo (k) fluoranthene	ND	0.22	1.0	ug/l							
Benzyl butyl phthalate	ND	0.18	1.0	ug/l							
Bis(2-chloroethoxy)methane	ND	0.25	1.0	ug/l							
Bis(2-chloroethyl)ether	ND	0.27	1.0	ug/l							
Bis(2-chloroisopropyl)ether	ND	0.38	1.0	ug/l							
Bis(2-ethylhexyl)phthalate	ND	2.3	5.0	ug/l							
Butyl benzyl phthalate	ND	0.18	1.0	ug/l							
Chrysene	ND	0.19	1.0	ug/l							
Dibenzo (a,h) anthracene	ND	0.080	2.0	ug/l							
Diethyl phthalate	ND	0.15	1.0	ug/l							

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Acid and Base/Neutral Extractables by EPA Method 625 - Quality Control

Batch W5A0403 - EPA 625

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0403-BLK1)					Analyzed: 01/13/15 19:46						
Dimethyl phthalate	ND	0.18	1.0	ug/l							
Di-n-butyl phthalate	ND	0.24	1.0	ug/l							
Di-n-octyl phthalate	ND	0.19	1.0	ug/l							
Fluoranthene	ND	0.22	1.0	ug/l							
Fluorene	ND	0.35	1.0	ug/l							
Hexachlorobenzene	ND	0.49	1.0	ug/l							
Hexachlorobutadiene	ND	0.47	1.0	ug/l							
Hexachlorocyclopentadiene	ND	1.5	5.0	ug/l							
Hexachloroethane	ND	0.52	1.0	ug/l							
Indeno (1,2,3-cd) pyrene	ND	0.12	2.0	ug/l							
Isophorone	ND	0.21	1.0	ug/l							
Naphthalene	ND	0.49	1.0	ug/l							
Nitrobenzene	ND	0.36	1.0	ug/l							
N-Nitrosodimethylamine	ND	0.14	1.0	ug/l							
N-Nitrosodi-n-propylamine	ND	0.26	1.0	ug/l							
N-Nitrosodiphenylamine	ND	0.19	1.0	ug/l							
Pentachlorophenol	ND	0.19	1.0	ug/l							
Phenanthrene	ND	0.32	1.0	ug/l							
Phenol	ND	0.16	1.0	ug/l							
Pyrene	ND	0.25	1.0	ug/l							
Surr: 2,4,6-Tribromophenol	*37.7*			*ug/l*	*50.0*		*75*	*25-102*			
Surr: 2-Fluorobiphenyl	*17.4*			*ug/l*	*25.0*		*69*	*22-107*			
Surr: 2-Fluorophenol	*24.1*			*ug/l*	*50.0*		*48*	*3-74*			
Surr: Nitrobenzene-d5	*19.1*			*ug/l*	*25.0*		*76*	*27-111*			
Surr: Phenol-d5	*15.8*			*ug/l*	*50.0*		*32*	*0.1-53*			
Surr: Terphenyl-d14	*21.7*			*ug/l*	*25.0*		*87*	*28-113*			
LCS (W5A0403-BS1)					Analyzed: 01/13/15 20:16						
1,2,4-Trichlorobenzene	15.1	0.55	1.0	ug/l	25.0		60	44-142			
1,2-Dichlorobenzene	15.0	0.57	1.0	ug/l	25.0		60	32-129			
1,3-Dichlorobenzene	14.4	0.53	1.0	ug/l	25.0		58	0.1-172			
1,4-Dichlorobenzene	16.0	0.55	1.0	ug/l	25.0		64	20-124			
2,4,6-Trichlorophenol	16.0	0.22	1.0	ug/l	25.0		64	37-144			
2,4-Dichlorophenol	15.5	0.26	1.0	ug/l	25.0		62	39-135			
2,4-Dimethylphenol	11.8	0.30	1.0	ug/l	25.0		47	32-119			
2,4-Dinitrophenol	17.0	1.6	10	ug/l	25.0		68	0.1-191			
2,4-Dinitrotoluene	18.0	0.18	1.0	ug/l	25.0		72	39-139			
2,6-Dinitrotoluene	14.9	0.27	1.0	ug/l	25.0		60	50-158			
2-Chloronaphthalene	15.5	0.45	1.0	ug/l	25.0		62	60-118			
2-Chlorophenol	15.0	0.28	1.0	ug/l	25.0		60	23-134			
2-Methyl-4,6-dinitrophenol	19.3	1.7	5.0	ug/l	25.0		77	0.1-181			

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Acid and Base/Neutral Extractables by EPA Method 625 - Quality Control

Batch W5A0403 - EPA 625

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS (W5A0403-BS1)					Analyzed: 01/13/15 20:16						
2-Nitrophenol	16.1	0.26	1.0	ug/l	25.0		64	29-182			
3,3'-Dichlorobenzidine	22.3	1.2	5.0	ug/l	25.0		89	0.1-262			
4,6-Dinitro-2-methylphenol	19.3	1.7	5.0	ug/l	25.0		77	0.1-181			
4-Bromophenyl phenyl ether	14.6	0.36	1.0	ug/l	25.0		58	53-127			
4-Chloro-3-methylphenol	15.2	0.23	1.0	ug/l	25.0		61	22-147			
4-Chlorophenyl phenyl ether	16.5	0.41	1.0	ug/l	25.0		66	25-158			
4-Nitrophenol	6.24	0.45	5.0	ug/l	25.0		25	0.1-132			
Acenaphthene	17.4	0.38	1.0	ug/l	25.0		69	47-145			
Acenaphthylene	16.4	0.40	1.0	ug/l	25.0		65	33-145			
Anthracene	19.4	0.34	1.0	ug/l	25.0		78	27-133			
Benzo (a) anthracene	21.1	0.19	1.0	ug/l	25.0		84	33-143			
Benzo (a) pyrene	18.0	0.13	1.0	ug/l	25.0		72	17-163			
Benzo (b) fluoranthene	20.3	0.14	1.0	ug/l	25.0		81	24-159			
Benzo (g,h,i) perylene	22.4	0.10	2.0	ug/l	25.0		90	0.1-219			
Benzo (k) fluoranthene	19.4	0.22	1.0	ug/l	25.0		78	11-162			
Benzyl butyl phthalate	22.4	0.18	1.0	ug/l	25.0		89	0.1-152			
Bis(2-chloroethoxy)methane	16.5	0.25	1.0	ug/l	25.0		66	33-184			
Bis(2-chloroethyl)ether	15.5	0.27	1.0	ug/l	25.0		62	12-158			
Bis(2-chloroisopropyl)ether	16.1	0.38	1.0	ug/l	25.0		64	36-166			
Bis(2-ethylhexyl)phthalate	23.3	2.3	5.0	ug/l	25.0		93	8-158			
Butyl benzyl phthalate	22.4	0.18	1.0	ug/l	25.0		89	0.1-152			
Chrysene	20.2	0.19	1.0	ug/l	25.0		81	17-168			
Dibenzo (a,h) anthracene	22.7	0.080	2.0	ug/l	25.0		91	0.1-227			
Diethyl phthalate	19.2	0.15	1.0	ug/l	25.0		77	0.1-114			
Dimethyl phthalate	14.4	0.18	1.0	ug/l	25.0		58	0.1-112			
Di-n-butyl phthalate	21.4	0.24	1.0	ug/l	25.0		86	1-118			
Di-n-octyl phthalate	20.7	0.19	1.0	ug/l	25.0		83	4-146			
Fluoranthene	21.0	0.22	1.0	ug/l	25.0		84	26-137			
Fluorene	17.4	0.35	1.0	ug/l	25.0		70	59-121			
Hexachlorobenzene	17.8	0.49	1.0	ug/l	25.0		71	0.1-152			
Hexachlorobutadiene	15.6	0.47	1.0	ug/l	25.0		63	24-116			
Hexachlorocyclopentadiene	9.36	1.5	5.0	ug/l	25.0		37	0.1-81			
Hexachloroethane	15.9	0.52	1.0	ug/l	25.0		64	40-113			
Indeno (1,2,3-cd) pyrene	21.5	0.12	2.0	ug/l	25.0		86	0.1-171			
Isophorone	15.2	0.21	1.0	ug/l	25.0		61	21-196			
Naphthalene	16.6	0.49	1.0	ug/l	25.0		67	21-133			
Nitrobenzene	16.9	0.36	1.0	ug/l	25.0		67	35-180			
N-Nitrosodimethylamine	11.2	0.14	1.0	ug/l	25.0		45	15-59			
N-Nitrosodi-n-propylamine	17.1	0.26	1.0	ug/l	25.0		68	0.1-230			

Power Engineers, Inc.
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Acid and Base/Neutral Extractables by EPA Method 625 - Quality Control

Batch W5A0403 - EPA 625

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS (W5A0403-BS1)					Analyzed: 01/13/15 20:16						
N-Nitrosodiphenylamine	14.6	0.19	1.0	ug/l	25.0		58	42-90			
Pentachlorophenol	16.9	0.19	1.0	ug/l	25.0		68	14-176			
Phenanthrene	20.1	0.32	1.0	ug/l	25.0		80	54-120			
Phenol	6.86	0.16	1.0	ug/l	25.0		27	5-112			
Pyrene	21.1	0.25	1.0	ug/l	25.0		84	52-115			
Surr: 2,4,6-Tribromophenol	*36.2*			*ug/l*	*50.0*		*72*	*25-102*			
Surr: 2-Fluorobiphenyl	*16.2*			*ug/l*	*25.0*		*65*	*22-107*			
Surr: 2-Fluorophenol	*20.4*			*ug/l*	*50.0*		*41*	*3-74*			
Surr: Nitrobenzene-d5	*16.4*			*ug/l*	*25.0*		*66*	*27-111*			
Surr: Phenol-d5	*12.4*			*ug/l*	*50.0*		*25*	*0.1-53*			
Surr: Terphenyl-d14	*21.3*			*ug/l*	*25.0*		*85*	*28-113*			
LCS Dup (W5A0403-BSD1)					Analyzed: 01/13/15 20:47						
1,2,4-Trichlorobenzene	15.6	0.55	1.0	ug/l	25.0		62	44-142	3	30	
1,2-Dichlorobenzene	15.2	0.57	1.0	ug/l	25.0		61	32-129	1	30	
1,3-Dichlorobenzene	14.5	0.53	1.0	ug/l	25.0		58	0.1-172	0.3	30	
1,4-Dichlorobenzene	16.2	0.55	1.0	ug/l	25.0		65	20-124	0.7	30	
2,4,6-Trichlorophenol	18.6	0.22	1.0	ug/l	25.0		74	37-144	15	30	
2,4-Dichlorophenol	17.8	0.26	1.0	ug/l	25.0		71	39-135	14	30	
2,4-Dimethylphenol	12.0	0.30	1.0	ug/l	25.0		48	32-119	2	30	
2,4-Dinitrophenol	18.5	1.6	10	ug/l	25.0		74	0.1-191	9	30	
2,4-Dinitrotoluene	19.0	0.18	1.0	ug/l	25.0		76	39-139	5	30	
2,6-Dinitrotoluene	16.7	0.27	1.0	ug/l	25.0		67	50-158	11	30	
2-Chloronaphthalene	16.9	0.45	1.0	ug/l	25.0		68	60-118	9	30	
2-Chlorophenol	16.6	0.28	1.0	ug/l	25.0		66	23-134	10	30	
2-Methyl-4,6-dinitrophenol	20.7	1.7	5.0	ug/l	25.0		83	0.1-181	7	30	
2-Nitrophenol	18.7	0.26	1.0	ug/l	25.0		75	29-182	15	30	
3,3'-Dichlorobenzidine	22.1	1.2	5.0	ug/l	25.0		88	0.1-262	0.9	30	
4,6-Dinitro-2-methylphenol	20.7	1.7	5.0	ug/l	25.0		83	0.1-181	7	30	
4-Bromophenyl phenyl ether	15.4	0.36	1.0	ug/l	25.0		61	53-127	5	30	
4-Chloro-3-methylphenol	17.9	0.23	1.0	ug/l	25.0		72	22-147	16	30	
4-Chlorophenyl phenyl ether	17.9	0.41	1.0	ug/l	25.0		71	25-158	8	30	
4-Nitrophenol	6.73	0.45	5.0	ug/l	25.0		27	0.1-132	8	30	
Acenaphthene	18.5	0.38	1.0	ug/l	25.0		74	47-145	6	30	
Acenaphthylene	18.9	0.40	1.0	ug/l	25.0		75	33-145	14	30	
Anthracene	19.8	0.34	1.0	ug/l	25.0		79	27-133	2	30	
Benzo (a) anthracene	21.4	0.19	1.0	ug/l	25.0		86	33-143	2	30	
Benzo (a) pyrene	19.3	0.13	1.0	ug/l	25.0		77	17-163	7	30	
Benzo (b) fluoranthene	20.8	0.14	1.0	ug/l	25.0		83	24-159	2	30	
Benzo (g,h,i) perylene	18.9	0.10	2.0	ug/l	25.0		76	0.1-219	17	30	
Benzo (k) fluoranthene	20.9	0.22	1.0	ug/l	25.0		84	11-162	7	30	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

Acid and Base/Neutral Extractables by EPA Method 625 - Quality Control

Batch W5A0403 - EPA 625

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS Dup (W5A0403-BSD1)					Analyzed: 01/13/15 20:47						
Benzyl butyl phthalate	22.3	0.18	1.0	ug/l	25.0		89	0.1-152	0.4	30	
Bis(2-chloroethoxy)methane	19.0	0.25	1.0	ug/l	25.0		76	33-184	15	30	
Bis(2-chloroethyl)ether	17.5	0.27	1.0	ug/l	25.0		70	12-158	12	30	
Bis(2-chloroisopropyl)ether	17.9	0.38	1.0	ug/l	25.0		71	36-166	11	30	
Bis(2-ethylhexyl)phthalate	23.1	2.3	5.0	ug/l	25.0		92	8-158	0.9	30	
Butyl benzyl phthalate	22.3	0.18	1.0	ug/l	25.0		89	0.1-152	0.4	30	
Chrysene	21.0	0.19	1.0	ug/l	25.0		84	17-168	4	30	
Dibenzo (a,h) anthracene	19.7	0.080	2.0	ug/l	25.0		79	0.1-227	14	30	
Diethyl phthalate	20.5	0.15	1.0	ug/l	25.0		82	0.1-114	7	30	
Dimethyl phthalate	17.8	0.18	1.0	ug/l	25.0		71	0.1-112	21	30	
Di-n-butyl phthalate	21.6	0.24	1.0	ug/l	25.0		86	1-118	0.7	30	
Di-n-octyl phthalate	21.6	0.19	1.0	ug/l	25.0		86	4-146	4	30	
Fluoranthene	21.2	0.22	1.0	ug/l	25.0		85	26-137	0.9	30	
Fluorene	18.6	0.35	1.0	ug/l	25.0		74	59-121	6	30	
Hexachlorobenzene	19.0	0.49	1.0	ug/l	25.0		76	0.1-152	7	30	
Hexachlorobutadiene	15.4	0.47	1.0	ug/l	25.0		62	24-116	1	30	
Hexachlorocyclopentadiene	10.5	1.5	5.0	ug/l	25.0		42	0.1-81	12	30	
Hexachloroethane	15.2	0.52	1.0	ug/l	25.0		61	40-113	4	30	
Indeno (1,2,3-cd) pyrene	18.5	0.12	2.0	ug/l	25.0		74	0.1-171	15	30	
Isophorone	17.6	0.21	1.0	ug/l	25.0		71	21-196	15	30	
Naphthalene	17.3	0.49	1.0	ug/l	25.0		69	21-133	4	30	
Nitrobenzene	19.0	0.36	1.0	ug/l	25.0		76	35-180	12	30	
N-Nitrosodimethylamine	10.9	0.14	1.0	ug/l	25.0		44	15-59	3	30	
N-Nitrosodi-n-propylamine	19.5	0.26	1.0	ug/l	25.0		78	0.1-230	13	30	
N-Nitrosodiphenylamine	15.8	0.19	1.0	ug/l	25.0		63	42-90	8	30	
Pentachlorophenol	18.7	0.19	1.0	ug/l	25.0		75	14-176	10	30	
Phenanthrene	21.3	0.32	1.0	ug/l	25.0		85	54-120	6	30	
Phenol	7.78	0.16	1.0	ug/l	25.0		31	5-112	13	30	
Pyrene	21.4	0.25	1.0	ug/l	25.0		85	52-115	1	30	
Surr: 2,4,6-Tribromophenol	*39.6*			*ug/l*	*50.0*		*79*	*25-102*			
Surr: 2-Fluorobiphenyl	*18.3*			*ug/l*	*25.0*		*73*	*22-107*			
Surr: 2-Fluorophenol	*22.9*			*ug/l*	*50.0*		*46*	*3-74*			
Surr: Nitrobenzene-d5	*18.0*			*ug/l*	*25.0*		*72*	*27-111*			
Surr: Phenol-d5	*14.3*			*ug/l*	*50.0*		*29*	*0.1-53*			
Surr: Terphenyl-d14	*21.9*			*ug/l*	*25.0*		*87*	*28-113*			

Chlorinated Pesticides and/or PCBs - Quality Control

Batch W5A0425 - EPA 8081A

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

Chlorinated Pesticides and/or PCBs - Quality Control

Batch W5A0425 - EPA 8081A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0425-BLK1)					Analyzed: 01/17/15 03:31						
4,4'-DDD	ND	0.48	2.5	ug/kg							
4,4'-DDE	ND	0.77	2.5	ug/kg							
4,4'-DDT	ND	0.55	2.5	ug/kg							
Aldrin	ND	1.2	2.5	ug/kg							
alpha-BHC	ND	1.5	2.5	ug/kg							
beta-BHC	ND	0.79	2.5	ug/kg							
Chlordane (tech)	ND	10	50	ug/kg							
delta-BHC	ND	0.57	2.5	ug/kg							
Dieldrin	ND	0.75	2.5	ug/kg							
Endosulfan I	ND	0.57	2.5	ug/kg							
Endosulfan II	ND	0.32	2.5	ug/kg							
Endosulfan sulfate	ND	0.55	2.5	ug/kg							
Endrin	ND	1.3	2.5	ug/kg							
Endrin aldehyde	ND	0.70	2.5	ug/kg							
gamma-BHC (Lindane)	ND	1.3	2.5	ug/kg							
Heptachlor	ND	1.4	2.5	ug/kg							
Heptachlor epoxide	ND	0.91	2.5	ug/kg							
Methoxychlor	ND	0.55	2.5	ug/kg							
Toxaphene	ND	8.6	75	ug/kg							
Surr: Decachlorobiphenyl	*21.4*			*ug/kg*	*25.0*		*85*	*21-125*			
Surr: Tetrachloro-meta-xylene	*18.6*			*ug/kg*	*25.0*		*74*	*18-112*			
Blank (W5A0425-BLK2)					Analyzed: 02/25/15 19:24						
4,4'-DDD	ND	0.096	0.50	ug/kg							O-12
4,4'-DDE	ND	0.15	0.50	ug/kg							O-12
4,4'-DDT	ND	0.11	0.50	ug/kg							O-12
Aldrin	ND	0.23	0.50	ug/kg							O-12
alpha-BHC	ND	0.29	0.50	ug/kg							O-12
beta-BHC	ND	0.16	0.50	ug/kg							O-12
Chlordane (tech)	ND	2.0	10	ug/kg							O-12
delta-BHC	ND	0.11	0.50	ug/kg							O-12
Dieldrin	ND	0.15	0.50	ug/kg							O-12
Endosulfan I	ND	0.11	0.50	ug/kg							O-12
Endosulfan II	ND	0.064	0.50	ug/kg							O-12
Endosulfan sulfate	ND	0.11	0.50	ug/kg							O-12
Endrin	ND	0.27	0.50	ug/kg							O-12
Endrin aldehyde	ND	0.14	0.50	ug/kg							O-12
gamma-BHC (Lindane)	ND	0.26	0.50	ug/kg							O-12
Heptachlor	ND	0.27	0.50	ug/kg							O-12
Heptachlor epoxide	ND	0.18	0.50	ug/kg							O-12

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Chlorinated Pesticides and/or PCBs - Quality Control

Batch W5A0425 - EPA 8081A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0425-BLK2)					Analyzed: 02/25/15 19:24						
Methoxychlor	ND	0.11	0.50	ug/kg							O-12
Toxaphene	ND	1.7	15	ug/kg							O-12
Surr: Decachlorobiphenyl	*22.0*			*ug/kg*	*25.0*		*88*	*21-125*			O-12
Surr: Tetrachloro-meta-xylene	*17.0*			*ug/kg*	*25.0*		*68*	*18-112*			O-12
LCS (W5A0425-BS1)					Analyzed: 01/17/15 04:02						
4,4'-DDD	23.6	0.48	2.5	ug/kg	25.0		94	48-126			
4,4'-DDE	22.5	0.77	2.5	ug/kg	25.0		90	48-121			
4,4'-DDT	26.3	0.55	2.5	ug/kg	25.0		105	45-146			
Aldrin	20.0	1.2	2.5	ug/kg	25.0		80	57-137			
alpha-BHC	20.6	1.5	2.5	ug/kg	25.0		83	64-131			
beta-BHC	23.2	0.79	2.5	ug/kg	25.0		93	48-126			
delta-BHC	21.6	0.57	2.5	ug/kg	25.0		86	30-124			
Dieldrin	21.8	0.75	2.5	ug/kg	25.0		87	49-123			
Endosulfan I	17.4	0.57	2.5	ug/kg	25.0		69	14-101			
Endosulfan II	21.3	0.32	2.5	ug/kg	25.0		85	33-146			
Endosulfan sulfate	26.5	0.55	2.5	ug/kg	25.0		106	33-146			
Endrin	23.9	1.3	2.5	ug/kg	25.0		96	39-144			
Endrin aldehyde	20.1	0.70	2.5	ug/kg	25.0		80	23-104			
gamma-BHC (Lindane)	21.0	1.3	2.5	ug/kg	25.0		84	43-114			
Heptachlor	21.2	1.4	2.5	ug/kg	25.0		85	48-125			
Heptachlor epoxide	21.0	0.91	2.5	ug/kg	25.0		84	47-121			
Methoxychlor	29.5	0.55	2.5	ug/kg	25.0		118	47-157			
Surr: Decachlorobiphenyl	*23.7*			*ug/kg*	*25.0*		*95*	*21-125*			
Surr: Tetrachloro-meta-xylene	*18.6*			*ug/kg*	*25.0*		*74*	*18-112*			
LCS (W5A0425-BS2)					Analyzed: 02/25/15 19:54						
4,4'-DDD	21.0	0.48	2.5	ug/kg	25.0		84	48-126			O-12
4,4'-DDE	19.7	0.77	2.5	ug/kg	25.0		79	48-121			O-12
4,4'-DDT	22.3	0.55	2.5	ug/kg	25.0		89	45-146			O-12
Aldrin	17.7	1.2	2.5	ug/kg	25.0		71	57-137			O-12
alpha-BHC	18.4	1.5	2.5	ug/kg	25.0		74	64-131			O-12
beta-BHC	21.2	0.79	2.5	ug/kg	25.0		85	48-126			O-12
delta-BHC	20.7	0.57	2.5	ug/kg	25.0		83	30-124			O-12
Dieldrin	19.7	0.75	2.5	ug/kg	25.0		79	49-123			O-12
Endosulfan I	15.6	0.57	2.5	ug/kg	25.0		62	14-101			O-12
Endosulfan II	19.9	0.32	2.5	ug/kg	25.0		79	33-146			O-12
Endosulfan sulfate	26.9	0.55	2.5	ug/kg	25.0		108	33-146			O-12
Endrin	21.4	1.3	2.5	ug/kg	25.0		85	39-144			O-12
Endrin aldehyde	23.2	0.70	2.5	ug/kg	25.0		93	23-104			O-12
gamma-BHC (Lindane)	18.8	1.3	2.5	ug/kg	25.0		75	43-114			O-12
Heptachlor	19.0	1.4	2.5	ug/kg	25.0		76	48-125			O-12

Power Engineers, Inc.
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Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

Chlorinated Pesticides and/or PCBs - Quality Control

Batch W5A0425 - EPA 8081A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS (W5A0425-BS2)					Analyzed: 02/25/15 19:54						
Heptachlor epoxide	19.1	0.91	2.5	ug/kg	25.0		76	47-121			O-12
Methoxychlor	28.2	0.55	2.5	ug/kg	25.0		113	47-157			O-12
Surr: Decachlorobiphenyl	*22.4*			*ug/kg*	*25.0*		*90*	*21-125*			*O-12*
Surr: Tetrachloro-meta-xylene	*16.2*			*ug/kg*	*25.0*		65	*18-112*			*O-12*
Matrix Spike (W5A0425-MS1)		**Source: 5A08071-13**			Analyzed: 01/17/15 05:03						
4,4'-DDD	214	4.4	23	ug/kg	229	ND	93	21-119			M-02
4,4'-DDE	198	7.1	23	ug/kg	229	ND	86	18-122			M-02
4,4'-DDT	229	5.0	23	ug/kg	229	ND	100	12-141			M-02
Aldrin	155	11	23	ug/kg	229	ND	68	24-173			M-02
alpha-BHC	161	13	23	ug/kg	229	ND	70	44-146			M-02
beta-BHC	203	7.2	23	ug/kg	229	ND	88	7-156			M-02
delta-BHC	196	5.2	23	ug/kg	229	ND	85	11-147			M-02
Dieldrin	186	6.9	23	ug/kg	229	ND	81	23-123			M-02
Endosulfan I	133	5.2	23	ug/kg	229	ND	58	0.1-94			M-02
Endosulfan II	175	2.9	23	ug/kg	229	ND	76	0.1-109			M-02
Endosulfan sulfate	235	5.0	23	ug/kg	229	ND	103	0.1-152			M-02
Endrin	205	12	23	ug/kg	229	ND	89	22-147			M-02
Endrin aldehyde	187	6.4	23	ug/kg	229	ND	82	0.1-114			M-02
gamma-BHC (Lindane)	168	12	23	ug/kg	229	ND	73	16-121			M-02
Heptachlor	165	12	23	ug/kg	229	ND	72	4-141			M-02
Heptachlor epoxide	176	8.3	23	ug/kg	229	ND	77	17-135			M-02
Methoxychlor	259	5.0	23	ug/kg	229	ND	113	14-153			M-02
Surr: Decachlorobiphenyl	*202*			*ug/kg*	*229*		*88*	*21-125*			*M-02*
Surr: Tetrachloro-meta-xylene	*136*			*ug/kg*	*229*		*59*	*18-112*			*M-02*
Matrix Spike Dup (W5A0425-MSD1)		**Source: 5A08071-13**			Analyzed: 01/17/15 05:34						
4,4'-DDD	214	4.3	22	ug/kg	224	ND	96	21-119	0.1	25	M-02
4,4'-DDE	194	6.9	22	ug/kg	224	ND	86	18-122	2	25	M-02
4,4'-DDT	224	4.9	22	ug/kg	224	ND	100	12-141	2	25	M-02
Aldrin	138	10	22	ug/kg	224	ND	62	24-173	12	25	M-02
alpha-BHC	149	13	22	ug/kg	224	ND	67	44-146	8	25	M-02
beta-BHC	186	7.1	22	ug/kg	224	ND	83	7-156	8	25	M-02
delta-BHC	182	5.1	22	ug/kg	224	ND	81	11-147	7	25	M-02
Dieldrin	175	6.7	22	ug/kg	224	ND	78	23-123	6	25	M-02
Endosulfan I	133	5.1	22	ug/kg	224	ND	59	0.1-94	0.2	25	M-02
Endosulfan II	183	2.9	22	ug/kg	224	ND	82	0.1-109	4	25	M-02
Endosulfan sulfate	236	4.9	22	ug/kg	224	ND	105	0.1-152	0.2	25	M-02
Endrin	196	12	22	ug/kg	224	ND	87	22-147	5	25	M-02
Endrin aldehyde	174	6.3	22	ug/kg	224	ND	78	0.1-114	7	25	M-02
gamma-BHC (Lindane)	152	12	22	ug/kg	224	ND	68	16-121	10	25	M-02
Heptachlor	148	12	22	ug/kg	224	ND	66	4-141	11	25	M-02

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

Chlorinated Pesticides and/or PCBs - Quality Control

Batch W5A0425 - EPA 8081A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike Dup (W5A0425-MSD1)	**Source: 5A08071-13**				Analyzed: 01/17/15 05:34						
Heptachlor epoxide	161	8.2	22	ug/kg	224	ND	72	17-135	9	25	M-02
Methoxychlor	252	4.9	22	ug/kg	224	ND	112	14-153	3	25	M-02
Surr: Decachlorobiphenyl	*208*			*ug/kg*	*224*		*93*	*21-125*			*M-02*
Surr: Tetrachloro-meta-xylene	*127*			*ug/kg*	*224*		*57*	*18-112*			*M-02*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods - Quality Control

Batch W5A0348 - SM 4500Cl-G

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0348-BLK1)					Analyzed: 01/09/15 11:42						
Chlorine Residual, Total	ND	0.0015	0.050	mg/l							
LCS (W5A0348-BS1)					Analyzed: 01/09/15 11:42						
Chlorine Residual, Total	0.194	0.0015	0.050	mg/l	0.200		97	85-110			
Matrix Spike (W5A0348-MS1)	**Source: 5A08071-01**				Analyzed: 01/09/15 11:42						
Chlorine Residual, Total	0.219	0.0015	0.050	mg/l	0.200	0.0143	102	78-114			
Matrix Spike Dup (W5A0348-MSD1)	**Source: 5A08071-01**				Analyzed: 01/09/15 11:42						
Chlorine Residual, Total	0.221	0.0015	0.050	mg/l	0.200	0.0143	103	78-114	0.8	15	

Metals - Low Level by 1600 Series Methods - Quality Control

Batch W5A0551 - EPA 1640

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0551-BLK1)					Analyzed: 01/22/15 12:56						
Arsenic, Total	ND	0.012	0.050	ug/l							
Chromium, Total	0.0770	0.034	0.30	ug/l							J
LCS (W5A0551-BS1)					Analyzed: 01/22/15 13:00						
Arsenic, Total	3.51	0.012	0.050	ug/l	5.00		70	48-101			
Chromium, Total	4.59	0.034	0.30	ug/l	5.00		92	68-116			
Matrix Spike (W5A0551-MS1)	**Source: 5A08071-01**				Analyzed: 01/22/15 14:42						
Arsenic, Total	3.34	0.012	0.050	ug/l	5.00	0.698	53	28-100			
Chromium, Total	9.65	0.034	0.30	ug/l	5.00	5.26	88	60-115			
Matrix Spike (W5A0551-MS2)	**Source: 5A08071-02**				Analyzed: 01/22/15 15:10						
Arsenic, Total	3.22	0.012	0.050	ug/l	5.00	0.811	48	28-100			
Chromium, Total	9.69	0.034	0.30	ug/l	5.00	5.60	82	60-115			
Matrix Spike Dup (W5A0551-MSD1)	**Source: 5A08071-01**				Analyzed: 01/22/15 14:46						
Arsenic, Total	3.36	0.012	0.050	ug/l	5.00	0.698	53	28-100	0.6	30	
Chromium, Total	9.56	0.034	0.30	ug/l	5.00	5.26	86	60-115	1	30	
Matrix Spike Dup (W5A0551-MSD2)	**Source: 5A08071-02**				Analyzed: 01/22/15 15:15						

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Metals - Low Level by 1600 Series Methods - Quality Control

Batch W5A0551 - EPA 1640

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike Dup (W5A0551-MSD2)	**Source: 5A08071-02**				Analyzed: 01/22/15 15:15						
Arsenic, Total	3.09	0.012	0.050	ug/l	5.00	0.811	46	28-100	4	30	
Chromium, Total	9.86	0.034	0.30	ug/l	5.00	5.60	85	60-115	2	30	

Batch W5A0708 - EPA 1640

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0708-BLK1)					Analyzed: 01/26/15 14:36						
Silver, Total	ND	0.018	0.050	ug/l							
LCS (W5A0708-BS1)					Analyzed: 01/26/15 14:41						
Silver, Total	4.08	0.018	0.050	ug/l	5.00		82	0.1-140			
Matrix Spike (W5A0708-MS1)	**Source: 5A08071-04**				Analyzed: 01/26/15 16:11						
Silver, Total	3.56	0.018	0.050	ug/l	5.00	ND	71	0.1-140			
Matrix Spike (W5A0708-MS2)	**Source: 5A08071-12**				Analyzed: 01/26/15 16:37						
Silver, Total	2.96	0.018	0.050	ug/l	5.00	ND	59	0.1-140			
Matrix Spike Dup (W5A0708-MSD1)	**Source: 5A08071-04**				Analyzed: 01/26/15 16:15						
Silver, Total	3.68	0.018	0.050	ug/l	5.00	ND	74	0.1-140	3	30	
Matrix Spike Dup (W5A0708-MSD2)	**Source: 5A08071-12**				Analyzed: 01/26/15 16:41						
Silver, Total	4.20	0.018	0.050	ug/l	5.00	ND	84	0.1-140	35	30	QR-04

Batch W5A0864 - EPA 1640

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0864-BLK1)					Analyzed: 01/22/15 21:34						
Cadmium, Total	ND	0.0017	0.010	ug/l							
Copper, Total	ND	0.0038	0.010	ug/l							
Lead, Total	0.00318	0.0014	0.010	ug/l							J
Nickel, Total	ND	0.0040	0.010	ug/l							
Zinc, Total	ND	0.036	0.20	ug/l							
LCS (W5A0864-BS1)					Analyzed: 01/22/15 21:48						
Cadmium, Total	2.02	0.0017	0.010	ug/l	2.00		101	78-114			
Copper, Total	2.01	0.0038	0.010	ug/l	2.00		101	73-122			
Lead, Total	2.03	0.0014	0.010	ug/l	2.00		101	79-123			
Nickel, Total	2.04	0.0040	0.010	ug/l	2.00		102	74-127			
Zinc, Total	10.2	0.036	0.20	ug/l	10.0		102	75-127			
Matrix Spike (W5A0864-MS1)	**Source: 5A08071-03**				Analyzed: 01/22/15 22:02						
Cadmium, Total	1.96	0.0017	0.010	ug/l	2.00	0.0116	97	68-126			
Copper, Total	2.51	0.0038	0.010	ug/l	2.00	0.507	100	60-138			
Lead, Total	2.16	0.0014	0.010	ug/l	2.00	0.169	100	64-136			
Nickel, Total	5.14	0.0040	0.010	ug/l	2.00	3.23	96	68-128			
Zinc, Total	11.6	0.036	0.20	ug/l	10.0	1.78	99	68-132			
Matrix Spike (W5A0864-MS2)	**Source: 5A08071-04**				Analyzed: 01/22/15 22:30						
Cadmium, Total	1.98	0.0017	0.010	ug/l	2.00	0.0130	98	68-126			

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Metals - Low Level by 1600 Series Methods - Quality Control

Batch W5A0864 - EPA 1640

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike (W5A0864-MS2)		**Source: 5A08071-04**			Analyzed: 01/22/15 22:30						
Copper, Total	2.50	0.0038	0.010	ug/l	2.00	0.588	96	60-138			
Lead, Total	2.20	0.0014	0.010	ug/l	2.00	0.247	98	64-136			
Nickel, Total	3.35	0.0040	0.010	ug/l	2.00	1.43	96	68-128			
Zinc, Total	11.1	0.036	0.20	ug/l	10.0	1.26	99	68-132			
Matrix Spike Dup (W5A0864-MSD1)		**Source: 5A08071-03**			Analyzed: 01/22/15 22:16						
Cadmium, Total	2.01	0.0017	0.010	ug/l	2.00	0.0116	100	68-126	2	30	
Copper, Total	2.53	0.0038	0.010	ug/l	2.00	0.507	101	60-138	0.9	30	
Lead, Total	2.20	0.0014	0.010	ug/l	2.00	0.169	102	64-136	2	30	
Nickel, Total	5.25	0.0040	0.010	ug/l	2.00	3.23	101	68-128	2	30	
Zinc, Total	11.9	0.036	0.20	ug/l	10.0	1.78	102	68-132	3	30	
Matrix Spike Dup (W5A0864-MSD2)		**Source: 5A08071-04**			Analyzed: 01/22/15 22:44						
Cadmium, Total	2.01	0.0017	0.010	ug/l	2.00	0.0130	100	68-126	1	30	
Copper, Total	2.57	0.0038	0.010	ug/l	2.00	0.588	99	60-138	2	30	
Lead, Total	2.25	0.0014	0.010	ug/l	2.00	0.247	100	64-136	2	30	
Nickel, Total	3.35	0.0040	0.010	ug/l	2.00	1.43	96	68-128	0.01	30	
Zinc, Total	11.4	0.036	0.20	ug/l	10.0	1.26	101	68-132	2	30	

Metals (Aqueous) by EPA 6000/7000 Series Methods - Quality Control

Batch W5A0468 - EPA 7470A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0468-BLK1)					Analyzed: 01/13/15 15:59						
Mercury, Total	ND	0.0035	0.10	ug/l							
LCS (W5A0468-BS1)					Analyzed: 01/13/15 15:59						
Mercury, Total	0.954	0.0035	0.10	ug/l	1.00		95	80-120			
Matrix Spike (W5A0468-MS1)		**Source: 5A08071-04**			Analyzed: 01/13/15 15:59						
Mercury, Total	1.04	0.0035	0.10	ug/l	1.00	ND	104	60-129			
Matrix Spike Dup (W5A0468-MSD1)		**Source: 5A08071-04**			Analyzed: 01/13/15 15:59						
Mercury, Total	1.07	0.0035	0.10	ug/l	1.00	ND	107	60-129	3	20	

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods - Quality Control

Batch W5A0475 - EPA 6020A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0475-BLK1)					Analyzed: 01/14/15 18:51						
Arsenic, Total	ND	0.20	0.50	mg/kg							
Cadmium, Total	ND	0.20	0.20	mg/kg							
Chromium, Total	ND	0.23	1.0	mg/kg							

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Metals (Non-Aqueous) by EPA 6000/7000 Series Methods - Quality Control

Batch W5A0475 - EPA 6020A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0475-BLK1)					Analyzed: 01/14/15 18:51						
Copper, Total	ND	0.29	0.50	mg/kg							
Lead, Total	ND	0.21	0.50	mg/kg							
Nickel, Total	ND	0.45	1.0	mg/kg							
Silver, Total	ND	0.30	0.50	mg/kg							
Zinc, Total	ND	2.3	5.0	mg/kg							
LCS (W5A0475-BS1)					Analyzed: 01/14/15 18:58						
Arsenic, Total	49.3	0.20	0.50	mg/kg	50.0		99	80-120			
Cadmium, Total	49.2	0.20	0.20	mg/kg	50.0		98	80-120			
Chromium, Total	51.6	0.23	1.0	mg/kg	50.0		103	80-120			
Copper, Total	51.9	0.29	0.50	mg/kg	50.0		104	80-120			
Lead, Total	49.2	0.21	0.50	mg/kg	50.0		98	80-120			
Nickel, Total	53.5	0.45	1.0	mg/kg	50.0		107	80-120			
Silver, Total	52.5	0.30	0.50	mg/kg	50.0		105	80-120			
Zinc, Total	50.4	2.3	5.0	mg/kg	50.0		101	80-120			
Matrix Spike (W5A0475-MS1)		Source: 5A08071-13			Analyzed: 01/14/15 19:56						
Arsenic, Total	49.9	0.20	0.50	mg/kg	49.4	2.47	96	75-125			
Cadmium, Total	48.6	0.20	0.20	mg/kg	49.4	ND	98	75-125			
Chromium, Total	61.6	0.23	1.0	mg/kg	49.4	12.5	99	75-125			
Copper, Total	51.5	0.29	0.50	mg/kg	49.4	3.03	98	75-125			
Lead, Total	51.1	0.21	0.50	mg/kg	49.4	3.29	97	75-125			
Nickel, Total	59.2	0.45	1.0	mg/kg	49.4	8.54	103	75-125			
Silver, Total	51.6	0.30	0.50	mg/kg	49.4	ND	105	75-125			
Zinc, Total	66.6	2.3	5.0	mg/kg	49.4	18.9	96	75-125			
Matrix Spike Dup (W5A0475-MSD1)		Source: 5A08071-13			Analyzed: 01/14/15 20:31						
Arsenic, Total	49.6	0.20	0.50	mg/kg	49.1	2.47	96	75-125	0.5	20	
Cadmium, Total	48.4	0.20	0.20	mg/kg	49.1	ND	98	75-125	0.4	20	
Chromium, Total	61.6	0.23	1.0	mg/kg	49.1	12.5	100	75-125	0.02	20	
Copper, Total	51.5	0.29	0.50	mg/kg	49.1	3.03	99	75-125	0.02	20	
Lead, Total	51.3	0.21	0.50	mg/kg	49.1	3.29	98	75-125	0.3	20	
Nickel, Total	58.9	0.45	1.0	mg/kg	49.1	8.54	103	75-125	0.5	20	
Silver, Total	52.0	0.30	0.50	mg/kg	49.1	ND	106	75-125	0.6	20	
Zinc, Total	68.1	2.3	5.0	mg/kg	49.1	18.9	100	75-125	2	20	

Batch W5A0911 - EPA 7471A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0911-BLK1)					Analyzed: 01/26/15 12:25						
Mercury, Total	1.83	0.80	10	ug/kg							J
LCS (W5A0911-BS1)					Analyzed: 01/26/15 12:25						
Mercury, Total	81.3	0.80	10	ug/kg	83.3		98	80-120			

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Metals (Non-Aqueous) by EPA 6000/7000 Series Methods - Quality Control

Batch W5A0911 - EPA 7471A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike (W5A0911-MS1)		**Source: 5A07087-01**			Analyzed: 01/26/15 12:25						
Mercury, Total	905	2.9	36	ug/kg	75.6	817	115	47-138			
Matrix Spike Dup (W5A0911-MSD1)		**Source: 5A07087-01**			Analyzed: 01/26/15 12:25						
Mercury, Total	907	3.2	40	ug/kg	77.4	817	116	47-138	0.3	20	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis - Quality Control

Batch W5A0710 - EPA 9060M

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0710-BLK1)					Analyzed: 01/15/15 07:54						
Total Organic Carbon (TOC)	ND	36.0	200	mg/kg dry wt							
LCS (W5A0710-BS1)					Analyzed: 01/15/15 07:54						
Total Organic Carbon (TOC)	8320	36.0	200	mg/kg dry wt	8600		97	80-120			
Matrix Spike (W5A0710-MS1)		**Source: 5A09069-13**			Analyzed: 01/15/15 07:54						
Total Organic Carbon (TOC)	19600	36.0	200	mg/kg dry wt	19200	392	100	62-131			
Matrix Spike Dup (W5A0710-MSD1)		**Source: 5A09069-13**			Analyzed: 01/15/15 07:54						
Total Organic Carbon (TOC)	21500	36.0	200	mg/kg dry wt	20500	392	103	62-131	9	20	

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

Batch W5A0426 - EPA 8082

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0426-BLK1)					Analyzed: 01/17/15 03:31						
Aroclor 1016	ND	17	50	ug/kg							
Aroclor 1221	ND	30	50	ug/kg							
Aroclor 1232	ND	21	50	ug/kg							
Aroclor 1242	ND	24	50	ug/kg							
Aroclor 1248	ND	38	50	ug/kg							
Aroclor 1254	ND	26	50	ug/kg							
Aroclor 1260	ND	4.3	50	ug/kg							
Surr: Decachlorobiphenyl	*22.0*			*ug/kg*	*25.0*		*88*	*18-131*			
Surr: Tetrachloro-meta-xylene	*18.8*			*ug/kg*	*25.0*		*75*	*21-119*			
Blank (W5A0426-BLK2)					Analyzed: 02/25/15 19:24						
Aroclor 1016	ND	3.4	10	ug/kg							QC-2
Aroclor 1221	ND	6.0	10	ug/kg							QC-2
Aroclor 1232	ND	4.2	10	ug/kg							QC-2
Aroclor 1242	ND	4.8	10	ug/kg							QC-2

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Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

Batch W5A0426 - EPA 8082

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0426-BLK2)					Analyzed: 02/25/15 19:24						
Aroclor 1248	ND	7.6	10	ug/kg							QC-2
Aroclor 1254	ND	5.2	10	ug/kg							QC-2
Aroclor 1260	ND	0.86	10	ug/kg							QC-2
Surr: Decachlorobiphenyl	*22.9*			*ug/kg*	*25.0*		*92*	*18-131*			QC-2
Surr: Tetrachloro-meta-xylene	*17.2*			*ug/kg*	*25.0*		*69*	*21-119*			QC-2
LCS (W5A0426-BS1)					Analyzed: 01/17/15 04:33						
Aroclor 1016	197	17	50	ug/kg	250		79	30-168			
Aroclor 1260	222	4.3	50	ug/kg	250		89	49-125			
Surr: Decachlorobiphenyl	*23.0*			*ug/kg*	*25.0*		*92*	*18-131*			
Surr: Tetrachloro-meta-xylene	*16.8*			*ug/kg*	*25.0*		*67*	*21-119*			
LCS (W5A0426-BS2)					Analyzed: 02/25/15 20:25						
Aroclor 1016	187	17	50	ug/kg	250		75	30-168			QC-2
Aroclor 1260	215	4.3	50	ug/kg	250		86	49-125			QC-2
Surr: Decachlorobiphenyl	*22.3*			*ug/kg*	*25.0*		*89*	*18-131*			QC-2
Surr: Tetrachloro-meta-xylene	*15.9*			*ug/kg*	*25.0*		*63*	*21-119*			QC-2
Matrix Spike (W5A0426-MS1)		**Source: 5A08071-13**			Analyzed: 01/17/15 06:05						
Aroclor 1016	2360	150	430	ug/kg	2150	ND	110	24-169			M-02
Aroclor 1260	1960	37	430	ug/kg	2150	ND	91	29-155			M-02
Surr: Decachlorobiphenyl	*195*			*ug/kg*	*215*		*91*	*18-131*			*M-02*
Surr: Tetrachloro-meta-xylene	*149*			*ug/kg*	*215*		*69*	*21-119*			*M-02*
Matrix Spike Dup (W5A0426-MSD1)		**Source: 5A08071-13**			Analyzed: 01/17/15 06:35						
Aroclor 1016	2180	140	420	ug/kg	2120	ND	103	24-169	8	25	M-02
Aroclor 1260	1990	36	420	ug/kg	2120	ND	94	29-155	1	25	M-02
Surr: Decachlorobiphenyl	*194*			*ug/kg*	*212*		*91*	*18-131*			*M-02*
Surr: Tetrachloro-meta-xylene	*147*			*ug/kg*	*212*		*70*	*21-119*			*M-02*

Semivolatile Organics - Low Level by GC/MS SIM Mode - Quality Control

Batch W5A0527 - EPA 8270C SIM

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0527-BLK1)					Analyzed: 01/15/15 11:23						
1-Methylnaphthalene	ND	1.0	5.0	ug/kg							
2-Methylnaphthalene	ND	1.0	5.0	ug/kg							
Acenaphthene	ND	1.0	5.0	ug/kg							
Acenaphthylene	ND	1.0	5.0	ug/kg							
Anthracene	ND	1.0	5.0	ug/kg							
Benzo (a) anthracene	ND	1.0	5.0	ug/kg							
Benzo (a) pyrene	ND	1.0	5.0	ug/kg							
Benzo (b) fluoranthene	ND	1.0	5.0	ug/kg							
Benzo (g,h,i) perylene	ND	1.0	5.0	ug/kg							

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Semivolatile Organics - Low Level by GC/MS SIM Mode - Quality Control

Batch W5A0527 - EPA 8270C SIM

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0527-BLK1)					Analyzed: 01/15/15 11:23						
Benzo (k) fluoranthene	ND	1.0	5.0	ug/kg							
Chrysene	ND	1.0	5.0	ug/kg							
Dibenzo (a,h) anthracene	ND	1.0	5.0	ug/kg							
Fluoranthene	ND	1.0	5.0	ug/kg							
Fluorene	ND	1.0	5.0	ug/kg							
Indeno (1,2,3-cd) pyrene	ND	1.0	5.0	ug/kg							
Naphthalene	ND	1.0	5.0	ug/kg							
Phenanthrene	ND	1.0	5.0	ug/kg							
Pyrene	ND	1.0	5.0	ug/kg							
Surr: 2-Fluorobiphenyl	*91.3*			*ug/kg*	*167*		*55*	*0.1-109*			
Surr: Nitrobenzene-d5	*90.1*			*ug/kg*	*167*		*54*	*0.1-107*			
Surr: Terphenyl-d14	*98.1*			*ug/kg*	*167*		*59*	*28-128*			
LCS (W5A0527-BS1)					Analyzed: 01/15/15 11:57						
Acenaphthene	256	1.0	5.0	ug/kg	333		77	27-103			
Acenaphthylene	240	1.0	5.0	ug/kg	333		72	29-112			
Anthracene	255	1.0	5.0	ug/kg	333		77	31-119			
Benzo (a) anthracene	219	1.0	5.0	ug/kg	333		66	26-132			
Benzo (a) pyrene	287	1.0	5.0	ug/kg	333		86	19-146			
Benzo (b) fluoranthene	272	1.0	5.0	ug/kg	333		82	40-120			
Benzo (g,h,i) perylene	284	1.0	5.0	ug/kg	333		85	18-135			
Benzo (k) fluoranthene	304	1.0	5.0	ug/kg	333		91	40-120			
Chrysene	275	1.0	5.0	ug/kg	333		83	40-120			
Dibenzo (a,h) anthracene	275	1.0	5.0	ug/kg	333		83	20-137			
Fluoranthene	241	1.0	5.0	ug/kg	333		72	33-123			
Fluorene	235	1.0	5.0	ug/kg	333		70	33-106			
Indeno (1,2,3-cd) pyrene	296	1.0	5.0	ug/kg	333		89	16-136			
Naphthalene	240	1.0	5.0	ug/kg	333		72	22-98			
Phenanthrene	265	1.0	5.0	ug/kg	333		79	32-110			
Pyrene	229	1.0	5.0	ug/kg	333		69	34-122			
Surr: 2-Fluorobiphenyl	*114*			*ug/kg*	*167*		*69*	*0.1-109*			
Surr: Nitrobenzene-d5	*102*			*ug/kg*	*167*		*61*	*0.1-107*			
Surr: Terphenyl-d14	*103*			*ug/kg*	*167*		*62*	*28-128*			
Matrix Spike (W5A0527-MS1)		**Source: 5A08071-13**			Analyzed: 01/15/15 12:31						
Acenaphthene	2550	15	74	ug/kg	4950	ND	51	5-115			
Acenaphthylene	2540	15	74	ug/kg	4950	ND	51	8-111			
Anthracene	2670	15	74	ug/kg	4950	ND	54	3-132			
Benzo (a) anthracene	3240	15	74	ug/kg	4950	ND	65	14-125			
Benzo (a) pyrene	3480	15	74	ug/kg	4950	ND	70	2-138			
Benzo (b) fluoranthene	3300	15	74	ug/kg	4950	ND	67	20-150			
Benzo (g,h,i) perylene	3080	15	74	ug/kg	4950	ND	62	9-129			

Power Engineers, Inc.
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Date Reported: 03/09/15 12:32

Semivolatile Organics - Low Level by GC/MS SIM Mode - Quality Control

Batch W5A0527 - EPA 8270C SIM

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike (W5A0527-MS1)	Source: 5A08071-13				Analyzed: 01/15/15 12:31						
Benzo (k) fluoranthene	3570	15	74	ug/kg	4950	ND	72	20-150			
Chrysene	2900	15	74	ug/kg	4950	ND	59	20-150			
Dibenzo (a,h) anthracene	3070	15	74	ug/kg	4950	ND	62	10-144			
Fluoranthene	2800	15	74	ug/kg	4950	ND	56	11-127			
Fluorene	2580	15	74	ug/kg	4950	ND	52	4-125			
Indeno (1,2,3-cd) pyrene	3470	15	74	ug/kg	4950	ND	70	3-137			
Naphthalene	2170	15	74	ug/kg	4950	ND	44	0.1-117			
Phenanthrene	2730	15	74	ug/kg	4950	ND	55	10-122			
Pyrene	2750	15	74	ug/kg	4950	ND	56	10-128			
Surr: 2-Fluorobiphenyl	*1090*			*ug/kg*	*2480*		*44*	*0.1-109*			
Surr: Nitrobenzene-d5	*986*			*ug/kg*	*2480*		*40*	*0.1-107*			
Surr: Terphenyl-d14	*1300*			*ug/kg*	*2480*		*53*	*28-128*			
Matrix Spike Dup (W5A0527-MSD1)	Source: 5A08071-13				Analyzed: 01/15/15 13:06						
Acenaphthene	2420	15	74	ug/kg	4900	ND	49	5-115	5	30	
Acenaphthylene	2340	15	74	ug/kg	4900	ND	48	8-111	8	30	
Anthracene	2530	15	74	ug/kg	4900	ND	52	3-132	5	30	
Benzo (a) anthracene	2280	15	74	ug/kg	4900	ND	46	14-125	35	30	MS-05
Benzo (a) pyrene	3310	15	74	ug/kg	4900	ND	68	2-138	5	30	
Benzo (b) fluoranthene	3090	15	74	ug/kg	4900	ND	63	20-150	7	30	
Benzo (g,h,i) perylene	3570	15	74	ug/kg	4900	ND	73	9-129	15	30	
Benzo (k) fluoranthene	3480	15	74	ug/kg	4900	ND	71	20-150	3	30	
Chrysene	3050	15	74	ug/kg	4900	ND	62	20-150	5	30	
Dibenzo (a,h) anthracene	3550	15	74	ug/kg	4900	ND	72	10-144	15	30	
Fluoranthene	2490	15	74	ug/kg	4900	ND	51	11-127	12	30	
Fluorene	2380	15	74	ug/kg	4900	ND	48	4-125	8	30	
Indeno (1,2,3-cd) pyrene	3770	15	74	ug/kg	4900	ND	77	3-137	8	30	
Naphthalene	2290	15	74	ug/kg	4900	ND	47	0.1-117	5	30	
Phenanthrene	2650	15	74	ug/kg	4900	ND	54	10-122	3	30	
Pyrene	2390	15	74	ug/kg	4900	ND	49	10-128	14	30	
Surr: 2-Fluorobiphenyl	*1020*			*ug/kg*	*2450*		*42*	*0.1-109*			
Surr: Nitrobenzene-d5	*996*			*ug/kg*	*2450*		*41*	*0.1-107*			
Surr: Terphenyl-d14	*1060*			*ug/kg*	*2450*		*43*	*28-128*			

Volatile Organics by EPA Method 624 - Quality Control

Batch W5A0528 - EPA 624

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0528-BLK1)					Analyzed: 01/13/15 19:10						
1,1,1-Trichloroethane	ND	0.38	1.0	ug/l							

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Volatile Organics by EPA Method 624 - Quality Control

Batch W5A0528 - EPA 624

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0528-BLK1)				Analyzed: 01/13/15 19:10							
1,1,2,2-Tetrachloroethane	ND	0.18	1.0	ug/l							
1,1,2-Trichloroethane	ND	0.25	1.0	ug/l							
1,1-Dichloroethane	ND	0.21	1.0	ug/l							
1,1-Dichloroethene	ND	0.39	1.0	ug/l							
1,2-Dichloroethane	ND	0.24	1.0	ug/l							
1,2-Dichloropropane	ND	0.18	1.0	ug/l							
1,3-Dichloropropene, Total	ND	0.26	1.0	ug/l							
2-Chloroethyl vinyl ether	ND	0.28	5.0	ug/l							
Acrolein	ND	2.2	5.0	ug/l							
Acrylonitrile	ND	1.8	2.0	ug/l							
Benzene	ND	0.23	1.0	ug/l							
Bromodichloromethane	ND	0.28	1.0	ug/l							
Bromoform	ND	0.32	1.0	ug/l							
Bromomethane	ND	0.47	1.0	ug/l							
Carbon tetrachloride	ND	0.33	1.0	ug/l							
Chlorobenzene	ND	0.21	1.0	ug/l							
Chloroethane	ND	0.23	1.0	ug/l							
Chloroform	ND	0.25	1.0	ug/l							
Chloromethane	ND	0.26	1.0	ug/l							
cis-1,3-Dichloropropene	ND	0.22	1.0	ug/l							
Dibromochloromethane	ND	0.38	1.0	ug/l							
Dichlorodifluoromethane (Freon 12)	ND	0.44	1.0	ug/l							
Ethylbenzene	ND	0.17	1.0	ug/l							
m,p-Xylene	ND	0.70	1.0	ug/l							
m-Dichlorobenzene	ND	0.35	1.0	ug/l							
Methyl tert-butyl ether (MTBE)	ND	0.25	1.0	ug/l							
Methylene chloride	ND	0.25	1.0	ug/l							
o-Dichlorobenzene	ND	0.33	1.0	ug/l							
o-Xylene	ND	0.32	1.0	ug/l							
p-Dichlorobenzene	ND	0.37	1.0	ug/l							
Tetrachloroethene	ND	0.27	1.0	ug/l							
Toluene	ND	0.22	1.0	ug/l							
trans-1,2-Dichloroethene	ND	0.23	1.0	ug/l							
trans-1,3-Dichloropropene	ND	0.32	1.0	ug/l							
Trichloroethene	ND	0.37	1.0	ug/l							
Trichlorofluoromethane	ND	0.53	1.0	ug/l							
Vinyl chloride	ND	0.33	1.0	ug/l							
Surr: 1,2-Dichloroethane-d4	*48.5*			*ug/l*	*50.0*		*97*	*82-125*			
Surr: 4-Bromofluorobenzene	*49.3*			*ug/l*	*50.0*		*99*	*88-108*			

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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

Volatile Organics by EPA Method 624 - Quality Control

Batch W5A0528 - EPA 624

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0528-BLK1)					Analyzed: 01/13/15 19:10						
Surr: Toluene-d8	*50.6*			*ug/l*	*50.0*		*101*	*92-112*			
LCS (W5A0528-BS1)					Analyzed: 01/13/15 17:08						
1,1,1-Trichloroethane	39.6	0.38	1.0	ug/l	50.0		79	52-162			
1,1,2,2-Tetrachloroethane	47.0	0.18	1.0	ug/l	50.0		94	46-157			
1,1,2-Trichloroethane	47.1	0.25	1.0	ug/l	50.0		94	52-150			
1,1-Dichloroethane	43.9	0.21	1.0	ug/l	50.0		88	59-155			
1,1-Dichloroethene	43.8	0.39	1.0	ug/l	50.0		88	0.1-234			
1,2-Dichloroethane	40.4	0.24	1.0	ug/l	50.0		81	49-155			
1,2-Dichloropropane	43.8	0.18	1.0	ug/l	50.0		88	0.1-210			
2-Chloroethyl vinyl ether	39.6	0.28	5.0	ug/l	50.0		79	0.1-305			
Acrolein	33.1	2.2	5.0	ug/l	50.0		66	49-152			
Acrylonitrile	40.6	1.8	2.0	ug/l	50.0		81	74-127			
Benzene	49.1	0.23	1.0	ug/l	50.0		98	37-151			
Bromodichloromethane	43.8	0.28	1.0	ug/l	50.0		88	35-155			
Bromoform	45.1	0.32	1.0	ug/l	50.0		90	45-169			
Bromomethane	38.0	0.47	1.0	ug/l	50.0		76	0.1-242			
Carbon tetrachloride	39.3	0.33	1.0	ug/l	50.0		79	70-140			
Chlorobenzene	53.4	0.21	1.0	ug/l	50.0		107	37-160			
Chloroethane	39.2	0.23	1.0	ug/l	50.0		78	14-230			
Chloroform	41.6	0.25	1.0	ug/l	50.0		83	51-138			
Chloromethane	50.4	0.26	1.0	ug/l	50.0		101	0.1-273			
cis-1,3-Dichloropropene	41.3	0.22	1.0	ug/l	50.0		83	0.1-227			
Dibromochloromethane	42.3	0.38	1.0	ug/l	50.0		85	53-149			
Dichlorodifluoromethane (Freon 12)	46.3	0.44	1.0	ug/l	50.0		93	67-126			
Ethylbenzene	50.4	0.17	1.0	ug/l	50.0		101	37-162			
m,p-Xylene	49.1	0.70	1.0	ug/l	50.0		98	81-121			
m-Dichlorobenzene	48.2	0.35	1.0	ug/l	50.0		96	59-156			
Methyl tert-butyl ether (MTBE)	44.7	0.25	1.0	ug/l	50.0		89	80-128			
Methylene chloride	49.6	0.25	1.0	ug/l	50.0		99	0.1-221			
o-Dichlorobenzene	47.0	0.33	1.0	ug/l	50.0		94	18-190			
o-Xylene	48.2	0.32	1.0	ug/l	50.0		96	84-121			
p-Dichlorobenzene	48.8	0.37	1.0	ug/l	50.0		98	18-190			
Tetrachloroethene	46.1	0.27	1.0	ug/l	50.0		92	64-148			
Toluene	47.5	0.22	1.0	ug/l	50.0		95	47-150			
trans-1,2-Dichloroethene	48.5	0.23	1.0	ug/l	50.0		97	54-156			
trans-1,3-Dichloropropene	39.5	0.32	1.0	ug/l	50.0		79	17-183			
Trichloroethene	43.1	0.37	1.0	ug/l	50.0		86	71-157			
Trichlorofluoromethane	46.4	0.53	1.0	ug/l	50.0		93	17-181			
Vinyl chloride	43.4	0.33	1.0	ug/l	50.0		87	0.1-251			

Power Engineers, Inc.
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Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

Volatile Organics by EPA Method 624 - Quality Control

Batch W5A0528 - EPA 624

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS (W5A0528-BS1)					Analyzed: 01/13/15 17:08						
Surr: 1,2-Dichloroethane-d4	*46.1*			*ug/l*	*50.0*		*92*	*82-125*			
Surr: 4-Bromofluorobenzene	*54.2*			*ug/l*	*50.0*		*108*	*88-108*			
Surr: Toluene-d8	*49.6*			*ug/l*	*50.0*		*99*	*92-112*			
LCS Dup (W5A0528-BSD1)					Analyzed: 01/13/15 17:38						
1,1,1-Trichloroethane	45.9	0.38	1.0	ug/l	50.0		92	52-162	15	25	
1,1,2,2-Tetrachloroethane	46.9	0.18	1.0	ug/l	50.0		94	46-157	0.1	25	
1,1,2-Trichloroethane	48.9	0.25	1.0	ug/l	50.0		98	52-150	4	25	
1,1-Dichloroethane	48.0	0.21	1.0	ug/l	50.0		96	59-155	9	25	
1,1-Dichloroethene	63.5	0.39	1.0	ug/l	50.0		127	0.1-234	37	25	QR-BS
1,2-Dichloroethane	47.6	0.24	1.0	ug/l	50.0		95	49-155	16	25	
1,2-Dichloropropane	46.3	0.18	1.0	ug/l	50.0		93	0.1-210	6	25	
2-Chloroethyl vinyl ether	42.2	0.28	5.0	ug/l	50.0		84	0.1-305	6	25	
Acrolein	31.1	2.2	5.0	ug/l	50.0		62	49-152	6	25	
Acrylonitrile	44.6	1.8	2.0	ug/l	50.0		89	74-127	9	25	
Benzene	52.3	0.23	1.0	ug/l	50.0		105	37-151	6	25	
Bromodichloromethane	48.0	0.28	1.0	ug/l	50.0		96	35-155	9	25	
Bromoform	45.0	0.32	1.0	ug/l	50.0		90	45-169	0.2	25	
Bromomethane	49.3	0.47	1.0	ug/l	50.0		99	0.1-242	26	25	QR-BS
Carbon tetrachloride	45.4	0.33	1.0	ug/l	50.0		91	70-140	14	25	
Chlorobenzene	53.9	0.21	1.0	ug/l	50.0		108	37-160	0.9	25	
Chloroethane	51.2	0.23	1.0	ug/l	50.0		102	14-230	27	25	QR-BS
Chloroform	46.5	0.25	1.0	ug/l	50.0		93	51-138	11	25	
Chloromethane	57.3	0.26	1.0	ug/l	50.0		115	0.1-273	13	25	
cis-1,3-Dichloropropene	44.2	0.22	1.0	ug/l	50.0		88	0.1-227	7	25	
Dibromochloromethane	45.2	0.38	1.0	ug/l	50.0		90	53-149	7	25	
Dichlorodifluoromethane (Freon 12)	55.3	0.44	1.0	ug/l	50.0		111	67-126	18	25	
Ethylbenzene	51.8	0.17	1.0	ug/l	50.0		104	37-162	3	25	
m,p-Xylene	50.7	0.70	1.0	ug/l	50.0		101	81-121	3	25	
m-Dichlorobenzene	52.4	0.35	1.0	ug/l	50.0		105	59-156	8	25	
Methyl tert-butyl ether (MTBE)	50.4	0.25	1.0	ug/l	50.0		101	80-128	12	25	
Methylene chloride	47.8	0.25	1.0	ug/l	50.0		96	0.1-221	4	25	
o-Dichlorobenzene	52.1	0.33	1.0	ug/l	50.0		104	18-190	10	25	
o-Xylene	49.3	0.32	1.0	ug/l	50.0		99	84-121	2	25	
p-Dichlorobenzene	52.5	0.37	1.0	ug/l	50.0		105	18-190	7	25	
Tetrachloroethene	47.9	0.27	1.0	ug/l	50.0		96	64-148	4	25	
Toluene	50.8	0.22	1.0	ug/l	50.0		102	47-150	7	25	
trans-1,2-Dichloroethene	53.0	0.23	1.0	ug/l	50.0		106	54-156	9	25	
trans-1,3-Dichloropropene	44.3	0.32	1.0	ug/l	50.0		89	17-183	11	25	
Trichloroethene	47.4	0.37	1.0	ug/l	50.0		95	71-157	10	25	

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Date Received: 01/08/15 17:20
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Volatile Organics by EPA Method 624 - Quality Control

Batch W5A0528 - EPA 624

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS Dup (W5A0528-BSD1)					Analyzed: 01/13/15 17:38						
Trichlorofluoromethane	59.1	0.53	1.0	ug/l	50.0		118	17-181	24	25	
Vinyl chloride	55.5	0.33	1.0	ug/l	50.0		111	0.1-251	25	25	
Surr: 1,2-Dichloroethane-d4	*49.2*			*ug/l*	*50.0*		*98*	*82-125*			
Surr: 4-Bromofluorobenzene	*52.4*			*ug/l*	*50.0*		*105*	*88-108*			
Surr: Toluene-d8	*50.8*			*ug/l*	*50.0*		*102*	*92-112*			
Matrix Spike (W5A0528-MS1)		**Source: 5A08071-03**			Analyzed: 01/14/15 10:55						
1,1,1-Trichloroethane	44.2	0.38	1.0	ug/l	50.0	ND	88	52-162			
1,1,2,2-Tetrachloroethane	38.5	0.18	1.0	ug/l	50.0	ND	77	46-157			
1,1,2-Trichloroethane	52.9	0.25	1.0	ug/l	50.0	ND	106	52-150			
1,1-Dichloroethane	45.3	0.21	1.0	ug/l	50.0	ND	91	59-155			
1,1-Dichloroethene	41.8	0.39	1.0	ug/l	50.0	ND	84	0.1-234			
1,2-Dichloroethane	38.3	0.24	1.0	ug/l	50.0	ND	77	49-155			
1,2-Dichloropropane	41.7	0.18	1.0	ug/l	50.0	ND	83	0.1-210			
2-Chloroethyl vinyl ether	28.6	0.28	5.0	ug/l	50.0	ND	57	0.1-305			
Acrolein	131	2.2	5.0	ug/l	50.0	ND	262	5-170			MS-05
Acrylonitrile	33.8	1.8	2.0	ug/l	50.0	ND	68	59-133			
Benzene	50.4	0.23	1.0	ug/l	50.0	ND	101	37-151			
Bromodichloromethane	43.0	0.28	1.0	ug/l	50.0	ND	86	35-155			
Bromoform	49.4	0.32	1.0	ug/l	50.0	ND	99	45-169			
Bromomethane	34.6	0.47	1.0	ug/l	50.0	ND	69	0.1-242			
Carbon tetrachloride	45.5	0.33	1.0	ug/l	50.0	ND	91	70-140			
Chlorobenzene	60.3	0.21	1.0	ug/l	50.0	ND	121	37-160			
Chloroethane	26.5	0.23	1.0	ug/l	50.0	ND	53	14-230			
Chloroform	43.4	0.25	1.0	ug/l	50.0	ND	87	51-138			
Chloromethane	33.9	0.26	1.0	ug/l	50.0	ND	68	0.1-273			
cis-1,3-Dichloropropene	39.5	0.22	1.0	ug/l	50.0	ND	79	0.1-227			
Dibromochloromethane	42.3	0.38	1.0	ug/l	50.0	ND	85	53-149			
Dichlorodifluoromethane (Freon 12)	44.2	0.44	1.0	ug/l	50.0	ND	88	32-141			
Ethylbenzene	56.9	0.17	1.0	ug/l	50.0	ND	114	37-162			
m-Dichlorobenzene	56.7	0.35	1.0	ug/l	50.0	ND	113	59-156			
Methylene chloride	43.7	0.25	1.0	ug/l	50.0	ND	87	0.1-221			
o-Dichlorobenzene	54.6	0.33	1.0	ug/l	50.0	ND	109	18-190			
p-Dichlorobenzene	56.6	0.37	1.0	ug/l	50.0	ND	113	18-190			
Tetrachloroethene	55.8	0.27	1.0	ug/l	50.0	ND	112	64-148			
Toluene	51.4	0.22	1.0	ug/l	50.0	ND	103	47-150			
trans-1,2-Dichloroethene	50.4	0.23	1.0	ug/l	50.0	ND	101	54-156			
trans-1,3-Dichloropropene	37.5	0.32	1.0	ug/l	50.0	ND	75	17-183			
Trichloroethene	46.8	0.37	1.0	ug/l	50.0	ND	94	71-157			
Trichlorofluoromethane	46.9	0.53	1.0	ug/l	50.0	ND	94	17-181			

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

Volatile Organics by EPA Method 624 - Quality Control

Batch W5A0528 - EPA 624

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike (W5A0528-MS1)	**Source: 5A08071-03**				Analyzed: 01/14/15 10:55						
Vinyl chloride	30.9	0.33	1.0	ug/l	50.0	ND	62	0.1-251			
Surr: 1,2-Dichloroethane-d4	*44.0*			*ug/l*	*50.0*		*88*	*82-125*			
Surr: 4-Bromofluorobenzene	*56.6*			*ug/l*	*50.0*		*113*	*88-108*			*S-04*
Surr: Toluene-d8	*50.7*			*ug/l*	*50.0*		*101*	*92-112*			
Matrix Spike Dup (W5A0528-MSD1)	**Source: 5A08071-03**				Analyzed: 01/14/15 11:25						
1,1,1-Trichloroethane	42.1	0.38	1.0	ug/l	50.0	ND	84	52-162	5	25	
1,1,2,2-Tetrachloroethane	41.4	0.18	1.0	ug/l	50.0	ND	83	46-157	7	25	
1,1,2-Trichloroethane	53.6	0.25	1.0	ug/l	50.0	ND	107	52-150	1	25	
1,1-Dichloroethane	44.3	0.21	1.0	ug/l	50.0	ND	89	59-155	2	25	
1,1-Dichloroethene	44.4	0.39	1.0	ug/l	50.0	ND	89	0.1-234	6	25	
1,2-Dichloroethane	38.5	0.24	1.0	ug/l	50.0	ND	77	49-155	0.4	25	
1,2-Dichloropropane	42.0	0.18	1.0	ug/l	50.0	ND	84	0.1-210	0.8	25	
2-Chloroethyl vinyl ether	30.1	0.28	5.0	ug/l	50.0	ND	60	0.1-305	5	25	
Acrolein	102	2.2	5.0	ug/l	50.0	ND	204	5-170	25	25	MS-05
Acrylonitrile	35.1	1.8	2.0	ug/l	50.0	ND	70	59-133	4	25	
Benzene	48.6	0.23	1.0	ug/l	50.0	ND	97	37-151	4	25	
Bromodichloromethane	42.8	0.28	1.0	ug/l	50.0	ND	86	35-155	0.3	25	
Bromoform	50.5	0.32	1.0	ug/l	50.0	ND	101	45-169	2	25	
Bromomethane	36.0	0.47	1.0	ug/l	50.0	ND	72	0.1-242	4	25	
Carbon tetrachloride	43.7	0.33	1.0	ug/l	50.0	ND	87	70-140	4	25	
Chlorobenzene	59.0	0.21	1.0	ug/l	50.0	ND	118	37-160	2	25	
Chloroethane	28.0	0.23	1.0	ug/l	50.0	ND	56	14-230	5	25	
Chloroform	42.3	0.25	1.0	ug/l	50.0	ND	85	51-138	3	25	
Chloromethane	43.5	0.26	1.0	ug/l	50.0	ND	87	0.1-273	25	25	
cis-1,3-Dichloropropene	40.1	0.22	1.0	ug/l	50.0	ND	80	0.1-227	2	25	
Dibromochloromethane	43.5	0.38	1.0	ug/l	50.0	ND	87	53-149	3	25	
Dichlorodifluoromethane (Freon 12)	47.7	0.44	1.0	ug/l	50.0	ND	95	32-141	8	25	
Ethylbenzene	54.9	0.17	1.0	ug/l	50.0	ND	110	37-162	3	25	
m-Dichlorobenzene	58.4	0.35	1.0	ug/l	50.0	ND	117	59-156	3	25	
Methylene chloride	42.2	0.25	1.0	ug/l	50.0	ND	84	0.1-221	4	25	
o-Dichlorobenzene	57.3	0.33	1.0	ug/l	50.0	ND	115	18-190	5	25	
p-Dichlorobenzene	58.7	0.37	1.0	ug/l	50.0	ND	117	18-190	4	25	
Tetrachloroethene	52.0	0.27	1.0	ug/l	50.0	ND	104	64-148	7	25	
Toluene	48.9	0.22	1.0	ug/l	50.0	ND	98	47-150	5	25	
trans-1,2-Dichloroethene	49.3	0.23	1.0	ug/l	50.0	ND	99	54-156	2	25	
trans-1,3-Dichloropropene	39.0	0.32	1.0	ug/l	50.0	ND	78	17-183	4	25	
Trichloroethene	44.4	0.37	1.0	ug/l	50.0	ND	89	71-157	5	25	
Trichlorofluoromethane	48.6	0.53	1.0	ug/l	50.0	ND	97	17-181	4	25	
Vinyl chloride	35.8	0.33	1.0	ug/l	50.0	ND	72	0.1-251	15	25	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

Volatile Organics by EPA Method 624 - Quality Control

Batch W5A0528 - EPA 624

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike Dup (W5A0528-MSD1)	**Source: 5A08071-03**			Analyzed: 01/14/15 11:25							
Surr: 1,2-Dichloroethane-d4	*43.4*			*ug/l*	*50.0*		*87*	*82-125*			
Surr: 4-Bromofluorobenzene	*56.8*			*ug/l*	*50.0*		*114*	*88-108*			*S-04*
Surr: Toluene-d8	*50.6*			*ug/l*	*50.0*		*101*	*92-112*			

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/08/15 17:20
Date Reported: 03/09/15 12:32

Notes and Definitions

SeeAtt	See Attachment
S-04	The surrogate recovery for this sample is outside of established control limits due to possible sample matrix effect.
S_PTS	Analysis subcontracted to PTS Laboratories, Inc.
QR-BS	The RPD value for the BS/BSD (LCS/LCSD) was outside of QC acceptance limits however both recoveries were acceptable. The QC batch was accepted based on acceptable results for the recoveries of the BS (LCS) and BSD (LCSD).
QR-04	The RPD value for the MS/MSD was outside of QC acceptance limits however both recoveries were acceptable. The QC batch was accepted based on acceptable results for the recoveries and RPD for the LCS and LCSD.
QC-2	This QC sample was reanalyzed to complement samples that require re-analysis on different date. See analysis date.
O-14	This analysis was requested by the client after the holding time was exceeded.
O-12	The sample was originally analyzed within holding time. However, it was reanalyzed without dilution that exceeded the recommended holding time.
MS-05	The spike recovery and/or RPD were outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
M-02	Due to the nature of matrix interferences, sample was diluted prior to preparation. The MDL and MRL were raised due to the dilution.
J	Estimated conc. detected <MRL and >MDL.
ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reportable
Dil	Dilution
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Sub	Subcontracted analysis, original report available upon request
MDL	Method Detection Limit
MDA	Minimum Detectable Activity
MRL	Method Reporting Limit

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California Department of Health Services.

The Reporting Limit (RL) is referenced as the Laboratory's Practical Quantitation Limit (PQL) or the Detection Limit for Reporting Purposes (DLR).

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

CHAIN OF CUSTODY RECORD

5412065

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964
14859 East Clark Avenue : Industry : CA 91745
Tel 626-336-2139 ♦ Fax 626-336-2634 ♦ www.wecklabs.com

Page_____Of_____

CLIENT NAME: Power Engineers

PROJECT: Sylmar Cable Assessment

ADDRESS: 731 East Ball Rd. Ste.100 Anaheim, CA 92805

PHONE: 949-444-1002

FAX:

Email: Sjgruber@barnsmcd.com

PO#:

PROJECT MANAGER: Steve Gruber

Sampler: Gruber/VRby

ANALYSES REQUESTED

ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.	SVOC EPA 8270C	PCBs EPA 8082	Organics, Carbon EPA 9060m Metals EPA 6020A +Mercury EPA 7471A	Pesticides/Herbicides EPA 8081B/8151A	Particle Size ASTM D1140/D422					
	1/9/15	0900	Sed	Vault-3	3	X	X	X	X	X	X				
		0900	Sed	Vault-5		X	X	X	X	X	X				
		0900		Vault-8		X	X	X	X	X	X				
		0900		Vault-11		X	X	X	X	X	X				
		0900		Vault-21		X	X	X	X	X	X				
		1405		Cab-East-1		X	X	X	X	X	X				
		1330		Cab-East-2		X	X	X	X	X	X				
		1245		Cab-East-3		X	X	X	X	X	X				
		1200		Cab-East-4		X	X	X	X	X	X				
		1100		Cab-East-5		X	X	X	X	X	X				
		1105		Cab-East-5-Dup		X	X	X	X	X	X				

Special Handling

- ☐ Same Day Rush 150%
- ☐ 24 Hour Rush 100%
- ☐ 4-5 Day Rush 75%
- ☐ Rush Extraction 50%
- ☒ 10-15 Business Days
- ☐ QA/QC Package

Charges will apply for weekends and holidays

Method of Shipment

COMMENTS: See Attachment from Hai Van Nguyen

RELINQUISHED BY		DATE / TIME	RECEIVED BY		DATE / TIME
SIGNATURE	PRINT NAME		SIGNATURE	PRINT NAME	
[signature]	Steve Gruber	1/12/15 1125	[signature]	Adrian Talby	1/14/15 1125
SIGNATURE	PRINT NAME		SIGNATURE	PRINT NAME	
SIGNATURE	PRINT NAME		SIGNATURE	PRINT NAME	

SAMPLE CONDITION:

Actual Temperature: 2.8

Received On Ice	(Y) / N
Preserved	Y / (N)
Evidence Seals Present	Y / (N)
Container Attacked	Y / (N)
Preserved at Lab	Y / (N)

SAMPLE TYPE CODE:
AQ=Aqueous
NA= Non Aqueous
SL = Sludge
DW = Drinking Water
WW = Waste Water
RW = Rain Water
GW = Ground Water
SO = Soil
SW = Solid Waste
OL = Oil
OT = Other Matrix

PRESCHEDULED RUSH ANALYSES WILL TAKE PRIORITY OVER UNSCHEDULED RUSH REQUESTS. CLIENT AGREES TO TERMS AND CONDITIONS (SEE BACK OF THIS FORM).

SPECIAL REQUIREMENTS / BILLING INFORMATION

DISTRIBUTION: WHITE & CANARY - For Laboratory PINK - For Client

CERTIFICATE OF ANALYSIS

Client:	Power Engineers, Inc. 731 East Ball Rd., Ste. 100 Anaheim CA, 92805	**Report Date:**	03/09/15 12:40
		Received Date:	01/12/15 11:25
		Turn Around:	Normal
Attention:	Court Morgan	**Client Project:**	Sylmar Cable Assessment
Phone:	(714) 507-2764		
Fax:	(714) 507-2799		
Work Order(s):	5A12065		

NELAP #04229CA ELAP#1132 NEVADA #CA211 HAWAII LACSD #10143

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. Weck Laboratories, Inc. certifies that the test results meet all NELAC requirements unless noted in the case narrative. This analytical report is confidential and is only intended for the use of Weck Laboratories, Inc. and its client. This report contains the Chain of Custody document, which is an integral part of it, and can only be reproduced in full with the authorization of Weck Laboratories, Inc.

Dear Court Morgan :

Enclosed are the results of analyses for samples received 01/12/15 11:25 with the Chain of Custody document. The samples were received in good condition, at 2.8 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

Case Narrative:

Reviewed by:

Hai Van Nguyen
Project Manager

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Sampled by:	Sample Comments	Lab ID	Matrix	Date Sampled
Vault-3	Graber/CRG		5A12065-01	Solid	01/09/15 09:00
Vault-5	Graber/CRG		5A12065-02	Solid	01/09/15 09:00
Vault-8	Graber/CRG		5A12065-03	Solid	01/09/15 09:00
Vault-11	Graber/CRG		5A12065-04	Solid	01/09/15 09:00
Vault-21	Graber/CRG		5A12065-05	Solid	01/09/15 09:00
Cab-Exst-1	Graber/CRG		5A12065-06	Solid	01/09/15 14:05
Cab-Exst-2	Graber/CRG		5A12065-07	Solid	01/09/15 13:30
Cab-Exst-3	Graber/CRG		5A12065-08	Solid	01/09/15 12:45
Cab-Exst-4	Graber/CRG		5A12065-09	Solid	01/09/15 12:00
Cab-Exst-5	Graber/CRG		5A12065-10	Solid	01/09/15 11:00
Cab-Exst-5-Dup	Graber/CRG		5A12065-11	Solid	01/09/15 11:00

ANALYSES

Chlorinated Pesticides and/or PCBs

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Polychlorinated Biphenyls by EPA Method 8082

Semivolatile Organics - Low Level by GC/MS SIM Mode

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-01 Vault-3

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	**0.77**	0.74	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12, J
4,4'-DDE	**3.7**	1.2	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12, J
4,4'-DDT	ND	0.85	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Aldrin	ND	1.8	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
alpha-BHC	ND	2.3	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
beta-BHC	ND	1.2	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Chlordane (tech)	ND	16	77	ug/kg	1	02/26/15 01:01	M-02, O-12
delta-BHC	ND	0.88	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Dieldrin	ND	1.2	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Endosulfan I	ND	0.88	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Endosulfan II	ND	0.49	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Endosulfan sulfate	ND	0.85	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Endrin	ND	2.1	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Endrin aldehyde	ND	1.1	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
gamma-BHC (Lindane)	ND	2.0	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Heptachlor	ND	2.1	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Heptachlor epoxide	ND	1.4	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Methoxychlor	ND	0.85	3.9	ug/kg	1	02/26/15 01:01	M-02, O-12
Toxaphene	ND	13	120	ug/kg	1	02/26/15 01:01	M-02, O-12
Surr: Decachlorobiphenyl	*77 %*	Conc:*149*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*44 %*	Conc:*84.8*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**3.2**	0.20	0.50	mg/kg	1	01/21/15 18:27	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/21/15 18:27	
Chromium, Total	**16**	0.23	1.0	mg/kg	1	01/21/15 18:27	
Copper, Total	**4.3**	0.29	0.50	mg/kg	1	01/21/15 18:27	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 18:27	
Zinc, Total	**27**	2.3	5.0	mg/kg	1	01/21/15 18:27	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**5.4**	0.21	0.50	mg/kg	1	01/21/15 18:27	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-01 Vault-3

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	11	0.45	1.0	mg/kg	1	01/21/15 18:27	

Method: EPA 7471A Batch: W5A0914 Prepared: 01/20/15 16:22 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	49	0.72	9.0	ug/kg	1	01/23/15 16:11	

Organic Carbon in Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M Batch: W5A0758 Prepared: 01/16/15 14:15 Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	7590	36.0	200	mg/kg dry wt	1	01/16/15 15:01	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 Batch: W5A0683 Prepared: 01/15/15 12:18 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	26	77	ug/kg	1	02/26/15 01:01	M-02, O-12
Aroclor 1221	ND	46	77	ug/kg	1	02/26/15 01:01	M-02, O-12
Aroclor 1232	ND	32	77	ug/kg	1	02/26/15 01:01	M-02, O-12
Aroclor 1242	ND	37	77	ug/kg	1	02/26/15 01:01	M-02, O-12
Aroclor 1248	ND	59	77	ug/kg	1	02/26/15 01:01	M-02, O-12
Aroclor 1254	ND	40	77	ug/kg	1	02/26/15 01:01	M-02, O-12
Aroclor 1260	ND	6.6	77	ug/kg	1	02/26/15 01:01	M-02, O-12
Surr: Decachlorobiphenyl	*80 %*	Conc:*155*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*46 %*	Conc:*88.3*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	12	61	ug/kg	1	01/15/15 16:34	
2-Methylnaphthalene	ND	12	61	ug/kg	1	01/15/15 16:34	
Acenaphthene	ND	12	61	ug/kg	1	01/15/15 16:34	
Acenaphthylene	ND	12	61	ug/kg	1	01/15/15 16:34	
Anthracene	ND	12	61	ug/kg	1	01/15/15 16:34	
Benzo (a) anthracene	ND	12	61	ug/kg	1	01/15/15 16:34	
Benzo (a) pyrene	ND	12	61	ug/kg	1	01/15/15 16:34	
Benzo (b) fluoranthene	ND	12	61	ug/kg	1	01/15/15 16:34	
Benzo (g,h,i) perylene	ND	12	61	ug/kg	1	01/15/15 16:34	
Benzo (k) fluoranthene	ND	12	61	ug/kg	1	01/15/15 16:34	
Chrysene	ND	12	61	ug/kg	1	01/15/15 16:34	
Dibenzo (a,h) anthracene	ND	12	61	ug/kg	1	01/15/15 16:34	
Fluoranthene	ND	12	61	ug/kg	1	01/15/15 16:34	

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-01 Vault-3

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	12	61	ug/kg	1	01/15/15 16:34	
Indeno (1,2,3-cd) pyrene	ND	12	61	ug/kg	1	01/15/15 16:34	
Naphthalene	ND	12	61	ug/kg	1	01/15/15 16:34	
Phenanthrene	ND	12	61	ug/kg	1	01/15/15 16:34	
Pyrene	ND	12	61	ug/kg	1	01/15/15 16:34	
Surr: 2-Fluorobiphenyl	*37 %*	Conc:*755*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*39 %*	Conc:*798*	*0.1-107*	%			
Surr: Terphenyl-d14	*47 %*	Conc:*942*	*28-128*	%			

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-02 Vault-5

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.78	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
4,4'-DDE	**3.1**	1.2	4.0	ug/kg	1	02/26/15 01:31	J, M-02, O-12
4,4'-DDT	ND	0.89	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
Aldrin	ND	1.9	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
alpha-BHC	ND	2.4	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
beta-BHC	ND	1.3	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
Chlordane (tech)	ND	17	81	ug/kg	1	02/26/15 01:31	M-02, O-12
delta-BHC	ND	0.92	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
Dieldrin	ND	1.2	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
Endosulfan I	ND	0.92	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
Endosulfan II	ND	0.52	4.0	ug/kg	1	02/26/15 01:31	O-12, M-02
Endosulfan sulfate	ND	0.89	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
Endrin	ND	2.2	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
Endrin aldehyde	ND	1.1	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
gamma-BHC (Lindane)	ND	2.1	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
Heptachlor	ND	2.2	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
Heptachlor epoxide	ND	1.5	4.0	ug/kg	1	02/26/15 01:31	O-12, M-02
Methoxychlor	ND	0.89	4.0	ug/kg	1	02/26/15 01:31	M-02, O-12
Toxaphene	ND	14	120	ug/kg	1	02/26/15 01:31	M-02, O-12
Surr: Decachlorobiphenyl	*80 %*	Conc:*161*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*46 %*	Conc:*92.5*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**5.0**	0.20	0.50	mg/kg	1	01/21/15 18:32	
Cadmium, Total	**0.23**	0.20	0.20	mg/kg	1	01/21/15 18:32	
Chromium, Total	**19**	0.23	1.0	mg/kg	1	01/21/15 18:32	
Copper, Total	**5.6**	0.29	0.50	mg/kg	1	01/21/15 18:32	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 18:32	
Zinc, Total	**32**	2.3	5.0	mg/kg	1	01/21/15 18:32	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**7.2**	0.21	0.50	mg/kg	1	01/21/15 18:32	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-02 **Vault-5**

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0726 | Prepared: 01/16/15 10:44 | Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**14**	0.45	1.0	mg/kg	1	01/21/15 18:32	

Method: EPA 7471A | Batch: W5A0914 | Prepared: 01/20/15 16:22 | Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**62**	0.80	10	ug/kg	1	01/23/15 16:11	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0758 | Prepared: 01/16/15 14:15 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**5910**	36.0	200	mg/kg dry wt	1	01/16/15 15:01	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0683 | Prepared: 01/15/15 12:18 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	28	81	ug/kg	1	02/26/15 01:31	M-02, O-12
Aroclor 1221	ND	49	81	ug/kg	1	02/26/15 01:31	M-02, O-12
Aroclor 1232	ND	34	81	ug/kg	1	02/26/15 01:31	M-02, O-12
Aroclor 1242	ND	39	81	ug/kg	1	02/26/15 01:31	M-02, O-12
Aroclor 1248	ND	62	81	ug/kg	1	02/26/15 01:31	M-02, O-12
Aroclor 1254	ND	42	81	ug/kg	1	02/26/15 01:31	O-12, M-02
Aroclor 1260	ND	7.0	81	ug/kg	1	02/26/15 01:31	M-02, O-12
Surr: Decachlorobiphenyl	*83 %*	Conc:*168*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*46 %*	Conc:*92.3*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	12	58	ug/kg	1	01/15/15 17:08	
2-Methylnaphthalene	ND	12	58	ug/kg	1	01/15/15 17:08	
Acenaphthene	ND	12	58	ug/kg	1	01/15/15 17:08	
Acenaphthylene	ND	12	58	ug/kg	1	01/15/15 17:08	
Anthracene	ND	12	58	ug/kg	1	01/15/15 17:08	
Benzo (a) anthracene	ND	12	58	ug/kg	1	01/15/15 17:08	
Benzo (a) pyrene	ND	12	58	ug/kg	1	01/15/15 17:08	
Benzo (b) fluoranthene	ND	12	58	ug/kg	1	01/15/15 17:08	
Benzo (g,h,i) perylene	ND	12	58	ug/kg	1	01/15/15 17:08	
Benzo (k) fluoranthene	ND	12	58	ug/kg	1	01/15/15 17:08	
Chrysene	ND	12	58	ug/kg	1	01/15/15 17:08	
Dibenzo (a,h) anthracene	ND	12	58	ug/kg	1	01/15/15 17:08	
Fluoranthene	ND	12	58	ug/kg	1	01/15/15 17:08	

Power Engineers, Inc.
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Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-02 Vault-5

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	12	58	ug/kg	1	01/15/15 17:08	
Indeno (1,2,3-cd) pyrene	ND	12	58	ug/kg	1	01/15/15 17:08	
Naphthalene	ND	12	58	ug/kg	1	01/15/15 17:08	
Phenanthrene	ND	12	58	ug/kg	1	01/15/15 17:08	
Pyrene	ND	12	58	ug/kg	1	01/15/15 17:08	
Surr: 2-Fluorobiphenyl	*38 %*	Conc:*740*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*41 %*	Conc:*789*	*0.1-107*	%			
Surr: Terphenyl-d14	*48 %*	Conc:*935*	*28-128*	%			

Power Engineers, Inc.
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Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-03 Vault-8

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.79	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
4,4'-DDE	**2.8**	1.3	4.1	ug/kg	1	02/26/15 02:02	J, M-02, O-12
4,4'-DDT	ND	0.91	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
Aldrin	ND	1.9	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
alpha-BHC	ND	2.4	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
beta-BHC	ND	1.3	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
Chlordane (tech)	ND	17	82	ug/kg	1	02/26/15 02:02	M-02, O-12
delta-BHC	ND	0.94	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
Dieldrin	ND	1.2	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
Endosulfan I	ND	0.94	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
Endosulfan II	ND	0.53	4.1	ug/kg	1	02/26/15 02:02	O-12, M-02
Endosulfan sulfate	ND	0.91	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
Endrin	ND	2.2	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
Endrin aldehyde	ND	1.2	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
gamma-BHC (Lindane)	ND	2.2	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
Heptachlor	ND	2.2	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
Heptachlor epoxide	ND	1.5	4.1	ug/kg	1	02/26/15 02:02	O-12, M-02
Methoxychlor	ND	0.91	4.1	ug/kg	1	02/26/15 02:02	M-02, O-12
Toxaphene	ND	14	120	ug/kg	1	02/26/15 02:02	M-02, O-12
Surr: Decachlorobiphenyl	*68 %*	Conc:*139*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*41 %*	Conc:*85.1*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**3.0**	0.20	0.50	mg/kg	1	01/21/15 18:38	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/21/15 18:38	
Chromium, Total	**16**	0.23	1.0	mg/kg	1	01/21/15 18:38	
Copper, Total	**3.9**	0.29	0.50	mg/kg	1	01/21/15 18:38	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 18:38	
Zinc, Total	**29**	2.3	5.0	mg/kg	1	01/21/15 18:38	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**5.1**	0.21	0.50	mg/kg	1	01/21/15 18:38	

Power Engineers, Inc.
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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-03 Vault-8

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**11**	0.45	1.0	mg/kg	1	01/21/15 18:38	

Method: EPA 7471A Batch: W5A0914 Prepared: 01/20/15 16:22 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**36**	0.80	10	ug/kg	1	01/23/15 16:11	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M Batch: W5A0837 Prepared: 01/19/15 14:12 Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**3430**	36.0	200	mg/kg dry wt	1	01/19/15 15:03	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 Batch: W5A0683 Prepared: 01/15/15 12:18 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	28	82	ug/kg	1	02/26/15 02:02	M-02, O-12
Aroclor 1221	ND	49	82	ug/kg	1	02/26/15 02:02	M-02, O-12
Aroclor 1232	ND	35	82	ug/kg	1	02/26/15 02:02	M-02, O-12
Aroclor 1242	ND	40	82	ug/kg	1	02/26/15 02:02	M-02, O-12
Aroclor 1248	ND	63	82	ug/kg	1	02/26/15 02:02	M-02, O-12
Aroclor 1254	ND	43	82	ug/kg	1	02/26/15 02:02	O-12, M-02
Aroclor 1260	ND	7.1	82	ug/kg	1	02/26/15 02:02	M-02, O-12
Surr: Decachlorobiphenyl	*70 %*	Conc:*145*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*42 %*	Conc:*85.7*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	12	60	ug/kg	1	01/15/15 17:42	
2-Methylnaphthalene	ND	12	60	ug/kg	1	01/15/15 17:42	
Acenaphthene	ND	12	60	ug/kg	1	01/15/15 17:42	
Acenaphthylene	ND	12	60	ug/kg	1	01/15/15 17:42	
Anthracene	ND	12	60	ug/kg	1	01/15/15 17:42	
Benzo (a) anthracene	ND	12	60	ug/kg	1	01/15/15 17:42	
Benzo (a) pyrene	ND	12	60	ug/kg	1	01/15/15 17:42	
Benzo (b) fluoranthene	ND	12	60	ug/kg	1	01/15/15 17:42	
Benzo (g,h,i) perylene	ND	12	60	ug/kg	1	01/15/15 17:42	
Benzo (k) fluoranthene	ND	12	60	ug/kg	1	01/15/15 17:42	
Chrysene	ND	12	60	ug/kg	1	01/15/15 17:42	
Dibenzo (a,h) anthracene	ND	12	60	ug/kg	1	01/15/15 17:42	
Fluoranthene	ND	12	60	ug/kg	1	01/15/15 17:42	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-03 Vault-8

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	12	60	ug/kg	1	01/15/15 17:42	
Indeno (1,2,3-cd) pyrene	ND	12	60	ug/kg	1	01/15/15 17:42	
Naphthalene	ND	12	60	ug/kg	1	01/15/15 17:42	
Phenanthrene	ND	12	60	ug/kg	1	01/15/15 17:42	
Pyrene	ND	12	60	ug/kg	1	01/15/15 17:42	
Surr: 2-Fluorobiphenyl	*39 %*	Conc:*780*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*45 %*	Conc:*894*	*0.1-107*	%			
Surr: Terphenyl-d14	*58 %*	Conc:*1160*	*28-128*	%			

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-04 Vault-11

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	**0.82**	0.75	3.9	ug/kg	1	02/26/15 05:36	J, M-02, O-12
4,4'-DDE	**4.3**	1.2	3.9	ug/kg	1	02/26/15 05:36	O-12, M-02
4,4'-DDT	ND	0.86	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Aldrin	ND	1.8	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
alpha-BHC	ND	2.3	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
beta-BHC	ND	1.2	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Chlordane (tech)	ND	16	78	ug/kg	1	02/26/15 05:36	M-02, O-12
delta-BHC	ND	0.89	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Dieldrin	ND	1.2	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Endosulfan I	ND	0.89	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Endosulfan II	ND	0.50	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Endosulfan sulfate	ND	0.86	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Endrin	ND	2.1	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Endrin aldehyde	ND	1.1	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
gamma-BHC (Lindane)	ND	2.1	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Heptachlor	ND	2.1	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Heptachlor epoxide	ND	1.4	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Methoxychlor	ND	0.86	3.9	ug/kg	1	02/26/15 05:36	M-02, O-12
Toxaphene	ND	13	120	ug/kg	1	02/26/15 05:36	M-02, O-12
Surr: Decachlorobiphenyl	*85 %*	Conc:*167*	*21-125*	%			*O-12, M-02*
Surr: Tetrachloro-meta-xylene	*50 %*	Conc:*98.8*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**4.3**	0.20	0.50	mg/kg	1	01/21/15 18:44	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/21/15 18:44	
Chromium, Total	**17**	0.23	1.0	mg/kg	1	01/21/15 18:44	
Copper, Total	**7.5**	0.29	0.50	mg/kg	1	01/21/15 18:44	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 18:44	
Zinc, Total	**29**	2.3	5.0	mg/kg	1	01/21/15 18:44	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**6.4**	0.21	0.50	mg/kg	1	01/21/15 18:44	

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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-04 **Vault-11**

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0726 | Prepared: 01/16/15 10:44 | Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**12**	0.45	1.0	mg/kg	1	01/21/15 18:44	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**93**	0.73	9.1	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0758 | Prepared: 01/16/15 14:15 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**4560**	36.0	200	mg/kg dry wt	1	01/16/15 15:01	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0683 | Prepared: 01/15/15 12:18 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	27	78	ug/kg	1	02/26/15 05:36	M-02, O-12
Aroclor 1221	ND	47	78	ug/kg	1	02/26/15 05:36	M-02, O-12
Aroclor 1232	ND	33	78	ug/kg	1	02/26/15 05:36	M-02, O-12
Aroclor 1242	ND	38	78	ug/kg	1	02/26/15 05:36	M-02, O-12
Aroclor 1248	ND	60	78	ug/kg	1	02/26/15 05:36	M-02, O-12
Aroclor 1254	ND	41	78	ug/kg	1	02/26/15 05:36	M-02, O-12
Aroclor 1260	ND	6.7	78	ug/kg	1	02/26/15 05:36	M-02, O-12
Surr: Decachlorobiphenyl	*89 %*	Conc:*174*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*52 %*	Conc:*102*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	13	67	ug/kg	1	01/15/15 18:16	
2-Methylnaphthalene	ND	13	67	ug/kg	1	01/15/15 18:16	
Acenaphthene	ND	13	67	ug/kg	1	01/15/15 18:16	
Acenaphthylene	ND	13	67	ug/kg	1	01/15/15 18:16	
Anthracene	ND	13	67	ug/kg	1	01/15/15 18:16	
Benzo (a) anthracene	ND	13	67	ug/kg	1	01/15/15 18:16	
Benzo (a) pyrene	ND	13	67	ug/kg	1	01/15/15 18:16	
Benzo (b) fluoranthene	ND	13	67	ug/kg	1	01/15/15 18:16	
Benzo (g,h,i) perylene	ND	13	67	ug/kg	1	01/15/15 18:16	
Benzo (k) fluoranthene	ND	13	67	ug/kg	1	01/15/15 18:16	
Chrysene	ND	13	67	ug/kg	1	01/15/15 18:16	
Dibenzo (a,h) anthracene	ND	13	67	ug/kg	1	01/15/15 18:16	
Fluoranthene	ND	13	67	ug/kg	1	01/15/15 18:16	

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5A12065-04 Vault-11

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	13	67	ug/kg	1	01/15/15 18:16	
Indeno (1,2,3-cd) pyrene	ND	13	67	ug/kg	1	01/15/15 18:16	
Naphthalene	ND	13	67	ug/kg	1	01/15/15 18:16	
Phenanthrene	ND	13	67	ug/kg	1	01/15/15 18:16	
Pyrene	ND	13	67	ug/kg	1	01/15/15 18:16	
Surr: 2-Fluorobiphenyl	*51 %*	Conc:*1130*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*55 %*	Conc:*1240*	*0.1-107*	%			
Surr: Terphenyl-d14	*59 %*	Conc:*1310*	*28-128*	%			

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Date Reported: 03/09/15 12:40

5A12065-05 **Vault-21**

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.88	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
4,4'-DDE	**3.0**	1.4	4.6	ug/kg	1	02/26/15 06:07	J, M-02, O-12
4,4'-DDT	ND	1.0	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Aldrin	ND	2.1	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
alpha-BHC	ND	2.7	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
beta-BHC	ND	1.4	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Chlordane (tech)	ND	19	91	ug/kg	1	02/26/15 06:07	M-02, O-12
delta-BHC	ND	1.0	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Dieldrin	ND	1.4	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Endosulfan I	ND	1.0	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Endosulfan II	ND	0.58	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Endosulfan sulfate	ND	1.0	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Endrin	ND	2.4	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Endrin aldehyde	ND	1.3	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
gamma-BHC (Lindane)	ND	2.4	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Heptachlor	ND	2.5	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Heptachlor epoxide	ND	1.7	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Methoxychlor	ND	1.0	4.6	ug/kg	1	02/26/15 06:07	M-02, O-12
Toxaphene	ND	16	140	ug/kg	1	02/26/15 06:07	M-02, O-12
Surr: Decachlorobiphenyl	*84 %*	Conc:*191*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*41 %*	Conc:*92.7*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**6.6**	0.20	0.50	mg/kg	1	01/21/15 19:17	
Cadmium, Total	**0.25**	0.20	0.20	mg/kg	1	01/21/15 19:17	
Chromium, Total	**16**	0.23	1.0	mg/kg	1	01/21/15 19:17	
Copper, Total	**4.9**	0.29	0.50	mg/kg	1	01/21/15 19:17	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 19:17	
Zinc, Total	**26**	2.3	5.0	mg/kg	1	01/21/15 19:17	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**6.7**	0.21	0.50	mg/kg	1	01/21/15 19:17	

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Date Reported: 03/09/15 12:40

5A12065-05 Vault-21

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0726 | Prepared: 01/16/15 10:44 | Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**11**	0.45	1.0	mg/kg	1	01/21/15 19:17	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**53**	0.80	10	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0758 | Prepared: 01/16/15 14:15 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**10300**	36.0	200	mg/kg dry wt	1	01/16/15 15:01	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0683 | Prepared: 01/15/15 12:18 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	31	91	ug/kg	1	02/26/15 06:07	M-02, O-12
Aroclor 1221	ND	55	91	ug/kg	1	02/26/15 06:07	M-02, O-12
Aroclor 1232	ND	38	91	ug/kg	1	02/26/15 06:07	M-02, O-12
Aroclor 1242	ND	44	91	ug/kg	1	02/26/15 06:07	M-02, O-12
Aroclor 1248	ND	69	91	ug/kg	1	02/26/15 06:07	M-02, O-12
Aroclor 1254	ND	47	91	ug/kg	1	02/26/15 06:07	M-02, O-12
Aroclor 1260	ND	7.9	91	ug/kg	1	02/26/15 06:07	M-02, O-12
Surr: Decachlorobiphenyl	*87 %*	Conc:*199*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*40 %*	Conc:*92.0*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	12	59	ug/kg	1	01/15/15 18:50	
2-Methylnaphthalene	ND	12	59	ug/kg	1	01/15/15 18:50	
Acenaphthene	ND	12	59	ug/kg	1	01/15/15 18:50	
Acenaphthylene	ND	12	59	ug/kg	1	01/15/15 18:50	
Anthracene	ND	12	59	ug/kg	1	01/15/15 18:50	
Benzo (a) anthracene	ND	12	59	ug/kg	1	01/15/15 18:50	
Benzo (a) pyrene	ND	12	59	ug/kg	1	01/15/15 18:50	
Benzo (b) fluoranthene	ND	12	59	ug/kg	1	01/15/15 18:50	
Benzo (g,h,i) perylene	ND	12	59	ug/kg	1	01/15/15 18:50	
Benzo (k) fluoranthene	ND	12	59	ug/kg	1	01/15/15 18:50	
Chrysene	ND	12	59	ug/kg	1	01/15/15 18:50	
Dibenzo (a,h) anthracene	ND	12	59	ug/kg	1	01/15/15 18:50	
Fluoranthene	ND	12	59	ug/kg	1	01/15/15 18:50	

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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-05 Vault-21

Sampled: 01/09/15 09:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	12	59	ug/kg	1	01/15/15 18:50	
Indeno (1,2,3-cd) pyrene	ND	12	59	ug/kg	1	01/15/15 18:50	
Naphthalene	ND	12	59	ug/kg	1	01/15/15 18:50	
Phenanthrene	ND	12	59	ug/kg	1	01/15/15 18:50	
Pyrene	ND	12	59	ug/kg	1	01/15/15 18:50	
Surr: 2-Fluorobiphenyl	*51 %*	Conc:*993*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*54 %*	Conc:*1060*	*0.1-107*	%			
Surr: Terphenyl-d14	*59 %*	Conc:*1150*	*28-128*	%			

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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-06 Cab-Exst-1

Sampled: 01/09/15 14:05 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.87	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
4,4'-DDE	ND	1.4	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
4,4'-DDT	ND	1.0	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
Aldrin	ND	2.1	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
alpha-BHC	ND	2.6	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
beta-BHC	ND	1.4	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
Chlordane (tech)	ND	18	90	ug/kg	1	02/26/15 06:37	M-02, O-12
delta-BHC	ND	1.0	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
Dieldrin	ND	1.4	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
Endosulfan I	ND	1.0	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
Endosulfan II	ND	0.58	4.5	ug/kg	1	02/26/15 06:37	O-12, M-02
Endosulfan sulfate	ND	1.0	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
Endrin	ND	2.4	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
Endrin aldehyde	ND	1.3	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
gamma-BHC (Lindane)	ND	2.4	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
Heptachlor	ND	2.5	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
Heptachlor epoxide	ND	1.6	4.5	ug/kg	1	02/26/15 06:37	O-12, M-02
Methoxychlor	ND	1.0	4.5	ug/kg	1	02/26/15 06:37	M-02, O-12
Toxaphene	ND	16	140	ug/kg	1	02/26/15 06:37	M-02, O-12
Surr: Decachlorobiphenyl	*76 %*	Conc:*173*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*46 %*	Conc:*105*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**3.7**	0.20	0.50	mg/kg	1	01/21/15 19:23	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/21/15 19:23	
Chromium, Total	**8.1**	0.23	1.0	mg/kg	1	01/21/15 19:23	
Copper, Total	**2.5**	0.29	0.50	mg/kg	1	01/21/15 19:23	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 19:23	
Zinc, Total	**13**	2.3	5.0	mg/kg	1	01/21/15 19:23	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**1.9**	0.21	0.50	mg/kg	1	01/21/15 19:23	

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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-06 Cab-Exst-1

Sampled: 01/09/15 14:05 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0726 | Prepared: 01/16/15 10:44 | Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**5.8**	0.45	1.0	mg/kg	1	01/21/15 19:23	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**10**	0.80	10	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0758 | Prepared: 01/16/15 14:15 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**475**	36.0	200	mg/kg dry wt	1	01/16/15 15:01	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0683 | Prepared: 01/15/15 12:18 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	31	90	ug/kg	1	02/26/15 06:37	M-02, O-12
Aroclor 1221	ND	54	90	ug/kg	1	02/26/15 06:37	M-02, O-12
Aroclor 1232	ND	38	90	ug/kg	1	02/26/15 06:37	M-02, O-12
Aroclor 1242	ND	43	90	ug/kg	1	02/26/15 06:37	M-02, O-12
Aroclor 1248	ND	69	90	ug/kg	1	02/26/15 06:37	M-02, O-12
Aroclor 1254	ND	47	90	ug/kg	1	02/26/15 06:37	M-02, O-12
Aroclor 1260	ND	7.8	90	ug/kg	1	02/26/15 06:37	M-02, O-12
Surr: Decachlorobiphenyl	*79 %*	Conc:*179*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*47 %*	Conc:*105*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	10	51	ug/kg	1	01/15/15 19:24	
2-Methylnaphthalene	ND	10	51	ug/kg	1	01/15/15 19:24	
Acenaphthene	ND	10	51	ug/kg	1	01/15/15 19:24	
Acenaphthylene	ND	10	51	ug/kg	1	01/15/15 19:24	
Anthracene	ND	10	51	ug/kg	1	01/15/15 19:24	
Benzo (a) anthracene	**23**	10	51	ug/kg	1	01/15/15 19:24	J
Benzo (a) pyrene	ND	10	51	ug/kg	1	01/15/15 19:24	
Benzo (b) fluoranthene	ND	10	51	ug/kg	1	01/15/15 19:24	
Benzo (g,h,i) perylene	ND	10	51	ug/kg	1	01/15/15 19:24	
Benzo (k) fluoranthene	ND	10	51	ug/kg	1	01/15/15 19:24	
Chrysene	**12**	10	51	ug/kg	1	01/15/15 19:24	J
Dibenzo (a,h) anthracene	ND	10	51	ug/kg	1	01/15/15 19:24	
Fluoranthene	**30**	10	51	ug/kg	1	01/15/15 19:24	J

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Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-06 Cab-Exst-1

Sampled: 01/09/15 14:05 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	10	51	ug/kg	1	01/15/15 19:24	
Indeno (1,2,3-cd) pyrene	ND	10	51	ug/kg	1	01/15/15 19:24	
Naphthalene	ND	10	51	ug/kg	1	01/15/15 19:24	
Phenanthrene	**25**	10	51	ug/kg	1	01/15/15 19:24	J
Pyrene	**22**	10	51	ug/kg	1	01/15/15 19:24	J
Surr: 2-Fluorobiphenyl	*51 %*	Conc:*878*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*54 %*	Conc:*929*	*0.1-107*	%			
Surr: Terphenyl-d14	*52 %*	Conc:*888*	*28-128*	%			

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Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-07 Cab-Exst-2

Sampled: 01/09/15 13:30 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.83	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
4,4'-DDE	ND	1.3	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
4,4'-DDT	ND	0.95	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Aldrin	ND	2.0	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
alpha-BHC	ND	2.5	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
beta-BHC	ND	1.4	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Chlordane (tech)	ND	18	86	ug/kg	1	02/26/15 07:08	M-02, O-12
delta-BHC	ND	0.98	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Dieldrin	ND	1.3	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Endosulfan I	ND	0.98	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Endosulfan II	ND	0.55	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Endosulfan sulfate	ND	0.95	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Endrin	ND	2.3	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Endrin aldehyde	ND	1.2	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
gamma-BHC (Lindane)	ND	2.3	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Heptachlor	ND	2.3	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Heptachlor epoxide	ND	1.6	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Methoxychlor	ND	0.95	4.3	ug/kg	1	02/26/15 07:08	M-02, O-12
Toxaphene	ND	15	130	ug/kg	1	02/26/15 07:08	M-02, O-12
Surr: Decachlorobiphenyl	*82 %*	Conc:*176*	*21-125*	%			*O-12, M-02*
Surr: Tetrachloro-meta-xylene	*43 %*	Conc:*92.6*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**2.2**	0.20	0.50	mg/kg	1	01/21/15 19:29	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/21/15 19:29	
Chromium, Total	**18**	0.23	1.0	mg/kg	1	01/21/15 19:29	
Copper, Total	**4.4**	0.29	0.50	mg/kg	1	01/21/15 19:29	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 19:29	
Zinc, Total	**31**	2.3	5.0	mg/kg	1	01/21/15 19:29	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**4.5**	0.21	0.50	mg/kg	1	01/21/15 19:29	

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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-07 Cab-Exst-2

Sampled: 01/09/15 13:30 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0726 | Prepared: 01/16/15 10:44 | Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**12**	0.45	1.0	mg/kg	1	01/21/15 19:29	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**27**	0.80	10	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0758 | Prepared: 01/16/15 14:15 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**1730**	36.0	200	mg/kg dry wt	1	01/16/15 15:01	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0683 | Prepared: 01/15/15 12:18 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	29	86	ug/kg	1	02/26/15 07:08	M-02, O-12
Aroclor 1221	ND	52	86	ug/kg	1	02/26/15 07:08	M-02, O-12
Aroclor 1232	ND	36	86	ug/kg	1	02/26/15 07:08	M-02, O-12
Aroclor 1242	ND	41	86	ug/kg	1	02/26/15 07:08	M-02, O-12
Aroclor 1248	ND	66	86	ug/kg	1	02/26/15 07:08	M-02, O-12
Aroclor 1254	ND	45	86	ug/kg	1	02/26/15 07:08	M-02, O-12
Aroclor 1260	ND	7.4	86	ug/kg	1	02/26/15 07:08	M-02, O-12
Surr: Decachlorobiphenyl	*85 %*	Conc:*183*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*44 %*	Conc:*95.0*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	11	54	ug/kg	1	01/15/15 19:58	
2-Methylnaphthalene	ND	11	54	ug/kg	1	01/15/15 19:58	
Acenaphthene	ND	11	54	ug/kg	1	01/15/15 19:58	
Acenaphthylene	ND	11	54	ug/kg	1	01/15/15 19:58	
Anthracene	ND	11	54	ug/kg	1	01/15/15 19:58	
Benzo (a) anthracene	ND	11	54	ug/kg	1	01/15/15 19:58	
Benzo (a) pyrene	ND	11	54	ug/kg	1	01/15/15 19:58	
Benzo (b) fluoranthene	ND	11	54	ug/kg	1	01/15/15 19:58	
Benzo (g,h,i) perylene	ND	11	54	ug/kg	1	01/15/15 19:58	
Benzo (k) fluoranthene	ND	11	54	ug/kg	1	01/15/15 19:58	
Chrysene	ND	11	54	ug/kg	1	01/15/15 19:58	
Dibenzo (a,h) anthracene	ND	11	54	ug/kg	1	01/15/15 19:58	
Fluoranthene	ND	11	54	ug/kg	1	01/15/15 19:58	

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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-07 Cab-Exst-2

Sampled: 01/09/15 13:30 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	11	54	ug/kg	1	01/15/15 19:58	
Indeno (1,2,3-cd) pyrene	ND	11	54	ug/kg	1	01/15/15 19:58	
Naphthalene	ND	11	54	ug/kg	1	01/15/15 19:58	
Phenanthrene	ND	11	54	ug/kg	1	01/15/15 19:58	
Pyrene	ND	11	54	ug/kg	1	01/15/15 19:58	
Surr: 2-Fluorobiphenyl	*49 %*	Conc:*871*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*57 %*	Conc:*1020*	*0.1-107*	%			
Surr: Terphenyl-d14	*55 %*	Conc:*988*	*28-128*	%			

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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-08 Cab-Exst-3

Sampled: 01/09/15 12:45 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.80	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
4,4'-DDE	**1.3**	1.3	4.1	ug/kg	1	02/26/15 07:39	J, M-02, O-12
4,4'-DDT	ND	0.91	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Aldrin	ND	1.9	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
alpha-BHC	ND	2.4	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
beta-BHC	ND	1.3	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Chlordane (tech)	ND	17	83	ug/kg	1	02/26/15 07:39	M-02, O-12
delta-BHC	ND	0.95	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Dieldrin	ND	1.2	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Endosulfan I	ND	0.95	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Endosulfan II	ND	0.53	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Endosulfan sulfate	ND	0.91	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Endrin	ND	2.2	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Endrin aldehyde	ND	1.2	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
gamma-BHC (Lindane)	ND	2.2	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Heptachlor	ND	2.3	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Heptachlor epoxide	ND	1.5	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Methoxychlor	ND	0.91	4.1	ug/kg	1	02/26/15 07:39	M-02, O-12
Toxaphene	ND	14	120	ug/kg	1	02/26/15 07:39	M-02, O-12
Surr: Decachlorobiphenyl	*78 %*	Conc:*162*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*45 %*	Conc:*93.6*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**2.6**	0.20	0.50	mg/kg	1	01/21/15 19:34	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/21/15 19:34	
Chromium, Total	**17**	0.23	1.0	mg/kg	1	01/21/15 19:34	
Copper, Total	**4.2**	0.29	0.50	mg/kg	1	01/21/15 19:34	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 19:34	
Zinc, Total	**25**	2.3	5.0	mg/kg	1	01/21/15 19:34	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**4.1**	0.21	0.50	mg/kg	1	01/21/15 19:34	

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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-08 Cab-Exst-3

Sampled: 01/09/15 12:45 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0726 | Prepared: 01/16/15 10:44 | Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**12**	0.45	1.0	mg/kg	1	01/21/15 19:34	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**65**	0.80	10	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0758 | Prepared: 01/16/15 14:15 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**1840**	36.0	200	mg/kg dry wt	1	01/16/15 15:01	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0683 | Prepared: 01/15/15 12:18 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	28	83	ug/kg	1	02/26/15 07:39	M-02, O-12
Aroclor 1221	ND	50	83	ug/kg	1	02/26/15 07:39	M-02, O-12
Aroclor 1232	ND	35	83	ug/kg	1	02/26/15 07:39	M-02, O-12
Aroclor 1242	ND	40	83	ug/kg	1	02/26/15 07:39	M-02, O-12
Aroclor 1248	ND	63	83	ug/kg	1	02/26/15 07:39	M-02, O-12
Aroclor 1254	ND	43	83	ug/kg	1	02/26/15 07:39	O-12, M-02
Aroclor 1260	ND	7.1	83	ug/kg	1	02/26/15 07:39	M-02, O-12
Surr: Decachlorobiphenyl	*81 %*	Conc:*168*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*46 %*	Conc:*95.3*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	14	68	ug/kg	1	01/15/15 20:32	
2-Methylnaphthalene	ND	14	68	ug/kg	1	01/15/15 20:32	
Acenaphthene	ND	14	68	ug/kg	1	01/15/15 20:32	
Acenaphthylene	ND	14	68	ug/kg	1	01/15/15 20:32	
Anthracene	ND	14	68	ug/kg	1	01/15/15 20:32	
Benzo (a) anthracene	ND	14	68	ug/kg	1	01/15/15 20:32	
Benzo (a) pyrene	ND	14	68	ug/kg	1	01/15/15 20:32	
Benzo (b) fluoranthene	ND	14	68	ug/kg	1	01/15/15 20:32	
Benzo (g,h,i) perylene	ND	14	68	ug/kg	1	01/15/15 20:32	
Benzo (k) fluoranthene	ND	14	68	ug/kg	1	01/15/15 20:32	
Chrysene	ND	14	68	ug/kg	1	01/15/15 20:32	
Dibenzo (a,h) anthracene	ND	14	68	ug/kg	1	01/15/15 20:32	
Fluoranthene	ND	14	68	ug/kg	1	01/15/15 20:32	

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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-08 Cab-Exst-3

Sampled: 01/09/15 12:45 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	14	68	ug/kg	1	01/15/15 20:32	
Indeno (1,2,3-cd) pyrene	ND	14	68	ug/kg	1	01/15/15 20:32	
Naphthalene	ND	14	68	ug/kg	1	01/15/15 20:32	
Phenanthrene	ND	14	68	ug/kg	1	01/15/15 20:32	
Pyrene	ND	14	68	ug/kg	1	01/15/15 20:32	
Surr: 2-Fluorobiphenyl	*56 %*	Conc:*1260*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*62 %*	Conc:*1400*	*0.1-107*	%			
Surr: Terphenyl-d14	*61 %*	Conc:*1390*	*28-128*	%			

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Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-09 Cab-Exst-4

Sampled: 01/09/15 12:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.78	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
4,4'-DDE	ND	1.3	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
4,4'-DDT	ND	0.90	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Aldrin	ND	1.9	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
alpha-BHC	ND	2.4	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
beta-BHC	ND	1.3	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Chlordane (tech)	ND	17	82	ug/kg	1	02/26/15 08:09	M-02, O-12
delta-BHC	ND	0.93	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Dieldrin	ND	1.2	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Endosulfan I	ND	0.93	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Endosulfan II	ND	0.52	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Endosulfan sulfate	ND	0.90	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Endrin	ND	2.2	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Endrin aldehyde	ND	1.1	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
gamma-BHC (Lindane)	ND	2.1	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Heptachlor	ND	2.2	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Heptachlor epoxide	ND	1.5	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Methoxychlor	ND	0.90	4.1	ug/kg	1	02/26/15 08:09	M-02, O-12
Toxaphene	ND	14	120	ug/kg	1	02/26/15 08:09	M-02, O-12
Surr: Decachlorobiphenyl	*77 %*	Conc:*157*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*43 %*	Conc:*87.8*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**2.7**	0.20	0.50	mg/kg	1	01/21/15 19:40	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/21/15 19:40	
Chromium, Total	**17**	0.23	1.0	mg/kg	1	01/21/15 19:40	
Copper, Total	**4.0**	0.29	0.50	mg/kg	1	01/21/15 19:40	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 19:40	
Zinc, Total	**26**	2.3	5.0	mg/kg	1	01/21/15 19:40	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**4.6**	0.21	0.50	mg/kg	1	01/21/15 19:40	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-09 Cab-Exst-4

Sampled: 01/09/15 12:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0726 | Prepared: 01/16/15 10:44 | Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**11**	0.45	1.0	mg/kg	1	01/21/15 19:40	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**180**	0.80	10	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0758 | Prepared: 01/16/15 14:15 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**2410**	36.0	200	mg/kg dry wt	1	01/16/15 15:01	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0683 | Prepared: 01/15/15 12:18 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	28	82	ug/kg	1	02/26/15 08:09	M-02, O-12
Aroclor 1221	ND	49	82	ug/kg	1	02/26/15 08:09	M-02, O-12
Aroclor 1232	ND	34	82	ug/kg	1	02/26/15 08:09	M-02, O-12
Aroclor 1242	ND	39	82	ug/kg	1	02/26/15 08:09	M-02, O-12
Aroclor 1248	ND	62	82	ug/kg	1	02/26/15 08:09	M-02, O-12
Aroclor 1254	ND	42	82	ug/kg	1	02/26/15 08:09	M-02, O-12
Aroclor 1260	ND	7.0	82	ug/kg	1	02/26/15 08:09	M-02, O-12
Surr: Decachlorobiphenyl	*79 %*	Conc:*162*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*44 %*	Conc:*89.7*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	11	53	ug/kg	1	01/15/15 21:07	
2-Methylnaphthalene	ND	11	53	ug/kg	1	01/15/15 21:07	
Acenaphthene	ND	11	53	ug/kg	1	01/15/15 21:07	
Acenaphthylene	ND	11	53	ug/kg	1	01/15/15 21:07	
Anthracene	ND	11	53	ug/kg	1	01/15/15 21:07	
Benzo (a) anthracene	ND	11	53	ug/kg	1	01/15/15 21:07	
Benzo (a) pyrene	ND	11	53	ug/kg	1	01/15/15 21:07	
Benzo (b) fluoranthene	ND	11	53	ug/kg	1	01/15/15 21:07	
Benzo (g,h,i) perylene	ND	11	53	ug/kg	1	01/15/15 21:07	
Benzo (k) fluoranthene	ND	11	53	ug/kg	1	01/15/15 21:07	
Chrysene	ND	11	53	ug/kg	1	01/15/15 21:07	
Dibenzo (a,h) anthracene	ND	11	53	ug/kg	1	01/15/15 21:07	
Fluoranthene	ND	11	53	ug/kg	1	01/15/15 21:07	

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Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-09 Cab-Exst-4

Sampled: 01/09/15 12:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	11	53	ug/kg	1	01/15/15 21:07	
Indeno (1,2,3-cd) pyrene	ND	11	53	ug/kg	1	01/15/15 21:07	
Naphthalene	ND	11	53	ug/kg	1	01/15/15 21:07	
Phenanthrene	ND	11	53	ug/kg	1	01/15/15 21:07	
Pyrene	ND	11	53	ug/kg	1	01/15/15 21:07	
Surr: 2-Fluorobiphenyl	*58 %*	Conc:*1030*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*60 %*	Conc:*1080*	*0.1-107*	%			
Surr: Terphenyl-d14	*58 %*	Conc:*1030*	*28-128*	%			

Power Engineers, Inc.
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Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-10 Cab-Exst-5

Sampled: 01/09/15 11:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.85	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
4,4'-DDE	ND	1.4	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
4,4'-DDT	ND	0.98	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Aldrin	ND	2.1	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
alpha-BHC	ND	2.6	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
beta-BHC	ND	1.4	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Chlordane (tech)	ND	18	89	ug/kg	1	02/26/15 08:40	M-02, O-12
delta-BHC	ND	1.0	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Dieldrin	ND	1.3	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Endosulfan I	ND	1.0	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Endosulfan II	ND	0.57	4.4	ug/kg	1	02/26/15 08:40	O-12, M-02
Endosulfan sulfate	ND	0.98	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Endrin	ND	2.4	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Endrin aldehyde	ND	1.2	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
gamma-BHC (Lindane)	ND	2.3	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Heptachlor	ND	2.4	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Heptachlor epoxide	ND	1.6	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Methoxychlor	ND	0.98	4.4	ug/kg	1	02/26/15 08:40	M-02, O-12
Toxaphene	ND	15	130	ug/kg	1	02/26/15 08:40	M-02, O-12
Surr: Decachlorobiphenyl	*78 %*	Conc:*173*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*38 %*	Conc:*84.1*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**2.6**	0.20	0.50	mg/kg	1	01/21/15 19:45	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/21/15 19:45	
Chromium, Total	**17**	0.23	1.0	mg/kg	1	01/21/15 19:45	
Copper, Total	**4.0**	0.29	0.50	mg/kg	1	01/21/15 19:45	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 19:45	
Zinc, Total	**26**	2.3	5.0	mg/kg	1	01/21/15 19:45	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**5.1**	0.21	0.50	mg/kg	1	01/21/15 19:45	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-10 Cab-Exst-5

Sampled: 01/09/15 11:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B | Batch: W5A0726 | Prepared: 01/16/15 10:44 | Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	12	0.45	1.0	mg/kg	1	01/21/15 19:45	

Method: EPA 7471A | Batch: W5A0911 | Prepared: 01/20/15 16:20 | Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	32	0.73	9.1	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M | Batch: W5A0758 | Prepared: 01/16/15 14:15 | Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	1640	36.0	200	mg/kg dry wt	1	01/16/15 15:01	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 | Batch: W5A0683 | Prepared: 01/15/15 12:18 | Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	30	89	ug/kg	1	02/26/15 08:40	M-02, O-12
Aroclor 1221	ND	53	89	ug/kg	1	02/26/15 08:40	M-02, O-12
Aroclor 1232	ND	37	89	ug/kg	1	02/26/15 08:40	M-02, O-12
Aroclor 1242	ND	43	89	ug/kg	1	02/26/15 08:40	M-02, O-12
Aroclor 1248	ND	68	89	ug/kg	1	02/26/15 08:40	M-02, O-12
Aroclor 1254	ND	46	89	ug/kg	1	02/26/15 08:40	M-02, O-12
Aroclor 1260	ND	7.6	89	ug/kg	1	02/26/15 08:40	M-02, O-12
Surr: Decachlorobiphenyl	*80 %*	Conc:*178*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*37 %*	Conc:*81.1*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM | Batch: W5A0527 | Prepared: 01/13/15 13:55 | Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	13	64	ug/kg	1	01/15/15 21:42	
2-Methylnaphthalene	ND	13	64	ug/kg	1	01/15/15 21:42	
Acenaphthene	ND	13	64	ug/kg	1	01/15/15 21:42	
Acenaphthylene	ND	13	64	ug/kg	1	01/15/15 21:42	
Anthracene	ND	13	64	ug/kg	1	01/15/15 21:42	
Benzo (a) anthracene	ND	13	64	ug/kg	1	01/15/15 21:42	
Benzo (a) pyrene	ND	13	64	ug/kg	1	01/15/15 21:42	
Benzo (b) fluoranthene	ND	13	64	ug/kg	1	01/15/15 21:42	
Benzo (g,h,i) perylene	ND	13	64	ug/kg	1	01/15/15 21:42	
Benzo (k) fluoranthene	ND	13	64	ug/kg	1	01/15/15 21:42	
Chrysene	ND	13	64	ug/kg	1	01/15/15 21:42	
Dibenzo (a,h) anthracene	ND	13	64	ug/kg	1	01/15/15 21:42	
Fluoranthene	ND	13	64	ug/kg	1	01/15/15 21:42	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-10 Cab-Exst-5

Sampled: 01/09/15 11:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	13	64	ug/kg	1	01/15/15 21:42	
Indeno (1,2,3-cd) pyrene	ND	13	64	ug/kg	1	01/15/15 21:42	
Naphthalene	ND	13	64	ug/kg	1	01/15/15 21:42	
Phenanthrene	ND	13	64	ug/kg	1	01/15/15 21:42	
Pyrene	ND	13	64	ug/kg	1	01/15/15 21:42	
Surr: 2-Fluorobiphenyl	*50 %*	Conc:*1080*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*53 %*	Conc:*1140*	*0.1-107*	%			
Surr: Terphenyl-d14	*56 %*	Conc:*1210*	*28-128*	%			

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-11 Cab-Exst-5-Dup

Sampled: 01/09/15 11:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Chlorinated Pesticides and/or PCBs

Method: EPA 8081A Batch: W5A0682 Prepared: 01/15/15 12:16 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
4,4'-DDD	ND	0.77	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
4,4'-DDE	**2.2**	1.2	4.0	ug/kg	1	02/26/15 09:11	J, M-02, O-12
4,4'-DDT	ND	0.88	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Aldrin	ND	1.9	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
alpha-BHC	ND	2.3	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
beta-BHC	ND	1.3	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Chlordane (tech)	ND	16	80	ug/kg	1	02/26/15 09:11	M-02, O-12
delta-BHC	ND	0.91	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Dieldrin	ND	1.2	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Endosulfan I	ND	0.91	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Endosulfan II	ND	0.51	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Endosulfan sulfate	ND	0.88	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Endrin	ND	2.1	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Endrin aldehyde	ND	1.1	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
gamma-BHC (Lindane)	ND	2.1	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Heptachlor	ND	2.2	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Heptachlor epoxide	ND	1.5	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Methoxychlor	ND	0.88	4.0	ug/kg	1	02/26/15 09:11	M-02, O-12
Toxaphene	ND	14	120	ug/kg	1	02/26/15 09:11	M-02, O-12
Surr: Decachlorobiphenyl	*81 %*	Conc:*162*	*21-125*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*45 %*	Conc:*89.1*	*18-112*	%			*M-02, O-12*

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: ASTM D2862 Batch: W5C0473 Prepared: 02/02/15 12:22 Analyst: [Department]

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Particle Size Distribution	**See Attachment**		% by Weight	1	02/02/15 12:22	S_PTS

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020A Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Arsenic, Total	**2.7**	0.20	0.50	mg/kg	1	01/21/15 19:51	
Cadmium, Total	ND	0.20	0.20	mg/kg	1	01/21/15 19:51	
Chromium, Total	**17**	0.23	1.0	mg/kg	1	01/21/15 19:51	
Copper, Total	**5.1**	0.29	0.50	mg/kg	1	01/21/15 19:51	
Silver, Total	ND	0.30	0.50	mg/kg	1	01/21/15 19:51	
Zinc, Total	**29**	2.3	5.0	mg/kg	1	01/21/15 19:51	

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Lead, Total	**5.4**	0.21	0.50	mg/kg	1	01/21/15 19:51	

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731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-11 Cab-Exst-5-Dup

Sampled: 01/09/15 11:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods

Method: EPA 6020B Batch: W5A0726 Prepared: 01/16/15 10:44 Analyst: Anand Panchal

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Nickel, Total	**12**	0.45	1.0	mg/kg	1	01/21/15 19:51	

Method: EPA 7471A Batch: W5A0911 Prepared: 01/20/15 16:20 Analyst: Steven Andrew Martinez

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Mercury, Total	**35**	0.80	10	ug/kg	1	01/26/15 12:25	

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis

Method: EPA 9060M Batch: W5A0758 Prepared: 01/16/15 14:15 Analyst: Jose L. Pazzi

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Total Organic Carbon (TOC)	**1660**	36.0	200	mg/kg dry wt	1	01/16/15 15:01	

Polychlorinated Biphenyls by EPA Method 8082

Method: EPA 8082 Batch: W5A0683 Prepared: 01/15/15 12:18 Analyst: Maxwell Wang

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Aroclor 1016	ND	27	80	ug/kg	1	02/26/15 09:11	M-02, O-12
Aroclor 1221	ND	48	80	ug/kg	1	02/26/15 09:11	M-02, O-12
Aroclor 1232	ND	34	80	ug/kg	1	02/26/15 09:11	M-02, O-12
Aroclor 1242	ND	38	80	ug/kg	1	02/26/15 09:11	M-02, O-12
Aroclor 1248	ND	**61**	80	ug/kg	1	02/26/15 09:11	M-02, O-12
Aroclor 1254	ND	42	80	ug/kg	1	02/26/15 09:11	O-12, M-02
Aroclor 1260	ND	6.9	80	ug/kg	1	02/26/15 09:11	M-02, O-12
Surr: Decachlorobiphenyl	*84 %*	Conc:*168*	*18-131*	%			*M-02, O-12*
Surr: Tetrachloro-meta-xylene	*44 %*	Conc:*88.6*	*21-119*	%			*M-02, O-12*

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
1-Methylnaphthalene	ND	13	67	ug/kg	1	01/15/15 22:16	
2-Methylnaphthalene	ND	13	67	ug/kg	1	01/15/15 22:16	
Acenaphthene	ND	13	67	ug/kg	1	01/15/15 22:16	
Acenaphthylene	ND	13	67	ug/kg	1	01/15/15 22:16	
Anthracene	ND	13	67	ug/kg	1	01/15/15 22:16	
Benzo (a) anthracene	ND	13	67	ug/kg	1	01/15/15 22:16	
Benzo (a) pyrene	ND	13	67	ug/kg	1	01/15/15 22:16	
Benzo (b) fluoranthene	ND	13	67	ug/kg	1	01/15/15 22:16	
Benzo (g,h,i) perylene	ND	13	67	ug/kg	1	01/15/15 22:16	
Benzo (k) fluoranthene	ND	13	67	ug/kg	1	01/15/15 22:16	
Chrysene	ND	13	67	ug/kg	1	01/15/15 22:16	
Dibenzo (a,h) anthracene	ND	13	67	ug/kg	1	01/15/15 22:16	
Fluoranthene	ND	13	67	ug/kg	1	01/15/15 22:16	

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

5A12065-11 Cab-Exst-5-Dup

Sampled: 01/09/15 11:00 **Sampled By:** Graber/CRG **Matrix:** Solid

Semivolatile Organics - Low Level by GC/MS SIM Mode

Method: EPA 8270C SIM Batch: W5A0527 Prepared: 01/13/15 13:55 Analyst: Armando Bielma

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Fluorene	ND	13	67	ug/kg	1	01/15/15 22:16	
Indeno (1,2,3-cd) pyrene	ND	13	67	ug/kg	1	01/15/15 22:16	
Naphthalene	ND	13	67	ug/kg	1	01/15/15 22:16	
Phenanthrene	ND	13	67	ug/kg	1	01/15/15 22:16	
Pyrene	ND	13	67	ug/kg	1	01/15/15 22:16	
Surr: 2-Fluorobiphenyl	*51 %*	Conc:*1150*	*0.1-109*	%			
Surr: Nitrobenzene-d5	*55 %*	Conc:*1230*	*0.1-107*	%			
Surr: Terphenyl-d14	*71 %*	Conc:*1580*	*28-128*	%			

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QUALITY CONTROL SECTION

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Date Reported: 03/09/15 12:40

Chlorinated Pesticides and/or PCBs - Quality Control

Batch W5A0682 - EPA 8081A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0682-BLK1)				Analyzed: 01/23/15 23:33							
4,4'-DDD	ND	0.48	2.5	ug/kg							
4,4'-DDE	ND	0.77	2.5	ug/kg							
4,4'-DDT	ND	0.55	2.5	ug/kg							
Aldrin	ND	1.2	2.5	ug/kg							
alpha-BHC	ND	1.5	2.5	ug/kg							
beta-BHC	ND	0.79	2.5	ug/kg							
Chlordane (tech)	ND	10	50	ug/kg							
delta-BHC	ND	0.57	2.5	ug/kg							
Dieldrin	ND	0.75	2.5	ug/kg							
Endosulfan I	ND	0.57	2.5	ug/kg							
Endosulfan II	ND	0.32	2.5	ug/kg							
Endosulfan sulfate	ND	0.55	2.5	ug/kg							
Endrin	ND	1.3	2.5	ug/kg							
Endrin aldehyde	ND	0.70	2.5	ug/kg							
gamma-BHC (Lindane)	ND	1.3	2.5	ug/kg							
Heptachlor	ND	1.4	2.5	ug/kg							
Heptachlor epoxide	ND	0.91	2.5	ug/kg							
Methoxychlor	ND	0.55	2.5	ug/kg							
Toxaphene	ND	8.6	75	ug/kg							
Surr: Decachlorobiphenyl	*20.5*			*ug/kg*	*25.0*		*82*	*21-125*			
Surr: Tetrachloro-meta-xylene	*17.7*			*ug/kg*	*25.0*		*71*	*18-112*			
Blank (W5A0682-BLK2)				Analyzed: 02/25/15 20:55							
4,4'-DDD	ND	0.096	0.50	ug/kg							QC-2
4,4'-DDE	ND	0.15	0.50	ug/kg							QC-2
4,4'-DDT	ND	0.11	0.50	ug/kg							QC-2
Aldrin	ND	0.23	0.50	ug/kg							QC-2
alpha-BHC	ND	0.29	0.50	ug/kg							QC-2
beta-BHC	ND	0.16	0.50	ug/kg							QC-2
Chlordane (tech)	ND	2.0	10	ug/kg							QC-2
delta-BHC	ND	0.11	0.50	ug/kg							QC-2
Dieldrin	ND	0.15	0.50	ug/kg							QC-2
Endosulfan I	ND	0.11	0.50	ug/kg							QC-2
Endosulfan II	ND	0.064	0.50	ug/kg							QC-2
Endosulfan sulfate	ND	0.11	0.50	ug/kg							QC-2
Endrin	ND	0.27	0.50	ug/kg							QC-2
Endrin aldehyde	ND	0.14	0.50	ug/kg							QC-2
gamma-BHC (Lindane)	ND	0.26	0.50	ug/kg							QC-2
Heptachlor	ND	0.27	0.50	ug/kg							QC-2
Heptachlor epoxide	ND	0.18	0.50	ug/kg							QC-2

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Chlorinated Pesticides and/or PCBs - Quality Control

Batch W5A0682 - EPA 8081A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0682-BLK2)					Analyzed: 02/25/15 20:55						
Methoxychlor	ND	0.11	0.50	ug/kg							QC-2
Toxaphene	ND	1.7	15	ug/kg							QC-2
Surr: Decachlorobiphenyl	*18.3*			*ug/kg*	*25.0*		*73*	*21-125*			QC-2
Surr: Tetrachloro-meta-xylene	*14.3*			*ug/kg*	*25.0*		57	*18-112*			QC-2
LCS (W5A0682-BS1)					Analyzed: 01/24/15 00:04						
4,4'-DDD	23.0	0.48	2.5	ug/kg	25.0		92	48-126			
4,4'-DDE	22.3	0.77	2.5	ug/kg	25.0		89	48-121			
4,4'-DDT	25.3	0.55	2.5	ug/kg	25.0		101	45-146			
Aldrin	19.5	1.2	2.5	ug/kg	25.0		78	57-137			
alpha-BHC	19.9	1.5	2.5	ug/kg	25.0		80	64-131			
beta-BHC	22.6	0.79	2.5	ug/kg	25.0		91	48-126			
delta-BHC	21.4	0.57	2.5	ug/kg	25.0		85	30-124			
Dieldrin	21.4	0.75	2.5	ug/kg	25.0		85	49-123			
Endosulfan I	15.4	0.57	2.5	ug/kg	25.0		61	14-101			
Endosulfan II	19.0	0.32	2.5	ug/kg	25.0		76	33-146			
Endosulfan sulfate	27.1	0.55	2.5	ug/kg	25.0		109	33-146			
Endrin	23.1	1.3	2.5	ug/kg	25.0		92	39-144			
Endrin aldehyde	16.1	0.70	2.5	ug/kg	25.0		64	23-104			
gamma-BHC (Lindane)	20.5	1.3	2.5	ug/kg	25.0		82	43-114			
Heptachlor	21.0	1.4	2.5	ug/kg	25.0		84	48-125			
Heptachlor epoxide	20.2	0.91	2.5	ug/kg	25.0		81	47-121			
Methoxychlor	28.7	0.55	2.5	ug/kg	25.0		115	47-157			
Surr: Decachlorobiphenyl	*21.4*			*ug/kg*	*25.0*		*86*	*21-125*			
Surr: Tetrachloro-meta-xylene	*17.4*			*ug/kg*	*25.0*		*69*	*18-112*			
LCS (W5A0682-BS2)					Analyzed: 02/25/15 21:26						
4,4'-DDD	19.1	0.48	2.5	ug/kg	25.0		77	48-126			QC-2
4,4'-DDE	18.4	0.77	2.5	ug/kg	25.0		74	48-121			QC-2
4,4'-DDT	20.2	0.55	2.5	ug/kg	25.0		81	45-146			QC-2
Aldrin	16.4	1.2	2.5	ug/kg	25.0		66	57-137			QC-2
alpha-BHC	16.6	1.5	2.5	ug/kg	25.0		66	64-131			QC-2
beta-BHC	19.5	0.79	2.5	ug/kg	25.0		78	48-126			QC-2
delta-BHC	19.1	0.57	2.5	ug/kg	25.0		76	30-124			QC-2
Dieldrin	18.2	0.75	2.5	ug/kg	25.0		73	49-123			QC-2
Endosulfan I	13.0	0.57	2.5	ug/kg	25.0		52	14-101			QC-2
Endosulfan II	16.7	0.32	2.5	ug/kg	25.0		67	33-146			QC-2
Endosulfan sulfate	25.1	0.55	2.5	ug/kg	25.0		100	33-146			QC-2
Endrin	19.9	1.3	2.5	ug/kg	25.0		79	39-144			QC-2
Endrin aldehyde	18.5	0.70	2.5	ug/kg	25.0		74	23-104			QC-2
gamma-BHC (Lindane)	17.1	1.3	2.5	ug/kg	25.0		68	43-114			QC-2
Heptachlor	17.6	1.4	2.5	ug/kg	25.0		70	48-125			QC-2

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Chlorinated Pesticides and/or PCBs - Quality Control

Batch W5A0682 - EPA 8081A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS (W5A0682-BS2)					Analyzed: 02/25/15 21:26						
Heptachlor epoxide	17.2	0.91	2.5	ug/kg	25.0		69	47-121			QC-2
Methoxychlor	25.8	0.55	2.5	ug/kg	25.0		103	47-157			QC-2
Surr: Decachlorobiphenyl	*19.8*			*ug/kg*	*25.0*		*79*	*21-125*			QC-2
Surr: Tetrachloro-meta-xylene	*14.1*			*ug/kg*	*25.0*		*56*	*18-112*			QC-2
Matrix Spike (W5A0682-MS1)		**Source: 5A12065-01**			Analyzed: 01/24/15 04:40						
4,4'-DDD	225	4.6	24	ug/kg	240	0.766	93	21-119			M-02
4,4'-DDE	222	7.4	24	ug/kg	240	3.74	91	18-122			M-02
4,4'-DDT	226	5.3	24	ug/kg	240	ND	94	12-141			M-02
Aldrin	166	11	24	ug/kg	240	ND	69	24-173			M-02
alpha-BHC	167	14	24	ug/kg	240	ND	70	44-146			M-02
beta-BHC	220	7.6	24	ug/kg	240	ND	92	7-156			M-02
delta-BHC	213	5.5	24	ug/kg	240	ND	89	11-147			M-02
Dieldrin	203	7.2	24	ug/kg	240	ND	85	23-123			M-02
Endosulfan I	123	5.5	24	ug/kg	240	ND	51	0.1-94			M-02
Endosulfan II	160	3.1	24	ug/kg	240	ND	67	0.1-109			M-02
Endosulfan sulfate	243	5.3	24	ug/kg	240	ND	101	0.1-152			M-02
Endrin	224	13	24	ug/kg	240	ND	93	22-147			M-02
Endrin aldehyde	192	6.7	24	ug/kg	240	ND	80	0.1-114			M-02
gamma-BHC (Lindane)	175	13	24	ug/kg	240	ND	73	16-121			M-02
Heptachlor	169	13	24	ug/kg	240	ND	70	4-141			M-02
Heptachlor epoxide	184	8.8	24	ug/kg	240	ND	77	17-135			M-02
Methoxychlor	246	5.3	24	ug/kg	240	ND	102	14-153			M-02
Surr: Decachlorobiphenyl	*203*			*ug/kg*	*240*		*85*	*21-125*			*M-02*
Surr: Tetrachloro-meta-xylene	*143*			*ug/kg*	*240*		*60*	*18-112*			*M-02*
Matrix Spike Dup (W5A0682-MSD1)		**Source: 5A12065-01**			Analyzed: 01/24/15 05:10						
4,4'-DDD	234	4.6	24	ug/kg	242	0.766	97	21-119	4	25	M-02
4,4'-DDE	223	7.4	24	ug/kg	242	3.74	91	18-122	0.6	25	M-02
4,4'-DDT	223	5.3	24	ug/kg	242	ND	92	12-141	1	25	M-02
Aldrin	164	11	24	ug/kg	242	ND	68	24-173	1	25	M-02
alpha-BHC	166	14	24	ug/kg	242	ND	69	44-146	0.8	25	M-02
beta-BHC	214	7.6	24	ug/kg	242	ND	89	7-156	3	25	M-02
delta-BHC	214	5.5	24	ug/kg	242	ND	89	11-147	0.6	25	M-02
Dieldrin	203	7.2	24	ug/kg	242	ND	84	23-123	0.03	25	M-02
Endosulfan I	96.8	5.5	24	ug/kg	242	ND	40	0.1-94	24	25	M-02
Endosulfan II	133	3.1	24	ug/kg	242	ND	55	0.1-109	18	25	M-02
Endosulfan sulfate	248	5.3	24	ug/kg	242	ND	103	0.1-152	2	25	M-02
Endrin	222	13	24	ug/kg	242	ND	92	22-147	1	25	M-02
Endrin aldehyde	194	6.8	24	ug/kg	242	ND	80	0.1-114	1	25	M-02
gamma-BHC (Lindane)	174	13	24	ug/kg	242	ND	72	16-121	0.8	25	M-02
Heptachlor	162	13	24	ug/kg	242	ND	67	4-141	4	25	M-02

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Chlorinated Pesticides and/or PCBs - Quality Control

Batch W5A0682 - EPA 8081A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike Dup (W5A0682-MSD1)		**Source: 5A12065-01**			Analyzed: 01/24/15 05:10						
Heptachlor epoxide	183	8.8	24	ug/kg	242	ND	76	17-135	0.8	25	M-02
Methoxychlor	245	5.3	24	ug/kg	242	ND	101	14-153	0.3	25	M-02
Surr: Decachlorobiphenyl	*203*			*ug/kg*	*242*		*84*	*21-125*			*M-02*
Surr: Tetrachloro-meta-xylene	*149*			*ug/kg*	*242*		*62*	*18-112*			*M-02*

Metals (Non-Aqueous) by EPA 6000/7000 Series Methods - Quality Control

Batch W5A0726 - EPA 6020A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0726-BLK1)					Analyzed: 01/21/15 18:10						
Arsenic, Total	ND	0.20	0.50	mg/kg							
Cadmium, Total	ND	0.20	0.20	mg/kg							
Chromium, Total	ND	0.23	1.0	mg/kg							
Copper, Total	ND	0.29	0.50	mg/kg							
Lead, Total	ND	0.21	0.50	mg/kg							
Nickel, Total	ND	0.45	1.0	mg/kg							
Silver, Total	ND	0.30	0.50	mg/kg							
Zinc, Total	2.70	2.3	5.0	mg/kg							J
LCS (W5A0726-BS1)					Analyzed: 01/21/15 18:15						
Arsenic, Total	50.3	0.20	0.50	mg/kg	50.0		101	80-120			
Cadmium, Total	50.3	0.20	0.20	mg/kg	50.0		101	80-120			
Chromium, Total	51.8	0.23	1.0	mg/kg	50.0		104	80-120			
Copper, Total	53.8	0.29	0.50	mg/kg	50.0		108	80-120			
Lead, Total	50.8	0.21	0.50	mg/kg	50.0		102	80-120			
Nickel, Total	52.8	0.45	1.0	mg/kg	50.0		106	80-120			
Silver, Total	51.2	0.30	0.50	mg/kg	50.0		102	80-120			
Zinc, Total	51.7	2.3	5.0	mg/kg	50.0		103	80-120			
Matrix Spike (W5A0726-MS1)		**Source: 5A12065-01**			Analyzed: 01/21/15 20:02						
Arsenic, Total	53.7	0.20	0.50	mg/kg	49.3	3.19	102	75-125			
Cadmium, Total	50.5	0.20	0.20	mg/kg	49.3	ND	103	75-125			
Chromium, Total	69.1	0.23	1.0	mg/kg	49.3	16.0	108	75-125			
Copper, Total	54.8	0.29	0.50	mg/kg	49.3	4.31	102	75-125			
Lead, Total	54.4	0.21	0.50	mg/kg	49.3	5.41	99	75-125			
Nickel, Total	67.2	0.45	1.0	mg/kg	49.3	10.9	114	75-125			
Silver, Total	50.1	0.30	0.50	mg/kg	49.3	ND	102	75-125			
Zinc, Total	79.8	2.3	5.0	mg/kg	49.3	27.4	107	75-125			
Matrix Spike Dup (W5A0726-MSD1)		**Source: 5A12065-01**			Analyzed: 01/21/15 20:08						
Arsenic, Total	50.1	0.20	0.50	mg/kg	48.3	3.19	97	75-125	7	20	
Cadmium, Total	48.5	0.20	0.20	mg/kg	48.3	ND	100	75-125	4	20	

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Metals (Non-Aqueous) by EPA 6000/7000 Series Methods - Quality Control

Batch W5A0726 - EPA 6020A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike Dup (W5A0726-MSD1)	Source: 5A12065-01				Analyzed: 01/21/15 20:08						
Chromium, Total	67.3	0.23	1.0	mg/kg	48.3	16.0	106	75-125	3	20	
Copper, Total	52.4	0.29	0.50	mg/kg	48.3	4.31	100	75-125	4	20	
Lead, Total	53.3	0.21	0.50	mg/kg	48.3	5.41	99	75-125	2	20	
Nickel, Total	62.3	0.45	1.0	mg/kg	48.3	10.9	107	75-125	8	20	
Silver, Total	48.0	0.30	0.50	mg/kg	48.3	ND	99	75-125	4	20	
Zinc, Total	73.3	2.3	5.0	mg/kg	48.3	27.4	95	75-125	9	20	

Batch W5A0911 - EPA 7471A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0911-BLK1)					Analyzed: 01/26/15 12:25						
Mercury, Total	1.83	0.80	10	ug/kg							J
LCS (W5A0911-BS1)					Analyzed: 01/26/15 12:25						
Mercury, Total	81.3	0.80	10	ug/kg	83.3		98	80-120			
Matrix Spike (W5A0911-MS1)	Source: 5A07087-01				Analyzed: 01/26/15 12:25						
Mercury, Total	905	2.9	36	ug/kg	75.6	817	115	47-138			
Matrix Spike Dup (W5A0911-MSD1)	Source: 5A07087-01				Analyzed: 01/26/15 12:25						
Mercury, Total	907	3.2	40	ug/kg	77.4	817	116	47-138	0.3	20	

Batch W5A0914 - EPA 7471A

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0914-BLK1)					Analyzed: 01/23/15 16:11						
Mercury, Total	1.50	0.80	10	ug/kg							J
LCS (W5A0914-BS1)					Analyzed: 01/23/15 16:11						
Mercury, Total	80.7	0.80	10	ug/kg	83.3		97	80-120			
Matrix Spike (W5A0914-MS1)	Source: 5A09058-01				Analyzed: 01/23/15 16:11						
Mercury, Total	151	0.80	10	ug/kg	78.0	139	14	47-138			MS-02
Matrix Spike Dup (W5A0914-MSD1)	Source: 5A09058-01				Analyzed: 01/23/15 16:11						
Mercury, Total	171	0.80	10	ug/kg	80.6	139	39	47-138	13	20	MS-02

Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis - Quality Control

Batch W5A0758 - EPA 9060M

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0758-BLK1)					Analyzed: 01/16/15 15:01						
Total Organic Carbon (TOC)	ND	36.0	200	mg/kg dry wt							
LCS (W5A0758-BS1)					Analyzed: 01/16/15 15:01						
Total Organic Carbon (TOC)	8940	36.0	200	mg/kg dry wt	8600		104	80-120			
Matrix Spike (W5A0758-MS1)	Source: 5A12065-07				Analyzed: 01/16/15 15:01						

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Organic Carbon In Soil/Solid by EPA 9060M- Dry Weight Basis - Quality Control

Batch W5A0758 - EPA 9060M

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike (W5A0758-MS1)		**Source: 5A12065-07**			Analyzed: 01/16/15 15:01						
Total Organic Carbon (TOC)	26400	36.0	200	mg/kg dry wt	22300	1730	111	62-131			
Matrix Spike Dup (W5A0758-MSD1)		**Source: 5A12065-07**			Analyzed: 01/16/15 15:01						
Total Organic Carbon (TOC)	31100	36.0	200	mg/kg dry wt	25900	1730	114	62-131	16	20	

Batch W5A0837 - EPA 9060M

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0837-BLK1)					Analyzed: 01/19/15 15:03						
Total Organic Carbon (TOC)	ND	36.0	200	mg/kg dry wt							
LCS (W5A0837-BS1)					Analyzed: 01/19/15 15:03						
Total Organic Carbon (TOC)	8800	36.0	200	mg/kg dry wt	8600		102	80-120			
Matrix Spike (W5A0837-MS1)		**Source: 5A09064-04**			Analyzed: 01/19/15 15:03						
Total Organic Carbon (TOC)	56500	36.0	200	mg/kg dry wt	19500	32300	124	62-131			
Matrix Spike Dup (W5A0837-MSD1)		**Source: 5A09064-04**			Analyzed: 01/19/15 15:03						
Total Organic Carbon (TOC)	55500	36.0	200	mg/kg dry wt	20300	32300	114	62-131	2	20	

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

Batch W5A0683 - EPA 8082

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0683-BLK1)					Analyzed: 01/23/15 23:33						
Aroclor 1016	ND	17	50	ug/kg							
Aroclor 1221	ND	30	50	ug/kg							
Aroclor 1232	ND	21	50	ug/kg							
Aroclor 1242	ND	24	50	ug/kg							
Aroclor 1248	ND	38	50	ug/kg							
Aroclor 1254	ND	26	50	ug/kg							
Aroclor 1260	ND	4.3	50	ug/kg							
Surr: Decachlorobiphenyl	*21.2*			*ug/kg*	*25.0*		*85*	*18-131*			
Surr: Tetrachloro-meta-xylene	*17.8*			*ug/kg*	*25.0*		*71*	*21-119*			
Blank (W5A0683-BLK2)					Analyzed: 02/25/15 20:55						
Aroclor 1016	ND	3.4	10	ug/kg							QC-2
Aroclor 1221	ND	6.0	10	ug/kg							QC-2
Aroclor 1232	ND	4.2	10	ug/kg							QC-2
Aroclor 1242	ND	4.8	10	ug/kg							QC-2
Aroclor 1248	ND	7.6	10	ug/kg							QC-2
Aroclor 1254	ND	5.2	10	ug/kg							QC-2

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

Batch W5A0683 - EPA 8082

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0683-BLK2)					Analyzed: 02/25/15 20:55						
Aroclor 1260	ND	0.86	10	ug/kg							QC-2
Surr: Decachlorobiphenyl	*18.9*			*ug/kg*	*25.0*		*75*	*18-131*			QC-2
Surr: Tetrachloro-meta-xylene	*14.5*			*ug/kg*	*25.0*		*58*	*21-119*			QC-2
LCS (W5A0683-BS1)					Analyzed: 01/24/15 00:34						
Aroclor 1016	175	17	50	ug/kg	250		70	30-168			
Aroclor 1260	226	4.3	50	ug/kg	250		90	49-125			
Surr: Decachlorobiphenyl	*22.3*			*ug/kg*	*25.0*		*89*	*18-131*			
Surr: Tetrachloro-meta-xylene	*13.3*			*ug/kg*	*25.0*		*53*	*21-119*			
LCS (W5A0683-BS2)					Analyzed: 02/25/15 21:57						
Aroclor 1016	155	17	50	ug/kg	250		62	30-168			QC-2
Aroclor 1260	206	4.3	50	ug/kg	250		82	49-125			QC-2
Surr: Decachlorobiphenyl	*21.3*			*ug/kg*	*25.0*		*85*	*18-131*			QC-2
Surr: Tetrachloro-meta-xylene	*10.1*			*ug/kg*	*25.0*		*40*	*21-119*			QC-2
Matrix Spike (W5A0683-MS1)		**Source: 5A12065-01**			Analyzed: 01/24/15 05:41						
Aroclor 1016	4110	170	500	ug/kg	2480	ND	166	24-169			M-02
Aroclor 1260	2380	43	500	ug/kg	2480	ND	96	29-155			M-02
Surr: Decachlorobiphenyl	*220*			*ug/kg*	*248*		*89*	*18-131*			*M-02*
Surr: Tetrachloro-meta-xylene	*159*			*ug/kg*	*248*		*64*	*21-119*			*M-02*
Matrix Spike Dup (W5A0683-MSD1)		**Source: 5A12065-01**			Analyzed: 01/24/15 06:12						
Aroclor 1016	4070	170	490	ug/kg	2450	ND	166	24-169	1	25	M-02
Aroclor 1260	2270	42	490	ug/kg	2450	ND	93	29-155	5	25	M-02
Surr: Decachlorobiphenyl	*212*			*ug/kg*	*245*		*87*	*18-131*			*M-02*
Surr: Tetrachloro-meta-xylene	*132*			*ug/kg*	*245*		*54*	*21-119*			*M-02*

Semivolatile Organics - Low Level by GC/MS SIM Mode - Quality Control

Batch W5A0527 - EPA 8270C SIM

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0527-BLK1)					Analyzed: 01/15/15 11:23						
1-Methylnaphthalene	ND	1.0	5.0	ug/kg							
2-Methylnaphthalene	ND	1.0	5.0	ug/kg							
Acenaphthene	ND	1.0	5.0	ug/kg							
Acenaphthylene	ND	1.0	5.0	ug/kg							
Anthracene	ND	1.0	5.0	ug/kg							
Benzo (a) anthracene	ND	1.0	5.0	ug/kg							
Benzo (a) pyrene	ND	1.0	5.0	ug/kg							
Benzo (b) fluoranthene	ND	1.0	5.0	ug/kg							
Benzo (g,h,i) perylene	ND	1.0	5.0	ug/kg							
Benzo (k) fluoranthene	ND	1.0	5.0	ug/kg							
Chrysene	ND	1.0	5.0	ug/kg							

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

Semivolatile Organics - Low Level by GC/MS SIM Mode - Quality Control

Batch W5A0527 - EPA 8270C SIM

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W5A0527-BLK1)					Analyzed: 01/15/15 11:23						
Dibenzo (a,h) anthracene	ND	1.0	5.0	ug/kg							
Fluoranthene	ND	1.0	5.0	ug/kg							
Fluorene	ND	1.0	5.0	ug/kg							
Indeno (1,2,3-cd) pyrene	ND	1.0	5.0	ug/kg							
Naphthalene	ND	1.0	5.0	ug/kg							
Phenanthrene	ND	1.0	5.0	ug/kg							
Pyrene	ND	1.0	5.0	ug/kg							
Surr: 2-Fluorobiphenyl	*91.3*			*ug/kg*	*167*		*55*	*0.1-109*			
Surr: Nitrobenzene-d5	*90.1*			*ug/kg*	*167*		*54*	*0.1-107*			
Surr: Terphenyl-d14	*98.1*			*ug/kg*	*167*		*59*	*28-128*			
LCS (W5A0527-BS1)					Analyzed: 01/15/15 11:57						
Acenaphthene	256	1.0	5.0	ug/kg	333		77	27-103			
Acenaphthylene	240	1.0	5.0	ug/kg	333		72	29-112			
Anthracene	255	1.0	5.0	ug/kg	333		77	31-119			
Benzo (a) anthracene	219	1.0	5.0	ug/kg	333		66	26-132			
Benzo (a) pyrene	287	1.0	5.0	ug/kg	333		86	19-146			
Benzo (b) fluoranthene	272	1.0	5.0	ug/kg	333		82	40-120			
Benzo (g,h,i) perylene	284	1.0	5.0	ug/kg	333		85	18-135			
Benzo (k) fluoranthene	304	1.0	5.0	ug/kg	333		91	40-120			
Chrysene	275	1.0	5.0	ug/kg	333		83	40-120			
Dibenzo (a,h) anthracene	275	1.0	5.0	ug/kg	333		83	20-137			
Fluoranthene	241	1.0	5.0	ug/kg	333		72	33-123			
Fluorene	235	1.0	5.0	ug/kg	333		70	33-106			
Indeno (1,2,3-cd) pyrene	296	1.0	5.0	ug/kg	333		89	16-136			
Naphthalene	240	1.0	5.0	ug/kg	333		72	22-98			
Phenanthrene	265	1.0	5.0	ug/kg	333		79	32-110			
Pyrene	229	1.0	5.0	ug/kg	333		69	34-122			
Surr: 2-Fluorobiphenyl	*114*			*ug/kg*	*167*		*69*	*0.1-109*			
Surr: Nitrobenzene-d5	*102*			*ug/kg*	*167*		*61*	*0.1-107*			
Surr: Terphenyl-d14	*103*			*ug/kg*	*167*		*62*	*28-128*			
Matrix Spike (W5A0527-MS1)		**Source: 5A08071-13**			Analyzed: 01/15/15 12:31						
Acenaphthene	2550	15	74	ug/kg	4950	ND	51	5-115			
Acenaphthylene	2540	15	74	ug/kg	4950	ND	51	8-111			
Anthracene	2670	15	74	ug/kg	4950	ND	54	3-132			
Benzo (a) anthracene	3240	15	74	ug/kg	4950	ND	65	14-125			
Benzo (a) pyrene	3480	15	74	ug/kg	4950	ND	70	2-138			
Benzo (b) fluoranthene	3300	15	74	ug/kg	4950	ND	67	20-150			
Benzo (g,h,i) perylene	3080	15	74	ug/kg	4950	ND	62	9-129			
Benzo (k) fluoranthene	3570	15	74	ug/kg	4950	ND	72	20-150			
Chrysene	2900	15	74	ug/kg	4950	ND	59	20-150			

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

Semivolatile Organics - Low Level by GC/MS SIM Mode - Quality Control

Batch W5A0527 - EPA 8270C SIM

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike (W5A0527-MS1)		**Source: 5A08071-13**			Analyzed: 01/15/15 12:31						
Dibenzo (a,h) anthracene	3070	15	74	ug/kg	4950	ND	62	10-144			
Fluoranthene	2800	15	74	ug/kg	4950	ND	56	11-127			
Fluorene	2580	15	74	ug/kg	4950	ND	52	4-125			
Indeno (1,2,3-cd) pyrene	3470	15	74	ug/kg	4950	ND	70	3-137			
Naphthalene	2170	15	74	ug/kg	4950	ND	44	0.1-117			
Phenanthrene	2730	15	74	ug/kg	4950	ND	55	10-122			
Pyrene	2750	15	74	ug/kg	4950	ND	56	10-128			
Surr: 2-Fluorobiphenyl	*1090*			*ug/kg*	*2480*		*44*	*0.1-109*			
Surr: Nitrobenzene-d5	*986*			*ug/kg*	*2480*		*40*	*0.1-107*			
Surr: Terphenyl-d14	*1300*			*ug/kg*	*2480*		*53*	*28-128*			
Matrix Spike Dup (W5A0527-MSD1)		**Source: 5A08071-13**			Analyzed: 01/15/15 13:06						
Acenaphthene	2420	15	74	ug/kg	4900	ND	49	5-115	5	30	
Acenaphthylene	2340	15	74	ug/kg	4900	ND	48	8-111	8	30	
Anthracene	2530	15	74	ug/kg	4900	ND	52	3-132	5	30	
Benzo (a) anthracene	2280	15	74	ug/kg	4900	ND	46	14-125	35	30	MS-05
Benzo (a) pyrene	3310	15	74	ug/kg	4900	ND	68	2-138	5	30	
Benzo (b) fluoranthene	3090	15	74	ug/kg	4900	ND	63	20-150	7	30	
Benzo (g,h,i) perylene	3570	15	74	ug/kg	4900	ND	73	9-129	15	30	
Benzo (k) fluoranthene	3480	15	74	ug/kg	4900	ND	71	20-150	3	30	
Chrysene	3050	15	74	ug/kg	4900	ND	62	20-150	5	30	
Dibenzo (a,h) anthracene	3550	15	74	ug/kg	4900	ND	72	10-144	15	30	
Fluoranthene	2490	15	74	ug/kg	4900	ND	51	11-127	12	30	
Fluorene	2380	15	74	ug/kg	4900	ND	48	4-125	8	30	
Indeno (1,2,3-cd) pyrene	3770	15	74	ug/kg	4900	ND	77	3-137	8	30	
Naphthalene	2290	15	74	ug/kg	4900	ND	47	0.1-117	5	30	
Phenanthrene	2650	15	74	ug/kg	4900	ND	54	10-122	3	30	
Pyrene	2390	15	74	ug/kg	4900	ND	49	10-128	14	30	
Surr: 2-Fluorobiphenyl	*1020*			*ug/kg*	*2450*		*42*	*0.1-109*			
Surr: Nitrobenzene-d5	*996*			*ug/kg*	*2450*		*41*	*0.1-107*			
Surr: Terphenyl-d14	*1060*			*ug/kg*	*2450*		*43*	*28-128*			

Power Engineers, Inc.
731 East Ball Rd., Ste. 100
Anaheim CA, 92805

Date Received: 01/12/15 11:25
Date Reported: 03/09/15 12:40

Notes and Definitions

SeeAtt	See Attachment
S_PTS	Analysis subcontracted to PTS Laboratories, Inc.
QC-2	This QC sample was reanalyzed to complement samples that require re-analysis on different date. See analysis date.
O-12	The sample was originally analyzed within holding time. However, it was reanalyzed without dilution that exceeded the recommended holding time.
MS-05	The spike recovery and/or RPD were outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
MS-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
M-02	Due to the nature of matrix interferences, sample was diluted prior to preparation. The MDL and MRL were raised due to the dilution.
J	Estimated conc. detected <MRL and >MDL.
ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reportable
Dil	Dilution
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Sub	Subcontracted analysis, original report available upon request
MDL	Method Detection Limit
MDA	Minimum Detectable Activity
MRL	Method Reporting Limit

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California Department of Health Services.

The Reporting Limit (RL) is referenced as the Laboratory's Practical Quantitation Limit (PQL) or the Detection Limit for Reporting Purposes (DLR).

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

CHAIN OF CUSTODY RECORD

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964
14859 East Clark Avenue : Industry : CA 91745
Tel 626-336-2139 ♦ Fax 626-336-2634 ♦ www.wecklabs.com

STANDARD 5A08071

CLIENT NAME:	PROJECT:
Power Engineers	Sylmar Cable Assessment
ADDRESS: 731 East Ball Rd. Ste. 100, Anaheim, CA 92805	PHONE: 949-444-1002 FAX: EMAIL: sjgruber@burnsmcd.com
PROJECT MANAGER: Steve Gruber	SAMPLER: VRG

ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.	SVOC EPA 625	Total Residual Chlorine SM 4500Cl-G	Metals EPA 1640	Mercury EPA 7470A	VOC EPA 624	SVOC EPA 8270C	PCBs EPA 8082	Organic Carbon EPA 9060M	Metals EPA 6020A + Mercury EPA 7471A	Organochlorine Pesticides/PCB EPA 8081A	Particle Size EPA 160.3M + ASTM D2862	COMMENTS
	1/7/15	1208	W	CAB-EXST-1	7	X	X	X	X	X							See Attachment
	1/7/15	1220	W	CAB-EXST-2	7	X	X	X	X	X							
	1/7/15	1227	W	CAB-EXST-3	7	X	X	X	X	X							
	1/7/15	1238	W	CAB-EXST-4	7	X	X	X	X	X							
	1/7/15	1247	W	CAB-EXST-5	7	X	X	X	X	X							
	1/7/15	1247	W	CAB-EXST-5-DUP	7	X	X	X	X	X							
	1/7/15	106	W	VAULT-3	7	X	X	X	X	X							
	1/7/15	113	W	VAULT-5	7	X	X	X	X	X							
	1/7/15	148	W	VAULT-8	7	X	X	X	X	X							
	1/7/15	1:20	W	VAULT-11	7	X	X	X	X	X							
	1/7/15	1:35p	W	VAULT-21	7	X	X	X	X	X							

SPECIAL HANDLING

- ☐ Same Day Rush 150%
- ☐ 24 Hour Rush 100%
- ☐ 48-72 Hour Rush 75%
- ☐ 4 - 5 Day Rush 30%
- ☐ Rush Extractions 50%
- ☐ 10 - 15 Business Days
- ☐ QA/QC Data Package

Charges will apply for weekends/holidays

Method of Shipment:

RELINQUISHED BY	DATE / TIME	RECEIVED BY
[signature]	1/8/15 17:20	Samaha
RELINQUISHED BY	DATE / TIME	RECEIVED BY
RELINQUISHED BY	DATE / TIME	RECEIVED BY

SAMPLE CONDITION:

Actual Temperature:	4.1°C	
Received On Ice	(Y)	N
Preserved	Y	(N)
Evidence Seals Present	Y	(N)
Container Attacked	Y	(N)
Preserved at Lab	Y	(N)

SAMPLE TYPE CODE:
AQ=Aqueous
NA= Non Aqueous
SL = Sludge
DW = Drinking Water
WW = Waste Water
RW = Rain Water
GW = Ground Water
SO = Soil
SW = Solid Waste
OL = Oil
OT = Other Matrix

PRESCHEDULED RUSH ANALYSES WILL TAKE PRIORITY OVER UNSCHEDULED RUSH REQUESTS
Client agrees to Terms & Conditions at: www.wecklabs.com

SPECIAL REQUIREMENTS / BILLING INFORMATION

COC version 042707

WESTON SOLUTIONS, INC.
5817 Dryden Place, Suite 101
Carlsbad, CA 92008
(760) 795-6900 / (760) 931-1580 FAX
www.westonsolutions.com

February 27, 2015

Hai Van Nguyen
Weck Laboratories, Inc.
14859 East Clark Avenue
Industry, CA 91745

Dear Ms. Nguyen:

Please find enclosed the results for 5 grain size samples for your job Weck 5A08071 received on January 28, 2015. These samples were processed according to procedures described by Plumb, 1981. All analyses were performed consistent with our laboratory's quality assurance program, and all samples met the quality control criteria specified in the above methods and/or our internal SOPs. This report is to be reproduced in its entirety.

We will dispose of the samples in 30 days unless you specify otherwise. Thank you for allowing us the opportunity of processing your sediment samples and please call if you have any questions.

Sincerely,

Olga E. Hernández
Marine Science Laboratory Manager

GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A08071
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.12
Client Sample Name:	5A08071-13
Total sample weight:	29.262 grams

Size		Weight		Cumulative
Microns	Phi	grams	Percent	Percent
2000.000	-1.0	0.000	0.000	0.000
1414.214	-0.5	0.000	0.000	0.000
1000.000	0.0	0.000	0.000	0.000
707.107	0.5	0.005	0.017	0.017
500.000	1.0	0.022	0.075	0.092
353.553	1.5	0.042	0.144	0.236
250.000	2.0	0.098	0.335	0.571
176.777	2.5	0.182	0.622	1.193
125.000	3.0	0.508	1.736	2.929
88.388	3.5	2.968	10.143	13.071
62.500	4.0	11.758	40.181	53.253
31.250	5.0	11.610	39.677	92.930
15.625	6.0	0.720	2.462	95.392
7.812	7.0	0.254	0.869	96.261
3.906	8.0	0.212	0.724	96.985
1.953	9.0	0.127	0.434	97.419
< 1.953	> 9.0	0.755	2.581	100.000

% < 4 phi	= 46.747
% > 1 phi	= 0.017
% gravel	= 0.000
% sand	= 53.253
% silt	= 43.732
% clay	= 3.015

Sample Statistics

Median		Mean		Dispersion	Skewness
phi	microns	phi	microns		
3.960	64.28	4.156	56.11	0.619	0.317

5th percentile =	3.102
16th percentile =	3.536
50th percentile =	3.960
84th percentile =	4.775
95th percentile =	5.841

Weston Solutions, Inc.
5817 Dryden Place, Ste 101
Carlsbad, CA 92008

GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A08071
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.13
Client Sample Name:	5A08071-15
Total sample weight:	29.303 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.000	0.000	0.000
1414.214	-0.5	0.001	0.003	0.003
1000.000	0.0	0.004	0.014	0.017
707.107	0.5	0.015	0.051	0.068
500.000	1.0	0.031	0.106	0.174
353.553	1.5	0.042	0.143	0.317
250.000	2.0	0.097	0.331	0.648
176.777	2.5	0.096	0.328	0.976
125.000	3.0	0.314	1.072	2.048
88.388	3.5	2.800	9.555	11.603
62.500	4.0	11.715	39.979	51.582
31.250	5.0	11.441	39.044	90.626
15.625	6.0	1.229	4.194	94.820
7.812	7.0	0.297	1.012	95.832
3.906	8.0	0.085	0.289	96.121
1.953	9.0	0.254	0.868	96.989
< 1.953	> 9.0	0.882	3.011	100.000

% < 4 phi	= 48.418
% > 1 phi	= 0.068
% gravel	= 0.000
% sand	= 51.582
% silt	= 44.539
% clay	= 3.879

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.980	63.36	4.193	54.69	0.638	0.333

5th percentile	= 3.154
16th percentile	= 3.555
50th percentile	= 3.980
84th percentile	= 4.830
95th percentile	= 6.178

Weston Solutions, Inc.
5817 Dryden Place, Ste 101
Carlsbad, CA 92008

GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A08071
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.14
Client Sample Name:	5A08071-17
Total sample weight:	26.240 grams

Size		Weight		Cumulative
Microns	Phi	grams	Percent	Percent
2000.000	-1.0	0.000	0.000	0.000
1414.214	-0.5	0.001	0.004	0.004
1000.000	0.0	0.001	0.004	0.008
707.107	0.5	0.004	0.015	0.023
500.000	1.0	0.019	0.072	0.095
353.553	1.5	0.042	0.160	0.255
250.000	2.0	0.061	0.232	0.488
176.777	2.5	0.072	0.274	0.762
125.000	3.0	0.255	0.972	1.734
88.388	3.5	2.536	9.665	11.398
62.500	4.0	12.621	48.098	59.496
31.250	5.0	8.814	33.589	93.085
15.625	6.0	0.593	2.261	95.346
7.812	7.0	0.127	0.484	95.830
3.906	8.0	0.085	0.323	96.153
1.953	9.0	0.085	0.323	96.476
< 1.953	> 9.0	0.925	3.524	100.000

% < 4 phi	= 40.504
% > 1 phi	= 0.023
% gravel	= 0.000
% sand	= 59.496
% silt	= 36.657
% clay	= 3.847

Sample Statistics

Median		Mean		Dispersion	Skewness
phi	microns	phi	microns		
3.901	66.93	4.139	56.77	0.591	0.402

5th percentile	= 3.169
16th percentile	= 3.548
50th percentile	= 3.901
84th percentile	= 4.730
95th percentile	= 5.847

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GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A08071
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.15
Client Sample Name:	5A08071-19
Total sample weight:	25.998 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.018	0.069	0.069
1414.214	-0.5	0.001	0.004	0.073
1000.000	0.0	0.001	0.004	0.077
707.107	0.5	0.001	0.004	0.081
500.000	1.0	0.008	0.031	0.112
353.553	1.5	0.015	0.058	0.169
250.000	2.0	0.026	0.100	0.269
176.777	2.5	0.063	0.242	0.512
125.000	3.0	0.232	0.892	1.404
88.388	3.5	3.396	13.062	14.466
62.500	4.0	14.660	56.388	70.854
31.250	5.0	6.059	23.307	94.162
15.625	6.0	0.381	1.467	95.628
7.812	7.0	0.042	0.163	95.791
3.906	8.0	0.085	0.326	96.117
1.953	9.0	0.085	0.326	96.443
< 1.953	> 9.0	0.925	3.557	100.000

% < 4 phi	= 29.146
% > 1 phi	= 0.081
% gravel	= 0.069
% sand	= 70.785
% silt	= 25.263
% clay	= 3.883

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.815	71.05	4.039	60.84	0.525	0.426

5th percentile =	3.138
16th percentile =	3.514
50th percentile =	3.815
84th percentile =	4.564
95th percentile =	5.572

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GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A08071
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.16
Client Sample Name:	5A08071-21
Total sample weight:	26.224 grams

Size		Weight		Cumulative
Microns	Phi	grams	Percent	Percent
2000.000	-1.0	0.000	0.000	0.000
1414.214	-0.5	0.000	0.000	0.000
1000.000	0.0	0.000	0.000	0.000
707.107	0.5	0.001	0.004	0.004
500.000	1.0	0.008	0.031	0.034
353.553	1.5	0.030	0.114	0.149
250.000	2.0	0.068	0.259	0.408
176.777	2.5	0.070	0.267	0.675
125.000	3.0	0.234	0.892	1.567
88.388	3.5	3.349	12.771	14.338
62.500	4.0	14.802	56.444	70.782
31.250	5.0	6.229	23.753	94.535
15.625	6.0	0.254	0.970	95.504
7.812	7.0	0.212	0.808	96.312
3.906	8.0	0.042	0.162	96.474
1.953	9.0	0.042	0.162	96.636
< 1.953	> 9.0	0.882	3.364	100.000

% < 4 phi = 29.218
% > 1 phi = 0.004
% gravel = 0.000
% sand = 70.782
% silt = 25.692
% clay = 3.526

Sample Statistics

Median		Mean		Dispersion	Skewness
phi	microns	phi	microns		
3.816	71.01	4.036	60.98	0.521	0.422

5th percentile = 3.134
16th percentile = 3.515
50th percentile = 3.816
84th percentile = 4.556
95th percentile = 5.480

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CHAIN OF CUSTODY RECORD

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964
14859 East Clark Avenue : Industry : CA 91745
Tel 626-336-2139 ♦ Fax 626-336-2634 ♦ www.wecklabs.com

CLIENT NAME: Weck Laboratories Inc

PROJECT: 5A08071

ADDRESS: 14859 E Clark Ave, Industry Ca 91745

PHONE: (626) 336 2139

FAX:

Email: HaiVan.Nguyen@wecklabs.com

PO#:

PROJECT MANAGER: Hai-Van Nguyen

Sampler: Client

ANALYSES REQUESTED: Plumb

Special Handling
- ☐ Same Day Rush 150%
- ☐ 24 Hour Rush 100%
- ☐ 4-5 Day Rush 75%
- ☐ Rush Extraction 50%
- ☐ 10-15 Business Days
- ☐ QA/QC Package

Charges will apply for weekends and holidays

Method of Shipment

ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.	Plumb	COMMENTS
	1/7/15	1036	S	5A08071 -13	1	✓	B150128.12
	1/7/15	1014	S	5A08071 -15	1	✓	B150128.13
	1/7/15	1004	S	5A08071 -17	1	✓	B150128.14
	1/7/15	0945	S	5A08071 -19	1	✓	B150128.15
	1/7/15	0918	S	5A08071 -21	1	✓	B150128.16

RELINQUISHED BY		DATE / TIME	RECEIVED BY		DATE / TIME
SIGNATURE	PRINT NAME		SIGNATURE	PRINT NAME	
[signature]		1/27/15 1510	[signature]	Scott Cropper	1.27.15 1510
SIGNATURE	PRINT NAME		SIGNATURE	PRINT NAME	
[signature]	Scott Cropper	1.28.15 0800	[signature]	Alma E. Hernandez	28 JAN 15 0800
SIGNATURE	PRINT NAME		SIGNATURE	PRINT NAME	

SAMPLE CONDITION:
Actual Temperature:
Received On Ice Y / N
Preserved Y / N
Evidence Seals Present Y / N
Container Attacked Y / N
Preserved at Lab Y / N

SAMPLE TYPE CODE:
AQ=Aqueous
NA= Non Aqueous
SL = Sludge
DW = Drinking Water
WW = Waste Water
RW = Rain Water
GW = Ground Water
SO = Soil
SW = Solid Waste
OL = Oil
OT = Other Matrix

PRESCHEDULED RUSH ANALYSES WILL TAKE PRIORITY OVER UNSCHEDULED RUSH REQUESTS. CLIENT AGREES TO TERMS AND CONDITIONS (SEE BACK OF THIS FORM).

SPECIAL REQUIREMENTS / BILLING INFORMATION

DISTRIBUTION: WHITE & CANARY - For Laboratory PINK - For Client

WESTON SOLUTIONS, INC.
5817 Dryden Place, Suite 101
Carlsbad, CA 92008
(760) 795-6900 / (760) 931-1580 FAX
www.westonsolutions.com

February 27, 2015

Hai Van Nguyen
Weck Laboratories, Inc.
14859 East Clark Avenue
Industry, CA 91745

Dear Ms. Nguyen:

Please find enclosed the results for 11 grain size samples for your job Weck 5A12065 received on January 28, 2015. These samples were processed according to procedures described by Plumb, 1981. All analyses were performed consistent with our laboratory's quality assurance program, and all samples met the quality control criteria specified in the above methods and/or our internal SOPs. This report is to be reproduced in its entirety.

We will dispose of the samples in 30 days unless you specify otherwise. Thank you for allowing us the opportunity of processing your sediment samples and please call if you have any questions.

Sincerely,

Olga E. Hernández
Marine Science Laboratory Manager

GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.01
Client Sample Name:	5A12065-01
Total sample weight:	28.461 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.012	0.042	0.042
1414.214	-0.5	0.054	0.190	0.232
1000.000	0.0	0.099	0.348	0.580
707.107	0.5	0.142	0.499	1.079
500.000	1.0	0.195	0.685	1.764
353.553	1.5	0.188	0.661	2.424
250.000	2.0	0.259	0.910	3.334
176.777	2.5	0.233	0.819	4.153
125.000	3.0	0.826	2.902	7.055
88.388	3.5	4.549	15.983	23.039
62.500	4.0	13.733	48.253	71.291
31.250	5.0	6.653	23.375	94.667
15.625	6.0	0.339	1.191	95.858
7.812	7.0	0.085	0.298	96.156
3.906	8.0	0.169	0.596	96.751
1.953	9.0	0.085	0.298	97.049
< 1.953	> 9.0	0.840	2.951	100.000

% < 4 phi	= 28.709
% > 1 phi	= 1.079
% gravel	= 0.042
% sand	= 71.249
% silt	= 25.460
% clay	= 3.249

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.779	72.83	3.912	66.44	0.632	0.209

5th percentile	= 2.646
16th percentile	= 3.280
50th percentile	= 3.779
84th percentile	= 4.544
95th percentile	= 5.280

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GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.02
Client Sample Name:	5A12065-02
Total sample weight:	28.047 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.000	0.000	0.000
1414.214	-0.5	0.009	0.032	0.032
1000.000	0.0	0.008	0.029	0.061
707.107	0.5	0.039	0.139	0.200
500.000	1.0	0.084	0.299	0.499
353.553	1.5	0.075	0.267	0.767
250.000	2.0	0.203	0.724	1.490
176.777	2.5	0.166	0.592	2.082
125.000	3.0	0.476	1.697	3.779
88.388	3.5	4.490	16.009	19.788
62.500	4.0	13.437	47.908	67.696
31.250	5.0	7.288	25.986	93.682
15.625	6.0	0.381	1.360	95.041
7.812	7.0	0.212	0.755	95.797
3.906	8.0	0.042	0.151	95.948
1.953	9.0	0.169	0.604	96.552
< 1.953	> 9.0	0.967	3.448	100.000

% < 4 phi	= 32.304
% > 1 phi	= 0.200
% gravel	= 0.000
% sand	= 67.696
% silt	= 28.252
% clay	= 4.052

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.815	71.04	4.005	62.30	0.623	0.304

5th percentile	= 3.038
16th percentile	= 3.382
50th percentile	= 3.815
84th percentile	= 4.627
95th percentile	= 5.970

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GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.03
Client Sample Name:	5A12065-03
Total sample weight:	26.893 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.003	0.011	0.011
1414.214	-0.5	0.009	0.033	0.045
1000.000	0.0	0.004	0.015	0.059
707.107	0.5	0.017	0.063	0.123
500.000	1.0	0.037	0.138	0.260
353.553	1.5	0.060	0.223	0.483
250.000	2.0	0.118	0.439	0.922
176.777	2.5	0.157	0.584	1.506
125.000	3.0	0.786	2.923	4.429
88.388	3.5	5.208	19.366	23.795
62.500	4.0	13.340	49.605	73.399
31.250	5.0	5.890	21.902	95.301
15.625	6.0	0.169	0.630	95.931
7.812	7.0	0.042	0.158	96.089
3.906	8.0	0.042	0.158	96.246
1.953	9.0	0.085	0.315	96.562
< 1.953	> 9.0	0.925	3.438	100.000

% < 4 phi	= 26.601
% > 1 phi	= 0.123
% gravel	= 0.011
% sand	= 73.388
% silt	= 22.847
% clay	= 3.754

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.764	73.60	3.891	67.39	0.593	0.215

5th percentile	= 3.015
16th percentile	= 3.299
50th percentile	= 3.764
84th percentile	= 4.484
95th percentile	= 4.986

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GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.04
Client Sample Name:	5A12065-04
Total sample weight:	25.783 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.000	0.000	0.000
1414.214	-0.5	0.002	0.008	0.008
1000.000	0.0	0.010	0.039	0.047
707.107	0.5	0.030	0.116	0.163
500.000	1.0	0.058	0.225	0.388
353.553	1.5	0.061	0.237	0.624
250.000	2.0	0.106	0.411	1.036
176.777	2.5	0.156	0.605	1.641
125.000	3.0	0.679	2.634	4.274
88.388	3.5	4.369	16.945	21.219
62.500	4.0	11.972	46.433	67.653
31.250	5.0	6.568	25.474	93.127
15.625	6.0	0.424	1.643	94.770
7.812	7.0	0.169	0.657	95.428
3.906	8.0	0.127	0.493	95.921
1.953	9.0	0.085	0.329	96.249
< 1.953	> 9.0	0.967	3.751	100.000

% < 4 phi = 32.347
% > 1 phi = 0.163
% gravel = 0.000
% sand = 67.653
% silt = 28.268
% clay = 4.079

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.810	71.30	3.994	62.77	0.648	0.284

5th percentile = 3.021
16th percentile = 3.346
50th percentile = 3.810
84th percentile = 4.642
95th percentile = 6.350

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GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.05
Client Sample Name:	5A12065-05
Total sample weight:	25.164 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.005	0.020	0.020
1414.214	-0.5	0.033	0.131	0.151
1000.000	0.0	0.044	0.175	0.326
707.107	0.5	0.050	0.199	0.525
500.000	1.0	0.087	0.346	0.870
353.553	1.5	0.109	0.433	1.303
250.000	2.0	0.185	0.735	2.039
176.777	2.5	0.225	0.894	2.933
125.000	3.0	1.224	4.864	7.797
88.388	3.5	5.407	21.487	29.284
62.500	4.0	11.828	47.003	76.287
31.250	5.0	4.788	19.028	95.315
15.625	6.0	0.212	0.842	96.157
7.812	7.0	0.042	0.168	96.325
3.906	8.0	0.042	0.168	96.494
1.953	9.0	0.085	0.337	96.831
< 1.953	> 9.0	0.798	3.169	100.000

% < 4 phi	= 23.713
% > 1 phi	= 0.525
% gravel	= 0.020
% sand	= 76.267
% silt	= 20.207
% clay	= 3.506

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.720	75.87	3.798	71.89	0.607	0.128

5th percentile =	2.713
16th percentile =	3.191
50th percentile =	3.720
84th percentile =	4.405
95th percentile =	4.983

Weston Solutions, Inc.
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GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.06
Client Sample Name:	5A12065-06
Total sample weight:	33.480 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	4.505	13.456	13.456
1414.214	-0.5	1.384	4.134	17.590
1000.000	0.0	2.796	8.351	25.941
707.107	0.5	5.997	17.912	43.854
500.000	1.0	7.254	21.667	65.521
353.553	1.5	7.297	21.795	87.316
250.000	2.0	2.074	6.195	93.511
176.777	2.5	0.846	2.527	96.038
125.000	3.0	0.233	0.696	96.734
88.388	3.5	0.122	0.364	97.098
62.500	4.0	0.174	0.520	97.618
31.250	5.0	0.254	0.759	98.377
15.625	6.0	0.042	0.127	98.504
7.812	7.0	0.042	0.127	98.630
3.906	8.0	0.042	0.127	98.757
1.953	9.0	0.042	0.127	98.883
< 1.953	> 9.0	0.374	1.117	100.000

% < 4 phi = 2.382
% > 1 phi = 43.854
% gravel = 13.456
% sand = 84.162
% silt = 1.139
% clay = 1.243

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
0.642	640.90	0.366	776.03	1.058	-0.261

5th percentile = .
16th percentile = -0.692
50th percentile = 0.642
84th percentile = 1.424
95th percentile = 2.295
*** 5th percentile not obtainable ***

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GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.07
Client Sample Name:	5A12065-07
Total sample weight:	29.448 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.000	0.000	0.000
1414.214	-0.5	0.010	0.034	0.034
1000.000	0.0	0.025	0.085	0.119
707.107	0.5	0.027	0.092	0.211
500.000	1.0	0.058	0.197	0.407
353.553	1.5	0.087	0.295	0.703
250.000	2.0	0.208	0.706	1.409
176.777	2.5	0.341	1.158	2.567
125.000	3.0	0.904	3.070	5.637
88.388	3.5	4.387	14.897	20.534
62.500	4.0	14.595	49.562	70.096
31.250	5.0	7.076	24.030	94.126
15.625	6.0	0.466	1.583	95.709
7.812	7.0	0.212	0.719	96.428
3.906	8.0	0.169	0.576	97.004
1.953	9.0	0.085	0.288	97.292
< 1.953	> 9.0	0.798	2.708	100.000

% < 4 phi	= 29.904
% > 1 phi	= 0.211
% gravel	= 0.000
% sand	= 70.096
% silt	= 26.908
% clay	= 2.996

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.797	71.93	3.963	64.11	0.615	0.270

5th percentile	= 2.896
16th percentile	= 3.348
50th percentile	= 3.797
84th percentile	= 4.579
95th percentile	= 5.552

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GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.08
Client Sample Name:	5A12065-08
Total sample weight:	26.030 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.000	0.000	0.000
1414.214	-0.5	0.003	0.012	0.012
1000.000	0.0	0.020	0.077	0.088
707.107	0.5	0.011	0.042	0.131
500.000	1.0	0.033	0.127	0.257
353.553	1.5	0.063	0.242	0.499
250.000	2.0	0.281	1.080	1.579
176.777	2.5	0.088	0.338	1.917
125.000	3.0	0.308	1.183	3.100
88.388	3.5	3.725	14.310	17.411
62.500	4.0	13.624	52.340	69.750
31.250	5.0	6.526	25.070	94.820
15.625	6.0	0.466	1.791	96.610
7.812	7.0	0.085	0.326	96.936
3.906	8.0	0.042	0.163	97.099
1.953	9.0	0.127	0.488	97.587
< 1.953	> 9.0	0.628	2.413	100.000

% < 4 phi = 30.250
% > 1 phi = 0.131
% gravel = 0.000
% sand = 69.750
% silt = 27.349
% clay = 2.901

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.811	71.23	4.010	62.09	0.559	0.355

5th percentile = 3.066
16th percentile = 3.451
50th percentile = 3.811
84th percentile = 4.568
95th percentile = 5.101

Weston Solutions, Inc.
5817 Dryden Place, Ste 101
Carlsbad, CA 92008

GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.09
Client Sample Name:	5A12065-09
Total sample weight:	26.312 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.000	0.000	0.000
1414.214	-0.5	0.000	0.000	0.000
1000.000	0.0	0.007	0.027	0.027
707.107	0.5	0.013	0.049	0.076
500.000	1.0	0.039	0.148	0.224
353.553	1.5	0.040	0.152	0.376
250.000	2.0	0.073	0.277	0.654
176.777	2.5	0.096	0.365	1.019
125.000	3.0	0.417	1.585	2.603
88.388	3.5	3.402	12.930	15.533
62.500	4.0	13.800	52.448	67.981
31.250	5.0	6.737	25.606	93.587
15.625	6.0	0.466	1.771	95.358
7.812	7.0	0.127	0.483	95.842
3.906	8.0	0.127	0.483	96.325
1.953	9.0	0.042	0.161	96.486
< 1.953	> 9.0	0.925	3.514	100.000

% < 4 phi	= 32.019
% > 1 phi	= 0.076
% gravel	= 0.000
% sand	= 67.981
% silt	= 28.344
% clay	= 3.675

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.829	70.39	4.065	59.75	0.561	0.422

5th percentile	= 3.093
16th percentile	= 3.504
50th percentile	= 3.829
84th percentile	= 4.626
95th percentile	= 5.798

Weston Solutions, Inc.
5817 Dryden Place, Ste 101
Carlsbad, CA 92008

GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.10
Client Sample Name:	5A12065-10
Total sample weight:	26.487 grams

Size (Microns)	Size (Phi)	Weight grams	Percent	Cumulative Percent
2000.000	-1.0	0.000	0.000	0.000
1414.214	-0.5	0.001	0.004	0.004
1000.000	0.0	0.001	0.004	0.008
707.107	0.5	0.006	0.023	0.030
500.000	1.0	0.019	0.072	0.102
353.553	1.5	0.046	0.174	0.276
250.000	2.0	0.048	0.181	0.457
176.777	2.5	0.135	0.510	0.967
125.000	3.0	0.214	0.808	1.774
88.388	3.5	3.143	11.866	13.641
62.500	4.0	14.237	53.751	67.392
31.250	5.0	7.161	27.037	94.429
15.625	6.0	0.254	0.960	95.389
7.812	7.0	0.212	0.800	96.189
3.906	8.0	0.042	0.160	96.349
1.953	9.0	0.085	0.320	96.669
< 1.953	> 9.0	0.882	3.331	100.000

% < 4 phi	= 32.608
% > 1 phi	= 0.030
% gravel	= 0.000
% sand	= 67.392
% silt	= 28.957
% clay	= 3.651

Sample Statistics

Median phi	Median microns	Mean phi	Mean microns	Dispersion	Skewness
3.838	69.92	4.068	59.62	0.546	0.421

5th percentile	= 3.136
16th percentile	= 3.522
50th percentile	= 3.838
84th percentile	= 4.614
95th percentile	= 5.595

Weston Solutions, Inc.
5817 Dryden Place, Ste 101
Carlsbad, CA 92008

GRAIN SIZE ANALYSIS

Company:	Weck Laboratories, Inc.
Contract Number/Name:	Weck 5A12065
Contact person:	Hai Van Nguyen
Date of analysis:	02Feb15
Date of report:	27Feb15
Analysis method:	Sieve/pipette (Plumb, 1981)
Sample Identification:	B150128.11
Client Sample Name:	5A12065-11
Total sample weight:	25.627 grams

Size		Weight		Cumulative
Microns	Phi	grams	Percent	Percent
2000.000	-1.0	0.020	0.078	0.078
1414.214	-0.5	0.007	0.027	0.105
1000.000	0.0	0.005	0.020	0.125
707.107	0.5	0.004	0.016	0.140
500.000	1.0	0.012	0.047	0.187
353.553	1.5	0.050	0.195	0.382
250.000	2.0	0.070	0.273	0.656
176.777	2.5	0.125	0.488	1.143
125.000	3.0	0.449	1.752	2.895
88.388	3.5	3.242	12.651	15.546
62.500	4.0	13.430	52.406	67.952
31.250	5.0	6.865	26.787	94.738
15.625	6.0	0.254	0.992	95.730
7.812	7.0	0.127	0.496	96.226
3.906	8.0	0.042	0.165	96.392
1.953	9.0	0.085	0.331	96.723
< 1.953	> 9.0	0.840	3.277	100.000

% < 4 phi	= 32.048
% > 1 phi	= 0.140
% gravel	= 0.078
% sand	= 67.874
% silt	= 28.440
% clay	= 3.608

Sample Statistics

Median		Mean		Dispersion	Skewness
phi	microns	phi	microns		
3.829	70.38	4.052	60.30	0.547	0.407

5th percentile	= 3.083
16th percentile	= 3.504
50th percentile	= 3.829
84th percentile	= 4.599
95th percentile	= 5.264

Weston Solutions, Inc.
5817 Dryden Place, Ste 101
Carlsbad, CA 92008

CHAIN OF CUSTODY RECORD

Weck Laboratories, Inc.
Analytical Laboratory Services - Since 1964
14859 East Clark Avenue : Industry : CA 91745
Tel 626-336-2139 ♦ Fax 626-336-2634 ♦ www.wecklabs.com

CLIENT NAME:	PROJECT:
Weck Laboratories Inc	5A12065
ADDRESS:	PHONE: (626)336 2139
14859 E Clark Ave	FAX:
Industry Ca 91745	Email: hai van.Nguyen@ wecklabs.com
	PO#:
PROJECT MANAGER: Hai Van Nguyen	Sampler: Client

ANALYSES REQUESTED: DI Water

Special Handling
- ☐ Same Day Rush 150%
- ☐ 24 Hour Rush 100%
- ☐ 4-5 Day Rush 75%
- ☐ Rush Extraction 50%
- ☐ 10-15 Business Days
- ☐ QA/QC Package

Charges will apply for weekends and holidays

ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.	DI Water	Method of Shipment / COMMENTS
	1/9/15	0900	S	5A12065-01	1	✓	B150128.01
	1/9/15	0900	S	5A12065-02	1	✓	B150128.02
	1/9/15	0900	S	5A12065-03	1	✓	B150128.03
	1/9/15	0900	S	5A12065-04	1	✓	B150128.04
	1/9/15	0900	S	5A12065-05	1	✓	B150128.05
	1/9/15	1405	S	5A12065-06	1	✓	B150128.06
	1/9/15	1336	S	5A12065-07	1	✓	B150128.07
	1/9/15	1245	S	5A12065-08	1	✓	B150128.08
	1/9/15	1200	S	5A12065-09	1	✓	B150128.09
	1/9/15	1100	S	5A12065-10	1	✓	B150128.10
	1/9/15	1100	S	5A12065-11	1	✓	B150128.11

RELINQUISHED BY		DATE / TIME	RECEIVED BY		DATE / TIME
SIGNATURE	PRINT NAME		SIGNATURE	PRINT NAME	
[signature]		1/23/15 1510	[signature]	Scott Cropper	1.27.15 1516
SIGNATURE	PRINT NAME		SIGNATURE	PRINT NAME	
[signature]	Scott Cropper	1.28.15 0900	[signature]	OLGA E. HERNANDEZ	28JAN15/0800
SIGNATURE	PRINT NAME		SIGNATURE	PRINT NAME	

SAMPLE CONDITION:

Actual Temperature:	
Received On Ice	Y / N
Preserved	Y / N
Evidence Seals Present	Y / N
Container Attacked	Y / N
Preserved at Lab	Y / N

SAMPLE TYPE CODE:
AQ=Aqueous
NA= Non Aqueous
SL = Sludge
DW = Drinking Water
WW = Waste Water
RW = Rain Water
GW = Ground Water
SO = Soil
SW = Solid Waste
OL = Oil
OT = Other Matrix

PRESCHEDULED RUSH ANALYSES WILL TAKE PRIORITY OVER UNSCHEDULED RUSH REQUESTS. CLIENT AGREES TO TERMS AND CONDITIONS (SEE BACK OF THIS FORM).

SPECIAL REQUIREMENTS / BILLING INFORMATION

DISTRIBUTION: WHITE & CANARY - For Laboratory PINK - For Client

APPENDIX E - SEDIMENT TOXICITY RESULTS

Sylmar Electrode – Toxicity Report

January 2015 Sampling Event

Prepared for: **Burns & McDonnell**
4225 Executive Square, Suite 500
La Jolla, CA 92037

Testing Location: **Nautilus Environmental**
San Diego Laboratory
4340 Vandever Avenue
San Diego, CA 92120

Data Quality Assurance:

- Nautilus Environmental is accredited in accordance with NELAP by the State of Oregon Environmental Laboratory Accreditation Program (Certificate No. 4053-001). It is also certified by the State of California Department of Health Services Environmental Laboratory Accreditation Program (Certificate No. 1802) and the State of Washington Department of Ecology (Lab ID C552).
- All data have been reviewed and verified.
- All test results have met minimum test acceptability criteria under their respective USEPA protocols, unless otherwise noted in this report.
- All test results have met internal Quality Assurance Program requirements.

Verified by:

Kasey Skrivseth, Environmental Scientist
Date: February 20, 2015

INTRODUCTION

Burns & McDonnell (B&M) has partnered with Nautilus Environmental (Nautilus) to perform sediment toxicity testing as part of a pre-construction baseline study for the Sylmar Electrode, located in the waters of Santa Monica Bay, CA. Fifteen samples were evaluated using a 10-day solid-phase test with the marine amphipod *Eohaustorius estuarius* (*Eohaustorius*), in accordance with test methods found in "Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods.", as well as guidance from the Sediment Quality Objectives (SQO) program document (USEPA 1994, SCCWRP 2009). This report summarizes results of the January 2015 sampling event. Testing was conducted at Nautilus in San Diego, California.

METHODS AND MATERIALS

Sample Collection, Receipt, and Preparation

Sediment was collected on January 7 and 9, 2015 under the direction of B&M personnel. Following collection, the samples were placed in individual polypropylene bags in the field, labeled, and tightly sealed. Samples then were packed in ice chests with wet ice and transported to Nautilus by B&M personnel on January 12, 2015. A summary of sample information can be found in Table 1. Proper chain-of-custody (COC) procedures were followed during all phases of sediment collection and transport. Upon arrival at the laboratory, the temperature in each cooler was recorded and the contents were verified against COC forms. Samples then were placed in a 4 degrees Celsius (°C) temperature-controlled room, in the dark until test initiation. COC forms and sample check-in information are provided in Appendices A and B, respectively.

Prior to testing, an aliquot of each sample was sieved through a 500-micrometer (µm) Nitex® mesh screen to remove native organisms and ensure reliable test organism recovery, with the exception of sample CAB-Exst-1. This sample had a larger grain size compared with the other samples and was therefore sieved using a 1-millimeter (mm) screen. All sediments were thoroughly homogenized prior to sieving and distribution to test chambers.

Table 1. Sample ID, Collection, and Receipt Information

Sample ID	Date/Time Collected	Date/Time Received at Nautilus	Receipt Temperature (°C)
CAB-REF-1	1/7/15 10:36	1/12/15 14:00	6.0
CAB-REF-2	1/7/15 10:14		5.0
CAB-REF-3	1/7/15 10:04		5.0
CAB-REF-4	1/7/15 09:45		5.0
CAB-REF-5	1/7/15 09:18		5.0
VAULT-3	1/9/15 09:00		5.0
VAULT-5	1/9/15 09:00		4.0
VAULT-8	1/9/15 09:00		5.0
VAULT-11	1/9/15 09:00		5.0
VAULT-21	1/9/15 09:00		4.0
CAB-Exst-1	1/9/15 14:05		5.0
CAB-Exst-2	1/9/15 13:30		5.0
CAB-Exst-3	1/9/15 12:45		5.0
CAB-Exst-4	1/9/15 12:00		3.0
CAB-Exst-5	1/9/15 11:00		5.0

Toxicity Test Methodology

Test methods and acceptability criteria are described in Table 2. Interstitial water was collected, when possible, from all test sediments prior to initiation via centrifugation for analysis of total ammonia. In some instances, a granular sample can prohibit the collection of interstitial water. Water quality parameters (pH, temperature, salinity, and dissolved oxygen) were monitored daily. During testing, overlying water samples were collected from surrogate chambers at test initiation and termination to monitor ammonia concentrations.

Table 2. Toxicity Test Methodology and QA/QC Requirements for the 10-day Solid Phase Amphipod Toxicity Test

Test organism	Marine Amphipod – *Eohaustorius estuarius*
Test organism source	Northwest Aquatic Sciences; Newport, OR
Test organism size at initiation	3-5 mm
Test duration; endpoint	10 days; survival
Test solution renewal	None
Feeding	Prior to test initiation only during holding period
Test chamber	1-L glass jar
Sediment depth	2 cm
Overlying water volume	800 mL
Test temperature	15 ± 1°C test-wide mean, 15 ± 3°C instantaneous
Overlying water	Natural seawater collected offshore SIO Pier in La Jolla, CA. 20µm filtered. Seawater was diluted to 32 ppt with deionized water prior to testing.
Number of organisms/chamber	20
Number of replicates	5, plus 1 surrogate test chamber for water quality readings
Negative control	Sieved sand collected by organism supplier from the organism collection site (Lab Control)
Photoperiod	Continuous light (24 hour)
Aeration	Continuous (3-4 bubbles per second)
Test Protocol	EPA 600/R-94/025 (USEPA 1994) and SCCWRP 2009
Test acceptability criteria	≥ 90 percent mean survival in lab control
Reference toxicant	Ammonium chloride

cm – centimeter
°C – degrees Celsius
L - Liter
mL – milliliter
mm - millimeter
ppt – parts per thousand
SIO – Scripps Institution of Oceanography
µm - micrometer
USEPA – United States Environmental Protection Agency

Statistical Analyses

Survival data, expressed as a proportion, were arcsine square-root transformed prior to statistical analysis to normalize the distribution of the data and satisfy statistical assumptions for analysis. Statistical assumptions were evaluated prior to analysis using Bartlett's Test for differences in variance and D'Agostino Pearson Omnibus test for normality. A one-way Analysis of Variance (ANOVA) was performed to determine if significant differences existed among samples and lab control. If the ANOVA detected a significant difference among samples, unpaired *t*-test comparisons were performed to identify a significant difference for each sample compared to control. Analyses were performed with GraphPad Prism, Version 4.02.

Statistical analyses of reference toxicant data was performed using Comprehensive Environmental Toxicity Information System Software (CETIS™), Version 1.8.7.20. (Tidepool Scientific Software 2010-2013). Analyses followed standard USEPA flow chart methods specified for this test type. The dose-response was reviewed and validated.

RESULTS AND DISCUSSION

A summary of toxicity results are provided in Figure 1. Detailed survival summary, statistical analyses, and water quality data are provided in Appendices C, D, and E, respectively.

Mean survival of *Eohaustorius* in the laboratory control was 97 percent, exceeding the minimum control survival criterion of 90 percent. Mean survival among the samples ranged from 96 to 100 percent (Figure 1, Appendix C). A one-way ANOVA analysis failed to detect statistically significant differences among sites (p=0.9445, Appendix E).

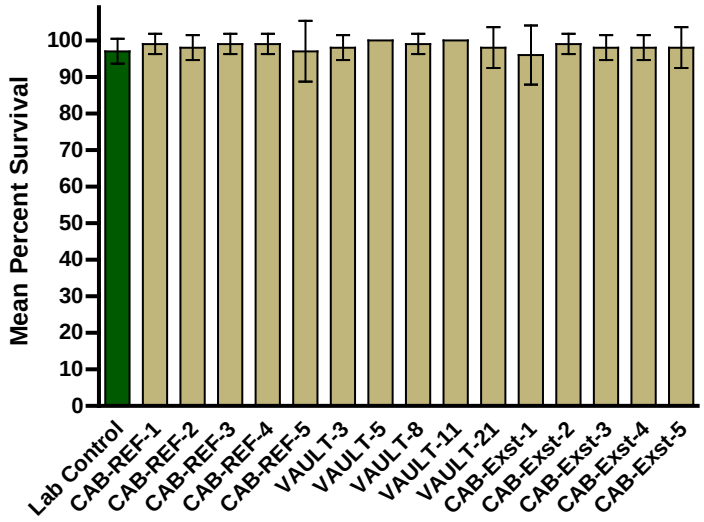

Figure 1. Ten-day survival of amphipods (*Eohaustorius estuarius*) (mean percent survival ±95% C.I.).

QUALITY ASSURANCE

All data presented have been thoroughly reviewed and deemed acceptable for reporting in accordance with relevant protocols and Nautilus' internal QA/QC program. All toxicity tests were initiated within 13 days of sample collection. Minor deviations are noted on datasheets with corrective actions taken when appropriate.

All water quality measurements were within required ranges for the duration of the test. Pore water and overlying water total ammonia concentrations, where measured, ranged from <0.5 to 3.8 mg/L. No effect was observed in any sample including the sample with the highest pore water ammonia concentration and all measured ammonia values were well below any reported thresholds for *Eohaustorius* (Kohn et al. 1994, USEPA 1994).

Mean control survival in the reference toxicant test was 95 percent. An LC_{50} value of 120 milligrams per liter (mg/L) total ammonia was determined using the Spearman-Karber method. This LC_{50} value was within the internal control chart limits of $\pm$ two standard deviations from the historical mean (Appendix F). A list of qualifier codes can be found in Appendix G.

REFERENCES

ASTM 2003. Standard Test Method for Measuring The Toxicity of Sediment-Associated Contaminants with Estuarine and Marine Invertebrates. American Society for Testing and Materials, Philadelphia Pennsylvania. ASTM Method E1367-03.

GraphPad Software Inc. 1992-2004. GraphPad Prism, Version 4.02.

Kohn NP, Word JQ, Niyogi DK, Ross LT, Dillon T and Moore DW (1994). Acute toxicity of ammonia to four species of marine amphipod. Marine Environmental Research. 38: 1-15.

SCCWRP, 2009. Sediment Quality Assessment Draft Technical Support Manual.

Tidepool Scientific Software. 2001-2013. CETIS™ Comprehensive Environmental Toxicity Information System Software, Version 1.8.7.20.

USEPA 1994. Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods. June 1994. Environmental Protection Agency, Office of Research and Development. EPA 600/R-94/025.

Appendix A

Chain-of-Custody Forms

Nautilus Environmental

4340 Vandever Ave.
San Diego, CA 92120
Phone 858.587.7333
Fax 858.587.3961

Chain of Custody

Date 1/7/15 Page 1 of 2

Sample Collection By:

Report to:		Invoice To:	
Company	Power Engineers	Company	Power Engineers
Address	731 East Ball Road, Suite 100	Address	731 East Ball Road, Suite 100
City/State/Zip	Anaheim, CA 92805	City/State/Zip	Anaheim, CA 92805
Contact	Steve Gruber	Contact	Steve Gruber
Phone	(949) 444-1002	Phone	(949) 444-1002
Email	sjgruber@burnsmcd.com	Email	sjgruber@burnsmcd.com

	SAMPLE ID	DATE	TIME	MATRIX	CONTAINER TYPE	NO. OF CONTAINERS	COMMENTS	ANALYSES REQUIRED: E. estuarias 10-day Survival										Receipt Temperature (°C)
1	CAB-REF-1	1/7/15	1036	Sed	Pl Bag	1	Bight '13 protocols	X										6.0
2	CAB-REF-2	1/7/15	1014	Sed	Pl Bag	1	Bight '13 protocols	X										5.0
3	CAB-REF-3	1/7/15	1004	Sed	Pl Bag	1	Bight '13 protocols	X										5.0
4	CAB-REF-4	1/7/15	945	Sed	Pl Bag	1	Bight '13 protocols	X										5.0
5	CAB-REF-5	1/7/15	918	Sed	Pl Bag	1	Bight '13 protocols	X										5.0
6	Vault-3	1/9/15	0900	Sed	"	1	"	X										5.0
7	Vault-5	1/9/15	0900	"	"	1	"	X										4.0
8	Vault-8	1/9/15	0900	"	"	1	"	X										5.0
9	Vault-11	1/9/15	0900	"	"	1	"	X										5.0
10	Vault-21	1/9/15	0900	"	"	1	"	X										4.0

PROJECT INFORMATION		SAMPLE RECEIPT	
Client:		Total No. of Containers	10
PO No.:		Received Good Condition?	Y
Shipped Via:		Matches Test Schedule?	Y

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY (CLIENT)	RELINQUISHED BY (COURIER)
(Signature) (Time): 1/9/15, 1400	(Signature) (Time): 1400
(Printed Name) (Date): Steve Gruber	(Printed Name) (Date): Alexi Gabriel 1/12/15
(Company): Burns & McDonnell	(Company): Nautilus AG 1/12/15
RECEIVED BY (COURIER)	**RECEIVED BY (LABORATORY)**
(Signature) (Time)	(Signature) (Time): 1400
(Printed Name) (Date)	(Printed Name) (Date): Alexi Gabriel 1/12/15
(Company)	(Company): Nautilus

Additional costs may be required for sample disposal or storage. Payment net 30 unless otherwise contracted.

DISTRIBUTION: WHITE - Nautilus Environmental, COLOR - Originator

Nautilus Environmental
4340 Vandever Avenue
San Diego, CA 92120
Phone 858.587.7333
Fax 858.587.3961

Chain of Custody

Date 11/12/15 Page 2 of 2

Sample Collection By: _____

Report to:
- Company: Power Engineers
- Address: 731 East Ball Rd, Suite 100
- City/State/Zip: Anaheim, CA 92805
- Contact: Steve Gruber
- Phone: 949-444-1002
- Email: sjgruber@burnsmcd.com

Invoice To:
- Company: Same
- Address: _____
- City/State/Zip: _____
- Contact: _____
- Phone: _____
- Email: _____

	SAMPLE ID	DATE	TIME	MATRIX	CONTAINER TYPE	NO. OF CONTAINERS	COMMENTS	ANALYSES REQUIRED: E. coli/enterococci in Bay/Ocean water	Receipt Temperature (°C)
1	Cab-Exst-1	11/9/15	1405	Seal	PL Bag	1	Bright 13 protocols	X	5.0
2	Cab-Exst-2		1330					X	5.0
3	Cab-Exst-3		1245					X	5.0
4	Cab-Exst-4		1200					X	3.0
5	Cab-Exst-5		1100					X	3.0
6									
7									
8									
9									
10									

PROJECT INFORMATION		SAMPLE RECEIPT	
Client:		Total No. of Containers	5
PO No.:		Received Good Condition?	Y
Shipped Via:		Matches Test Schedule?	Y

SPECIAL INSTRUCTIONS/COMMENTS:

1) RELINQUISHED BY (CLIENT)		2) RECEIVED BY (COURIER)	
(Signature)	(Time) 1400	(Signature)	(Time)
(Printed Name) Steve Gruber	(Date) 11/12/15	(Printed Name)	(Date)
(Company)		(Company)	

3) RELINQUISHED BY (COURIER)		4) RECEIVED BY (LABORATORY)	
(Signature)	(Time)	(Signature)	(Time) 1400
(Printed Name)	(Date)	(Printed Name) Alexi Gabriel	(Date) 11/12/15
(Company)		(Company) Nautilus	

Additional costs maybe required for sample disposal or storage.
Payment Net 30 unless otherwise contracted.

DISTRIBUTION: WHITE - Nautilus Environmental, COLOR - Originator

Appendix B

Sample Receipt Information

Nautilus Environmental
4340 Vandever Avenue
San Diego, CA 92120

Sediment Sample Check-In Information

Client: Burns & McDonnell / Power Engineers

Test Type(s): Eoh - 10 day

Project: Sylmar Electrode

Test IDs: 1501 - 5058 through 5072

Nautilus Log-in 15-xxxx (A)	Sample ID	Collection Date & Time	Receipt Date & Time	Receipt Temp. (°C)	No. Containers	Container Type	Approx. Total Volume Received (L)	Sample Description	Tech Intials
15-3000	CAB-REF-1	1/7/15 1036	1/12/15 1400	6.0	1	ziplock	~4 L	sediment	AG
15-3001	CAB-REF-2	1014		5.0			~4L		
15-3002	CAB-REF-3	1004		5.0			~5L		
15-3003	CAB-REF-4	0945		5.0			~4L		
15-3004	CAB-REF-5	0918		5.0			~4L		
15-3005	Vault-3	1/9/15 0900		5.0			~3L		
15-3006	Vault-5	0900		4.0			~3L		
15-3007	Vault-8	0900		5.0			~4L		
15-3008	Vault-11	0900		5.0			~2L		
15-3009	Vault-21	0900		4.0			~3L		
15-3010	CAB-Exst-1	1405		5.0			~4L	coarse, sandy material	
15-3011	CAB-Exst-2	1330		5.0			~4L	~~brown~~ sediment (A)	

Samples Shipped Via: hand

COC Present? (Y) N

Sieving Required? (Y) N Screen Size: 0.5mm (B)

Sub-samples for additional chemistry:

Collect and Preserve Initial Porewater Tech Initials AG/ALB

Other _____ Tech Initials _____

Other _____ Tech Initials _____

Comments: (A) AG 1/12/15 Q18

(B) CAB-Exst-1 was sieved through a 1mm screen due to larger grain size

QC Check: BG 1/21/15

Final Review: KS 1/29/15

Nautilus Environmental
4340 Vandever Avenue
San Diego, CA 92120

Sediment Sample Check-In Information

Client: Burns & McDonnell / Power Engineers

Test Type(s): Eon - 10 day

Project: Sylmar Electrode

Test IDs: 1501-S058 through S072

Nautilus Log-in ~~15-xxxx~~ (A)	Sample ID	Collection Date & Time	Receipt Date & Time	Receipt Temp. (°C)	No. Containers	Container Type	Approx. Total Volume Received (L)	Sample Description	Tech Intials
15-3012	CAB-~~East~~ 3	1/9/15 1245	1/12/15 1400	5.0	1	ziplock	~~~2L~~ ~~2.4L~~ (A)	~~Brown~~ sediment (A)	AG
15-3013	CAB-East 4	↓ 1200	↓	3.0	↓	↓	~3L	↓	↓
15-3014	CAB-East 5	↓ 1100	↓	5.0	↓	↓	~2L	↓	↓
~~15-3015~~ (A)									

Samples Shipped Via: hand

COC Present? (Y) N

Sieving Required? (Y) N Screen Size: 0.5mm

Sub-samples for additional chemistry:

Collect and Preserve Initial Porewater Tech Initials AG/ALB

Other _____ Tech Initials _____

Other _____ Tech Initials _____

Comments: (A) AG 1/12/15 Q18

QC Check: BO 1/21/15

Final Review: KS 1/29/15

Total Ammonia Analysis **Pore Water**
Marine

Client: Burns and McDonnell
Project: Sylmar Electrode
Test Type: Eon 10-day Survival

DI Blank: 0.0 **Test Start Date:** 1/20/2015 **Analyst:** SGE
SW Blank: 0.0 **Analysis Date:** ~~1/15/15~~ 1/14/15 N x 1.22 Q18 SGE

Sample ID	Nautilus ID	Sub-Sample Date	Test Day	pH (units)	Salinity (ppt)	NH3-N (mg/L)	Ammonia (mg/L)
Blank Spike (10 mg/L NH_3)		NA	NA	NA	NA	8.1	9.9
CAB-REF-1		1/12/2015	Check-in	(D)	(D)	(D)	(D)
CAB-REF-2		1/12/2015	Check-in	(D)	(D)	(D)	(D)
CAB-REF-3		1/12/2015	Check-in	7.98	35.0	2.6	3.2
CAB-REF-4		1/12/2015	Check-in	(D)	(D)	(D)	(D)
CAB-REF-5		1/12/2015	Check-in	8.01	35.0	1.4	1.7
VAULT-3		1/12/2015	Check-in	7.86	35.0	1.6	2.0
VAULT-5		1/12/2015	Check-in	7.84	34.0	1.5	1.8
VAULT-8		1/12/2015	Check-in	7.87	34.0	2.2	2.7
VAULT-11		1/12/2015	Check-in	7.90	35.0	3.1	3.8
VAULT-21		1/12/2015	Check-in	7.87	36.0	1.5	1.8
Spike Check (10 mg/L NH_3)		NA	NA	NA	NA	8.1	9.9
CAB-Exst-1		1/12/2015	Check-in	(D)	(D)	(D)	(D)
CAB-Exst-2		1/12/2015	Check-in	8.10	36.0	1.8	2.2
CAB-Exst-3		1/12/2015	Check-in	7.85	35.0	1.1	1.3
CAB-Exst-4		1/12/2015	Check-in	7.78	35.0	1.3	1.6
CAB-Exst-5		1/12/2015	Check-in	(D)	(D)	(D)	(D)
Sample Duplicate[a]	CAB-EXST-4	NA	NA	NA	NA	1.2	1.5
Sample Duplicate + Spike[a]		NA	NA	NA	NA	9.3	11.3
Spike Check (10 mg/L NH_3)		NA	NA	NA	NA	8.1	9.9

Relative Percent Difference (RPD) = [sample] (mg/L) - [sample duplicate] (mg/L) / [average ammonia] (mg/L) x 100 — **Acceptable Range: 0-20%**

Percent Recovery = [spiked sample] (mg/L) - [sample] (mg/L) / nominal [spike] (mg/L) x 100 — **Acceptable Range: 80-120%[b]**

QC Sample ID	[NH_3]	[Sample Dup]	Measured [Spike]	Nominal [Spike]	RPD	% Recovery
Blank	0.0	NA	9.9	10	NA	99
CAB-EXST-4	1.6	1.5	11.3	10	6.5	97

Comments: (D) Unable to recover adequate volume after centrifugation

Notes: [a] Unless otherwise noted, the last sample listed on the datasheet is used for duplicate and duplicate + spike QC check.

[b] Acceptable range for % recovery applies only to the blank spike. Spike recoveries in samples may vary based on sample matrix and are for information only.

[c] Calculation not performed due to one or more values below the method detection limit.

Method Detection Limit (MDL) = 0.5 mg/L

QC Check: BEJ 1/20/15 **Final Review:** YS 1/29/15

Appendix C

Summary of Results Tables

Burns & McDonnell
10-Day *Eohaustorius* Survival Bioassay
Project: Sylmar Electrode
Test Initiation Date: 1/20/15

Site ID	Replicate	Random No.	No. Alive	Percent Survival	Mean Percent Survival	Standard Deviation
Lab Control	A	15	20	100	97.0	2.7
	B	32	19	95		
	C	17	19	95		
	D	49	20	100		
	E	52	19	95		
CAB-REF-1	A	1	20	100	99.0	2.2
	B	33	20	100		
	C	27	20	100		
	D	48	20	100		
	E	57	19	95		
CAB-REF-2	A	36	20	100	98.0	2.7
	B	54	19	95		
	C	38	20	100		
	D	25	19	95		
	E	34	20	100		
CAB-REF-3	A	12	20	100	99.0	2.2
	B	59	20	100		
	C	26	20	100		
	D	46	20	100		
	E	9	19	95		
CAB-REF-4	A	20	19	95	99.0	2.2
	B	72	20	100		
	C	4	20	100		
	D	77	20	100		
	E	64	20	100		
CAB-REF-5	A	23	20	100	97.0	6.7
	B	37	17	85		
	C	73	20	100		
	D	63	20	100		
	E	43	20	100		
VAULT-3	A	31	19	95	98.0	2.7
	B	60	20	100		
	C	19	20	100		
	D	21	20	100		
	E	53	19	95		
VAULT-5	A	55	20	100	100	0.0
	B	56	20	100		
	C	75	20	100		
	D	13	20	100		
	E	76	20	100		
VAULT-8	A	39	20	100	99.0	2.2
	B	78	20	100		
	C	47	20	100		
	D	35	20	100		
	E	80	19	95		
VAULT-11	A	70	20	100	100	0.0
	B	68	20	100		
	C	45	20	100		
	D	30	20	100		
	E	61	20	100		
VAULT-21	A	41	20	100	98.0	4.5
	B	7	18	90		
	C	74	20	100		
	D	18	20	100		
	E	28	20	100		
CAB-Exst-1	A	62	20	100	96.0	6.5
	B	58	20	100		
	C	22	19	95		
	D	3	17	85		
	E	71	20	100		
CAB-Exst-2	A	11	20	100	99.0	2.2
	B	8	20	100		
	C	67	19	95		
	D	29	20	100		
	E	66	20	100		
CAB-Exst-3	A	40	20	100	98.0	2.7
	B	51	20	100		
	C	44	19	95		
	D	79	20	100		
	E	5	19	95		
CAB-Exst-4	A	42	19	95	98.0	2.7
	B	50	20	100		
	C	10	20	100		
	D	24	19	95		
	E	2	20	100		
CAB-Exst-5	A	6	18	90	98.0	4.5
	B	65	20	100		
	C	16	20	100		
	D	14	20	100		
	E	69	20	100		

Appendix D

Raw Datasheets

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test Species: *E. estuarius*
Test No(s).: 1501-5058 through 5072
Start Date/Time: 1/20/2015 1130
Sample ID: Lab Control
End Date/Time: 1/30/2015 1030
Log-in No.: 15-3015

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.7	31.0	8.2	8.02	NH	1136 Collect Ammonia
1	15.8	31.3	7.9	8.07	AG	
2	14.7	31.6	8.3	8.08	EG	
3	15.2	31.0	8.1	8.04	NH	
4	15.0	31.0	8.1	8.09	AD	
5	15.1	31.0	8.2	8.07	NH	
6	15.0	31.0	7.9	8.03	EG	
7	14.7	31.1	8.4	8.01	ALB	
8	15.2	31.3	8.2	8.03	BK	
9	16.0	31.3	8.5	7.95	EG	
10	15.6	31.0	7.9	8.02	NH	801 Collect Ammonia

QC Check: BG 2/6/15
Final Review: KS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test Species: *E. estuarius*
Test No(s).: 1501-5058
Start Date/Time: 1/20/2015 1130
Sample ID: CAB-REF-1
End Date/Time: 1/30/2015 1030
Log-in No.: 15-3000

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.6	31.6	8.1	8.08	NH	✓BG Collect Ammonia
1	15.9	32.0	7.9	8.13	AG	
2	14.9	31.8	8.2	8.10	EG	
3	15.2	31.6	8.2	8.10	NH	
4	14.7	31.9	8.1	8.15	AD	
5	15.0	31.5	8.1	8.15	NH	
6	14.9	31.9	8.1	8.13	EG	
7	14.8	32.1	8.3	8.06	ALB	
8	15.3	31.9	8.1	8.03	BK	
9	16.1	32.1	8.5	8.04	EG	Q1
10	15.6	31.9	8.1	8.08	NH	✓EG Collect Ammonia

QC Check: BG 2/6/15
Final Review: YS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test No(s).: 1501-5059
Sample ID: CAB-REF-2
Log-in No.: 15-3001

Test Species: *E. estuarius*
Start Date/Time: 1/20/2015 1130
End Date/Time: 1/30/2015 1030

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.8	31.7	8.0	8.06	NH	✓ 1130 Collect Ammonia
1	15.8	32.2	7.9	8.11	AG	
2	15.6	31.9	8.2	8.06	EG	
3	15.2	31.7	8.2	8.09	NH	
4	14.8	32.0	8.0	8.11	AD	
5	15.1	31.7	8.0	8.14	NH	
6	15.2	32.0	8.1	8.11	EG	
7	14.8	32.0	8.3	8.05	ALB	
8	15.3	32.1	8.0	8.10	BK	
9	16.3	32.4	8.5	8.05	EG	Q1
10	15.7	32.1	8.1	8.09	NH	✓ 1030 Collect Ammonia

QC Check: EG 2/6/15
Final Review: RS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test No(s).: 1501-5060
Sample ID: CAB-REF-3
Log-in No.: 15-3002

Test Species: *E. estuarius*
Start Date/Time: 1/20/2015 1130
End Date/Time: 1/30/2015 1030

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.7	31.9	8.1	8.07	NH	BG Collect Ammonia
1	16.C	32.2	8.0	8.08	AG	
2	15.1	31.8	8.2	8.04	EG	
3	EG Q18 1/22/15 15.2 15.4	* 31.8 31.7	* 8.1 8.1	* 8.08 8.06	* X NH	
4	14.9	32.0	8.1	8.09	AD	
5	15.1	31.7	8.1	8.14	NH	
6	15.3	31.8	8.0	8.10	EG	
7	15.0	32.0	8.3	8.03	ALB	
8	15.3	32.2	7.8	8.05	BK	
9	16.2	32.4	8.2	7.96	EG	Q1
10	15.2	32.0	8.1	8.03	NH	BG Collect Ammonia

QC Check: BG 2/6/15
Final Review: KS 2/9/15

Nautilus Environmental. 4340 Vandever Avenue. San Diego, CA 92120.

* EG Q18 1/22/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test No(s).: 1501-5061
Sample ID: CAB-REF-4
Log-in No.: 15-3003

Test Species: *E. estuarius*
Start Date/Time: 1/20/2015 1130
End Date/Time: 1/30/2015 1080

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.8	31.8	8.1	8.08	NH	1130 Collect Ammonia
1 Q1	16.1	32.2	7.9	8.11	AG	1 eah swimming in water column
2	15.2	31.8	8.1	8.08	EG	
3	15.4	31.7	8.1	8.11	NH	
4	15.0	32.0	8.0	8.13	AD	
5	15.1	31.9	8.0	8.17	NH	
6	15.3	31.9	8.1	8.14	EG	
7	15.1	32.0	8.3	8.06	ALB	1 on sediment surface (live)
8	15.3	32.2	8.1	8.08	BK	1 body on sed. surface
9	16.2	32.4	* ~~8.2~~ 8.4	~~7.96~~ 8.05	EG	1 Body on sed. surface Q1
10	15.2	32.2	8.2	8.05	NH	1 Body on surf. 1130 Collect Ammonia

QC Check: BG 2/6/15
Final Review: YS 2/9/15

Nautilus Environmental. 4340 Vandever Avenue. San Diego, CA 92120.

* EG Q1B 1/29/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test No(s).: 1501-5062
Sample ID: CAB-REF-5
Log-in No.: 15-3004

Test Species: *E. estuarius*
Start Date/Time: 1/20/2015 1130
End Date/Time: 1/30/2015 1030

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.8	31.9	8.1	8.06	NH	✓ BU Collect Ammonia
1 Q1	16.2	32.2	7.8	8.04	AG	
2	15.3	31.8	8.2	8.02	EG	
3	15.4	31.8	8.0	8.02	NH	
4	15.1	32.0	8.0	8.05	AD	
5	15.2	31.9	8.0	8.10	NH	
6	15.4	31.9	8.1	8.11	EG	
7	16.1	32.0	8.3	8.02	ALB	
8	15.4	32.3	8.1	8.05	BK	
9	16.6	32.3	8.4	8.01	EG	Q1
10	15.4	32.1	8.1	8.06	NH	✓ BU Collect Ammonia

QC Check: BU 2/6/15
Final Review: RS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test No(s).: 1501-SD63
Sample ID: VAULT-3
Log-in No.: 15-3005

Test Species: *E. estuarius*
Start Date/Time: 1/20/2015 1130
End Date/Time: 1/30/2015 1030

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.9	31.9	8.0	8.08	NH	✓BG Collect Ammonia
1 Q1	16.4	32.3	7.8	8.09	AG	
2	15.6	31.8	8.0	8.04	EG	
3	16.6	31.9	8.1	8.09	NH	
4	15.5	32.0	7.7	8.10	AD	1 on surface
5	15.5	31.8	7.9	8.13	NH	
6	15.8	31.8	8.0	8.08	EG	
7	15.3	32.0	8.2	8.02	ALB	
8	15.4	32.1	8.0	8.07	BK	
9	16.5	32.1	8.5	8.06	EG	Q1
10	15.4	32.1	8.1	8.06	NH	✓BG Collect Ammonia

QC Check: BG 2/6/15
Final Review: KS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test No(s).: 1501-5064
Sample ID: VAULT-5
Log-in No.: 15-3006

Test Species: *E. estuarius*
Start Date/Time: 1/20/2015 1130
End Date/Time: 1/30/2015 1030

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.9	31.4	8.0	8.04	NH	BG Collect Ammonia
1 Q1	16.5	32.1	7.7	8.09	AG	
2	15.7	31.7	8.0	8.11	EG	
3	15.6	31.7	8.0	8.09	NH	
4	15.5	31.8	7.8	8.09	AD	
5	15.6	31.4	7.4	8.11	NH	
6	15.7	31.7	8.0	8.09	EG	
7	15.4	31.8	8.2	8.02	ALB	
8	15.4	32.0	7.9	8.07	BK	
9	16.6	32.0	8.4	8.00	EG	Q1
10	15.5	32.1	8.1	8.04	NH	BG Collect Ammonia

QC Check: BG 2/6/15
Final Review: YS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test Species: *E. estuarius*
Test No(s).: 1501-8065
Start Date/Time: 1/20/2015 1130
Sample ID: VAULT-8
End Date/Time: 1/30/2015 1030
Log-in No.: 15-3007

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.9	31.9	7.9	8.03	NH	Collect Ammonia ✓ BG
1 Q1	16.6	32.2	7.6	8.04	AG	
2	15.8	31.7	7.9	8.05	EG	
3	15.8	31.7	8.0	8.11	NH	1 mort
4	15.6	31.9	7.9	8.12	~~AO~~	
5	15.6	31.9	7.9	8.13	NH	
6	15.8	31.8	8.0	8.12	EG	1 Body on sediment surface in surr
7	15.1	31.9	8.1	8.04	ALB	1 body on sediment surface
8	15.8	32.2	7.8	8.09	BK	1 body on sed. surface
9	16.8	32.0	8.4	8.03	EG	1 Body on sed. surface Q1
10	15.4	32.2	8.1	8.08	NH	✓ Collect Ammonia

QC Check: BG 2/10/15
Final Review: KS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test No(s).: 1501-5066
Sample ID: VAULT-11
Log-in No.: 15-3008

Test Species: *E. estuarius*
Start Date/Time: 1/20/2015 1130
End Date/Time: 1/30/2015 1030

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.1	31.7	8.2	8.08	NH	✓ BG Collect Ammonia
1	15.6	32.2	8.0	8.10	AG	
2	14.9	31.7	8.1	8.01	EG	
3	14.9	31.7	8.1	8.08	NH	
4	14.1	32.0	8.2	8.12	~~NH~~	
5	14.4	31.6	8.1	8.14	NH	
6	14.6	31.9	8.1	8.08	EG	
7	14.3	32.0	8.4	8.03	ALB	
8	14.6	32.2	8.1	8.06	BK	
9	15.7	32.2	8.5	8.02	EG	
10	14.6	32.1	9.3	8.07	NH	✓ BK Collect Ammonia

QC Check: BG 2/6/15
Final Review: YS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test Species: *E. estuarius*
Test No(s).: 1501-8067
Start Date/Time: 1/20/2015 1130
Sample ID: VAULT-21
End Date/Time: 1/30/2015 1030
Log-in No.: 15-3009

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.1	31.9	8.0	8.06	NH	✓ BG Collect Ammonia
1	15.5	32.3	7.8	8.06	AG	
2	14.5	31.8	8.0	7.99	EG	
3	14.7	31.8	8.1	8.05	NH	
4	14.2	32.0	8.2	8.07	AO	
5	14.4	31.9	8.0	8.11	NH	
6	14.6	31.9	8.1	8.07	EG	
7	14.4	32.0	8.3	7.99	ALB	
8	14.6	32.1	8.1	8.07	BK	
9	15.8	32.4	8.5	7.99	EG	
10	14.7	32.1	8.2	8.03	NH	✓ BG Collect Ammonia

QC Check: BG 2/6/15
Final Review: KS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test Species: *E. estuarius*
Test No(s).: 1501-8068
Start Date/Time: 1/20/2015 1130
Sample ID: CAB-Exst-1
End Date/Time: 1/30/2015 1030
Log-in No.: 15-3010

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.2	31.9	8.1	8.11	NH	✓BG Collect Ammonia
1	15.6	32.2	8.0	8.14	AG	
2	14.5	31.8	8.2	8.10	EG	1 dead in surr.
3	14.7	31.9	8.2	8.16	NH	
4	14.2	32.0	8.2	8.18	AD	
5	14.4	31.6	8.1	8.16	NH	
6	14.7	31.9	8.2	8.18	EG	1 body in surr. on surface
7	14.4	32.0	8.4	8.10	ALB	1 body on sediment surface
8	14.7	32.2	8.2	8.14	BK	1 body on sed. surface
9	15.7	32.5	8.6	8.12	EG	1 body on sed. surface
10	14.8	32.3	8.3	8.13	NH	✓BG Collect Ammonia

QC Check: BG 2/6/15
Final Review: YS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test Species: *E. estuarius*
Test No(s).: 1501-SO109
Start Date/Time: 1/20/2015 1130
Sample ID: CAB-Exst-2
End Date/Time: 1/30/2015 1030
Log-in No.: 15-3011

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.3	31.8	8.1	8.10	NH	1130 Collect Ammonia
1	15.7	32.3	8.0	8.10	AG	
2	14.6	31.7	8.2	8.01	EG	
3	14.8	32.0	8.2	8.11	NH	
4	14.4	32.0	8.1	8.11	AO	
5	14.4	32.0	8.1	8.16	NH	
6	14.8	31.9	8.1	8.09	EG	
7	14.6	32.1	8.4	8.01	MB	
8	14.7	32.2	8.2	8.07	BK	
9	15.6	32.4	8.4	8.00	EG	
10	14.5	32.4	8.3	8.06	NH	1030 Collect Ammonia

QC Check: BG 2/6/15
Final Review: KS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test Species: *E. estuarius*
Test No(s).: 1501-5070
Start Date/Time: 1/20/2015 1130
Sample ID: CAB-Exst-3
End Date/Time: 1/30/2015 1030
Log-in No.: 15-3012

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.4	31.9	8.1	8.09	NH	1130 Collect Ammonia
1	15.7	32.3	7.9	8.08	AE	
2	14.8	31.8	8.2	8.03	EG	
3	14.6	31.9	8.1	8.09	NH	
4	14.3	32.1	8.2	8.14	AO	
5	14.5	32.2	8.1	8.22	NH	
6	14.6	32.0	8.1	8.10	EG	
7	14.5	32.1	8.3	8.00	ALB	
8	14.8	32.3	7.9	8.02	BK	
9	15.7	32.4	8.5	7.98	EG	
10	14.5	32.3	8.3	8.03	NH	1130 ✓ Collect Ammonia

QC Check: BG 2/6/15
Final Review: KS 2/9/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test No(s).: 1501-5071
Sample ID: CAB-Exst-4
Log-in No.: 15-3013

Test Species: *E. estuarius*
Start Date/Time: 1/20/2015 1130
End Date/Time: 1/30/2015 1030

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.3	32.0	8.1	8.09	NH	✓BG Collect Ammonia
1	15.1	32.3	7.9	8.08	AG	
2	14.8	31.8	8.2	8.04	EG	1 trapped on surface of water
3	14.8	31.9	8.2	8.11	NH	
4	14.4	32.0	8.1	8.15	AD	
5	14.6	31.9	8.1	8.12	NH	
6	14.7	32.0	8.2	8.13	EG	
7	14.5	32.0	8.3	8.03	ALB	
8	14.7	32.2	7.9	8.09	BK	
9	*~~14.8~~ 15.7	32.2	*~~7.7~~ 8.6	*~~8.07~~ 8.02	EG	
10	14.6	32.2	8.3	8.05	NH	✓BG Collect Ammonia

QC Check: BG 2/6/15
Final Review: YS 2/9/15

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* EG Q18 1/29/15

10-Day Marine Sediment Bioassay
Static Conditions

Water Quality Measurements

Client/Project ID: Burns & McDonnell
Test Species: *E. estuarius*
Test No(s).: 1501-5072
Start Date/Time: 1/20/2015 1130
Sample ID: CAB-Exst-5
End Date/Time: 1/30/2015 1030
Log-in No.: 15-3014

Test Day	Temperature (°C)	Salinity (ppt)	Dissolved Oxygen (mg/L)	pH (units)	Technician Initials	Comments
0	15.6	32.0	7.8	8.02	NH	BG Collect Ammonia
1	15.9	32.3	7.6	7.97	AG	
2	15.2	31.8	7.8	7.94	EG	1 dead on surface
3	14.9	32.0	8.2	8.04	NH	
4	15.0	31.9	7.7	7.99	AD	
5	14.6	32.0	7.9	8.05	NH	
6	15.1	31.8	8.1	8.01	EG	1 Body on surface
7	14.8	32.0	8.3	8.01	ALB	1 body on sediment surface
8	14.8	32.2	7.7	8.07	BK	1 body on sed. surface
9	16.0	32.2	8.4	7.97	EG	1 Body on sed surface
10	15.0	32.2	8.1	8.03	NH	BG Collect Ammonia

QC Check: BG 2/6/15
Final Review: KS 2/9/15

Sediment Bioassay

Daily Observations

Client: Burns & McDonnell

Test Species: *E. estuarius*

Project ID Sylmar Electrode

Start Date/Time: 1/20/2015 1130

Test No.: 1501-S058 through S072

End Date/Time: 1/30/2015 1030

Random Number	Daily Observations (Use Codes Provided)									
	1	2	3	4	5	6	7	8	9	10
1	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	N	N	N	N
3	N	N	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	1B	1B	1B
8	N	N	N	N	N	N	N	N	N	N
9	N	N	N	N	N	N	N	N	N	N
10	N	N	N	N	N	N	N	N	N	N
11	N	N	N	N	N	N	N	N	N	N
12	N	2E 25 EG 1/19/15	N	N	N	N	N	N	N	N
13	N	N	N	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N	N	N
15	N	N	N	N	N	N	N	N	N	N
16	N	N	N	N	N	N	1B 1B 1B 1/27/15 BT	1B	N	1B
17	N	N	N	N	N	N	N	N	N	1B
18	N	N	N	N	N	N	N	N	N	N
19	N	N	N	N	N	N	N	N	N	N
20	N	N	N	N	N	N	1B	1B	1B	1B
21	N	N	N	N	N	N	N	N	N	N
22	N	N	N	N	N	N	N	N	N	N
23	N	N	N	N	N	N	N	N	N	N
24	N	N	N	N	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N	N	N
26	N	N	N	N	N	N	N	N	N	N
27	N	N	N	N	N	N	N	N	N	N
28	N	N	N	N	N	N	N	N	N	N
29	N	N	N	N	N	N	N	N	N	N
30	N	N	N	N	N	N	N	N	N	N
Tech	AB	EG	NH	AD	MH	EG	ALB	BK	EG	BG

Observations Key

E = Emerged, specify number S = Trapped on surface, specify number
N = Normal G = Abnormal growth on or discoloration of sediment surface
A = No/low aeration B = Body or molt on sediment surface, specify number

QC Check: BG 2/6/15 **Final Review:** BS 2/9/15

Sediment Bioassay **Daily Observations**

Client: Burns & McDonnell **Test Species:** *E. estuarius*

Project ID Sylmar Electrode **Start Date/Time:** 1/20/2015 1130

Test No.: 1501-S058 through S072 **End Date/Time:** 1/30/2015 1030

Random Number	Daily Observations (Use Codes Provided)									
	1	2	3	4	5	6	7	8	9	10
31	N	N	N	N	1B	1B	1B	1B	1B	1B
32	N	N	N	N	N	N	N	N	N	1B
33	N	N	N	N	N	N	N	N	N	N
34	N	N	N	N	N	N	N	N	N	N
35	N	N	N	N	N	N	N	N	N	N
36	N	N	N	N	N	N	N	N	N	N
37	N	BE IS 1	N	N	1B	1B	1B	1B	1B	1B
38	N	N	N	N	N	N	N	N	N	N
39	N	BE IS	N	N	N	N	N	N	N	N
40	N	N	N	N	N	N	N	N	N	N
41	N	N	N	N	N	N	N	N	N	N
42	N	N	N	N	N	1B	1B	1B	1B	N
43	N	N	N	N	N	N	N	N	N	N
44	N	N	N	N	N	N	N	N	N	1B
45	N	N	N	N	N	N	N	N	N	N
46	N	N	N	N	N	N	N	N	N	N
47	N	N	N	N	N	N	N	N	N	N
48	N	N	N	N	N	N	N	N	N	N
49	N	N	N	N	N	N	N	N	N	N
50	N	N	N	N	N	N	N	N	N	N
51	N	N	N	N	N	N	N	N	N	N
52	N	N	N	N	N	N	1B	1B	1B	B
53	N	N	N	N	N	N	N	N	N	N
54	N	N	N	N	N	N	N	N	N	N
55	N	N	N	N	N	N	N	N	N	N
56	N	N	N	N	N	N	N	N	N	N
57	N	N	N	N	N	N	N	N	N	N
58	N	N	N	N	N	N	N	N	N	N
59	N	N	N	N	N	N	N	N	N	N
60	N	N	N	N	N	N	N	N	N	N
Tech	AO	EG	NH	AO	NH	EG	ALB	BL	EG	AG

Observations Key

E = Emerged, specify number S = Trapped on surface, specify number
N = Normal G = Abnormal growth on or discoloration of sediment surface
A = No/low aeration B = Body or molt on sediment surface, specify number

QC Check: BG 2/6/15 **Final Review:** KB 2/9/15

Sediment Bioassay **Daily Observations**

Client: Burns & McDonnell **Test Species:** *E. estuarius*

Project ID Sylmar Electrode **Start Date/Time:** 1/20/2015 1130

Test No.: 501-S058 through S072 **End Date/Time:** 1/30/2015 1030

Random Number	Daily Observations (Use Codes Provided)									
	1	2	3	4	5	6	7	8	9	10
61	N	N	N	N	N	N	N	N	N	N
62	N	N	N	N	N	N	N	N	N	N
63	N	N	N	N	N	N	N	N	N	N
64	N	N	N	N	N	N	N	N	N	N
65	N	N	N	N	N	N	N	N	N	N
66	N	E 1S	N	N	N	N	N	N	N	N
67	N	E 1S	N	N	N	N	N	N	N	B
68	N	N	N	N	N	N	N	N	N	N
69	N	N	N	N	N	N	N	N	N	N
70	N	E 1S	N	N	N	N	N	N	N	N
71	N	N	N	N	N	N	N	N	N	N
72	N	N	N	N	N	N	N	N	N	N
73	N	N	N	N	N	N	N	N	N	N
74	N	N	N	N	N	N	N	N	N	N
75	N	N	N	N	N	N	N	N	N	N
76	N	N	N	N	N	N	N	N	N	N
77	N	N	N	N	N	N	N	N	N	N
78	N	N	N	N	N	N	N	N	N	N
79	N	N	N	N	N	N	N	N	N	N
80	N	N	N	N	N	N	N	N	N	N
Tech	BG	EG	MH	AP	MH	EG	ALB	BK	EG	BG

Observations Key

E = Emerged, specify number S = Trapped on surface, specify number
N = Normal G = Abnormal growth on or discoloration of sediment surface
A = No/low aeration B = Body or molt on sediment surface, specify number

QC Check: BG 2/6/15 **Final Review:** BS 2/9/15

Marine Sediment Bioassay **Organism Survival**

Client/Project ID: Burns & McDonnell **Test Species:** *E. estuarius*

Test No(s).: 1561 - S058 through S072 **Start Date/Time:** 1/20/2015 1130

Initial No. Organisms: 20 10/rep KS QA 1/29/15 **End Date/Time:** 1/30/2015 1030

Random Number	Number Alive	10% QC Check of final counts	Random Number	Number Alive	10% QC Check of final counts
1	20		26	20	20
2	20		27	20	
3	17	17	28	20	
4	20		29	20	
5	19		30	20	
6	18		31	19	
7	18		32	19	
8	20		33	20	
9	19	19	34	20	20
10	20		35	20	
11	20		36	20	
12	20		37	17	17
13	20		38	20	
14	20	20	39	20	
15	20		40	20	
16	20	20	41	20	
17	19		42	19	
18	20		43	20	
19	20		44	19	19
20	19		45	20	
21	20		46	20	
22	19	19	47	20	20
23	20		48	20	
24	19		49	20	
25	19		50	20	
Tech Initials:	BG/EG	AG	Tech Initials:	EG/BG	AG

Initiation QC Check Initials: KS

Counts AG/BG All Jars initiated KS Air BG Lights (24hr) BG

T_0 pore water WQ (pH, salinity, ammonia) AG All pore water ammonia below NH_3 threshold BG

NH_3 Thresholds: (*Eohaustorius* and *Leptocheirus* = 60 mg/L) (*Ampelisca* and *Rhepoxynius* = 30 mg/L)

Termination QC Check Initials:

T_f pore water WQ (pH, salinity, ammonia) N/A

Animal Source/Date Received: Northwestern Aquatic Sciences/ 1/14/15 **Size at Initiation:** 3-5 mm

Comments:

QC Check: BG 2/10/15 **Final Review:** KS 2/9/15

Marine Sediment Bioassay **Organism Survival**

Client/Project ID: Burns & McDonnell **Test Species:** *E. estuarius*

Test No(s).: 1501-5058 through 5072 **Start Date/Time:** 1/20/2015 1130

Initial No. Organisms: 20 ~~10~~/rep KS 1/29/15 **End Date/Time:** 1/30/2015 1030

Random Number	Number Alive	10% QC Check of final counts	Random Number	Number Alive	10% QC Check of final counts
51	20	20	76	20	
52	19		77	20	
53	19		78	20	
54	19		79	20	
55	20		80	19	19
56	20				
57	19				
58	20				
59	20				
60	20	20			
61	20				
62	20				
63	20				
64	20				
65	20	20			
66	20				
67	19	19			
68	20				
69	20				
70	20				
71	20				
72	20				
73	20	20			
74	20				
75	20				
Tech Initials:	BG/EG/AG	AG	Tech Initials:	BG/EG	AC

Initiation QC Check Initials: KS

Counts AG/BG All Jars initiated KS Air BG Lights (24hr) BG

T_0 pore water WQ (pH, salinity, ammonia) AG All pore water ammonia below NH_3 threshold BG

NH_3 Thresholds: (*Eohaustorius* and *Leptocheirus* = 60 mg/L) (*Ampelisca* and *Rhepoxynius* = 30 mg/L)

Termination QC Check Initials:

T_f pore water WQ (pH, salinity, ammonia) N/A

Animal Source/Date Received: Northwestern Aquatic Sciences / 1/14/15 **Size at Initiation:** 3-5mm

Comments:

QC Check: BG 2/10/15 **Final Review:** KS 2/9/15

Burns & McDonnell
10-Day Eohaustorius Survival Bioassay
Project: Sylmar Electrode
Test Initiation Date: 1/20/15

1 - 80

Site	Rep	Rand #
Lab Control	A	15
	B	32
	C	17
	D	49
	E	52
CAB-REF-1	A	1
	B	33
	C	27
	D	48
	E	57
CAB-REF-2	A	36
	B	54
	C	38
	D	25
	E	34
CAB-REF-3	A	12
	B	59
	C	26
	D	46
	E	9
CAB-REF-4	A	20
	B	72
	C	4
	D	77
	E	64
CAB-REF-5	A	23
	B	37
	C	73
	D	63
	E	43
VAULT-3	A	31
	B	60
	C	19
	D	21
	E	53
VAULT-5	A	55
	B	56
	C	75
	D	13
	E	76
VAULT-8	A	39
	B	78
	C	47
	D	35
	E	80
VAULT-11	A	70
	B	68
	C	45
	D	30
	E	61
VAULT-21	A	41
	B	7
	C	74
	D	18
	E	28
CAB-Exst-1	A	62
	B	58
	C	22
	D	3
	E	71
CAB-Exst-2	A	11
	B	8
	C	67
	D	29
	E	66
CAB-Exst-3	A	40
	B	51
	C	44
	D	79
	E	5
CAB-Exst-4	A	42
	B	50
	C	10
	D	24
	E	2
CAB-Exst-5	A	6
	B	65
	C	16
	D	14
	E	69

QL-AC

Total Ammonia Analysis

~~Freshwater~~ Marine
YS

Overlying Water

Client: Burns and McDonnell
Project: Sylmar Electrode
Test Type: Eoh 10-day Survival

DI Blank: 0.0 SW Blank: ⑧G21 YS **Analyst:** SG2
Test Start Date: 1/20/15 **Analysis Date:** 1/21/15

N x 1.22

Sample ID	Nautilus ID	Sub-Sample Date	Test Day	NH3-N (mg/L)	Ammonia (mg/L)
Blank Spike (10 mg/L NH_3)		NA	NA	7.7	9.4
Lab Control	1	1/20/2015	0	0.0	<0.5
CAB-REF-1	2	1/20/2015	0	0.5	0.6
CAB-REF-2	3	1/20/2015	0	0.4	<0.5
CAB-REF-3	4	1/20/2015	0	0.0	<0.5
CAB-REF-4	5	1/20/2015	0	0.2	<0.5
CAB-REF-5	6	1/20/2015	0	0.0	<0.5
VAULT-3	7	1/20/2015	0	0.3	<0.5
VAULT-5	8	1/20/2015	0	0.0	<0.5
VAULT-8	9	1/20/2015	0	0.0	<0.5
VAULT-11	10	1/20/2015	0	0.3	<0.5
Spike Check (10 mg/L NH_3)		NA	NA	7.7	9.4
VAULT-21	11	1/20/2015	0	0.0	<0.5
CAB-Exst-1	12	1/20/2015	0	0.0	<0.5
CAB-Exst-2	13	1/20/2015	0	0.2	<0.5
CAB-Exst-3	14	1/20/2015	0	0.2	<0.5
CAB-Exst-4	15	1/20/2015	0	0.2	<0.5
CAB-Exst-5	16	1/20/2015	0	0.0	<0.5
Sample Duplicate[a]	16	NA	NA	0.0	<0.5
Sample Duplicate + Spike[a]		NA	NA	7.5	9.2
Spike Check (10 mg/L NH_3)		NA	NA	7.7	9.4

Relative Percent Difference (RPD) = [sample] (mg/L) - [sample duplicate] (mg/L) / [average ammonia] (mg/L) x 100 — **Acceptable Range: 0-20%**

Percent Recovery = [spiked sample] (mg/L) - [sample] (mg/L) / nominal [spike] (mg/L) x 100 — **Acceptable Range: 80-120%[b]**

QC Sample ID	[NH_3]	[Sample Dup]	Measured [Spike]	Nominal [Spike]	RPD	% Recovery
Blank	0.0	NA	9.4	10	NA	94
16	<0.5	<0.5	9.2	10	C	C

Comments:

Notes: [a]Unless otherwise noted, the last sample listed on the datasheet is used for duplicate and duplicate + spike QC check.

[b] Acceptable range for % recovery applies only to the blank spike. Spike recoveries in samples may vary based on sample matrix and are for information only.

[c] Calculation not performed due to one or both values below the method detection limit.

Method Detection Limit = 0.5 mg/L ⑧ G21 - not measured due to technician error YS 1/29/15

QC Check: BG 1/20/15 **Final Review:** YS 1/29/15

Total Ammonia Analysis

~~Freshwater~~
Marine YS

Overlying Water

Client: Burns and McDonnell
Project: Sylmar Electrode
Test Type: Eoh 10-day Survival

DI Blank: 0.0 SW Blank: 0.0 **Analyst:** SG2
Test Start Date: 1/20/15 **Analysis Date:** 2/2/15

Sample ID	Nautilus ID	Sub-Sample Date	Test Day	NH3-N (mg/L)	Ammonia (mg/L) N x 1.22
Blank Spike (10 mg/L NH_3)		NA	NA	8.0	9.8
Lab Control	17	1/30/2015	10	0.8	1.0
CAB-REF-1	18	1/30/2015	10	2.4	2.9
CAB-REF-2	19	1/30/2015	10	0.5	0.6
CAB-REF-3	20	1/30/2015	10	1.7	2.1
CAB-REF-4	21	1/30/2015	10	2.2	2.7
CAB-REF-5	22	1/30/2015	10	0.1	<0.5
VAULT-3	23	1/30/2015	10	1.0	1.2
VAULT-5	24	1/30/2015	10	1.2	1.5
VAULT-8	25	1/30/2015	10	1.8	2.2
VAULT-11	26	1/30/2015	10	1.5	1.8
Spike Check (10 mg/L NH_3)		NA	NA	8.0	9.8
VAULT-21	27	1/30/2015	10	1.8	2.2
CAB-Exst-1	28	1/30/2015	10	0.3	<0.5
CAB-Exst-2	29	1/30/2015	10	1.1	1.3
CAB-Exst-3	30	1/30/2015	10	0.6	0.7
CAB-Exst-4	31	1/30/2015	10	1.4	1.7
CAB-Exst-5	32	1/30/2015	10	1.4	1.7
Sample Duplicate[a]	32	NA	NA	1.2	1.5
Sample Duplicate + Spike[a]		NA	NA	9.1	11.1
Spike Check (10 mg/L NH_3)		NA	NA	8.0	9.8

Relative Percent Difference (RPD) = [sample] (mg/L) - [sample duplicate] (mg/L) x 100 / [average ammonia] (mg/L) — **Acceptable Range: 0-20%**

Percent Recovery = [spiked sample] (mg/L) - [sample] (mg/L) x 100 / nominal [spike] (mg/L) — **Acceptable Range: 80-120%[b]**

QC Sample ID	[NH_3]	[Sample Dup]	Measured [Spike]	Nominal [Spike]	RPD	% Recovery
Blank	0.0	NA	9.8	10	NA	98
32	1.7	1.5	11.1	10	12.5	94

Comments:

Notes: [a]Unless otherwise noted, the last sample listed on the datasheet is used for duplicate and duplicate + spike QC check.

[b] Acceptable range for % recovery applies only to the blank spike. Spike recoveries in samples may vary based on sample matrix and are for information only.

[c] Calculation not performed due to one or both values below the method detection limit.

Method Detection Limit = 0.5 mg/L

QC Check: BG 2/6/15 **Final Review:** YS 2/9/15

Appendix E

Summary of Statistical Analyses

Burns & McDonnell / Sylmar Electrode
Toxicity Test Raw Data Summary

Initial Number of Animals: 20

Test Initiated 1/20/15

***E. estuarius* 10 Day Survival**

Site ID	Replicate	Number Alive	Percent Survival	Mean Percent Survival	Number Initial	Number Survived	Proportion Alive	Transformed Result
Lab Control	A	20	100	97	20	20	1	1.459
	B	19	95		20	19	0.95	1.345
	C	19	95		20	19	0.95	1.345
	D	20	100		20	20	1	1.459
	E	19	95		20	19	0.95	1.345
CAB-REF-1	A	20	100	99	20	20	1	1.459
	B	20	100		20	20	1	1.459
	C	20	100		20	20	1	1.459
	D	20	100		20	20	1	1.459
	E	19	95		20	19	0.95	1.345
CAB-REF-2	A	20	100	98	20	20	1	1.459
	B	19	95		20	19	0.95	1.345
	C	20	100		20	20	1	1.459
	D	19	95		20	19	0.95	1.345
	E	20	100		20	20	1	1.459
CAB-REF-3	A	20	100	99	20	20	1	1.459
	B	20	100		20	20	1	1.459
	C	20	100		20	20	1	1.459
	D	20	100		20	20	1	1.459
	E	19	95		20	19	0.95	1.345
CAB-REF-4	A	19	95	99	20	19	0.95	1.345
	B	20	100		20	20	1	1.459
	C	20	100		20	20	1	1.459
	D	20	100		20	20	1	1.459
	E	20	100		20	20	1	1.459
CAB-REF-5	A	20	100	97	20	20	1	1.459
	B	17	85		20	17	0.85	1.173
	C	20	100		20	20	1	1.459
	D	20	100		20	20	1	1.459
	E	20	100		20	20	1	1.459
VAULT-3	A	19	95	98	20	19	0.95	1.345
	B	20	100		20	20	1	1.459
	C	20	100		20	20	1	1.459
	D	20	100		20	20	1	1.459
	E	19	95		20	19	0.95	1.345
VAULT-5	A	20	100	100	20	20	1	1.459
	B	20	100		20	20	1	1.459
	C	20	100		20	20	1	1.459
	D	20	100		20	20	1	1.459
	E	20	100		20	20	1	1.459
VAULT-8	A	20	100	99	20	20	1	1.459
	B	20	100		20	20	1	1.459
	C	20	100		20	20	1	1.459
	D	20	100		20	20	1	1.459
	E	19	95		20	19	0.95	1.345
VAULT-11	A	20	100	100	20	20	1	1.459
	B	20	100		20	20	1	1.459
	C	20	100		20	20	1	1.459
	D	20	100		20	20	1	1.459
	E	20	100		20	20	1	1.459
VAULT-21	A	20	100	98	20	20	1	1.459
	B	18	90		20	18	0.9	1.249
	C	20	100		20	20	1	1.459
	D	20	100		20	20	1	1.459
	E	20	100		20	20	1	1.459
CAB-Exst-1	A	20	100	96	20	20	1	1.459
	B	20	100		20	20	1	1.459
	C	19	95		20	19	0.95	1.345
	D	17	85		20	17	0.85	1.173
	E	20	100		20	20	1	1.459
CAB-Exst-2	A	20	100	99	20	20	1	1.459
	B	20	100		20	20	1	1.459
	C	19	95		20	19	0.95	1.345
	D	20	100		20	20	1	1.459
	E	20	100		20	20	1	1.459
CAB-Exst-3	A	20	100	98	20	20	1	1.459
	B	20	100		20	20	1	1.459
	C	19	95		20	19	0.95	1.345
	D	20	100		20	20	1	1.459
	E	19	95		20	19	0.95	1.345
CAB-Exst-4	A	19	95	98	20	19	0.95	1.345
	B	20	100		20	20	1	1.459
	C	20	100		20	20	1	1.459
	D	19	95		20	19	0.95	1.345
	E	20	100		20	20	1	1.459
CAB-Exst-5	A	18	90	98	20	18	0.9	1.249
	B	20	100		20	20	1	1.459
	C	20	100		20	20	1	1.459
	D	20	100		20	20	1	1.459
	E	20	100		20	20	1	1.459

Burns & McDonnell
Sylmar Electrode
E. estuarius 10 Day Survival
Test initiated 1/20/15
Column Stats

	Lab Control	CAB-REF-1	CAB-REF-2	CAB-REF-3	CAB-REF-4	CAB-REF-5
Number of values	5	5	5	5	5	5
Minimum	1.345	1.345	1.345	1.345	1.345	1.173
25% Percentile	1.345	1.402	1.345	1.402	1.402	1.316
Median	1.345	1.459	1.459	1.459	1.459	1.459
75% Percentile	1.459	1.459	1.459	1.459	1.459	1.459
Maximum	1.459	1.459	1.459	1.459	1.459	1.459
Mean	1.391	1.436	1.413	1.436	1.436	1.402
Std. Deviation	0.06244	0.05098	0.06244	0.05098	0.05098	0.1279
Std. Error	0.02792	0.02280	0.02792	0.02280	0.02280	0.0572
Lower 95% CI of mean	1.313	1.373	1.336	1.373	1.373	1.243
Upper 95% CI of mean	1.468	1.500	1.491	1.500	1.500	1.561
D'Agostino & Pearson omnibus normality test						
K2	0.0	0.0	0.0	0.0	0.0	0.0
P value	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500
Passed normality test (alpha=0.05)?	Yes	Yes	Yes	Yes	Yes	Yes
P value summary	*	*	*	*	*	*
Sum	6.953	7.181	7.067	7.181	7.181	7.009

	VAULT-3	VAULT-5	VAULT-8	VAULT-11	VAULT-21	CAB-Exst-1	CAB-Exst-2	CAB-Exst-3	CAB-Exst-4	CAB-Exst-5
Number of values	5	5	5	5	5	5	5	5	5	5
Minimum	1.345	1.459	1.345	1.459	1.249	1.173	1.345	1.345	1.345	1.249
25% Percentile	1.345	1.459	1.402	1.459	1.354	1.259	1.402	1.345	1.345	1.354
Median	1.459	1.459	1.459	1.459	1.459	1.459	1.459	1.459	1.459	1.459
75% Percentile	1.459	1.459	1.459	1.459	1.459	1.459	1.459	1.459	1.459	1.459
Maximum	1.459	1.459	1.459	1.459	1.459	1.459	1.459	1.459	1.459	1.459
Mean	1.413	1.459	1.436	1.459	1.417	1.379	1.436	1.413	1.413	1.417
Std. Deviation	0.06244	0.0	0.05098	0.0	0.09391	0.1253	0.05098	0.06244	0.06244	0.09391
Std. Error	0.02792	0.0	0.02280	0.0	0.04200	0.05603	0.02280	0.02792	0.02792	0.04200
Lower 95% CI of mean	1.336	1.459	1.373	1.459	1.300	1.223	1.373	1.336	1.336	1.300
Upper 95% CI of mean	1.491	1.459	1.500	1.459	1.534	1.535	1.500	1.491	1.491	1.534
D'Agostino & Pearson omnibus normality test										
K2	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
P value	0.0500		0.0500		0.0500	0.0500	0.0500	0.0500	0.0500	0.0500
Passed normality test (alpha=0.05)?	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes
P value summary	*		*		*	*	*	*	*	*
Sum	7.067	7.295	7.181	7.295	7.085	6.895	7.181	7.067	7.067	7.085

Entry: BG 2/12/15
QC: KS 2/12/15

Burns & McDonnell
Sylmar Electrode
E. estuarius 10 Day Survival
Test initiated 1/20/15
ANOVA

Parameter	Value	Data Set-B	Data Set-C
Table Analyzed			
Transformed Eoh Survival			
One-way analysis of variance			
P value	0.9445		
P value summary	ns		
Are means signif. different? (P < 0.05)	No		
Number of groups	16		
F	0.4758		
R squared	0.1003		
Bartlett's test for equal variances			
Bartlett's statistic (corrected)			
P value			
P value summary	ns		
Do the variances differ signif. (P < 0.05)	No		
ANOVA Table	SS	df	MS
Treatment (between columns)	0.03666	15	0.002444
Residual (within columns)	0.3287	64	0.005137
Total	0.3654	79	

Entry: BG 2/12/15
QC: KS 2/12/15

Appendix F

Reference Toxicant Results

CETIS Summary Report

Acute Amphipod Survival Test — **Nautilus Environmental (CA)**

Batch ID:	07-7077-4866	**Test Type:**	Survival (96h)	**Analyst:**	
Start Date:	20 Jan-15 13:00	**Protocol:**	EPA/600/R-94/025 (1994)	**Diluent:**	Diluted Natural Seawater
Ending Date:	24 Jan-15 12:05	**Species:**	Eohaustorius estuarius	**Brine:**	Not Applicable
Duration:	95h	**Source:**	Northwestern Aquatic Science, OR	**Age:**	Size 3-5mm

KB BG 1/26/15

Sample ID:	20-7179-1292	**Code:**	150120eeraNH3	**Client:**	Internal
Sample Date:	20 Jan-15	**Material:**	Total Ammonia	**Project:**	
Receive Date:	20 Jan-15	**Source:**	Reference Toxicant		
Sample Age:	13h	**Station:**	Total Ammonia (Measured)		

Comparison Summary

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
07-2850-5402	96h Survival Rate	68.6	142.5	98.87	12.7%		Steel Many-One Rank Sum Test

Point Estimate Summary

Analysis ID	Endpoint	Level	mg/L	95% LCL	95% UCL	TU	Method
20-0991-2008	96h Survival Rate	EC50	120.2	107.7	134.3		Spearman-Kärber

96h Survival Rate Summary

C-mg/L	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Lab Control	4	0.95	0.8581	1	0.9	1	0.02887	0.05774	6.08%	0.0%
18.2		4	1	1	1	1	1	0	0	0.0%	-5.26%
36.8		4	1	1	1	1	1	0	0	0.0%	-5.26%
68.6		4	0.95	0.8581	1	0.9	1	0.02887	0.05774	6.08%	0.0%
142.5		4	0.3	0.009484	0.5905	0.1	0.5	0.09129	0.1826	60.86%	68.42%
286		4	0	0	0	0	0	0	0		100.0%

96h Survival Rate Detail

C-mg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Lab Control	0.9	1	1	0.9
18.2		1	1	1	1
36.8		1	1	1	1
68.6		1	0.9	0.9	1
142.5		0.2	0.4	0.5	0.1
286		0	0	0	0

Acute Amphipod Survival Test — **Nautilus Environmental (CA)**

Analysis ID: 07-2850-5402 **Endpoint:** 96h Survival Rate **CETIS Version:** CETISv1.8.7
Analyzed: 26 Jan-15 11:12 **Analysis:** Nonparametric-Control vs Treatments **Official Results:** Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	NOEL	LOEL	TOEL	TU
Angular (Corrected)	NA	C > T	NA	NA	12.7%	68.6	142.5	98.87	

Steel Many-One Rank Sum Test

Control	vs	C-mg/L	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
Lab Control		18.2	22	10	2	6	0.9864	Asymp	Non-Significant Effect
		36.8	22	10	2	6	0.9864	Asymp	Non-Significant Effect
		68.6	18	10	3	6	0.8000	Asymp	Non-Significant Effect
		142.5*	10	10	0	6	0.0350	Asymp	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2.114404	0.5286011	4	42.46	<0.0001	Significant Effect
Error	0.1867196	0.01244797	15			
Total	2.301124		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Mod Levene Equality of Variance	19.52	4.893	<0.0001	Unequal Variances
Variances	Levene Equality of Variance	20.09	4.893	<0.0001	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.9336	0.866	0.1809	Normal Distribution

96h Survival Rate Summary

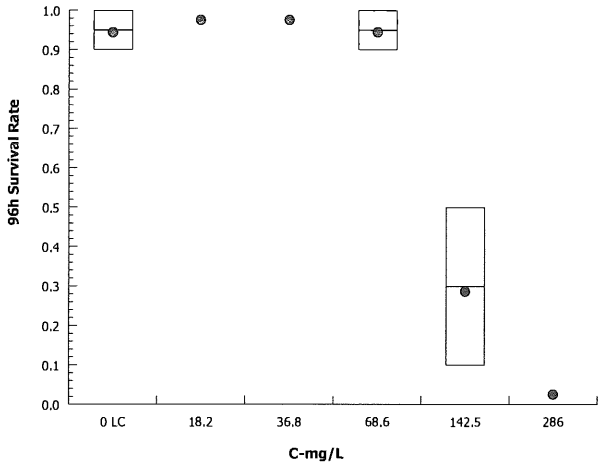
C-mg/L	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Lab Control	4	0.95	0.8581	1	0.95	0.9	1	0.02887	6.08%	0.0%
18.2		4	1	1	1	1	1	1	0	0.0%	-5.26%
36.8		4	1	1	1	1	1	1	0	0.0%	-5.26%
68.6		4	0.95	0.8581	1	0.95	0.9	1	0.02887	6.08%	0.0%
142.5		4	0.3	0.009484	0.5905	0.3	0.1	0.5	0.09129	60.86%	68.42%
286		4	0	0	0	0	0	0	0		100.0%

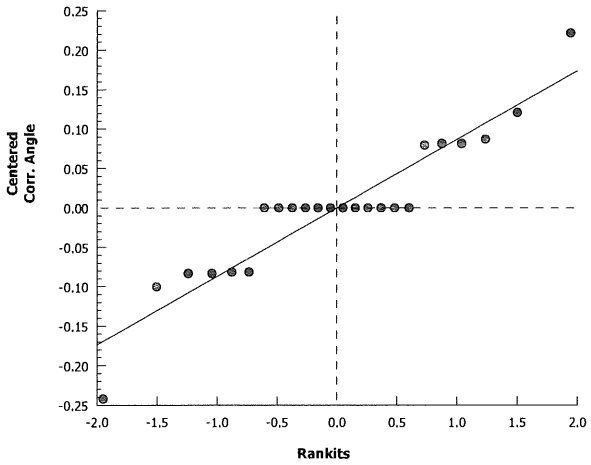
Angular (Corrected) Transformed Summary

C-mg/L	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Lab Control	4	1.331	1.181	1.48	1.331	1.249	1.412	0.04705	7.07%	0.0%
18.2		4	1.412	1.412	1.412	1.412	1.412	1.412	0	0.0%	-6.12%
36.8		4	1.412	1.412	1.412	1.412	1.412	1.412	0	0.0%	-6.12%
68.6		4	1.332	1.179	1.486	1.331	1.249	1.419	0.04814	7.23%	-0.14%
142.5		4	0.5639	0.2297	0.8981	0.5742	0.3218	0.7854	0.105	37.25%	57.62%
286		4	0.1588	0.1588	0.1588	0.1588	0.1588	0.1588	0	0.0%	88.07%

Acute Amphipod Survival Test					**Nautilus Environmental (CA)**
Analysis ID:	07-2850-5402	**Endpoint:**	96h Survival Rate	**CETIS Version:**	CETISv1.8.7
Analyzed:	26 Jan-15 11:12	**Analysis:**	Nonparametric-Control vs Treatments	**Official Results:**	Yes

Graphics





CETIS Analytical Report

Test Code: 150120eeraNH3 | 13-8190-5595

Acute Amphipod Survival Test — **Nautilus Environmental (CA)**

Analysis ID:	20-0991-2008	**Endpoint:**	96h Survival Rate	**CETIS Version:**	CETISv1.8.7
Analyzed:	26 Jan-15 11:12	**Analysis:**	Untrimmed Spearman-Kärber	**Official Results:**	Yes

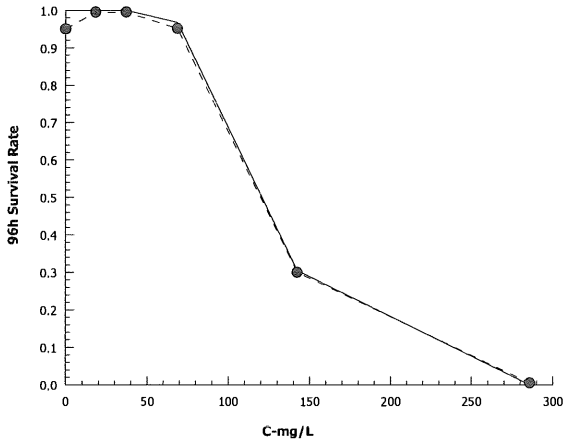
Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	EC50	95% LCL	95% UCL
Control Threshold	0.05	0.00%	2.08	0.024	120.2	107.7	134.3

96h Survival Rate Summary

			Calculated Variate(A/B)								
C-mg/L	Control Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	Lab Control	4	0.95	0.9	1	0.02887	0.05773	6.08%	0.0%	38	40
18.2		4	1	1	1	0	0	0.0%	-5.26%	40	40
36.8		4	1	1	1	0	0	0.0%	-5.26%	40	40
68.6		4	0.95	0.9	1	0.02887	0.05773	6.08%	0.0%	39	41
142.5		4	0.3	0.1	0.5	0.09129	0.1826	60.86%	68.42%	12	40
286		4	0	0	0	0	0		100.0%	0	40

Graphics



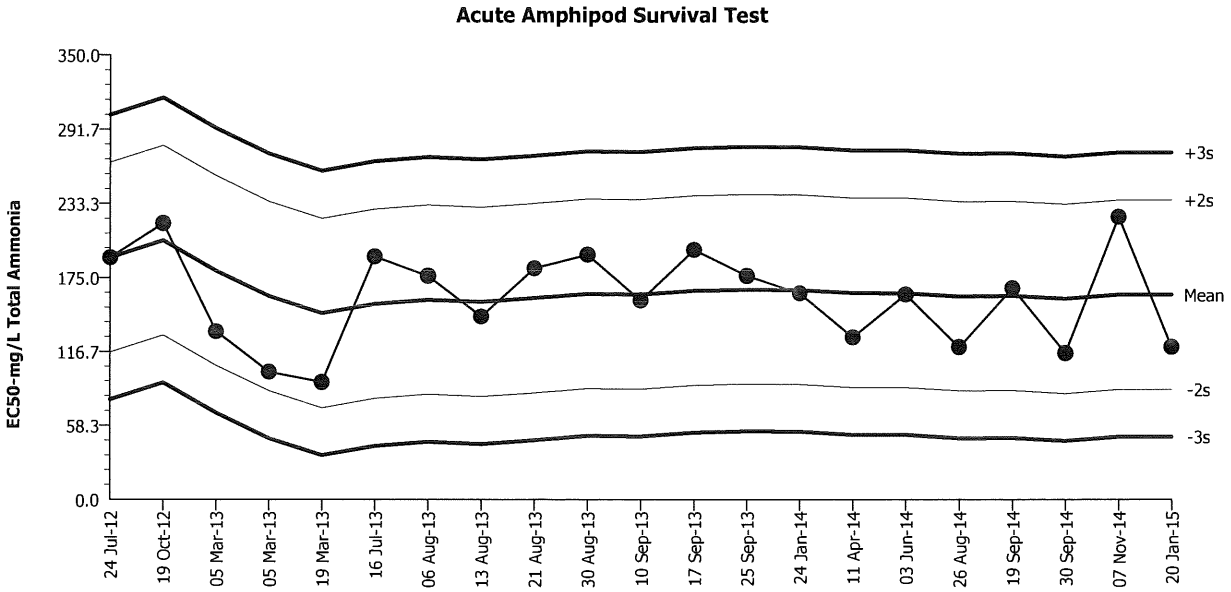
Analyst: BG QA: KB 2/6/15

CETIS QC Plot

Report Date: 26 Jan-15 11:18 (1 of 1)

Acute Amphipod Survival Test — **Nautilus Environmental (CA)**

Test Type:	Survival (96h)	**Organism:**	Eohaustorius estuarius (Amphipod)	**Material:**	Total Ammonia
Protocol:	EPA/600/R-94/025 (1994)	**Endpoint:**	96h Survival Rate	**Source:**	Reference Toxicant-REF



Mean:	161.7	**Count:**	20	**-2s Warning Limit:**	86.93	**-3s Action Limit:**	49.55
Sigma:	37.38	**CV:**	23.10%	**+2s Warning Limit:**	236.5	**+3s Action Limit:**	273.8

Quality Control Data

Point	Year	Month	Day	Time	QC Data	Delta	Sigma	Warning	Action	Test ID	Analysis ID
1	2012	Jul	24	14:35	190.8	29.1	0.7786			06-0022-0875	18-3343-8257
2		Oct	19	15:00	218	56.31	1.506			11-9001-8810	19-5920-6961
3	2013	Mar	5	14:45	132.6	-29.09	-0.7782			02-8576-9591	02-0123-6764
4			5	16:45	100.9	-60.82	-1.627			05-0400-3106	15-3478-2725
5			19	14:45	92.58	-69.12	-1.849			02-8887-7708	16-4451-4042
6		Jul	16	15:30	192	30.27	0.8097			14-9711-0096	13-6124-1070
7		Aug	6	16:00	176.7	15.02	0.4018			01-8948-8741	06-3663-8973
8			13	13:50	144.4	-17.34	-0.4638			00-6364-6517	21-0686-0688
9			21	12:50	182.5	20.83	0.5573			10-8683-1100	03-4990-5623
10			30	13:45	193.4	31.69	0.8479			06-1699-9207	03-8457-1584
11		Sep	10	15:00	157.3	-4.449	-0.119			20-6615-4216	10-9160-9156
12			17	13:30	197.2	35.53	0.9506			06-9424-5467	17-0376-8527
13			25	13:30	176.7	15.04	0.4025			00-4475-9415	12-6022-6717
14	2014	Jan	24	15:40	162.9	1.232	0.03295			02-0577-2653	10-6694-0827
15		Apr	11	13:00	128	-33.7	-0.9016			09-4034-2209	12-9159-9164
16		Jun	3	14:30	162	0.2645	0.007076			09-9194-4563	19-2782-8711
17		Aug	26	13:20	120.1	-41.55	-1.112			13-7366-1810	21-0194-9752
18		Sep	19	14:00	166.9	5.201	0.1391			09-4714-5643	00-4609-7819
19			30	14:00	115.6	-46.15	-1.234			07-5077-2970	08-6420-0871
20		Nov	7	16:30	223.3	61.58	1.647			18-5533-4683	13-9574-4802
21	2015	Jan	20	13:00	120.2	-41.46	-1.109			13-8190-5595	20-0991-2008

96-hour Marine Acute Bioassay
Static Conditions

Water Quality Measurements
& Test Organism Survival

Client: Internal
Sample ID: NH_3
Test No.: 150120eeraNH3

Test Species: *E. estuarius*
Start Date/Time: 1/20/2015 1300
End Date/Time: 1/24/2015 1205

	Tech Initials				
	0	24	48	72	96
Counts:	KS				AD
Readings:	NH	AG	EG	NH	AD
Dilutions made by:	EG				
High conc. made (mg/L):	320				
Vol. NH stock added (mL):	60.5				
Final Volume (mL):	2000				

NH stock concentration (mg/L): 10,614

Concentration mg/L	RAND #	Number of Live Organisms		Salinity (ppt)					Temperature (°C)					Dissolved Oxygen (mg/L)					pH (units)				
		0	96	0	24	48	72	96	0	24	48	72	96	0	24	48	72	96	0	24	48	72	96
Lab Control	10	10	9	29.7	29.8	29.4	29.6	29.6	15.6	15.5	14.6	14.5	14.2	8.1	7.3	7.6	8.0	7.9	8.05	7.94	7.86	7.96	7.98
	5	10	10																				
	6	10	10																				
	11	10	9																				
20	22	10	10	29.9	30.1	29.7	29.6	29.9	15.7	15.3	14.4	14.3	14.1	8.3	7.4	7.8	8.0	7.9	8.04	7.92	7.86	7.87	7.97
(18.2)	2	10	10																				
	24	10	10																				
	19	10	10																				
40	4	10	10	29.9	30.3	29.9	30.0	30.1	15.6	15.4	14.4	14.4	14.1	8.3	7.7	7.8	8.0	8.1	8.01	7.90	7.87	7.87	7.99
(36.8)	1	10	10																				
	21	10	10																				
	23	10	10																				
80	20	~~10~~ 11 (B)	11	30.0	30.4	30.0	30.1	30.2	15.7	15.2	14.3	14.2	14.0	8.3	8.2	7.9	8.0	8.0	7.99	7.88	7.86	7.94	7.96
(108.6)	18	10	9																				
	3	10	9																				
	14	10	10															7.7					
160	17	10	2	30.1	30.4	30.1	30.3	30.3	15.6	15.2	14.3	14.3	14.1	8.3	7.5	7.8	7.8	~~7.8~~	7.81	7.82	7.82	7.80	7.89
(142.5)	12	10	4															(B)					
	8	10	5																				
	9	10	1																				
320	15	10	0	30.2	30.5	30.3	30.4	30.5	15.6	15.2	14.3	14.3	14.1	8.4	7.4	7.5	7.4	7.2	7.64	7.71	7.74	7.83	7.83
(286.0)	16	10	0																				
	13	10	0																				
	7	10	0																				

Rand # QC: EG
Initial Count QC: KS

Animal Source/Date Received: Northwestern Aquatic Sciences / 1/14/15 Size at Initiation: 3-5mm

Comments: (B) AD QC 1/24/15 (B) QC BG 1/26/15
Measured values recorded in parentheses

QC Check: BG 1/26/15 Final Review: KB 2/6/15

Total Ammonia Analysis
Freshwater

Overlying Water

Client: Internal
Project: Ammonia RefTox
Test Type: Eoh 96 hour

DI Blank: 0.0
Test Start Date: 1/20/2015

Analyst: SGE
Analysis Date: 1/20/15

Sample ID	Nautilus ID	Sub-Sample Date	Test Day	NH3-N (mg/L)	N x 1.22 Ammonia (mg/L)
Blank Spike (10 mg/L NH_3)		NA	NA	7.4	9.0
Lab Control		1/20/15	0	0.0	<0.5
20			0	14.9	18.2
40			0	30.2	36.8
80			0	~~34~~ 28.1x2	68.6
160			0	29.2x4	~~142.4~~ 116.8
320			0	29.3x8	~~285.6~~ 234.4
					286.0
Spike Check (10 mg/L NH_3)		NA	NA	7.4	9.0
Sample Duplicate[a]	20	NA	NA	15.0	18.3
Sample Duplicate + Spike[a]		NA	NA	23.5	28.7
Spike Check (10 mg/L NH_3)		NA	NA	7.4	9.0

Q18 BG 1/20/15

Q18 BG 1/20/15

Relative Percent Difference (RPD) = [sample] (mg/L) - [sample duplicate] (mg/L) / [average ammonia] (mg/L) x 100 — **Acceptable Range: 0-20%**

Percent Recovery = [spiked sample] (mg/L) - [sample] (mg/L) / nominal [spike] (mg/L) x 100 — **Acceptable Range: 80-120%[b]**

QC Sample ID	[NH_3]	[Sample Dup]	Measured [Spike]	Nominal [Spike]	RPD	% Recovery
Blank	0.0	NA	9.0	10	NA	90
20	18.2	18.3	28.7	10	0.5	105

Comments: SGE Q18 1/20/15

Notes: [a]Unless otherwise noted, the last sample listed on the datasheet is used for duplicate and duplicate + spike QC check.

[b] Acceptable range for % recovery applies only to the blank spike. Spike recoveries in samples may vary based on sample matrix and are for information only.

[c] Calculation not performed due to one or both values below the method detection limit.

Method Detection Limit = 0.5 mg/L

QC Check: BG 1/20/15

Final Review: KB 2/6/15

Appendix G

Laboratory Qualifier Codes

Nautilus Environmental

Glossary of Qualifier Codes:

Laboratory Procedures

Q1 - Temperatures out of recommended range; corrective action taken and recorded in Test Temperature Correction Log

Q2 - Temperatures out of recommended range; no action taken, test terminated same day

Q3 - Sample aerated prior to initiation or renewal due to dissolved oxygen (D.O.) levels below 6.0 mg/L

Q4 - Test aerated; D.O. levels dropped below 4.0 mg/L

Q5 - Test initiated with aeration due to an anticipated drop in D.O.

Q6 - Airline obstructed or fell out of replicate and replaced; drop in D.O. occurred

Q7 - Salinity out of recommended range

Q8 - Spilled test chamber/ Unable to recover test organism(s)

Q9 - Inadequate sample volume remaining, 50% renewal performed

Q10 - Inadequate sample volume remaining, no renewal performed

Q11 - Sample out of holding time; refer to QA section of report

Q12 - Replicate(s) not initiated; excluded from data analysis

Q13 - Survival counts not recorded due to poor visibility or heavy debris

Q14 - D.O. percent saturation was checked and was ≤ 110%

Data Analysis/Reporting

Q15 - Did not meet minimum test acceptability criteria. Refer to QA section of report.

Q16 - Percent minimum significant difference (PMSD) was below the lower bound limit for acceptability. This indicates that statistics may be over-sensitive in detecting a difference from the control due to low variability in the data set.

Q17 - Percent minimum significant difference (PMSD) was above the upper bound limit for acceptability. This indicates that statistics may be under-sensitive in detecting a difference from the control due to high variability in the data set.

Error Correction

Q18 - Incorrect Entry

Q19 - Illegible Entry

Q20 - Miscalculation

Q21 - Other (provide reason in comments section)

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D5: RECREATIONAL FISHING DATA

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Year	Month	Port Name	Block	Species	Kept
2010	1	MARINA DEL REY	0680	Mackerel, Pacific	300
2010	1	MARINA DEL REY	0680	Rockfish, unspecified	
2010	1	MARINA DEL REY	0680	Bass, kelp	
2010	1	MARINA DEL REY	0680	Bass, barred sand	
2010	1	MARINA DEL REY	0680	Whitefish, ocean	
2010	1	MARINA DEL REY	0701	Mackerel, Pacific	
2010	1	REDONDO BEACH	0701	Sheephead, California	
2010	1	MARINA DEL REY	0701	Sheephead, California	
2010	1	MARINA DEL REY	0701	Shark, thresher	1
2010	1	MARINA DEL REY	0701	Lingcod	
2010	1	MARINA DEL REY	0701	Rockfish, unspecified	
2010	1	REDONDO BEACH	0701	Scorpionfish, California	81
2010	1	MARINA DEL REY	0701	Scorpionfish, California	1543
2010	1	MARINA DEL REY	0701	Cabezon	
2010	1	REDONDO BEACH	0701	Bass, kelp	47
2010	1	MARINA DEL REY	0701	Bass, kelp	97
2010	1	REDONDO BEACH	0701	Bass, barred sand	266
2010	1	MARINA DEL REY	0701	Bass, barred sand	691
2010	1	REDONDO BEACH	0701	Triggerfish	6
2010	1	MARINA DEL REY	0701	Triggerfish	6
2010	1	REDONDO BEACH	0701	Halfmoon	62
2010	1	MARINA DEL REY	0701	Blacksmith	359
2010	1	MARINA DEL REY	0702	Mackerel, Pacific	18
2010	1	REDONDO BEACH	0702	Sheephead, California	
2010	1	MARINA DEL REY	0702	Sheephead, California	
2010	1	MARINA DEL REY	0702	Ray, bat	
2010	1	REDONDO BEACH	0702	Halibut, California	1
2010	1	MARINA DEL REY	0702	Rockfish, unspecified	1
2010	1	REDONDO BEACH	0702	Scorpionfish, California	32
2010	1	MARINA DEL REY	0702	Scorpionfish, California	364
2010	1	MARINA DEL REY	0702	Cabezon	
2010	1	MARINA DEL REY	0702	Bass, kelp	33
2010	1	REDONDO BEACH	0702	Bass, kelp	47
2010	1	MARINA DEL REY	0702	Bass, barred sand	246
2010	1	REDONDO BEACH	0702	Bass, barred sand	421
2010	1	REDONDO BEACH	0702	Triggerfish	1
2010	1	MARINA DEL REY	0702	Croaker, white	
2010	1	MARINA DEL REY	0702	Perch-like, unspecified	25
2010	1	REDONDO BEACH	0702	Halfmoon	76
2010	1	MARINA DEL REY	0702	Crab, rock unspecified	60
2010	1	MARINA DEL REY	0702	Lobster, California spiny	32
2010	1	REDONDO BEACH	0720	Bonito, Pacific	2
2010	1	SAN PEDRO	0720	Sheephead, California	
2010	1	REDONDO BEACH	0720	Shark, leopard	
2010	1	MARINA DEL REY	0720	Ray, bat	
2010	1	REDONDO BEACH	0720	Halibut, California	1
2010	1	MARINA DEL REY	0720	Rockfish, unspecified	
2010	1	MARINA DEL REY	0720	Scorpionfish, California	3
2010	1	SAN PEDRO	0720	Scorpionfish, California	16
2010	1	REDONDO BEACH	0720	Scorpionfish, California	96
2010	1	MARINA DEL REY	0720	Bass, kelp	2
2010	1	SAN PEDRO	0720	Bass, kelp	10
2010	1	REDONDO BEACH	0720	Bass, kelp	152
2010	1	SAN PEDRO	0720	Bass, barred sand	10
2010	1	MARINA DEL REY	0720	Bass, barred sand	36
2010	1	REDONDO BEACH	0720	Bass, barred sand	875
2010	1	REDONDO BEACH	0720	Bass, giant sea	
2010	1	REDONDO BEACH	0720	Triggerfish	1
2010	1	SAN PEDRO	0720	Triggerfish	3
2010	1	REDONDO BEACH	0720	Blacksmith	402
2010	1	REDONDO BEACH	0720	Sargo	3
2010	1	SAN PEDRO	0720	Surfperch, black	3
2010	1	MARINA DEL REY	0720	Crab, rock unspecified	46
2010	1	MARINA DEL REY	0720	Crab, spider	
2010	1	MARINA DEL REY	0720	Crab, pelagic red	4
2010	1	MARINA DEL REY	0720	Lobster, California spiny	144
2010	2	MARINA DEL REY	0679	Sheephead, California	
2010	2	MARINA DEL REY	0679	Scorpionfish, California	6
2010	2	MARINA DEL REY	0679	Bass, kelp	3
2010	2	MARINA DEL REY	0679	Bass, barred sand	12
2010	2	MARINA DEL REY	0701	Mackerel, Pacific	1

Year	Month	Port Name	Block	Species	Kept
2010	2	MARINA DEL REY	0701	Sheephead, California	
2010	2	MARINA DEL REY	0701	Halibut, California	1
2010	2	MARINA DEL REY	0701	Sanddab	1
2010	2	MARINA DEL REY	0701	Rockfish, unspecified	11
2010	2	REDONDO BEACH	0701	Scorpionfish, California	109
2010	2	MARINA DEL REY	0701	Scorpionfish, California	2598
2010	2	MARINA DEL REY	0701	Cabezon	
2010	2	REDONDO BEACH	0701	Bass, kelp	6
2010	2	MARINA DEL REY	0701	Bass, kelp	137
2010	2	REDONDO BEACH	0701	Bass, barred sand	27
2010	2	MARINA DEL REY	0701	Bass, barred sand	625
2010	2	MARINA DEL REY	0701	Triggerfish	9
2010	2	MARINA DEL REY	0701	Halfmoon	55
2010	2	MARINA DEL REY	0701	Whitefish, ocean	
2010	2	MARINA DEL REY	0701	Squid, jumbo	1
2010	2	REDONDO BEACH	0702	Sheephead, California	
2010	2	MARINA DEL REY	0702	Sheephead, California	
2010	2	MARINA DEL REY	0702	Shark, swell	
2010	2	MARINA DEL REY	0702	Ray, bat	1
2010	2	REDONDO BEACH	0702	Halibut, California	1
2010	2	MARINA DEL REY	0702	Rockfish, unspecified	
2010	2	REDONDO BEACH	0702	Scorpionfish, California	182
2010	2	MARINA DEL REY	0702	Scorpionfish, California	546
2010	2	MARINA DEL REY	0702	Cabezon	
2010	2	MARINA DEL REY	0702	Bass, kelp	26
2010	2	REDONDO BEACH	0702	Bass, kelp	29
2010	2	MARINA DEL REY	0702	Bass, barred sand	243
2010	2	REDONDO BEACH	0702	Bass, barred sand	268
2010	2	MARINA DEL REY	0702	Greenling, kelp	
2010	2	REDONDO BEACH	0702	Triggerfish	6
2010	2	MARINA DEL REY	0702	Crab, yellow rock	53
2010	2	MARINA DEL REY	0702	Splittail	3
2010	2	MARINA DEL REY	0702	Croaker, white	
2010	2	MARINA DEL REY	0702	Perch-like, unspecified	10
2010	2	REDONDO BEACH	0702	Halfmoon	3
2010	2	MARINA DEL REY	0702	Crab, rock unspecified	38
2010	2	MARINA DEL REY	0702	Crab, spider	4
2010	2	MARINA DEL REY	0702	Lobster, California spiny	59
2010	2	MARINA DEL REY	0702	Frog	16
2010	2	MARINA DEL REY	0720	Rockfish, unspecified	2
2010	2	MARINA DEL REY	0720	Scorpionfish, California	1
2010	2	MARINA DEL REY	0720	Bass, kelp	1
2010	2	MARINA DEL REY	0720	Bass, barred sand	3
2010	2	MARINA DEL REY	0720	Lobster, California spiny	12
2010	2	SAN PEDRO	0720		
2010	3	REDONDO BEACH	0680	Mackerel, Pacific	31
2010	3	MALIBU	0680	Mackerel, Pacific	140
2010	3	REDONDO BEACH	0680	Sheephead, California	3
2010	3	MALIBU	0680	Lingcod	
2010	3	REDONDO BEACH	0680	Lingcod	
2010	3	REDONDO BEACH	0680	Sanddab	15
2010	3	REDONDO BEACH	0680	Rockfish, unspecified	77
2010	3	REDONDO BEACH	0680	Rockfish, bocaccio	8
2010	3	REDONDO BEACH	0680	Scorpionfish, California	9
2010	3	REDONDO BEACH	0680	Rockfish, gopher	6
2010	3	MALIBU	0680	Bass, kelp	1
2010	3	REDONDO BEACH	0680	Bass, barred sand	1
2010	3	MALIBU	0680	Bass, barred sand	2
2010	3	REDONDO BEACH	0680	Croaker, white	
2010	3	MALIBU	0680	Whitefish, ocean	1
2010	3	REDONDO BEACH	0680	Whitefish, ocean	21
2010	3	MALIBU	0680	Rockfish, copper	2
2010	3	REDONDO BEACH	0680	Rockfish, copper	29
2010	3	REDONDO BEACH	0680	Rockfish, blue	4
2010	3	MARINA DEL REY	0701	Mackerel, Pacific	1
2010	3	MARINA DEL REY	0701	Sheephead, California	10
2010	3	MARINA DEL REY	0701	Lingcod	
2010	3	MARINA DEL REY	0701	Sole, rock	2
2010	3	MARINA DEL REY	0701	Sanddab	521
2010	3	MARINA DEL REY	0701	Rockfish, unspecified	2902
2010	3	MARINA DEL REY	0701	Rockfish, bocaccio	166

Year	Month	Port Name	Block	Species	Kept
2010	3	MARINA DEL REY	0701	Scorpionfish, California	3203
2010	3	MARINA DEL REY	0701	Cabezon	
2010	3	MARINA DEL REY	0701	Rockfish, widow	8
2010	3	MARINA DEL REY	0701	Bass, kelp	10
2010	3	MARINA DEL REY	0701	Bass, barred sand	295
2010	3	MARINA DEL REY	0701	Triggerfish	1
2010	3	MARINA DEL REY	0701	Halfmoon	1
2010	3	MARINA DEL REY	0701	Whitefish, ocean	161
2010	3	MARINA DEL REY	0701	Rockfish, copper	59
2010	3	MARINA DEL REY	0701	Rockfish, blue	5
2010	3	MARINA DEL REY	0702	Mackerel, Pacific	35
2010	3	REDONDO BEACH	0702	Sheephead, California	4
2010	3	MARINA DEL REY	0702	Sheephead, California	14
2010	3	REDONDO BEACH	0702	Lingcod	
2010	3	MARINA DEL REY	0702	Lingcod	
2010	3	MARINA DEL REY	0702	Sanddab	90
2010	3	MALIBU	0702	Rockfish, unspecified	2
2010	3	REDONDO BEACH	0702	Rockfish, unspecified	406
2010	3	MARINA DEL REY	0702	Rockfish, unspecified	2250
2010	3	REDONDO BEACH	0702	Rockfish, bocaccio	27
2010	3	MARINA DEL REY	0702	Rockfish, bocaccio	269
2010	3	REDONDO BEACH	0702	Scorpionfish, California	383
2010	3	MARINA DEL REY	0702	Scorpionfish, California	1760
2010	3	MARINA DEL REY	0702	Rockfish, gopher	2
2010	3	REDONDO BEACH	0702	Bass, kelp	14
2010	3	MARINA DEL REY	0702	Bass, kelp	
2010	3	REDONDO BEACH	0702	Bass, barred sand	57
2010	3	MARINA DEL REY	0702	Bass, barred sand	85
2010	3	MARINA DEL REY	0702	Triggerfish	5
2010	3	REDONDO BEACH	0702	Halfmoon	138
2010	3	REDONDO BEACH	0702	Whitefish, ocean	1
2010	3	MARINA DEL REY	0702	Whitefish, ocean	179
2010	3	MARINA DEL REY	0702	Rockfish, copper	41
2010	3	MARINA DEL REY	0702	Rockfish, blue	1
2010	3	LONG BEACH	0702	Lobster, California spiny	41
2010	3	MALIBU	0703	Mackerel, Pacific	2
2010	3	MALIBU	0703	Sheephead, California	11
2010	3	REDONDO BEACH	0703	Lingcod	
2010	3	REDONDO BEACH	0703	Sanddab	35
2010	3	MALIBU	0703	Sanddab	96
2010	3	REDONDO BEACH	0703	Rockfish, unspecified	68
2010	3	MALIBU	0703	Rockfish, unspecified	215
2010	3	MALIBU	0703	Rockfish, bocaccio	38
2010	3	MALIBU	0703	Scorpionfish, California	9
2010	3	MALIBU	0703	Bass, barred sand	2
2010	3	REDONDO BEACH	0703	Bass, barred sand	10
2010	3	MALIBU	0703	Croaker, white	20
2010	3	MALIBU	0703	Whitefish, ocean	29
2010	3	MALIBU	0703	Surfperch, unspecified	1
2010	3	MALIBU	0703	Rockfish, group red	32
2010	3	MARINA DEL REY	0720	Bonito, Pacific	1
2010	3	MARINA DEL REY	0720	Mackerel, Pacific	1
2010	3	MARINA DEL REY	0720	Barracuda, California	
2010	3	SAN PEDRO	0720	Sheephead, California	5
2010	3	REDONDO BEACH	0720	Sheephead, California	16
2010	3	MARINA DEL REY	0720	Shark, spiny dogfish	
2010	3	MARINA DEL REY	0720	Shark, leopard	27
2010	3	MARINA DEL REY	0720	Lingcod	
2010	3	REDONDO BEACH	0720	Sole, unspecified	1
2010	3	REDONDO BEACH	0720	Sanddab	45
2010	3	MARINA DEL REY	0720	Sanddab	
2010	3	MARINA DEL REY	0720	Rockfish, unspecified	16
2010	3	SAN PEDRO	0720	Rockfish, unspecified	147
2010	3	REDONDO BEACH	0720	Rockfish, unspecified	2743
2010	3	MARINA DEL REY	0720	Rockfish, bocaccio	1
2010	3	SAN PEDRO	0720	Rockfish, bocaccio	46
2010	3	REDONDO BEACH	0720	Rockfish, bocaccio	93
2010	3	MARINA DEL REY	0720	Scorpionfish, California	5
2010	3	SAN PEDRO	0720	Scorpionfish, California	10
2010	3	REDONDO BEACH	0720	Scorpionfish, California	297
2010	3	SAN PEDRO	0720	Bass, kelp	1

Year	Month	Port Name	Block	Species	Kept
2010	3	MARINA DEL REY	0720	Bass, kelp	3
2010	3	REDONDO BEACH	0720	Bass, barred sand	1
2010	3	MARINA DEL REY	0720	Bass, barred sand	35
2010	3	MARINA DEL REY	0720	Crab, red rock	14
2010	3	REDONDO BEACH	0720	Whitefish, ocean	75
2010	3	SAN PEDRO	0720	Whitefish, ocean	82
2010	3	MARINA DEL REY	0720	Crab, rock unspecified	1
2010	3	MARINA DEL REY	0720	Crab, spider	15
2010	3	MARINA DEL REY	0720	Lobster, California spiny	85
2010	3	SAN PEDRO	0720	Rockfish, group red	163
2010	3	SAN PEDRO	0721	Sheephead, California	7
2010	3	SAN PEDRO	0721	Lingcod	
2010	3	SAN PEDRO	0721	Rockfish, unspecified	137
2010	3	SAN PEDRO	0721	Rockfish, bocaccio	66
2010	3	SAN PEDRO	0721	Whitefish, ocean	6
2010	3	SAN PEDRO	0721	Rockfish, group red	101
2010	4	MARINA DEL REY	0679	Mackerel, Pacific	25
2010	4	MARINA DEL REY	0679	Lingcod	2
2010	4	MARINA DEL REY	0679	Halibut, California	1
2010	4	MARINA DEL REY	0679	Rockfish, unspecified	180
2010	4	MARINA DEL REY	0679	Rockfish, bocaccio	44
2010	4	MARINA DEL REY	0679	Whitefish, ocean	1
2010	4	MARINA DEL REY	0679	Rockfish, copper	1
2010	4	SANTA BARBARA HARBOR	0680	Sheephead, California	2
2010	4	MARINA DEL REY	0680	Lingcod	4
2010	4	SANTA BARBARA HARBOR	0680	Lingcod	6
2010	4	SANTA BARBARA HARBOR	0680	Halibut, California	2
2010	4	MARINA DEL REY	0680	Sanddab	10
2010	4	MARINA DEL REY	0680	Rockfish, unspecified	80
2010	4	SANTA BARBARA HARBOR	0680	Rockfish, unspecified	157
2010	4	SANTA BARBARA HARBOR	0680	Rockfish, bocaccio	12
2010	4	MARINA DEL REY	0680	Rockfish, bocaccio	20
2010	4	SANTA BARBARA HARBOR	0680	Scorpionfish, California	1
2010	4	MARINA DEL REY	0680	Scorpionfish, California	
2010	4	SANTA BARBARA HARBOR	0680	Whitefish, ocean	49
2010	4	MARINA DEL REY	0680	Rockfish, copper	1
2010	4	SANTA BARBARA HARBOR	0680	Rockfish, copper	61
2010	4	MARINA DEL REY	0701	Sheephead, California	2
2010	4	MARINA DEL REY	0701	Lingcod	40
2010	4	MARINA DEL REY	0701	Sole, bigmouth	2
2010	4	MARINA DEL REY	0701	Sanddab	202
2010	4	MARINA DEL REY	0701	Rockfish, canary	
2010	4	MARINA DEL REY	0701	Rockfish, unspecified	1727
2010	4	MARINA DEL REY	0701	Rockfish, bocaccio	361
2010	4	MARINA DEL REY	0701	Scorpionfish, California	2974
2010	4	MARINA DEL REY	0701	Cabezon	2
2010	4	MARINA DEL REY	0701	Bass, kelp	8
2010	4	MARINA DEL REY	0701	Bass, barred sand	180
2010	4	MARINA DEL REY	0701	Blacksmith	
2010	4	MARINA DEL REY	0701	Whitefish, ocean	46
2010	4	MARINA DEL REY	0701	Rockfish, copper	30
2010	4	MARINA DEL REY	0701	Rockfish, blue	2
2010	4	MARINA DEL REY	0702	Mackerel, Pacific	40
2010	4	MALIBU	0702	Mackerel, Pacific	
2010	4	MARINA DEL REY	0702	Sheephead, California	7
2010	4	MARINA DEL REY	0702	Lingcod	26
2010	4	MALIBU	0702	Sanddab	48
2010	4	MARINA DEL REY	0702	Sanddab	90
2010	4	MALIBU	0702	Rockfish, unspecified	10
2010	4	MARINA DEL REY	0702	Rockfish, unspecified	768
2010	4	MARINA DEL REY	0702	Rockfish, bocaccio	227
2010	4	MARINA DEL REY	0702	Scorpionfish, California	1254
2010	4	MARINA DEL REY	0702	Bass, kelp	
2010	4	MARINA DEL REY	0702	Bass, barred sand	31
2010	4	MARINA DEL REY	0702	Bass, giant sea	
2010	4	MARINA DEL REY	0702	Whitefish, ocean	69
2010	4	MARINA DEL REY	0702	Rockfish, copper	40
2010	4	MARINA DEL REY	0702	Rockfish, blue	4
2010	4	MARINA DEL REY	0702	Crab, rock unspecified	72
2010	4	MALIBU	0703	Mackerel, Pacific	180
2010	4	MALIBU	0703	Sheephead, California	1

Year	Month	Port Name	Block	Species	Kept
2010	4	MARINA DEL REY	0703	Sheephead, California	1
2010	4	MALIBU	0703	Lingcod	6
2010	4	MALIBU	0703	Sanddab	30
2010	4	MALIBU	0703	Rockfish, vermilion	14
2010	4	MARINA DEL REY	0703	Rockfish, unspecified	65
2010	4	MALIBU	0703	Rockfish, unspecified	223
2010	4	MARINA DEL REY	0703	Rockfish, bocaccio	17
2010	4	MALIBU	0703	Rockfish, bocaccio	28
2010	4	MALIBU	0703	Scorpionfish, California	8
2010	4	MARINA DEL REY	0703	Scorpionfish, California	
2010	4	MALIBU	0703	Rockfish, gopher	1
2010	4	MALIBU	0703	Rockfish, widow	1
2010	4	MARINA DEL REY	0703	Bass, kelp	
2010	4	MARINA DEL REY	0703	Bass, barred sand	1
2010	4	MALIBU	0703	Bass, barred sand	2
2010	4	MALIBU	0703	Croaker, white	
2010	4	MALIBU	0703	Whitefish, ocean	7
2010	4	MARINA DEL REY	0703	Whitefish, ocean	12
2010	4	MALIBU	0703	Rockfish, copper	1
2010	4	MARINA DEL REY	0703	Rockfish, copper	5
2010	4	MALIBU	0703	Rockfish, blue	5
2010	4	MALIBU	0703	Rockfish, group red	58
2010	4	MARINA DEL REY	0720	Sheephead, California	1
2010	4	REDONDO BEACH	0720	Sheephead, California	4
2010	4	REDONDO BEACH	0720	Lingcod	9
2010	4	MARINA DEL REY	0720	Lingcod	
2010	4	REDONDO BEACH	0720	Sole, unspecified	1
2010	4	MARINA DEL REY	0720	Sanddab	12
2010	4	MARINA DEL REY	0720	Rockfish, unspecified	260
2010	4	REDONDO BEACH	0720	Rockfish, unspecified	2770
2010	4	MARINA DEL REY	0720	Rockfish, bocaccio	30
2010	4	REDONDO BEACH	0720	Rockfish, bocaccio	135
2010	4	REDONDO BEACH	0720	Scorpionfish, California	42
2010	4	MARINA DEL REY	0720	Scorpionfish, California	115
2010	4	REDONDO BEACH	0720	Bass, kelp	3
2010	4	REDONDO BEACH	0720	Bass, barred sand	3
2010	4	REDONDO BEACH	0720	Grouper	10
2010	4	REDONDO BEACH	0720	Whitefish, ocean	19
2010	4	MARINA DEL REY	0720	Whitefish, ocean	
2010	4	SAN PEDRO	0721	Sheephead, California	2
2010	4	SAN PEDRO	0721	Rockfish, unspecified	160
2010	4	SAN PEDRO	0721	Rockfish, bocaccio	60
2010	4	SAN PEDRO	0721	Scorpionfish, California	12
2010	4	SAN PEDRO	0721	Whitefish, ocean	19
2010	4	SAN PEDRO	0721	Rockfish, group red	65
2010	5	MARINA DEL REY	0679	Mackerel, Pacific	10
2010	5	MARINA DEL REY	0679	Sheephead, California	1
2010	5	MARINA DEL REY	0679	Sanddab	40
2010	5	MARINA DEL REY	0679	Rockfish, unspecified	15
2010	5	MARINA DEL REY	0679	Scorpionfish, California	35
2010	5	MARINA DEL REY	0679	Bass, kelp	
2010	5	MARINA DEL REY	0679	Perch-like, unspecified	35
2010	5	MARINA DEL REY	0679	Whitefish, ocean	1
2010	5	MARINA DEL REY	0680	Sheephead, California	6
2010	5	MARINA DEL REY	0680	Lingcod	1
2010	5	SANTA BARBARA HARBOR	0680	Lingcod	10
2010	5	OXNARD	0680	Lingcod	
2010	5	MARINA DEL REY	0680	Sanddab	10
2010	5	OXNARD	0680	Rockfish, unspecified	100
2010	5	MARINA DEL REY	0680	Rockfish, unspecified	160
2010	5	SANTA BARBARA HARBOR	0680	Rockfish, unspecified	510
2010	5	MARINA DEL REY	0680	Rockfish, bocaccio	48
2010	5	SANTA BARBARA HARBOR	0680	Rockfish, bocaccio	77
2010	5	MARINA DEL REY	0680	Scorpionfish, California	1
2010	5	SANTA BARBARA HARBOR	0680	Scorpionfish, California	3
2010	5	OXNARD	0680	Scorpionfish, California	7
2010	5	SANTA BARBARA HARBOR	0680	Rockfish, gopher	4
2010	5	MARINA DEL REY	0680	Rockfish, gopher	45
2010	5	SANTA BARBARA HARBOR	0680	Rockfish, widow	2
2010	5	SANTA BARBARA HARBOR	0680	Bass, kelp	1
2010	5	MARINA DEL REY	0680	Bass, kelp	

Year	Month	Port Name	Block	Species	Kept
2010	5	MARINA DEL REY	0680	Bass, barred sand	2
2010	5	OXNARD	0680	Whitefish, ocean	18
2010	5	SANTA BARBARA HARBOR	0680	Whitefish, ocean	30
2010	5	MARINA DEL REY	0680	Whitefish, ocean	46
2010	5	MARINA DEL REY	0680	Rockfish, copper	57
2010	5	SANTA BARBARA HARBOR	0680	Rockfish, copper	162
2010	5	SANTA BARBARA HARBOR	0680	Rockfish, blue	40
2010	5	MARINA DEL REY	0701	Mackerel, Pacific	15
2010	5	MARINA DEL REY	0701	Sheephead, California	2
2010	5	MARINA DEL REY	0701	Lingcod	6
2010	5	MARINA DEL REY	0701	Sanddab	351
2010	5	MARINA DEL REY	0701	Rockfish, canary	
2010	5	MARINA DEL REY	0701	Rockfish, unspecified	1315
2010	5	MARINA DEL REY	0701	Rockfish, bocaccio	278
2010	5	MARINA DEL REY	0701	Scorpionfish, California	1851
2010	5	MARINA DEL REY	0701	Cabezon	1
2010	5	MARINA DEL REY	0701	Bass, kelp	8
2010	5	MARINA DEL REY	0701	Bass, barred sand	74
2010	5	MARINA DEL REY	0701	Blacksmith	7
2010	5	MARINA DEL REY	0701	Whitefish, ocean	145
2010	5	MARINA DEL REY	0701	Rockfish, copper	40
2010	5	MARINA DEL REY	0701	Rockfish, blue	1
2010	5	MARINA DEL REY	0701	Octopus, unspecified	10
2010	5	MARINA DEL REY	0702	Mackerel, Pacific	1
2010	5	MARINA DEL REY	0702	Sheephead, California	1
2010	5	MARINA DEL REY	0702	Shark, spiny dogfish	
2010	5	MARINA DEL REY	0702	Shark, soupfin	
2010	5	REDONDO BEACH	0702	Lingcod	1
2010	5	MARINA DEL REY	0702	Lingcod	24
2010	5	MARINA DEL REY	0702	Sole, petrale	1
2010	5	REDONDO BEACH	0702	Sanddab	114
2010	5	MARINA DEL REY	0702	Sanddab	457
2010	5	REDONDO BEACH	0702	Rockfish, unspecified	372
2010	5	MARINA DEL REY	0702	Rockfish, unspecified	1539
2010	5	REDONDO BEACH	0702	Rockfish, bocaccio	18
2010	5	MARINA DEL REY	0702	Rockfish, bocaccio	617
2010	5	REDONDO BEACH	0702	Scorpionfish, California	9
2010	5	MARINA DEL REY	0702	Scorpionfish, California	1408
2010	5	MARINA DEL REY	0702	Rockfish, gopher	12
2010	5	MARINA DEL REY	0702	Rockfish, widow	1
2010	5	MARINA DEL REY	0702	Bass, kelp	2
2010	5	MARINA DEL REY	0702	Bass, barred sand	5
2010	5	MARINA DEL REY	0702	Crab, red rock	37
2010	5	MARINA DEL REY	0702	Eel	
2010	5	MARINA DEL REY	0702	Perch-like, unspecified	70
2010	5	REDONDO BEACH	0702	Whitefish, ocean	1
2010	5	MARINA DEL REY	0702	Whitefish, ocean	52
2010	5	MARINA DEL REY	0702	Rockfish, copper	29
2010	5	MALIBU	0703	Mackerel, Pacific	3
2010	5	MALIBU	0703	Lingcod	5
2010	5	MALIBU	0703	Sanddab	47
2010	5	MALIBU	0703	Rockfish, vermilion	85
2010	5	MALIBU	0703	Rockfish, unspecified	159
2010	5	MALIBU	0703	Rockfish, bocaccio	72
2010	5	MALIBU	0703	Scorpionfish, California	
2010	5	MALIBU	0703	Rockfish, copper	11
2010	5	MALIBU	0703	Rockfish, group red	138
2010	5	REDONDO BEACH	0720	Mackerel, Pacific	8
2010	5	MARINA DEL REY	0720	Mackerel, Pacific	
2010	5	REDONDO BEACH	0720	Barracuda, California	1
2010	5	MARINA DEL REY	0720	Barracuda, California	
2010	5	REDONDO BEACH	0720	Sheephead, California	6
2010	5	REDONDO BEACH	0720	Lingcod	9
2010	5	MARINA DEL REY	0720	Lingcod	
2010	5	REDONDO BEACH	0720	Sole, unspecified	1
2010	5	MARINA DEL REY	0720	Halibut, California	3
2010	5	MARINA DEL REY	0720	Rockfish, unspecified	60
2010	5	REDONDO BEACH	0720	Rockfish, unspecified	2929
2010	5	REDONDO BEACH	0720	Rockfish, bocaccio	16
2010	5	MARINA DEL REY	0720	Rockfish, bocaccio	17
2010	5	REDONDO BEACH	0720	Scorpionfish, California	29

Year	Month	Port Name	Block	Species	Kept
2010	5	MARINA DEL REY	0720	Bass, kelp	1
2010	5	REDONDO BEACH	0720	Bass, kelp	7
2010	5	REDONDO BEACH	0720	Bass, barred sand	11
2010	5	REDONDO BEACH	0720	Blacksmith	33
2010	5	REDONDO BEACH	0720	Sargo	1
2010	5	REDONDO BEACH	0720	Whitefish, ocean	58
2010	5	MARINA DEL REY	0720	Rockfish, copper	2
2010	5	SAN PEDRO	0721	Sheephead, California	3
2010	5	SAN PEDRO	0721	Rockfish, unspecified	45
2010	5	SAN PEDRO	0721	Rockfish, bocaccio	20
2010	5	SAN PEDRO	0721	Scorpionfish, California	2
2010	5	SAN PEDRO	0721	Whitefish, ocean	24
2010	5	SAN PEDRO	0721	Rockfish, group red	10
2010	6	MARINA DEL REY	0679	Mackerel, Pacific	12
2010	6	MARINA DEL REY	0679	Sheephead, California	4
2010	6	MARINA DEL REY	0679	Shark, leopard	1
2010	6	MARINA DEL REY	0679	Halibut, California	2
2010	6	MARINA DEL REY	0679	Rockfish, unspecified	63
2010	6	MARINA DEL REY	0679	Scorpionfish, California	2
2010	6	MARINA DEL REY	0679	Bass, kelp	62
2010	6	MARINA DEL REY	0679	Bass, barred sand	25
2010	6	MARINA DEL REY	0679	Seabass, white	
2010	6	MARINA DEL REY	0679	Whitefish, ocean	8
2010	6	MARINA DEL REY	0679	Rockfish, copper	1
2010	6	MARINA DEL REY	0680	Mackerel, Pacific	37
2010	6	MARINA DEL REY	0680	Barracuda, California	
2010	6	MARINA DEL REY	0680	Sheephead, California	3
2010	6	MARINA DEL REY	0680	Lingcod	1
2010	6	MARINA DEL REY	0680	Halibut, California	
2010	6	MARINA DEL REY	0680	Sanddab	15
2010	6	OXNARD	0680	Rockfish, unspecified	98
2010	6	MARINA DEL REY	0680	Rockfish, unspecified	202
2010	6	OXNARD	0680	Rockfish, bocaccio	1
2010	6	MARINA DEL REY	0680	Rockfish, bocaccio	29
2010	6	OXNARD	0680	Bass, kelp	17
2010	6	MARINA DEL REY	0680	Bass, kelp	52
2010	6	OXNARD	0680	Bass, barred sand	2
2010	6	MARINA DEL REY	0680	Bass, barred sand	9
2010	6	MARINA DEL REY	0680	Bass, giant sea	
2010	6	MARINA DEL REY	0680	Seabass, white	
2010	6	MARINA DEL REY	0680	Croaker, black	
2010	6	MARINA DEL REY	0680	Whitefish, ocean	1
2010	6	MARINA DEL REY	0680	Rockfish, copper	4
2010	6	MARINA DEL REY	0701	Mackerel, Pacific	104
2010	6	MARINA DEL REY	0701	Barracuda, California	133
2010	6	MARINA DEL REY	0701	Sheephead, California	22
2010	6	MARINA DEL REY	0701	Shark, swell	
2010	6	MARINA DEL REY	0701	Lingcod	3
2010	6	MARINA DEL REY	0701	Halibut, California	16
2010	6	MARINA DEL REY	0701	Sanddab	166
2010	6	MARINA DEL REY	0701	Rockfish, unspecified	658
2010	6	MARINA DEL REY	0701	Rockfish, bocaccio	246
2010	6	MARINA DEL REY	0701	Scorpionfish, California	1093
2010	6	MARINA DEL REY	0701	Cabezon	1
2010	6	MARINA DEL REY	0701	Rockfish, gopher	19
2010	6	REDONDO BEACH	0701	Bass, kelp	5
2010	6	MARINA DEL REY	0701	Bass, kelp	470
2010	6	REDONDO BEACH	0701	Bass, barred sand	19
2010	6	MARINA DEL REY	0701	Bass, barred sand	446
2010	6	MARINA DEL REY	0701	Seabass, white	1
2010	6	MARINA DEL REY	0701	Perch-like, unspecified	30
2010	6	MARINA DEL REY	0701	Halfmoon	20
2010	6	MARINA DEL REY	0701	Blacksmith	141
2010	6	MARINA DEL REY	0701	Whitefish, ocean	24
2010	6	MARINA DEL REY	0701	Rockfish, copper	20
2010	6	MARINA DEL REY	0701	Fish, unspecified	
2010	6	MARINA DEL REY	0701		
2010	6	MARINA DEL REY	0702	Mackerel, Pacific	23
2010	6	MARINA DEL REY	0702	Barracuda, California	55
2010	6	REDONDO BEACH	0702	Barracuda, California	142
2010	6	REDONDO BEACH	0702	Sheephead, California	2

Year	Month	Port Name	Block	Species	Kept
2010	6	MARINA DEL REY	0702	Shark, shortfin mako	
2010	6	MARINA DEL REY	0702	Shark, spiny dogfish	
2010	6	MARINA DEL REY	0702	Smelt, surf	5
2010	6	MARINA DEL REY	0702	Lingcod	9
2010	6	MARINA DEL REY	0702	Sole, petrale	1
2010	6	MARINA DEL REY	0702	Sanddab	582
2010	6	REDONDO BEACH	0702	Rockfish, unspecified	150
2010	6	MARINA DEL REY	0702	Rockfish, unspecified	1054
2010	6	MARINA DEL REY	0702	Rockfish, bocaccio	391
2010	6	REDONDO BEACH	0702	Scorpionfish, California	18
2010	6	MARINA DEL REY	0702	Scorpionfish, California	615
2010	6	MARINA DEL REY	0702	Bass, kelp	11
2010	6	REDONDO BEACH	0702	Bass, kelp	109
2010	6	MARINA DEL REY	0702	Bass, barred sand	3
2010	6	REDONDO BEACH	0702	Bass, barred sand	42
2010	6	MARINA DEL REY	0702	Crab, yellow rock	136
2010	6	MARINA DEL REY	0702	Croaker, white	1
2010	6	REDONDO BEACH	0702	Halfmoon	123
2010	6	REDONDO BEACH	0702	Whitefish, ocean	11
2010	6	MARINA DEL REY	0702	Whitefish, ocean	19
2010	6	MARINA DEL REY	0702	Rockfish, copper	8
2010	6	MARINA DEL REY	0702	Rockfish, blue	1
2010	6	MALIBU	0703	Mackerel, Pacific	612
2010	6	MALIBU	0703	Barracuda, California	
2010	6	MALIBU	0703	Sheephead, California	12
2010	6	MALIBU	0703	Jacksmelt	83
2010	6	MALIBU	0703	Lingcod	2
2010	6	MALIBU	0703	Sole, rock	1
2010	6	MALIBU	0703	Sanddab	60
2010	6	MALIBU	0703	Rockfish, vermilion	63
2010	6	MALIBU	0703	Rockfish, unspecified	328
2010	6	MALIBU	0703	Rockfish, bocaccio	88
2010	6	MALIBU	0703	Scorpionfish, California	11
2010	6	MALIBU	0703	Bass, kelp	9
2010	6	MALIBU	0703	Bass, barred sand	2
2010	6	MALIBU	0703	Bass, giant sea	
2010	6	MALIBU	0703	Seabass, white	1
2010	6	MALIBU	0703	Croaker, white	
2010	6	MALIBU	0703	Whitefish, ocean	3
2010	6	MALIBU	0703	Rockfish, copper	22
2010	6	MALIBU	0703	Rockfish, group red	46
2010	6	REDONDO BEACH	0720	Bonito, Pacific	1
2010	6	LONG BEACH	0720	Bonito, Pacific	10
2010	6	REDONDO BEACH	0720	Yellowtail	2
2010	6	REDONDO BEACH	0720	Mackerel, Pacific	10
2010	6	MARINA DEL REY	0720	Mackerel, Pacific	20
2010	6	SAN PEDRO	0720	Mackerel, Pacific	62
2010	6	LONG BEACH	0720	Mackerel, Pacific	
2010	6	REDONDO BEACH	0720	Barracuda, California	39
2010	6	SAN PEDRO	0720	Barracuda, California	829
2010	6	MARINA DEL REY	0720	Barracuda, California	
2010	6	MARINA DEL REY	0720	Sheephead, California	2
2010	6	SAN PEDRO	0720	Sheephead, California	12
2010	6	LONG BEACH	0720	Sheephead, California	25
2010	6	REDONDO BEACH	0720	Sheephead, California	275
2010	6	SAN PEDRO	0720	Lingcod	1
2010	6	MARINA DEL REY	0720	Lingcod	1
2010	6	REDONDO BEACH	0720	Lingcod	8
2010	6	REDONDO BEACH	0720	Sole, unspecified	1
2010	6	LONG BEACH	0720	Halibut, California	1
2010	6	HUNTINGTON BEACH	0720	Halibut, California	1
2010	6	SAN PEDRO	0720	Halibut, California	1
2010	6	REDONDO BEACH	0720	Halibut, California	8
2010	6	MARINA DEL REY	0720	Sanddab	
2010	6	LONG BEACH	0720	Rockfish, unspecified	1
2010	6	MARINA DEL REY	0720	Rockfish, unspecified	43
2010	6	SAN PEDRO	0720	Rockfish, unspecified	84
2010	6	REDONDO BEACH	0720	Rockfish, unspecified	756
2010	6	MARINA DEL REY	0720	Rockfish, bocaccio	3
2010	6	REDONDO BEACH	0720	Rockfish, bocaccio	7
2010	6	MARINA DEL REY	0720	Scorpionfish, California	4

Year	Month	Port Name	Block	Species	Kept
2010	6	LONG BEACH	0720	Scorpionfish, California	6
2010	6	REDONDO BEACH	0720	Scorpionfish, California	39
2010	6	SAN PEDRO	0720	Scorpionfish, California	394
2010	6	MARINA DEL REY	0720	Cabezon	1
2010	6	LONG BEACH	0720	Cabezon	2
2010	6	REDONDO BEACH	0720	Cabezon	7
2010	6	MARINA DEL REY	0720	Rockfish, gopher	40
2010	6	MARINA DEL REY	0720	Bass, kelp	75
2010	6	LONG BEACH	0720	Bass, kelp	294
2010	6	SAN PEDRO	0720	Bass, kelp	508
2010	6	REDONDO BEACH	0720	Bass, kelp	1354
2010	6	MARINA DEL REY	0720	Bass, barred sand	31
2010	6	LONG BEACH	0720	Bass, barred sand	32
2010	6	SAN PEDRO	0720	Bass, barred sand	304
2010	6	REDONDO BEACH	0720	Bass, barred sand	343
2010	6	REDONDO BEACH	0720	Bass, giant sea	
2010	6	REDONDO BEACH	0720	Triggerfish	1
2010	6	MARINA DEL REY	0720	Seabass, white	2
2010	6	LONG BEACH	0720	Seabass, white	44
2010	6	REDONDO BEACH	0720	Seabass, white	52
2010	6	SAN PEDRO	0720	Seabass, white	
2010	6	REDONDO BEACH	0720	Croaker, black	2
2010	6	REDONDO BEACH	0720	Eel, wolf (wolf-eel)	
2010	6	REDONDO BEACH	0720	Halfmoon	50
2010	6	LONG BEACH	0720	Halfmoon	
2010	6	REDONDO BEACH	0720	Blacksmith	48
2010	6	REDONDO BEACH	0720	Sargo	2
2010	6	LONG BEACH	0720	Whitefish, ocean	4
2010	6	SAN PEDRO	0720	Whitefish, ocean	6
2010	6	REDONDO BEACH	0720	Whitefish, ocean	15
2010	6	MARINA DEL REY	0720	Rockfish, blue	1
2010	6	REDONDO BEACH	0720		
2010	6	HUNTINGTON BEACH	0721	Shark, shortfin mako	1
2010	7	REDONDO BEACH	0678	Sheephead, California	4
2010	7	REDONDO BEACH	0678	Rockfish, unspecified	8
2010	7	REDONDO BEACH	0678	Scorpionfish, California	10
2010	7	REDONDO BEACH	0678	Rockfish, gopher	1
2010	7	REDONDO BEACH	0678	Bass, kelp	34
2010	7	REDONDO BEACH	0678	Bass, barred sand	35
2010	7	REDONDO BEACH	0678	Halfmoon	60
2010	7	MARINA DEL REY	0679	Mackerel, Pacific	58
2010	7	MARINA DEL REY	0679	Sheephead, California	2
2010	7	MARINA DEL REY	0679	Shark, leopard	
2010	7	MARINA DEL REY	0679	Guitarfish, shovelnose	
2010	7	MARINA DEL REY	0679	Halibut, California	1
2010	7	MARINA DEL REY	0679	Rockfish, unspecified	37
2010	7	MARINA DEL REY	0679	Rockfish, bocaccio	10
2010	7	MARINA DEL REY	0679	Scorpionfish, California	
2010	7	MARINA DEL REY	0679	Cabezon	
2010	7	MARINA DEL REY	0679	Bass, kelp	82
2010	7	MARINA DEL REY	0679	Bass, barred sand	121
2010	7	MARINA DEL REY	0679	Fish, unspecified	
2010	7	MARINA DEL REY	0680	Mackerel, Pacific	2
2010	7	MARINA DEL REY	0680	Barracuda, California	
2010	7	MARINA DEL REY	0680	Sheephead, California	1
2010	7	MARINA DEL REY	0680	Lingcod	1
2010	7	MARINA DEL REY	0680	Sanddab	2
2010	7	MARINA DEL REY	0680	Rockfish, unspecified	179
2010	7	MARINA DEL REY	0680	Rockfish, bocaccio	23
2010	7	MARINA DEL REY	0680	Scorpionfish, California	2
2010	7	MARINA DEL REY	0680	Rockfish, gopher	25
2010	7	MARINA DEL REY	0680	Bass, kelp	62
2010	7	MARINA DEL REY	0680	Bass, barred sand	25
2010	7	MARINA DEL REY	0680	Seabass, white	
2010	7	MARINA DEL REY	0680	Lizardfish, California	1
2010	7	MARINA DEL REY	0680	Whitefish, ocean	19
2010	7	MARINA DEL REY	0680	Rockfish, copper	1
2010	7	MARINA DEL REY	0680	Crab, spider	
2010	7	DANA POINT	0701	Bonito, Pacific	27
2010	7	MARINA DEL REY	0701	Mackerel, Pacific	261
2010	7	SAN DIEGO	0701	Barracuda, California	1

Year	Month	Port Name	Block	Species	Kept
2010	7	DANA POINT	0701	Barracuda, California	15
2010	7	MARINA DEL REY	0701	Barracuda, California	1343
2010	7	REDONDO BEACH	0701	Sheephead, California	2
2010	7	MARINA DEL REY	0701	Sheephead, California	12
2010	7	DANA POINT	0701	Sheephead, California	19
2010	7	MARINA DEL REY	0701	Skate, longnose	
2010	7	MARINA DEL REY	0701	Shark, leopard	
2010	7	MARINA DEL REY	0701	Shark, thresher	2
2010	7	MARINA DEL REY	0701	Ray, bat	
2010	7	MARINA DEL REY	0701	Lingcod	2
2010	7	DANA POINT	0701	Halibut, California	1
2010	7	MARINA DEL REY	0701	Halibut, California	16
2010	7	MARINA DEL REY	0701	Sanddab	2
2010	7	REDONDO BEACH	0701	Rockfish, unspecified	130
2010	7	MARINA DEL REY	0701	Rockfish, unspecified	482
2010	7	MARINA DEL REY	0701	Rockfish, bocaccio	71
2010	7	REDONDO BEACH	0701	Scorpionfish, California	1
2010	7	MARINA DEL REY	0701	Scorpionfish, California	518
2010	7	MARINA DEL REY	0701	Cabezon	
2010	7	MARINA DEL REY	0701	Rockfish, gopher	66
2010	7	SAN DIEGO	0701	Bass, kelp	2
2010	7	REDONDO BEACH	0701	Bass, kelp	13
2010	7	DANA POINT	0701	Bass, kelp	51
2010	7	MARINA DEL REY	0701	Bass, kelp	353
2010	7	REDONDO BEACH	0701	Bass, barred sand	69
2010	7	MARINA DEL REY	0701	Bass, barred sand	1590
2010	7	MARINA DEL REY	0701	Bass, giant sea	
2010	7	MARINA DEL REY	0701	Croaker, white	2
2010	7	MARINA DEL REY	0701	Blacksmith	
2010	7	MARINA DEL REY	0701	Whitefish, ocean	9
2010	7	MARINA DEL REY	0701	Rockfish, copper	4
2010	7	MARINA DEL REY	0701	Rockfish, blue	1
2010	7	MARINA DEL REY	0701	Octopus, unspecified	7
2010	7	REDONDO BEACH	0701		
2010	7	MARINA DEL REY	0702	Mackerel, Pacific	46
2010	7	MARINA DEL REY	0702	Barracuda, California	7
2010	7	REDONDO BEACH	0702	Barracuda, California	264
2010	7	MARINA DEL REY	0702	Sheephead, California	3
2010	7	REDONDO BEACH	0702	Sheephead, California	5
2010	7	MARINA DEL REY	0702	Shark, spiny dogfish	
2010	7	MARINA DEL REY	0702	Lingcod	18
2010	7	REDONDO BEACH	0702	Halibut, California	1
2010	7	MARINA DEL REY	0702	Sanddab	330
2010	7	REDONDO BEACH	0702	Rockfish, unspecified	18
2010	7	MARINA DEL REY	0702	Rockfish, unspecified	1012
2010	7	MARINA DEL REY	0702	Rockfish, bocaccio	365
2010	7	REDONDO BEACH	0702	Scorpionfish, California	1
2010	7	MARINA DEL REY	0702	Scorpionfish, California	454
2010	7	MARINA DEL REY	0702	Rockfish, widow	2
2010	7	MARINA DEL REY	0702	Bass, kelp	17
2010	7	REDONDO BEACH	0702	Bass, kelp	106
2010	7	MARINA DEL REY	0702	Bass, barred sand	5
2010	7	REDONDO BEACH	0702	Bass, barred sand	64
2010	7	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2010	7	MARINA DEL REY	0702	Blacksmith	
2010	7	REDONDO BEACH	0702	Whitefish, ocean	2
2010	7	MARINA DEL REY	0702	Whitefish, ocean	51
2010	7	MARINA DEL REY	0702	Rockfish, copper	7
2010	7	MALIBU	0703	Mackerel, Pacific	708
2010	7	MALIBU	0703	Sheephead, California	9
2010	7	MALIBU	0703	Lingcod	5
2010	7	MALIBU	0703	Sole, rock	1
2010	7	MALIBU	0703	Sanddab	13
2010	7	MALIBU	0703	Rockfish, vermilion	114
2010	7	MALIBU	0703	Rockfish, unspecified	267
2010	7	MALIBU	0703	Rockfish, bocaccio	17
2010	7	MALIBU	0703	Scorpionfish, California	1
2010	7	MALIBU	0703	Rockfish, gopher	14
2010	7	MALIBU	0703	Rockfish, widow	1
2010	7	MALIBU	0703	Bass, kelp	18
2010	7	MALIBU	0703	Bass, barred sand	2

Year	Month	Port Name	Block	Species	Kept
2010	7	MALIBU	0703	Croaker, white	1
2010	7	MALIBU	0703	Perch-like, unspecified	35
2010	7	MALIBU	0703	Blacksmith	31
2010	7	MALIBU	0703	Whitefish, ocean	4
2010	7	MALIBU	0703	Rockfish, group red	15
2010	7	REDONDO BEACH	0720	Bonito, Pacific	10
2010	7	MARINA DEL REY	0720	Mackerel, Pacific	15
2010	7	MARINA DEL REY	0720	Barracuda, California	1
2010	7	LONG BEACH	0720	Barracuda, California	2
2010	7	REDONDO BEACH	0720	Barracuda, California	293
2010	7	SAN PEDRO	0720	Barracuda, California	
2010	7	REDONDO BEACH	0720	Sheephead, California	51
2010	7	REDONDO BEACH	0720	Lingcod	1
2010	7	LONG BEACH	0720	Lingcod	1
2010	7	MARINA DEL REY	0720	Lingcod	2
2010	7	MARINA DEL REY	0720	Sole, unspecified	1
2010	7	LONG BEACH	0720	Halibut, California	1
2010	7	REDONDO BEACH	0720	Halibut, California	5
2010	7	SAN PEDRO	0720	Rockfish, unspecified	36
2010	7	LONG BEACH	0720	Rockfish, unspecified	70
2010	7	MARINA DEL REY	0720	Rockfish, unspecified	145
2010	7	REDONDO BEACH	0720	Rockfish, unspecified	846
2010	7	SAN PEDRO	0720	Rockfish, bocaccio	6
2010	7	MARINA DEL REY	0720	Rockfish, bocaccio	35
2010	7	SAN PEDRO	0720	Scorpionfish, California	1
2010	7	LONG BEACH	0720	Scorpionfish, California	5
2010	7	MARINA DEL REY	0720	Scorpionfish, California	6
2010	7	REDONDO BEACH	0720	Scorpionfish, California	58
2010	7	REDONDO BEACH	0720	Cabezon	1
2010	7	LONG BEACH	0720	Cabezon	1
2010	7	MARINA DEL REY	0720	Cabezon	
2010	7	MARINA DEL REY	0720	Rockfish, gopher	15
2010	7	LONG BEACH	0720	Bass, kelp	10
2010	7	MARINA DEL REY	0720	Bass, kelp	150
2010	7	REDONDO BEACH	0720	Bass, kelp	877
2010	7	SAN PEDRO	0720	Bass, barred sand	5
2010	7	MARINA DEL REY	0720	Bass, barred sand	133
2010	7	REDONDO BEACH	0720	Bass, barred sand	171
2010	7	REDONDO BEACH	0720	Bass, giant sea	
2010	7	REDONDO BEACH	0720	Seabass, white	8
2010	7	REDONDO BEACH	0720	Halfmoon	31
2010	7	REDONDO BEACH	0720	Blacksmith	36
2010	7	REDONDO BEACH	0720	Whitefish, ocean	130
2010	7	REDONDO BEACH	0720		
2010	8	MARINA DEL REY	0679	Mackerel, Pacific	5
2010	8	MARINA DEL REY	0679	Sheephead, California	4
2010	8	MARINA DEL REY	0679	Rockfish, unspecified	14
2010	8	MARINA DEL REY	0679	Scorpionfish, California	3
2010	8	MARINA DEL REY	0679	Bass, kelp	3
2010	8	MARINA DEL REY	0679	Bass, barred sand	21
2010	8	MARINA DEL REY	0679	Blacksmith	62
2010	8	MARINA DEL REY	0680	Mackerel, Pacific	
2010	8	MARINA DEL REY	0680	Lingcod	2
2010	8	MARINA DEL REY	0680	Sanddab	50
2010	8	MARINA DEL REY	0680	Rockfish, unspecified	265
2010	8	MARINA DEL REY	0680	Rockfish, bocaccio	20
2010	8	MARINA DEL REY	0680	Scorpionfish, California	
2010	8	MARINA DEL REY	0680	Rockfish, gopher	1
2010	8	MARINA DEL REY	0680	Whitefish, ocean	2
2010	8	MARINA DEL REY	0680	Rockfish, copper	2
2010	8	MARINA DEL REY	0701	Mackerel, Pacific	291
2010	8	MARINA DEL REY	0701	Barracuda, California	785
2010	8	MARINA DEL REY	0701	Sheephead, California	20
2010	8	MARINA DEL REY	0701	Ray, unspecified	
2010	8	MARINA DEL REY	0701	Ray, bat	
2010	8	MARINA DEL REY	0701	Lingcod	8
2010	8	MARINA DEL REY	0701	Halibut, California	4
2010	8	MARINA DEL REY	0701	Sanddab	430
2010	8	MARINA DEL REY	0701	Rockfish, canary	2
2010	8	MARINA DEL REY	0701	Rockfish, unspecified	810
2010	8	MARINA DEL REY	0701	Rockfish, bocaccio	253

Year	Month	Port Name	Block	Species	Kept
2010	8	MARINA DEL REY	0701	Scorpionfish, California	1679
2010	8	MARINA DEL REY	0701	Cabezon	
2010	8	MARINA DEL REY	0701	Rockfish, gopher	
2010	8	MARINA DEL REY	0701	Bass, kelp	66
2010	8	MARINA DEL REY	0701	Bass, barred sand	1896
2010	8	MARINA DEL REY	0701	Bass, giant sea	
2010	8	MARINA DEL REY	0701	Seabass, white	2
2010	8	MARINA DEL REY	0701	Croaker, black	1
2010	8	MARINA DEL REY	0701	Perch-like, unspecified	55
2010	8	MARINA DEL REY	0701	Blacksmith	41
2010	8	MARINA DEL REY	0701	Whitefish, ocean	64
2010	8	MARINA DEL REY	0701	Surfperch, unspecified	1
2010	8	MARINA DEL REY	0701	Rockfish, copper	17
2010	8	MARINA DEL REY	0701	Rockfish, blue	25
2010	8	MARINA DEL REY	0701	Octopus, unspecified	9
2010	8	MARINA DEL REY	0701		
2010	8	REDONDO BEACH	0702	Barracuda, California	6
2010	8	MARINA DEL REY	0702	Barracuda, California	39
2010	8	MARINA DEL REY	0702	Shark, spiny dogfish	
2010	8	MARINA DEL REY	0702	Shark, blue	
2010	8	MARINA DEL REY	0702	Ray, bat	
2010	8	MARINA DEL REY	0702	Lingcod	8
2010	8	SAN PEDRO	0702	Lingcod	
2010	8	MARINA DEL REY	0702	Sole, petrale	1
2010	8	MARINA DEL REY	0702	Sanddab	300
2010	8	REDONDO BEACH	0702	Rockfish, unspecified	42
2010	8	SAN PEDRO	0702	Rockfish, unspecified	65
2010	8	MARINA DEL REY	0702	Rockfish, unspecified	692
2010	8	REDONDO BEACH	0702	Rockfish, bocaccio	26
2010	8	SAN PEDRO	0702	Rockfish, bocaccio	31
2010	8	MARINA DEL REY	0702	Rockfish, bocaccio	227
2010	8	REDONDO BEACH	0702	Scorpionfish, California	2
2010	8	MARINA DEL REY	0702	Scorpionfish, California	451
2010	8	MARINA DEL REY	0702	Bass, kelp	
2010	8	REDONDO BEACH	0702	Bass, barred sand	3
2010	8	MARINA DEL REY	0702	Bass, barred sand	34
2010	8	MARINA DEL REY	0702	Croaker, black	
2010	8	MARINA DEL REY	0702	Whitefish, ocean	3
2010	8	MARINA DEL REY	0702	Rockfish, copper	5
2010	8	SAN PEDRO	0702	Rockfish, group red	6
2010	8	MARINA DEL REY	0702		
2010	8	MALIBU	0703	Mackerel, Pacific	377
2010	8	MALIBU	0703	Mackerel, jack	303
2010	8	MALIBU	0703	Sheephead, California	1
2010	8	MALIBU	0703	Lingcod	6
2010	8	MALIBU	0703	Sole, rock	2
2010	8	MALIBU	0703	Halibut, California	3
2010	8	MALIBU	0703	Sanddab	221
2010	8	MALIBU	0703	Rockfish, vermilion	266
2010	8	MALIBU	0703	Rockfish, unspecified	532
2010	8	MALIBU	0703	Rockfish, bocaccio	252
2010	8	MALIBU	0703	Scorpionfish, California	
2010	8	MALIBU	0703	Cabezon	
2010	8	MALIBU	0703	Rockfish, gopher	7
2010	8	MALIBU	0703	Whitefish, ocean	1
2010	8	MALIBU	0703	Surfperch, unspecified	2
2010	8	MALIBU	0703	Rockfish, copper	8
2010	8	REDONDO BEACH	0720	Bonito, Pacific	2
2010	8	REDONDO BEACH	0720	Yellowtail	1
2010	8	REDONDO BEACH	0720	Mackerel, Pacific	4
2010	8	MARINA DEL REY	0720	Mackerel, Pacific	31
2010	8	SAN PEDRO	0720	Mackerel, Pacific	117
2010	8	LONG BEACH	0720	Mackerel, Pacific	200
2010	8	MARINA DEL REY	0720	Barracuda, California	1
2010	8	REDONDO BEACH	0720	Barracuda, California	98
2010	8	SAN PEDRO	0720	Barracuda, California	106
2010	8	MARINA DEL REY	0720	Sheephead, California	5
2010	8	REDONDO BEACH	0720	Sheephead, California	16
2010	8	SAN PEDRO	0720	Sheephead, California	20
2010	8	MARINA DEL REY	0720	Shark, shortfin mako	1
2010	8	REDONDO BEACH	0720	Shark, swell	

Year	Month	Port Name	Block	Species	Kept
2010	8	MARINA DEL REY	0720	Sablefish	
2010	8	LONG BEACH	0720	Lingcod	1
2010	8	SAN PEDRO	0720	Lingcod	1
2010	8	MARINA DEL REY	0720	Lingcod	8
2010	8	REDONDO BEACH	0720	Lingcod	9
2010	8	REDONDO BEACH	0720	Halibut, California	1
2010	8	SAN PEDRO	0720	Halibut, California	28
2010	8	REDONDO BEACH	0720	Sanddab	6
2010	8	MARINA DEL REY	0720	Sanddab	152
2010	8	SAN PEDRO	0720	Sanddab	587
2010	8	LONG BEACH	0720	Rockfish, unspecified	10
2010	8	MARINA DEL REY	0720	Rockfish, unspecified	345
2010	8	SAN PEDRO	0720	Rockfish, unspecified	363
2010	8	REDONDO BEACH	0720	Rockfish, unspecified	1171
2010	8	SAN PEDRO	0720	Rockfish, bocaccio	23
2010	8	MARINA DEL REY	0720	Rockfish, bocaccio	30
2010	8	MARINA DEL REY	0720	Scorpionfish, California	57
2010	8	REDONDO BEACH	0720	Scorpionfish, California	209
2010	8	SAN PEDRO	0720	Scorpionfish, California	2653
2010	8	REDONDO BEACH	0720	Cabezon	164
2010	8	MARINA DEL REY	0720	Cabezon	
2010	8	MARINA DEL REY	0720	Bass, kelp	2
2010	8	REDONDO BEACH	0720	Bass, kelp	276
2010	8	SAN PEDRO	0720	Bass, kelp	408
2010	8	MARINA DEL REY	0720	Bass, barred sand	178
2010	8	REDONDO BEACH	0720	Bass, barred sand	248
2010	8	SAN PEDRO	0720	Bass, barred sand	359
2010	8	REDONDO BEACH	0720	Bass, giant sea	
2010	8	MARINA DEL REY	0720	Seabass, white	7
2010	8	REDONDO BEACH	0720	Seabass, white	31
2010	8	MARINA DEL REY	0720	Croaker, white	
2010	8	REDONDO BEACH	0720	Halfmoon	16
2010	8	REDONDO BEACH	0720	Sargo	1
2010	8	MARINA DEL REY	0720	Midshipman, plainfin	
2010	8	SAN PEDRO	0720	Whitefish, ocean	39
2010	8	REDONDO BEACH	0720	Whitefish, ocean	43
2010	8	MARINA DEL REY	0720	Whitefish, ocean	53
2010	8	MARINA DEL REY	0720	Rockfish, copper	4
2010	8	REDONDO BEACH	0720	Crab, rock unspecified	
2010	8	SAN PEDRO	0720	Rockfish, group red	35
2010	8	MARINA DEL REY	0721	Mackerel, Pacific	130
2010	8	MARINA DEL REY	0721	Sanddab	15
2010	8	MARINA DEL REY	0721	Rockfish, unspecified	24
2010	8	MARINA DEL REY	0721	Rockfish, bocaccio	10
2010	8	MARINA DEL REY	0721	Whitefish, ocean	2
2010	8	MARINA DEL REY	0721	Rockfish, copper	1
2010	9	MARINA DEL REY	0679	Sheephead, California	3
2010	9	MARINA DEL REY	0679	Sanddab	8
2010	9	MARINA DEL REY	0679	Rockfish, unspecified	3
2010	9	MARINA DEL REY	0679	Scorpionfish, California	7
2010	9	MARINA DEL REY	0679	Cabezon	
2010	9	MARINA DEL REY	0679	Bass, kelp	2
2010	9	MARINA DEL REY	0679	Bass, barred sand	13
2010	9	MARINA DEL REY	0679	Bass, giant sea	
2010	9	MARINA DEL REY	0679	Blacksmith	8
2010	9	MARINA DEL REY	0680	Barracuda, California	
2010	9	MARINA DEL REY	0680	Sheephead, California	2
2010	9	MARINA DEL REY	0680	Lingcod	5
2010	9	MARINA DEL REY	0680	Sanddab	270
2010	9	MARINA DEL REY	0680	Rockfish, unspecified	320
2010	9	MARINA DEL REY	0680	Rockfish, bocaccio	67
2010	9	MARINA DEL REY	0680	Scorpionfish, California	202
2010	9	MARINA DEL REY	0680	Bass, kelp	39
2010	9	MARINA DEL REY	0680	Bass, barred sand	13
2010	9	MARINA DEL REY	0680	Whitefish, ocean	16
2010	9	MARINA DEL REY	0680	Rockfish, copper	7
2010	9	MARINA DEL REY	0680	Rockfish, blue	15
2010	9	MARINA DEL REY	0701	Mackerel, Pacific	2
2010	9	MARINA DEL REY	0701	Sheephead, California	8
2010	9	MARINA DEL REY	0701	Ray, unspecified	
2010	9	MARINA DEL REY	0701	Lingcod	16

Year	Month	Port Name	Block	Species	Kept
2010	9	MARINA DEL REY	0701	Sole, unspecified	8
2010	9	MARINA DEL REY	0701	Halibut, California	2
2010	9	MARINA DEL REY	0701	Sanddab	474
2010	9	MARINA DEL REY	0701	Rockfish, unspecified	478
2010	9	MARINA DEL REY	0701	Rockfish, bocaccio	75
2010	9	MARINA DEL REY	0701	Scorpionfish, California	3947
2010	9	MARINA DEL REY	0701	Rockfish, gopher	5
2010	9	MARINA DEL REY	0701	Bass, kelp	17
2010	9	MARINA DEL REY	0701	Bass, barred sand	1093
2010	9	MARINA DEL REY	0701	Bass, giant sea	
2010	9	MARINA DEL REY	0701	Blacksmith	9
2010	9	MARINA DEL REY	0701	Sargo	3
2010	9	MARINA DEL REY	0701	Whitefish, ocean	11
2010	9	MARINA DEL REY	0701	Surfperch, rubberlip	2
2010	9	MARINA DEL REY	0701	Rockfish, copper	7
2010	9	REDONDO BEACH	0702	Mackerel, Pacific	
2010	9	MARINA DEL REY	0702	Sheephead, California	2
2010	9	REDONDO BEACH	0702	Sheephead, California	7
2010	9	MARINA DEL REY	0702	Shark, spiny dogfish	1
2010	9	REDONDO BEACH	0702	Shark, thresher	1
2010	9	MARINA DEL REY	0702	Sablefish	
2010	9	REDONDO BEACH	0702	Lingcod	3
2010	9	MARINA DEL REY	0702	Lingcod	14
2010	9	REDONDO BEACH	0702	Sanddab	246
2010	9	MARINA DEL REY	0702	Sanddab	704
2010	9	REDONDO BEACH	0702	Rockfish, unspecified	367
2010	9	MARINA DEL REY	0702	Rockfish, unspecified	1045
2010	9	REDONDO BEACH	0702	Rockfish, bocaccio	5
2010	9	MARINA DEL REY	0702	Rockfish, bocaccio	268
2010	9	REDONDO BEACH	0702	Scorpionfish, California	766
2010	9	MARINA DEL REY	0702	Scorpionfish, California	895
2010	9	REDONDO BEACH	0702	Cabezon	3
2010	9	MARINA DEL REY	0702	Cabezon	
2010	9	REDONDO BEACH	0702	Bass, kelp	10
2010	9	MARINA DEL REY	0702	Bass, kelp	
2010	9	MARINA DEL REY	0702	Bass, barred sand	71
2010	9	REDONDO BEACH	0702	Bass, barred sand	193
2010	9	MARINA DEL REY	0702	Bass, giant sea	
2010	9	MARINA DEL REY	0702	Midshipman, plainfin	
2010	9	MARINA DEL REY	0702	Whitefish, ocean	6
2010	9	REDONDO BEACH	0702	Whitefish, ocean	18
2010	9	MARINA DEL REY	0702	Rockfish, copper	7
2010	9	LOS ANGELES	0702		
2010	9	MALIBU	0703	Mackerel, Pacific	176
2010	9	MALIBU	0703	Mackerel, jack	1227
2010	9	MALIBU	0703	Sheephead, California	1
2010	9	MALIBU	0703	Lingcod	
2010	9	MALIBU	0703	Halibut, California	
2010	9	MALIBU	0703	Sanddab	136
2010	9	MALIBU	0703	Rockfish, vermilion	77
2010	9	MALIBU	0703	Rockfish, unspecified	422
2010	9	MALIBU	0703	Rockfish, bocaccio	208
2010	9	MALIBU	0703	Scorpionfish, California	3
2010	9	MALIBU	0703	Rockfish, copper	19
2010	9	MALIBU	0703	Rockfish, group red	17
2010	9	REDONDO BEACH	0720	Sheephead, California	1
2010	9	SAN PEDRO	0720	Sheephead, California	33
2010	9	HUNTINGTON BEACH	0720	Shark, shortfin mako	1
2010	9	REDONDO BEACH	0720	Lingcod	5
2010	9	SAN PEDRO	0720	Lingcod	
2010	9	SAN PEDRO	0720	Sanddab	342
2010	9	SAN PEDRO	0720	Rockfish, unspecified	281
2010	9	REDONDO BEACH	0720	Rockfish, unspecified	1020
2010	9	SAN PEDRO	0720	Rockfish, bocaccio	25
2010	9	REDONDO BEACH	0720	Scorpionfish, California	7
2010	9	SAN PEDRO	0720	Scorpionfish, California	999
2010	9	SAN PEDRO	0720	Bass, kelp	16
2010	9	REDONDO BEACH	0720	Bass, barred sand	1
2010	9	SAN PEDRO	0720	Bass, barred sand	26
2010	9	REDONDO BEACH	0720	Seabass, white	1
2010	9	SAN PEDRO	0720	Whitefish, ocean	6

Year	Month	Port Name	Block	Species	Kept
2010	9	REDONDO BEACH	0720	Whitefish, ocean	9
2010	9	LOS ANGELES	0720		
2010	10	MARINA DEL REY	0679	Sheephead, California	2
2010	10	MARINA DEL REY	0679	Lingcod	1
2010	10	MARINA DEL REY	0679	Rockfish, unspecified	59
2010	10	MARINA DEL REY	0679	Rockfish, bocaccio	2
2010	10	MARINA DEL REY	0679	Scorpionfish, California	9
2010	10	MARINA DEL REY	0679	Bass, kelp	5
2010	10	MARINA DEL REY	0679	Bass, barred sand	19
2010	10	MARINA DEL REY	0679	Bass, giant sea	
2010	10	MARINA DEL REY	0679	Blacksmith	6
2010	10	OXNARD	0680	Bonito, Pacific	1
2010	10	MARINA DEL REY	0680	Mackerel, Pacific	25
2010	10	MARINA DEL REY	0680	Sheephead, California	29
2010	10	OXNARD	0680	Sheephead, California	41
2010	10	MARINA DEL REY	0680	Lingcod	2
2010	10	OXNARD	0680	Halibut, California	2
2010	10	OXNARD	0680	Rockfish, unspecified	53
2010	10	MARINA DEL REY	0680	Rockfish, unspecified	129
2010	10	MARINA DEL REY	0680	Rockfish, bocaccio	11
2010	10	OXNARD	0680	Scorpionfish, California	62
2010	10	MARINA DEL REY	0680	Scorpionfish, California	113
2010	10	MARINA DEL REY	0680	Rockfish, gopher	2
2010	10	OXNARD	0680	Rockfish, gopher	11
2010	10	MARINA DEL REY	0680	Bass, kelp	159
2010	10	OXNARD	0680	Bass, kelp	428
2010	10	MARINA DEL REY	0680	Bass, barred sand	11
2010	10	OXNARD	0680	Bass, barred sand	17
2010	10	OXNARD	0680	Seabass, white	1
2010	10	MARINA DEL REY	0680	Seabass, white	2
2010	10	MARINA DEL REY	0680	Whitefish, ocean	2
2010	10	OXNARD	0680	Whitefish, ocean	4
2010	10	OXNARD	0680	Rockfish, copper	6
2010	10	MARINA DEL REY	0680	Rockfish, copper	8
2010	10	REDONDO BEACH	0701	Sheephead, California	1
2010	10	MARINA DEL REY	0701	Sheephead, California	35
2010	10	MARINA DEL REY	0701	Sablefish	5
2010	10	REDONDO BEACH	0701	Lingcod	2
2010	10	MARINA DEL REY	0701	Lingcod	173
2010	10	MARINA DEL REY	0701	Halibut, California	1
2010	10	REDONDO BEACH	0701	Sanddab	3
2010	10	MARINA DEL REY	0701	Sanddab	121
2010	10	SAN PEDRO	0701	Rockfish, unspecified	20
2010	10	REDONDO BEACH	0701	Rockfish, unspecified	124
2010	10	MARINA DEL REY	0701	Rockfish, unspecified	1090
2010	10	SAN PEDRO	0701	Rockfish, bocaccio	4
2010	10	MARINA DEL REY	0701	Rockfish, bocaccio	308
2010	10	SAN PEDRO	0701	Scorpionfish, California	75
2010	10	REDONDO BEACH	0701	Scorpionfish, California	94
2010	10	MARINA DEL REY	0701	Scorpionfish, California	3499
2010	10	MARINA DEL REY	0701	Cabezon	3
2010	10	MARINA DEL REY	0701	Bass, kelp	41
2010	10	SAN PEDRO	0701	Bass, barred sand	1
2010	10	REDONDO BEACH	0701	Bass, barred sand	3
2010	10	MARINA DEL REY	0701	Bass, barred sand	303
2010	10	REDONDO BEACH	0701	Halfmoon	10
2010	10	REDONDO BEACH	0701	Whitefish, ocean	16
2010	10	MARINA DEL REY	0701	Whitefish, ocean	50
2010	10	SAN PEDRO	0701	Whitefish, ocean	
2010	10	MARINA DEL REY	0701	Rockfish, copper	55
2010	10	REDONDO BEACH	0702	Sheephead, California	8
2010	10	MARINA DEL REY	0702	Sheephead, California	10
2010	10	MARINA DEL REY	0702	Shark, spiny dogfish	
2010	10	MARINA DEL REY	0702	Ray, unspecified	
2010	10	MARINA DEL REY	0702	Lingcod	104
2010	10	REDONDO BEACH	0702	Sole, unspecified	3
2010	10	REDONDO BEACH	0702	Halibut, California	1
2010	10	REDONDO BEACH	0702	Sanddab	20
2010	10	MARINA DEL REY	0702	Sanddab	504
2010	10	REDONDO BEACH	0702	Rockfish, unspecified	162
2010	10	MARINA DEL REY	0702	Rockfish, unspecified	1079

Year	Month	Port Name	Block	Species	Kept
2010	10	MARINA DEL REY	0702	Rockfish, bocaccio	492
2010	10	REDONDO BEACH	0702	Scorpionfish, California	304
2010	10	MARINA DEL REY	0702	Scorpionfish, California	547
2010	10	REDONDO BEACH	0702	Cabezon	1
2010	10	MARINA DEL REY	0702	Cabezon	
2010	10	MARINA DEL REY	0702	Rockfish, gopher	1
2010	10	MARINA DEL REY	0702	Rockfish, widow	2
2010	10	MARINA DEL REY	0702	Bass, kelp	20
2010	10	REDONDO BEACH	0702	Bass, kelp	24
2010	10	MARINA DEL REY	0702	Bass, barred sand	49
2010	10	REDONDO BEACH	0702	Bass, barred sand	92
2010	10	MARINA DEL REY	0702	Hagfishes	
2010	10	REDONDO BEACH	0702	Halfmoon	28
2010	10	REDONDO BEACH	0702	Whitefish, ocean	2
2010	10	MARINA DEL REY	0702	Whitefish, ocean	8
2010	10	MARINA DEL REY	0702	Rockfish, copper	19
2010	10	MARINA DEL REY	0702	Rockfish, blue	2
2010	10	MARINA DEL REY	0702	Crab, rock unspecified	59
2010	10	MARINA DEL REY	0702	Crab, spider	
2010	10	MARINA DEL REY	0702	Lobster, California spiny	58
2010	10	MALIBU	0703	Mackerel, Pacific	251
2010	10	MALIBU	0703	Mackerel, jack	31
2010	10	MALIBU	0703	Sheephead, California	1
2010	10	MARINA DEL REY	0703	Sheephead, California	10
2010	10	MALIBU	0703	Lingcod	1
2010	10	MARINA DEL REY	0703	Lingcod	
2010	10	MALIBU	0703	Sanddab	64
2010	10	MARINA DEL REY	0703	Sanddab	65
2010	10	MALIBU	0703	Rockfish, vermilion	112
2010	10	MARINA DEL REY	0703	Rockfish, unspecified	165
2010	10	MALIBU	0703	Rockfish, unspecified	344
2010	10	MALIBU	0703	Rockfish, bocaccio	39
2010	10	MARINA DEL REY	0703	Rockfish, bocaccio	53
2010	10	MARINA DEL REY	0703	Scorpionfish, California	32
2010	10	MARINA DEL REY	0703	Cabezon	1
2010	10	MALIBU	0703	Rockfish, gopher	5
2010	10	MARINA DEL REY	0703	Rockfish, gopher	15
2010	10	MARINA DEL REY	0703	Bass, kelp	26
2010	10	MALIBU	0703	Bass, kelp	
2010	10	MALIBU	0703	Bass, barred sand	1
2010	10	MARINA DEL REY	0703	Bass, barred sand	19
2010	10	MARINA DEL REY	0703	Whitefish, ocean	1
2010	10	MARINA DEL REY	0703	Rockfish, copper	5
2010	10	MALIBU	0703	Rockfish, copper	20
2010	10	SAN PEDRO	0720	Bonito, Pacific	2
2010	10	REDONDO BEACH	0720	Bonito, Pacific	4
2010	10	REDONDO BEACH	0720	Yellowtail	9
2010	10	REDONDO BEACH	0720	Mackerel, Pacific	17
2010	10	SAN PEDRO	0720	Mackerel, Pacific	72
2010	10	REDONDO BEACH	0720	Barracuda, California	6
2010	10	MARINA DEL REY	0720	Sheephead, California	1
2010	10	LOS ANGELES	0720	Sheephead, California	13
2010	10	SAN PEDRO	0720	Sheephead, California	51
2010	10	REDONDO BEACH	0720	Sheephead, California	119
2010	10	MARINA DEL REY	0720	Shark, horn	
2010	10	SAN PEDRO	0720	Lingcod	1
2010	10	MARINA DEL REY	0720	Lingcod	4
2010	10	REDONDO BEACH	0720	Lingcod	13
2010	10	REDONDO BEACH	0720	Halibut, California	1
2010	10	REDONDO BEACH	0720	Sanddab	3
2010	10	MARINA DEL REY	0720	Sanddab	5
2010	10	MARINA DEL REY	0720	Rockfish, unspecified	125
2010	10	SAN PEDRO	0720	Rockfish, unspecified	406
2010	10	REDONDO BEACH	0720	Rockfish, unspecified	731
2010	10	MARINA DEL REY	0720	Rockfish, bocaccio	47
2010	10	SAN PEDRO	0720	Rockfish, bocaccio	110
2010	10	REDONDO BEACH	0720	Rockfish, bocaccio	
2010	10	SAN PEDRO	0720	Scorpionfish, California	47
2010	10	REDONDO BEACH	0720	Scorpionfish, California	158
2010	10	MARINA DEL REY	0720	Scorpionfish, California	272
2010	10	SAN PEDRO	0720	Cabezon	1

Year	Month	Port Name	Block	Species	Kept
2010	10	REDONDO BEACH	0720	Cabezon	3
2010	10	LOS ANGELES	0720	Bass, kelp	1
2010	10	MARINA DEL REY	0720	Bass, kelp	4
2010	10	SAN PEDRO	0720	Bass, kelp	193
2010	10	REDONDO BEACH	0720	Bass, kelp	353
2010	10	SAN PEDRO	0720	Bass, barred sand	124
2010	10	REDONDO BEACH	0720	Bass, barred sand	202
2010	10	MARINA DEL REY	0720	Bass, barred sand	
2010	10	REDONDO BEACH	0720	Bass, giant sea	
2010	10	REDONDO BEACH	0720	Seabass, white	15
2010	10	SAN PEDRO	0720	Perch-like, unspecified	427
2010	10	REDONDO BEACH	0720	Opaleye	2
2010	10	REDONDO BEACH	0720	Halfmoon	47
2010	10	REDONDO BEACH	0720	Sargo	2
2010	10	MARINA DEL REY	0720	Whitefish, ocean	4
2010	10	REDONDO BEACH	0720	Whitefish, ocean	12
2010	10	SAN PEDRO	0720	Whitefish, ocean	102
2010	10	SAN PEDRO	0720	Surfperch, unspecified	2
2010	10	MARINA DEL REY	0720	Rockfish, copper	3
2010	10	REDONDO BEACH	0720	Scallop, rock	1
2010	10	SAN PEDRO	0720	Scallop, rock	12
2010	10	LOS ANGELES	0720	Scallop, rock	19
2010	10	LOS ANGELES	0720	Lobster, California spiny	4
2010	10	MARINA DEL REY	0720	Lobster, California spiny	4
2010	10	SAN PEDRO	0720	Lobster, California spiny	10
2010	10	SAN PEDRO	0720	Rockfish, group red	54
2010	10	REDONDO BEACH	0720	Rockfish, group red	60
2010	11	OXNARD	0680	Sheephead, California	2
2010	11	MARINA DEL REY	0680	Sheephead, California	3
2010	11	MARINA DEL REY	0680	Lingcod	
2010	11	MARINA DEL REY	0680	Sanddab	95
2010	11	OXNARD	0680	Rockfish, unspecified	21
2010	11	MARINA DEL REY	0680	Rockfish, unspecified	195
2010	11	MARINA DEL REY	0680	Rockfish, bocaccio	76
2010	11	OXNARD	0680	Scorpionfish, California	2
2010	11	MARINA DEL REY	0680	Scorpionfish, California	3
2010	11	OXNARD	0680	Bass, kelp	60
2010	11	MARINA DEL REY	0680	Bass, giant sea	
2010	11	OXNARD	0680	Whitefish, ocean	3
2010	11	MARINA DEL REY	0680	Rockfish, copper	13
2010	11	MARINA DEL REY	0680	Rockfish, blue	1
2010	11	MARINA DEL REY	0701	Mackerel, Pacific	
2010	11	REDONDO BEACH	0701	Sheephead, California	4
2010	11	MARINA DEL REY	0701	Sheephead, California	47
2010	11	MARINA DEL REY	0701	Wrasse, rock	
2010	11	REDONDO BEACH	0701	Lingcod	4
2010	11	MARINA DEL REY	0701	Lingcod	44
2010	11	MARINA DEL REY	0701	Halibut, California	
2010	11	MARINA DEL REY	0701	Sanddab	494
2010	11	REDONDO BEACH	0701	Rockfish, unspecified	140
2010	11	MARINA DEL REY	0701	Rockfish, unspecified	1461
2010	11	MARINA DEL REY	0701	Rockfish, bocaccio	261
2010	11	MARINA DEL REY	0701	Scorpionfish, California	2276
2010	11	MARINA DEL REY	0701	Cabezon	2
2010	11	MARINA DEL REY	0701	Bass, kelp	26
2010	11	MARINA DEL REY	0701	Bass, barred sand	217
2010	11	MARINA DEL REY	0701	Bass, giant sea	
2010	11	MARINA DEL REY	0701	Halfmoon	8
2010	11	MARINA DEL REY	0701	Blacksmith	15
2010	11	MARINA DEL REY	0701	Whitefish, ocean	169
2010	11	MARINA DEL REY	0701	Rockfish, copper	45
2010	11	MARINA DEL REY	0702	Sheephead, California	13
2010	11	MARINA DEL REY	0702	Shark, spiny dogfish	
2010	11	MARINA DEL REY	0702	Shark, swell	
2010	11	MARINA DEL REY	0702	Lingcod	42
2010	11	MARINA DEL REY	0702	Sole, petrale	1
2010	11	MARINA DEL REY	0702	Sanddab	689
2010	11	MARINA DEL REY	0702	Rockfish, unspecified	1766
2010	11	MARINA DEL REY	0702	Rockfish, bocaccio	453
2010	11	MARINA DEL REY	0702	Scorpionfish, California	877
2010	11	MARINA DEL REY	0702	Cabezon	

Year	Month	Port Name	Block	Species	Kept
2010	11	MARINA DEL REY	0702	Bass, kelp	2
2010	11	MARINA DEL REY	0702	Bass, barred sand	44
2010	11	MARINA DEL REY	0702	Crab, yellow rock	45
2010	11	MARINA DEL REY	0702	Whitefish, ocean	114
2010	11	MARINA DEL REY	0702	Rockfish, copper	43
2010	11	MARINA DEL REY	0702	Crab, rock unspecified	8
2010	11	MARINA DEL REY	0702	Lobster, California spiny	34
2010	11	SAN PEDRO	0720	Mackerel, Pacific	23
2010	11	REDONDO BEACH	0720	Sheephead, California	5
2010	11	SAN PEDRO	0720	Sheephead, California	67
2010	11	REDONDO BEACH	0720	Shark, unspecified	163
2010	11	REDONDO BEACH	0720	Lingcod	19
2010	11	SAN PEDRO	0720	Lingcod	
2010	11	SAN PEDRO	0720	Sanddab	15
2010	11	SAN PEDRO	0720	Rockfish, unspecified	261
2010	11	REDONDO BEACH	0720	Rockfish, unspecified	1764
2010	11	REDONDO BEACH	0720	Rockfish, bocaccio	10
2010	11	SAN PEDRO	0720	Rockfish, bocaccio	62
2010	11	REDONDO BEACH	0720	Scorpionfish, California	4
2010	11	SAN PEDRO	0720	Scorpionfish, California	86
2010	11	SAN PEDRO	0720	Cabezon	2
2010	11	REDONDO BEACH	0720	Bass, kelp	13
2010	11	SAN PEDRO	0720	Bass, kelp	235
2010	11	REDONDO BEACH	0720	Bass, barred sand	13
2010	11	SAN PEDRO	0720	Bass, barred sand	282
2010	11	SAN PEDRO	0720	Perch-like, unspecified	704
2010	11	SAN PEDRO	0720	Halfmoon	1
2010	11	REDONDO BEACH	0720	Halfmoon	2
2010	11	REDONDO BEACH	0720	Whitefish, ocean	11
2010	11	SAN PEDRO	0720	Whitefish, ocean	48
2010	11	SAN PEDRO	0720	Surfperch, unspecified	12
2010	11	REDONDO BEACH	0720	Rockfish, group red	45
2010	11	SAN PEDRO	0720	Rockfish, group red	48
2010	11	REDONDO BEACH	0720		
2010	12	MARINA DEL REY	0679	Sheephead, California	1
2010	12	MARINA DEL REY	0679	Sanddab	3
2010	12	MARINA DEL REY	0679	Rockfish, unspecified	1
2010	12	MARINA DEL REY	0679	Scorpionfish, California	50
2010	12	MARINA DEL REY	0679	Bass, kelp	
2010	12	MARINA DEL REY	0679	Bass, barred sand	18
2010	12	MARINA DEL REY	0679	Blacksmith	
2010	12	MARINA DEL REY	0680	Lingcod	
2010	12	MARINA DEL REY	0680	Rockfish, unspecified	145
2010	12	MARINA DEL REY	0680	Rockfish, bocaccio	17
2010	12	MARINA DEL REY	0680	Scorpionfish, California	230
2010	12	MARINA DEL REY	0680	Rockfish, copper	10
2010	12	MARINA DEL REY	0701	Sheephead, California	3
2010	12	MARINA DEL REY	0701	Sanddab	40
2010	12	MARINA DEL REY	0701	Rockfish, unspecified	360
2010	12	MARINA DEL REY	0701	Rockfish, bocaccio	92
2010	12	MARINA DEL REY	0701	Scorpionfish, California	497
2010	12	MARINA DEL REY	0701	Bass, barred sand	104
2010	12	MARINA DEL REY	0701	Whitefish, ocean	10
2010	12	MARINA DEL REY	0701	Rockfish, copper	5
2010	12	REDONDO BEACH	0702	Sheephead, California	2
2010	12	MARINA DEL REY	0702	Sheephead, California	8
2010	12	MARINA DEL REY	0702	Shark, spiny dogfish	
2010	12	MARINA DEL REY	0702	Shark, soupfin	1
2010	12	REDONDO BEACH	0702	Lingcod	
2010	12	MARINA DEL REY	0702	Lingcod	
2010	12	REDONDO BEACH	0702	Sanddab	72
2010	12	MARINA DEL REY	0702	Sanddab	501
2010	12	REDONDO BEACH	0702	Rockfish, unspecified	187
2010	12	MARINA DEL REY	0702	Rockfish, unspecified	1461
2010	12	REDONDO BEACH	0702	Rockfish, bocaccio	3
2010	12	MARINA DEL REY	0702	Rockfish, bocaccio	260
2010	12	REDONDO BEACH	0702	Scorpionfish, California	17
2010	12	MARINA DEL REY	0702	Scorpionfish, California	676
2010	12	MARINA DEL REY	0702	Cabezon	1
2010	12	MARINA DEL REY	0702	Rockfish, widow	3
2010	12	REDONDO BEACH	0702	Bass, kelp	1

Year	Month	Port Name	Block	Species	Kept
2010	12	MARINA DEL REY	0702	Bass, kelp	7
2010	12	REDONDO BEACH	0702	Bass, barred sand	29
2010	12	MARINA DEL REY	0702	Bass, barred sand	105
2010	12	MARINA DEL REY	0702	Crab, yellow rock	2
2010	12	MARINA DEL REY	0702	Croaker, black	
2010	12	REDONDO BEACH	0702	Whitefish, ocean	1
2010	12	MARINA DEL REY	0702	Whitefish, ocean	73
2010	12	MARINA DEL REY	0702	Rockfish, copper	25
2010	12	MARINA DEL REY	0702	Crab, rock unspecified	222
2010	12	MARINA DEL REY	0702	Lobster, California spiny	118
2010	12	REDONDO BEACH	0720	Sheephead, California	8
2010	12	SAN PEDRO	0720	Sheephead, California	175
2010	12	SAN PEDRO	0720	Lingcod	
2010	12	SAN PEDRO	0720	Halibut, California	1
2010	12	SAN PEDRO	0720	Rockfish, unspecified	294
2010	12	REDONDO BEACH	0720	Rockfish, unspecified	1423
2010	12	SAN PEDRO	0720	Rockfish, bocaccio	33
2010	12	REDONDO BEACH	0720	Scorpionfish, California	70
2010	12	SAN PEDRO	0720	Scorpionfish, California	179
2010	12	SAN PEDRO	0720	Cabezon	1
2010	12	SAN PEDRO	0720	Bass, kelp	65
2010	12	REDONDO BEACH	0720	Bass, barred sand	66
2010	12	SAN PEDRO	0720	Bass, barred sand	196
2010	12	SAN PEDRO	0720	Perch-like, unspecified	166
2010	12	REDONDO BEACH	0720	Halfmoon	14
2010	12	REDONDO BEACH	0720	Whitefish, ocean	8
2010	12	SAN PEDRO	0720	Whitefish, ocean	60
2010	12	SAN PEDRO	0720	Surfperch, unspecified	8
2010	12	SAN PEDRO	0720	Snail, top	12
2010	12	SAN PEDRO	0720	Rockfish, group red	10
2011	1	MARINA DEL REY	0679	Sheephead, California	
2011	1	MARINA DEL REY	0679	Lingcod	
2011	1	MARINA DEL REY	0679	Sanddab	83
2011	1	MARINA DEL REY	0679	Rockfish, unspecified	1
2011	1	MARINA DEL REY	0679	Scorpionfish, California	716
2011	1	MARINA DEL REY	0679	Cabezon	
2011	1	MARINA DEL REY	0679	Bass, kelp	34
2011	1	MARINA DEL REY	0679	Bass, barred sand	303
2011	1	MARINA DEL REY	0679	Perch-like, unspecified	62
2011	1	MARINA DEL REY	0679	Sargo	1
2011	1	MARINA DEL REY	0679	Surfperch, unspecified	3
2011	1	MARINA DEL REY	0679	Lobster, California spiny	3
2011	1	MARINA DEL REY	0701	Sheephead, California	
2011	1	MARINA DEL REY	0701	Sanddab	405
2011	1	MARINA DEL REY	0701	Rockfish, unspecified	105
2011	1	SAN PEDRO	0701	Scorpionfish, California	1
2011	1	MARINA DEL REY	0701	Scorpionfish, California	5629
2011	1	MARINA DEL REY	0701	Cabezon	
2011	1	MARINA DEL REY	0701	Bass, kelp	52
2011	1	MARINA DEL REY	0701	Bass, barred sand	787
2011	1	MARINA DEL REY	0701	Perch-like, unspecified	15
2011	1	SAN PEDRO	0701	Halfmoon	32
2011	1	MARINA DEL REY	0701	Halfmoon	55
2011	1	REDONDO BEACH	0702	Sheephead, California	
2011	1	MARINA DEL REY	0702	Sheephead, California	
2011	1	MARINA DEL REY	0702	Sanddab	50
2011	1	REDONDO BEACH	0702	Sanddab	85
2011	1	MARINA DEL REY	0702	Rockfish, unspecified	2
2011	1	REDONDO BEACH	0702	Rockfish, unspecified	
2011	1	MARINA DEL REY	0702	Scorpionfish, California	445
2011	1	REDONDO BEACH	0702	Scorpionfish, California	476
2011	1	MARINA DEL REY	0702	Cabezon	
2011	1	MARINA DEL REY	0702	Bass, kelp	17
2011	1	REDONDO BEACH	0702	Bass, kelp	20
2011	1	REDONDO BEACH	0702	Bass, barred sand	96
2011	1	MARINA DEL REY	0702	Bass, barred sand	139
2011	1	REDONDO BEACH	0702	Triggerfish	1
2011	1	REDONDO BEACH	0702	Halfmoon	
2011	1	MARINA DEL REY	0702	Surfperch, unspecified	10
2011	1	MARINA DEL REY	0702	Crab, rock unspecified	126
2011	1	MARINA DEL REY	0702	Crab, spider	2

Year	Month	Port Name	Block	Species	Kept
2011	1	MARINA DEL REY	0702	Lobster, California spiny	207
2011	1	SAN PEDRO	0720	Sheephead, California	
2011	1	REDONDO BEACH	0720	Sole, unspecified	6
2011	1	SAN PEDRO	0720	Halibut, California	2
2011	1	REDONDO BEACH	0720	Sanddab	45
2011	1	SAN PEDRO	0720	Rockfish, unspecified	
2011	1	SAN PEDRO	0720	Scorpionfish, California	99
2011	1	REDONDO BEACH	0720	Scorpionfish, California	570
2011	1	SAN PEDRO	0720	Cabezon	
2011	1	REDONDO BEACH	0720	Bass, kelp	5
2011	1	SAN PEDRO	0720	Bass, kelp	70
2011	1	REDONDO BEACH	0720	Bass, barred sand	173
2011	1	SAN PEDRO	0720	Bass, barred sand	260
2011	1	SAN PEDRO	0720	Bass, giant sea	
2011	1	SAN PEDRO	0720	Perch-like, unspecified	298
2011	1	SAN PEDRO	0720	Halfmoon	1
2011	1	REDONDO BEACH	0720	Halfmoon	87
2011	1	REDONDO BEACH	0720	Blacksmith	25
2011	1	SAN PEDRO	0720	Blacksmith	45
2011	1	SAN PEDRO	0720	Sargo	33
2011	1	SAN PEDRO	0720	Surfperch, unspecified	8
2011	2	MARINA DEL REY	0679	Sheephead, California	
2011	2	MARINA DEL REY	0679	Sanddab	60
2011	2	MARINA DEL REY	0679	Rockfish, unspecified	
2011	2	MARINA DEL REY	0679	Scorpionfish, California	158
2011	2	MARINA DEL REY	0679	Bass, kelp	
2011	2	MARINA DEL REY	0679	Bass, barred sand	39
2011	2	MARINA DEL REY	0679	Triggerfish	1
2011	2	SANTA BARBARA HARBOR	0680	Scorpionfish, California	1
2011	2	SANTA BARBARA HARBOR	0680	Cabezon	1
2011	2	SANTA BARBARA HARBOR	0680	Bass, kelp	6
2011	2	SANTA BARBARA HARBOR	0680	Scallop, rock	20
2011	2	SANTA BARBARA HARBOR	0680	Lobster, California spiny	14
2011	2	MARINA DEL REY	0701	Sheephead, California	
2011	2	MARINA DEL REY	0701	Sanddab	729
2011	2	MARINA DEL REY	0701	Rockfish, unspecified	
2011	2	MARINA DEL REY	0701	Scorpionfish, California	5491
2011	2	MARINA DEL REY	0701	Bass, kelp	38
2011	2	MARINA DEL REY	0701	Bass, barred sand	491
2011	2	MARINA DEL REY	0701	Triggerfish	1
2011	2	MARINA DEL REY	0701	Perch-like, unspecified	30
2011	2	MARINA DEL REY	0701	Blacksmith	170
2011	2	REDONDO BEACH	0702	Sheephead, California	
2011	2	MARINA DEL REY	0702	Sheephead, California	
2011	2	MARINA DEL REY	0702	Lingcod	
2011	2	MARINA DEL REY	0702	Sanddab	90
2011	2	MARINA DEL REY	0702	Rockfish, unspecified	6
2011	2	REDONDO BEACH	0702	Scorpionfish, California	320
2011	2	MARINA DEL REY	0702	Scorpionfish, California	910
2011	2	MARINA DEL REY	0702	Cabezon	
2011	2	REDONDO BEACH	0702	Bass, kelp	5
2011	2	MARINA DEL REY	0702	Bass, kelp	26
2011	2	REDONDO BEACH	0702	Bass, barred sand	57
2011	2	MARINA DEL REY	0702	Bass, barred sand	267
2011	2	MARINA DEL REY	0702	Triggerfish	4
2011	2	MARINA DEL REY	0702	Crab, red rock	28
2011	2	MARINA DEL REY	0702	Perch-like, unspecified	33
2011	2	REDONDO BEACH	0702	Opaleye	1
2011	2	REDONDO BEACH	0702	Halfmoon	18
2011	2	REDONDO BEACH	0702	Blacksmith	55
2011	2	MARINA DEL REY	0702	Blacksmith	60
2011	2	MARINA DEL REY	0702	Whitefish, ocean	
2011	2	MARINA DEL REY	0702	Crab, rock unspecified	62
2011	2	MARINA DEL REY	0702	Lobster, California spiny	99
2011	3	MARINA DEL REY	0680	Sanddab	20
2011	3	MARINA DEL REY	0680	Rockfish, unspecified	380
2011	3	MARINA DEL REY	0680	Rockfish, bocaccio	15
2011	3	MARINA DEL REY	0680	Scorpionfish, California	2
2011	3	MARINA DEL REY	0680	Rockfish, gopher	35
2011	3	MARINA DEL REY	0680	Whitefish, ocean	2
2011	3	MARINA DEL REY	0701	Sheephead, California	4

Year	Month	Port Name	Block	Species	Kept
2011	3	MARINA DEL REY	0701	Lingcod	
2011	3	MARINA DEL REY	0701	Sanddab	180
2011	3	MARINA DEL REY	0701	Rockfish, unspecified	2523
2011	3	MARINA DEL REY	0701	Rockfish, bocaccio	187
2011	3	MARINA DEL REY	0701	Scorpionfish, California	3827
2011	3	MARINA DEL REY	0701	Bass, kelp	1
2011	3	MARINA DEL REY	0701	Bass, barred sand	99
2011	3	MARINA DEL REY	0701	Whitefish, ocean	77
2011	3	MARINA DEL REY	0701	Rockfish, copper	59
2011	3	MARINA DEL REY	0702	Sheephead, California	1
2011	3	SAN PEDRO	0702	Sheephead, California	2
2011	3	MARINA DEL REY	0702	Shark, spiny dogfish	
2011	3	MARINA DEL REY	0702	Shark, soupfin	
2011	3	MARINA DEL REY	0702	Ratfish, spotted	
2011	3	SAN PEDRO	0702	Lingcod	
2011	3	MARINA DEL REY	0702	Lingcod	
2011	3	SAN PEDRO	0702	Sanddab	15
2011	3	REDONDO BEACH	0702	Sanddab	35
2011	3	MARINA DEL REY	0702	Sanddab	690
2011	3	SAN PEDRO	0702	Rockfish, unspecified	90
2011	3	REDONDO BEACH	0702	Rockfish, unspecified	305
2011	3	MARINA DEL REY	0702	Rockfish, unspecified	1665
2011	3	SAN PEDRO	0702	Rockfish, bocaccio	21
2011	3	REDONDO BEACH	0702	Rockfish, bocaccio	39
2011	3	MARINA DEL REY	0702	Rockfish, bocaccio	137
2011	3	SAN PEDRO	0702	Scorpionfish, California	50
2011	3	REDONDO BEACH	0702	Scorpionfish, California	121
2011	3	MARINA DEL REY	0702	Scorpionfish, California	381
2011	3	MARINA DEL REY	0702	Cabezon	
2011	3	MARINA DEL REY	0702	Bass, kelp	1
2011	3	MARINA DEL REY	0702	Bass, barred sand	19
2011	3	MARINA DEL REY	0702	Lizardfish, California	
2011	3	MARINA DEL REY	0702	Whitefish, ocean	22
2011	3	SAN PEDRO	0702	Rockfish, copper	1
2011	3	MARINA DEL REY	0702	Rockfish, copper	9
2011	3	MARINA DEL REY	0702	Crab, rock unspecified	43
2011	3	MARINA DEL REY	0702	Lobster, California spiny	43
2011	3	MARINA DEL REY	0702	Fish, unspecified	
2011	3	MARINA DEL REY	0703	Lingcod	
2011	3	MARINA DEL REY	0703	Sanddab	220
2011	3	MARINA DEL REY	0703	Rockfish, unspecified	816
2011	3	MARINA DEL REY	0703	Rockfish, bocaccio	148
2011	3	MARINA DEL REY	0703	Scorpionfish, California	1
2011	3	MARINA DEL REY	0703	Rockfish, widow	1
2011	3	MARINA DEL REY	0703	Whitefish, ocean	1
2011	3	MARINA DEL REY	0703	Rockfish, copper	24
2011	3	MARINA DEL REY	0720	Sheephead, California	
2011	3	MARINA DEL REY	0720	Lingcod	
2011	3	REDONDO BEACH	0720	Sanddab	42
2011	3	MARINA DEL REY	0720	Sanddab	43
2011	3	SAN PEDRO	0720	Rockfish, unspecified	100
2011	3	MARINA DEL REY	0720	Rockfish, unspecified	520
2011	3	REDONDO BEACH	0720	Rockfish, unspecified	1829
2011	3	MARINA DEL REY	0720	Rockfish, bocaccio	126
2011	3	REDONDO BEACH	0720	Rockfish, bocaccio	165
2011	3	MARINA DEL REY	0720	Scorpionfish, California	1
2011	3	SAN PEDRO	0720	Scorpionfish, California	2
2011	3	REDONDO BEACH	0720	Scorpionfish, California	129
2011	3	SAN PEDRO	0720	Whitefish, ocean	1
2011	3	REDONDO BEACH	0720	Whitefish, ocean	6
2011	3	MARINA DEL REY	0720	Rockfish, copper	13
2011	3	SAN PEDRO	0720	Rockfish, group red	30
2011	3	REDONDO BEACH	0720	Rockfish, group red	44
2011	4	MARINA DEL REY	0701	Sheephead, California	1
2011	4	MARINA DEL REY	0701	Lingcod	6
2011	4	MARINA DEL REY	0701	Sanddab	463
2011	4	MARINA DEL REY	0701	Rockfish, cowcod	
2011	4	MARINA DEL REY	0701	Rockfish, unspecified	2441
2011	4	MARINA DEL REY	0701	Rockfish, bocaccio	131
2011	4	MARINA DEL REY	0701	Scorpionfish, California	3991
2011	4	MARINA DEL REY	0701	Cabezon	1

Year	Month	Port Name	Block	Species	Kept
2011	4	MARINA DEL REY	0701	Rockfish, gopher	3
2011	4	MARINA DEL REY	0701	Bass, kelp	8
2011	4	MARINA DEL REY	0701	Bass, barred sand	158
2011	4	MARINA DEL REY	0701	Whitefish, ocean	4
2011	4	MARINA DEL REY	0701	Rockfish, copper	153
2011	4	MARINA DEL REY	0701	Rockfish, blue	52
2011	4	MARINA DEL REY	0702	Mackerel, Pacific	30
2011	4	MARINA DEL REY	0702	Sheephead, California	2
2011	4	MARINA DEL REY	0702	Shark, spiny dogfish	
2011	4	MARINA DEL REY	0702	Shark, soupfin	
2011	4	MARINA DEL REY	0702	Ratfish, spotted	
2011	4	MARINA DEL REY	0702	Jacksmelt	12
2011	4	REDONDO BEACH	0702	Lingcod	1
2011	4	MARINA DEL REY	0702	Lingcod	5
2011	4	MARINA DEL REY	0702	Sole, unspecified	9
2011	4	MARINA DEL REY	0702	Sole, petrale	1
2011	4	MARINA DEL REY	0702	Halibut, California	
2011	4	REDONDO BEACH	0702	Sanddab	128
2011	4	MARINA DEL REY	0702	Sanddab	509
2011	4	REDONDO BEACH	0702	Rockfish, unspecified	431
2011	4	MARINA DEL REY	0702	Rockfish, unspecified	1810
2011	4	REDONDO BEACH	0702	Rockfish, bocaccio	100
2011	4	MARINA DEL REY	0702	Rockfish, bocaccio	384
2011	4	REDONDO BEACH	0702	Scorpionfish, California	26
2011	4	MARINA DEL REY	0702	Scorpionfish, California	918
2011	4	MARINA DEL REY	0702	Bass, barred sand	2
2011	4	MARINA DEL REY	0702	Whitefish, ocean	4
2011	4	MARINA DEL REY	0702	Surfperch, black	1
2011	4	MARINA DEL REY	0702	Rockfish, copper	34
2011	4	MARINA DEL REY	0702	Rockfish, blue	1
2011	4	MARINA DEL REY	0703	Lingcod	1
2011	4	MARINA DEL REY	0703	Sanddab	115
2011	4	MARINA DEL REY	0703	Rockfish, unspecified	336
2011	4	MARINA DEL REY	0703	Rockfish, bocaccio	81
2011	4	MARINA DEL REY	0703	Scorpionfish, California	
2011	4	MARINA DEL REY	0703	Rockfish, copper	6
2011	4	MARINA DEL REY	0720	Sheephead, California	1
2011	4	SAN PEDRO	0720	Lingcod	1
2011	4	MARINA DEL REY	0720	Lingcod	1
2011	4	REDONDO BEACH	0720	Lingcod	10
2011	4	MARINA DEL REY	0720	Sanddab	29
2011	4	SAN PEDRO	0720	Rockfish, unspecified	65
2011	4	MARINA DEL REY	0720	Rockfish, unspecified	167
2011	4	REDONDO BEACH	0720	Rockfish, unspecified	3336
2011	4	SAN PEDRO	0720	Rockfish, bocaccio	30
2011	4	MARINA DEL REY	0720	Rockfish, bocaccio	55
2011	4	REDONDO BEACH	0720	Rockfish, bocaccio	110
2011	4	SAN PEDRO	0720	Scorpionfish, California	1
2011	4	MARINA DEL REY	0720	Scorpionfish, California	46
2011	4	REDONDO BEACH	0720	Scorpionfish, California	50
2011	4	MARINA DEL REY	0720	Cabezon	
2011	4	MARINA DEL REY	0720	Bass, kelp	
2011	4	MARINA DEL REY	0720	Bass, barred sand	
2011	4	REDONDO BEACH	0720	Whitefish, ocean	5
2011	4	MARINA DEL REY	0720	Rockfish, copper	16
2011	4	SAN PEDRO	0720	Rockfish, group red	11
2011	4	REDONDO BEACH	0720	Rockfish, group red	51
2011	5	MARINA DEL REY	0679	Mackerel, Pacific	3
2011	5	MARINA DEL REY	0679	Barracuda, California	205
2011	5	MARINA DEL REY	0679	Ray, bat	
2011	5	MARINA DEL REY	0679	Halibut, California	
2011	5	MARINA DEL REY	0679	Scorpionfish, California	1
2011	5	MARINA DEL REY	0679	Bass, kelp	3
2011	5	MARINA DEL REY	0679	Bass, barred sand	2
2011	5	MARINA DEL REY	0679	Blacksmith	6
2011	5	MARINA DEL REY	0680	Barracuda, California	245
2011	5	MARINA DEL REY	0680	Sheephead, California	2
2011	5	SANTA BARBARA HARBOR	0680	Lingcod	8
2011	5	MARINA DEL REY	0680	Lingcod	
2011	5	MARINA DEL REY	0680	Sanddab	56
2011	5	SANTA BARBARA HARBOR	0680	Rockfish, unspecified	131

Year	Month	Port Name	Block	Species	Kept
2011	5	MARINA DEL REY	0680	Rockfish, unspecified	190
2011	5	SANTA BARBARA HARBOR	0680	Rockfish, bocaccio	5
2011	5	MARINA DEL REY	0680	Rockfish, bocaccio	45
2011	5	SANTA BARBARA HARBOR	0680	Scorpionfish, California	1
2011	5	SANTA BARBARA HARBOR	0680	Whitefish, ocean	47
2011	5	MARINA DEL REY	0680	Rockfish, copper	10
2011	5	SANTA BARBARA HARBOR	0680	Rockfish, copper	61
2011	5	SANTA BARBARA HARBOR	0680	Rockfish, blue	23
2011	5	MARINA DEL REY	0701	Mackerel, Pacific	111
2011	5	NEWPORT BEACH	0701	Barracuda, California	107
2011	5	SAN PEDRO	0701	Barracuda, California	135
2011	5	LONG BEACH	0701	Barracuda, California	278
2011	5	REDONDO BEACH	0701	Barracuda, California	318
2011	5	MARINA DEL REY	0701	Barracuda, California	4034
2011	5	DANA POINT	0701	Sheephead, California	1
2011	5	MARINA DEL REY	0701	Sheephead, California	2
2011	5	MARINA DEL REY	0701	Shark, spiny dogfish	10
2011	5	MARINA DEL REY	0701	Lingcod	11
2011	5	LONG BEACH	0701	Sanddab	21
2011	5	REDONDO BEACH	0701	Sanddab	28
2011	5	MARINA DEL REY	0701	Sanddab	296
2011	5	SAN DIEGO	0701	Rockfish, unspecified	2
2011	5	SAN PEDRO	0701	Rockfish, unspecified	4
2011	5	DANA POINT	0701	Rockfish, unspecified	7
2011	5	REDONDO BEACH	0701	Rockfish, unspecified	35
2011	5	LONG BEACH	0701	Rockfish, unspecified	62
2011	5	MARINA DEL REY	0701	Rockfish, unspecified	1704
2011	5	LONG BEACH	0701	Rockfish, bocaccio	8
2011	5	REDONDO BEACH	0701	Rockfish, bocaccio	12
2011	5	MARINA DEL REY	0701	Rockfish, bocaccio	302
2011	5	DANA POINT	0701	Scorpionfish, California	2
2011	5	SAN PEDRO	0701	Scorpionfish, California	10
2011	5	MARINA DEL REY	0701	Scorpionfish, California	674
2011	5	MARINA DEL REY	0701	Cabezon	
2011	5	SAN PEDRO	0701	Bass, kelp	2
2011	5	SAN DIEGO	0701	Bass, kelp	6
2011	5	DANA POINT	0701	Bass, kelp	7
2011	5	MARINA DEL REY	0701	Bass, kelp	56
2011	5	DANA POINT	0701	Bass, barred sand	9
2011	5	MARINA DEL REY	0701	Bass, barred sand	233
2011	5	MARINA DEL REY	0701	Lizardfish, California	
2011	5	MARINA DEL REY	0701	Blacksmith	
2011	5	MARINA DEL REY	0701	Whitefish, ocean	9
2011	5	MARINA DEL REY	0701	Rockfish, copper	71
2011	5	SAN DIEGO	0701	Scallop, rock	10
2011	5	NEWPORT BEACH	0702	Barracuda, California	2
2011	5	SAN PEDRO	0702	Barracuda, California	146
2011	5	MARINA DEL REY	0702	Barracuda, California	500
2011	5	REDONDO BEACH	0702	Barracuda, California	973
2011	5	LONG BEACH	0702	Barracuda, California	1363
2011	5	SAN PEDRO	0702	Sheephead, California	1
2011	5	MARINA DEL REY	0702	Sheephead, California	1
2011	5	REDONDO BEACH	0702	Sheephead, California	28
2011	5	SAN PEDRO	0702	Shark, spiny dogfish	1
2011	5	MARINA DEL REY	0702	Shark, spiny dogfish	
2011	5	SAN PEDRO	0702	Shark, soupfin	
2011	5	MARINA DEL REY	0702	Lingcod	7
2011	5	SEAL BEACH	0702	Lingcod	
2011	5	SAN PEDRO	0702	Lingcod	
2011	5	MARINA DEL REY	0702	Sole, unspecified	1
2011	5	LONG BEACH	0702	Sanddab	32
2011	5	SEAL BEACH	0702	Sanddab	60
2011	5	SAN PEDRO	0702	Sanddab	60
2011	5	REDONDO BEACH	0702	Sanddab	79
2011	5	MARINA DEL REY	0702	Sanddab	676
2011	5	NEWPORT BEACH	0702	Rockfish, unspecified	5
2011	5	SEAL BEACH	0702	Rockfish, unspecified	60
2011	5	REDONDO BEACH	0702	Rockfish, unspecified	273
2011	5	SAN PEDRO	0702	Rockfish, unspecified	312
2011	5	LONG BEACH	0702	Rockfish, unspecified	424
2011	5	MARINA DEL REY	0702	Rockfish, unspecified	911

Year	Month	Port Name	Block	Species	Kept
2011	5	SEAL BEACH	0702	Rockfish, bocaccio	20
2011	5	REDONDO BEACH	0702	Rockfish, bocaccio	61
2011	5	SAN PEDRO	0702	Rockfish, bocaccio	62
2011	5	LONG BEACH	0702	Rockfish, bocaccio	119
2011	5	MARINA DEL REY	0702	Rockfish, bocaccio	175
2011	5	NEWPORT BEACH	0702	Scorpionfish, California	1
2011	5	REDONDO BEACH	0702	Scorpionfish, California	18
2011	5	SAN PEDRO	0702	Scorpionfish, California	20
2011	5	SEAL BEACH	0702	Scorpionfish, California	28
2011	5	LONG BEACH	0702	Scorpionfish, California	46
2011	5	MARINA DEL REY	0702	Scorpionfish, California	304
2011	5	REDONDO BEACH	0702	Cabezon	1
2011	5	MARINA DEL REY	0702	Cabezon	
2011	5	MARINA DEL REY	0702	Bass, kelp	19
2011	5	SAN PEDRO	0702	Bass, kelp	34
2011	5	REDONDO BEACH	0702	Bass, kelp	38
2011	5	REDONDO BEACH	0702	Bass, barred sand	23
2011	5	MARINA DEL REY	0702	Bass, barred sand	39
2011	5	MARINA DEL REY	0702	Perch-like, unspecified	12
2011	5	SAN PEDRO	0702	Halfmoon	31
2011	5	LONG BEACH	0702	Whitefish, ocean	1
2011	5	SAN PEDRO	0702	Whitefish, ocean	22
2011	5	REDONDO BEACH	0702	Whitefish, ocean	41
2011	5	REDONDO BEACH	0702	Rockfish, copper	1
2011	5	SAN PEDRO	0702	Rockfish, copper	2
2011	5	MARINA DEL REY	0702	Rockfish, copper	8
2011	5	SAN PEDRO	0702	Octopus, unspecified	1
2011	5	MARINA DEL REY	0702	Octopus, unspecified	1
2011	5	MARINA DEL REY	0702	Crab, rock unspecified	63
2011	5	MARINA DEL REY	0702		
2011	5	MARINA DEL REY	0720	Mackerel, Pacific	
2011	5	NEWPORT BEACH	0720	Barracuda, California	1
2011	5	MARINA DEL REY	0720	Barracuda, California	212
2011	5	SAN PEDRO	0720	Barracuda, California	292
2011	5	REDONDO BEACH	0720	Barracuda, California	1617
2011	5	SAN PEDRO	0720	Sheephead, California	2
2011	5	SAN PEDRO	0720	Lingcod	1
2011	5	MARINA DEL REY	0720	Lingcod	
2011	5	MARINA DEL REY	0720	Sanddab	45
2011	5	SAN PEDRO	0720	Sanddab	49
2011	5	REDONDO BEACH	0720	Sanddab	58
2011	5	SAN PEDRO	0720	Rockfish, vermilion	44
2011	5	MARINA DEL REY	0720	Rockfish, unspecified	295
2011	5	SAN PEDRO	0720	Rockfish, unspecified	566
2011	5	REDONDO BEACH	0720	Rockfish, unspecified	1957
2011	5	REDONDO BEACH	0720	Rockfish, bocaccio	20
2011	5	SAN PEDRO	0720	Rockfish, bocaccio	32
2011	5	MARINA DEL REY	0720	Rockfish, bocaccio	71
2011	5	SAN PEDRO	0720	Scorpionfish, California	2
2011	5	REDONDO BEACH	0720	Scorpionfish, California	27
2011	5	SAN PEDRO	0720	Cabezon	1
2011	5	REDONDO BEACH	0720	Bass, kelp	1
2011	5	REDONDO BEACH	0720	Bass, barred sand	5
2011	5	MARINA DEL REY	0720	Lizardfish, California	
2011	5	SAN PEDRO	0720	Perch-like, unspecified	15
2011	5	REDONDO BEACH	0720	Halfmoon	16
2011	5	REDONDO BEACH	0720	Whitefish, ocean	5
2011	5	SAN PEDRO	0720	Rockfish, copper	3
2011	5	MARINA DEL REY	0720	Rockfish, copper	3
2011	5	SAN PEDRO	0720	Rockfish, blue	1
2011	5	SAN PEDRO	0720	Rockfish, group red	77
2011	5	SAN PEDRO	0721	Rockfish, unspecified	64
2011	5	SAN PEDRO	0721	Rockfish, bocaccio	6
2011	5	SAN PEDRO	0721	Bass, kelp	8
2011	5	SAN PEDRO	0721	Bass, barred sand	2
2011	6	MARINA DEL REY	0679	Mackerel, Pacific	1
2011	6	MARINA DEL REY	0679	Barracuda, California	115
2011	6	MARINA DEL REY	0679	Sheephead, California	1
2011	6	LONG BEACH	0679	Sheephead, California	2
2011	6	MARINA DEL REY	0679	Ray, unspecified	
2011	6	MARINA DEL REY	0679	Halibut, California	1

Year	Month	Port Name	Block	Species	Kept
2011	6	MARINA DEL REY	0679	Sanddab	1
2011	6	MARINA DEL REY	0679	Rockfish, unspecified	29
2011	6	MARINA DEL REY	0679	Scorpionfish, California	
2011	6	MARINA DEL REY	0679	Bass, kelp	35
2011	6	LONG BEACH	0679	Bass, kelp	37
2011	6	LONG BEACH	0679	Bass, barred sand	2
2011	6	MARINA DEL REY	0679	Bass, barred sand	23
2011	6	MARINA DEL REY	0679	Seabass, white	1
2011	6	LONG BEACH	0679	Seabass, white	2
2011	6	MARINA DEL REY	0679	Blacksmith	4
2011	6	LONG BEACH	0679	Sargo	2
2011	6	MARINA DEL REY	0679	Surfperch, unspecified	10
2011	6	MARINA DEL REY	0680	Barracuda, California	51
2011	6	MARINA DEL REY	0680	Sheephead, California	
2011	6	MARINA DEL REY	0680	Lingcod	1
2011	6	MARINA DEL REY	0680	Halibut, California	1
2011	6	OXNARD	0680	Sanddab	5
2011	6	MARINA DEL REY	0680	Sanddab	70
2011	6	OXNARD	0680	Rockfish, unspecified	206
2011	6	MARINA DEL REY	0680	Rockfish, unspecified	245
2011	6	OXNARD	0680	Rockfish, bocaccio	9
2011	6	MARINA DEL REY	0680	Rockfish, bocaccio	18
2011	6	MARINA DEL REY	0680	Scorpionfish, California	1
2011	6	OXNARD	0680	Cabezon	1
2011	6	MARINA DEL REY	0680	Rockfish, gopher	45
2011	6	MARINA DEL REY	0680	Bass, kelp	386
2011	6	OXNARD	0680	Bass, barred sand	1
2011	6	MARINA DEL REY	0680	Bass, barred sand	5
2011	6	MARINA DEL REY	0680	Seabass, white	2
2011	6	MARINA DEL REY	0680	Rockfish, copper	16
2011	6	MARINA DEL REY	0701	Mackerel, Pacific	1
2011	6	LONG BEACH	0701	Mackerel, Pacific	
2011	6	REDONDO BEACH	0701	Herring, Pacific	11
2011	6	LONG BEACH	0701	Barracuda, California	112
2011	6	REDONDO BEACH	0701	Barracuda, California	116
2011	6	MARINA DEL REY	0701	Barracuda, California	1252
2011	6	MARINA DEL REY	0701	Sheephead, California	18
2011	6	REDONDO BEACH	0701	Sheephead, California	80
2011	6	LONG BEACH	0701	Sheephead, California	
2011	6	MARINA DEL REY	0701	Shark, unspecified	1
2011	6	MARINA DEL REY	0701	Shark, spiny dogfish	
2011	6	MARINA DEL REY	0701	Ray, bat	
2011	6	LONG BEACH	0701	Lingcod	1
2011	6	MARINA DEL REY	0701	Lingcod	3
2011	6	MARINA DEL REY	0701	Sole, petrale	2
2011	6	REDONDO BEACH	0701	Halibut, California	2
2011	6	MARINA DEL REY	0701	Halibut, California	10
2011	6	MARINA DEL REY	0701	Sanddab	648
2011	6	MARINA DEL REY	0701	Rockfish, canary	
2011	6	LONG BEACH	0701	Rockfish, unspecified	23
2011	6	SEAL BEACH	0701	Rockfish, unspecified	60
2011	6	REDONDO BEACH	0701	Rockfish, unspecified	91
2011	6	MARINA DEL REY	0701	Rockfish, unspecified	2323
2011	6	SEAL BEACH	0701	Rockfish, bocaccio	15
2011	6	MARINA DEL REY	0701	Rockfish, bocaccio	212
2011	6	LONG BEACH	0701	Scorpionfish, California	2
2011	6	REDONDO BEACH	0701	Scorpionfish, California	6
2011	6	MARINA DEL REY	0701	Scorpionfish, California	925
2011	6	REDONDO BEACH	0701	Cabezon	1
2011	6	MARINA DEL REY	0701	Cabezon	2
2011	6	MARINA DEL REY	0701	Rockfish, gopher	8
2011	6	LONG BEACH	0701	Bass, kelp	4
2011	6	REDONDO BEACH	0701	Bass, kelp	103
2011	6	MARINA DEL REY	0701	Bass, kelp	436
2011	6	LONG BEACH	0701	Bass, barred sand	1
2011	6	REDONDO BEACH	0701	Bass, barred sand	38
2011	6	MARINA DEL REY	0701	Bass, barred sand	810
2011	6	LONG BEACH	0701	Bass, giant sea	
2011	6	MARINA DEL REY	0701	Seabass, white	4
2011	6	REDONDO BEACH	0701	Seabass, white	19
2011	6	MARINA DEL REY	0701	Croaker, white	

Year	Month	Port Name	Block	Species	Kept
2011	6	MARINA DEL REY	0701	Lizardfish, California	
2011	6	MARINA DEL REY	0701	Halfmoon	5
2011	6	REDONDO BEACH	0701	Halfmoon	6
2011	6	MARINA DEL REY	0701	Blacksmith	43
2011	6	REDONDO BEACH	0701	Sargo	5
2011	6	REDONDO BEACH	0701	Whitefish, ocean	7
2011	6	MARINA DEL REY	0701	Whitefish, ocean	12
2011	6	MARINA DEL REY	0701	Surfperch, unspecified	2
2011	6	SEAL BEACH	0701	Rockfish, copper	2
2011	6	MARINA DEL REY	0701	Rockfish, copper	61
2011	6	MARINA DEL REY	0701	Rockfish, blue	4
2011	6	LONG BEACH	0702	Barracuda, California	153
2011	6	LONG BEACH	0702	Sheephead, California	1
2011	6	MARINA DEL REY	0702	Shark, spiny dogfish	
2011	6	REDONDO BEACH	0702	Shark, thresher	1
2011	6	MARINA DEL REY	0702	Shark, soupfin	1
2011	6	MARINA DEL REY	0702	Ratfish, spotted	
2011	6	MARINA DEL REY	0702	Lingcod	4
2011	6	MARINA DEL REY	0702	Sole, petrale	3
2011	6	MARINA DEL REY	0702	Halibut, California	
2011	6	MARINA DEL REY	0702	Sanddab	681
2011	6	REDONDO BEACH	0702	Rockfish, unspecified	26
2011	6	SAN PEDRO	0702	Rockfish, unspecified	46
2011	6	LONG BEACH	0702	Rockfish, unspecified	77
2011	6	MARINA DEL REY	0702	Rockfish, unspecified	2118
2011	6	SAN PEDRO	0702	Rockfish, bocaccio	59
2011	6	MARINA DEL REY	0702	Rockfish, bocaccio	351
2011	6	SAN PEDRO	0702	Scorpionfish, California	2
2011	6	LONG BEACH	0702	Scorpionfish, California	6
2011	6	REDONDO BEACH	0702	Scorpionfish, California	11
2011	6	MARINA DEL REY	0702	Scorpionfish, California	453
2011	6	MARINA DEL REY	0702	Cabezon	
2011	6	MARINA DEL REY	0702	Rockfish, gopher	20
2011	6	MARINA DEL REY	0702	Rockfish, widow	1
2011	6	LONG BEACH	0702	Bass, kelp	3
2011	6	SAN PEDRO	0702	Bass, kelp	10
2011	6	REDONDO BEACH	0702	Bass, kelp	14
2011	6	MARINA DEL REY	0702	Bass, kelp	20
2011	6	REDONDO BEACH	0702	Bass, barred sand	22
2011	6	MARINA DEL REY	0702	Bass, barred sand	32
2011	6	SAN PEDRO	0702	Halfmoon	81
2011	6	LONG BEACH	0702	Sargo	2
2011	6	SAN PEDRO	0702	Whitefish, ocean	23
2011	6	MARINA DEL REY	0702	Rockfish, copper	23
2011	6	MARINA DEL REY	0703	Rockfish, unspecified	8
2011	6	MARINA DEL REY	0703	Cabezon	1
2011	6	MARINA DEL REY	0703	Bass, kelp	120
2011	6	MARINA DEL REY	0703	Bass, barred sand	10
2011	6	SAN PEDRO	0720	Mackerel, Pacific	3
2011	6	REDONDO BEACH	0720	Mackerel, Pacific	
2011	6	REDONDO BEACH	0720	Mackerel, jack	52
2011	6	MARINA DEL REY	0720	Barracuda, California	84
2011	6	REDONDO BEACH	0720	Barracuda, California	583
2011	6	SAN PEDRO	0720	Sheephead, California	1
2011	6	MARINA DEL REY	0720	Sheephead, California	18
2011	6	REDONDO BEACH	0720	Sheephead, California	145
2011	6	MARINA DEL REY	0720	Lingcod	1
2011	6	REDONDO BEACH	0720	Lingcod	9
2011	6	LONG BEACH	0720	Lingcod	
2011	6	LONG BEACH	0720	Sole, unspecified	2
2011	6	REDONDO BEACH	0720	Halibut, California	3
2011	6	REDONDO BEACH	0720	Sanddab	5
2011	6	SAN PEDRO	0720	Sanddab	9
2011	6	LONG BEACH	0720	Sanddab	21
2011	6	MARINA DEL REY	0720	Sanddab	42
2011	6	SAN PEDRO	0720	Rockfish, vermilion	8
2011	6	LONG BEACH	0720	Rockfish, vermilion	21
2011	6	LONG BEACH	0720	Rockfish, unspecified	53
2011	6	SAN PEDRO	0720	Rockfish, unspecified	70
2011	6	MARINA DEL REY	0720	Rockfish, unspecified	201
2011	6	REDONDO BEACH	0720	Rockfish, unspecified	3021

Year	Month	Port Name	Block	Species	Kept
2011	6	SAN PEDRO	0720	Rockfish, bocaccio	4
2011	6	LONG BEACH	0720	Rockfish, bocaccio	30
2011	6	REDONDO BEACH	0720	Rockfish, bocaccio	47
2011	6	MARINA DEL REY	0720	Rockfish, bocaccio	65
2011	6	MARINA DEL REY	0720	Scorpionfish, California	3
2011	6	SAN PEDRO	0720	Scorpionfish, California	7
2011	6	REDONDO BEACH	0720	Scorpionfish, California	42
2011	6	LONG BEACH	0720	Scorpionfish, California	142
2011	6	SAN PEDRO	0720	Cabezon	1
2011	6	REDONDO BEACH	0720	Cabezon	5
2011	6	MARINA DEL REY	0720	Cabezon	
2011	6	MARINA DEL REY	0720	Bass, kelp	26
2011	6	LONG BEACH	0720	Bass, kelp	32
2011	6	SAN PEDRO	0720	Bass, kelp	46
2011	6	REDONDO BEACH	0720	Bass, kelp	972
2011	6	SAN PEDRO	0720	Bass, barred sand	1
2011	6	LONG BEACH	0720	Bass, barred sand	2
2011	6	MARINA DEL REY	0720	Bass, barred sand	22
2011	6	REDONDO BEACH	0720	Bass, barred sand	198
2011	6	SAN PEDRO	0720	Seabass, white	2
2011	6	REDONDO BEACH	0720	Seabass, white	89
2011	6	REDONDO BEACH	0720	Croaker, black	
2011	6	SAN PEDRO	0720	Halfmoon	22
2011	6	REDONDO BEACH	0720	Halfmoon	72
2011	6	SAN PEDRO	0720	Sargo	1
2011	6	REDONDO BEACH	0720	Sargo	54
2011	6	REDONDO BEACH	0720	Whitefish, ocean	57
2011	6	REDONDO BEACH	0720	Surfperch, pile	
2011	6	MARINA DEL REY	0720	Rockfish, copper	11
2011	6	HUNTINGTON BEACH	0721	Shark, shortfin mako	2
2011	6	OXNARD	0721	Lingcod	
2011	6	OXNARD	0721	Sanddab	90
2011	6	OXNARD	0721	Rockfish, unspecified	440
2011	6	OXNARD	0721	Rockfish, bocaccio	30
2011	6	OXNARD	0721	Scorpionfish, California	5
2011	6	HUNTINGTON BEACH	0721		
2011	7	MARINA DEL REY	0679	Mackerel, Pacific	60
2011	7	MARINA DEL REY	0679	Barracuda, California	99
2011	7	MARINA DEL REY	0679	Sheephead, California	8
2011	7	MARINA DEL REY	0679	Lingcod	1
2011	7	MARINA DEL REY	0679	Halibut, California	2
2011	7	MARINA DEL REY	0679	Sanddab	23
2011	7	MARINA DEL REY	0679	Rockfish, unspecified	112
2011	7	MARINA DEL REY	0679	Rockfish, bocaccio	1
2011	7	MARINA DEL REY	0679	Scorpionfish, California	9
2011	7	MARINA DEL REY	0679	Cabezon	16
2011	7	MARINA DEL REY	0679	Bass, kelp	80
2011	7	MARINA DEL REY	0679	Bass, barred sand	613
2011	7	MARINA DEL REY	0679	Seabass, white	4
2011	7	MARINA DEL REY	0679	Blacksmith	5
2011	7	MARINA DEL REY	0679	Whitefish, ocean	1
2011	7	MARINA DEL REY	0679	Rockfish, copper	1
2011	7	MARINA DEL REY	0680	Mackerel, Pacific	17
2011	7	MARINA DEL REY	0680	Barracuda, California	
2011	7	MARINA DEL REY	0680	Sheephead, California	8
2011	7	OXNARD	0680	Halibut, California	1
2011	7	MARINA DEL REY	0680	Sanddab	10
2011	7	MARINA DEL REY	0680	Rockfish, unspecified	200
2011	7	MARINA DEL REY	0680	Rockfish, bocaccio	12
2011	7	MARINA DEL REY	0680	Scorpionfish, California	
2011	7	MARINA DEL REY	0680	Bass, kelp	44
2011	7	OXNARD	0680	Bass, kelp	65
2011	7	MARINA DEL REY	0680	Bass, barred sand	3
2011	7	OXNARD	0680	Bass, barred sand	5
2011	7	OXNARD	0680	Seabass, white	
2011	7	MARINA DEL REY	0680	Whitefish, ocean	9
2011	7	MARINA DEL REY	0680	Rockfish, copper	10
2011	7	VENTURA	0701	Tuna, bluefin	1
2011	7	MARINA DEL REY	0701	Mackerel, Pacific	256
2011	7	SAN PEDRO	0701	Barracuda, California	16
2011	7	MARINA DEL REY	0701	Barracuda, California	1167

Year	Month	Port Name	Block	Species	Kept
2011	7	REDONDO BEACH	0701	Sheephead, California	3
2011	7	MARINA DEL REY	0701	Sheephead, California	55
2011	7	MARINA DEL REY	0701	Wrasse, rock	
2011	7	MARINA DEL REY	0701	Shark, shortfin mako	1
2011	7	SAN PEDRO	0701	Shark, shortfin mako	
2011	7	MARINA DEL REY	0701	Shark, thresher	1
2011	7	MARINA DEL REY	0701	Ray, bat	
2011	7	MARINA DEL REY	0701	Stingray	
2011	7	REDONDO BEACH	0701	Lingcod	2
2011	7	MARINA DEL REY	0701	Lingcod	21
2011	7	SAN PEDRO	0701	Lingcod	
2011	7	MARINA DEL REY	0701	Sole, unspecified	3
2011	7	MARINA DEL REY	0701	Halibut, California	11
2011	7	REDONDO BEACH	0701	Sanddab	8
2011	7	MARINA DEL REY	0701	Sanddab	73
2011	7	SAN PEDRO	0701	Rockfish, unspecified	1
2011	7	VENTURA	0701	Rockfish, unspecified	2
2011	7	REDONDO BEACH	0701	Rockfish, unspecified	8
2011	7	MARINA DEL REY	0701	Rockfish, unspecified	1940
2011	7	MARINA DEL REY	0701	Rockfish, bocaccio	141
2011	7	SAN PEDRO	0701	Scorpionfish, California	1
2011	7	REDONDO BEACH	0701	Scorpionfish, California	3
2011	7	MARINA DEL REY	0701	Scorpionfish, California	492
2011	7	REDONDO BEACH	0701	Cabezon	1
2011	7	MARINA DEL REY	0701	Cabezon	26
2011	7	MARINA DEL REY	0701	Rockfish, gopher	13
2011	7	MARINA DEL REY	0701	Bass, spotted sand	
2011	7	REDONDO BEACH	0701	Bass, kelp	62
2011	7	MARINA DEL REY	0701	Bass, kelp	871
2011	7	SAN PEDRO	0701	Bass, kelp	
2011	7	SAN PEDRO	0701	Bass, barred sand	45
2011	7	REDONDO BEACH	0701	Bass, barred sand	154
2011	7	MARINA DEL REY	0701	Bass, barred sand	2911
2011	7	MARINA DEL REY	0701	Bass, giant sea	
2011	7	REDONDO BEACH	0701	Seabass, white	6
2011	7	MARINA DEL REY	0701	Seabass, white	14
2011	7	MARINA DEL REY	0701	Croaker, white	
2011	7	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	1
2011	7	MARINA DEL REY	0701	Halfmoon	2
2011	7	SAN PEDRO	0701	Blacksmith	15
2011	7	MARINA DEL REY	0701	Blacksmith	313
2011	7	MARINA DEL REY	0701	Midshipman, plainfin	
2011	7	MARINA DEL REY	0701	Whitefish, ocean	40
2011	7	MARINA DEL REY	0701	Rockfish, copper	11
2011	7	MARINA DEL REY	0701	Rockfish, blue	3
2011	7	MARINA DEL REY	0702	Mackerel, Pacific	45
2011	7	REDONDO BEACH	0702	Barracuda, California	34
2011	7	REDONDO BEACH	0702	Sheephead, California	5
2011	7	MARINA DEL REY	0702	Sheephead, California	7
2011	7	SAN PEDRO	0702	Sheephead, California	51
2011	7	MARINA DEL REY	0702	Shark, shortfin mako	1
2011	7	MARINA DEL REY	0702	Shark, spiny dogfish	
2011	7	MARINA DEL REY	0702	Ratfish, spotted	
2011	7	REDONDO BEACH	0702	Ray, bat	
2011	7	MARINA DEL REY	0702	Lingcod	7
2011	7	MARINA DEL REY	0702	Sole, petrale	1
2011	7	REDONDO BEACH	0702	Sanddab	8
2011	7	MARINA DEL REY	0702	Sanddab	462
2011	7	REDONDO BEACH	0702	Rockfish, unspecified	40
2011	7	MARINA DEL REY	0702	Rockfish, unspecified	2043
2011	7	REDONDO BEACH	0702	Rockfish, bocaccio	1
2011	7	MARINA DEL REY	0702	Rockfish, bocaccio	220
2011	7	REDONDO BEACH	0702	Scorpionfish, California	2
2011	7	MARINA DEL REY	0702	Scorpionfish, California	198
2011	7	REDONDO BEACH	0702	Cabezon	2
2011	7	MARINA DEL REY	0702	Cabezon	
2011	7	MARINA DEL REY	0702	Rockfish, gopher	28
2011	7	REDONDO BEACH	0702	Bass, kelp	16
2011	7	MARINA DEL REY	0702	Bass, kelp	129
2011	7	SAN PEDRO	0702	Bass, kelp	131
2011	7	REDONDO BEACH	0702	Bass, barred sand	52

Year	Month	Port Name	Block	Species	Kept
2011	7	MARINA DEL REY	0702	Bass, barred sand	63
2011	7	REDONDO BEACH	0702	Bass, giant sea	
2011	7	MARINA DEL REY	0702	Halfmoon	5
2011	7	SAN PEDRO	0702	Halfmoon	200
2011	7	MARINA DEL REY	0702	Blacksmith	3
2011	7	MARINA DEL REY	0702	Whitefish, ocean	12
2011	7	REDONDO BEACH	0702	Whitefish, ocean	
2011	7	REDONDO BEACH	0702	Rockfish, copper	4
2011	7	MARINA DEL REY	0702	Rockfish, copper	21
2011	7	MARINA DEL REY	0702	Rockfish, blue	6
2011	7	REDONDO BEACH	0702		
2011	7	MALIBU	0703	Mackerel, Pacific	235
2011	7	MALIBU	0703	Sheephead, California	1
2011	7	MALIBU	0703	Lingcod	4
2011	7	MALIBU	0703	Sanddab	23
2011	7	MALIBU	0703	Rockfish, vermilion	46
2011	7	MALIBU	0703	Rockfish, unspecified	116
2011	7	MALIBU	0703	Rockfish, bocaccio	47
2011	7	MALIBU	0703	Scorpionfish, California	
2011	7	MALIBU	0703	Cabezon	1
2011	7	MALIBU	0703	Rockfish, gopher	2
2011	7	MALIBU	0703	Bass, kelp	22
2011	7	MALIBU	0703	Bass, barred sand	1
2011	7	MALIBU	0703	Croaker, white	3
2011	7	MALIBU	0703	Perch-like, unspecified	15
2011	7	MALIBU	0703	Halfmoon	5
2011	7	MALIBU	0703	Rockfish, copper	2
2011	7	MALIBU	0703	Rockfish, blue	
2011	7	MALIBU	0703	Rockfish, group red	31
2011	7	REDONDO BEACH	0720	Yellowtail	12
2011	7	MARINA DEL REY	0720	Mackerel, Pacific	15
2011	7	LONG BEACH	0720	Barracuda, California	1
2011	7	REDONDO BEACH	0720	Barracuda, California	115
2011	7	MARINA DEL REY	0720	Barracuda, California	115
2011	7	SAN PEDRO	0720	Sheephead, California	1
2011	7	LONG BEACH	0720	Sheephead, California	3
2011	7	LOS ANGELES	0720	Sheephead, California	3
2011	7	SANTA MONICA	0720	Sheephead, California	6
2011	7	MARINA DEL REY	0720	Sheephead, California	11
2011	7	REDONDO BEACH	0720	Sheephead, California	274
2011	7	HUNTINGTON BEACH	0720	Shark, shortfin mako	2
2011	7	SANTA MONICA	0720	Lingcod	1
2011	7	SAN PEDRO	0720	Lingcod	1
2011	7	MARINA DEL REY	0720	Lingcod	5
2011	7	REDONDO BEACH	0720	Lingcod	21
2011	7	SANTA MONICA	0720	Halibut, California	2
2011	7	REDONDO BEACH	0720	Halibut, California	14
2011	7	MARINA DEL REY	0720	Sanddab	8
2011	7	SANTA MONICA	0720	Rockfish, unspecified	28
2011	7	SAN PEDRO	0720	Rockfish, unspecified	121
2011	7	MARINA DEL REY	0720	Rockfish, unspecified	185
2011	7	REDONDO BEACH	0720	Rockfish, unspecified	1587
2011	7	REDONDO BEACH	0720	Rockfish, bocaccio	1
2011	7	MARINA DEL REY	0720	Rockfish, bocaccio	12
2011	7	SAN PEDRO	0720	Rockfish, bocaccio	28
2011	7	SANTA MONICA	0720	Scorpionfish, California	2
2011	7	MARINA DEL REY	0720	Scorpionfish, California	4
2011	7	REDONDO BEACH	0720	Scorpionfish, California	79
2011	7	MARINA DEL REY	0720	Cabezon	1
2011	7	REDONDO BEACH	0720	Cabezon	5
2011	7	MARINA DEL REY	0720	Rockfish, gopher	64
2011	7	SANTA MONICA	0720	Bass, kelp	7
2011	7	SAN PEDRO	0720	Bass, kelp	41
2011	7	LONG BEACH	0720	Bass, kelp	98
2011	7	MARINA DEL REY	0720	Bass, kelp	168
2011	7	REDONDO BEACH	0720	Bass, kelp	2410
2011	7	MARINA DEL REY	0720	Bass, barred sand	19
2011	7	REDONDO BEACH	0720	Bass, barred sand	587
2011	7	REDONDO BEACH	0720	Bass, giant sea	
2011	7	LOS ANGELES	0720	Seabass, white	1
2011	7	LONG BEACH	0720	Seabass, white	19

Year	Month	Port Name	Block	Species	Kept
2011	7	REDONDO BEACH	0720	Seabass, white	37
2011	7	REDONDO BEACH	0720	Opah	16
2011	7	MARINA DEL REY	0720	Perch-like, unspecified	17
2011	7	REDONDO BEACH	0720	Opaleye	2
2011	7	MARINA DEL REY	0720	Halfmoon	2
2011	7	REDONDO BEACH	0720	Halfmoon	218
2011	7	MARINA DEL REY	0720	Sargo	5
2011	7	REDONDO BEACH	0720	Sargo	21
2011	7	LONG BEACH	0720	Whitefish, ocean	1
2011	7	REDONDO BEACH	0720	Whitefish, ocean	90
2011	7	MARINA DEL REY	0720	Rockfish, copper	5
2011	7	HUNTINGTON BEACH	0721	Shark, shortfin mako	1
2011	8	MARINA DEL REY	0679	Mackerel, Pacific	25
2011	8	MARINA DEL REY	0679	Barracuda, California	3
2011	8	MARINA DEL REY	0679	Sheephead, California	2
2011	8	MARINA DEL REY	0679	Wrasse, rock	
2011	8	MARINA DEL REY	0679	Skate, California	
2011	8	MARINA DEL REY	0679	Lingcod	
2011	8	MARINA DEL REY	0679	Sanddab	
2011	8	MARINA DEL REY	0679	Rockfish, unspecified	65
2011	8	MARINA DEL REY	0679	Scorpionfish, California	17
2011	8	MARINA DEL REY	0679	Cabezon	
2011	8	MARINA DEL REY	0679	Bass, kelp	47
2011	8	MARINA DEL REY	0679	Bass, barred sand	322
2011	8	MARINA DEL REY	0679	Bass, giant sea	
2011	8	MARINA DEL REY	0679	Seabass, white	1
2011	8	MARINA DEL REY	0680	Mackerel, Pacific	
2011	8	OXNARD	0680	Barracuda, California	3
2011	8	MARINA DEL REY	0680	Barracuda, California	
2011	8	REDONDO BEACH	0680	Sheephead, California	1
2011	8	OXNARD	0680	Sheephead, California	12
2011	8	MARINA DEL REY	0680	Sheephead, California	13
2011	8	MARINA DEL REY	0680	Lingcod	3
2011	8	REDONDO BEACH	0680	Lingcod	
2011	8	OXNARD	0680	Halibut, California	1
2011	8	MARINA DEL REY	0680	Halibut, California	3
2011	8	MARINA DEL REY	0680	Sanddab	3
2011	8	REDONDO BEACH	0680	Rockfish, unspecified	47
2011	8	OXNARD	0680	Rockfish, unspecified	140
2011	8	MARINA DEL REY	0680	Rockfish, unspecified	289
2011	8	MARINA DEL REY	0680	Rockfish, bocaccio	22
2011	8	OXNARD	0680	Rockfish, bocaccio	36
2011	8	OXNARD	0680	Scorpionfish, California	1
2011	8	MARINA DEL REY	0680	Scorpionfish, California	2
2011	8	REDONDO BEACH	0680	Scorpionfish, California	3
2011	8	REDONDO BEACH	0680	Cabezon	2
2011	8	MARINA DEL REY	0680	Cabezon	
2011	8	OXNARD	0680	Rockfish, gopher	5
2011	8	MARINA DEL REY	0680	Rockfish, gopher	45
2011	8	REDONDO BEACH	0680	Bass, kelp	69
2011	8	OXNARD	0680	Bass, kelp	112
2011	8	MARINA DEL REY	0680	Bass, kelp	153
2011	8	OXNARD	0680	Bass, barred sand	1
2011	8	MARINA DEL REY	0680	Bass, barred sand	1
2011	8	REDONDO BEACH	0680	Bass, barred sand	14
2011	8	MARINA DEL REY	0680	Seabass, white	
2011	8	OXNARD	0680	Whitefish, ocean	2
2011	8	MARINA DEL REY	0680	Whitefish, ocean	19
2011	8	REDONDO BEACH	0680	Surfperch, unspecified	35
2011	8	REDONDO BEACH	0680	Rockfish, copper	2
2011	8	MARINA DEL REY	0680	Rockfish, copper	6
2011	8	OXNARD	0680	Rockfish, copper	16
2011	8	MARINA DEL REY	0680	Rockfish, blue	
2011	8	MARINA DEL REY	0701	Mackerel, Pacific	537
2011	8	MARINA DEL REY	0701	Barracuda, California	671
2011	8	MARINA DEL REY	0701	Sheephead, California	80
2011	8	MARINA DEL REY	0701	Shark, thresher	1
2011	8	MARINA DEL REY	0701	Lingcod	20
2011	8	MARINA DEL REY	0701	Sole, unspecified	11
2011	8	MARINA DEL REY	0701	Sole, petrale	2
2011	8	MARINA DEL REY	0701	Halibut, California	7

Year	Month	Port Name	Block	Species	Kept
2011	8	MARINA DEL REY	0701	Sanddab	427
2011	8	MARINA DEL REY	0701	Rockfish, unspecified	1500
2011	8	MARINA DEL REY	0701	Rockfish, bocaccio	292
2011	8	MARINA DEL REY	0701	Scorpionfish, California	1560
2011	8	MARINA DEL REY	0701	Cabezon	24
2011	8	MARINA DEL REY	0701	Rockfish, gopher	35
2011	8	MARINA DEL REY	0701	Bass, kelp	435
2011	8	MARINA DEL REY	0701	Bass, barred sand	3185
2011	8	MARINA DEL REY	0701	Croaker, black	1
2011	8	MARINA DEL REY	0701	Perch-like, unspecified	50
2011	8	MARINA DEL REY	0701	Halfmoon	63
2011	8	MARINA DEL REY	0701	Blacksmith	203
2011	8	MARINA DEL REY	0701	Sargo	1
2011	8	MARINA DEL REY	0701	Whitefish, ocean	33
2011	8	MARINA DEL REY	0701	Rockfish, copper	22
2011	8	MARINA DEL REY	0702	Mackerel, Pacific	60
2011	8	REDONDO BEACH	0702	Mackerel, Pacific	100
2011	8	MARINA DEL REY	0702	Barracuda, California	4
2011	8	REDONDO BEACH	0702	Barracuda, California	175
2011	8	REDONDO BEACH	0702	Sheephead, California	9
2011	8	MARINA DEL REY	0702	Sheephead, California	21
2011	8	MARINA DEL REY	0702	Shark, spiny dogfish	
2011	8	REDONDO BEACH	0702	Lingcod	1
2011	8	MARINA DEL REY	0702	Lingcod	33
2011	8	REDONDO BEACH	0702	Sole, unspecified	3
2011	8	MARINA DEL REY	0702	Sole, unspecified	4
2011	8	REDONDO BEACH	0702	Halibut, California	3
2011	8	REDONDO BEACH	0702	Sanddab	98
2011	8	MARINA DEL REY	0702	Sanddab	278
2011	8	REDONDO BEACH	0702	Rockfish, unspecified	300
2011	8	MARINA DEL REY	0702	Rockfish, unspecified	2021
2011	8	REDONDO BEACH	0702	Rockfish, bocaccio	14
2011	8	MARINA DEL REY	0702	Rockfish, bocaccio	368
2011	8	REDONDO BEACH	0702	Scorpionfish, California	28
2011	8	MARINA DEL REY	0702	Scorpionfish, California	1322
2011	8	REDONDO BEACH	0702	Cabezon	1
2011	8	MARINA DEL REY	0702	Cabezon	1
2011	8	MARINA DEL REY	0702	Bass, kelp	54
2011	8	REDONDO BEACH	0702	Bass, kelp	94
2011	8	MARINA DEL REY	0702	Bass, barred sand	204
2011	8	REDONDO BEACH	0702	Bass, barred sand	213
2011	8	REDONDO BEACH	0702	Bass, giant sea	
2011	8	REDONDO BEACH	0702	Triggerfish	4
2011	8	MARINA DEL REY	0702	Sunfish, ocean	
2011	8	REDONDO BEACH	0702	Opaleye	1
2011	8	REDONDO BEACH	0702	Blacksmith	15
2011	8	MARINA DEL REY	0702	Whitefish, ocean	27
2011	8	REDONDO BEACH	0702	Whitefish, ocean	36
2011	8	MARINA DEL REY	0702	Rockfish, copper	15
2011	8	MARINA DEL REY	0702	Rockfish, blue	3
2011	8	REDONDO BEACH	0702	Lobster, California spiny	2
2011	8	REDONDO BEACH	0702		
2011	8	MALIBU	0703	Mackerel, Pacific	462
2011	8	MALIBU	0703	Sheephead, California	1
2011	8	MALIBU	0703	Ray, bat	2
2011	8	MALIBU	0703	Lingcod	5
2011	8	MALIBU	0703	Sole, rock	1
2011	8	MALIBU	0703	Halibut, California	
2011	8	MALIBU	0703	Sanddab	130
2011	8	MALIBU	0703	Rockfish, vermilion	211
2011	8	MALIBU	0703	Rockfish, unspecified	351
2011	8	MALIBU	0703	Rockfish, bocaccio	274
2011	8	MALIBU	0703	Cabezon	
2011	8	MALIBU	0703	Bass, kelp	7
2011	8	MALIBU	0703	Bass, barred sand	2
2011	8	MALIBU	0703	Croaker, white	1
2011	8	MALIBU	0703	Surfperch, unspecified	12
2011	8	MALIBU	0703	Surfperch, rainbow	1
2011	8	MALIBU	0703	Rockfish, copper	25
2011	8	MALIBU	0703	Rockfish, blue	6
2011	8	MALIBU	0703	Rockfish, group red	47

Year	Month	Port Name	Block	Species	Kept
2011	8	REDONDO BEACH	0720	Bonito, Pacific	1
2011	8	REDONDO BEACH	0720	Yellowtail	1
2011	8	REDONDO BEACH	0720	Mackerel, Pacific	35
2011	8	SAN PEDRO	0720	Mackerel, Pacific	45
2011	8	SAN PEDRO	0720	Mackerel, jack	12
2011	8	SAN PEDRO	0720	Barracuda, California	4
2011	8	REDONDO BEACH	0720	Barracuda, California	9
2011	8	LONG BEACH	0720	Sheephead, California	3
2011	8	MARINA DEL REY	0720	Sheephead, California	6
2011	8	SAN PEDRO	0720	Sheephead, California	32
2011	8	REDONDO BEACH	0720	Sheephead, California	164
2011	8	HUNTINGTON BEACH	0720	Shark, shortfin mako	
2011	8	SAN PEDRO	0720	Shark, shortfin mako	
2011	8	REDONDO BEACH	0720	Shark, spiny dogfish	2
2011	8	SAN PEDRO	0720	Shark, soupfin	
2011	8	SAN PEDRO	0720	Shark, blue	
2011	8	REDONDO BEACH	0720	Ray, bat	
2011	8	SAN PEDRO	0720	Lingcod	4
2011	8	MARINA DEL REY	0720	Lingcod	5
2011	8	REDONDO BEACH	0720	Lingcod	12
2011	8	REDONDO BEACH	0720	Sole, unspecified	3
2011	8	REDONDO BEACH	0720	Halibut, California	2
2011	8	SAN PEDRO	0720	Sanddab	10
2011	8	MARINA DEL REY	0720	Sanddab	126
2011	8	LONG BEACH	0720	Rockfish, unspecified	83
2011	8	SAN PEDRO	0720	Rockfish, unspecified	124
2011	8	MARINA DEL REY	0720	Rockfish, unspecified	383
2011	8	REDONDO BEACH	0720	Rockfish, unspecified	552
2011	8	REDONDO BEACH	0720	Rockfish, bocaccio	7
2011	8	SAN PEDRO	0720	Rockfish, bocaccio	7
2011	8	LONG BEACH	0720	Rockfish, bocaccio	25
2011	8	MARINA DEL REY	0720	Rockfish, bocaccio	135
2011	8	MARINA DEL REY	0720	Scorpionfish, California	1
2011	8	SAN PEDRO	0720	Scorpionfish, California	6
2011	8	REDONDO BEACH	0720	Scorpionfish, California	42
2011	8	SAN PEDRO	0720	Cabezon	3
2011	8	REDONDO BEACH	0720	Cabezon	18
2011	8	REDONDO BEACH	0720	Rockfish, gopher	
2011	8	MARINA DEL REY	0720	Bass, kelp	70
2011	8	SAN PEDRO	0720	Bass, kelp	299
2011	8	REDONDO BEACH	0720	Bass, kelp	1098
2011	8	SAN PEDRO	0720	Bass, barred sand	15
2011	8	REDONDO BEACH	0720	Bass, barred sand	125
2011	8	REDONDO BEACH	0720	Bass, giant sea	
2011	8	SAN PEDRO	0720	Seabass, white	37
2011	8	REDONDO BEACH	0720	Seabass, white	50
2011	8	MARINA DEL REY	0720	Perch-like, unspecified	10
2011	8	REDONDO BEACH	0720	Perch-like, unspecified	21
2011	8	SAN PEDRO	0720	Opaleye	23
2011	8	REDONDO BEACH	0720	Opaleye	97
2011	8	LONG BEACH	0720	Halfmoon	93
2011	8	SAN PEDRO	0720	Halfmoon	293
2011	8	REDONDO BEACH	0720	Halfmoon	835
2011	8	SAN PEDRO	0720	Blacksmith	10
2011	8	REDONDO BEACH	0720	Sargo	95
2011	8	SAN PEDRO	0720	Sargo	113
2011	8	LONG BEACH	0720	Whitefish, ocean	1
2011	8	MARINA DEL REY	0720	Whitefish, ocean	2
2011	8	REDONDO BEACH	0720	Whitefish, ocean	30
2011	8	REDONDO BEACH	0720	Surfperch, rubberlip	37
2011	8	REDONDO BEACH	0720	Rockfish, copper	2
2011	8	MARINA DEL REY	0720	Rockfish, copper	5
2011	8	SAN PEDRO	0720	Rockfish, copper	8
2011	8	SAN PEDRO	0720	Rockfish, blue	2
2011	8	MARINA DEL REY	0720	Rockfish, blue	11
2011	8	REDONDO BEACH	0720	Rockfish, blue	
2011	8	REDONDO BEACH	0720	Lobster, California spiny	
2011	9	MARINA DEL REY	0679	Mackerel, Pacific	5
2011	9	MARINA DEL REY	0679	Sheephead, California	1
2011	9	REDONDO BEACH	0679	Shark, thresher	1
2011	9	MARINA DEL REY	0679	Lingcod	

Year	Month	Port Name	Block	Species	Kept
2011	9	REDONDO BEACH	0679	Halibut, California	1
2011	9	MARINA DEL REY	0679	Halibut, California	1
2011	9	MARINA DEL REY	0679	Sanddab	60
2011	9	MARINA DEL REY	0679	Rockfish, unspecified	3
2011	9	REDONDO BEACH	0679	Scorpionfish, California	1
2011	9	MARINA DEL REY	0679	Scorpionfish, California	84
2011	9	MARINA DEL REY	0679	Cabezon	
2011	9	REDONDO BEACH	0679	Bass, kelp	33
2011	9	MARINA DEL REY	0679	Bass, kelp	39
2011	9	REDONDO BEACH	0679	Bass, barred sand	17
2011	9	MARINA DEL REY	0679	Bass, barred sand	46
2011	9	MARINA DEL REY	0679	Bass, giant sea	
2011	9	MARINA DEL REY	0679	Blacksmith	15
2011	9	MARINA DEL REY	0680	Mackerel, Pacific	30
2011	9	MARINA DEL REY	0680	Barracuda, California	1
2011	9	MARINA DEL REY	0680	Sheephead, California	42
2011	9	MARINA DEL REY	0680	Shark, leopard	1
2011	9	MARINA DEL REY	0680	Lingcod	5
2011	9	MARINA DEL REY	0680	Halibut, California	1
2011	9	MARINA DEL REY	0680	Sanddab	41
2011	9	MARINA DEL REY	0680	Rockfish, unspecified	555
2011	9	MARINA DEL REY	0680	Rockfish, bocaccio	10
2011	9	MARINA DEL REY	0680	Scorpionfish, California	9
2011	9	MARINA DEL REY	0680	Cabezon	9
2011	9	MARINA DEL REY	0680	Rockfish, gopher	40
2011	9	MARINA DEL REY	0680	Bass, kelp	701
2011	9	MARINA DEL REY	0680	Bass, barred sand	30
2011	9	MARINA DEL REY	0680	Seabass, white	5
2011	9	MARINA DEL REY	0680	Whitefish, ocean	4
2011	9	MARINA DEL REY	0680	Rockfish, copper	44
2011	9	HUNTINGTON BEACH	0701	Mackerel, Pacific	10
2011	9	MARINA DEL REY	0701	Mackerel, Pacific	55
2011	9	HUNTINGTON BEACH	0701	Barracuda, California	2
2011	9	MARINA DEL REY	0701	Sheephead, California	31
2011	9	MARINA DEL REY	0701	Shark, leopard	1
2011	9	MARINA DEL REY	0701	Shark, thresher	2
2011	9	MARINA DEL REY	0701	Lingcod	36
2011	9	MARINA DEL REY	0701	Sole, petrale	1
2011	9	MARINA DEL REY	0701	Halibut, California	6
2011	9	MARINA DEL REY	0701	Sanddab	728
2011	9	CRESCENT CITY	0701	Rockfish, unspecified	2
2011	9	MARINA DEL REY	0701	Rockfish, unspecified	850
2011	9	MARINA DEL REY	0701	Rockfish, bocaccio	130
2011	9	HUNTINGTON BEACH	0701	Scorpionfish, California	1
2011	9	CRESCENT CITY	0701	Scorpionfish, California	8
2011	9	MARINA DEL REY	0701	Scorpionfish, California	3741
2011	9	MARINA DEL REY	0701	Cabezon	2
2011	9	HUNTINGTON BEACH	0701	Bass, kelp	10
2011	9	CRESCENT CITY	0701	Bass, kelp	12
2011	9	MARINA DEL REY	0701	Bass, kelp	338
2011	9	CRESCENT CITY	0701	Bass, barred sand	35
2011	9	MARINA DEL REY	0701	Bass, barred sand	802
2011	9	MARINA DEL REY	0701	Halfmoon	6
2011	9	MARINA DEL REY	0701	Blacksmith	56
2011	9	MARINA DEL REY	0701	Whitefish, ocean	61
2011	9	MARINA DEL REY	0701	Surfperch, unspecified	21
2011	9	MARINA DEL REY	0701	Surfperch, rubberlip	1
2011	9	MARINA DEL REY	0701	Rockfish, copper	19
2011	9	MARINA DEL REY	0701	Squid, jumbo	1684
2011	9	MARINA DEL REY	0702	Mackerel, Pacific	3
2011	9	MARINA DEL REY	0702	Sheephead, California	6
2011	9	REDONDO BEACH	0702	Sheephead, California	10
2011	9	MARINA DEL REY	0702	Shark, spiny dogfish	
2011	9	MARINA DEL REY	0702	Ray, bat	
2011	9	REDONDO BEACH	0702	Lingcod	1
2011	9	MARINA DEL REY	0702	Lingcod	12
2011	9	MARINA DEL REY	0702	Sole, unspecified	1
2011	9	MARINA DEL REY	0702	Sole, petrale	1
2011	9	MARINA DEL REY	0702	Halibut, California	
2011	9	REDONDO BEACH	0702	Sanddab	135
2011	9	MARINA DEL REY	0702	Sanddab	488

Year	Month	Port Name	Block	Species	Kept
2011	9	REDONDO BEACH	0702	Rockfish, unspecified	114
2011	9	MARINA DEL REY	0702	Rockfish, unspecified	1416
2011	9	MARINA DEL REY	0702	Rockfish, bocaccio	388
2011	9	REDONDO BEACH	0702	Scorpionfish, California	239
2011	9	MARINA DEL REY	0702	Scorpionfish, California	477
2011	9	REDONDO BEACH	0702	Cabezon	1
2011	9	MARINA DEL REY	0702	Cabezon	1
2011	9	MARINA DEL REY	0702	Rockfish, widow	3
2011	9	MARINA DEL REY	0702	Bass, kelp	21
2011	9	REDONDO BEACH	0702	Bass, kelp	28
2011	9	MARINA DEL REY	0702	Bass, barred sand	19
2011	9	REDONDO BEACH	0702	Bass, barred sand	72
2011	9	MARINA DEL REY	0702	Bass, giant sea	
2011	9	MARINA DEL REY	0702	Sunfish, ocean	
2011	9	REDONDO BEACH	0702	Seabass, white	1
2011	9	MARINA DEL REY	0702	Seabass, white	
2011	9	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2011	9	MARINA DEL REY	0702	Hagfishes	
2011	9	REDONDO BEACH	0702	Halfmoon	12
2011	9	REDONDO BEACH	0702	Blacksmith	57
2011	9	MARINA DEL REY	0702	Whitefish, ocean	3
2011	9	MARINA DEL REY	0702	Rockfish, copper	23
2011	9	REDONDO BEACH	0702	Squid, jumbo	128
2011	9	MARINA DEL REY	0702	Squid, jumbo	269
2011	9	SAN PEDRO	0720	Bonito, Pacific	3
2011	9	REDONDO BEACH	0720	Bonito, Pacific	5
2011	9	SAN PEDRO	0720	Yellowtail	1
2011	9	REDONDO BEACH	0720	Yellowtail	3
2011	9	LONG BEACH	0720	Mackerel, Pacific	50
2011	9	SAN PEDRO	0720	Mackerel, Pacific	111
2011	9	SAN PEDRO	0720	Mackerel, jack	25
2011	9	REDONDO BEACH	0720	Barracuda, California	3
2011	9	LONG BEACH	0720	Barracuda, California	
2011	9	SAN PEDRO	0720	Barracuda, California	
2011	9	MARINA DEL REY	0720	Sheephead, California	1
2011	9	LONG BEACH	0720	Sheephead, California	18
2011	9	SAN PEDRO	0720	Sheephead, California	105
2011	9	REDONDO BEACH	0720	Sheephead, California	239
2011	9	LONG BEACH	0720	Shark, shortfin mako	1
2011	9	SAN PEDRO	0720	Shark, shortfin mako	
2011	9	MARINA DEL REY	0720	Shark, spiny dogfish	
2011	9	REDONDO BEACH	0720	Shark, leopard	1
2011	9	MARINA DEL REY	0720	Shark, leopard	
2011	9	SAN PEDRO	0720	Shark, thresher	1
2011	9	MARINA DEL REY	0720	Lingcod	1
2011	9	SAN PEDRO	0720	Lingcod	3
2011	9	REDONDO BEACH	0720	Lingcod	14
2011	9	REDONDO BEACH	0720	Sole, unspecified	1
2011	9	REDONDO BEACH	0720	Halibut, California	5
2011	9	REDONDO BEACH	0720	Sanddab	9
2011	9	SAN PEDRO	0720	Sanddab	116
2011	9	MARINA DEL REY	0720	Sanddab	163
2011	9	LONG BEACH	0720	Sanddab	349
2011	9	LONG BEACH	0720	Rockfish, unspecified	120
2011	9	MARINA DEL REY	0720	Rockfish, unspecified	228
2011	9	SAN PEDRO	0720	Rockfish, unspecified	506
2011	9	REDONDO BEACH	0720	Rockfish, unspecified	1394
2011	9	REDONDO BEACH	0720	Rockfish, bocaccio	2
2011	9	LONG BEACH	0720	Rockfish, bocaccio	43
2011	9	SAN PEDRO	0720	Rockfish, bocaccio	110
2011	9	MARINA DEL REY	0720	Rockfish, bocaccio	128
2011	9	MARINA DEL REY	0720	Scorpionfish, California	1
2011	9	SAN PEDRO	0720	Scorpionfish, California	12
2011	9	REDONDO BEACH	0720	Scorpionfish, California	276
2011	9	LONG BEACH	0720	Scorpionfish, California	291
2011	9	LONG BEACH	0720	Cabezon	4
2011	9	SAN PEDRO	0720	Cabezon	4
2011	9	REDONDO BEACH	0720	Cabezon	10
2011	9	LONG BEACH	0720	Rockfish, gopher	1
2011	9	MARINA DEL REY	0720	Bass, kelp	43
2011	9	LONG BEACH	0720	Bass, kelp	65

Year	Month	Port Name	Block	Species	Kept
2011	9	SAN PEDRO	0720	Bass, kelp	307
2011	9	REDONDO BEACH	0720	Bass, kelp	863
2011	9	LONG BEACH	0720	Bass, barred sand	1
2011	9	MARINA DEL REY	0720	Bass, barred sand	2
2011	9	SAN PEDRO	0720	Bass, barred sand	16
2011	9	REDONDO BEACH	0720	Bass, barred sand	102
2011	9	REDONDO BEACH	0720	Bass, giant sea	
2011	9	SAN PEDRO	0720	Seabass, white	7
2011	9	REDONDO BEACH	0720	Seabass, white	19
2011	9	MARINA DEL REY	0720	Seabass, white	
2011	9	SAN PEDRO	0720	Opaleye	15
2011	9	REDONDO BEACH	0720	Opaleye	19
2011	9	SAN PEDRO	0720	Halfmoon	344
2011	9	LONG BEACH	0720	Halfmoon	368
2011	9	REDONDO BEACH	0720	Halfmoon	1162
2011	9	REDONDO BEACH	0720	Blacksmith	23
2011	9	SAN PEDRO	0720	Blacksmith	142
2011	9	SAN PEDRO	0720	Sargo	54
2011	9	REDONDO BEACH	0720	Sargo	90
2011	9	MARINA DEL REY	0720	Whitefish, ocean	1
2011	9	LONG BEACH	0720	Whitefish, ocean	2
2011	9	SAN PEDRO	0720	Whitefish, ocean	48
2011	9	REDONDO BEACH	0720	Whitefish, ocean	87
2011	9	SAN PEDRO	0720	Surfperch, unspecified	30
2011	9	REDONDO BEACH	0720	Surfperch, black	11
2011	9	MARINA DEL REY	0720	Rockfish, copper	9
2011	9	SAN PEDRO	0720	Rockfish, copper	12
2011	9	REDONDO BEACH	0720	Rockfish, blue	1
2011	9	MARINA DEL REY	0720	Rockfish, blue	5
2011	9	MARINA DEL REY	0720	Squid, jumbo	350
2011	9	REDONDO BEACH	0720	Squid, jumbo	1085
2011	9	SAN PEDRO	0720	Rockfish, group red	27
2011	10	REDONDO BEACH	0679	Halibut, California	2
2011	10	REDONDO BEACH	0679	Rockfish, unspecified	2
2011	10	REDONDO BEACH	0679	Scorpionfish, California	28
2011	10	REDONDO BEACH	0679	Cabezon	1
2011	10	REDONDO BEACH	0679	Bass, kelp	22
2011	10	REDONDO BEACH	0679	Bass, barred sand	64
2011	10	REDONDO BEACH	0679	Bass, giant sea	
2011	10	REDONDO BEACH	0679	Blacksmith	33
2011	10	MARINA DEL REY	0680	Mackerel, Pacific	4
2011	10	MARINA DEL REY	0680	Sheephead, California	4
2011	10	MARINA DEL REY	0680	Lingcod	18
2011	10	MARINA DEL REY	0680	Halibut, California	
2011	10	MARINA DEL REY	0680	Sanddab	125
2011	10	MARINA DEL REY	0680	Rockfish, unspecified	891
2011	10	MARINA DEL REY	0680	Rockfish, bocaccio	304
2011	10	MARINA DEL REY	0680	Scorpionfish, California	50
2011	10	MARINA DEL REY	0680	Bass, kelp	29
2011	10	MARINA DEL REY	0680	Bass, barred sand	6
2011	10	MARINA DEL REY	0680	Sargo	1
2011	10	MARINA DEL REY	0680	Whitefish, ocean	17
2011	10	MARINA DEL REY	0680	Rockfish, copper	31
2011	10	MARINA DEL REY	0680	Rockfish, blue	3
2011	10	MARINA DEL REY	0701	Mackerel, Pacific	10
2011	10	REDONDO BEACH	0701	Sheephead, California	5
2011	10	MARINA DEL REY	0701	Sheephead, California	81
2011	10	MARINA DEL REY	0701	Lingcod	240
2011	10	REDONDO BEACH	0701	Lingcod	
2011	10	MARINA DEL REY	0701	Sanddab	267
2011	10	MARINA DEL REY	0701	Rockfish, unspecified	2878
2011	10	MARINA DEL REY	0701	Rockfish, black-and-yellow	15
2011	10	MARINA DEL REY	0701	Rockfish, bocaccio	1278
2011	10	REDONDO BEACH	0701	Scorpionfish, California	4
2011	10	MARINA DEL REY	0701	Scorpionfish, California	2889
2011	10	REDONDO BEACH	0701	Cabezon	3
2011	10	MARINA DEL REY	0701	Cabezon	12
2011	10	REDONDO BEACH	0701	Bass, kelp	11
2011	10	MARINA DEL REY	0701	Bass, kelp	84
2011	10	REDONDO BEACH	0701	Bass, barred sand	33
2011	10	MARINA DEL REY	0701	Bass, barred sand	312

Year	Month	Port Name	Block	Species	Kept
2011	10	MARINA DEL REY	0701	Blacksmith	25
2011	10	MARINA DEL REY	0701	Whitefish, ocean	131
2011	10	MARINA DEL REY	0701	Rockfish, copper	151
2011	10	MARINA DEL REY	0702	Mackerel, Pacific	65
2011	10	REDONDO BEACH	0702	Sheephead, California	3
2011	10	MARINA DEL REY	0702	Sheephead, California	18
2011	10	SAN PEDRO	0702	Sheephead, California	40
2011	10	MARINA DEL REY	0702	Ratfish, spotted	
2011	10	REDONDO BEACH	0702	Lingcod	10
2011	10	MARINA DEL REY	0702	Lingcod	60
2011	10	MARINA DEL REY	0702	Sole, rex	2
2011	10	MARINA DEL REY	0702	Sole, petrale	3
2011	10	MARINA DEL REY	0702	Sole, Dover	1
2011	10	REDONDO BEACH	0702	Halibut, California	1
2011	10	REDONDO BEACH	0702	Sanddab	133
2011	10	MARINA DEL REY	0702	Sanddab	528
2011	10	MARINA DEL REY	0702	Rockfish, canary	1
2011	10	REDONDO BEACH	0702	Rockfish, unspecified	490
2011	10	MARINA DEL REY	0702	Rockfish, unspecified	2084
2011	10	REDONDO BEACH	0702	Rockfish, bocaccio	46
2011	10	MARINA DEL REY	0702	Rockfish, bocaccio	650
2011	10	SAN PEDRO	0702	Scorpionfish, California	1
2011	10	REDONDO BEACH	0702	Scorpionfish, California	239
2011	10	MARINA DEL REY	0702	Scorpionfish, California	507
2011	10	SAN PEDRO	0702	Cabezon	1
2011	10	MARINA DEL REY	0702	Cabezon	
2011	10	MARINA DEL REY	0702	Rockfish, widow	3
2011	10	MARINA DEL REY	0702	Bass, kelp	6
2011	10	REDONDO BEACH	0702	Bass, kelp	13
2011	10	MARINA DEL REY	0702	Bass, barred sand	12
2011	10	REDONDO BEACH	0702	Bass, barred sand	22
2011	10	MARINA DEL REY	0702	Hagfishes	
2011	10	REDONDO BEACH	0702	Halfmoon	2
2011	10	SAN PEDRO	0702	Halfmoon	201
2011	10	MARINA DEL REY	0702	Blacksmith	15
2011	10	MARINA DEL REY	0702	Whitefish, ocean	12
2011	10	SAN PEDRO	0702	Whitefish, ocean	50
2011	10	MARINA DEL REY	0702	Rockfish, copper	45
2011	10	MARINA DEL REY	0702	Rockfish, blue	2
2011	10	SAN PEDRO	0702	Rockfish, blue	60
2011	10	MARINA DEL REY	0702	Squid, jumbo	1
2011	10	REDONDO BEACH	0702	Crab, rock unspecified	1
2011	10	REDONDO BEACH	0702	Lobster, California spiny	39
2011	10	MARINA DEL REY	0703	Sheephead, California	2
2011	10	MARINA DEL REY	0703	Lingcod	5
2011	10	MARINA DEL REY	0703	Sanddab	60
2011	10	MARINA DEL REY	0703	Rockfish, unspecified	260
2011	10	MARINA DEL REY	0703	Rockfish, bocaccio	76
2011	10	MARINA DEL REY	0703	Scorpionfish, California	7
2011	10	MARINA DEL REY	0703	Cabezon	
2011	10	MARINA DEL REY	0703	Bass, barred sand	1
2011	10	MARINA DEL REY	0703	Whitefish, ocean	1
2011	10	MARINA DEL REY	0703	Rockfish, copper	15
2011	10	REDONDO BEACH	0703	Lobster, California spiny	15
2011	10	LONG BEACH	0720	Tuna, yellowfin	1
2011	10	MARINA DEL REY	0720	Bonito, Pacific	1
2011	10	REDONDO BEACH	0720	Bonito, Pacific	6
2011	10	SAN PEDRO	0720	Mackerel, Pacific	1
2011	10	SAN PEDRO	0720	Mackerel, jack	21
2011	10	REDONDO BEACH	0720	Barracuda, California	
2011	10	MARINA DEL REY	0720	Sheephead, California	2
2011	10	LONG BEACH	0720	Sheephead, California	8
2011	10	REDONDO BEACH	0720	Sheephead, California	20
2011	10	SAN PEDRO	0720	Sheephead, California	47
2011	10	REDONDO BEACH	0720	Shark, horn	
2011	10	REDONDO BEACH	0720	Guitarfish, shovelnose	
2011	10	LONG BEACH	0720	Lingcod	3
2011	10	MARINA DEL REY	0720	Lingcod	22
2011	10	SAN PEDRO	0720	Lingcod	48
2011	10	REDONDO BEACH	0720	Lingcod	56
2011	10	REDONDO BEACH	0720	Sole, unspecified	3

Year	Month	Port Name	Block	Species	Kept
2011	10	REDONDO BEACH	0720	Sanddab	4
2011	10	SAN PEDRO	0720	Sanddab	6
2011	10	MARINA DEL REY	0720	Sanddab	46
2011	10	LONG BEACH	0720	Rockfish, unspecified	7
2011	10	MARINA DEL REY	0720	Rockfish, unspecified	295
2011	10	SAN PEDRO	0720	Rockfish, unspecified	761
2011	10	REDONDO BEACH	0720	Rockfish, unspecified	3392
2011	10	REDONDO BEACH	0720	Rockfish, bocaccio	25
2011	10	MARINA DEL REY	0720	Rockfish, bocaccio	87
2011	10	SAN PEDRO	0720	Rockfish, bocaccio	412
2011	10	LONG BEACH	0720	Rockfish, bocaccio	
2011	10	LONG BEACH	0720	Scorpionfish, California	1
2011	10	SAN PEDRO	0720	Scorpionfish, California	16
2011	10	MARINA DEL REY	0720	Scorpionfish, California	40
2011	10	REDONDO BEACH	0720	Scorpionfish, California	358
2011	10	REDONDO BEACH	0720	Cabezon	4
2011	10	SAN PEDRO	0720	Cabezon	
2011	10	MARINA DEL REY	0720	Rockfish, gopher	3
2011	10	SAN PEDRO	0720	Bass, kelp	46
2011	10	REDONDO BEACH	0720	Bass, kelp	50
2011	10	LONG BEACH	0720	Bass, kelp	56
2011	10	SAN PEDRO	0720	Bass, barred sand	4
2011	10	REDONDO BEACH	0720	Bass, barred sand	26
2011	10	REDONDO BEACH	0720	Bass, giant sea	
2011	10	LONG BEACH	0720	Seabass, white	1
2011	10	REDONDO BEACH	0720	Lizardfish, California	
2011	10	REDONDO BEACH	0720	Perch-like, unspecified	15
2011	10	REDONDO BEACH	0720	Opaleye	1
2011	10	SAN PEDRO	0720	Opaleye	8
2011	10	SAN PEDRO	0720	Halfmoon	86
2011	10	REDONDO BEACH	0720	Halfmoon	101
2011	10	SAN PEDRO	0720	Blacksmith	10
2011	10	SAN PEDRO	0720	Sargo	9
2011	10	REDONDO BEACH	0720	Sargo	20
2011	10	MARINA DEL REY	0720	Whitefish, ocean	1
2011	10	LONG BEACH	0720	Whitefish, ocean	4
2011	10	REDONDO BEACH	0720	Whitefish, ocean	76
2011	10	SAN PEDRO	0720	Whitefish, ocean	101
2011	10	MARINA DEL REY	0720	Rockfish, copper	5
2011	10	LONG BEACH	0720	Rockfish, blue	3
2011	10	SAN PEDRO	0720	Rockfish, blue	7
2011	10	REDONDO BEACH	0720	Crab, rock unspecified	36
2011	10	REDONDO BEACH	0720	Crab, spider	2
2011	10	REDONDO BEACH	0720	Lobster, California spiny	211
2011	10	SAN PEDRO	0720	Rockfish, group red	428
2011	11	MARINA DEL REY	0680	Mackerel, Pacific	7
2011	11	MARINA DEL REY	0680	Sheephead, California	34
2011	11	MARINA DEL REY	0680	Lingcod	13
2011	11	MARINA DEL REY	0680	Sole, unspecified	1
2011	11	MARINA DEL REY	0680	Sanddab	72
2011	11	MARINA DEL REY	0680	Rockfish, unspecified	968
2011	11	MARINA DEL REY	0680	Rockfish, bocaccio	175
2011	11	MARINA DEL REY	0680	Scorpionfish, California	6
2011	11	MARINA DEL REY	0680	Cabezon	
2011	11	MARINA DEL REY	0680	Rockfish, gopher	9
2011	11	MARINA DEL REY	0680	Bass, kelp	8
2011	11	MARINA DEL REY	0680	Bass, barred sand	5
2011	11	MARINA DEL REY	0680	Blacksmith	
2011	11	MARINA DEL REY	0680	Sargo	9
2011	11	MARINA DEL REY	0680	Whitefish, ocean	31
2011	11	MARINA DEL REY	0680	Rockfish, copper	10
2011	11	MARINA DEL REY	0680	Rockfish, blue	3
2011	11	SAN PEDRO	0701	Mackerel, Pacific	4
2011	11	MARINA DEL REY	0701	Sheephead, California	22
2011	11	MARINA DEL REY	0701	Lingcod	79
2011	11	SAN PEDRO	0701	Halibut, California	1
2011	11	MARINA DEL REY	0701	Sanddab	50
2011	11	SAN PEDRO	0701	Rockfish, unspecified	6
2011	11	MARINA DEL REY	0701	Rockfish, unspecified	1426
2011	11	MARINA DEL REY	0701	Rockfish, bocaccio	475
2011	11	MARINA DEL REY	0701	Scorpionfish, California	3596

Year	Month	Port Name	Block	Species	Kept
2011	11	MARINA DEL REY	0701	Cabezon	1
2011	11	MARINA DEL REY	0701	Rockfish, gopher	5
2011	11	MARINA DEL REY	0701	Bass, kelp	87
2011	11	MARINA DEL REY	0701	Bass, barred sand	414
2011	11	MARINA DEL REY	0701	Whitefish, ocean	89
2011	11	MARINA DEL REY	0701	Rockfish, copper	72
2011	11	MARINA DEL REY	0702	Sheephead, California	15
2011	11	MARINA DEL REY	0702	Shark, spiny dogfish	1
2011	11	MARINA DEL REY	0702	Lingcod	30
2011	11	REDONDO BEACH	0702	Lingcod	
2011	11	MARINA DEL REY	0702	Cod, Pacific	30
2011	11	MARINA DEL REY	0702	Sole, unspecified	25
2011	11	MARINA DEL REY	0702	Sole, petrale	1
2011	11	MARINA DEL REY	0702	Sanddab	410
2011	11	REDONDO BEACH	0702	Sanddab	
2011	11	REDONDO BEACH	0702	Rockfish, unspecified	16
2011	11	MARINA DEL REY	0702	Rockfish, unspecified	1867
2011	11	REDONDO BEACH	0702	Rockfish, bocaccio	12
2011	11	MARINA DEL REY	0702	Rockfish, bocaccio	669
2011	11	REDONDO BEACH	0702	Scorpionfish, California	8
2011	11	MARINA DEL REY	0702	Scorpionfish, California	1343
2011	11	REDONDO BEACH	0702	Bass, barred sand	3
2011	11	MARINA DEL REY	0702	Bass, barred sand	9
2011	11	MARINA DEL REY	0702	Whitefish, ocean	122
2011	11	REDONDO BEACH	0702	Whitefish, ocean	
2011	11	MARINA DEL REY	0702	Surfperch, shiner	1
2011	11	MARINA DEL REY	0702	Rockfish, copper	79
2011	11	MARINA DEL REY	0703	Mackerel, Pacific	6
2011	11	MARINA DEL REY	0703	Lingcod	
2011	11	MARINA DEL REY	0703	Sole, unspecified	1
2011	11	MARINA DEL REY	0703	Sanddab	80
2011	11	MARINA DEL REY	0703	Rockfish, unspecified	126
2011	11	MARINA DEL REY	0703	Rockfish, bocaccio	42
2011	11	MARINA DEL REY	0703	Rockfish, gopher	2
2011	11	MARINA DEL REY	0703	Whitefish, ocean	1
2011	11	MARINA DEL REY	0703	Surfperch, rubberlip	2
2011	11	MARINA DEL REY	0703	Rockfish, copper	5
2011	11	SAN PEDRO	0720	Mackerel, Pacific	1
2011	11	SAN PEDRO	0720	Sheephead, California	8
2011	11	REDONDO BEACH	0720	Sheephead, California	19
2011	11	REDONDO BEACH	0720	Lingcod	17
2011	11	SAN PEDRO	0720	Lingcod	20
2011	11	REDONDO BEACH	0720	Halibut, California	1
2011	11	SAN PEDRO	0720	Halibut, California	3
2011	11	SAN PEDRO	0720	Rockfish, unspecified	659
2011	11	REDONDO BEACH	0720	Rockfish, unspecified	2858
2011	11	REDONDO BEACH	0720	Rockfish, bocaccio	2
2011	11	SAN PEDRO	0720	Rockfish, bocaccio	270
2011	11	REDONDO BEACH	0720	Scorpionfish, California	10
2011	11	SAN PEDRO	0720	Scorpionfish, California	12
2011	11	SAN PEDRO	0720	Bass, kelp	1
2011	11	REDONDO BEACH	0720	Bass, kelp	27
2011	11	SAN PEDRO	0720	Bass, barred sand	1
2011	11	REDONDO BEACH	0720	Bass, barred sand	18
2011	11	REDONDO BEACH	0720	Whitefish, ocean	8
2011	11	SAN PEDRO	0720	Whitefish, ocean	21
2011	11	SAN PEDRO	0720	Rockfish, blue	25
2011	11	REDONDO BEACH	0720	Crab, rock unspecified	50
2011	11	REDONDO BEACH	0720	Crab, spider	3
2011	11	REDONDO BEACH	0720	Lobster, California spiny	152
2011	11	SAN PEDRO	0720	Rockfish, group red	389
2011	12	MARINA DEL REY	0679	Sheephead, California	2
2011	12	MARINA DEL REY	0679	Rockfish, unspecified	55
2011	12	MARINA DEL REY	0679	Scorpionfish, California	16
2011	12	MARINA DEL REY	0679	Bass, kelp	15
2011	12	MARINA DEL REY	0679	Bass, barred sand	35
2011	12	MARINA DEL REY	0680	Lingcod	1
2011	12	MARINA DEL REY	0680	Rockfish, unspecified	30
2011	12	MARINA DEL REY	0680	Rockfish, bocaccio	6
2011	12	MARINA DEL REY	0680	Scorpionfish, California	1
2011	12	MARINA DEL REY	0680	Cabezon	

Year	Month	Port Name	Block	Species	Kept
2011	12	MARINA DEL REY	0680	Bass, barred sand	1
2011	12	MARINA DEL REY	0680	Rockfish, copper	1
2011	12	MARINA DEL REY	0701	Sheephead, California	71
2011	12	MARINA DEL REY	0701	Lingcod	60
2011	12	MARINA DEL REY	0701	Sole, unspecified	1
2011	12	MARINA DEL REY	0701	Sanddab	20
2011	12	MARINA DEL REY	0701	Rockfish, unspecified	2603
2011	12	MARINA DEL REY	0701	Rockfish, bocaccio	769
2011	12	MARINA DEL REY	0701	Scorpionfish, California	5490
2011	12	MARINA DEL REY	0701	Cabezon	5
2011	12	MARINA DEL REY	0701	Bass, kelp	42
2011	12	MARINA DEL REY	0701	Bass, barred sand	499
2011	12	MARINA DEL REY	0701	Whitefish, ocean	68
2011	12	MARINA DEL REY	0701	Rockfish, copper	122
2011	12	MARINA DEL REY	0701	Rockfish, blue	49
2011	12	MARINA DEL REY	0702	Mackerel, Pacific	1
2011	12	MARINA DEL REY	0702	Sheephead, California	29
2011	12	MARINA DEL REY	0702	Wrasse, rock	
2011	12	MARINA DEL REY	0702	Shark, spiny dogfish	1
2011	12	MARINA DEL REY	0702	Shark, blue	
2011	12	MARINA DEL REY	0702	Ray, unspecified	
2011	12	MARINA DEL REY	0702	Lingcod	31
2011	12	MARINA DEL REY	0702	Sole, unspecified	5
2011	12	MARINA DEL REY	0702	Halibut, California	1
2011	12	MARINA DEL REY	0702	Sanddab	676
2011	12	REDONDO BEACH	0702	Rockfish, unspecified	20
2011	12	MARINA DEL REY	0702	Rockfish, unspecified	2026
2011	12	REDONDO BEACH	0702	Rockfish, bocaccio	8
2011	12	MARINA DEL REY	0702	Rockfish, bocaccio	661
2011	12	REDONDO BEACH	0702	Scorpionfish, California	5
2011	12	MARINA DEL REY	0702	Scorpionfish, California	830
2011	12	REDONDO BEACH	0702	Cabezon	1
2011	12	MARINA DEL REY	0702	Cabezon	
2011	12	MARINA DEL REY	0702	Bass, kelp	11
2011	12	REDONDO BEACH	0702	Bass, barred sand	11
2011	12	MARINA DEL REY	0702	Bass, barred sand	72
2011	12	MARINA DEL REY	0702	Lizardfish, California	2
2011	12	MARINA DEL REY	0702	Blacksmith	9
2011	12	MARINA DEL REY	0702	Whitefish, ocean	22
2011	12	MARINA DEL REY	0702	Rockfish, copper	43
2011	12	MARINA DEL REY	0702	Rockfish, blue	2
2011	12	REDONDO BEACH	0702	Crab, rock unspecified	167
2011	12	REDONDO BEACH	0702	Lobster, California spiny	87
2011	12	MARINA DEL REY	0703	Lingcod	3
2011	12	MARINA DEL REY	0703	Sanddab	245
2011	12	MARINA DEL REY	0703	Rockfish, unspecified	725
2011	12	MARINA DEL REY	0703	Rockfish, bocaccio	241
2011	12	MARINA DEL REY	0703	Scorpionfish, California	4
2011	12	MARINA DEL REY	0703	Whitefish, ocean	1
2011	12	MARINA DEL REY	0703	Rockfish, copper	6
2011	12	LONG BEACH	0720	Sheephead, California	1
2011	12	MARINA DEL REY	0720	Sheephead, California	4
2011	12	SAN PEDRO	0720	Sheephead, California	20
2011	12	REDONDO BEACH	0720	Sheephead, California	25
2011	12	SAN PEDRO	0720	Lingcod	4
2011	12	MARINA DEL REY	0720	Lingcod	8
2011	12	REDONDO BEACH	0720	Lingcod	14
2011	12	MARINA DEL REY	0720	Sanddab	30
2011	12	LONG BEACH	0720	Rockfish, unspecified	30
2011	12	SAN PEDRO	0720	Rockfish, unspecified	257
2011	12	MARINA DEL REY	0720	Rockfish, unspecified	280
2011	12	REDONDO BEACH	0720	Rockfish, unspecified	1921
2011	12	MARINA DEL REY	0720	Rockfish, bocaccio	120
2011	12	SAN PEDRO	0720	Rockfish, bocaccio	190
2011	12	REDONDO BEACH	0720	Scorpionfish, California	32
2011	12	SAN PEDRO	0720	Scorpionfish, California	200
2011	12	MARINA DEL REY	0720	Scorpionfish, California	256
2011	12	REDONDO BEACH	0720	Cabezon	1
2011	12	REDONDO BEACH	0720	Bass, kelp	
2011	12	REDONDO BEACH	0720	Bass, barred sand	16
2011	12	LONG BEACH	0720	Whitefish, ocean	4

Year	Month	Port Name	Block	Species	Kept
2011	12	SAN PEDRO	0720	Whitefish, ocean	17
2011	12	REDONDO BEACH	0720	Whitefish, ocean	113
2011	12	MARINA DEL REY	0720	Rockfish, copper	16
2011	12	REDONDO BEACH	0720	Crab, rock unspecified	149
2011	12	REDONDO BEACH	0720	Lobster, California spiny	73
2011	12	LONG BEACH	0720	Rockfish, group red	30
2011	12	REDONDO BEACH	0720	Rockfish, group red	355
2011	12	SAN PEDRO	0720	Rockfish, group red	364
2012	1	MARINA DEL REY	0679	Sheephead, California	
2012	1	MARINA DEL REY	0679	Sole, unspecified	1
2012	1	MARINA DEL REY	0679	Halibut, California	1
2012	1	MARINA DEL REY	0679	Sanddab	50
2012	1	MARINA DEL REY	0679	Rockfish, unspecified	
2012	1	MARINA DEL REY	0679	Scorpionfish, California	256
2012	1	MARINA DEL REY	0679	Cabezon	
2012	1	MARINA DEL REY	0679	Bass, kelp	94
2012	1	MARINA DEL REY	0679	Bass, barred sand	215
2012	1	SAN PEDRO	0680	Sheephead, California	7
2012	1	SAN PEDRO	0680	Bass, barred sand	1
2012	1	SAN PEDRO	0680	Lobster, California spiny	1
2012	1	MARINA DEL REY	0701	Mackerel, Pacific	30
2012	1	MARINA DEL REY	0701	Sheephead, California	
2012	1	MARINA DEL REY	0701	Shark, blue	
2012	1	MARINA DEL REY	0701	Skate, unspecified	
2012	1	MARINA DEL REY	0701	Lingcod	
2012	1	MARINA DEL REY	0701	Sole, unspecified	4
2012	1	MARINA DEL REY	0701	Sole, rock	1
2012	1	MARINA DEL REY	0701	Halibut, California	7
2012	1	MARINA DEL REY	0701	Sanddab	1090
2012	1	MARINA DEL REY	0701	Rockfish, unspecified	1
2012	1	MARINA DEL REY	0701	Scorpionfish, California	5467
2012	1	MARINA DEL REY	0701	Cabezon	
2012	1	MARINA DEL REY	0701	Bass, kelp	324
2012	1	MARINA DEL REY	0701	Bass, barred sand	1570
2012	1	MARINA DEL REY	0701	Triggerfish	4
2012	1	MARINA DEL REY	0701	Opaleye	1
2012	1	MARINA DEL REY	0701	Halfmoon	2
2012	1	MARINA DEL REY	0701	Blacksmith	183
2012	1	REDONDO BEACH	0702	Mackerel, Pacific	18
2012	1	REDONDO BEACH	0702	Sheephead, California	3
2012	1	REDONDO BEACH	0702	Sanddab	97
2012	1	REDONDO BEACH	0702	Rockfish, unspecified	8
2012	1	REDONDO BEACH	0702	Scorpionfish, California	253
2012	1	REDONDO BEACH	0702	Cabezon	
2012	1	REDONDO BEACH	0702	Bass, kelp	21
2012	1	SANTA MONICA	0702	Bass, kelp	
2012	1	SANTA MONICA	0702	Bass, barred sand	13
2012	1	MARINA DEL REY	0702	Bass, barred sand	18
2012	1	REDONDO BEACH	0702	Bass, barred sand	130
2012	1	REDONDO BEACH	0702	Halfmoon	80
2012	1	REDONDO BEACH	0702	Whitefish, ocean	
2012	1	REDONDO BEACH	0702	Crab, Dungeness	2
2012	1	MARINA DEL REY	0702	Crab, rock unspecified	5
2012	1	SANTA MONICA	0702	Crab, rock unspecified	42
2012	1	REDONDO BEACH	0702	Crab, rock unspecified	236
2012	1	SANTA MONICA	0702	Crab, spider	1
2012	1	REDONDO BEACH	0702	Crab, spider	43
2012	1	MARINA DEL REY	0702	Lobster, California spiny	7
2012	1	SANTA MONICA	0702	Lobster, California spiny	10
2012	1	REDONDO BEACH	0702	Lobster, California spiny	62
2012	1	REDONDO BEACH	0720	Sole, unspecified	1
2012	1	REDONDO BEACH	0720	Scorpionfish, California	68
2012	1	SAN PEDRO	0720	Scorpionfish, California	141
2012	1	SAN PEDRO	0720	Cabezon	
2012	1	REDONDO BEACH	0720	Bass, kelp	23
2012	1	SAN PEDRO	0720	Bass, kelp	56
2012	1	SANTA MONICA	0720	Bass, barred sand	8
2012	1	REDONDO BEACH	0720	Bass, barred sand	78
2012	1	SAN PEDRO	0720	Bass, barred sand	258
2012	1	SAN PEDRO	0720	Triggerfish	1
2012	1	SAN PEDRO	0720	Halfmoon	6

Year	Month	Port Name	Block	Species	Kept
2012	1	REDONDO BEACH	0720	Blacksmith	44
2012	1	LONG BEACH	0720	Scallop, rock	1
2012	1	REDONDO BEACH	0720	Crab, rock unspecified	11
2012	1	SANTA MONICA	0720	Crab, rock unspecified	23
2012	1	REDONDO BEACH	0720	Crab, spider	2
2012	1	SANTA MONICA	0720	Lobster, California spiny	11
2012	1	REDONDO BEACH	0720	Lobster, California spiny	12
2012	2	MARINA DEL REY	0679	Sheephead, California	
2012	2	MARINA DEL REY	0679	Sanddab	38
2012	2	MARINA DEL REY	0679	Rockfish, unspecified	
2012	2	MARINA DEL REY	0679	Scorpionfish, California	265
2012	2	MARINA DEL REY	0679	Cabezon	
2012	2	MARINA DEL REY	0679	Bass, kelp	13
2012	2	MARINA DEL REY	0679	Bass, barred sand	69
2012	2	MARINA DEL REY	0679	Triggerfish	2
2012	2	MARINA DEL REY	0679	Surfperch, unspecified	1
2012	2	LONG BEACH	0701	Bonito, Pacific	10
2012	2	MARINA DEL REY	0701	Sole, unspecified	14
2012	2	MARINA DEL REY	0701	Halibut, California	7
2012	2	MARINA DEL REY	0701	Sanddab	50
2012	2	MARINA DEL REY	0701	Scorpionfish, California	4701
2012	2	MARINA DEL REY	0701	Cabezon	
2012	2	MARINA DEL REY	0701	Bass, kelp	165
2012	2	LONG BEACH	0701	Bass, kelp	
2012	2	MARINA DEL REY	0701	Bass, barred sand	578
2012	2	MARINA DEL REY	0701	Blacksmith	85
2012	2	MARINA DEL REY	0701	Surfperch, unspecified	3
2012	2	REDONDO BEACH	0702	Mackerel, Pacific	40
2012	2	REDONDO BEACH	0702	Sheephead, California	
2012	2	REDONDO BEACH	0702	Shark, thresher	1
2012	2	REDONDO BEACH	0702	Sole, unspecified	3
2012	2	REDONDO BEACH	0702	Sanddab	18
2012	2	REDONDO BEACH	0702	Rockfish, unspecified	
2012	2	REDONDO BEACH	0702	Scorpionfish, California	549
2012	2	REDONDO BEACH	0702	Cabezon	
2012	2	MARINA DEL REY	0702	Bass, kelp	1
2012	2	REDONDO BEACH	0702	Bass, kelp	33
2012	2	MARINA DEL REY	0702	Bass, barred sand	5
2012	2	REDONDO BEACH	0702	Bass, barred sand	204
2012	2	REDONDO BEACH	0702	Halfmoon	1
2012	2	REDONDO BEACH	0702	Whitefish, ocean	
2012	2	REDONDO BEACH	0702	Surfperch, unspecified	8
2012	2	REDONDO BEACH	0702	Surfperch, black	1
2012	2	REDONDO BEACH	0702	Rockfish, copper	
2012	2	MARINA DEL REY	0702	Crab, rock unspecified	2
2012	2	REDONDO BEACH	0702	Crab, rock unspecified	160
2012	2	REDONDO BEACH	0702	Crab, spider	6
2012	2	MARINA DEL REY	0702	Lobster, California spiny	12
2012	2	REDONDO BEACH	0702	Lobster, California spiny	20
2012	2	REDONDO BEACH	0720	Sheephead, California	
2012	2	MARINA DEL REY	0720	Lingcod	
2012	2	REDONDO BEACH	0720	Sole, unspecified	1
2012	2	REDONDO BEACH	0720	Sanddab	8
2012	2	SAN PEDRO	0720	Scorpionfish, California	7
2012	2	REDONDO BEACH	0720	Scorpionfish, California	193
2012	2	REDONDO BEACH	0720	Cabezon	
2012	2	REDONDO BEACH	0720	Bass, kelp	18
2012	2	MARINA DEL REY	0720	Bass, barred sand	2
2012	2	REDONDO BEACH	0720	Bass, barred sand	65
2012	2	REDONDO BEACH	0720	Perch-like, unspecified	15
2012	2	REDONDO BEACH	0720	Whitefish, ocean	
2012	2	REDONDO BEACH	0720	Crab, spider	4
2012	2	REDONDO BEACH	0720	Lobster, California spiny	13
2012	2	MARINA DEL REY	0720	Lobster, California spiny	14
2012	3	MARINA DEL REY	0679	Lingcod	
2012	3	MARINA DEL REY	0679	Sanddab	110
2012	3	MARINA DEL REY	0679	Rockfish, unspecified	110
2012	3	MARINA DEL REY	0679	Rockfish, bocaccio	32
2012	3	MARINA DEL REY	0679	Scorpionfish, California	31
2012	3	MARINA DEL REY	0679	Rockfish, copper	3
2012	3	MARINA DEL REY	0701	Sheephead, California	4

Year	Month	Port Name	Block	Species	Kept
2012	3	MARINA DEL REY	0701	Shark, thresher	1
2012	3	REDONDO BEACH	0701	Lingcod	3
2012	3	MARINA DEL REY	0701	Lingcod	27
2012	3	MARINA DEL REY	0701	Sole, unspecified	2
2012	3	REDONDO BEACH	0701	Sanddab	45
2012	3	MARINA DEL REY	0701	Sanddab	125
2012	3	REDONDO BEACH	0701	Rockfish, unspecified	217
2012	3	MARINA DEL REY	0701	Rockfish, unspecified	3896
2012	3	MARINA DEL REY	0701	Rockfish, bocaccio	1937
2012	3	REDONDO BEACH	0701	Scorpionfish, California	3
2012	3	MARINA DEL REY	0701	Scorpionfish, California	1733
2012	3	MARINA DEL REY	0701	Cabezon	1
2012	3	MARINA DEL REY	0701	Bass, kelp	21
2012	3	MARINA DEL REY	0701	Bass, barred sand	261
2012	3	REDONDO BEACH	0701	Whitefish, ocean	1
2012	3	MARINA DEL REY	0701	Whitefish, ocean	7
2012	3	MARINA DEL REY	0701	Rockfish, copper	109
2012	3	REDONDO BEACH	0702	Mackerel, Pacific	60
2012	3	REDONDO BEACH	0702	Sheephead, California	2
2012	3	MARINA DEL REY	0702	Sheephead, California	4
2012	3	SAN PEDRO	0702	Sheephead, California	14
2012	3	REDONDO BEACH	0702	Shark, thresher	1
2012	3	MARINA DEL REY	0702	Lingcod	5
2012	3	REDONDO BEACH	0702	Lingcod	12
2012	3	MARINA DEL REY	0702	Sole, unspecified	1
2012	3	MARINA DEL REY	0702	Sole, petrale	3
2012	3	REDONDO BEACH	0702	Sanddab	331
2012	3	MARINA DEL REY	0702	Sanddab	448
2012	3	SAN PEDRO	0702	Rockfish, unspecified	93
2012	3	REDONDO BEACH	0702	Rockfish, unspecified	990
2012	3	MARINA DEL REY	0702	Rockfish, unspecified	1862
2012	3	SAN PEDRO	0702	Rockfish, bocaccio	62
2012	3	REDONDO BEACH	0702	Rockfish, bocaccio	328
2012	3	MARINA DEL REY	0702	Rockfish, bocaccio	561
2012	3	REDONDO BEACH	0702	Scorpionfish, California	16
2012	3	MARINA DEL REY	0702	Scorpionfish, California	506
2012	3	MARINA DEL REY	0702	Rockfish, gopher	3
2012	3	MARINA DEL REY	0702	Rockfish, widow	1
2012	3	SAN PEDRO	0702	Bass, kelp	1
2012	3	MARINA DEL REY	0702	Bass, barred sand	6
2012	3	REDONDO BEACH	0702	Bass, barred sand	39
2012	3	MARINA DEL REY	0702	Eel	1
2012	3	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	1
2012	3	REDONDO BEACH	0702	Eel, wolf (wolf-eel)	2
2012	3	SAN PEDRO	0702	Halfmoon	55
2012	3	SAN PEDRO	0702	Whitefish, ocean	10
2012	3	MARINA DEL REY	0702	Whitefish, ocean	44
2012	3	MARINA DEL REY	0702	Rockfish, copper	45
2012	3	MARINA DEL REY	0702	Crab, rock unspecified	15
2012	3	REDONDO BEACH	0702	Crab, rock unspecified	18
2012	3	REDONDO BEACH	0702	Crab, spider	2
2012	3	MARINA DEL REY	0702	Lobster, California spiny	1
2012	3	REDONDO BEACH	0702	Lobster, California spiny	34
2012	3	MARINA DEL REY	0703	Lingcod	1
2012	3	MARINA DEL REY	0703	Sanddab	255
2012	3	MARINA DEL REY	0703	Rockfish, unspecified	585
2012	3	MARINA DEL REY	0703	Rockfish, bocaccio	202
2012	3	MARINA DEL REY	0703	Scorpionfish, California	2
2012	3	MARINA DEL REY	0703	Rockfish, widow	10
2012	3	MARINA DEL REY	0703	Whitefish, ocean	1
2012	3	MARINA DEL REY	0703	Rockfish, copper	26
2012	3	REDONDO BEACH	0720	Sheephead, California	1
2012	3	SAN PEDRO	0720	Sheephead, California	8
2012	3	REDONDO BEACH	0720	Shark, leopard	1
2012	3	REDONDO BEACH	0720	Shark, horn	
2012	3	REDONDO BEACH	0720	Ray, bat	
2012	3	REDONDO BEACH	0720	Guitarfish, shovelnose	
2012	3	MARINA DEL REY	0720	Lingcod	1
2012	3	REDONDO BEACH	0720	Lingcod	2
2012	3	SAN PEDRO	0720	Lingcod	2
2012	3	MARINA DEL REY	0720	Sole, unspecified	2

Year	Month	Port Name	Block	Species	Kept
2012	3	MARINA DEL REY	0720	Sanddab	40
2012	3	REDONDO BEACH	0720	Sanddab	70
2012	3	MARINA DEL REY	0720	Rockfish, unspecified	391
2012	3	SAN PEDRO	0720	Rockfish, unspecified	527
2012	3	REDONDO BEACH	0720	Rockfish, unspecified	920
2012	3	REDONDO BEACH	0720	Rockfish, bocaccio	18
2012	3	MARINA DEL REY	0720	Rockfish, bocaccio	186
2012	3	SAN PEDRO	0720	Rockfish, bocaccio	253
2012	3	SAN PEDRO	0720	Scorpionfish, California	8
2012	3	REDONDO BEACH	0720	Scorpionfish, California	76
2012	3	MARINA DEL REY	0720	Scorpionfish, California	180
2012	3	REDONDO BEACH	0720	Cabezon	1
2012	3	SAN PEDRO	0720	Cabezon	1
2012	3	MARINA DEL REY	0720	Whitefish, ocean	1
2012	3	REDONDO BEACH	0720	Whitefish, ocean	5
2012	3	SAN PEDRO	0720	Whitefish, ocean	7
2012	3	MARINA DEL REY	0720	Rockfish, copper	7
2012	3	MARINA DEL REY	0720	Rockfish, blue	10
2012	3	REDONDO BEACH	0720	Crab, spider	2
2012	3	REDONDO BEACH	0720	Lobster, California spiny	60
2012	3	SAN PEDRO	0720	Rockfish, group red	284
2012	4	MARINA DEL REY	0679	Rockfish, unspecified	1
2012	4	MARINA DEL REY	0679	Scorpionfish, California	1
2012	4	MARINA DEL REY	0679	Cabezon	1
2012	4	MARINA DEL REY	0679	Bass, barred sand	10
2012	4	MARINA DEL REY	0679	Crab, rock unspecified	
2012	4	MARINA DEL REY	0680	Lingcod	5
2012	4	MARINA DEL REY	0680	Sanddab	165
2012	4	MARINA DEL REY	0680	Rockfish, unspecified	450
2012	4	MARINA DEL REY	0680	Rockfish, bocaccio	132
2012	4	MARINA DEL REY	0680	Scorpionfish, California	1
2012	4	MARINA DEL REY	0680	Eel, wolf (wolf-eel)	2
2012	4	MARINA DEL REY	0680	Whitefish, ocean	1
2012	4	MARINA DEL REY	0680	Rockfish, copper	3
2012	4	MARINA DEL REY	0701	Lingcod	26
2012	4	MARINA DEL REY	0701	Sanddab	276
2012	4	MARINA DEL REY	0701	Rockfish, cowcod	5
2012	4	MARINA DEL REY	0701	Rockfish, unspecified	3415
2012	4	MARINA DEL REY	0701	Rockfish, bocaccio	1205
2012	4	MARINA DEL REY	0701	Scorpionfish, California	1480
2012	4	MARINA DEL REY	0701	Cabezon	2
2012	4	MARINA DEL REY	0701	Bass, kelp	3
2012	4	MARINA DEL REY	0701	Bass, barred sand	76
2012	4	MARINA DEL REY	0701	Whitefish, ocean	16
2012	4	MARINA DEL REY	0701	Rockfish, copper	20
2012	4	REDONDO BEACH	0702	Sheephead, California	1
2012	4	MARINA DEL REY	0702	Ratfish, spotted	
2012	4	REDONDO BEACH	0702	Lingcod	3
2012	4	MARINA DEL REY	0702	Lingcod	5
2012	4	MARINA DEL REY	0702	Sole, unspecified	2
2012	4	REDONDO BEACH	0702	Sole, unspecified	25
2012	4	REDONDO BEACH	0702	Sanddab	777
2012	4	MARINA DEL REY	0702	Sanddab	1113
2012	4	REDONDO BEACH	0702	Rockfish, unspecified	1165
2012	4	MARINA DEL REY	0702	Rockfish, unspecified	3081
2012	4	REDONDO BEACH	0702	Rockfish, bocaccio	334
2012	4	MARINA DEL REY	0702	Rockfish, bocaccio	803
2012	4	REDONDO BEACH	0702	Scorpionfish, California	45
2012	4	MARINA DEL REY	0702	Scorpionfish, California	369
2012	4	REDONDO BEACH	0702	Cabezon	1
2012	4	MARINA DEL REY	0702	Rockfish, widow	2
2012	4	REDONDO BEACH	0702	Bass, kelp	1
2012	4	REDONDO BEACH	0702	Bass, barred sand	3
2012	4	MARINA DEL REY	0702	Bass, barred sand	10
2012	4	MARINA DEL REY	0702	Croaker, white	
2012	4	REDONDO BEACH	0702	Eel, wolf (wolf-eel)	1
2012	4	MARINA DEL REY	0702	Lizardfish, California	
2012	4	REDONDO BEACH	0702	Sargo	
2012	4	REDONDO BEACH	0702	Whitefish, ocean	1
2012	4	MARINA DEL REY	0702	Whitefish, ocean	2
2012	4	MARINA DEL REY	0702	Rockfish, copper	31

Year	Month	Port Name	Block	Species	Kept
2012	4	REDONDO BEACH	0702	Crab, rock unspecified	104
2012	4	MARINA DEL REY	0703	Lingcod	3
2012	4	MARINA DEL REY	0703	Sanddab	195
2012	4	MARINA DEL REY	0703	Rockfish, unspecified	1040
2012	4	MARINA DEL REY	0703	Rockfish, bocaccio	260
2012	4	MARINA DEL REY	0703	Scorpionfish, California	2
2012	4	MARINA DEL REY	0703	Whitefish, ocean	11
2012	4	MARINA DEL REY	0703	Rockfish, copper	25
2012	4	REDONDO BEACH	0720	Sheephead, California	1
2012	4	SAN PEDRO	0720	Sheephead, California	6
2012	4	SAN PEDRO	0720	Lingcod	2
2012	4	REDONDO BEACH	0720	Lingcod	10
2012	4	REDONDO BEACH	0720	Sanddab	117
2012	4	SAN PEDRO	0720	Rockfish, canary	18
2012	4	SAN PEDRO	0720	Rockfish, vermilion	28
2012	4	MARINA DEL REY	0720	Rockfish, unspecified	12
2012	4	SAN PEDRO	0720	Rockfish, unspecified	287
2012	4	REDONDO BEACH	0720	Rockfish, unspecified	4787
2012	4	SAN PEDRO	0720	Rockfish, bocaccio	80
2012	4	REDONDO BEACH	0720	Rockfish, bocaccio	94
2012	4	SAN PEDRO	0720	Scorpionfish, California	1
2012	4	MARINA DEL REY	0720	Scorpionfish, California	5
2012	4	REDONDO BEACH	0720	Scorpionfish, California	176
2012	4	MARINA DEL REY	0720	Bass, barred sand	10
2012	4	REDONDO BEACH	0720	Salmon, Chinook	1
2012	4	REDONDO BEACH	0720	Whitefish, ocean	1
2012	4	SAN PEDRO	0720	Rockfish, group red	49
2012	4	SAN PEDRO	0721	Sheephead, California	1
2012	4	SAN PEDRO	0721	Lingcod	3
2012	4	SAN PEDRO	0721	Rockfish, vermilion	57
2012	4	SAN PEDRO	0721	Rockfish, unspecified	365
2012	4	SAN PEDRO	0721	Rockfish, bocaccio	94
2012	4	SAN PEDRO	0721	Scorpionfish, California	3
2012	5	MARINA DEL REY	0679	Mackerel, Pacific	60
2012	5	MARINA DEL REY	0679	Barracuda, California	312
2012	5	MARINA DEL REY	0679	Sheephead, California	1
2012	5	MARINA DEL REY	0679	Jacksmelt	
2012	5	MARINA DEL REY	0679	Lingcod	
2012	5	MARINA DEL REY	0679	Halibut, California	2
2012	5	MARINA DEL REY	0679	Sanddab	90
2012	5	MARINA DEL REY	0679	Rockfish, unspecified	182
2012	5	MARINA DEL REY	0679	Rockfish, bocaccio	130
2012	5	MARINA DEL REY	0679	Scorpionfish, California	
2012	5	MARINA DEL REY	0679	Cabezon	
2012	5	MARINA DEL REY	0679	Bass, kelp	59
2012	5	MARINA DEL REY	0679	Bass, barred sand	21
2012	5	MARINA DEL REY	0679	Lizardfish, California	
2012	5	MARINA DEL REY	0679	Rockfish, copper	2
2012	5	MARINA DEL REY	0680	Sanddab	22
2012	5	MARINA DEL REY	0680	Rockfish, unspecified	110
2012	5	MARINA DEL REY	0680	Rockfish, bocaccio	60
2012	5	MARINA DEL REY	0680	Bass, barred sand	1
2012	5	MARINA DEL REY	0680	Whitefish, ocean	1
2012	5	MARINA DEL REY	0680	Rockfish, copper	2
2012	5	MARINA DEL REY	0701	Mackerel, Pacific	10
2012	5	SAN PEDRO	0701	Barracuda, California	24
2012	5	LONG BEACH	0701	Barracuda, California	40
2012	5	MARINA DEL REY	0701	Barracuda, California	600
2012	5	SAN PEDRO	0701	Sheephead, California	1
2012	5	MARINA DEL REY	0701	Sheephead, California	10
2012	5	MARINA DEL REY	0701	Wrasse, rock	
2012	5	MARINA DEL REY	0701	Shark, spiny dogfish	
2012	5	SAN PEDRO	0701	Lingcod	1
2012	5	MARINA DEL REY	0701	Lingcod	26
2012	5	MARINA DEL REY	0701	Halibut, California	1
2012	5	MARINA DEL REY	0701	Sanddab	980
2012	5	SAN PEDRO	0701	Rockfish, unspecified	50
2012	5	MARINA DEL REY	0701	Rockfish, unspecified	4683
2012	5	MARINA DEL REY	0701	Rockfish, bocaccio	1247
2012	5	SAN PEDRO	0701	Scorpionfish, California	7
2012	5	MARINA DEL REY	0701	Scorpionfish, California	2454

Year	Month	Port Name	Block	Species	Kept
2012	5	MARINA DEL REY	0701	Cabezon	
2012	5	MARINA DEL REY	0701	Rockfish, gopher	2
2012	5	MARINA DEL REY	0701	Rockfish, widow	4
2012	5	SAN PEDRO	0701	Bass, kelp	17
2012	5	MARINA DEL REY	0701	Bass, kelp	181
2012	5	SAN PEDRO	0701	Bass, barred sand	1
2012	5	MARINA DEL REY	0701	Bass, barred sand	174
2012	5	MARINA DEL REY	0701	Blacksmith	56
2012	5	MARINA DEL REY	0701	Sargo	3
2012	5	SAN PEDRO	0701	Whitefish, ocean	2
2012	5	MARINA DEL REY	0701	Whitefish, ocean	13
2012	5	MARINA DEL REY	0701	Surfperch, unspecified	
2012	5	MARINA DEL REY	0701	Rockfish, copper	10
2012	5	MARINA DEL REY	0701	Rockfish, blue	11
2012	5	MARINA DEL REY	0702	Mackerel, Pacific	
2012	5	MARINA DEL REY	0702	Barracuda, California	6
2012	5	SAN PEDRO	0702	Barracuda, California	28
2012	5	MARINA DEL REY	0702	Sheephead, California	3
2012	5	MARINA DEL REY	0702	Shark, spiny dogfish	
2012	5	MARINA DEL REY	0702	Lingcod	11
2012	5	REDONDO BEACH	0702	Lingcod	25
2012	5	REDONDO BEACH	0702	Sole, unspecified	2
2012	5	MARINA DEL REY	0702	Sole, petrale	2
2012	5	MARINA DEL REY	0702	Sanddab	756
2012	5	SAN PEDRO	0702	Rockfish, unspecified	55
2012	5	REDONDO BEACH	0702	Rockfish, unspecified	957
2012	5	MARINA DEL REY	0702	Rockfish, unspecified	2989
2012	5	SAN PEDRO	0702	Rockfish, bocaccio	34
2012	5	REDONDO BEACH	0702	Rockfish, bocaccio	122
2012	5	MARINA DEL REY	0702	Rockfish, bocaccio	788
2012	5	REDONDO BEACH	0702	Scorpionfish, California	7
2012	5	MARINA DEL REY	0702	Scorpionfish, California	556
2012	5	MARINA DEL REY	0702	Cabezon	
2012	5	REDONDO BEACH	0702	Bass, kelp	1
2012	5	MARINA DEL REY	0702	Bass, kelp	7
2012	5	REDONDO BEACH	0702	Bass, barred sand	4
2012	5	MARINA DEL REY	0702	Bass, barred sand	4
2012	5	MARINA DEL REY	0702	Croaker, black	1
2012	5	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	1
2012	5	MARINA DEL REY	0702	Whitefish, ocean	22
2012	5	MARINA DEL REY	0702	Rockfish, copper	31
2012	5	REDONDO BEACH	0702	Crab, rock unspecified	149
2012	5	REDONDO BEACH	0702	Crab, spider	2
2012	5	SAN PEDRO	0702	Rockfish, group red	6
2012	5	REDONDO BEACH	0702		
2012	5	LONG BEACH	0720	Barracuda, California	22
2012	5	REDONDO BEACH	0720	Barracuda, California	230
2012	5	SAN PEDRO	0720	Sheephead, California	4
2012	5	LONG BEACH	0720	Lingcod	1
2012	5	REDONDO BEACH	0720	Lingcod	15
2012	5	SAN PEDRO	0720	Lingcod	17
2012	5	REDONDO BEACH	0720	Halibut, California	2
2012	5	LONG BEACH	0720	Sanddab	8
2012	5	LONG BEACH	0720	Rockfish, unspecified	100
2012	5	SAN PEDRO	0720	Rockfish, unspecified	235
2012	5	REDONDO BEACH	0720	Rockfish, unspecified	2830
2012	5	LONG BEACH	0720	Rockfish, bocaccio	67
2012	5	SAN PEDRO	0720	Rockfish, bocaccio	78
2012	5	SAN PEDRO	0720	Scorpionfish, California	2
2012	5	REDONDO BEACH	0720	Scorpionfish, California	67
2012	5	REDONDO BEACH	0720	Bass, kelp	4
2012	5	SAN PEDRO	0720	Bass, kelp	8
2012	5	REDONDO BEACH	0720	Bass, barred sand	7
2012	5	SAN PEDRO	0720	Whitefish, ocean	2
2012	5	REDONDO BEACH	0720	Whitefish, ocean	4
2012	5	SAN PEDRO	0720	Rockfish, group red	76
2012	5	SAN PEDRO	0721	Rockfish, unspecified	27
2012	5	SAN PEDRO	0721	Rockfish, bocaccio	16
2012	5	SAN PEDRO	0721	Scorpionfish, California	4
2012	5	SAN PEDRO	0721	Whitefish, ocean	1
2012	5	SAN PEDRO	0721	Rockfish, group red	42

Year	Month	Port Name	Block	Species	Kept
2012	6	MARINA DEL REY	0679	Lingcod	
2012	6	SAN PEDRO	0679	Rockfish, unspecified	7
2012	6	MARINA DEL REY	0679	Rockfish, unspecified	34
2012	6	SAN PEDRO	0679	Scorpionfish, California	1
2012	6	MARINA DEL REY	0679	Scorpionfish, California	6
2012	6	MARINA DEL REY	0679	Cabezon	
2012	6	SAN PEDRO	0679	Bass, kelp	3
2012	6	MARINA DEL REY	0679	Bass, kelp	35
2012	6	SAN PEDRO	0679	Bass, barred sand	1
2012	6	MARINA DEL REY	0679	Bass, barred sand	72
2012	6	SAN PEDRO	0679	Perch-like, unspecified	50
2012	6	MARINA DEL REY	0680	Mackerel, Pacific	
2012	6	MARINA DEL REY	0680	Barracuda, California	14
2012	6	REDONDO BEACH	0680	Sheephead, California	4
2012	6	MARINA DEL REY	0680	Sheephead, California	28
2012	6	MARINA DEL REY	0680	Shark, soupfin	3
2012	6	REDONDO BEACH	0680	Lingcod	3
2012	6	MARINA DEL REY	0680	Lingcod	12
2012	6	MARINA DEL REY	0680	Sole, unspecified	1
2012	6	MARINA DEL REY	0680	Halibut, California	3
2012	6	MARINA DEL REY	0680	Sanddab	115
2012	6	REDONDO BEACH	0680	Rockfish, unspecified	36
2012	6	MARINA DEL REY	0680	Rockfish, unspecified	1207
2012	6	MARINA DEL REY	0680	Rockfish, bocaccio	278
2012	6	MARINA DEL REY	0680	Scorpionfish, California	4
2012	6	MARINA DEL REY	0680	Cabezon	
2012	6	MARINA DEL REY	0680	Rockfish, gopher	307
2012	6	REDONDO BEACH	0680	Bass, kelp	67
2012	6	MARINA DEL REY	0680	Bass, kelp	1246
2012	6	REDONDO BEACH	0680	Bass, barred sand	3
2012	6	MARINA DEL REY	0680	Bass, barred sand	15
2012	6	MARINA DEL REY	0680	Seabass, white	1
2012	6	MARINA DEL REY	0680	Whitefish, ocean	3
2012	6	MARINA DEL REY	0680	Rockfish, copper	61
2012	6	MARINA DEL REY	0701	Mackerel, Pacific	10
2012	6	OCEANSIDE	0701	Barracuda, California	1
2012	6	MARINA DEL REY	0701	Barracuda, California	50
2012	6	HUNTINGTON BEACH	0701	Barracuda, California	
2012	6	HUNTINGTON BEACH	0701	Sheephead, California	1
2012	6	MARINA DEL REY	0701	Sheephead, California	12
2012	6	OCEANSIDE	0701	Sheephead, California	14
2012	6	MARINA DEL REY	0701	Lingcod	76
2012	6	MARINA DEL REY	0701	Halibut, California	9
2012	6	MARINA DEL REY	0701	Sanddab	808
2012	6	OCEANSIDE	0701	Rockfish, unspecified	35
2012	6	MARINA DEL REY	0701	Rockfish, unspecified	4213
2012	6	HUNTINGTON BEACH	0701	Rockfish, unspecified	
2012	6	MARINA DEL REY	0701	Rockfish, bocaccio	2019
2012	6	OCEANSIDE	0701	Scorpionfish, California	2
2012	6	MARINA DEL REY	0701	Scorpionfish, California	2244
2012	6	MARINA DEL REY	0701	Cabezon	12
2012	6	MARINA DEL REY	0701	Rockfish, gopher	4
2012	6	MARINA DEL REY	0701	Rockfish, widow	5
2012	6	OCEANSIDE	0701	Bass, kelp	33
2012	6	HUNTINGTON BEACH	0701	Bass, kelp	42
2012	6	MARINA DEL REY	0701	Bass, kelp	208
2012	6	HUNTINGTON BEACH	0701	Bass, barred sand	9
2012	6	OCEANSIDE	0701	Bass, barred sand	18
2012	6	MARINA DEL REY	0701	Bass, barred sand	686
2012	6	MARINA DEL REY	0701	Seabass, white	11
2012	6	MARINA DEL REY	0701	Blacksmith	20
2012	6	OCEANSIDE	0701	Whitefish, ocean	1
2012	6	MARINA DEL REY	0701	Whitefish, ocean	3
2012	6	MARINA DEL REY	0701	Rockfish, copper	23
2012	6	MARINA DEL REY	0701	Rockfish, blue	1
2012	6	MARINA DEL REY	0701		
2012	6	REDONDO BEACH	0702	Bonito, Pacific	1
2012	6	MARINA DEL REY	0702	Mackerel, Pacific	1
2012	6	REDONDO BEACH	0702	Barracuda, California	22
2012	6	REDONDO BEACH	0702	Sheephead, California	11
2012	6	MARINA DEL REY	0702	Sheephead, California	32

Year	Month	Port Name	Block	Species	Kept
2012	6	MARINA DEL REY	0702	Shark, spiny dogfish	
2012	6	REDONDO BEACH	0702	Lingcod	17
2012	6	MARINA DEL REY	0702	Lingcod	22
2012	6	MARINA DEL REY	0702	Sole, unspecified	2
2012	6	MARINA DEL REY	0702	Sole, petrale	1
2012	6	MARINA DEL REY	0702	Halibut, California	2
2012	6	REDONDO BEACH	0702	Halibut, California	4
2012	6	REDONDO BEACH	0702	Sanddab	78
2012	6	MARINA DEL REY	0702	Sanddab	479
2012	6	REDONDO BEACH	0702	Rockfish, unspecified	491
2012	6	MARINA DEL REY	0702	Rockfish, unspecified	2026
2012	6	REDONDO BEACH	0702	Rockfish, bocaccio	103
2012	6	MARINA DEL REY	0702	Rockfish, bocaccio	923
2012	6	REDONDO BEACH	0702	Scorpionfish, California	16
2012	6	MARINA DEL REY	0702	Scorpionfish, California	675
2012	6	REDONDO BEACH	0702	Cabezon	2
2012	6	MARINA DEL REY	0702	Cabezon	
2012	6	MARINA DEL REY	0702	Rockfish, widow	
2012	6	MARINA DEL REY	0702	Bass, kelp	34
2012	6	REDONDO BEACH	0702	Bass, kelp	83
2012	6	MARINA DEL REY	0702	Bass, barred sand	13
2012	6	REDONDO BEACH	0702	Bass, barred sand	65
2012	6	REDONDO BEACH	0702	Seabass, white	6
2012	6	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	2
2012	6	MARINA DEL REY	0702	Lizardfish, California	18
2012	6	MARINA DEL REY	0702	Perch-like, unspecified	30
2012	6	MARINA DEL REY	0702	Opaleye	1
2012	6	REDONDO BEACH	0702	Opaleye	2
2012	6	REDONDO BEACH	0702	Halfmoon	45
2012	6	MARINA DEL REY	0702	Blacksmith	2
2012	6	REDONDO BEACH	0702	Sargo	4
2012	6	MARINA DEL REY	0702	Whitefish, ocean	5
2012	6	MARINA DEL REY	0702	Rockfish, copper	25
2012	6	REDONDO BEACH	0702	Rockfish, blue	1
2012	6	MARINA DEL REY	0702	Rockfish, blue	3
2012	6	REDONDO BEACH	0702	Crab, rock unspecified	172
2012	6	REDONDO BEACH	0702	Crab, spider	2
2012	6	REDONDO BEACH	0720	Yellowtail	1
2012	6	REDONDO BEACH	0720	Mackerel, Pacific	3
2012	6	MARINA DEL REY	0720	Mackerel, Pacific	12
2012	6	REDONDO BEACH	0720	Mackerel, jack	5
2012	6	MARINA DEL REY	0720	Barracuda, California	8
2012	6	REDONDO BEACH	0720	Barracuda, California	54
2012	6	LONG BEACH	0720	Barracuda, California	
2012	6	LONG BEACH	0720	Sheephead, California	1
2012	6	REDONDO BEACH	0720	Sheephead, California	70
2012	6	MARINA DEL REY	0720	Sheephead, California	
2012	6	HUNTINGTON BEACH	0720	Shark, shortfin mako	1
2012	6	MARINA DEL REY	0720	Lingcod	4
2012	6	REDONDO BEACH	0720	Lingcod	18
2012	6	MARINA DEL REY	0720	Halibut, California	1
2012	6	REDONDO BEACH	0720	Halibut, California	42
2012	6	MARINA DEL REY	0720	Sanddab	15
2012	6	REDONDO BEACH	0720	Sanddab	83
2012	6	MARINA DEL REY	0720	Rockfish, unspecified	201
2012	6	REDONDO BEACH	0720	Rockfish, unspecified	2963
2012	6	REDONDO BEACH	0720	Rockfish, bocaccio	1
2012	6	MARINA DEL REY	0720	Rockfish, bocaccio	186
2012	6	REDONDO BEACH	0720	Scorpionfish, California	27
2012	6	MARINA DEL REY	0720	Scorpionfish, California	
2012	6	LONG BEACH	0720	Cabezon	1
2012	6	MARINA DEL REY	0720	Cabezon	3
2012	6	REDONDO BEACH	0720	Cabezon	16
2012	6	MARINA DEL REY	0720	Rockfish, gopher	32
2012	6	LONG BEACH	0720	Bass, kelp	15
2012	6	MARINA DEL REY	0720	Bass, kelp	206
2012	6	REDONDO BEACH	0720	Bass, kelp	520
2012	6	MARINA DEL REY	0720	Bass, barred sand	26
2012	6	REDONDO BEACH	0720	Bass, barred sand	613
2012	6	MARINA DEL REY	0720	Seabass, white	3
2012	6	REDONDO BEACH	0720	Seabass, white	11

Year	Month	Port Name	Block	Species	Kept
2012	6	REDONDO BEACH	0720	Opaleye	9
2012	6	REDONDO BEACH	0720	Halfmoon	32
2012	6	REDONDO BEACH	0720	Sargo	6
2012	6	REDONDO BEACH	0720	Whitefish, ocean	8
2012	6	REDONDO BEACH	0720	Surfperch, unspecified	6
2012	6	REDONDO BEACH	0720	Surfperch, rubberlip	2
2012	6	REDONDO BEACH	0720	Rockfish, copper	2
2012	6	MARINA DEL REY	0720	Rockfish, copper	5
2012	7	MARINA DEL REY	0679	Mackerel, Pacific	15
2012	7	MARINA DEL REY	0679	Barracuda, California	260
2012	7	MARINA DEL REY	0679	Sheephead, California	1
2012	7	MARINA DEL REY	0679	Ray, unspecified	
2012	7	MARINA DEL REY	0679	Lingcod	
2012	7	MARINA DEL REY	0679	Halibut, California	1
2012	7	MARINA DEL REY	0679	Sanddab	25
2012	7	MARINA DEL REY	0679	Rockfish, unspecified	180
2012	7	MARINA DEL REY	0679	Scorpionfish, California	5
2012	7	MARINA DEL REY	0679	Cabezon	
2012	7	MARINA DEL REY	0679	Bass, kelp	33
2012	7	MARINA DEL REY	0679	Bass, barred sand	60
2012	7	MARINA DEL REY	0679	Seabass, white	
2012	7	MARINA DEL REY	0679	Lizardfish, California	
2012	7	MARINA DEL REY	0679	Rockfish, copper	5
2012	7	MARINA DEL REY	0680	Mackerel, Pacific	5
2012	7	MARINA DEL REY	0680	Barracuda, California	29
2012	7	OXNARD	0680	Sheephead, California	3
2012	7	REDONDO BEACH	0680	Sheephead, California	3
2012	7	MARINA DEL REY	0680	Sheephead, California	18
2012	7	REDONDO BEACH	0680	Lingcod	2
2012	7	MARINA DEL REY	0680	Lingcod	6
2012	7	MARINA DEL REY	0680	Halibut, California	2
2012	7	MARINA DEL REY	0680	Sanddab	50
2012	7	REDONDO BEACH	0680	Rockfish, unspecified	49
2012	7	OXNARD	0680	Rockfish, unspecified	203
2012	7	MARINA DEL REY	0680	Rockfish, unspecified	758
2012	7	MARINA DEL REY	0680	Rockfish, bocaccio	65
2012	7	REDONDO BEACH	0680	Cabezon	
2012	7	MARINA DEL REY	0680	Cabezon	
2012	7	REDONDO BEACH	0680	Rockfish, gopher	11
2012	7	MARINA DEL REY	0680	Rockfish, gopher	37
2012	7	OXNARD	0680	Bass, kelp	24
2012	7	REDONDO BEACH	0680	Bass, kelp	43
2012	7	MARINA DEL REY	0680	Bass, kelp	848
2012	7	OXNARD	0680	Bass, barred sand	1
2012	7	REDONDO BEACH	0680	Bass, barred sand	1
2012	7	MARINA DEL REY	0680	Bass, barred sand	32
2012	7	MARINA DEL REY	0680	Seabass, white	
2012	7	REDONDO BEACH	0680	Surfperch, rubberlip	4
2012	7	REDONDO BEACH	0680	Rockfish, copper	2
2012	7	MARINA DEL REY	0680	Rockfish, copper	32
2012	7	MARINA DEL REY	0701	Mackerel, Pacific	109
2012	7	REDONDO BEACH	0701	Barracuda, California	11
2012	7	MARINA DEL REY	0701	Barracuda, California	2462
2012	7	REDONDO BEACH	0701	Sheephead, California	2
2012	7	MARINA DEL REY	0701	Sheephead, California	6
2012	7	MARINA DEL REY	0701	Shark, thresher	1
2012	7	MARINA DEL REY	0701	Ray, unspecified	
2012	7	REDONDO BEACH	0701	Lingcod	1
2012	7	MARINA DEL REY	0701	Lingcod	24
2012	7	MARINA DEL REY	0701	Sole, bigmouth	1
2012	7	MARINA DEL REY	0701	Halibut, California	12
2012	7	MARINA DEL REY	0701	Sanddab	893
2012	7	REDONDO BEACH	0701	Rockfish, unspecified	56
2012	7	MARINA DEL REY	0701	Rockfish, unspecified	3443
2012	7	MARINA DEL REY	0701	Rockfish, bocaccio	582
2012	7	MARINA DEL REY	0701	Scorpionfish, California	1080
2012	7	MARINA DEL REY	0701	Cabezon	2
2012	7	MARINA DEL REY	0701	Rockfish, gopher	
2012	7	MARINA DEL REY	0701	Rockfish, yelloweye	35
2012	7	REDONDO BEACH	0701	Bass, kelp	31
2012	7	MARINA DEL REY	0701	Bass, kelp	167

Year	Month	Port Name	Block	Species	Kept
2012	7	MARINA DEL REY	0701	Bass, barred sand	1173
2012	7	MARINA DEL REY	0701	Blacksmith	
2012	7	MARINA DEL REY	0701	Whitefish, ocean	6
2012	7	MARINA DEL REY	0701	Rockfish, copper	38
2012	7	MARINA DEL REY	0701	Rockfish, blue	5
2012	7	MARINA DEL REY	0701	Crab, rock unspecified	
2012	7	MARINA DEL REY	0701	Fish, unspecified	1
2012	7	MARINA DEL REY	0701		
2012	7	REDONDO BEACH	0702	Yellowtail	1
2012	7	MARINA DEL REY	0702	Mackerel, Pacific	2
2012	7	MARINA DEL REY	0702	Mackerel, jack	3
2012	7	REDONDO BEACH	0702	Mackerel, jack	60
2012	7	MARINA DEL REY	0702	Barracuda, California	91
2012	7	REDONDO BEACH	0702	Barracuda, California	990
2012	7	MARINA DEL REY	0702	Sheephead, California	4
2012	7	REDONDO BEACH	0702	Sheephead, California	5
2012	7	MARINA DEL REY	0702	Shark, shortfin mako	1
2012	7	MARINA DEL REY	0702	Shark, spiny dogfish	
2012	7	REDONDO BEACH	0702	Lingcod	13
2012	7	MARINA DEL REY	0702	Lingcod	16
2012	7	MARINA DEL REY	0702	Sole, unspecified	3
2012	7	MARINA DEL REY	0702	Sole, petrale	4
2012	7	MARINA DEL REY	0702	Halibut, California	3
2012	7	REDONDO BEACH	0702	Halibut, California	4
2012	7	REDONDO BEACH	0702	Sanddab	232
2012	7	MARINA DEL REY	0702	Sanddab	754
2012	7	REDONDO BEACH	0702	Rockfish, cowcod	
2012	7	REDONDO BEACH	0702	Rockfish, unspecified	735
2012	7	MARINA DEL REY	0702	Rockfish, unspecified	2320
2012	7	REDONDO BEACH	0702	Rockfish, bocaccio	101
2012	7	MARINA DEL REY	0702	Rockfish, bocaccio	884
2012	7	REDONDO BEACH	0702	Scorpionfish, California	19
2012	7	MARINA DEL REY	0702	Scorpionfish, California	781
2012	7	REDONDO BEACH	0702	Cabezon	3
2012	7	MARINA DEL REY	0702	Cabezon	
2012	7	MARINA DEL REY	0702	Rockfish, widow	19
2012	7	MARINA DEL REY	0702	Bass, kelp	4
2012	7	REDONDO BEACH	0702	Bass, kelp	73
2012	7	REDONDO BEACH	0702	Bass, barred sand	60
2012	7	MARINA DEL REY	0702	Bass, barred sand	84
2012	7	REDONDO BEACH	0702	Bass, giant sea	
2012	7	MARINA DEL REY	0702	Seabass, white	1
2012	7	REDONDO BEACH	0702	Eel, wolf (wolf-eel)	1
2012	7	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	1
2012	7	REDONDO BEACH	0702	Perch-like, unspecified	12
2012	7	REDONDO BEACH	0702	Halfmoon	14
2012	7	REDONDO BEACH	0702	Whitefish, ocean	23
2012	7	MARINA DEL REY	0702	Surfperch, shiner	1
2012	7	MARINA DEL REY	0702	Rockfish, copper	20
2012	7	MARINA DEL REY	0702	Rockfish, blue	5
2012	7	REDONDO BEACH	0702	Crab, rock unspecified	177
2012	7	REDONDO BEACH	0702	Crab, spider	6
2012	7	MARINA DEL REY	0702		
2012	7	SAN PEDRO	0720	Mackerel, Pacific	19
2012	7	SAN PEDRO	0720	Barracuda, California	18
2012	7	REDONDO BEACH	0720	Barracuda, California	1481
2012	7	REDONDO BEACH	0720	Sheephead, California	36
2012	7	HUNTINGTON BEACH	0720	Shark, shortfin mako	2
2012	7	REDONDO BEACH	0720	Lingcod	8
2012	7	SAN PEDRO	0720	Lingcod	
2012	7	REDONDO BEACH	0720	Sole, unspecified	2
2012	7	REDONDO BEACH	0720	Halibut, California	3
2012	7	REDONDO BEACH	0720	Sanddab	1
2012	7	MARINA DEL REY	0720	Rockfish, unspecified	40
2012	7	SAN PEDRO	0720	Rockfish, unspecified	232
2012	7	REDONDO BEACH	0720	Rockfish, unspecified	2078
2012	7	REDONDO BEACH	0720	Rockfish, bocaccio	7
2012	7	MARINA DEL REY	0720	Rockfish, bocaccio	64
2012	7	SAN PEDRO	0720	Rockfish, bocaccio	125
2012	7	MARINA DEL REY	0720	Scorpionfish, California	1
2012	7	REDONDO BEACH	0720	Scorpionfish, California	35

Year	Month	Port Name	Block	Species	Kept
2012	7	REDONDO BEACH	0720	Cabezon	1
2012	7	MARINA DEL REY	0720	Bass, kelp	12
2012	7	SAN PEDRO	0720	Bass, kelp	98
2012	7	REDONDO BEACH	0720	Bass, kelp	960
2012	7	MARINA DEL REY	0720	Bass, barred sand	1
2012	7	SAN PEDRO	0720	Bass, barred sand	4
2012	7	REDONDO BEACH	0720	Bass, barred sand	76
2012	7	REDONDO BEACH	0720	Seabass, white	6
2012	7	REDONDO BEACH	0720	Croaker, black	4
2012	7	REDONDO BEACH	0720	Opaleye	10
2012	7	REDONDO BEACH	0720	Halfmoon	130
2012	7	REDONDO BEACH	0720	Sargo	25
2012	7	REDONDO BEACH	0720	Whitefish, ocean	3
2012	7	SAN PEDRO	0720	Rockfish, group red	5
2012	7	REDONDO BEACH	0720		
2012	8	MARINA DEL REY	0679	Sheephead, California	1
2012	8	MARINA DEL REY	0679	Sole, rex	2
2012	8	MARINA DEL REY	0679	Halibut, California	1
2012	8	MARINA DEL REY	0679	Rockfish, unspecified	3
2012	8	MARINA DEL REY	0679	Cabezon	1
2012	8	MARINA DEL REY	0679	Bass, kelp	5
2012	8	MARINA DEL REY	0679	Bass, barred sand	12
2012	8	MARINA DEL REY	0679	Blacksmith	
2012	8	MARINA DEL REY	0701	Mackerel, Pacific	8
2012	8	MARINA DEL REY	0701	Mackerel, jack	1
2012	8	LONG BEACH	0701	Barracuda, California	226
2012	8	MARINA DEL REY	0701	Barracuda, California	637
2012	8	MARINA DEL REY	0701	Sheephead, California	15
2012	8	MARINA DEL REY	0701	Ray, unspecified	
2012	8	MARINA DEL REY	0701	Lingcod	69
2012	8	MARINA DEL REY	0701	Sole, rock	1
2012	8	MARINA DEL REY	0701	Halibut, California	4
2012	8	LONG BEACH	0701	Sanddab	15
2012	8	MARINA DEL REY	0701	Sanddab	526
2012	8	MARINA DEL REY	0701	Rockfish, unspecified	2448
2012	8	MARINA DEL REY	0701	Rockfish, bocaccio	925
2012	8	MARINA DEL REY	0701	Scorpionfish, California	1907
2012	8	MARINA DEL REY	0701	Rockfish, gopher	28
2012	8	MARINA DEL REY	0701	Bass, kelp	36
2012	8	LONG BEACH	0701	Bass, barred sand	15
2012	8	MARINA DEL REY	0701	Bass, barred sand	983
2012	8	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	
2012	8	MARINA DEL REY	0701	Lizardfish, California	24
2012	8	MARINA DEL REY	0701	Opaleye	1
2012	8	MARINA DEL REY	0701	Blacksmith	8
2012	8	MARINA DEL REY	0701	Whitefish, ocean	2
2012	8	MARINA DEL REY	0701	Surfperch, rubberlip	6
2012	8	MARINA DEL REY	0701	Rockfish, copper	30
2012	8	MARINA DEL REY	0701	Rockfish, blue	1
2012	8	REDONDO BEACH	0702	Mackerel, Pacific	95
2012	8	REDONDO BEACH	0702	Mackerel, jack	1
2012	8	MARINA DEL REY	0702	Barracuda, California	35
2012	8	REDONDO BEACH	0702	Barracuda, California	117
2012	8	LONG BEACH	0702	Barracuda, California	134
2012	8	MARINA DEL REY	0702	Sheephead, California	4
2012	8	REDONDO BEACH	0702	Sheephead, California	8
2012	8	MARINA DEL REY	0702	Shark, spiny dogfish	
2012	8	REDONDO BEACH	0702	Shark, leopard	4
2012	8	REDONDO BEACH	0702	Ray, bat	
2012	8	MARINA DEL REY	0702	Smelt, surf	
2012	8	REDONDO BEACH	0702	Lingcod	2
2012	8	MARINA DEL REY	0702	Lingcod	39
2012	8	MARINA DEL REY	0702	Sole, petrale	1
2012	8	REDONDO BEACH	0702	Halibut, California	1
2012	8	SANTA MONICA	0702	Sanddab	18
2012	8	REDONDO BEACH	0702	Sanddab	343
2012	8	MARINA DEL REY	0702	Sanddab	789
2012	8	REDONDO BEACH	0702	Rockfish, unspecified	514
2012	8	MARINA DEL REY	0702	Rockfish, unspecified	1418
2012	8	REDONDO BEACH	0702	Rockfish, bocaccio	187
2012	8	MARINA DEL REY	0702	Rockfish, bocaccio	874

Year	Month	Port Name	Block	Species	Kept
2012	8	REDONDO BEACH	0702	Scorpionfish, California	73
2012	8	MARINA DEL REY	0702	Scorpionfish, California	127
2012	8	REDONDO BEACH	0702	Cabezon	4
2012	8	MARINA DEL REY	0702	Rockfish, widow	2
2012	8	MARINA DEL REY	0702	Bass, kelp	2
2012	8	REDONDO BEACH	0702	Bass, kelp	130
2012	8	LONG BEACH	0702	Bass, barred sand	1
2012	8	SANTA MONICA	0702	Bass, barred sand	1
2012	8	REDONDO BEACH	0702	Bass, barred sand	69
2012	8	REDONDO BEACH	0702	Seabass, white	6
2012	8	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	1
2012	8	REDONDO BEACH	0702	Opaleye	3
2012	8	REDONDO BEACH	0702	Halfmoon	4
2012	8	REDONDO BEACH	0702	Sargo	8
2012	8	MARINA DEL REY	0702	Whitefish, ocean	1
2012	8	MARINA DEL REY	0702	Rockfish, copper	16
2012	8	REDONDO BEACH	0702	Crab, rock unspecified	197
2012	8	REDONDO BEACH	0702	Crab, spider	7
2012	8	REDONDO BEACH	0702	Lobster, California spiny	
2012	8	REDONDO BEACH	0702		
2012	8	REDONDO BEACH	0720	Yellowtail	1
2012	8	REDONDO BEACH	0720	Barracuda, California	
2012	8	REDONDO BEACH	0720	Sheephead, California	8
2012	8	HUNTINGTON BEACH	0720	Shark, shortfin mako	
2012	8	REDONDO BEACH	0720	Lingcod	3
2012	8	REDONDO BEACH	0720	Halibut, California	1
2012	8	REDONDO BEACH	0720	Rockfish, unspecified	56
2012	8	REDONDO BEACH	0720	Rockfish, bocaccio	2
2012	8	REDONDO BEACH	0720	Scorpionfish, California	1
2012	8	REDONDO BEACH	0720	Cabezon	2
2012	8	REDONDO BEACH	0720	Bass, kelp	310
2012	8	REDONDO BEACH	0720	Bass, barred sand	14
2012	8	REDONDO BEACH	0720	Seabass, white	1
2012	8	REDONDO BEACH	0720	Halfmoon	19
2012	8	REDONDO BEACH	0720	Sargo	1
2012	8	REDONDO BEACH	0720	Whitefish, ocean	1
2012	8	REDONDO BEACH	0720	Surfperch, rubberlip	2
2012	8	HUNTINGTON BEACH	0720		
2012	8	REDONDO BEACH	0721	Shark, shortfin mako	1
2012	8	SAN PEDRO	0721	Shark, blue	
2012	9	MARINA DEL REY	0679	Sheephead, California	13
2012	9	MARINA DEL REY	0679	Shark, swell	
2012	9	MARINA DEL REY	0679	Lingcod	2
2012	9	MARINA DEL REY	0679	Sole, unspecified	2
2012	9	MARINA DEL REY	0679	Halibut, California	1
2012	9	MARINA DEL REY	0679	Sanddab	2
2012	9	MARINA DEL REY	0679	Rockfish, unspecified	36
2012	9	MARINA DEL REY	0679	Scorpionfish, California	156
2012	9	MARINA DEL REY	0679	Cabezon	1
2012	9	MARINA DEL REY	0679	Bass, kelp	50
2012	9	MARINA DEL REY	0679	Bass, barred sand	124
2012	9	MARINA DEL REY	0679	Bass, giant sea	
2012	9	MARINA DEL REY	0679	Blacksmith	25
2012	9	MARINA DEL REY	0679	Surfperch, rubberlip	2
2012	9	OXNARD	0680	Sheephead, California	5
2012	9	MARINA DEL REY	0680	Sheephead, California	19
2012	9	MARINA DEL REY	0680	Lingcod	5
2012	9	MARINA DEL REY	0680	Sanddab	10
2012	9	OXNARD	0680	Turbot	1
2012	9	OXNARD	0680	Rockfish, unspecified	31
2012	9	MARINA DEL REY	0680	Rockfish, unspecified	238
2012	9	MARINA DEL REY	0680	Rockfish, bocaccio	30
2012	9	MARINA DEL REY	0680	Scorpionfish, California	3
2012	9	MARINA DEL REY	0680	Cabezon	6
2012	9	MARINA DEL REY	0680	Rockfish, gopher	20
2012	9	OXNARD	0680	Bass, kelp	35
2012	9	MARINA DEL REY	0680	Bass, kelp	108
2012	9	MARINA DEL REY	0680	Bass, barred sand	40
2012	9	MARINA DEL REY	0680	Seabass, white	2
2012	9	OXNARD	0680	Seabass, white	3
2012	9	MARINA DEL REY	0680	Whitefish, ocean	5

Year	Month	Port Name	Block	Species	Kept
2012	9	MARINA DEL REY	0680	Rockfish, copper	35
2012	9	MARINA DEL REY	0701	Mackerel, Pacific	1
2012	9	MARINA DEL REY	0701	Mackerel, jack	1
2012	9	MARINA DEL REY	0701	Sheephead, California	11
2012	9	MARINA DEL REY	0701	Wrasse, rock	
2012	9	MARINA DEL REY	0701	Lingcod	18
2012	9	MARINA DEL REY	0701	Sole, rock	2
2012	9	MARINA DEL REY	0701	Halibut, California	1
2012	9	MARINA DEL REY	0701	Sanddab	32
2012	9	MARINA DEL REY	0701	Rockfish, unspecified	341
2012	9	MARINA DEL REY	0701	Rockfish, bocaccio	175
2012	9	MARINA DEL REY	0701	Scorpionfish, California	1856
2012	9	MARINA DEL REY	0701	Cabezon	2
2012	9	MARINA DEL REY	0701	Bass, kelp	127
2012	9	MARINA DEL REY	0701	Bass, barred sand	299
2012	9	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	
2012	9	MARINA DEL REY	0701	Blacksmith	4
2012	9	MARINA DEL REY	0701	Sargo	1
2012	9	MARINA DEL REY	0701	Whitefish, ocean	11
2012	9	MARINA DEL REY	0701	Rockfish, copper	3
2012	9	MARINA DEL REY	0701	Crab, rock unspecified	
2012	9	REDONDO BEACH	0702	Yellowtail	1
2012	9	REDONDO BEACH	0702	Mackerel, Pacific	366
2012	9	REDONDO BEACH	0702	Barracuda, California	2
2012	9	REDONDO BEACH	0702	Sheephead, California	15
2012	9	MARINA DEL REY	0702	Sheephead, California	25
2012	9	MARINA DEL REY	0702	Shark, spiny dogfish	
2012	9	REDONDO BEACH	0702	Shark, leopard	1
2012	9	REDONDO BEACH	0702	Lingcod	6
2012	9	MARINA DEL REY	0702	Lingcod	90
2012	9	MARINA DEL REY	0702	Sole, unspecified	4
2012	9	REDONDO BEACH	0702	Sole, unspecified	8
2012	9	MARINA DEL REY	0702	Sole, petrale	2
2012	9	REDONDO BEACH	0702	Sanddab	114
2012	9	MARINA DEL REY	0702	Sanddab	170
2012	9	MARINA DEL REY	0702	Rockfish, cowcod	
2012	9	REDONDO BEACH	0702	Rockfish, unspecified	426
2012	9	MARINA DEL REY	0702	Rockfish, unspecified	1137
2012	9	REDONDO BEACH	0702	Rockfish, bocaccio	29
2012	9	MARINA DEL REY	0702	Rockfish, bocaccio	1130
2012	9	REDONDO BEACH	0702	Scorpionfish, California	599
2012	9	MARINA DEL REY	0702	Scorpionfish, California	1212
2012	9	MARINA DEL REY	0702	Cabezon	1
2012	9	REDONDO BEACH	0702	Cabezon	13
2012	9	MARINA DEL REY	0702	Rockfish, widow	5
2012	9	MARINA DEL REY	0702	Bass, kelp	26
2012	9	REDONDO BEACH	0702	Bass, kelp	122
2012	9	MARINA DEL REY	0702	Bass, barred sand	31
2012	9	REDONDO BEACH	0702	Bass, barred sand	96
2012	9	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	3
2012	9	MARINA DEL REY	0702	Hagfishes	
2012	9	REDONDO BEACH	0702	Halfmoon	52
2012	9	MARINA DEL REY	0702	Whitefish, ocean	10
2012	9	REDONDO BEACH	0702	Whitefish, ocean	14
2012	9	MARINA DEL REY	0702	Rockfish, copper	20
2012	9	MARINA DEL REY	0702	Rockfish, blue	1
2012	9	REDONDO BEACH	0702	Lobster, California spiny	18
2012	9	REDONDO BEACH	0720	Yellowtail	10
2012	9	REDONDO BEACH	0720	Mackerel, Pacific	10
2012	9	REDONDO BEACH	0720	Barracuda, California	2
2012	9	LONG BEACH	0720	Sheephead, California	1
2012	9	MARINA DEL REY	0720	Sheephead, California	2
2012	9	REDONDO BEACH	0720	Sheephead, California	54
2012	9	MARINA DEL REY	0720	Lingcod	1
2012	9	SAN PEDRO	0720	Lingcod	2
2012	9	REDONDO BEACH	0720	Lingcod	12
2012	9	SAN PEDRO	0720	Sanddab	20
2012	9	MARINA DEL REY	0720	Sanddab	22
2012	9	SAN PEDRO	0720	Rockfish, unspecified	31
2012	9	MARINA DEL REY	0720	Rockfish, unspecified	42
2012	9	REDONDO BEACH	0720	Rockfish, unspecified	446

Year	Month	Port Name	Block	Species	Kept
2012	9	SAN PEDRO	0720	Rockfish, bocaccio	37
2012	9	MARINA DEL REY	0720	Rockfish, bocaccio	38
2012	9	MARINA DEL REY	0720	Scorpionfish, California	6
2012	9	REDONDO BEACH	0720	Scorpionfish, California	20
2012	9	REDONDO BEACH	0720	Cabezon	9
2012	9	LONG BEACH	0720	Cabezon	
2012	9	MARINA DEL REY	0720	Cabezon	
2012	9	LONG BEACH	0720	Bass, kelp	9
2012	9	MARINA DEL REY	0720	Bass, kelp	104
2012	9	REDONDO BEACH	0720	Bass, kelp	835
2012	9	MARINA DEL REY	0720	Bass, barred sand	1
2012	9	REDONDO BEACH	0720	Bass, barred sand	6
2012	9	LONG BEACH	0720	Bass, barred sand	
2012	9	REDONDO BEACH	0720	Bass, giant sea	
2012	9	REDONDO BEACH	0720	Seabass, white	4
2012	9	LONG BEACH	0720	Seabass, white	6
2012	9	MARINA DEL REY	0720	Perch-like, unspecified	35
2012	9	MARINA DEL REY	0720	Halfmoon	40
2012	9	REDONDO BEACH	0720	Halfmoon	236
2012	9	REDONDO BEACH	0720	Sargo	1
2012	9	LONG BEACH	0720	Sargo	8
2012	9	MARINA DEL REY	0720	Sargo	11
2012	9	MARINA DEL REY	0720	Rockfish, blue	8
2012	9	SAN PEDRO	0720	Rockfish, group red	2
2012	9	REDONDO BEACH	0720		
2012	10	MARINA DEL REY	0679	Sheephead, California	12
2012	10	MARINA DEL REY	0679	Lingcod	1
2012	10	MARINA DEL REY	0679	Rockfish, unspecified	20
2012	10	MARINA DEL REY	0679	Scorpionfish, California	15
2012	10	MARINA DEL REY	0679	Cabezon	9
2012	10	MARINA DEL REY	0679	Bass, barred sand	18
2012	10	MARINA DEL REY	0679	Rockfish, copper	2
2012	10	MARINA DEL REY	0680	Mackerel, Pacific	
2012	10	MARINA DEL REY	0680	Mackerel, jack	1
2012	10	MARINA DEL REY	0680	Sheephead, California	14
2012	10	MARINA DEL REY	0680	Lingcod	21
2012	10	MARINA DEL REY	0680	Sanddab	135
2012	10	MARINA DEL REY	0680	Rockfish, unspecified	1020
2012	10	MARINA DEL REY	0680	Rockfish, bocaccio	368
2012	10	MARINA DEL REY	0680	Scorpionfish, California	135
2012	10	MARINA DEL REY	0680	Cabezon	3
2012	10	MARINA DEL REY	0680	Rockfish, gopher	45
2012	10	MARINA DEL REY	0680	Bass, kelp	7
2012	10	MARINA DEL REY	0680	Bass, barred sand	29
2012	10	MARINA DEL REY	0680	Triggerfish	1
2012	10	MARINA DEL REY	0680	Eel, wolf (wolf-eel)	4
2012	10	MARINA DEL REY	0680	Whitefish, ocean	7
2012	10	MARINA DEL REY	0680	Rockfish, copper	75
2012	10	MARINA DEL REY	0701	Bonito, Pacific	40
2012	10	MARINA DEL REY	0701	Mackerel, Pacific	135
2012	10	MARINA DEL REY	0701	Sheephead, California	175
2012	10	MARINA DEL REY	0701	Shark, shortfin mako	2
2012	10	MARINA DEL REY	0701	Lingcod	87
2012	10	MARINA DEL REY	0701	Halibut, California	3
2012	10	MARINA DEL REY	0701	Sanddab	146
2012	10	MARINA DEL REY	0701	Rockfish, unspecified	2504
2012	10	MARINA DEL REY	0701	Rockfish, bocaccio	751
2012	10	MARINA DEL REY	0701	Scorpionfish, California	5460
2012	10	MARINA DEL REY	0701	Cabezon	94
2012	10	MARINA DEL REY	0701	Rockfish, gopher	1
2012	10	MARINA DEL REY	0701	Bass, kelp	269
2012	10	MARINA DEL REY	0701	Bass, barred sand	537
2012	10	MARINA DEL REY	0701	Seabass, white	1
2012	10	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	1
2012	10	MARINA DEL REY	0701	Blacksmith	156
2012	10	MARINA DEL REY	0701	Whitefish, ocean	73
2012	10	MARINA DEL REY	0701	Rockfish, copper	7
2012	10	MARINA DEL REY	0701	Rockfish, blue	11
2012	10	REDONDO BEACH	0702	Mackerel, Pacific	588
2012	10	MARINA DEL REY	0702	Mackerel, Pacific	
2012	10	REDONDO BEACH	0702	Sheephead, California	5

Year	Month	Port Name	Block	Species	Kept
2012	10	MARINA DEL REY	0702	Sheephead, California	37
2012	10	MARINA DEL REY	0702	Shark, shortfin mako	1
2012	10	MARINA DEL REY	0702	Shark, spiny dogfish	
2012	10	REDONDO BEACH	0702	Lingcod	2
2012	10	MARINA DEL REY	0702	Lingcod	85
2012	10	MARINA DEL REY	0702	Sole, petrale	
2012	10	MARINA DEL REY	0702	Halibut, California	1
2012	10	MARINA DEL REY	0702	Sanddab	77
2012	10	REDONDO BEACH	0702	Rockfish, unspecified	202
2012	10	MARINA DEL REY	0702	Rockfish, unspecified	1129
2012	10	REDONDO BEACH	0702	Rockfish, bocaccio	50
2012	10	MARINA DEL REY	0702	Rockfish, bocaccio	872
2012	10	REDONDO BEACH	0702	Scorpionfish, California	196
2012	10	MARINA DEL REY	0702	Scorpionfish, California	472
2012	10	REDONDO BEACH	0702	Cabezon	3
2012	10	MARINA DEL REY	0702	Cabezon	7
2012	10	MARINA DEL REY	0702	Rockfish, widow	17
2012	10	MARINA DEL REY	0702	Bass, kelp	22
2012	10	REDONDO BEACH	0702	Bass, kelp	26
2012	10	REDONDO BEACH	0702	Bass, barred sand	15
2012	10	MARINA DEL REY	0702	Bass, barred sand	61
2012	10	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2012	10	REDONDO BEACH	0702	Halfmoon	39
2012	10	MARINA DEL REY	0702	Blacksmith	40
2012	10	REDONDO BEACH	0702	Whitefish, ocean	1
2012	10	MARINA DEL REY	0702	Whitefish, ocean	4
2012	10	REDONDO BEACH	0702	Surfperch, black	1
2012	10	MARINA DEL REY	0702	Rockfish, copper	29
2012	10	MARINA DEL REY	0702	Rockfish, blue	1
2012	10	REDONDO BEACH	0702	Crab, rock unspecified	162
2012	10	REDONDO BEACH	0702	Lobster, California spiny	159
2012	10	REDONDO BEACH	0720	Bonito, Pacific	2
2012	10	REDONDO BEACH	0720	Yellowtail	3
2012	10	REDONDO BEACH	0720	Mackerel, unspecified	12
2012	10	REDONDO BEACH	0720	Mackerel, Pacific	
2012	10	MARINA DEL REY	0720	Sheephead, California	1
2012	10	REDONDO BEACH	0720	Sheephead, California	126
2012	10	REDONDO BEACH	0720	Lingcod	16
2012	10	MARINA DEL REY	0720	Lingcod	
2012	10	MARINA DEL REY	0720	Sanddab	5
2012	10	MARINA DEL REY	0720	Rockfish, unspecified	70
2012	10	SAN PEDRO	0720	Rockfish, unspecified	141
2012	10	REDONDO BEACH	0720	Rockfish, unspecified	951
2012	10	SAN PEDRO	0720	Rockfish, bocaccio	8
2012	10	REDONDO BEACH	0720	Rockfish, bocaccio	18
2012	10	MARINA DEL REY	0720	Rockfish, bocaccio	18
2012	10	REDONDO BEACH	0720	Scorpionfish, California	75
2012	10	REDONDO BEACH	0720	Cabezon	6
2012	10	REDONDO BEACH	0720	Bass, kelp	196
2012	10	REDONDO BEACH	0720	Bass, barred sand	38
2012	10	REDONDO BEACH	0720	Seabass, white	15
2012	10	REDONDO BEACH	0720	Opaleye	42
2012	10	REDONDO BEACH	0720	Halfmoon	91
2012	10	REDONDO BEACH	0720	Sargo	2
2012	10	REDONDO BEACH	0720	Whitefish, ocean	1
2012	10	MARINA DEL REY	0720	Whitefish, ocean	1
2012	10	SAN PEDRO	0720	Whitefish, ocean	3
2012	10	REDONDO BEACH	0720	Rockfish, blue	
2012	10	REDONDO BEACH	0720	Crab, rock unspecified	5
2012	10	REDONDO BEACH	0720	Lobster, California spiny	109
2012	11	MARINA DEL REY	0680	Sheephead, California	6
2012	11	MARINA DEL REY	0680	Lingcod	5
2012	11	MARINA DEL REY	0680	Sanddab	80
2012	11	MARINA DEL REY	0680	Rockfish, unspecified	300
2012	11	MARINA DEL REY	0680	Rockfish, bocaccio	96
2012	11	MARINA DEL REY	0680	Scorpionfish, California	2
2012	11	MARINA DEL REY	0680	Whitefish, ocean	1
2012	11	MARINA DEL REY	0680	Rockfish, copper	22
2012	11	MARINA DEL REY	0701	Mackerel, Pacific	65
2012	11	MARINA DEL REY	0701	Sheephead, California	204
2012	11	AVALON	0701	Shark, leopard	

Year	Month	Port Name	Block	Species	Kept
2012	11	SAN PEDRO	0701	Lingcod	5
2012	11	MARINA DEL REY	0701	Lingcod	221
2012	11	MARINA DEL REY	0701	Sanddab	21
2012	11	AVALON	0701	Sanddab	
2012	11	SAN PEDRO	0701	Rockfish, unspecified	45
2012	11	MARINA DEL REY	0701	Rockfish, unspecified	4578
2012	11	SAN PEDRO	0701	Rockfish, bocaccio	22
2012	11	MARINA DEL REY	0701	Rockfish, bocaccio	984
2012	11	SAN PEDRO	0701	Scorpionfish, California	55
2012	11	MARINA DEL REY	0701	Scorpionfish, California	2016
2012	11	MARINA DEL REY	0701	Cabezon	3
2012	11	MARINA DEL REY	0701	Rockfish, widow	20
2012	11	MARINA DEL REY	0701	Bass, kelp	142
2012	11	SAN PEDRO	0701	Bass, barred sand	4
2012	11	MARINA DEL REY	0701	Bass, barred sand	277
2012	11	MARINA DEL REY	0701	Blacksmith	12
2012	11	MARINA DEL REY	0701	Whitefish, ocean	401
2012	11	MARINA DEL REY	0701	Rockfish, copper	102
2012	11	MARINA DEL REY	0701	Rockfish, blue	39
2012	11	MARINA DEL REY	0702	Mackerel, Pacific	1
2012	11	MARINA DEL REY	0702	Sheephead, California	30
2012	11	MARINA DEL REY	0702	Sablefish	1
2012	11	MARINA DEL REY	0702	Lingcod	66
2012	11	MARINA DEL REY	0702	Sole, unspecified	1
2012	11	MARINA DEL REY	0702	Sole, petrale	5
2012	11	MARINA DEL REY	0702	Sanddab	337
2012	11	REDONDO BEACH	0702	Rockfish, unspecified	1
2012	11	MARINA DEL REY	0702	Rockfish, unspecified	1630
2012	11	MARINA DEL REY	0702	Rockfish, bocaccio	711
2012	11	REDONDO BEACH	0702	Scorpionfish, California	58
2012	11	MARINA DEL REY	0702	Scorpionfish, California	561
2012	11	MARINA DEL REY	0702	Rockfish, widow	51
2012	11	MARINA DEL REY	0702	Bass, barred sand	1
2012	11	REDONDO BEACH	0702	Bass, barred sand	10
2012	11	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2012	11	REDONDO BEACH	0702	Sargo	1
2012	11	MARINA DEL REY	0702	Whitefish, ocean	104
2012	11	MARINA DEL REY	0702	Rockfish, copper	33
2012	11	MARINA DEL REY	0702	Rockfish, blue	6
2012	11	REDONDO BEACH	0702	Crab, rock unspecified	232
2012	11	REDONDO BEACH	0702	Crab, spider	3
2012	11	REDONDO BEACH	0702	Lobster, California spiny	28
2012	11	MARINA DEL REY	0703	Lingcod	
2012	11	MARINA DEL REY	0703	Sanddab	50
2012	11	MARINA DEL REY	0703	Rockfish, unspecified	70
2012	11	MARINA DEL REY	0703	Rockfish, bocaccio	20
2012	11	MARINA DEL REY	0703	Scorpionfish, California	35
2012	11	MARINA DEL REY	0703	Whitefish, ocean	5
2012	11	MARINA DEL REY	0703	Rockfish, copper	1
2012	11	REDONDO BEACH	0720	Bonito, Pacific	2
2012	11	REDONDO BEACH	0720	Mackerel, Pacific	16
2012	11	REDONDO BEACH	0720	Barracuda, California	
2012	11	MARINA DEL REY	0720	Sheephead, California	1
2012	11	REDONDO BEACH	0720	Sheephead, California	45
2012	11	SAN PEDRO	0720	Lingcod	5
2012	11	MARINA DEL REY	0720	Lingcod	5
2012	11	REDONDO BEACH	0720	Lingcod	42
2012	11	MARINA DEL REY	0720	Sanddab	5
2012	11	SAN PEDRO	0720	Rockfish, unspecified	127
2012	11	MARINA DEL REY	0720	Rockfish, unspecified	210
2012	11	REDONDO BEACH	0720	Rockfish, unspecified	3151
2012	11	MARINA DEL REY	0720	Rockfish, bocaccio	56
2012	11	SAN PEDRO	0720	Rockfish, bocaccio	72
2012	11	SAN PEDRO	0720	Scorpionfish, California	5
2012	11	REDONDO BEACH	0720	Scorpionfish, California	104
2012	11	MARINA DEL REY	0720	Scorpionfish, California	
2012	11	REDONDO BEACH	0720	Cabezon	1
2012	11	REDONDO BEACH	0720	Bass, kelp	72
2012	11	REDONDO BEACH	0720	Bass, barred sand	18
2012	11	REDONDO BEACH	0720	Opaleye	47
2012	11	REDONDO BEACH	0720	Halfmoon	28

Year	Month	Port Name	Block	Species	Kept
2012	11	REDONDO BEACH	0720	Whitefish, ocean	5
2012	11	MARINA DEL REY	0720	Rockfish, copper	19
2012	11	REDONDO BEACH	0720	Crab, rock unspecified	40
2012	11	REDONDO BEACH	0720	Lobster, California spiny	38
2012	11	SAN PEDRO	0720	Rockfish, group red	162
2012	12	MARINA DEL REY	0680	Sheephead, California	4
2012	12	MARINA DEL REY	0680	Lingcod	6
2012	12	MARINA DEL REY	0680	Halibut, California	1
2012	12	MARINA DEL REY	0680	Sanddab	30
2012	12	MARINA DEL REY	0680	Rockfish, unspecified	490
2012	12	MARINA DEL REY	0680	Rockfish, bocaccio	116
2012	12	MARINA DEL REY	0680	Scorpionfish, California	
2012	12	MARINA DEL REY	0680	Cabezon	
2012	12	MARINA DEL REY	0680	Rockfish, gopher	8
2012	12	MARINA DEL REY	0680	Rockfish, copper	20
2012	12	MARINA DEL REY	0701	Sheephead, California	113
2012	12	MARINA DEL REY	0701	Lingcod	133
2012	12	MARINA DEL REY	0701	Halibut, California	1
2012	12	MARINA DEL REY	0701	Sanddab	411
2012	12	MARINA DEL REY	0701	Rockfish, unspecified	5250
2012	12	MARINA DEL REY	0701	Rockfish, bocaccio	717
2012	12	MARINA DEL REY	0701	Scorpionfish, California	2368
2012	12	MARINA DEL REY	0701	Cabezon	3
2012	12	MARINA DEL REY	0701	Rockfish, widow	179
2012	12	MARINA DEL REY	0701	Bass, kelp	78
2012	12	MARINA DEL REY	0701	Bass, barred sand	394
2012	12	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	1
2012	12	MARINA DEL REY	0701	Whitefish, ocean	174
2012	12	MARINA DEL REY	0701	Rockfish, copper	116
2012	12	MARINA DEL REY	0701	Rockfish, blue	6
2012	12	MARINA DEL REY	0702	Sheephead, California	49
2012	12	MARINA DEL REY	0702	Shark, spiny dogfish	
2012	12	MARINA DEL REY	0702	Lingcod	87
2012	12	MARINA DEL REY	0702	Sole, unspecified	2
2012	12	MARINA DEL REY	0702	Sole, petrale	1
2012	12	MARINA DEL REY	0702	Sanddab	527
2012	12	REDONDO BEACH	0702	Rockfish, unspecified	12
2012	12	MARINA DEL REY	0702	Rockfish, unspecified	3628
2012	12	MARINA DEL REY	0702	Rockfish, bocaccio	931
2012	12	REDONDO BEACH	0702	Scorpionfish, California	111
2012	12	MARINA DEL REY	0702	Scorpionfish, California	621
2012	12	MARINA DEL REY	0702	Cabezon	1
2012	12	MARINA DEL REY	0702	Rockfish, gopher	15
2012	12	MARINA DEL REY	0702	Rockfish, widow	256
2012	12	REDONDO BEACH	0702	Bass, kelp	3
2012	12	MARINA DEL REY	0702	Bass, kelp	21
2012	12	REDONDO BEACH	0702	Bass, barred sand	9
2012	12	MARINA DEL REY	0702	Bass, barred sand	56
2012	12	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2012	12	MARINA DEL REY	0702	Lizardfish, California	
2012	12	MARINA DEL REY	0702	Whitefish, ocean	61
2012	12	MARINA DEL REY	0702	Rockfish, copper	44
2012	12	MARINA DEL REY	0702	Rockfish, blue	9
2012	12	REDONDO BEACH	0702	Crab, rock unspecified	169
2012	12	REDONDO BEACH	0702	Crab, spider	14
2012	12	REDONDO BEACH	0702	Lobster, California spiny	71
2012	12	REDONDO BEACH	0720	Barracuda, California	
2012	12	SAN PEDRO	0720	Sheephead, California	5
2012	12	REDONDO BEACH	0720	Sheephead, California	21
2012	12	SAN PEDRO	0720	Lingcod	13
2012	12	REDONDO BEACH	0720	Lingcod	19
2012	12	SAN PEDRO	0720	Rockfish, unspecified	60
2012	12	REDONDO BEACH	0720	Rockfish, unspecified	3177
2012	12	REDONDO BEACH	0720	Rockfish, bocaccio	3
2012	12	SAN PEDRO	0720	Rockfish, bocaccio	80
2012	12	REDONDO BEACH	0720	Scorpionfish, California	207
2012	12	REDONDO BEACH	0720	Bass, kelp	25
2012	12	REDONDO BEACH	0720	Bass, barred sand	10
2012	12	REDONDO BEACH	0720	Opaleye	1
2012	12	SAN PEDRO	0720	Whitefish, ocean	1
2012	12	REDONDO BEACH	0720	Whitefish, ocean	8

Year	Month	Port Name	Block	Species	Kept
2012	12	REDONDO BEACH	0720	Surfperch, rubberlip	3
2012	12	REDONDO BEACH	0720	Rockfish, copper	2
2012	12	SAN PEDRO	0720	Rockfish, group red	230
2013	1	MARINA DEL REY	0679	Sheephead, California	
2013	1	MARINA DEL REY	0679	Lingcod	
2013	1	MARINA DEL REY	0679	Sanddab	
2013	1	MARINA DEL REY	0679	Rockfish, unspecified	0
2013	1	SAN PEDRO	0679	Rockfish, unspecified	
2013	1	SAN PEDRO	0679	Scorpionfish, California	7
2013	1	MARINA DEL REY	0679	Scorpionfish, California	1018
2013	1	SAN PEDRO	0679	Cabezon	
2013	1	MARINA DEL REY	0679	Cabezon	
2013	1	SAN PEDRO	0679	Bass, kelp	3
2013	1	MARINA DEL REY	0679	Bass, kelp	70
2013	1	SAN PEDRO	0679	Bass, barred sand	17
2013	1	MARINA DEL REY	0679	Bass, barred sand	344
2013	1	MARINA DEL REY	0679	Perch-like, unspecified	12
2013	1	REDONDO BEACH	0701	Lingcod	
2013	1	MARINA DEL REY	0701	Sole, unspecified	1
2013	1	MARINA DEL REY	0701	Sanddab	603
2013	1	REDONDO BEACH	0701	Scorpionfish, California	1
2013	1	MARINA DEL REY	0701	Scorpionfish, California	3863
2013	1	REDONDO BEACH	0701	Cabezon	
2013	1	MARINA DEL REY	0701	Bass, kelp	171
2013	1	REDONDO BEACH	0701	Bass, barred sand	2
2013	1	MARINA DEL REY	0701	Bass, barred sand	560
2013	1	MARINA DEL REY	0701	Triggerfish	
2013	1	REDONDO BEACH	0701	Eel, wolf (wolf-eel)	1
2013	1	REDONDO BEACH	0701	Perch-like, unspecified	22
2013	1	MARINA DEL REY	0701	Perch-like, unspecified	114
2013	1	MARINA DEL REY	0701	Opaleye	1
2013	1	MARINA DEL REY	0701	Blacksmith	236
2013	1	MARINA DEL REY	0702	Sheephead, California	
2013	1	MARINA DEL REY	0702	Sole, unspecified	1
2013	1	MARINA DEL REY	0702	Sanddab	70
2013	1	MARINA DEL REY	0702	Rockfish, unspecified	
2013	1	REDONDO BEACH	0702	Scorpionfish, California	60
2013	1	MARINA DEL REY	0702	Scorpionfish, California	233
2013	1	REDONDO BEACH	0702	Cabezon	
2013	1	MARINA DEL REY	0702	Cabezon	
2013	1	REDONDO BEACH	0702	Bass, kelp	1
2013	1	MARINA DEL REY	0702	Bass, kelp	18
2013	1	REDONDO BEACH	0702	Bass, barred sand	9
2013	1	MARINA DEL REY	0702	Bass, barred sand	70
2013	1	MARINA DEL REY	0702	Perch-like, unspecified	82
2013	1	REDONDO BEACH	0702	Crab, rock unspecified	150
2013	1	REDONDO BEACH	0702	Crab, spider	7
2013	1	REDONDO BEACH	0702	Lobster, California spiny	13
2013	1	REDONDO BEACH	0720	Mackerel, Pacific	3
2013	1	REDONDO BEACH	0720	Sheephead, California	
2013	1	REDONDO BEACH	0720	Lingcod	
2013	1	REDONDO BEACH	0720	Sole, unspecified	1
2013	1	REDONDO BEACH	0720	Sanddab	2
2013	1	REDONDO BEACH	0720	Rockfish, unspecified	85
2013	1	REDONDO BEACH	0720	Scorpionfish, California	335
2013	1	REDONDO BEACH	0720	Cabezon	
2013	1	REDONDO BEACH	0720	Bass, kelp	13
2013	1	REDONDO BEACH	0720	Bass, barred sand	175
2013	1	REDONDO BEACH	0720	Perch-like, unspecified	124
2013	1	REDONDO BEACH	0720	Blacksmith	129
2013	1	REDONDO BEACH	0720	Whitefish, ocean	
2013	1	REDONDO BEACH	0720	Surfperch, unspecified	1
2013	1	REDONDO BEACH	0720	Rockfish, copper	
2013	1	REDONDO BEACH	0720	Rockfish, blue	
2013	1	REDONDO BEACH	0720	Crab, rock unspecified	27
2013	1	REDONDO BEACH	0720	Lobster, California spiny	22
2013	2	MARINA DEL REY	0679	Sheephead, California	
2013	2	MARINA DEL REY	0679	Sole, unspecified	2
2013	2	MARINA DEL REY	0679	Sanddab	110
2013	2	MARINA DEL REY	0679	Rockfish, unspecified	
2013	2	MARINA DEL REY	0679	Scorpionfish, California	453

Year	Month	Port Name	Block	Species	Kept
2013	2	MARINA DEL REY	0679	Cabezon	
2013	2	MARINA DEL REY	0679	Bass, kelp	17
2013	2	MARINA DEL REY	0679	Bass, barred sand	87
2013	2	MARINA DEL REY	0679	Perch-like, unspecified	50
2013	2	REDONDO BEACH	0701	Lingcod	
2013	2	MARINA DEL REY	0701	Lingcod	
2013	2	MARINA DEL REY	0701	Sole, unspecified	2
2013	2	MARINA DEL REY	0701	Sanddab	1925
2013	2	MARINA DEL REY	0701	Rockfish, unspecified	
2013	2	REDONDO BEACH	0701	Scorpionfish, California	1
2013	2	MARINA DEL REY	0701	Scorpionfish, California	3355
2013	2	MARINA DEL REY	0701	Cabezon	
2013	2	REDONDO BEACH	0701	Bass, kelp	1
2013	2	MARINA DEL REY	0701	Bass, kelp	93
2013	2	REDONDO BEACH	0701	Bass, barred sand	3
2013	2	MARINA DEL REY	0701	Bass, barred sand	413
2013	2	MARINA DEL REY	0701	Perch-like, unspecified	79
2013	2	MARINA DEL REY	0701	Blacksmith	373
2013	2	REDONDO BEACH	0701	Whitefish, ocean	
2013	2	MARINA DEL REY	0701	Surfperch, unspecified	10
2013	2	MARINA DEL REY	0701	Surfperch, black	4
2013	2	MARINA DEL REY	0701	Surfperch, rubberlip	1
2013	2	MARINA DEL REY	0701	Octopus, unspecified	6
2013	2	MARINA DEL REY	0702	Sanddab	85
2013	2	MARINA DEL REY	0702	Scorpionfish, California	15
2013	2	REDONDO BEACH	0702	Scorpionfish, California	25
2013	2	REDONDO BEACH	0702	Cabezon	
2013	2	REDONDO BEACH	0702	Bass, barred sand	4
2013	2	REDONDO BEACH	0702	Perch-like, unspecified	20
2013	2	REDONDO BEACH	0702	Crab, rock unspecified	76
2013	2	REDONDO BEACH	0702	Lobster, California spiny	14
2013	2	REDONDO BEACH	0720	Mackerel, Pacific	40
2013	2	REDONDO BEACH	0720	Sheephead, California	
2013	2	OXNARD	0720	Lingcod	
2013	2	REDONDO BEACH	0720	Lingcod	
2013	2	REDONDO BEACH	0720	Sanddab	3
2013	2	REDONDO BEACH	0720	Rockfish, canary	
2013	2	REDONDO BEACH	0720	Rockfish, unspecified	
2013	2	OXNARD	0720	Scorpionfish, California	1
2013	2	REDONDO BEACH	0720	Scorpionfish, California	15
2013	2	OXNARD	0720	Cabezon	
2013	2	REDONDO BEACH	0720	Cabezon	
2013	2	REDONDO BEACH	0720	Bass, kelp	1
2013	2	OXNARD	0720	Bass, kelp	2
2013	2	OXNARD	0720	Bass, barred sand	10
2013	2	REDONDO BEACH	0720	Bass, barred sand	20
2013	2	REDONDO BEACH	0720	Perch-like, unspecified	235
2013	2	REDONDO BEACH	0720	Halfmoon	28
2013	2	REDONDO BEACH	0720	Whitefish, ocean	
2013	2	REDONDO BEACH	0720	Rockfish, copper	
2013	2	REDONDO BEACH	0720	Rockfish, blue	
2013	3	MARINA DEL REY	0680	Lingcod	2
2013	3	MARINA DEL REY	0680	Sanddab	130
2013	3	MARINA DEL REY	0680	Rockfish, unspecified	790
2013	3	MARINA DEL REY	0680	Rockfish, bocaccio	140
2013	3	MARINA DEL REY	0680	Scorpionfish, California	3
2013	3	MARINA DEL REY	0680	Whitefish, ocean	7
2013	3	MARINA DEL REY	0680	Rockfish, copper	32
2013	3	MARINA DEL REY	0680	Rockfish, blue	2
2013	3	MARINA DEL REY	0701	Sheephead, California	15
2013	3	MARINA DEL REY	0701	Lingcod	21
2013	3	MARINA DEL REY	0701	Sole, unspecified	3
2013	3	MARINA DEL REY	0701	Sanddab	1756
2013	3	MARINA DEL REY	0701	Rockfish, unspecified	9108
2013	3	MARINA DEL REY	0701	Rockfish, bocaccio	726
2013	3	MARINA DEL REY	0701	Scorpionfish, California	726
2013	3	MARINA DEL REY	0701	Cabezon	2
2013	3	MARINA DEL REY	0701	Rockfish, widow	588
2013	3	MARINA DEL REY	0701	Bass, kelp	26
2013	3	MARINA DEL REY	0701	Bass, barred sand	126
2013	3	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	5

Year	Month	Port Name	Block	Species	Kept
2013	3	MARINA DEL REY	0701	Whitefish, ocean	42
2013	3	MARINA DEL REY	0701	Rockfish, copper	37
2013	3	MARINA DEL REY	0701	Rockfish, blue	2
2013	3	MARINA DEL REY	0702	Mackerel, Pacific	761
2013	3	SAN PEDRO	0702	Sheephead, California	8
2013	3	MARINA DEL REY	0702	Sheephead, California	12
2013	3	REDONDO BEACH	0702	Lingcod	1
2013	3	MARINA DEL REY	0702	Lingcod	24
2013	3	MARINA DEL REY	0702	Sole, petrale	10
2013	3	MARINA DEL REY	0702	Sanddab	902
2013	3	SAN PEDRO	0702	Rockfish, unspecified	247
2013	3	REDONDO BEACH	0702	Rockfish, unspecified	358
2013	3	MARINA DEL REY	0702	Rockfish, unspecified	3244
2013	3	SAN PEDRO	0702	Rockfish, bocaccio	62
2013	3	MARINA DEL REY	0702	Rockfish, bocaccio	617
2013	3	REDONDO BEACH	0702	Scorpionfish, California	1
2013	3	SAN PEDRO	0702	Scorpionfish, California	2
2013	3	MARINA DEL REY	0702	Scorpionfish, California	337
2013	3	MARINA DEL REY	0702	Rockfish, widow	26
2013	3	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	1
2013	3	MARINA DEL REY	0702	Lizardfish, California	3
2013	3	SAN PEDRO	0702	Halfmoon	82
2013	3	MARINA DEL REY	0702	Whitefish, ocean	9
2013	3	SAN PEDRO	0702	Whitefish, ocean	36
2013	3	MARINA DEL REY	0702	Rockfish, copper	28
2013	3	MARINA DEL REY	0702	Rockfish, blue	1
2013	3	MARINA DEL REY	0702	Lobster, California spiny	13
2013	3	MARINA DEL REY	0702		
2013	3	MARINA DEL REY	0703	Sheephead, California	1
2013	3	MARINA DEL REY	0703	Lingcod	
2013	3	MARINA DEL REY	0703	Sanddab	30
2013	3	MARINA DEL REY	0703	Rockfish, unspecified	257
2013	3	MARINA DEL REY	0703	Rockfish, bocaccio	10
2013	3	MARINA DEL REY	0703	Scorpionfish, California	7
2013	3	MARINA DEL REY	0703	Whitefish, ocean	1
2013	3	MARINA DEL REY	0703	Rockfish, copper	25
2013	3	REDONDO BEACH	0720	Sheephead, California	5
2013	3	SAN PEDRO	0720	Sheephead, California	15
2013	3	MARINA DEL REY	0720	Lingcod	2
2013	3	REDONDO BEACH	0720	Lingcod	7
2013	3	SAN PEDRO	0720	Lingcod	14
2013	3	MARINA DEL REY	0720	Sole, petrale	1
2013	3	SAN PEDRO	0720	Sanddab	156
2013	3	MARINA DEL REY	0720	Sanddab	610
2013	3	LONG BEACH	0720	Rockfish, unspecified	119
2013	3	MARINA DEL REY	0720	Rockfish, unspecified	685
2013	3	SAN PEDRO	0720	Rockfish, unspecified	690
2013	3	REDONDO BEACH	0720	Rockfish, unspecified	5873
2013	3	MARINA DEL REY	0720	Rockfish, bocaccio	180
2013	3	SAN PEDRO	0720	Rockfish, bocaccio	212
2013	3	MARINA DEL REY	0720	Scorpionfish, California	4
2013	3	SAN PEDRO	0720	Scorpionfish, California	8
2013	3	REDONDO BEACH	0720	Scorpionfish, California	28
2013	3	MARINA DEL REY	0720	Rockfish, yelloweye	200
2013	3	MARINA DEL REY	0720	Rockfish, widow	1
2013	3	MARINA DEL REY	0720	Lizardfish, California	
2013	3	MARINA DEL REY	0720	Midshipman, plainfin	1
2013	3	REDONDO BEACH	0720	Whitefish, ocean	9
2013	3	SAN PEDRO	0720	Rockfish, copper	13
2013	3	MARINA DEL REY	0720	Rockfish, copper	18
2013	3	MARINA DEL REY	0720	Rockfish, blue	36
2013	3	SAN PEDRO	0720	Rockfish, blue	39
2013	3	MARINA DEL REY	0720	Octopus, unspecified	20
2013	3	SAN PEDRO	0720	Rockfish, group red	532
2013	3	SAN PEDRO	0720		
2013	4	MARINA DEL REY	0678	Lingcod	1
2013	4	MARINA DEL REY	0678	Sanddab	70
2013	4	MARINA DEL REY	0678	Rockfish, unspecified	145
2013	4	MARINA DEL REY	0678	Rockfish, bocaccio	15
2013	4	MARINA DEL REY	0678	Rockfish, copper	3
2013	4	MARINA DEL REY	0680	Lingcod	

Year	Month	Port Name	Block	Species	Kept
2013	4	MARINA DEL REY	0680	Sanddab	60
2013	4	MARINA DEL REY	0680	Rockfish, unspecified	365
2013	4	MARINA DEL REY	0680	Rockfish, bocaccio	85
2013	4	MARINA DEL REY	0680	Scorpionfish, California	
2013	4	MARINA DEL REY	0680	Whitefish, ocean	2
2013	4	MARINA DEL REY	0680	Rockfish, copper	22
2013	4	MARINA DEL REY	0701	Sheephead, California	8
2013	4	REDONDO BEACH	0701	Lingcod	1
2013	4	MARINA DEL REY	0701	Lingcod	10
2013	4	MARINA DEL REY	0701	Sole, unspecified	4
2013	4	MARINA DEL REY	0701	Sanddab	1960
2013	4	REDONDO BEACH	0701	Rockfish, unspecified	205
2013	4	MARINA DEL REY	0701	Rockfish, unspecified	6368
2013	4	MARINA DEL REY	0701	Rockfish, bocaccio	440
2013	4	REDONDO BEACH	0701	Scorpionfish, California	13
2013	4	MARINA DEL REY	0701	Scorpionfish, California	2176
2013	4	MARINA DEL REY	0701	Bass, kelp	76
2013	4	MARINA DEL REY	0701	Bass, barred sand	155
2013	4	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	1
2013	4	MARINA DEL REY	0701	Whitefish, ocean	23
2013	4	MARINA DEL REY	0701	Rockfish, copper	29
2013	4	MARINA DEL REY	0701	Rockfish, blue	14
2013	4	MARINA DEL REY	0701		
2013	4	MARINA DEL REY	0702	Mackerel, Pacific	125
2013	4	MARINA DEL REY	0702	Sheephead, California	1
2013	4	MARINA DEL REY	0702	Jacksmelt	313
2013	4	MARINA DEL REY	0702	Lingcod	27
2013	4	MARINA DEL REY	0702	Sole, unspecified	2
2013	4	MARINA DEL REY	0702	Sole, rock	1
2013	4	MARINA DEL REY	0702	Sole, petrale	3
2013	4	MARINA DEL REY	0702	Halibut, California	
2013	4	MARINA DEL REY	0702	Sanddab	992
2013	4	MARINA DEL REY	0702	Rockfish, unspecified	2975
2013	4	MARINA DEL REY	0702	Rockfish, bocaccio	531
2013	4	MARINA DEL REY	0702	Scorpionfish, California	445
2013	4	MARINA DEL REY	0702	Cabezon	
2013	4	MARINA DEL REY	0702	Rockfish, widow	48
2013	4	MARINA DEL REY	0702	Bass, kelp	3
2013	4	MARINA DEL REY	0702	Bass, barred sand	16
2013	4	MARINA DEL REY	0702	Lizardfish, California	40
2013	4	MARINA DEL REY	0702	Blacksmith	47
2013	4	MARINA DEL REY	0702	Whitefish, ocean	27
2013	4	MARINA DEL REY	0702	Surfperch, barred	7
2013	4	MARINA DEL REY	0702	Rockfish, copper	31
2013	4	SAN PEDRO	0720	Sheephead, California	1
2013	4	LONG BEACH	0720	Lingcod	1
2013	4	SAN PEDRO	0720	Lingcod	8
2013	4	REDONDO BEACH	0720	Lingcod	11
2013	4	SAN PEDRO	0720	Sanddab	28
2013	4	LONG BEACH	0720	Rockfish, unspecified	168
2013	4	SAN PEDRO	0720	Rockfish, unspecified	455
2013	4	REDONDO BEACH	0720	Rockfish, unspecified	4221
2013	4	SAN PEDRO	0720	Rockfish, bocaccio	176
2013	4	LONG BEACH	0720	Scorpionfish, California	2
2013	4	REDONDO BEACH	0720	Scorpionfish, California	6
2013	4	SAN PEDRO	0720	Scorpionfish, California	11
2013	4	SAN PEDRO	0720	Surfperch, white	2
2013	4	SAN PEDRO	0720	Rockfish, copper	4
2013	4	SAN PEDRO	0720	Rockfish, blue	8
2013	4	REDONDO BEACH	0720	Rockfish, group red	130
2013	4	SAN PEDRO	0720	Rockfish, group red	434
2013	4	REDONDO BEACH	0720		
2013	5	MARINA DEL REY	0679	Mackerel, Pacific	15
2013	5	MARINA DEL REY	0679	Sheephead, California	6
2013	5	MARINA DEL REY	0679	Rockfish, unspecified	60
2013	5	MARINA DEL REY	0679	Bass, kelp	
2013	5	MARINA DEL REY	0679	Croaker, white	
2013	5	MARINA DEL REY	0679	Blacksmith	48
2013	5	MARINA DEL REY	0680	Barracuda, California	
2013	5	MARINA DEL REY	0680	Sheephead, California	4
2013	5	MARINA DEL REY	0680	Lingcod	12

Year	Month	Port Name	Block	Species	Kept
2013	5	MARINA DEL REY	0680	Sanddab	47
2013	5	MARINA DEL REY	0680	Rockfish, unspecified	310
2013	5	MARINA DEL REY	0680	Rockfish, bocaccio	42
2013	5	MARINA DEL REY	0680	Bass, kelp	11
2013	5	MARINA DEL REY	0680	Rockfish, copper	24
2013	5	SAN PEDRO	0701	Yellowtail	1
2013	5	MARINA DEL REY	0701	Mackerel, Pacific	60
2013	5	MARINA DEL REY	0701	Sheephead, California	7
2013	5	SAN PEDRO	0701	Sheephead, California	29
2013	5	MARINA DEL REY	0701	Shark, shortfin mako	0
2013	5	MARINA DEL REY	0701	Shark, thresher	1
2013	5	MARINA DEL REY	0701	Jacksmelt	20
2013	5	SEAL BEACH	0701	Lingcod	6
2013	5	MARINA DEL REY	0701	Lingcod	196
2013	5	MARINA DEL REY	0701	Sole, unspecified	1
2013	5	MARINA DEL REY	0701	Halibut, California	1
2013	5	MARINA DEL REY	0701	Sanddab	247
2013	5	SAN PEDRO	0701	Rockfish, unspecified	10
2013	5	SEAL BEACH	0701	Rockfish, unspecified	150
2013	5	MARINA DEL REY	0701	Rockfish, unspecified	6195
2013	5	MARINA DEL REY	0701	Rockfish, black	145
2013	5	SEAL BEACH	0701	Rockfish, bocaccio	31
2013	5	MARINA DEL REY	0701	Rockfish, bocaccio	2402
2013	5	MARINA DEL REY	0701	Scorpionfish, California	635
2013	5	MARINA DEL REY	0701	Cabezon	
2013	5	MARINA DEL REY	0701	Rockfish, gopher	
2013	5	MARINA DEL REY	0701	Rockfish, widow	21
2013	5	SAN PEDRO	0701	Bass, kelp	10
2013	5	MARINA DEL REY	0701	Bass, kelp	47
2013	5	MARINA DEL REY	0701	Bass, barred sand	148
2013	5	MARINA DEL REY	0701	Salmon, Chinook	1
2013	5	SAN PEDRO	0701	Opaleye	42
2013	5	SAN PEDRO	0701	Halfmoon	12
2013	5	MARINA DEL REY	0701	Blacksmith	256
2013	5	SAN PEDRO	0701	Whitefish, ocean	8
2013	5	MARINA DEL REY	0701	Whitefish, ocean	37
2013	5	MARINA DEL REY	0701	Rockfish, copper	17
2013	5	MARINA DEL REY	0701	Rockfish, blue	89
2013	5	MARINA DEL REY	0702	Mackerel, Pacific	68
2013	5	MARINA DEL REY	0702	Sheephead, California	11
2013	5	MARINA DEL REY	0702	Shark, spiny dogfish	
2013	5	MARINA DEL REY	0702	Jacksmelt	
2013	5	MARINA DEL REY	0702	Lingcod	109
2013	5	MARINA DEL REY	0702	Sole, unspecified	1
2013	5	MARINA DEL REY	0702	Sole, petrale	1
2013	5	MARINA DEL REY	0702	Sanddab	643
2013	5	MARINA DEL REY	0702	Rockfish, unspecified	3558
2013	5	MARINA DEL REY	0702	Rockfish, bocaccio	1222
2013	5	MARINA DEL REY	0702	Scorpionfish, California	885
2013	5	MARINA DEL REY	0702	Rockfish, widow	428
2013	5	MARINA DEL REY	0702	Bass, kelp	
2013	5	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2013	5	MARINA DEL REY	0702	Blacksmith	22
2013	5	MARINA DEL REY	0702	Whitefish, ocean	28
2013	5	MARINA DEL REY	0702	Rockfish, copper	52
2013	5	MARINA DEL REY	0702	Rockfish, blue	16
2013	5	REDONDO BEACH	0720	Barracuda, California	1
2013	5	LONG BEACH	0720	Sheephead, California	3
2013	5	REDONDO BEACH	0720	Sheephead, California	31
2013	5	AVALON	0720	Ray, unspecified	
2013	5	REDONDO BEACH	0720	Lingcod	23
2013	5	LONG BEACH	0720	Halibut, California	1
2013	5	REDONDO BEACH	0720	Halibut, California	2
2013	5	LONG BEACH	0720	Rockfish, unspecified	13
2013	5	REDONDO BEACH	0720	Rockfish, unspecified	6113
2013	5	AVALON	0720	Rockfish, unspecified	
2013	5	AVALON	0720	Scorpionfish, California	1
2013	5	LONG BEACH	0720	Scorpionfish, California	2
2013	5	REDONDO BEACH	0720	Scorpionfish, California	29
2013	5	LONG BEACH	0720	Rockfish, gopher	1
2013	5	LONG BEACH	0720	Bass, kelp	4

Year	Month	Port Name	Block	Species	Kept
2013	5	REDONDO BEACH	0720	Bass, kelp	17
2013	5	AVALON	0720	Bass, kelp	
2013	5	REDONDO BEACH	0720	Bass, barred sand	1
2013	5	LONG BEACH	0720	Bass, barred sand	6
2013	5	REDONDO BEACH	0720	Seabass, white	2
2013	5	AVALON	0720	Croaker, white	
2013	5	AVALON	0720	Lizardfish, California	
2013	5	REDONDO BEACH	0720	Opaleye	5
2013	5	LONG BEACH	0720	Halfmoon	4
2013	5	REDONDO BEACH	0720	Sargo	9
2013	5	LONG BEACH	0720	Whitefish, ocean	2
2013	5	REDONDO BEACH	0720	Whitefish, ocean	15
2013	5	LONG BEACH	0720	Rockfish, blue	1
2013	6	MARINA DEL REY	0678	Rockfish, unspecified	32
2013	6	MARINA DEL REY	0678	Bass, kelp	1
2013	6	MARINA DEL REY	0678	Bass, barred sand	1
2013	6	MARINA DEL REY	0679	Sheephead, California	7
2013	6	MARINA DEL REY	0679	Ray, unspecified	
2013	6	MARINA DEL REY	0679	Lingcod	
2013	6	MARINA DEL REY	0679	Rockfish, unspecified	150
2013	6	MARINA DEL REY	0679	Rockfish, bocaccio	
2013	6	MARINA DEL REY	0679	Scorpionfish, California	
2013	6	MARINA DEL REY	0679	Cabezon	
2013	6	MARINA DEL REY	0679	Rockfish, gopher	8
2013	6	MARINA DEL REY	0679	Bass, kelp	4
2013	6	MARINA DEL REY	0679	Bass, barred sand	4
2013	6	MARINA DEL REY	0679	Blacksmith	135
2013	6	MARINA DEL REY	0679	Sargo	1
2013	6	MARINA DEL REY	0680	Mackerel, Pacific	10
2013	6	MARINA DEL REY	0680	Barracuda, California	
2013	6	MARINA DEL REY	0680	Sheephead, California	12
2013	6	MARINA DEL REY	0680	Lingcod	8
2013	6	MARINA DEL REY	0680	Halibut, California	4
2013	6	MARINA DEL REY	0680	Sanddab	47
2013	6	MARINA DEL REY	0680	Rockfish, unspecified	700
2013	6	MARINA DEL REY	0680	Rockfish, bocaccio	134
2013	6	MARINA DEL REY	0680	Scorpionfish, California	4
2013	6	MARINA DEL REY	0680	Bass, kelp	174
2013	6	MARINA DEL REY	0680	Bass, barred sand	4
2013	6	MARINA DEL REY	0680	Seabass, white	1
2013	6	MARINA DEL REY	0680	Whitefish, ocean	5
2013	6	MARINA DEL REY	0680	Rockfish, copper	28
2013	6	MARINA DEL REY	0680	Rockfish, blue	3
2013	6	MARINA DEL REY	0701	Mackerel, Pacific	21
2013	6	MARINA DEL REY	0701	Sheephead, California	9
2013	6	MARINA DEL REY	0701	Shark, thresher	2
2013	6	MARINA DEL REY	0701	Shark, soupfin	
2013	6	MARINA DEL REY	0701	Lingcod	229
2013	6	MARINA DEL REY	0701	Halibut, California	26
2013	6	MARINA DEL REY	0701	Sanddab	135
2013	6	MARINA DEL REY	0701	Rockfish, unspecified	7958
2013	6	MARINA DEL REY	0701	Rockfish, bocaccio	2067
2013	6	MARINA DEL REY	0701	Scorpionfish, California	454
2013	6	MARINA DEL REY	0701	Cabezon	2
2013	6	MARINA DEL REY	0701	Rockfish, gopher	45
2013	6	MARINA DEL REY	0701	Rockfish, widow	1183
2013	6	MARINA DEL REY	0701	Bass, kelp	167
2013	6	MARINA DEL REY	0701	Bass, barred sand	696
2013	6	MARINA DEL REY	0701	Bass, giant sea	
2013	6	MARINA DEL REY	0701	Sunfish, ocean	
2013	6	MARINA DEL REY	0701	Croaker, white	
2013	6	MARINA DEL REY	0701	Perch-like, unspecified	67
2013	6	MARINA DEL REY	0701	Halfmoon	48
2013	6	MARINA DEL REY	0701	Blacksmith	261
2013	6	MARINA DEL REY	0701	Whitefish, ocean	22
2013	6	MARINA DEL REY	0701	Rockfish, copper	38
2013	6	MARINA DEL REY	0701	Rockfish, blue	47
2013	6	MARINA DEL REY	0701		
2013	6	MARINA DEL REY	0702	Mackerel, Pacific	1
2013	6	MARINA DEL REY	0702	Sheephead, California	20
2013	6	MARINA DEL REY	0702	Shark, spiny dogfish	

Year	Month	Port Name	Block	Species	Kept
2013	6	MARINA DEL REY	0702	Lingcod	120
2013	6	MARINA DEL REY	0702	Sole, unspecified	1
2013	6	MARINA DEL REY	0702	Sole, petrale	4
2013	6	MARINA DEL REY	0702	Halibut, California	1
2013	6	MARINA DEL REY	0702	Sanddab	904
2013	6	MARINA DEL REY	0702	Rockfish, unspecified	5277
2013	6	MARINA DEL REY	0702	Rockfish, bocaccio	1069
2013	6	MARINA DEL REY	0702	Scorpionfish, California	933
2013	6	MARINA DEL REY	0702	Rockfish, gopher	4
2013	6	MARINA DEL REY	0702	Rockfish, widow	87
2013	6	MARINA DEL REY	0702	Bass, kelp	13
2013	6	MARINA DEL REY	0702	Bass, barred sand	56
2013	6	MARINA DEL REY	0702	Sunfish, ocean	
2013	6	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	1
2013	6	MARINA DEL REY	0702	Perch-like, unspecified	45
2013	6	MARINA DEL REY	0702	Blacksmith	16
2013	6	MARINA DEL REY	0702	Whitefish, ocean	9
2013	6	MARINA DEL REY	0702	Surfperch, unspecified	10
2013	6	MARINA DEL REY	0702	Rockfish, copper	22
2013	6	MARINA DEL REY	0702	Rockfish, blue	18
2013	6	MARINA DEL REY	0702	Fish, unspecified	
2013	6	REDONDO BEACH	0720	Yellowtail	1
2013	6	MARINA DEL REY	0720	Mackerel, Pacific	10
2013	6	SAN PEDRO	0720	Barracuda, California	
2013	6	SAN PEDRO	0720	Sheephead, California	7
2013	6	REDONDO BEACH	0720	Sheephead, California	99
2013	6	SAN PEDRO	0720	Lingcod	1
2013	6	REDONDO BEACH	0720	Lingcod	17
2013	6	MARINA DEL REY	0720	Lingcod	
2013	6	REDONDO BEACH	0720	Halibut, California	2
2013	6	SAN PEDRO	0720	Sanddab	166
2013	6	REDONDO BEACH	0720	Sanddab	200
2013	6	LONG BEACH	0720	Rockfish, unspecified	3
2013	6	MARINA DEL REY	0720	Rockfish, unspecified	100
2013	6	SAN PEDRO	0720	Rockfish, unspecified	268
2013	6	REDONDO BEACH	0720	Rockfish, unspecified	5767
2013	6	MARINA DEL REY	0720	Rockfish, bocaccio	40
2013	6	SAN PEDRO	0720	Rockfish, bocaccio	61
2013	6	SAN PEDRO	0720	Scorpionfish, California	2
2013	6	REDONDO BEACH	0720	Scorpionfish, California	12
2013	6	REDONDO BEACH	0720	Cabezon	1
2013	6	SAN PEDRO	0720	Cabezon	
2013	6	LONG BEACH	0720	Rockfish, gopher	
2013	6	SAN PEDRO	0720	Bass, kelp	8
2013	6	REDONDO BEACH	0720	Bass, kelp	109
2013	6	LONG BEACH	0720	Bass, kelp	
2013	6	MARINA DEL REY	0720	Bass, kelp	
2013	6	SAN PEDRO	0720	Bass, barred sand	2
2013	6	REDONDO BEACH	0720	Bass, barred sand	57
2013	6	LONG BEACH	0720	Bass, barred sand	
2013	6	REDONDO BEACH	0720	Seabass, white	5
2013	6	SAN PEDRO	0720	Croaker, white	1
2013	6	REDONDO BEACH	0720	Opaleye	1
2013	6	REDONDO BEACH	0720	Halfmoon	113
2013	6	REDONDO BEACH	0720	Blacksmith	55
2013	6	SAN PEDRO	0720	Sargo	2
2013	6	REDONDO BEACH	0720	Sargo	23
2013	6	SAN PEDRO	0720	Whitefish, ocean	1
2013	6	REDONDO BEACH	0720	Whitefish, ocean	42
2013	6	SAN PEDRO	0720	Surfperch, unspecified	2
2013	6	SAN PEDRO	0720	Rockfish, copper	58
2013	6	SAN PEDRO	0720	Rockfish, blue	84
2013	7	MARINA DEL REY	0679	Rockfish, unspecified	30
2013	7	MARINA DEL REY	0679	Scorpionfish, California	1
2013	7	MARINA DEL REY	0679	Bass, kelp	2
2013	7	MARINA DEL REY	0679	Bass, barred sand	16
2013	7	MARINA DEL REY	0680	Mackerel, Pacific	20
2013	7	MARINA DEL REY	0680	Barracuda, California	1
2013	7	OXNARD	0680	Sheephead, California	28
2013	7	MARINA DEL REY	0680	Sheephead, California	60
2013	7	OXNARD	0680	Lingcod	1

Year	Month	Port Name	Block	Species	Kept
2013	7	MARINA DEL REY	0680	Lingcod	23
2013	7	MARINA DEL REY	0680	Halibut, California	2
2013	7	OXNARD	0680	Rockfish, cowcod	
2013	7	OXNARD	0680	Rockfish, unspecified	272
2013	7	MARINA DEL REY	0680	Rockfish, unspecified	635
2013	7	MARINA DEL REY	0680	Rockfish, bocaccio	84
2013	7	OXNARD	0680	Rockfish, bocaccio	135
2013	7	MARINA DEL REY	0680	Scorpionfish, California	1
2013	7	OXNARD	0680	Scorpionfish, California	2
2013	7	OXNARD	0680	Cabezon	1
2013	7	MARINA DEL REY	0680	Cabezon	2
2013	7	OXNARD	0680	Bass, kelp	59
2013	7	MARINA DEL REY	0680	Bass, kelp	489
2013	7	MARINA DEL REY	0680	Bass, barred sand	5
2013	7	OXNARD	0680	Seabass, white	1
2013	7	MARINA DEL REY	0680	Seabass, white	2
2013	7	MARINA DEL REY	0680	Halfmoon	80
2013	7	OXNARD	0680	Whitefish, ocean	2
2013	7	MARINA DEL REY	0680	Whitefish, ocean	16
2013	7	MARINA DEL REY	0680	Rockfish, copper	2
2013	7	MARINA DEL REY	0701	Mackerel, Pacific	12
2013	7	MARINA DEL REY	0701	Mackerel, jack	1
2013	7	MARINA DEL REY	0701	Barracuda, California	68
2013	7	MARINA DEL REY	0701	Sheephead, California	11
2013	7	MARINA DEL REY	0701	Wrasse, rock	
2013	7	MARINA DEL REY	0701	Shark, unspecified	150
2013	7	MARINA DEL REY	0701	Skate, unspecified	
2013	7	REDONDO BEACH	0701	Lingcod	1
2013	7	MARINA DEL REY	0701	Lingcod	129
2013	7	MARINA DEL REY	0701	Sole, unspecified	1
2013	7	REDONDO BEACH	0701	Halibut, California	3
2013	7	MARINA DEL REY	0701	Halibut, California	13
2013	7	MARINA DEL REY	0701	Sanddab	451
2013	7	REDONDO BEACH	0701	Rockfish, unspecified	342
2013	7	MARINA DEL REY	0701	Rockfish, unspecified	6524
2013	7	REDONDO BEACH	0701	Rockfish, bocaccio	38
2013	7	MARINA DEL REY	0701	Rockfish, bocaccio	2214
2013	7	REDONDO BEACH	0701	Scorpionfish, California	5
2013	7	MARINA DEL REY	0701	Scorpionfish, California	650
2013	7	MARINA DEL REY	0701	Cabezon	2
2013	7	MARINA DEL REY	0701	Rockfish, gopher	
2013	7	MARINA DEL REY	0701	Rockfish, widow	304
2013	7	REDONDO BEACH	0701	Bass, kelp	8
2013	7	MARINA DEL REY	0701	Bass, kelp	95
2013	7	REDONDO BEACH	0701	Bass, barred sand	4
2013	7	MARINA DEL REY	0701	Bass, barred sand	956
2013	7	MARINA DEL REY	0701	Seabass, white	1
2013	7	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	2
2013	7	MARINA DEL REY	0701	Lizardfish, California	5
2013	7	MARINA DEL REY	0701	Halfmoon	20
2013	7	MARINA DEL REY	0701	Blacksmith	47
2013	7	MARINA DEL REY	0701	Sargo	1
2013	7	REDONDO BEACH	0701	Sargo	7
2013	7	MARINA DEL REY	0701	Whitefish, ocean	9
2013	7	MARINA DEL REY	0701	Surfperch, rubberlip	
2013	7	MARINA DEL REY	0701	Rockfish, copper	33
2013	7	MARINA DEL REY	0701	Rockfish, blue	17
2013	7	MARINA DEL REY	0701	Sea cucumber, unspecified	1
2013	7	MARINA DEL REY	0701		
2013	7	MARINA DEL REY	0702	Barracuda, California	
2013	7	MARINA DEL REY	0702	Sheephead, California	6
2013	7	MARINA DEL REY	0702	Shark, spiny dogfish	
2013	7	MARINA DEL REY	0702	Lingcod	58
2013	7	SAN PEDRO	0702	Lingcod	
2013	7	MARINA DEL REY	0702	Sole, petrale	3
2013	7	MARINA DEL REY	0702	Halibut, California	1
2013	7	MARINA DEL REY	0702	Sanddab	824
2013	7	SAN PEDRO	0702	Rockfish, unspecified	100
2013	7	MARINA DEL REY	0702	Rockfish, unspecified	4241
2013	7	SAN PEDRO	0702	Rockfish, bocaccio	95
2013	7	MARINA DEL REY	0702	Rockfish, bocaccio	2400

Year	Month	Port Name	Block	Species	Kept
2013	7	SAN PEDRO	0702	Scorpionfish, California	30
2013	7	MARINA DEL REY	0702	Scorpionfish, California	1051
2013	7	MARINA DEL REY	0702	Rockfish, gopher	2
2013	7	MARINA DEL REY	0702	Rockfish, widow	327
2013	7	MARINA DEL REY	0702	Bass, kelp	10
2013	7	MARINA DEL REY	0702	Bass, barred sand	7
2013	7	MARINA DEL REY	0702	Seabass, white	
2013	7	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2013	7	MARINA DEL REY	0702	Lizardfish, California	
2013	7	MARINA DEL REY	0702	Whitefish, ocean	4
2013	7	MARINA DEL REY	0702	Surfperch, shiner	1
2013	7	SAN PEDRO	0702	Rockfish, copper	1
2013	7	MARINA DEL REY	0702	Rockfish, copper	24
2013	7	MARINA DEL REY	0702	Rockfish, blue	20
2013	7	REDONDO BEACH	0720	Barracuda, California	1
2013	7	REDONDO BEACH	0720	Sheephead, California	5
2013	7	HUNTINGTON BEACH	0720	Shark, shortfin mako	1
2013	7	MARINA DEL REY	0720	Lingcod	4
2013	7	REDONDO BEACH	0720	Lingcod	22
2013	7	REDONDO BEACH	0720	Sole, unspecified	1
2013	7	REDONDO BEACH	0720	Sanddab	500
2013	7	MARINA DEL REY	0720	Rockfish, unspecified	150
2013	7	SANTA MONICA	0720	Rockfish, unspecified	231
2013	7	REDONDO BEACH	0720	Rockfish, unspecified	4509
2013	7	REDONDO BEACH	0720	Rockfish, bocaccio	33
2013	7	MARINA DEL REY	0720	Rockfish, bocaccio	54
2013	7	REDONDO BEACH	0720	Scorpionfish, California	8
2013	7	REDONDO BEACH	0720	Cabezon	2
2013	7	REDONDO BEACH	0720	Bass, kelp	12
2013	7	NEWPORT BEACH	0720	Bass, kelp	
2013	7	REDONDO BEACH	0720	Bass, barred sand	19
2013	7	NEWPORT BEACH	0720	Bass, barred sand	
2013	7	REDONDO BEACH	0720	Sargo	1
2013	7	REDONDO BEACH	0720	Whitefish, ocean	1
2013	7	HUNTINGTON BEACH	0720		
2013	8	GUADALUPE BEACH	0678	Sheephead, California	1
2013	8	GUADALUPE BEACH	0678	Bass, kelp	1
2013	8	GUADALUPE BEACH	0678	Bass, barred sand	1
2013	8	GUADALUPE BEACH	0678	Halfmoon	1
2013	8	MARINA DEL REY	0679	Mackerel, Pacific	
2013	8	MARINA DEL REY	0679	Barracuda, California	
2013	8	MARINA DEL REY	0679	Sheephead, California	1
2013	8	MARINA DEL REY	0679	Shark, thresher	
2013	8	MARINA DEL REY	0679	Shark, soupfin	
2013	8	MARINA DEL REY	0679	Ray, unspecified	
2013	8	MARINA DEL REY	0679	Lingcod	16
2013	8	MARINA DEL REY	0679	Sole, unspecified	2
2013	8	MARINA DEL REY	0679	Halibut, California	1
2013	8	MARINA DEL REY	0679	Sanddab	
2013	8	MARINA DEL REY	0679	Rockfish, unspecified	150
2013	8	MARINA DEL REY	0679	Rockfish, bocaccio	1
2013	8	MARINA DEL REY	0679	Scorpionfish, California	3
2013	8	MARINA DEL REY	0679	Cabezon	
2013	8	MARINA DEL REY	0679	Bass, kelp	11
2013	8	MARINA DEL REY	0679	Bass, barred sand	76
2013	8	MARINA DEL REY	0679	Bass, giant sea	
2013	8	MARINA DEL REY	0679	Seabass, white	1
2013	8	MARINA DEL REY	0679	Blacksmith	
2013	8	MARINA DEL REY	0679	Rockfish, copper	4
2013	8	MARINA DEL REY	0679	Rockfish, blue	1
2013	8	MARINA DEL REY	0680	Mackerel, Pacific	
2013	8	OXNARD	0680	Barracuda, California	
2013	8	MARINA DEL REY	0680	Sheephead, California	1
2013	8	OXNARD	0680	Sheephead, California	3
2013	8	MARINA DEL REY	0680	Jacksmelt	
2013	8	MARINA DEL REY	0680	Lingcod	32
2013	8	OXNARD	0680	Lingcod	
2013	8	MARINA DEL REY	0680	Sanddab	20
2013	8	OXNARD	0680	Rockfish, unspecified	26
2013	8	MARINA DEL REY	0680	Rockfish, unspecified	1170
2013	8	MARINA DEL REY	0680	Rockfish, bocaccio	451

Year	Month	Port Name	Block	Species	Kept
2013	8	MARINA DEL REY	0680	Cabezon	
2013	8	OXNARD	0680	Bass, kelp	36
2013	8	MARINA DEL REY	0680	Bass, kelp	
2013	8	OXNARD	0680	Bass, barred sand	1
2013	8	MARINA DEL REY	0680	Rockfish, copper	71
2013	8	MARINA DEL REY	0701	Mackerel, Pacific	3
2013	8	MARINA DEL REY	0701	Barracuda, California	2
2013	8	MARINA DEL REY	0701	Sheephead, California	6
2013	8	MARINA DEL REY	0701	Wrasse, rock	
2013	8	MARINA DEL REY	0701	Shark, shortfin mako	2
2013	8	MARINA DEL REY	0701	Shark, spiny dogfish	
2013	8	MARINA DEL REY	0701	Lingcod	375
2013	8	MARINA DEL REY	0701	Sole, unspecified	6
2013	8	MARINA DEL REY	0701	Halibut, California	4
2013	8	MARINA DEL REY	0701	Sanddab	206
2013	8	MARINA DEL REY	0701	Rockfish, unspecified	6940
2013	8	MARINA DEL REY	0701	Rockfish, bocaccio	2092
2013	8	MARINA DEL REY	0701	Scorpionfish, California	754
2013	8	MARINA DEL REY	0701	Cabezon	3
2013	8	MARINA DEL REY	0701	Rockfish, widow	379
2013	8	MARINA DEL REY	0701	Bass, kelp	29
2013	8	MARINA DEL REY	0701	Bass, barred sand	981
2013	8	MARINA DEL REY	0701	Bass, giant sea	
2013	8	MARINA DEL REY	0701	Triggerfish	1
2013	8	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	3
2013	8	MARINA DEL REY	0701	Blacksmith	55
2013	8	MARINA DEL REY	0701	Whitefish, ocean	22
2013	8	MARINA DEL REY	0701	Surfperch, unspecified	1
2013	8	MARINA DEL REY	0701	Rockfish, copper	15
2013	8	MARINA DEL REY	0701	Rockfish, blue	6
2013	8	MARINA DEL REY	0701		
2013	8	MARINA DEL REY	0702	Sheephead, California	16
2013	8	MARINA DEL REY	0702	Shark, shortfin mako	
2013	8	MARINA DEL REY	0702	Lingcod	186
2013	8	MARINA DEL REY	0702	Sanddab	784
2013	8	MARINA DEL REY	0702	Rockfish, unspecified	4979
2013	8	MARINA DEL REY	0702	Rockfish, bocaccio	1665
2013	8	MARINA DEL REY	0702	Scorpionfish, California	739
2013	8	MARINA DEL REY	0702	Rockfish, widow	121
2013	8	MARINA DEL REY	0702	Bass, kelp	
2013	8	MARINA DEL REY	0702	Bass, barred sand	2
2013	8	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2013	8	MARINA DEL REY	0702	Whitefish, ocean	30
2013	8	MARINA DEL REY	0702	Rockfish, copper	28
2013	8	MARINA DEL REY	0702	Rockfish, blue	18
2013	8	MARINA DEL REY	0703	Rockfish, unspecified	180
2013	8	MARINA DEL REY	0703	Rockfish, bocaccio	110
2013	8	MARINA DEL REY	0703	Rockfish, widow	10
2013	8	MARINA DEL REY	0703	Rockfish, copper	5
2013	8	MARINA DEL REY	0720	Barracuda, California	
2013	8	MARINA DEL REY	0720	Sheephead, California	4
2013	8	REDONDO BEACH	0720	Sheephead, California	
2013	8	LONG BEACH	0720	Shark, shortfin mako	1
2013	8	KLAMATH	0720	Lingcod	11
2013	8	MARINA DEL REY	0720	Lingcod	12
2013	8	REDONDO BEACH	0720	Lingcod	15
2013	8	MARINA DEL REY	0720	Sanddab	20
2013	8	KLAMATH	0720	Rockfish, canary	
2013	8	MARINA DEL REY	0720	Rockfish, unspecified	441
2013	8	REDONDO BEACH	0720	Rockfish, unspecified	1993
2013	8	KLAMATH	0720	Rockfish, black	64
2013	8	REDONDO BEACH	0720	Rockfish, bocaccio	56
2013	8	MARINA DEL REY	0720	Rockfish, bocaccio	186
2013	8	REDONDO BEACH	0720	Scorpionfish, California	1
2013	8	MARINA DEL REY	0720	Scorpionfish, California	39
2013	8	KLAMATH	0720	Cabezon	1
2013	8	MARINA DEL REY	0720	Rockfish, gopher	1
2013	8	MARINA DEL REY	0720	Rockfish, widow	1
2013	8	REDONDO BEACH	0720	Bass, kelp	5
2013	8	MARINA DEL REY	0720	Bass, kelp	7
2013	8	REDONDO BEACH	0720	Bass, barred sand	8

Year	Month	Port Name	Block	Species	Kept
2013	8	REDONDO BEACH	0720	Seabass, white	3
2013	8	MARINA DEL REY	0720	Opaleye	1
2013	8	MARINA DEL REY	0720	Halfmoon	1
2013	8	REDONDO BEACH	0720	Whitefish, ocean	2
2013	8	MARINA DEL REY	0720	Whitefish, ocean	7
2013	8	MARINA DEL REY	0720	Surfperch, rubberlip	1
2013	8	KLAMATH	0720	Rockfish, copper	2
2013	8	MARINA DEL REY	0720	Rockfish, copper	4
2013	8	REDONDO BEACH	0720	Rockfish, copper	5
2013	8	KLAMATH	0720	Rockfish, blue	4
2013	8	MARINA DEL REY	0720	Rockfish, blue	48
2013	9	MARINA DEL REY	0678	Sea urchin, red	2
2013	9	MARINA DEL REY	0678	Crab, rock unspecified	8
2013	9	MARINA DEL REY	0678	Lobster, California spiny	8
2013	9	SANTA BARBARA HARBOR	0680	Sheephead, California	2
2013	9	MARINA DEL REY	0680	Sheephead, California	7
2013	9	MARINA DEL REY	0680	Lingcod	33
2013	9	MARINA DEL REY	0680	Sanddab	60
2013	9	SANTA BARBARA HARBOR	0680	Rockfish, unspecified	2
2013	9	MARINA DEL REY	0680	Rockfish, unspecified	1701
2013	9	MARINA DEL REY	0680	Rockfish, bocaccio	468
2013	9	MARINA DEL REY	0680	Scorpionfish, California	8
2013	9	MARINA DEL REY	0680	Cabezon	
2013	9	MARINA DEL REY	0680	Rockfish, widow	1
2013	9	MARINA DEL REY	0680	Bass, kelp	5
2013	9	SANTA BARBARA HARBOR	0680	Bass, kelp	9
2013	9	MARINA DEL REY	0680	Bass, barred sand	2
2013	9	MARINA DEL REY	0680	Whitefish, ocean	7
2013	9	MARINA DEL REY	0680	Rockfish, copper	23
2013	9	SANTA BARBARA HARBOR	0680	Scallop, rock	2
2013	9	MARINA DEL REY	0701	Sheephead, California	21
2013	9	MARINA DEL REY	0701	Ray, bat	
2013	9	MARINA DEL REY	0701	Lingcod	222
2013	9	MARINA DEL REY	0701	Sanddab	60
2013	9	MARINA DEL REY	0701	Rockfish, unspecified	4525
2013	9	MARINA DEL REY	0701	Rockfish, bocaccio	846
2013	9	MARINA DEL REY	0701	Scorpionfish, California	2365
2013	9	MARINA DEL REY	0701	Cabezon	5
2013	9	MARINA DEL REY	0701	Rockfish, widow	576
2013	9	MARINA DEL REY	0701	Bass, kelp	6
2013	9	MARINA DEL REY	0701	Bass, barred sand	144
2013	9	MARINA DEL REY	0701	Whitefish, ocean	38
2013	9	MARINA DEL REY	0701	Rockfish, copper	25
2013	9	MARINA DEL REY	0701	Rockfish, blue	6
2013	9	SAN PEDRO	0702	Bonito, Pacific	20
2013	9	MARINA DEL REY	0702	Mackerel, Pacific	66
2013	9	MARINA DEL REY	0702	Barracuda, California	
2013	9	SAN PEDRO	0702	Sheephead, California	11
2013	9	MARINA DEL REY	0702	Sheephead, California	17
2013	9	MARINA DEL REY	0702	Shark, spiny dogfish	
2013	9	SAN PEDRO	0702	Lingcod	2
2013	9	MARINA DEL REY	0702	Lingcod	90
2013	9	MARINA DEL REY	0702	Sole, petrale	2
2013	9	MARINA DEL REY	0702	Halibut, California	
2013	9	MARINA DEL REY	0702	Sanddab	563
2013	9	SAN PEDRO	0702	Rockfish, unspecified	69
2013	9	MARINA DEL REY	0702	Rockfish, unspecified	5194
2013	9	SAN PEDRO	0702	Rockfish, bocaccio	65
2013	9	MARINA DEL REY	0702	Rockfish, bocaccio	1147
2013	9	SAN PEDRO	0702	Scorpionfish, California	137
2013	9	MARINA DEL REY	0702	Scorpionfish, California	1021
2013	9	MARINA DEL REY	0702	Cabezon	
2013	9	SAN PEDRO	0702	Rockfish, gopher	10
2013	9	SAN PEDRO	0702	Rockfish, widow	15
2013	9	MARINA DEL REY	0702	Rockfish, widow	467
2013	9	SAN PEDRO	0702	Bass, kelp	6
2013	9	MARINA DEL REY	0702	Bass, kelp	6
2013	9	SAN PEDRO	0702	Bass, barred sand	9
2013	9	MARINA DEL REY	0702	Bass, barred sand	15
2013	9	SAN PEDRO	0702	Opaleye	20
2013	9	SAN PEDRO	0702	Halfmoon	50

Year	Month	Port Name	Block	Species	Kept
2013	9	SAN PEDRO	0702	Whitefish, ocean	5
2013	9	MARINA DEL REY	0702	Whitefish, ocean	82
2013	9	MARINA DEL REY	0702	Rockfish, copper	27
2013	9	MARINA DEL REY	0702	Rockfish, blue	11
2013	9	MARINA DEL REY	0702	Octopus, unspecified	1
2013	9	SAN PEDRO	0702	Rockfish, group red	20
2013	9	MARINA DEL REY	0703	Lingcod	3
2013	9	MARINA DEL REY	0703	Sanddab	5
2013	9	MARINA DEL REY	0703	Rockfish, unspecified	150
2013	9	MARINA DEL REY	0703	Rockfish, bocaccio	50
2013	9	MARINA DEL REY	0703	Rockfish, copper	2
2013	9	REDONDO BEACH	0720	Bonito, Pacific	1
2013	9	MARINA DEL REY	0720	Mackerel, Pacific	1
2013	9	REDONDO BEACH	0720	Sheephead, California	13
2013	9	LONG BEACH	0720	Shark, shortfin mako	
2013	9	LONG BEACH	0720	Shark, blue	
2013	9	MARINA DEL REY	0720	Lingcod	1
2013	9	REDONDO BEACH	0720	Lingcod	
2013	9	MARINA DEL REY	0720	Sanddab	15
2013	9	MARINA DEL REY	0720	Rockfish, unspecified	75
2013	9	REDONDO BEACH	0720	Rockfish, unspecified	148
2013	9	REDONDO BEACH	0720	Rockfish, bocaccio	5
2013	9	MARINA DEL REY	0720	Rockfish, bocaccio	83
2013	9	MARINA DEL REY	0720	Scorpionfish, California	165
2013	9	REDONDO BEACH	0720	Scorpionfish, California	
2013	9	REDONDO BEACH	0720	Cabezon	1
2013	9	REDONDO BEACH	0720	Bass, kelp	7
2013	9	REDONDO BEACH	0720	Bass, barred sand	4
2013	9	REDONDO BEACH	0720	Opaleye	1
2013	9	REDONDO BEACH	0720	Halfmoon	10
2013	9	REDONDO BEACH	0720	Whitefish, ocean	7
2013	9	REDONDO BEACH	0720	Rockfish, copper	2
2013	9	REDONDO BEACH	0720	Rockfish, blue	1
2013	9	MARINA DEL REY	0720	Rockfish, blue	7
2013	9	REDONDO BEACH	0720	Lobster, California spiny	34
2013	10	MARINA DEL REY	0680	Sheephead, California	55
2013	10	MARINA DEL REY	0680	Lingcod	55
2013	10	MARINA DEL REY	0680	Rockfish, unspecified	1285
2013	10	MARINA DEL REY	0680	Rockfish, bocaccio	87
2013	10	MARINA DEL REY	0680	Scorpionfish, California	17
2013	10	MARINA DEL REY	0680	Cabezon	1
2013	10	MARINA DEL REY	0680	Bass, barred sand	7
2013	10	MARINA DEL REY	0680	Whitefish, ocean	77
2013	10	MARINA DEL REY	0680	Rockfish, copper	75
2013	10	MARINA DEL REY	0680	Rockfish, blue	12
2013	10	MARINA DEL REY	0701	Sheephead, California	83
2013	10	MARINA DEL REY	0701	Ray, unspecified	
2013	10	MARINA DEL REY	0701	Lingcod	247
2013	10	MARINA DEL REY	0701	Sanddab	44
2013	10	MARINA DEL REY	0701	Rockfish, unspecified	4707
2013	10	MARINA DEL REY	0701	Rockfish, bocaccio	1514
2013	10	MARINA DEL REY	0701	Scorpionfish, California	1924
2013	10	MARINA DEL REY	0701	Cabezon	13
2013	10	MARINA DEL REY	0701	Rockfish, widow	596
2013	10	MARINA DEL REY	0701	Bass, kelp	22
2013	10	MARINA DEL REY	0701	Bass, barred sand	190
2013	10	MARINA DEL REY	0701	Whitefish, ocean	17
2013	10	MARINA DEL REY	0701	Rockfish, copper	23
2013	10	MARINA DEL REY	0701	Rockfish, blue	5
2013	10	MARINA DEL REY	0701		
2013	10	MARINA DEL REY	0702	Sheephead, California	19
2013	10	MARINA DEL REY	0702	Shark, spiny dogfish	5
2013	10	MARINA DEL REY	0702	Lingcod	66
2013	10	MARINA DEL REY	0702	Sanddab	88
2013	10	MARINA DEL REY	0702	Rockfish, unspecified	2606
2013	10	MARINA DEL REY	0702	Rockfish, bocaccio	693
2013	10	MARINA DEL REY	0702	Scorpionfish, California	438
2013	10	MARINA DEL REY	0702	Rockfish, widow	43
2013	10	MARINA DEL REY	0702	Bass, barred sand	5
2013	10	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2013	10	MARINA DEL REY	0702	Whitefish, ocean	2

Year	Month	Port Name	Block	Species	Kept
2013	10	MARINA DEL REY	0702	Rockfish, copper	20
2013	10	MARINA DEL REY	0702	Rockfish, blue	1
2013	10	MARINA DEL REY	0702	Octopus, unspecified	1
2013	10	REDONDO BEACH	0720	Bonito, Pacific	2
2013	10	SAN PEDRO	0720	Yellowtail	4
2013	10	REDONDO BEACH	0720	Mackerel, Pacific	2
2013	10	SAN PEDRO	0720	Barracuda, California	1
2013	10	REDONDO BEACH	0720	Barracuda, California	
2013	10	SAN PEDRO	0720	Sheephead, California	34
2013	10	REDONDO BEACH	0720	Sheephead, California	69
2013	10	SAN PEDRO	0720	Lingcod	20
2013	10	REDONDO BEACH	0720	Lingcod	96
2013	10	SAN PEDRO	0720	Rockfish, unspecified	324
2013	10	REDONDO BEACH	0720	Rockfish, unspecified	3303
2013	10	REDONDO BEACH	0720	Rockfish, black	
2013	10	REDONDO BEACH	0720	Rockfish, bocaccio	10
2013	10	SAN PEDRO	0720	Rockfish, bocaccio	238
2013	10	SAN PEDRO	0720	Scorpionfish, California	2
2013	10	REDONDO BEACH	0720	Scorpionfish, California	427
2013	10	REDONDO BEACH	0720	Cabezon	4
2013	10	SAN PEDRO	0720	Bass, kelp	3
2013	10	REDONDO BEACH	0720	Bass, kelp	34
2013	10	SAN PEDRO	0720	Bass, barred sand	3
2013	10	REDONDO BEACH	0720	Bass, barred sand	18
2013	10	REDONDO BEACH	0720	Eel, wolf (wolf-eel)	1
2013	10	SAN PEDRO	0720	Opaleye	1
2013	10	REDONDO BEACH	0720	Opaleye	3
2013	10	REDONDO BEACH	0720	Halfmoon	17
2013	10	SAN PEDRO	0720	Halfmoon	35
2013	10	SAN PEDRO	0720	Sargo	71
2013	10	SAN PEDRO	0720	Whitefish, ocean	8
2013	10	REDONDO BEACH	0720	Whitefish, ocean	16
2013	10	REDONDO BEACH	0720	Surfperch, rubberlip	18
2013	10	SAN PEDRO	0720	Rockfish, blue	21
2013	10	REDONDO BEACH	0720	Rockfish, blue	
2013	10	REDONDO BEACH	0720	Lobster, California spiny	3
2013	10	SAN PEDRO	0720	Rockfish, group red	323
2013	10	REDONDO BEACH	0721	Mackerel, Pacific	4
2013	10	REDONDO BEACH	0721	Barracuda, California	
2013	10	REDONDO BEACH	0721	Lingcod	5
2013	10	REDONDO BEACH	0721	Rockfish, unspecified	47
2013	10	REDONDO BEACH	0721	Rockfish, bocaccio	3
2013	10	REDONDO BEACH	0721	Bass, kelp	1
2013	10	REDONDO BEACH	0721	Bass, barred sand	2
2013	10	REDONDO BEACH	0721	Rockfish, copper	1
2013	11	MARINA DEL REY	0678	Shark, spiny dogfish	1
2013	11	MARINA DEL REY	0678	Lingcod	1
2013	11	MARINA DEL REY	0678	Sanddab	3
2013	11	MARINA DEL REY	0678	Rockfish, unspecified	52
2013	11	MARINA DEL REY	0678	Bass, kelp	1
2013	11	MARINA DEL REY	0678	Bass, barred sand	6
2013	11	MARINA DEL REY	0678	Crab, rock unspecified	2
2013	11	MARINA DEL REY	0678	Lobster, California spiny	13
2013	11	REDONDO BEACH	0678		
2013	11	MARINA DEL REY	0678		
2013	11	MARINA DEL REY	0679	Lingcod	
2013	11	MARINA DEL REY	0679	Sanddab	30
2013	11	MARINA DEL REY	0679	Rockfish, unspecified	70
2013	11	MARINA DEL REY	0679	Rockfish, bocaccio	60
2013	11	MARINA DEL REY	0679	Scorpionfish, California	55
2013	11	MARINA DEL REY	0679	Rockfish, copper	2
2013	11	MARINA DEL REY	0680	Sheephead, California	7
2013	11	MARINA DEL REY	0680	Lingcod	19
2013	11	MARINA DEL REY	0680	Rockfish, unspecified	490
2013	11	MARINA DEL REY	0680	Rockfish, bocaccio	70
2013	11	MARINA DEL REY	0680	Scorpionfish, California	15
2013	11	MARINA DEL REY	0680	Cabezon	
2013	11	MARINA DEL REY	0680	Rockfish, widow	1
2013	11	MARINA DEL REY	0680	Bass, barred sand	1
2013	11	MARINA DEL REY	0680	Rockfish, copper	20
2013	11	SAN PEDRO	0701	Sheephead, California	4

Year	Month	Port Name	Block	Species	Kept
2013	11	MARINA DEL REY	0701	Sheephead, California	111
2013	11	SAN PEDRO	0701	Lingcod	1
2013	11	MARINA DEL REY	0701	Lingcod	187
2013	11	MARINA DEL REY	0701	Sole, unspecified	3
2013	11	MARINA DEL REY	0701	Sanddab	62
2013	11	SAN PEDRO	0701	Rockfish, unspecified	52
2013	11	MARINA DEL REY	0701	Rockfish, unspecified	5122
2013	11	SAN PEDRO	0701	Rockfish, bocaccio	21
2013	11	MARINA DEL REY	0701	Rockfish, bocaccio	1284
2013	11	SAN PEDRO	0701	Scorpionfish, California	3
2013	11	MARINA DEL REY	0701	Scorpionfish, California	4477
2013	11	MARINA DEL REY	0701	Cabezon	6
2013	11	MARINA DEL REY	0701	Rockfish, widow	164
2013	11	SAN PEDRO	0701	Bass, kelp	2
2013	11	MARINA DEL REY	0701	Bass, kelp	16
2013	11	SAN PEDRO	0701	Bass, barred sand	1
2013	11	MARINA DEL REY	0701	Bass, barred sand	214
2013	11	SAN PEDRO	0701	Sargo	18
2013	11	SAN PEDRO	0701	Whitefish, ocean	1
2013	11	MARINA DEL REY	0701	Whitefish, ocean	14
2013	11	MARINA DEL REY	0701	Rockfish, copper	28
2013	11	MARINA DEL REY	0701	Rockfish, blue	11
2013	11	LONG BEACH	0701	Lobster, California spiny	3
2013	11	SAN PEDRO	0701	Rockfish, group red	62
2013	11	SAN PEDRO	0702	Bonito, Pacific	30
2013	11	SAN PEDRO	0702	Sheephead, California	15
2013	11	MARINA DEL REY	0702	Sheephead, California	42
2013	11	MARINA DEL REY	0702	Lingcod	128
2013	11	SAN PEDRO	0702	Lingcod	
2013	11	MARINA DEL REY	0702	Sole, petrale	2
2013	11	MARINA DEL REY	0702	Sanddab	449
2013	11	SAN PEDRO	0702	Rockfish, cowcod	
2013	11	SAN PEDRO	0702	Rockfish, unspecified	430
2013	11	MARINA DEL REY	0702	Rockfish, unspecified	5133
2013	11	SAN PEDRO	0702	Rockfish, bocaccio	55
2013	11	MARINA DEL REY	0702	Rockfish, bocaccio	835
2013	11	MARINA DEL REY	0702	Scorpionfish, California	2800
2013	11	MARINA DEL REY	0702	Cabezon	1
2013	11	MARINA DEL REY	0702	Rockfish, widow	123
2013	11	SAN PEDRO	0702	Bass, kelp	
2013	11	MARINA DEL REY	0702	Bass, barred sand	8
2013	11	SAN PEDRO	0702	Opaleye	10
2013	11	SAN PEDRO	0702	Halfmoon	30
2013	11	MARINA DEL REY	0702	Blacksmith	1
2013	11	MARINA DEL REY	0702	Whitefish, ocean	25
2013	11	MARINA DEL REY	0702	Rockfish, copper	33
2013	11	MARINA DEL REY	0702	Rockfish, blue	17
2013	11	SAN PEDRO	0702	Rockfish, group red	15
2013	11	SAN PEDRO	0720	Sheephead, California	16
2013	11	REDONDO BEACH	0720	Sheephead, California	19
2013	11	REDONDO BEACH	0720	Lingcod	27
2013	11	SAN PEDRO	0720	Lingcod	27
2013	11	SAN PEDRO	0720	Rockfish, unspecified	287
2013	11	REDONDO BEACH	0720	Rockfish, unspecified	3833
2013	11	REDONDO BEACH	0720	Rockfish, bocaccio	1
2013	11	SAN PEDRO	0720	Rockfish, bocaccio	193
2013	11	REDONDO BEACH	0720	Scorpionfish, California	2
2013	11	SAN PEDRO	0720	Scorpionfish, California	6
2013	11	REDONDO BEACH	0720	Cabezon	
2013	11	SAN PEDRO	0720	Bass, kelp	7
2013	11	REDONDO BEACH	0720	Bass, kelp	16
2013	11	REDONDO BEACH	0720	Bass, barred sand	4
2013	11	SAN PEDRO	0720	Bass, barred sand	4
2013	11	SAN PEDRO	0720	Opaleye	4
2013	11	REDONDO BEACH	0720	Opaleye	16
2013	11	SAN PEDRO	0720	Halfmoon	182
2013	11	SAN PEDRO	0720	Sargo	102
2013	11	SAN PEDRO	0720	Whitefish, ocean	2
2013	11	REDONDO BEACH	0720	Rockfish, copper	3
2013	11	REDONDO BEACH	0720	Lobster, California spiny	24
2013	11	SAN PEDRO	0720	Rockfish, group red	244

Year	Month	Port Name	Block	Species	Kept
2013	11	REDONDO BEACH	0720		
2013	12	MARINA DEL REY	0678	Sheephead, California	2
2013	12	MARINA DEL REY	0678	Lingcod	1
2013	12	MARINA DEL REY	0678	Bass, kelp	1
2013	12	MARINA DEL REY	0678	Bass, barred sand	8
2013	12	MARINA DEL REY	0678	Triggerfish	1
2013	12	MARINA DEL REY	0678	Scallop, rock	20
2013	12	MARINA DEL REY	0678	Lobster, California spiny	3
2013	12	MARINA DEL REY	0679	Rockfish, unspecified	17
2013	12	MARINA DEL REY	0679	Scorpionfish, California	35
2013	12	MARINA DEL REY	0679	Bass, barred sand	19
2013	12	MARINA DEL REY	0680	Sheephead, California	2
2013	12	MARINA DEL REY	0680	Lingcod	13
2013	12	MARINA DEL REY	0680	Sanddab	2
2013	12	MARINA DEL REY	0680	Rockfish, unspecified	525
2013	12	MARINA DEL REY	0680	Rockfish, bocaccio	58
2013	12	MARINA DEL REY	0680	Scorpionfish, California	4
2013	12	MARINA DEL REY	0680	Whitefish, ocean	2
2013	12	REDONDO BEACH	0701	Sheephead, California	1
2013	12	MARINA DEL REY	0701	Sheephead, California	79
2013	12	MARINA DEL REY	0701	Lingcod	57
2013	12	MARINA DEL REY	0701	Halibut, California	1
2013	12	MARINA DEL REY	0701	Sanddab	10
2013	12	REDONDO BEACH	0701	Rockfish, unspecified	403
2013	12	MARINA DEL REY	0701	Rockfish, unspecified	4837
2013	12	MARINA DEL REY	0701	Rockfish, bocaccio	657
2013	12	REDONDO BEACH	0701	Scorpionfish, California	340
2013	12	MARINA DEL REY	0701	Scorpionfish, California	5532
2013	12	MARINA DEL REY	0701	Cabezon	4
2013	12	MARINA DEL REY	0701	Rockfish, gopher	2
2013	12	MARINA DEL REY	0701	Rockfish, widow	109
2013	12	MARINA DEL REY	0701	Bass, kelp	18
2013	12	MARINA DEL REY	0701	Bass, barred sand	183
2013	12	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	2
2013	12	MARINA DEL REY	0701	Whitefish, ocean	242
2013	12	MARINA DEL REY	0701	Rockfish, copper	136
2013	12	MARINA DEL REY	0701	Rockfish, blue	5
2013	12	MARINA DEL REY	0702	Sheephead, California	20
2013	12	MARINA DEL REY	0702	Lingcod	72
2013	12	MARINA DEL REY	0702	Sole, petrale	1
2013	12	MARINA DEL REY	0702	Sanddab	266
2013	12	MARINA DEL REY	0702	Rockfish, unspecified	3798
2013	12	MARINA DEL REY	0702	Rockfish, bocaccio	974
2013	12	MARINA DEL REY	0702	Scorpionfish, California	1282
2013	12	MARINA DEL REY	0702	Rockfish, widow	85
2013	12	MARINA DEL REY	0702	Bass, barred sand	2
2013	12	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	1
2013	12	MARINA DEL REY	0702	Lizardfish, California	
2013	12	MARINA DEL REY	0702	Whitefish, ocean	39
2013	12	MARINA DEL REY	0702	Surfperch, shiner	1
2013	12	MARINA DEL REY	0702	Rockfish, copper	40
2013	12	MARINA DEL REY	0702	Rockfish, blue	11
2013	12	MARINA DEL REY	0702	Octopus, unspecified	1
2013	12	LONG BEACH	0720	Sheephead, California	6
2013	12	REDONDO BEACH	0720	Sheephead, California	17
2013	12	SAN PEDRO	0720	Sheephead, California	18
2013	12	LONG BEACH	0720	Lingcod	2
2013	12	SAN PEDRO	0720	Lingcod	5
2013	12	REDONDO BEACH	0720	Lingcod	17
2013	12	MARINA DEL REY	0720	Lingcod	
2013	12	SAN PEDRO	0720	Rockfish, vermilion	75
2013	12	LONG BEACH	0720	Rockfish, unspecified	30
2013	12	MARINA DEL REY	0720	Rockfish, unspecified	130
2013	12	SAN PEDRO	0720	Rockfish, unspecified	257
2013	12	REDONDO BEACH	0720	Rockfish, unspecified	3140
2013	12	MARINA DEL REY	0720	Rockfish, bocaccio	80
2013	12	SAN PEDRO	0720	Rockfish, bocaccio	115
2013	12	LONG BEACH	0720	Scorpionfish, California	1
2013	12	SAN PEDRO	0720	Scorpionfish, California	6
2013	12	MARINA DEL REY	0720	Scorpionfish, California	90
2013	12	REDONDO BEACH	0720	Scorpionfish, California	194

Year	Month	Port Name	Block	Species	Kept
2013	12	REDONDO BEACH	0720	Cabezon	1
2013	12	LONG BEACH	0720	Cabezon	
2013	12	LONG BEACH	0720	Bass, kelp	8
2013	12	MARINA DEL REY	0720	Bass, barred sand	2
2013	12	LONG BEACH	0720	Bass, barred sand	6
2013	12	SAN PEDRO	0720	Opaleye	1
2013	12	REDONDO BEACH	0720	Whitefish, ocean	2
2013	12	LONG BEACH	0720	Rockfish, copper	4
2013	12	MARINA DEL REY	0720	Rockfish, copper	5
2013	12	LONG BEACH	0720	Rockfish, blue	2
2013	12	SAN PEDRO	0720	Rockfish, group red	188
2014	1	GUADALUPE BEACH	0678		
2014	1	MARINA DEL REY	0679	Sheephead, California	
2014	1	MARINA DEL REY	0679	Lingcod	
2014	1	MARINA DEL REY	0679	Halibut, California	1
2014	1	MARINA DEL REY	0679	Sanddab	780
2014	1	MARINA DEL REY	0679	Rockfish, unspecified	
2014	1	MARINA DEL REY	0679	Scorpionfish, California	1125
2014	1	MARINA DEL REY	0679	Cabezon	
2014	1	MARINA DEL REY	0679	Bass, kelp	83
2014	1	MARINA DEL REY	0679	Bass, barred sand	383
2014	1	MARINA DEL REY	0679	Triggerfish	4
2014	1	MARINA DEL REY	0679	Perch-like, unspecified	758
2014	1	REDONDO BEACH	0679	Lobster, California spiny	2
2014	1	MARINA DEL REY	0680	Mackerel, Pacific	1
2014	1	MARINA DEL REY	0680	Sheephead, California	
2014	1	MARINA DEL REY	0680	Lingcod	
2014	1	MARINA DEL REY	0680	Rockfish, unspecified	
2014	1	MARINA DEL REY	0680	Rockfish, copper	
2014	1	MARINA DEL REY	0701	Mackerel, Pacific	57
2014	1	MARINA DEL REY	0701	Sheephead, California	
2014	1	MARINA DEL REY	0701	Wrasse, rock	
2014	1	MARINA DEL REY	0701	Ray, unspecified	
2014	1	MARINA DEL REY	0701	Lingcod	
2014	1	MARINA DEL REY	0701	Halibut, California	1
2014	1	MARINA DEL REY	0701	Sanddab	2343
2014	1	MARINA DEL REY	0701	Rockfish, unspecified	
2014	1	MARINA DEL REY	0701	Scorpionfish, California	6831
2014	1	MARINA DEL REY	0701	Cabezon	
2014	1	MARINA DEL REY	0701	Bass, kelp	116
2014	1	MARINA DEL REY	0701	Bass, barred sand	403
2014	1	MARINA DEL REY	0701	Triggerfish	3
2014	1	MARINA DEL REY	0701	Opaleye	1
2014	1	MARINA DEL REY	0701	Blacksmith	3686
2014	1	MARINA DEL REY	0701	Whitefish, ocean	
2014	1	MARINA DEL REY	0701	Surfperch, rubberlip	1
2014	1	MARINA DEL REY	0701	Rockfish, copper	
2014	1	REDONDO BEACH	0720	Sheephead, California	
2014	1	REDONDO BEACH	0720	Lingcod	
2014	1	REDONDO BEACH	0720	Sole, unspecified	3
2014	1	REDONDO BEACH	0720	Sanddab	1485
2014	1	REDONDO BEACH	0720	Rockfish, unspecified	16
2014	1	REDONDO BEACH	0720	Scorpionfish, California	733
2014	1	REDONDO BEACH	0720	Cabezon	
2014	1	REDONDO BEACH	0720	Rockfish, gopher	
2014	1	REDONDO BEACH	0720	Bass, kelp	4
2014	1	REDONDO BEACH	0720	Bass, barred sand	13
2014	1	REDONDO BEACH	0720	Triggerfish	1
2014	1	REDONDO BEACH	0720	Halfmoon	4
2014	1	REDONDO BEACH	0720	Blacksmith	35
2014	1	REDONDO BEACH	0720	Whitefish, ocean	
2014	1	REDONDO BEACH	0720	Rockfish, copper	
2014	1	REDONDO BEACH	0720	Rockfish, blue	
2014	2	MARINA DEL REY	0678	Sheephead, California	4
2014	2	MARINA DEL REY	0678	Bass, kelp	3
2014	2	MARINA DEL REY	0678	Bass, barred sand	9
2014	2	MARINA DEL REY	0678	Scallop, rock	58
2014	2	MARINA DEL REY	0678	Lobster, California spiny	6
2014	2	MARINA DEL REY	0679	Mackerel, Pacific	40
2014	2	MARINA DEL REY	0679	Sheephead, California	
2014	2	MARINA DEL REY	0679	Lingcod	

Year	Month	Port Name	Block	Species	Kept
2014	2	MARINA DEL REY	0679	Sanddab	460
2014	2	MARINA DEL REY	0679	Rockfish, unspecified	
2014	2	MARINA DEL REY	0679	Scorpionfish, California	812
2014	2	MARINA DEL REY	0679	Cabezon	
2014	2	MARINA DEL REY	0679	Bass, kelp	19
2014	2	MARINA DEL REY	0679	Bass, barred sand	138
2014	2	MARINA DEL REY	0679	Triggerfish	6
2014	2	MARINA DEL REY	0679	Perch-like, unspecified	868
2014	2	MARINA DEL REY	0679	Blacksmith	140
2014	2	MARINA DEL REY	0679	Surfperch, rubberlip	5
2014	2	MARINA DEL REY	0701	Mackerel, Pacific	355
2014	2	MARINA DEL REY	0701	Sheephead, California	
2014	2	MARINA DEL REY	0701	Lingcod	
2014	2	MARINA DEL REY	0701	Sanddab	2310
2014	2	MARINA DEL REY	0701	Rockfish, unspecified	
2014	2	MARINA DEL REY	0701	Scorpionfish, California	3371
2014	2	MARINA DEL REY	0701	Cabezon	
2014	2	MARINA DEL REY	0701	Rockfish, gopher	
2014	2	MARINA DEL REY	0701	Bass, kelp	62
2014	2	MARINA DEL REY	0701	Bass, barred sand	185
2014	2	MARINA DEL REY	0701	Triggerfish	5
2014	2	MARINA DEL REY	0701	Croaker, black	1
2014	2	MARINA DEL REY	0701	Blacksmith	4845
2014	2	MARINA DEL REY	0701	Sargo	2
2014	2	MARINA DEL REY	0701	Whitefish, ocean	
2014	2	MARINA DEL REY	0701	Surfperch, rubberlip	36
2014	2	MARINA DEL REY	0701	Rockfish, copper	
2014	2	MARINA DEL REY	0701	Rockfish, blue	
2014	2	MARINA DEL REY	0702	Mackerel, Pacific	8
2014	2	MARINA DEL REY	0702	Sanddab	316
2014	2	MARINA DEL REY	0702	Rockfish, unspecified	
2014	2	MARINA DEL REY	0702	Scorpionfish, California	75
2014	2	MARINA DEL REY	0702	Bass, kelp	
2014	2	MARINA DEL REY	0702	Blacksmith	78
2014	2	MARINA DEL REY	0702	Octopus, unspecified	5
2014	3	MARINA DEL REY	0678	Lobster, California spiny	4
2014	3	MARINA DEL REY	0678		
2014	3	MARINA DEL REY	0679	Lobster, California spiny	24
2014	3	MARINA DEL REY	0680	Mackerel, Pacific	1
2014	3	MARINA DEL REY	0680	Sheephead, California	5
2014	3	MARINA DEL REY	0680	Lingcod	15
2014	3	MARINA DEL REY	0680	Sanddab	195
2014	3	MARINA DEL REY	0680	Rockfish, cowcod	
2014	3	MARINA DEL REY	0680	Rockfish, canary	
2014	3	MARINA DEL REY	0680	Rockfish, unspecified	1218
2014	3	MARINA DEL REY	0680	Rockfish, bocaccio	44
2014	3	MARINA DEL REY	0680	Scorpionfish, California	13
2014	3	MARINA DEL REY	0680	Cabezon	
2014	3	MARINA DEL REY	0680	Rockfish, gopher	13
2014	3	MARINA DEL REY	0680	Rockfish, widow	8
2014	3	MARINA DEL REY	0680	Bass, kelp	1
2014	3	MARINA DEL REY	0680	Bass, barred sand	
2014	3	MARINA DEL REY	0680	Blacksmith	4
2014	3	MARINA DEL REY	0680	Whitefish, ocean	34
2014	3	MARINA DEL REY	0680	Rockfish, copper	202
2014	3	MARINA DEL REY	0680	Rockfish, blue	23
2014	3	MARINA DEL REY	0701	Mackerel, Pacific	200
2014	3	REDONDO BEACH	0701	Sheephead, California	1
2014	3	MARINA DEL REY	0701	Sheephead, California	16
2014	3	REDONDO BEACH	0701	Lingcod	5
2014	3	MARINA DEL REY	0701	Lingcod	153
2014	3	MARINA DEL REY	0701	Sole, unspecified	2
2014	3	MARINA DEL REY	0701	Sanddab	284
2014	3	REDONDO BEACH	0701	Rockfish, unspecified	167
2014	3	MARINA DEL REY	0701	Rockfish, unspecified	7768
2014	3	MARINA DEL REY	0701	Rockfish, bocaccio	500
2014	3	REDONDO BEACH	0701	Scorpionfish, California	10
2014	3	MARINA DEL REY	0701	Scorpionfish, California	528
2014	3	MARINA DEL REY	0701	Cabezon	1
2014	3	MARINA DEL REY	0701	Rockfish, widow	57
2014	3	MARINA DEL REY	0701	Bass, kelp	19

Year	Month	Port Name	Block	Species	Kept
2014	3	MARINA DEL REY	0701	Bass, barred sand	102
2014	3	MARINA DEL REY	0701	Blacksmith	150
2014	3	REDONDO BEACH	0701	Whitefish, ocean	15
2014	3	MARINA DEL REY	0701	Whitefish, ocean	41
2014	3	MARINA DEL REY	0701	Rockfish, copper	58
2014	3	MARINA DEL REY	0701	Rockfish, blue	180
2014	3	MARINA DEL REY	0701		
2014	3	MARINA DEL REY	0702	Mackerel, Pacific	568
2014	3	MARINA DEL REY	0702	Sheephead, California	17
2014	3	MARINA DEL REY	0702	Wrasse, rock	1
2014	3	MARINA DEL REY	0702	Smelt, night	
2014	3	MARINA DEL REY	0702	Lingcod	45
2014	3	MARINA DEL REY	0702	Sole, petrale	3
2014	3	MARINA DEL REY	0702	Sanddab	495
2014	3	MARINA DEL REY	0702	Rockfish, cowcod	
2014	3	MARINA DEL REY	0702	Rockfish, canary	
2014	3	MARINA DEL REY	0702	Rockfish, unspecified	3912
2014	3	MARINA DEL REY	0702	Rockfish, bocaccio	612
2014	3	MARINA DEL REY	0702	Scorpionfish, California	77
2014	3	MARINA DEL REY	0702	Rockfish, widow	48
2014	3	MARINA DEL REY	0702	Bass, kelp	
2014	3	MARINA DEL REY	0702	Bass, barred sand	13
2014	3	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	2
2014	3	MARINA DEL REY	0702	Perch-like, unspecified	105
2014	3	MARINA DEL REY	0702	Blacksmith	253
2014	3	MARINA DEL REY	0702	Whitefish, ocean	33
2014	3	MARINA DEL REY	0702	Surfperch, shiner	2
2014	3	MARINA DEL REY	0702	Surfperch, rubberlip	3
2014	3	MARINA DEL REY	0702	Rockfish, copper	65
2014	3	MARINA DEL REY	0702	Rockfish, blue	51
2014	3	MARINA DEL REY	0703	Lingcod	
2014	3	MARINA DEL REY	0703	Sanddab	100
2014	3	MARINA DEL REY	0703	Rockfish, unspecified	70
2014	3	MARINA DEL REY	0703	Rockfish, copper	
2014	3	SAN PEDRO	0720	Sheephead, California	10
2014	3	REDONDO BEACH	0720	Sheephead, California	49
2014	3	SAN PEDRO	0720	Shark, spiny dogfish	1
2014	3	MARINA DEL REY	0720	Lingcod	4
2014	3	SAN PEDRO	0720	Lingcod	10
2014	3	REDONDO BEACH	0720	Lingcod	12
2014	3	LONG BEACH	0720	Lingcod	
2014	3	REDONDO BEACH	0720	Sole, unspecified	3
2014	3	MARINA DEL REY	0720	Sanddab	38
2014	3	LONG BEACH	0720	Sanddab	683
2014	3	SAN PEDRO	0720	Rockfish, vermilion	79
2014	3	MARINA DEL REY	0720	Rockfish, unspecified	380
2014	3	SAN PEDRO	0720	Rockfish, unspecified	392
2014	3	LONG BEACH	0720	Rockfish, unspecified	955
2014	3	REDONDO BEACH	0720	Rockfish, unspecified	3320
2014	3	MARINA DEL REY	0720	Rockfish, bocaccio	20
2014	3	LONG BEACH	0720	Rockfish, bocaccio	162
2014	3	SAN PEDRO	0720	Rockfish, bocaccio	194
2014	3	MARINA DEL REY	0720	Scorpionfish, California	1
2014	3	SAN PEDRO	0720	Scorpionfish, California	12
2014	3	REDONDO BEACH	0720	Scorpionfish, California	82
2014	3	REDONDO BEACH	0720	Cabezon	3
2014	3	LONG BEACH	0720	Cabezon	
2014	3	SAN PEDRO	0720	Rockfish, gopher	2
2014	3	SAN PEDRO	0720	Rockfish, yelloweye	2
2014	3	REDONDO BEACH	0720	Bass, barred sand	1
2014	3	REDONDO BEACH	0720	Perch-like, unspecified	39
2014	3	LONG BEACH	0720	Whitefish, ocean	1
2014	3	SAN PEDRO	0720	Whitefish, ocean	10
2014	3	REDONDO BEACH	0720	Whitefish, ocean	52
2014	3	REDONDO BEACH	0720	Surfperch, unspecified	4
2014	3	LONG BEACH	0720	Rockfish, copper	1
2014	3	SAN PEDRO	0720	Rockfish, copper	2
2014	3	MARINA DEL REY	0720	Rockfish, copper	30
2014	3	LONG BEACH	0720	Rockfish, blue	7
2014	3	REDONDO BEACH	0720	Lobster, California spiny	5
2014	3	SAN PEDRO	0720	Rockfish, group red	393

Year	Month	Port Name	Block	Species	Kept
2014	3	REDONDO BEACH	0720		
2014	4	REDONDO BEACH	0701	Lingcod	2
2014	4	MARINA DEL REY	0701	Lingcod	86
2014	4	MARINA DEL REY	0701	Sanddab	297
2014	4	REDONDO BEACH	0701	Rockfish, unspecified	761
2014	4	MARINA DEL REY	0701	Rockfish, unspecified	4705
2014	4	MARINA DEL REY	0701	Rockfish, bocaccio	1391
2014	4	MARINA DEL REY	0701	Scorpionfish, California	347
2014	4	MARINA DEL REY	0701	Rockfish, widow	53
2014	4	MARINA DEL REY	0701	Bass, kelp	17
2014	4	MARINA DEL REY	0701	Bass, barred sand	71
2014	4	MARINA DEL REY	0701	Whitefish, ocean	6
2014	4	MARINA DEL REY	0701	Rockfish, copper	129
2014	4	MARINA DEL REY	0701	Rockfish, blue	8
2014	4	MARINA DEL REY	0702	Mackerel, Pacific	13
2014	4	MARINA DEL REY	0702	Sheephead, California	1
2014	4	MARINA DEL REY	0702	Wrasse, rock	
2014	4	REDONDO BEACH	0702	Lingcod	2
2014	4	MARINA DEL REY	0702	Lingcod	8
2014	4	MARINA DEL REY	0702	Sole, unspecified	1
2014	4	MARINA DEL REY	0702	Sole, petrale	3
2014	4	REDONDO BEACH	0702	Sanddab	10
2014	4	MARINA DEL REY	0702	Sanddab	315
2014	4	REDONDO BEACH	0702	Rockfish, unspecified	301
2014	4	MARINA DEL REY	0702	Rockfish, unspecified	1822
2014	4	MARINA DEL REY	0702	Rockfish, bocaccio	319
2014	4	REDONDO BEACH	0702	Scorpionfish, California	1
2014	4	MARINA DEL REY	0702	Scorpionfish, California	39
2014	4	MARINA DEL REY	0702	Cabezon	
2014	4	MARINA DEL REY	0702	Rockfish, yelloweye	
2014	4	MARINA DEL REY	0702	Rockfish, widow	11
2014	4	MARINA DEL REY	0702	Bass, kelp	1
2014	4	MARINA DEL REY	0702	Lizardfish, California	2
2014	4	MARINA DEL REY	0702	Blacksmith	66
2014	4	MARINA DEL REY	0702	Whitefish, ocean	1
2014	4	REDONDO BEACH	0702	Whitefish, ocean	3
2014	4	MARINA DEL REY	0702	Rockfish, copper	19
2014	4	MARINA DEL REY	0702	Rockfish, blue	92
2014	4	REDONDO BEACH	0720	Mackerel, Pacific	
2014	4	REDONDO BEACH	0720	Sheephead, California	2
2014	4	LONG BEACH	0720	Sheephead, California	2
2014	4	SAN PEDRO	0720	Sheephead, California	2
2014	4	LONG BEACH	0720	Lingcod	1
2014	4	REDONDO BEACH	0720	Lingcod	3
2014	4	SAN PEDRO	0720	Lingcod	9
2014	4	LONG BEACH	0720	Sanddab	278
2014	4	SAN PEDRO	0720	Rockfish, unspecified	267
2014	4	LONG BEACH	0720	Rockfish, unspecified	488
2014	4	REDONDO BEACH	0720	Rockfish, unspecified	1503
2014	4	LONG BEACH	0720	Rockfish, bocaccio	48
2014	4	SAN PEDRO	0720	Rockfish, bocaccio	129
2014	4	LONG BEACH	0720	Scorpionfish, California	5
2014	4	REDONDO BEACH	0720	Scorpionfish, California	13
2014	4	SAN PEDRO	0720	Scorpionfish, California	23
2014	4	REDONDO BEACH	0720	Cabezon	1
2014	4	REDONDO BEACH	0720	Bass, kelp	5
2014	4	REDONDO BEACH	0720	Bass, barred sand	
2014	4	REDONDO BEACH	0720	Whitefish, ocean	1
2014	4	LONG BEACH	0720	Rockfish, copper	6
2014	4	LONG BEACH	0720	Rockfish, blue	52
2014	4	REDONDO BEACH	0720	Rockfish, blue	
2014	4	SAN PEDRO	0720	Rockfish, group red	159
2014	4	REDONDO BEACH	0720		
2014	4	MARINA DEL REY	0721	Mackerel, Pacific	
2014	4	MARINA DEL REY	0721	Lingcod	
2014	4	MARINA DEL REY	0721	Sanddab	24
2014	4	MARINA DEL REY	0721	Rockfish, unspecified	54
2014	4	MARINA DEL REY	0721	Rockfish, bocaccio	15
2014	4	MARINA DEL REY	0721	Rockfish, copper	1
2014	5	SAN FRANCISCO	0678	Salmon, Chinook	12
2014	5	MARINA DEL REY	0679	Mackerel, Pacific	

Year	Month	Port Name	Block	Species	Kept
2014	5	MARINA DEL REY	0679	Sheephead, California	1
2014	5	MARINA DEL REY	0679	Rockfish, unspecified	24
2014	5	MARINA DEL REY	0679	Bass, kelp	
2014	5	MARINA DEL REY	0679	Bass, barred sand	1
2014	5	MARINA DEL REY	0679	Croaker, white	
2014	5	MARINA DEL REY	0680	Sheephead, California	1
2014	5	MARINA DEL REY	0680	Lingcod	1
2014	5	MARINA DEL REY	0680	Rockfish, cowcod	
2014	5	MARINA DEL REY	0680	Rockfish, unspecified	122
2014	5	MARINA DEL REY	0680	Rockfish, bocaccio	67
2014	5	MARINA DEL REY	0680	Rockfish, copper	8
2014	5	MARINA DEL REY	0701	Mackerel, Pacific	336
2014	5	SAN PEDRO	0701	Barracuda, California	32
2014	5	MARINA DEL REY	0701	Barracuda, California	36
2014	5	MARINA DEL REY	0701	Sheephead, California	1
2014	5	REDONDO BEACH	0701	Sheephead, California	2
2014	5	SAN PEDRO	0701	Sheephead, California	10
2014	5	MARINA DEL REY	0701	Shark, shortfin mako	1
2014	5	SAN PEDRO	0701	Lingcod	1
2014	5	MARINA DEL REY	0701	Lingcod	21
2014	5	MARINA DEL REY	0701	Sole, unspecified	4
2014	5	MARINA DEL REY	0701	Sanddab	140
2014	5	REDONDO BEACH	0701	Rockfish, unspecified	41
2014	5	SAN PEDRO	0701	Rockfish, unspecified	68
2014	5	MARINA DEL REY	0701	Rockfish, unspecified	5633
2014	5	SAN PEDRO	0701	Rockfish, bocaccio	55
2014	5	MARINA DEL REY	0701	Rockfish, bocaccio	1795
2014	5	REDONDO BEACH	0701	Scorpionfish, California	1
2014	5	MARINA DEL REY	0701	Scorpionfish, California	672
2014	5	MARINA DEL REY	0701	Cabezon	1
2014	5	MARINA DEL REY	0701	Rockfish, gopher	33
2014	5	REDONDO BEACH	0701	Bass, kelp	14
2014	5	MARINA DEL REY	0701	Bass, kelp	42
2014	5	SAN PEDRO	0701	Bass, kelp	70
2014	5	REDONDO BEACH	0701	Bass, barred sand	2
2014	5	MARINA DEL REY	0701	Bass, barred sand	96
2014	5	SAN PEDRO	0701	Opaleye	25
2014	5	MARINA DEL REY	0701	Rockfish, copper	43
2014	5	MARINA DEL REY	0701	Rockfish, blue	47
2014	5	SAN PEDRO	0702	Barracuda, California	33
2014	5	SAN PEDRO	0702	Sheephead, California	12
2014	5	MARINA DEL REY	0702	Lingcod	6
2014	5	MARINA DEL REY	0702	Sole, petrale	6
2014	5	MARINA DEL REY	0702	Sanddab	415
2014	5	SAN PEDRO	0702	Rockfish, unspecified	27
2014	5	MARINA DEL REY	0702	Rockfish, unspecified	887
2014	5	MARINA DEL REY	0702	Rockfish, bocaccio	379
2014	5	MARINA DEL REY	0702	Scorpionfish, California	113
2014	5	SAN PEDRO	0702	Bass, kelp	9
2014	5	MARINA DEL REY	0702	Bass, kelp	
2014	5	MARINA DEL REY	0702	Bass, barred sand	3
2014	5	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2014	5	SAN PEDRO	0702	Whitefish, ocean	3
2014	5	MARINA DEL REY	0702	Rockfish, copper	17
2014	5	MARINA DEL REY	0702	Rockfish, blue	36
2014	5	MARINA DEL REY	0720	Mackerel, Pacific	43
2014	5	MARINA DEL REY	0720	Barracuda, California	1
2014	5	SAN PEDRO	0720	Sheephead, California	1
2014	5	REDONDO BEACH	0720	Sheephead, California	3
2014	5	MARINA DEL REY	0720	Sheephead, California	3
2014	5	REDONDO BEACH	0720	Lingcod	2
2014	5	MARINA DEL REY	0720	Lingcod	11
2014	5	SAN PEDRO	0720	Sanddab	122
2014	5	MARINA DEL REY	0720	Sanddab	312
2014	5	MARINA DEL REY	0720	Rockfish, cowcod	
2014	5	MARINA DEL REY	0720	Rockfish, canary	1
2014	5	REDONDO BEACH	0720	Rockfish, unspecified	94
2014	5	SAN PEDRO	0720	Rockfish, unspecified	291
2014	5	MARINA DEL REY	0720	Rockfish, unspecified	779
2014	5	SAN PEDRO	0720	Rockfish, bocaccio	37
2014	5	MARINA DEL REY	0720	Rockfish, bocaccio	604

Year	Month	Port Name	Block	Species	Kept
2014	5	MARINA DEL REY	0720	Scorpionfish, California	7
2014	5	REDONDO BEACH	0720	Scorpionfish, California	
2014	5	MARINA DEL REY	0720	Cabezon	1
2014	5	REDONDO BEACH	0720	Cabezon	
2014	5	MARINA DEL REY	0720	Rockfish, gopher	14
2014	5	REDONDO BEACH	0720	Bass, kelp	5
2014	5	MARINA DEL REY	0720	Bass, kelp	64
2014	5	REDONDO BEACH	0720	Bass, barred sand	3
2014	5	MARINA DEL REY	0720	Bass, barred sand	15
2014	5	REDONDO BEACH	0720	Whitefish, ocean	9
2014	5	MARINA DEL REY	0720	Rockfish, copper	34
2014	5	MARINA DEL REY	0720	Rockfish, blue	40
2014	5	SAN PEDRO	0720	Rockfish, group red	171
2014	6	MARINA DEL REY	0679	Mackerel, Pacific	48
2014	6	MARINA DEL REY	0679	Barracuda, California	
2014	6	MARINA DEL REY	0679	Sheephead, California	4
2014	6	MARINA DEL REY	0679	Lingcod	
2014	6	MARINA DEL REY	0679	Rockfish, unspecified	143
2014	6	MARINA DEL REY	0679	Scorpionfish, California	2
2014	6	MARINA DEL REY	0679	Bass, kelp	3
2014	6	MARINA DEL REY	0679	Bass, barred sand	4
2014	6	MARINA DEL REY	0679	Surfperch, unspecified	18
2014	6	MARINA DEL REY	0679	Rockfish, copper	5
2014	6	MARINA DEL REY	0680	Mackerel, Pacific	10
2014	6	MARINA DEL REY	0680	Barracuda, California	
2014	6	MARINA DEL REY	0680	Sheephead, California	17
2014	6	MARINA DEL REY	0680	Lingcod	2
2014	6	MARINA DEL REY	0680	Sanddab	40
2014	6	MARINA DEL REY	0680	Rockfish, unspecified	827
2014	6	MARINA DEL REY	0680	Rockfish, bocaccio	86
2014	6	MARINA DEL REY	0680	Scorpionfish, California	1
2014	6	MARINA DEL REY	0680	Rockfish, gopher	4
2014	6	MARINA DEL REY	0680	Rockfish, widow	7
2014	6	MARINA DEL REY	0680	Bass, kelp	147
2014	6	MARINA DEL REY	0680	Whitefish, ocean	1
2014	6	MARINA DEL REY	0680	Rockfish, blue	2
2014	6	MARINA DEL REY	0701	Mackerel, Pacific	363
2014	6	MARINA DEL REY	0701	Mackerel, jack	30
2014	6	REDONDO BEACH	0701	Barracuda, California	7
2014	6	MARINA DEL REY	0701	Barracuda, California	549
2014	6	MARINA DEL REY	0701	Sheephead, California	17
2014	6	MARINA DEL REY	0701	Shark, shortfin mako	2
2014	6	MARINA DEL REY	0701	Shark, thresher	1
2014	6	MARINA DEL REY	0701	Lingcod	12
2014	6	MARINA DEL REY	0701	Halibut, California	2
2014	6	MARINA DEL REY	0701	Sanddab	334
2014	6	REDONDO BEACH	0701	Rockfish, unspecified	348
2014	6	MARINA DEL REY	0701	Rockfish, unspecified	6711
2014	6	MARINA DEL REY	0701	Rockfish, bocaccio	1116
2014	6	MARINA DEL REY	0701	Scorpionfish, California	337
2014	6	REDONDO BEACH	0701	Cabezon	1
2014	6	MARINA DEL REY	0701	Cabezon	5
2014	6	MARINA DEL REY	0701	Rockfish, widow	33
2014	6	REDONDO BEACH	0701	Bass, kelp	21
2014	6	MARINA DEL REY	0701	Bass, kelp	187
2014	6	MARINA DEL REY	0701	Bass, barred sand	213
2014	6	MARINA DEL REY	0701	Triggerfish	2
2014	6	MARINA DEL REY	0701	Croaker, white	
2014	6	MARINA DEL REY	0701	Lizardfish, California	
2014	6	REDONDO BEACH	0701	Halfmoon	3
2014	6	MARINA DEL REY	0701	Blacksmith	75
2014	6	REDONDO BEACH	0701	Sargo	1
2014	6	MARINA DEL REY	0701	Whitefish, ocean	18
2014	6	MARINA DEL REY	0701	Surfperch, rubberlip	
2014	6	MARINA DEL REY	0701	Rockfish, copper	68
2014	6	MARINA DEL REY	0702	Bonito, Pacific	60
2014	6	MARINA DEL REY	0702	Mackerel, Pacific	43
2014	6	MARINA DEL REY	0702	Mackerel, jack	
2014	6	MARINA DEL REY	0702	Barracuda, California	58
2014	6	MARINA DEL REY	0702	Sheephead, California	5
2014	6	MARINA DEL REY	0702	Shark, spiny dogfish	

Year	Month	Port Name	Block	Species	Kept
2014	6	MARINA DEL REY	0702	Lingcod	32
2014	6	MARINA DEL REY	0702	Sanddab	478
2014	6	MARINA DEL REY	0702	Rockfish, cowcod	
2014	6	MARINA DEL REY	0702	Rockfish, canary	
2014	6	MARINA DEL REY	0702	Rockfish, unspecified	3469
2014	6	MARINA DEL REY	0702	Rockfish, bocaccio	875
2014	6	MARINA DEL REY	0702	Scorpionfish, California	463
2014	6	MARINA DEL REY	0702	Cabezon	
2014	6	MARINA DEL REY	0702	Rockfish, yelloweye	
2014	6	MARINA DEL REY	0702	Rockfish, widow	50
2014	6	MARINA DEL REY	0702	Bass, kelp	4
2014	6	MARINA DEL REY	0702	Bass, barred sand	3
2014	6	MARINA DEL REY	0702	Lizardfish, California	
2014	6	MARINA DEL REY	0702	Blacksmith	36
2014	6	MARINA DEL REY	0702	Surfperch, shiner	1
2014	6	MARINA DEL REY	0702	Rockfish, copper	39
2014	6	MARINA DEL REY	0702	Rockfish, blue	75
2014	6	MARINA DEL REY	0703	Lingcod	
2014	6	MARINA DEL REY	0703	Sanddab	60
2014	6	MARINA DEL REY	0703	Rockfish, unspecified	84
2014	6	MARINA DEL REY	0703	Rockfish, bocaccio	6
2014	6	MARINA DEL REY	0703	Surfperch, shiner	1
2014	6	MARINA DEL REY	0703	Rockfish, copper	10
2014	6	MARINA DEL REY	0720	Bonito, Pacific	35
2014	6	MARINA DEL REY	0720	Yellowtail	5
2014	6	MARINA DEL REY	0720	Mackerel, Pacific	39
2014	6	REDONDO BEACH	0720	Mackerel, Pacific	150
2014	6	MARINA DEL REY	0720	Barracuda, California	1
2014	6	REDONDO BEACH	0720	Barracuda, California	4
2014	6	REDONDO BEACH	0720	Sheephead, California	30
2014	6	LONG BEACH	0720	Shark, shortfin mako	2
2014	6	REDONDO BEACH	0720	Shark, gray smoothhound	1
2014	6	MARINA DEL REY	0720	Lingcod	1
2014	6	REDONDO BEACH	0720	Lingcod	2
2014	6	MARINA DEL REY	0720	Halibut, California	3
2014	6	REDONDO BEACH	0720	Halibut, California	
2014	6	REDONDO BEACH	0720	Sanddab	23
2014	6	MARINA DEL REY	0720	Sanddab	115
2014	6	MARINA DEL REY	0720	Rockfish, cowcod	
2014	6	MARINA DEL REY	0720	Rockfish, unspecified	565
2014	6	REDONDO BEACH	0720	Rockfish, unspecified	1287
2014	6	MARINA DEL REY	0720	Rockfish, bocaccio	338
2014	6	REDONDO BEACH	0720	Scorpionfish, California	2
2014	6	MARINA DEL REY	0720	Scorpionfish, California	2
2014	6	REDONDO BEACH	0720	Cabezon	1
2014	6	MARINA DEL REY	0720	Cabezon	
2014	6	MARINA DEL REY	0720	Rockfish, gopher	8
2014	6	MARINA DEL REY	0720	Bass, kelp	39
2014	6	REDONDO BEACH	0720	Bass, kelp	278
2014	6	REDONDO BEACH	0720	Bass, barred sand	3
2014	6	MARINA DEL REY	0720	Bass, barred sand	16
2014	6	REDONDO BEACH	0720	Seabass, white	2
2014	6	REDONDO BEACH	0720	Croaker, black	1
2014	6	REDONDO BEACH	0720	Croaker, white	1
2014	6	REDONDO BEACH	0720	Opaleye	2
2014	6	REDONDO BEACH	0720	Halfmoon	140
2014	6	REDONDO BEACH	0720	Sargo	36
2014	6	REDONDO BEACH	0720	Whitefish, ocean	3
2014	6	REDONDO BEACH	0720	Surfperch, unspecified	20
2014	6	MARINA DEL REY	0720	Rockfish, copper	12
2014	6	MARINA DEL REY	0720	Rockfish, blue	7
2014	6	REDONDO BEACH	0720	Fish, unspecified	4
2014	6	LONG BEACH	0721	Shark, shortfin mako	7
2014	6	REDONDO BEACH	0721	Rockfish, unspecified	180
2014	7	MARINA DEL REY	0679	Bonito, Pacific	
2014	7	MARINA DEL REY	0679	Mackerel, Pacific	6
2014	7	MARINA DEL REY	0679	Mackerel, jack	10
2014	7	MARINA DEL REY	0679	Sheephead, California	3
2014	7	MARINA DEL REY	0679	Rockfish, unspecified	35
2014	7	MARINA DEL REY	0679	Scorpionfish, California	1
2014	7	MARINA DEL REY	0679	Rockfish, gopher	1

Year	Month	Port Name	Block	Species	Kept
2014	7	MARINA DEL REY	0679	Bass, kelp	
2014	7	MARINA DEL REY	0679	Bass, barred sand	2
2014	7	MARINA DEL REY	0679	Blacksmith	16
2014	7	MARINA DEL REY	0680	Mackerel, Pacific	20
2014	7	MARINA DEL REY	0680	Barracuda, California	7
2014	7	MARINA DEL REY	0680	Sheephead, California	45
2014	7	MARINA DEL REY	0680	Shark, shortfin mako	1
2014	7	MARINA DEL REY	0680	Lingcod	5
2014	7	MARINA DEL REY	0680	Sole, unspecified	1
2014	7	MARINA DEL REY	0680	Sanddab	7
2014	7	MARINA DEL REY	0680	Rockfish, unspecified	655
2014	7	MARINA DEL REY	0680	Rockfish, bocaccio	20
2014	7	MARINA DEL REY	0680	Scorpionfish, California	1
2014	7	MARINA DEL REY	0680	Rockfish, gopher	2
2014	7	MARINA DEL REY	0680	Bass, kelp	114
2014	7	MARINA DEL REY	0680	Bass, barred sand	11
2014	7	MARINA DEL REY	0680	Whitefish, ocean	5
2014	7	MARINA DEL REY	0680	Surfperch, shiner	2
2014	7	MARINA DEL REY	0680	Rockfish, copper	27
2014	7	MARINA DEL REY	0680	Rockfish, blue	7
2014	7	MARINA DEL REY	0701	Bonito, Pacific	2297
2014	7	MARINA DEL REY	0701	Mackerel, unspecified	45
2014	7	MARINA DEL REY	0701	Mackerel, Pacific	1114
2014	7	MARINA DEL REY	0701	Mackerel, jack	15
2014	7	MARINA DEL REY	0701	Barracuda, California	435
2014	7	MARINA DEL REY	0701	Sheephead, California	24
2014	7	REDONDO BEACH	0701	Sheephead, California	
2014	7	MARINA DEL REY	0701	Wrasse, rock	
2014	7	MARINA DEL REY	0701	Shark, shortfin mako	2
2014	7	MARINA DEL REY	0701	Lingcod	15
2014	7	MARINA DEL REY	0701	Sole, unspecified	5
2014	7	MARINA DEL REY	0701	Sole, fantail	1
2014	7	MARINA DEL REY	0701	Halibut, California	4
2014	7	MARINA DEL REY	0701	Sanddab	126
2014	7	MARINA DEL REY	0701	Rockfish, cowcod	1
2014	7	MARINA DEL REY	0701	Rockfish, unspecified	6420
2014	7	MARINA DEL REY	0701	Rockfish, bocaccio	289
2014	7	MARINA DEL REY	0701	Scorpionfish, California	1799
2014	7	MARINA DEL REY	0701	Cabezon	2
2014	7	MARINA DEL REY	0701	Rockfish, gopher	15
2014	7	REDONDO BEACH	0701	Bass, kelp	3
2014	7	MARINA DEL REY	0701	Bass, kelp	501
2014	7	MARINA DEL REY	0701	Bass, barred sand	625
2014	7	REDONDO BEACH	0701	Bass, barred sand	
2014	7	MARINA DEL REY	0701	Triggerfish	10
2014	7	MARINA DEL REY	0701	Croaker, black	
2014	7	MARINA DEL REY	0701	Opah	1
2014	7	MARINA DEL REY	0701	Lizardfish, California	
2014	7	MARINA DEL REY	0701	Blacksmith	
2014	7	MARINA DEL REY	0701	Whitefish, ocean	9
2014	7	REDONDO BEACH	0701	Whitefish, ocean	
2014	7	MARINA DEL REY	0701	Rockfish, copper	32
2014	7	MARINA DEL REY	0701	Rockfish, blue	20
2014	7	MARINA DEL REY	0701		
2014	7	MARINA DEL REY	0702	Bonito, Pacific	149
2014	7	MARINA DEL REY	0702	Mackerel, Pacific	50
2014	7	MARINA DEL REY	0702	Mackerel, jack	2
2014	7	MARINA DEL REY	0702	Barracuda, California	
2014	7	MARINA DEL REY	0702	Sheephead, California	8
2014	7	MARINA DEL REY	0702	Shark, shortfin mako	
2014	7	MARINA DEL REY	0702	Lingcod	10
2014	7	MARINA DEL REY	0702	Sole, unspecified	1
2014	7	MARINA DEL REY	0702	Halibut, California	
2014	7	MARINA DEL REY	0702	Sanddab	270
2014	7	MARINA DEL REY	0702	Rockfish, cowcod	
2014	7	MARINA DEL REY	0702	Rockfish, unspecified	2229
2014	7	MARINA DEL REY	0702	Rockfish, bocaccio	419
2014	7	MARINA DEL REY	0702	Scorpionfish, California	634
2014	7	MARINA DEL REY	0702	Cabezon	1
2014	7	MARINA DEL REY	0702	Rockfish, gopher	2
2014	7	MARINA DEL REY	0702	Rockfish, widow	24

Year	Month	Port Name	Block	Species	Kept
2014	7	MARINA DEL REY	0702	Bass, kelp	30
2014	7	MARINA DEL REY	0702	Bass, barred sand	12
2014	7	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2014	7	MARINA DEL REY	0702	Blacksmith	100
2014	7	MARINA DEL REY	0702	Whitefish, ocean	14
2014	7	MARINA DEL REY	0702	Rockfish, copper	18
2014	7	MARINA DEL REY	0702	Rockfish, blue	95
2014	7	SAN PEDRO	0720	Bonito, Pacific	8
2014	7	REDONDO BEACH	0720	Bonito, Pacific	12
2014	7	MARINA DEL REY	0720	Bonito, Pacific	610
2014	7	REDONDO BEACH	0720	Yellowtail	1
2014	7	SAN PEDRO	0720	Mackerel, Pacific	5
2014	7	LONG BEACH	0720	Mackerel, Pacific	6
2014	7	REDONDO BEACH	0720	Mackerel, Pacific	201
2014	7	MARINA DEL REY	0720	Mackerel, Pacific	
2014	7	MARINA DEL REY	0720	Barracuda, California	1
2014	7	REDONDO BEACH	0720	Barracuda, California	
2014	7	SAN PEDRO	0720	Barracuda, California	
2014	7	MARINA DEL REY	0720	Sheephead, California	3
2014	7	REDONDO BEACH	0720	Sheephead, California	98
2014	7	LONG BEACH	0720	Shark, shortfin mako	2
2014	7	REDONDO BEACH	0720	Shark, shortfin mako	25
2014	7	LONG BEACH	0720	Lingcod	2
2014	7	REDONDO BEACH	0720	Lingcod	3
2014	7	MARINA DEL REY	0720	Lingcod	3
2014	7	MARINA DEL REY	0720	Sanddab	55
2014	7	REDONDO BEACH	0720	Sanddab	86
2014	7	LONG BEACH	0720	Rockfish, unspecified	1
2014	7	SAN PEDRO	0720	Rockfish, unspecified	130
2014	7	MARINA DEL REY	0720	Rockfish, unspecified	445
2014	7	REDONDO BEACH	0720	Rockfish, unspecified	1047
2014	7	REDONDO BEACH	0720	Rockfish, bocaccio	2
2014	7	SAN PEDRO	0720	Rockfish, bocaccio	36
2014	7	MARINA DEL REY	0720	Rockfish, bocaccio	224
2014	7	REDONDO BEACH	0720	Scorpionfish, California	1
2014	7	MARINA DEL REY	0720	Scorpionfish, California	350
2014	7	REDONDO BEACH	0720	Cabezon	2
2014	7	LONG BEACH	0720	Bass, kelp	1
2014	7	REDONDO BEACH	0720	Bass, kelp	114
2014	7	MARINA DEL REY	0720	Bass, kelp	124
2014	7	SAN PEDRO	0720	Bass, kelp	
2014	7	LONG BEACH	0720	Bass, barred sand	1
2014	7	REDONDO BEACH	0720	Bass, barred sand	3
2014	7	MARINA DEL REY	0720	Bass, barred sand	6
2014	7	REDONDO BEACH	0720	Bass, giant sea	
2014	7	MARINA DEL REY	0720	Triggerfish	6
2014	7	REDONDO BEACH	0720	Seabass, white	10
2014	7	REDONDO BEACH	0720	Opaleye	149
2014	7	REDONDO BEACH	0720	Halfmoon	357
2014	7	REDONDO BEACH	0720	Blacksmith	24
2014	7	REDONDO BEACH	0720	Sargo	63
2014	7	MARINA DEL REY	0720	Whitefish, ocean	2
2014	7	LONG BEACH	0720	Whitefish, ocean	5
2014	7	REDONDO BEACH	0720	Whitefish, ocean	26
2014	7	REDONDO BEACH	0720	Surfperch, black	2
2014	7	REDONDO BEACH	0720	Surfperch, rubberlip	5
2014	7	MARINA DEL REY	0720	Rockfish, copper	2
2014	7	SAN PEDRO	0720	Rockfish, copper	13
2014	7	SAN PEDRO	0720	Rockfish, blue	15
2014	7	LONG BEACH	0721	Shark, shortfin mako	1
2014	8	MARINA DEL REY	0679	Bonito, Pacific	14
2014	8	MARINA DEL REY	0679	Mackerel, Pacific	37
2014	8	MARINA DEL REY	0679	Mackerel, jack	14
2014	8	MARINA DEL REY	0679	Sheephead, California	2
2014	8	MARINA DEL REY	0679	Halibut, California	2
2014	8	MARINA DEL REY	0679	Rockfish, unspecified	15
2014	8	MARINA DEL REY	0679	Cabezon	
2014	8	MARINA DEL REY	0679	Bass, kelp	9
2014	8	MARINA DEL REY	0679	Bass, barred sand	15
2014	8	MARINA DEL REY	0679	Bass, giant sea	
2014	8	MARINA DEL REY	0679	Blacksmith	12

Year	Month	Port Name	Block	Species	Kept
2014	8	MARINA DEL REY	0680	Mackerel, Pacific	40
2014	8	MARINA DEL REY	0680	Barracuda, California	1
2014	8	MARINA DEL REY	0680	Halibut, California	
2014	8	MARINA DEL REY	0680	Rockfish, unspecified	4
2014	8	MARINA DEL REY	0680	Bass, kelp	6
2014	8	MARINA DEL REY	0680	Bass, barred sand	1
2014	8	MARINA DEL REY	0680	Croaker, white	1
2014	8	MARINA DEL REY	0701	Bonito, Pacific	280
2014	8	MARINA DEL REY	0701	Yellowtail	9
2014	8	MARINA DEL REY	0701	Mackerel, Pacific	1017
2014	8	MARINA DEL REY	0701	Mackerel, jack	7
2014	8	MARINA DEL REY	0701	Barracuda, California	6
2014	8	MARINA DEL REY	0701	Sheephead, California	13
2014	8	MARINA DEL REY	0701	Shark, shortfin mako	1
2014	8	MARINA DEL REY	0701	Lingcod	14
2014	8	MARINA DEL REY	0701	Sole, unspecified	14
2014	8	MARINA DEL REY	0701	Sanddab	385
2014	8	MARINA DEL REY	0701	Rockfish, unspecified	2587
2014	8	MARINA DEL REY	0701	Rockfish, bocaccio	218
2014	8	MARINA DEL REY	0701	Scorpionfish, California	513
2014	8	MARINA DEL REY	0701	Cabezon	3
2014	8	MARINA DEL REY	0701	Bass, kelp	117
2014	8	MARINA DEL REY	0701	Bass, barred sand	364
2014	8	MARINA DEL REY	0701	Eel, wolf (wolf-eel)	2
2014	8	MARINA DEL REY	0701	Whitefish, ocean	11
2014	8	MARINA DEL REY	0701	Rockfish, copper	9
2014	8	MARINA DEL REY	0701	Rockfish, blue	21
2014	8	MARINA DEL REY	0701		
2014	8	MARINA DEL REY	0702	Bonito, Pacific	324
2014	8	MARINA DEL REY	0702	Yellowtail	2
2014	8	MARINA DEL REY	0702	Mackerel, Pacific	25
2014	8	MARINA DEL REY	0702	Barracuda, California	1
2014	8	MARINA DEL REY	0702	Sheephead, California	7
2014	8	MARINA DEL REY	0702	Shark, shortfin mako	
2014	8	MARINA DEL REY	0702	Lingcod	15
2014	8	SAN PEDRO	0702	Lingcod	
2014	8	SAN PEDRO	0702	Sanddab	10
2014	8	MARINA DEL REY	0702	Sanddab	344
2014	8	SAN PEDRO	0702	Rockfish, unspecified	280
2014	8	MARINA DEL REY	0702	Rockfish, unspecified	2851
2014	8	SAN PEDRO	0702	Rockfish, bocaccio	58
2014	8	MARINA DEL REY	0702	Rockfish, bocaccio	388
2014	8	SAN PEDRO	0702	Scorpionfish, California	14
2014	8	MARINA DEL REY	0702	Scorpionfish, California	704
2014	8	MARINA DEL REY	0702	Rockfish, yelloweye	
2014	8	SAN PEDRO	0702	Rockfish, widow	4
2014	8	MARINA DEL REY	0702	Rockfish, widow	15
2014	8	MARINA DEL REY	0702	Bass, kelp	16
2014	8	MARINA DEL REY	0702	Bass, barred sand	2
2014	8	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2014	8	MARINA DEL REY	0702	Blacksmith	60
2014	8	MARINA DEL REY	0702	Whitefish, ocean	7
2014	8	MARINA DEL REY	0702	Surfperch, shiner	2
2014	8	SAN PEDRO	0702	Rockfish, copper	1
2014	8	MARINA DEL REY	0702	Rockfish, copper	8
2014	8	MARINA DEL REY	0702	Rockfish, blue	146
2014	8	REDONDO BEACH	0720	Bonito, Pacific	43
2014	8	LONG BEACH	0720	Bonito, Pacific	65
2014	8	SAN PEDRO	0720	Bonito, Pacific	385
2014	8	MARINA DEL REY	0720	Bonito, Pacific	444
2014	8	LONG BEACH	0720	Yellowtail	2
2014	8	SAN PEDRO	0720	Yellowtail	5
2014	8	REDONDO BEACH	0720	Yellowtail	13
2014	8	MARINA DEL REY	0720	Yellowtail	78
2014	8	REDONDO BEACH	0720	Mackerel, Pacific	40
2014	8	MARINA DEL REY	0720	Mackerel, Pacific	87
2014	8	SAN PEDRO	0720	Mackerel, Pacific	125
2014	8	MARINA DEL REY	0720	Barracuda, California	12
2014	8	REDONDO BEACH	0720	Barracuda, California	
2014	8	LONG BEACH	0720	Barracuda, California	
2014	8	SAN PEDRO	0720	Barracuda, California	

Year	Month	Port Name	Block	Species	Kept
2014	8	MARINA DEL REY	0720	Sheephead, California	5
2014	8	SAN PEDRO	0720	Sheephead, California	8
2014	8	REDONDO BEACH	0720	Sheephead, California	17
2014	8	LONG BEACH	0720	Shark, shortfin mako	
2014	8	SAN PEDRO	0720	Lingcod	1
2014	8	REDONDO BEACH	0720	Lingcod	3
2014	8	MARINA DEL REY	0720	Lingcod	3
2014	8	REDONDO BEACH	0720	Halibut, California	1
2014	8	SAN PEDRO	0720	Sanddab	16
2014	8	MARINA DEL REY	0720	Sanddab	94
2014	8	SAN PEDRO	0720	Rockfish, vermilion	71
2014	8	SAN PEDRO	0720	Rockfish, unspecified	177
2014	8	MARINA DEL REY	0720	Rockfish, unspecified	504
2014	8	REDONDO BEACH	0720	Rockfish, unspecified	631
2014	8	SAN PEDRO	0720	Rockfish, bocaccio	65
2014	8	MARINA DEL REY	0720	Rockfish, bocaccio	128
2014	8	SAN PEDRO	0720	Scorpionfish, California	1
2014	8	REDONDO BEACH	0720	Scorpionfish, California	5
2014	8	REDONDO BEACH	0720	Cabezon	1
2014	8	SAN PEDRO	0720	Cabezon	2
2014	8	MARINA DEL REY	0720	Rockfish, gopher	1
2014	8	SAN PEDRO	0720	Rockfish, widow	1
2014	8	LONG BEACH	0720	Bass, kelp	1
2014	8	REDONDO BEACH	0720	Bass, kelp	7
2014	8	SAN PEDRO	0720	Bass, kelp	16
2014	8	MARINA DEL REY	0720	Bass, kelp	152
2014	8	SAN PEDRO	0720	Bass, barred sand	1
2014	8	REDONDO BEACH	0720	Bass, barred sand	3
2014	8	MARINA DEL REY	0720	Bass, barred sand	12
2014	8	SAN PEDRO	0720	Seabass, white	
2014	8	MARINA DEL REY	0720	Seabass, white	
2014	8	REDONDO BEACH	0720	Opaleye	17
2014	8	REDONDO BEACH	0720	Halfmoon	40
2014	8	SAN PEDRO	0720	Sargo	1
2014	8	REDONDO BEACH	0720	Sargo	4
2014	8	MARINA DEL REY	0720	Whitefish, ocean	5
2014	8	REDONDO BEACH	0720	Whitefish, ocean	25
2014	8	SAN PEDRO	0720	Surfperch, unspecified	40
2014	8	MARINA DEL REY	0720	Rockfish, copper	3
2014	8	SAN PEDRO	0720	Rockfish, copper	28
2014	8	MARINA DEL REY	0720	Rockfish, blue	1
2014	8	REDONDO BEACH	0720	Rockfish, blue	2
2014	8	SAN PEDRO	0720	Rockfish, blue	58
2014	8	REDONDO BEACH	0720		
2014	9	MARINA DEL REY	0679	Bonito, Pacific	4
2014	9	MARINA DEL REY	0679	Mackerel, Pacific	14
2014	9	MARINA DEL REY	0679	Sheephead, California	4
2014	9	MARINA DEL REY	0679	Lingcod	
2014	9	MARINA DEL REY	0679	Rockfish, unspecified	4
2014	9	MARINA DEL REY	0679	Bass, kelp	15
2014	9	MARINA DEL REY	0679	Bass, barred sand	10
2014	9	MARINA DEL REY	0679	Blacksmith	38
2014	9	MARINA DEL REY	0680	Bonito, Pacific	18
2014	9	OXNARD	0680	Yellowtail	4
2014	9	MARINA DEL REY	0680	Mackerel, Pacific	71
2014	9	OXNARD	0680	Barracuda, California	
2014	9	MARINA DEL REY	0680	Barracuda, California	
2014	9	OXNARD	0680	Sheephead, California	2
2014	9	MARINA DEL REY	0680	Sheephead, California	2
2014	9	MARINA DEL REY	0680	Lingcod	1
2014	9	OXNARD	0680	Lingcod	
2014	9	OXNARD	0680	Halibut, California	1
2014	9	MARINA DEL REY	0680	Halibut, California	1
2014	9	MARINA DEL REY	0680	Sanddab	5
2014	9	OXNARD	0680	Rockfish, canary	7
2014	9	OXNARD	0680	Rockfish, unspecified	41
2014	9	MARINA DEL REY	0680	Rockfish, unspecified	43
2014	9	MARINA DEL REY	0680	Rockfish, bocaccio	14
2014	9	OXNARD	0680	Scorpionfish, California	2
2014	9	OXNARD	0680	Cabezon	
2014	9	OXNARD	0680	Rockfish, gopher	5

Year	Month	Port Name	Block	Species	Kept
2014	9	MARINA DEL REY	0680	Rockfish, gopher	7
2014	9	VENTURA	0680	Bass, kelp	5
2014	9	MARINA DEL REY	0680	Bass, kelp	23
2014	9	OXNARD	0680	Bass, kelp	
2014	9	MARINA DEL REY	0680	Bass, barred sand	4
2014	9	OXNARD	0680	Seabass, white	1
2014	9	MARINA DEL REY	0680	Seabass, white	
2014	9	OXNARD	0680	Halfmoon	1
2014	9	MARINA DEL REY	0680	Blacksmith	4
2014	9	MARINA DEL REY	0680	Whitefish, ocean	3
2014	9	MARINA DEL REY	0680	Rockfish, copper	2
2014	9	MARINA DEL REY	0680	Rockfish, blue	5
2014	9	OXNARD	0680	Rockfish, blue	8
2014	9	MARINA DEL REY	0701	Bonito, Pacific	1822
2014	9	MARINA DEL REY	0701	Yellowtail	50
2014	9	MARINA DEL REY	0701	Mackerel, Pacific	1045
2014	9	MARINA DEL REY	0701	Barracuda, California	5
2014	9	MARINA DEL REY	0701	Sheephead, California	78
2014	9	MARINA DEL REY	0701	Shark, shortfin mako	1
2014	9	MARINA DEL REY	0701	Lingcod	7
2014	9	MARINA DEL REY	0701	Sole, unspecified	2
2014	9	MARINA DEL REY	0701	Halibut, California	1
2014	9	MARINA DEL REY	0701	Sanddab	122
2014	9	MARINA DEL REY	0701	Rockfish, unspecified	1795
2014	9	MARINA DEL REY	0701	Rockfish, bocaccio	75
2014	9	MARINA DEL REY	0701	Scorpionfish, California	2632
2014	9	MARINA DEL REY	0701	Cabezon	7
2014	9	MARINA DEL REY	0701	Bass, kelp	86
2014	9	MARINA DEL REY	0701	Bass, barred sand	335
2014	9	MARINA DEL REY	0701	Whitefish, ocean	20
2014	9	MARINA DEL REY	0701	Rockfish, copper	3
2014	9	MARINA DEL REY	0701	Rockfish, blue	1
2014	9	MARINA DEL REY	0701		
2014	9	MARINA DEL REY	0702	Bonito, Pacific	242
2014	9	MARINA DEL REY	0702	Yellowtail	2
2014	9	MARINA DEL REY	0702	Mackerel, Pacific	265
2014	9	MARINA DEL REY	0702	Sheephead, California	10
2014	9	MARINA DEL REY	0702	Shark, blue	
2014	9	MARINA DEL REY	0702	Lingcod	14
2014	9	MARINA DEL REY	0702	Sanddab	250
2014	9	MARINA DEL REY	0702	Rockfish, unspecified	2599
2014	9	MARINA DEL REY	0702	Rockfish, bocaccio	357
2014	9	MARINA DEL REY	0702	Scorpionfish, California	163
2014	9	MARINA DEL REY	0702	Rockfish, yelloweye	
2014	9	MARINA DEL REY	0702	Rockfish, widow	24
2014	9	MARINA DEL REY	0702	Bass, kelp	2
2014	9	MARINA DEL REY	0702	Shad, threadfin	1
2014	9	MARINA DEL REY	0702	Eel, wolf (wolf-eel)	
2014	9	MARINA DEL REY	0702	Whitefish, ocean	4
2014	9	MARINA DEL REY	0702	Rockfish, copper	18
2014	9	MARINA DEL REY	0702	Rockfish, blue	146
2014	9	SAN PEDRO	0720	Bonito, Pacific	15
2014	9	SAN DIEGO	0720	Bonito, Pacific	60
2014	9	REDONDO BEACH	0720	Bonito, Pacific	136
2014	9	MARINA DEL REY	0720	Bonito, Pacific	442
2014	9	SAN PEDRO	0720	Yellowtail	3
2014	9	MARINA DEL REY	0720	Yellowtail	13
2014	9	REDONDO BEACH	0720	Yellowtail	14
2014	9	MARINA DEL REY	0720	Mackerel, Pacific	85
2014	9	REDONDO BEACH	0720	Mackerel, Pacific	
2014	9	REDONDO BEACH	0720	Barracuda, California	
2014	9	MARINA DEL REY	0720	Barracuda, California	
2014	9	SAN PEDRO	0720	Sheephead, California	2
2014	9	REDONDO BEACH	0720	Sheephead, California	18
2014	9	MARINA DEL REY	0720	Sheephead, California	21
2014	9	LONG BEACH	0720	Shark, shortfin mako	1
2014	9	REDONDO BEACH	0720	Shark, thresher	1
2014	9	REDONDO BEACH	0720	Lingcod	3
2014	9	MARINA DEL REY	0720	Lingcod	23
2014	9	SAN PEDRO	0720	Lingcod	
2014	9	MARINA DEL REY	0720	Sole, unspecified	1

Year	Month	Port Name	Block	Species	Kept
2014	9	REDONDO BEACH	0720	Halibut, California	1
2014	9	SAN PEDRO	0720	Rockfish, unspecified	4
2014	9	SAN DIEGO	0720	Rockfish, unspecified	120
2014	9	REDONDO BEACH	0720	Rockfish, unspecified	131
2014	9	MARINA DEL REY	0720	Rockfish, unspecified	222
2014	9	MARINA DEL REY	0720	Rockfish, bocaccio	171
2014	9	SAN PEDRO	0720	Scorpionfish, California	1
2014	9	REDONDO BEACH	0720	Scorpionfish, California	3
2014	9	SAN DIEGO	0720	Scorpionfish, California	4
2014	9	MARINA DEL REY	0720	Scorpionfish, California	96
2014	9	REDONDO BEACH	0720	Cabezon	1
2014	9	SAN PEDRO	0720	Bass, kelp	5
2014	9	SAN DIEGO	0720	Bass, kelp	10
2014	9	REDONDO BEACH	0720	Bass, kelp	19
2014	9	MARINA DEL REY	0720	Bass, kelp	109
2014	9	SAN DIEGO	0720	Bass, barred sand	1
2014	9	REDONDO BEACH	0720	Bass, barred sand	3
2014	9	MARINA DEL REY	0720	Bass, barred sand	32
2014	9	SAN PEDRO	0720	Halfmoon	1
2014	9	REDONDO BEACH	0720	Halfmoon	9
2014	9	MARINA DEL REY	0720	Whitefish, ocean	5
2014	9	REDONDO BEACH	0720	Whitefish, ocean	13
2014	9	REDONDO BEACH	0720	Surfperch, unspecified	5
2014	9	MARINA DEL REY	0720	Surfperch, unspecified	5
2014	9	MARINA DEL REY	0720	Rockfish, copper	2
2014	9	MARINA DEL REY	0720	Rockfish, blue	11
2014	9	REDONDO BEACH	0720	Rockfish, blue	
2014	10	MARINA DEL REY	0679	Bonito, Pacific	36
2014	10	MARINA DEL REY	0679	Yellowtail	58
2014	10	MARINA DEL REY	0679	Mackerel, Pacific	15
2014	10	MARINA DEL REY	0679	Sheephead, California	2
2014	10	MARINA DEL REY	0679	Lingcod	1
2014	10	MARINA DEL REY	0679	Halibut, California	
2014	10	MARINA DEL REY	0679	Rockfish, unspecified	223
2014	10	MARINA DEL REY	0679	Rockfish, bocaccio	86
2014	10	MARINA DEL REY	0679	Scorpionfish, California	34
2014	10	MARINA DEL REY	0679	Cabezon	2
2014	10	MARINA DEL REY	0679	Rockfish, yelloweye	94
2014	10	MARINA DEL REY	0679	Bass, kelp	23
2014	10	MARINA DEL REY	0679	Bass, barred sand	90
2014	10	MARINA DEL REY	0679	Blacksmith	10
2014	10	MARINA DEL REY	0680	Bonito, Pacific	43
2014	10	MARINA DEL REY	0680	Mackerel, Pacific	325
2014	10	MARINA DEL REY	0680	Barracuda, California	1
2014	10	MARINA DEL REY	0680	Sheephead, California	100
2014	10	MARINA DEL REY	0680	Lingcod	9
2014	10	MARINA DEL REY	0680	Halibut, California	4
2014	10	MARINA DEL REY	0680	Sanddab	6
2014	10	MARINA DEL REY	0680	Rockfish, unspecified	1468
2014	10	MARINA DEL REY	0680	Rockfish, bocaccio	147
2014	10	MARINA DEL REY	0680	Scorpionfish, California	27
2014	10	MARINA DEL REY	0680	Cabezon	1
2014	10	MARINA DEL REY	0680	Bass, kelp	38
2014	10	MARINA DEL REY	0680	Bass, barred sand	64
2014	10	MARINA DEL REY	0680	Blacksmith	47
2014	10	MARINA DEL REY	0680	Whitefish, ocean	77
2014	10	MARINA DEL REY	0680	Rockfish, copper	33
2014	10	MARINA DEL REY	0680	Rockfish, blue	48
2014	10	SAN PEDRO	0701	Bonito, Pacific	12
2014	10	MARINA DEL REY	0701	Bonito, Pacific	1541
2014	10	MARINA DEL REY	0701	Yellowtail	40
2014	10	MARINA DEL REY	0701	Mackerel, Pacific	1291
2014	10	MARINA DEL REY	0701	Barracuda, California	
2014	10	MARINA DEL REY	0701	Sheephead, California	178
2014	10	MARINA DEL REY	0701	Shark, shortfin mako	1
2014	10	MARINA DEL REY	0701	Shark, spiny dogfish	2
2014	10	MARINA DEL REY	0701	Lingcod	15
2014	10	MARINA DEL REY	0701	Halibut, California	7
2014	10	MARINA DEL REY	0701	Sanddab	214
2014	10	MARINA DEL REY	0701	Rockfish, cowcod	
2014	10	SAN PEDRO	0701	Rockfish, unspecified	5

Year	Month	Port Name	Block	Species	Kept
2014	10	MARINA DEL REY	0701	Rockfish, unspecified	1614
2014	10	MARINA DEL REY	0701	Rockfish, bocaccio	206
2014	10	SAN PEDRO	0701	Scorpionfish, California	73
2014	10	MARINA DEL REY	0701	Scorpionfish, California	3093
2014	10	MARINA DEL REY	0701	Cabezon	15
2014	10	SAN PEDRO	0701	Bass, kelp	2
2014	10	MARINA DEL REY	0701	Bass, kelp	373
2014	10	SAN PEDRO	0701	Bass, barred sand	15
2014	10	MARINA DEL REY	0701	Bass, barred sand	973
2014	10	MARINA DEL REY	0701	Blacksmith	20
2014	10	MARINA DEL REY	0701	Whitefish, ocean	21
2014	10	MARINA DEL REY	0701	Rockfish, copper	8
2014	10	MARINA DEL REY	0701	Rockfish, blue	8
2014	10	MARINA DEL REY	0701		
2014	10	MARINA DEL REY	0702	Bonito, Pacific	141
2014	10	MARINA DEL REY	0702	Yellowtail	6
2014	10	LONG BEACH	0702	Yellowtail	64
2014	10	MARINA DEL REY	0702	Mackerel, Pacific	269
2014	10	MARINA DEL REY	0702	Sheephead, California	13
2014	10	MARINA DEL REY	0702	Shark, shortfin mako	
2014	10	MARINA DEL REY	0702	Shark, spiny dogfish	
2014	10	MARINA DEL REY	0702	Lingcod	14
2014	10	MARINA DEL REY	0702	Sanddab	204
2014	10	MARINA DEL REY	0702	Rockfish, cowcod	
2014	10	MARINA DEL REY	0702	Rockfish, canary	
2014	10	MARINA DEL REY	0702	Rockfish, unspecified	1300
2014	10	MARINA DEL REY	0702	Rockfish, bocaccio	256
2014	10	MARINA DEL REY	0702	Scorpionfish, California	81
2014	10	MARINA DEL REY	0702	Cabezon	1
2014	10	MARINA DEL REY	0702	Rockfish, widow	8
2014	10	LONG BEACH	0702	Bass, kelp	3
2014	10	MARINA DEL REY	0702	Bass, kelp	20
2014	10	LONG BEACH	0702	Bass, barred sand	2
2014	10	MARINA DEL REY	0702	Bass, barred sand	50
2014	10	MARINA DEL REY	0702	Lizardfish, California	
2014	10	MARINA DEL REY	0702	Whitefish, ocean	3
2014	10	MARINA DEL REY	0702	Rockfish, copper	16
2014	10	MARINA DEL REY	0702	Rockfish, blue	33
2014	10	LONG BEACH	0720	Bonito, Pacific	3
2014	10	SAN PEDRO	0720	Bonito, Pacific	4
2014	10	MARINA DEL REY	0720	Bonito, Pacific	14
2014	10	SAN DIEGO	0720	Bonito, Pacific	29
2014	10	REDONDO BEACH	0720	Bonito, Pacific	283
2014	10	SAN DIEGO	0720	Yellowtail	3
2014	10	SAN PEDRO	0720	Yellowtail	84
2014	10	REDONDO BEACH	0720	Yellowtail	123
2014	10	MARINA DEL REY	0720	Yellowtail	137
2014	10	MARINA DEL REY	0720	Mackerel, Pacific	164
2014	10	SAN PEDRO	0720	Mackerel, Pacific	200
2014	10	REDONDO BEACH	0720	Barracuda, California	3
2014	10	SAN PEDRO	0720	Sheephead, California	4
2014	10	SAN DIEGO	0720	Sheephead, California	7
2014	10	MARINA DEL REY	0720	Sheephead, California	18
2014	10	REDONDO BEACH	0720	Sheephead, California	217
2014	10	MARINA DEL REY	0720	Jacksmelt	40
2014	10	REDONDO BEACH	0720	Smelt, whitebait	1
2014	10	SAN PEDRO	0720	Lingcod	1
2014	10	MARINA DEL REY	0720	Lingcod	3
2014	10	REDONDO BEACH	0720	Lingcod	7
2014	10	LONG BEACH	0720	Halibut, California	11
2014	10	MARINA DEL REY	0720	Sanddab	13
2014	10	LONG BEACH	0720	Rockfish, unspecified	3
2014	10	SAN DIEGO	0720	Rockfish, unspecified	31
2014	10	SAN PEDRO	0720	Rockfish, unspecified	52
2014	10	MARINA DEL REY	0720	Rockfish, unspecified	302
2014	10	REDONDO BEACH	0720	Rockfish, unspecified	1149
2014	10	MARINA DEL REY	0720	Rockfish, bocaccio	33
2014	10	SAN PEDRO	0720	Scorpionfish, California	3
2014	10	REDONDO BEACH	0720	Scorpionfish, California	70
2014	10	MARINA DEL REY	0720	Scorpionfish, California	83
2014	10	SAN DIEGO	0720	Cabezon	1

Year	Month	Port Name	Block	Species	Kept
2014	10	REDONDO BEACH	0720	Cabezon	7
2014	10	MARINA DEL REY	0720	Cabezon	
2014	10	MARINA DEL REY	0720	Rockfish, gopher	60
2014	10	SAN DIEGO	0720	Bass, kelp	3
2014	10	LONG BEACH	0720	Bass, kelp	5
2014	10	MARINA DEL REY	0720	Bass, kelp	10
2014	10	SAN PEDRO	0720	Bass, kelp	16
2014	10	REDONDO BEACH	0720	Bass, kelp	210
2014	10	MARINA DEL REY	0720	Bass, barred sand	15
2014	10	SAN PEDRO	0720	Bass, barred sand	31
2014	10	REDONDO BEACH	0720	Bass, barred sand	105
2014	10	REDONDO BEACH	0720	Seabass, white	2
2014	10	REDONDO BEACH	0720	Perch-like, unspecified	90
2014	10	REDONDO BEACH	0720	Opaleye	23
2014	10	SAN DIEGO	0720	Halfmoon	2
2014	10	REDONDO BEACH	0720	Halfmoon	103
2014	10	REDONDO BEACH	0720	Sargo	1
2014	10	MARINA DEL REY	0720	Whitefish, ocean	6
2014	10	REDONDO BEACH	0720	Whitefish, ocean	38
2014	10	REDONDO BEACH	0720	Surfperch, unspecified	8
2014	10	SAN PEDRO	0720	Rockfish, copper	3
2014	10	SAN PEDRO	0720	Rockfish, blue	
2014	10	REDONDO BEACH	0720	Lobster, California spiny	14
2014	10	MARINA DEL REY	0720	Lobster, California spiny	31
2014	10	REDONDO BEACH	0721	Yellowtail	4
2014	11	MARINA DEL REY	0679	Sheephead, California	13
2014	11	MARINA DEL REY	0679	Lingcod	3
2014	11	MARINA DEL REY	0679	Rockfish, unspecified	50
2014	11	MARINA DEL REY	0679	Rockfish, bocaccio	5
2014	11	MARINA DEL REY	0679	Cabezon	
2014	11	MARINA DEL REY	0679	Bass, kelp	15
2014	11	MARINA DEL REY	0679	Bass, barred sand	15
2014	11	MARINA DEL REY	0679	Rockfish, copper	7
2014	11	MARINA DEL REY	0680	Bonito, Pacific	10
2014	11	MARINA DEL REY	0680	Mackerel, Pacific	50
2014	11	MARINA DEL REY	0680	Sheephead, California	39
2014	11	MARINA DEL REY	0680	Lingcod	2
2014	11	MARINA DEL REY	0680	Sanddab	49
2014	11	MARINA DEL REY	0680	Rockfish, unspecified	812
2014	11	MARINA DEL REY	0680	Rockfish, bocaccio	203
2014	11	MARINA DEL REY	0680	Scorpionfish, California	1
2014	11	VENTURA	0680	Bass, kelp	3
2014	11	MARINA DEL REY	0680	Bass, kelp	15
2014	11	MARINA DEL REY	0680	Bass, barred sand	23
2014	11	VENTURA	0680	Seabass, white	5
2014	11	MARINA DEL REY	0680	Halfmoon	20
2014	11	MARINA DEL REY	0680	Whitefish, ocean	27
2014	11	MARINA DEL REY	0680	Rockfish, copper	15
2014	11	MARINA DEL REY	0680	Rockfish, blue	20
2014	11	VENTURA	0680	Lobster, California spiny	12
2014	11	MARINA DEL REY	0701	Bonito, Pacific	87
2014	11	MARINA DEL REY	0701	Yellowtail	9
2014	11	MARINA DEL REY	0701	Mackerel, Pacific	70
2014	11	MARINA DEL REY	0701	Sheephead, California	157
2014	11	MARINA DEL REY	0701	Shark, shortfin mako	2
2014	11	MARINA DEL REY	0701	Lingcod	97
2014	11	MARINA DEL REY	0701	Sanddab	284
2014	11	MARINA DEL REY	0701	Rockfish, unspecified	5110
2014	11	MARINA DEL REY	0701	Rockfish, bocaccio	1615
2014	11	MARINA DEL REY	0701	Scorpionfish, California	696
2014	11	MARINA DEL REY	0701	Cabezon	3
2014	11	MARINA DEL REY	0701	Rockfish, widow	47
2014	11	MARINA DEL REY	0701	Bass, kelp	75
2014	11	MARINA DEL REY	0701	Bass, barred sand	158
2014	11	MARINA DEL REY	0701	Halfmoon	4
2014	11	MARINA DEL REY	0701	Whitefish, ocean	34
2014	11	MARINA DEL REY	0701	Rockfish, copper	45
2014	11	MARINA DEL REY	0701	Rockfish, blue	71
2014	11	REDONDO BEACH	0702	Bonito, Pacific	2
2014	11	MARINA DEL REY	0702	Yellowtail	9
2014	11	MARINA DEL REY	0702	Mackerel, Pacific	206

Year	Month	Port Name	Block	Species	Kept
2014	11	REDONDO BEACH	0702	Sheephead, California	3
2014	11	MARINA DEL REY	0702	Sheephead, California	20
2014	11	MARINA DEL REY	0702	Shark, shortfin mako	
2014	11	MARINA DEL REY	0702	Shark, spiny dogfish	
2014	11	REDONDO BEACH	0702	Lingcod	12
2014	11	MARINA DEL REY	0702	Lingcod	53
2014	11	MARINA DEL REY	0702	Sanddab	703
2014	11	REDONDO BEACH	0702	Rockfish, cowcod	
2014	11	MARINA DEL REY	0702	Rockfish, canary	
2014	11	REDONDO BEACH	0702	Rockfish, unspecified	106
2014	11	MARINA DEL REY	0702	Rockfish, unspecified	2684
2014	11	REDONDO BEACH	0702	Rockfish, bocaccio	21
2014	11	MARINA DEL REY	0702	Rockfish, bocaccio	938
2014	11	MARINA DEL REY	0702	Scorpionfish, California	133
2014	11	MARINA DEL REY	0702	Rockfish, yelloweye	
2014	11	MARINA DEL REY	0702	Rockfish, widow	53
2014	11	MARINA DEL REY	0702	Bass, kelp	2
2014	11	REDONDO BEACH	0702	Bass, kelp	4
2014	11	REDONDO BEACH	0702	Bass, barred sand	1
2014	11	MARINA DEL REY	0702	Bass, barred sand	6
2014	11	MARINA DEL REY	0702	Lizardfish, California	4
2014	11	MARINA DEL REY	0702	Whitefish, ocean	12
2014	11	REDONDO BEACH	0702	Whitefish, ocean	61
2014	11	MARINA DEL REY	0702	Surfperch, unspecified	1
2014	11	REDONDO BEACH	0702	Rockfish, copper	7
2014	11	MARINA DEL REY	0702	Rockfish, copper	50
2014	11	MARINA DEL REY	0702	Rockfish, blue	29
2014	11	MARINA DEL REY	0702	Octopus, unspecified	
2014	11	MARINA DEL REY	0702	Fish, unspecified	
2014	11	LONG BEACH	0720	Bonito, Pacific	6
2014	11	SAN PEDRO	0720	Bonito, Pacific	28
2014	11	MARINA DEL REY	0720	Bonito, Pacific	120
2014	11	REDONDO BEACH	0720	Bonito, Pacific	369
2014	11	LONG BEACH	0720	Yellowtail	1
2014	11	MARINA DEL REY	0720	Yellowtail	1
2014	11	REDONDO BEACH	0720	Yellowtail	10
2014	11	LONG BEACH	0720	Mackerel, Pacific	16
2014	11	REDONDO BEACH	0720	Mackerel, Pacific	19
2014	11	SAN PEDRO	0720	Mackerel, Pacific	100
2014	11	SAN PEDRO	0720	Sheephead, California	12
2014	11	MARINA DEL REY	0720	Sheephead, California	18
2014	11	LONG BEACH	0720	Sheephead, California	19
2014	11	REDONDO BEACH	0720	Sheephead, California	45
2014	11	MARINA DEL REY	0720	Lingcod	4
2014	11	LONG BEACH	0720	Lingcod	13
2014	11	SAN PEDRO	0720	Lingcod	16
2014	11	REDONDO BEACH	0720	Lingcod	24
2014	11	REDONDO BEACH	0720	Sanddab	30
2014	11	LONG BEACH	0720	Sanddab	42
2014	11	SAN PEDRO	0720	Sanddab	145
2014	11	LONG BEACH	0720	Rockfish, vermilion	74
2014	11	LONG BEACH	0720	Rockfish, unspecified	178
2014	11	SAN PEDRO	0720	Rockfish, unspecified	431
2014	11	MARINA DEL REY	0720	Rockfish, unspecified	724
2014	11	REDONDO BEACH	0720	Rockfish, unspecified	1231
2014	11	REDONDO BEACH	0720	Rockfish, bocaccio	6
2014	11	SAN PEDRO	0720	Rockfish, bocaccio	12
2014	11	LONG BEACH	0720	Rockfish, bocaccio	59
2014	11	MARINA DEL REY	0720	Rockfish, bocaccio	61
2014	11	SAN PEDRO	0720	Scorpionfish, California	2
2014	11	REDONDO BEACH	0720	Scorpionfish, California	38
2014	11	MARINA DEL REY	0720	Scorpionfish, California	243
2014	11	LONG BEACH	0720	Scorpionfish, California	
2014	11	LONG BEACH	0720	Cabezon	1
2014	11	REDONDO BEACH	0720	Cabezon	10
2014	11	REDONDO BEACH	0720	Rockfish, gopher	1
2014	11	SAN PEDRO	0720	Bass, kelp	1
2014	11	LONG BEACH	0720	Bass, kelp	2
2014	11	MARINA DEL REY	0720	Bass, kelp	30
2014	11	REDONDO BEACH	0720	Bass, kelp	49
2014	11	LONG BEACH	0720	Bass, barred sand	5

Year	Month	Port Name	Block	Species	Kept
2014	11	SAN PEDRO	0720	Bass, barred sand	5
2014	11	MARINA DEL REY	0720	Bass, barred sand	16
2014	11	REDONDO BEACH	0720	Bass, barred sand	92
2014	11	REDONDO BEACH	0720	Bass, giant sea	
2014	11	REDONDO BEACH	0720	Seabass, white	1
2014	11	REDONDO BEACH	0720	Opaleye	16
2014	11	LONG BEACH	0720	Halfmoon	2
2014	11	REDONDO BEACH	0720	Halfmoon	39
2014	11	REDONDO BEACH	0720	Blacksmith	25
2014	11	SAN PEDRO	0720	Blacksmith	25
2014	11	REDONDO BEACH	0720	Sargo	1
2014	11	SAN PEDRO	0720	Whitefish, ocean	2
2014	11	LONG BEACH	0720	Whitefish, ocean	6
2014	11	MARINA DEL REY	0720	Whitefish, ocean	25
2014	11	REDONDO BEACH	0720	Whitefish, ocean	183
2014	11	REDONDO BEACH	0720	Surfperch, black	6
2014	11	REDONDO BEACH	0720	Surfperch, shiner	9
2014	11	REDONDO BEACH	0720	Surfperch, rubberlip	7
2014	11	REDONDO BEACH	0720	Rockfish, copper	14
2014	11	SAN PEDRO	0720	Rockfish, copper	20
2014	11	MARINA DEL REY	0720	Rockfish, copper	21
2014	11	REDONDO BEACH	0720	Rockfish, blue	9
2014	11	SAN PEDRO	0720	Rockfish, blue	26
2014	11	MARINA DEL REY	0720	Rockfish, blue	32
2014	11	REDONDO BEACH	0720	Lobster, California spiny	9
2014	11	SAN PEDRO	0720	Rockfish, group red	152
2014	11	REDONDO BEACH	0720		
2014	12	MARINA DEL REY	0680	Mackerel, Pacific	25
2014	12	MARINA DEL REY	0680	Sheephead, California	7
2014	12	MARINA DEL REY	0680	Lingcod	10
2014	12	MARINA DEL REY	0680	Halibut, California	2
2014	12	MARINA DEL REY	0680	Sanddab	50
2014	12	MARINA DEL REY	0680	Rockfish, unspecified	263
2014	12	MARINA DEL REY	0680	Rockfish, bocaccio	50
2014	12	MARINA DEL REY	0680	Rockfish, widow	2
2014	12	MARINA DEL REY	0680	Bass, kelp	5
2014	12	MARINA DEL REY	0680	Bass, barred sand	10
2014	12	MARINA DEL REY	0680	Whitefish, ocean	10
2014	12	MARINA DEL REY	0680	Rockfish, copper	20
2014	12	MARINA DEL REY	0701	Bonito, Pacific	47
2014	12	MARINA DEL REY	0701	Yellowtail	18
2014	12	MARINA DEL REY	0701	Mackerel, Pacific	30
2014	12	MARINA DEL REY	0701	Sheephead, California	125
2014	12	MARINA DEL REY	0701	Lingcod	24
2014	12	MARINA DEL REY	0701	Halibut, California	4
2014	12	MARINA DEL REY	0701	Sanddab	120
2014	12	MARINA DEL REY	0701	Rockfish, unspecified	3609
2014	12	MARINA DEL REY	0701	Rockfish, bocaccio	692
2014	12	MARINA DEL REY	0701	Cabezon	2
2014	12	MARINA DEL REY	0701	Rockfish, widow	2
2014	12	MARINA DEL REY	0701	Bass, kelp	34
2014	12	MARINA DEL REY	0701	Bass, barred sand	237
2014	12	MARINA DEL REY	0701	Seabass, white	3
2014	12	MARINA DEL REY	0701	Whitefish, ocean	38
2014	12	MARINA DEL REY	0701	Rockfish, copper	5
2014	12	MARINA DEL REY	0701	Rockfish, blue	5
2014	12	MARINA DEL REY	0702	Bonito, Pacific	5
2014	12	MARINA DEL REY	0702	Yellowtail	4
2014	12	MARINA DEL REY	0702	Mackerel, Pacific	556
2014	12	MARINA DEL REY	0702	Sheephead, California	51
2014	12	MARINA DEL REY	0702	Lingcod	28
2014	12	MARINA DEL REY	0702	Sanddab	436
2014	12	MARINA DEL REY	0702	Rockfish, cowcod	
2014	12	MARINA DEL REY	0702	Rockfish, canary	
2014	12	MARINA DEL REY	0702	Rockfish, unspecified	1825
2014	12	MARINA DEL REY	0702	Rockfish, bocaccio	302
2014	12	MARINA DEL REY	0702	Scorpionfish, California	
2014	12	MARINA DEL REY	0702	Cabezon	1
2014	12	MARINA DEL REY	0702	Rockfish, yelloweye	
2014	12	MARINA DEL REY	0702	Rockfish, widow	18
2014	12	MARINA DEL REY	0702	Bass, kelp	19

Year	Month	Port Name	Block	Species	Kept
2014	12	MARINA DEL REY	0702	Bass, barred sand	71
2014	12	MARINA DEL REY	0702	Triggerfish	2
2014	12	MARINA DEL REY	0702	Lizardfish, California	
2014	12	MARINA DEL REY	0702	Blacksmith	1
2014	12	MARINA DEL REY	0702	Whitefish, ocean	42
2014	12	MARINA DEL REY	0702	Surfperch, shiner	3
2014	12	MARINA DEL REY	0702	Rockfish, copper	61
2014	12	MARINA DEL REY	0702	Rockfish, blue	88
2014	12	MARINA DEL REY	0702	Octopus, unspecified	1
2014	12	SAN PEDRO	0720	Bonito, Pacific	1
2014	12	MARINA DEL REY	0720	Bonito, Pacific	1
2014	12	REDONDO BEACH	0720	Bonito, Pacific	5
2014	12	LONG BEACH	0720	Yellowtail	4
2014	12	SAN PEDRO	0720	Yellowtail	8
2014	12	MARINA DEL REY	0720	Yellowtail	11
2014	12	REDONDO BEACH	0720	Yellowtail	29
2014	12	SAN PEDRO	0720	Mackerel, Pacific	30
2014	12	MARINA DEL REY	0720	Mackerel, Pacific	78
2014	12	REDONDO BEACH	0720	Mackerel, Pacific	
2014	12	SAN PEDRO	0720	Sheephead, California	2
2014	12	LONG BEACH	0720	Sheephead, California	16
2014	12	MARINA DEL REY	0720	Sheephead, California	17
2014	12	REDONDO BEACH	0720	Sheephead, California	30
2014	12	SAN PEDRO	0720	Shark, shortfin mako	1
2014	12	REDONDO BEACH	0720	Lingcod	20
2014	12	LONG BEACH	0720	Lingcod	25
2014	12	SAN PEDRO	0720	Lingcod	27
2014	12	MARINA DEL REY	0720	Lingcod	35
2014	12	REDONDO BEACH	0720	Halibut, California	
2014	12	SAN PEDRO	0720	Sanddab	20
2014	12	MARINA DEL REY	0720	Sanddab	70
2014	12	LONG BEACH	0720	Rockfish, vermilion	139
2014	12	LONG BEACH	0720	Rockfish, unspecified	108
2014	12	SAN PEDRO	0720	Rockfish, unspecified	150
2014	12	MARINA DEL REY	0720	Rockfish, unspecified	1385
2014	12	REDONDO BEACH	0720	Rockfish, unspecified	2229
2014	12	SAN PEDRO	0720	Rockfish, bocaccio	8
2014	12	LONG BEACH	0720	Rockfish, bocaccio	148
2014	12	MARINA DEL REY	0720	Rockfish, bocaccio	403
2014	12	LONG BEACH	0720	Scorpionfish, California	2
2014	12	SAN PEDRO	0720	Scorpionfish, California	
2014	12	MARINA DEL REY	0720	Scorpionfish, California	
2014	12	REDONDO BEACH	0720	Cabezon	1
2014	12	MARINA DEL REY	0720	Cabezon	4
2014	12	REDONDO BEACH	0720	Rockfish, yelloweye	287
2014	12	LONG BEACH	0720	Bass, kelp	2
2014	12	SAN PEDRO	0720	Bass, kelp	5
2014	12	REDONDO BEACH	0720	Bass, kelp	13
2014	12	MARINA DEL REY	0720	Bass, kelp	
2014	12	LONG BEACH	0720	Bass, barred sand	1
2014	12	SAN PEDRO	0720	Bass, barred sand	1
2014	12	MARINA DEL REY	0720	Bass, barred sand	9
2014	12	REDONDO BEACH	0720	Bass, barred sand	51
2014	12	REDONDO BEACH	0720	Triggerfish	1
2014	12	REDONDO BEACH	0720	Opaleye	1
2014	12	REDONDO BEACH	0720	Halfmoon	
2014	12	REDONDO BEACH	0720	Blacksmith	27
2014	12	LONG BEACH	0720	Whitefish, ocean	2
2014	12	MARINA DEL REY	0720	Whitefish, ocean	2
2014	12	REDONDO BEACH	0720	Whitefish, ocean	314
2014	12	SAN PEDRO	0720	Rockfish, copper	18
2014	12	MARINA DEL REY	0720	Rockfish, copper	32
2014	12	MARINA DEL REY	0720	Rockfish, blue	8
2014	12	SAN PEDRO	0720	Rockfish, blue	35
2014	12	REDONDO BEACH	0720	Lobster, California spiny	23
2014	12	LONG BEACH	0720	Rockfish, group red	137

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APPENDIX E:
NATIVE AMERICAN COORDINATION AND CONSULTATION

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BonTerra CONSULTING

TRANSMITTAL

DATE: June 24, 2010

TO:	Mr. Dave Singleton	**FAX NUMBER:**	(916) 657-5390
	Program Analyst	**TEL NUMBER:**	(916) 653-4082
	Native American Heritage Comm.	**PROJECT:**	**Sylmar Ground Return Replacement Project**
	915 Capitol Mall, Rm. 364		
	Sacramento, CA 95814	**FROM:**	Patrick Maxon, RPA

☒ Fax / Pages 2 ☐ Mail ☐ Fed Ex / Overnite Express ☐ Delivery / Courier

REGARDING: Sacred Lands File Search and Contact List Request

Dear Mr. Singleton:

At your earliest convenience, please conduct a search of the Sacred Lands File for the proposed **Sylmar Ground Return Replacement Project**, Los Angeles County, California. The project area extends from the Kenter Canyon Terminal Tower and follows three separate alternatives to the ocean. The project area is shown on the USGS **Van Nuys, Canoga Park, Topanga, and Beverly Hills, CA** 7.5 Minute Quadrangles, Townships 1 North, 1 South and 2 South; Range 15 West and 16 West (multiple Sections) and on the attached map (refer to Exhibit 1). Please note, the search should be for the three southern segments beginning south of Mulholland and not the red northern segment that extends up to Sylmar. That was covered in the previous SLF search

Upgrades to the existing Pacific DC Intertie system have necessitated upgrades to the Sylmar Electrodes. A new upgrade is now being planned which will require the replacement of the entire overhead portion of the Sylmar Electrode (22 miles) and is considering three underground alternatives for the southern portion that extends from the Kenter Substation to the ocean. A previous NAHC SLF request was received for the northern 22-mile segment late last year.

Please fax or e-mail the results to me at p.maxon@bonterraconsulting.com, referencing your letter to "**Sylmar Ground Return Replacement Project** ".

If you have any questions or require any additional information, please do not hesitate to contact me at (714) 444-9199 or via email at pmaxon@bonterraconsulting.com.

Sincerely,

BONTERRA CONSULTING

Patrick Maxon, RPA
Director, Cultural Resources

151 Kalmus Drive, Suite E-200 Costa Mesa, CA 92626-7969 (714) 444-9199 (714) 444-9599 Fax

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

September 7, 2009

Mr. Patrick Maxon, RPA, Director, Cultural Resources
Bonterra Consulting
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626-7969

Sent by FAX to: 714-444-9599
Number of pages: 3

Re: Request for a Sacred Lands File Search and Native American Contacts List **for a Proposed "Sylvar-Kenter Electrode Upgrade Project", Upgrades to an existing Pacific Intertie System Site;** located in the San Fernando Valley over a 22 linear mile segment; Los Angeles County, California

Dear Mr. Maxon:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources (c.f. CA Public Resources Code §21070), was able to perform a record search of its Sacred Lands File (SLF) for the affected project area (APE) requested. The California Environmental Quality Act (CEQA; CA Public Resources Code Section 21000 – 21177)) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c)(f) CEQA guidelines). Section 15382 of the 2007 CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." The NAHC SLF search **did not indicate** the presence of Native American cultural resources within one-half - mile radius of the project area (APE) of the proposed project (APE). There are however, Native American cultural resources in close proximity to the APE at more than one point along the 22-mile line segment.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and individuals as 'consulting parties' under both state and federal law.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of the nearest tribes and interested Native American individuals that the NAHC recommends as 'consulting parties,' for this purpose, that may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We recommend that you contact persons on the attached list of Native American contacts. A Native American Tribe or Tribal Elder may be the only source of information about a cultural resource.. Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) at the Office of Historic Preservation Coordinator's office (at (916) 653-7278, for referral to the nearest Information Center of which there are 11..

Consultation with tribes and interested Native American consulting parties, on the NAHC list ,should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 [f]*et se),* and NAGPRA (25 U.S.C. 3001-3013), as appropriate. .

Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code §5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code §6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance' may also be protected the under Section 304 of the NHPA or at the Secretary of the Interior' discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C, 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibly threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Attachment: Native American Contacts List (NOTE: we further recommend that other forms of 'proof of mailing or proof of contact be utilized instead of 'Return Receipt Requested' Certified or Registered Mail.) Further, we suggest a follow-up telephone call to the contacts if the replies are not received or need clarification.

Native American Contact
Los Angeles County
September 8, 2009

Charles Cooke
32835 Santiago Road
Acton , CA 93510
Chumash
Fernandeno
Tataviam
Kitanemuk

(661) 733-1812 - cell
suscol@intox.net

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
,
Gabrielino Tongva
tattnlaw@gmail.com
310-570-6567

Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand Oaks , CA 91362
Chumash
Tataviam
Fernandeño

805 492-7255
(805) 558-1154 - cell
folkes9@msn.com

San Fernando Band of Mission Indians
John Valenzuela, Chairperson
P.O. Box 221838
Newhall , CA 91322
Fernandeño
Tataviam
Serrano
Vanyume
Kitanemuk

tsen2u@live.com
(661) 753-9833 Office
(760) 885-0955 Cell
(760) 949-1604 Fax

Fernandeno Tataviam Band of Mission Indians
William Gonzalaes, Cultural/Environ Depart
601 South Brand Boulevard, Suite 102
San Fernando , CA 91340
Fernandeno
Tataviam

rortega@tataaviam.us
(818) 837-0794 Office
(818) 581-9293 Cell
(818) 837-0796 Fax

Randy Guzman - Folkes
4577 Alamo Street, Unit C
Simi Valley , CA 93063
Chumash
Fernandeño
Tataviam
Shoshone Paiute
Yaqui

ndnRandy@gmail.com
(805) 905-1675 - cell

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th Street, Rm. 403
Los Angeles , CA 90020

(213) 351-5324
(213) 386-3995 FAX

This list is current only as of the date of this document.
Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. and federal NEPA (42 USC 4321-43351), NHPA Sections 106, 4(f) (16 USC 470(f) and NAGPRA (25 USC 3001-3013)

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Sylmar-Kenter Electrode Upgrade Project, a 22-mile Electrode Line Segment upgrading the existing Pacific Intertie DC System; located in the San Fernando Valley; Los Angeles County for which a Sacred Lands File search and Native American Contacts list were requested.

BonTerra CONSULTING

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Costa Mesa, CA 92626

September 8, 2009

Mr. John Valenzuela
San Fernando Band of Mission Indians
P.O. Box 221838
Newhall, California 91322

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Valenzuela:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar-Kenter Electrode Upgrade Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

A Sacred Lands File Search conducted by the Native American Heritage Commission (NAHC) did not indicate the presence of Native American cultural resources in the immediate project area. The NAHC also provided BonTerra Consulting with a list of Native American individuals/organizations that may have knowledge of cultural resources in the project area. Your name and contact information was included on the list.

An archaeological/historic records search will be conducted at the South Central Coastal Information Center, California State University, Fullerton. A pedestrian survey of the project site will be conducted.

Project

Upgrades to the existing Pacific DC Intertie system have necessitated upgrades to the Sylmar Electrodes. A new upgrade that will require the replacement of the entire overhead portion of the Sylmar Electrode (22 miles from Sylmar to the Kenter Tower) is now being planned. No new towers or modifications to existing towers are proposed.

Location

The proposed Sylmar-Kenter Electrode Upgrade Project runs for 22 miles from the Sylmar Converter Station in Sylmar to the Kenter Canyon Terminal Tower in Los Angeles. The project area is shown on the U.S. Geological Survey (USGS) San Fernando, Oat Mountain, Canoga Park, Topanga, and Beverly Hills, CA 7.5-minute quadrangles (north to south), and on the attached quadrangle map reduced in size (refer to Exhibit 1).

Your participation in this local planning process is important. If you have any additional knowledge of Native American Sacred Lands or other cultural resources on or near the study area, or any comment on the project, please contact me at your earliest convenience at (714) 444-9199 or via email at pmaxon@bonterraconsulting.com, with a subject line referencing the "Sylmar-Kenter Electrode Upgrade Project".

Sincerely,
BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director, Cultural Resources

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Costa Mesa, CA 92626

September 8, 2009

Ms. Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand Oaks, California 91362

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Ms. Salazar Folkes:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar-Kenter Electrode Upgrade Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Patrick O. Maxon, RPA
Director, Cultural Resources

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Costa Mesa, CA 92626

September 8, 2009

Mr. John Tommy Rosas
Tongva Ancestral Territorial Tribal Nation
4712 Admiralty Way, Ste. 172
Marina del Rey, California 90292

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Rosas:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar-Kenter Electrode Upgrade Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

September 8, 2009

Mr. Randy Guzman-Folkes
1931 Shadybrook Drive
Thousand Oaks, California 91362

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Guzman-Folkes:

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September 8, 2009

Mr. William Gonzales
Fernandeno Tataviam Band of Mission Indians
601 South Brand Blvd. Suite 102
San Fernando, California 91340

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Gonzales:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar-Kenter Electrode Upgrade Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

September 8, 2009

Mr. Charles Cook
32835 Santiago Road
Acton, California 93510

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Cook:

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Costa Mesa, CA 92626

September 8, 2009

Mr. Ron Andrade
LA City/County Native American Indian Comm.
3175 W. 6th Street, Rm. 403
Los Angeles, California 90020

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Andrade:

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BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director, Cultural Resources

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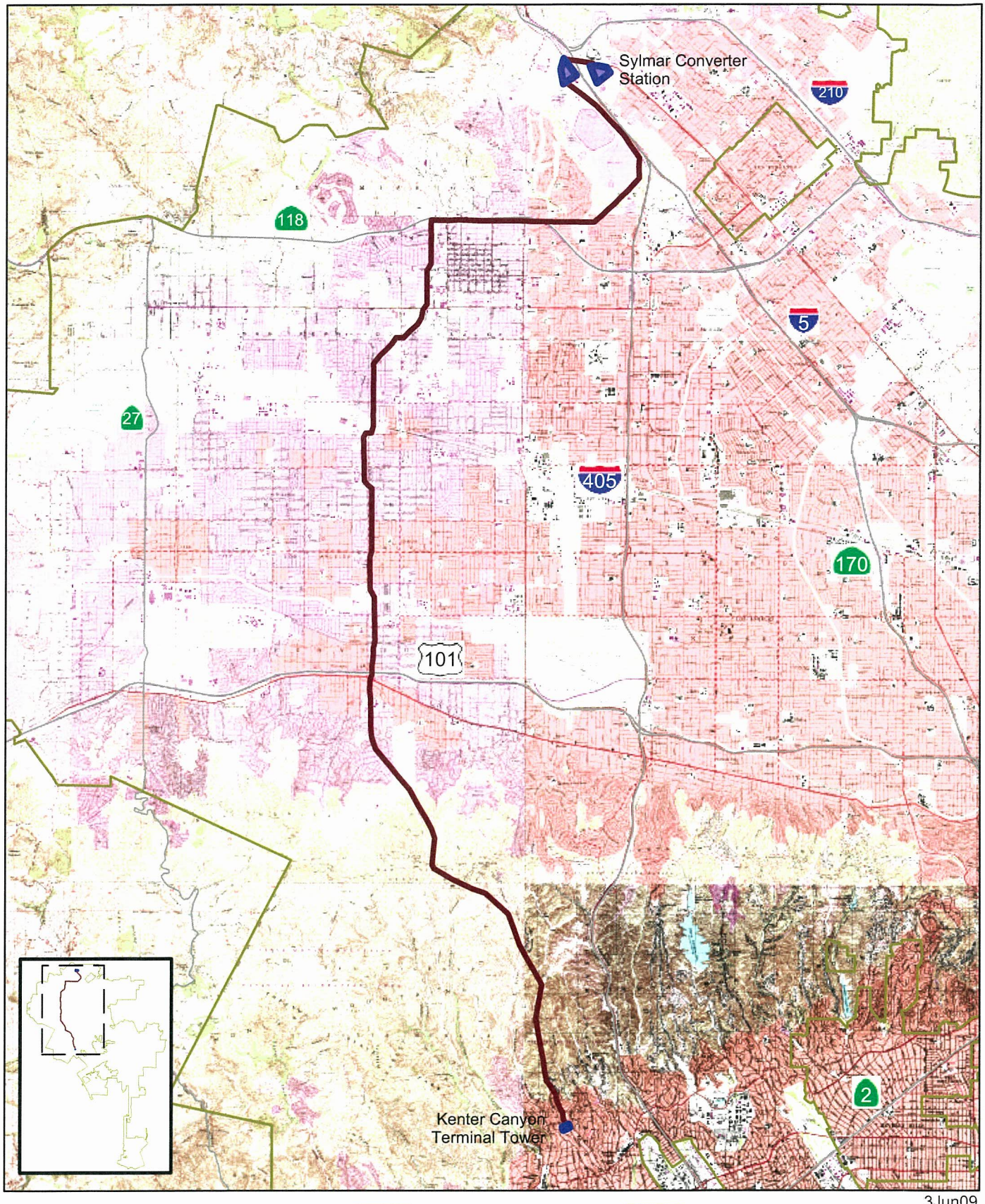

3Jun09

Electrode Route | Overhead Terminal | Los Angeles City Boundary

Pacific DC Intertie Electrode Upgrade - Overhead

TRANS GIS

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

September 8, 2009

Mr. John Tommy Rosas
Tongva Ancestral Territorial Tribal Nation

VIA EMAIL
tattnlaw@gmail.com

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

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Location

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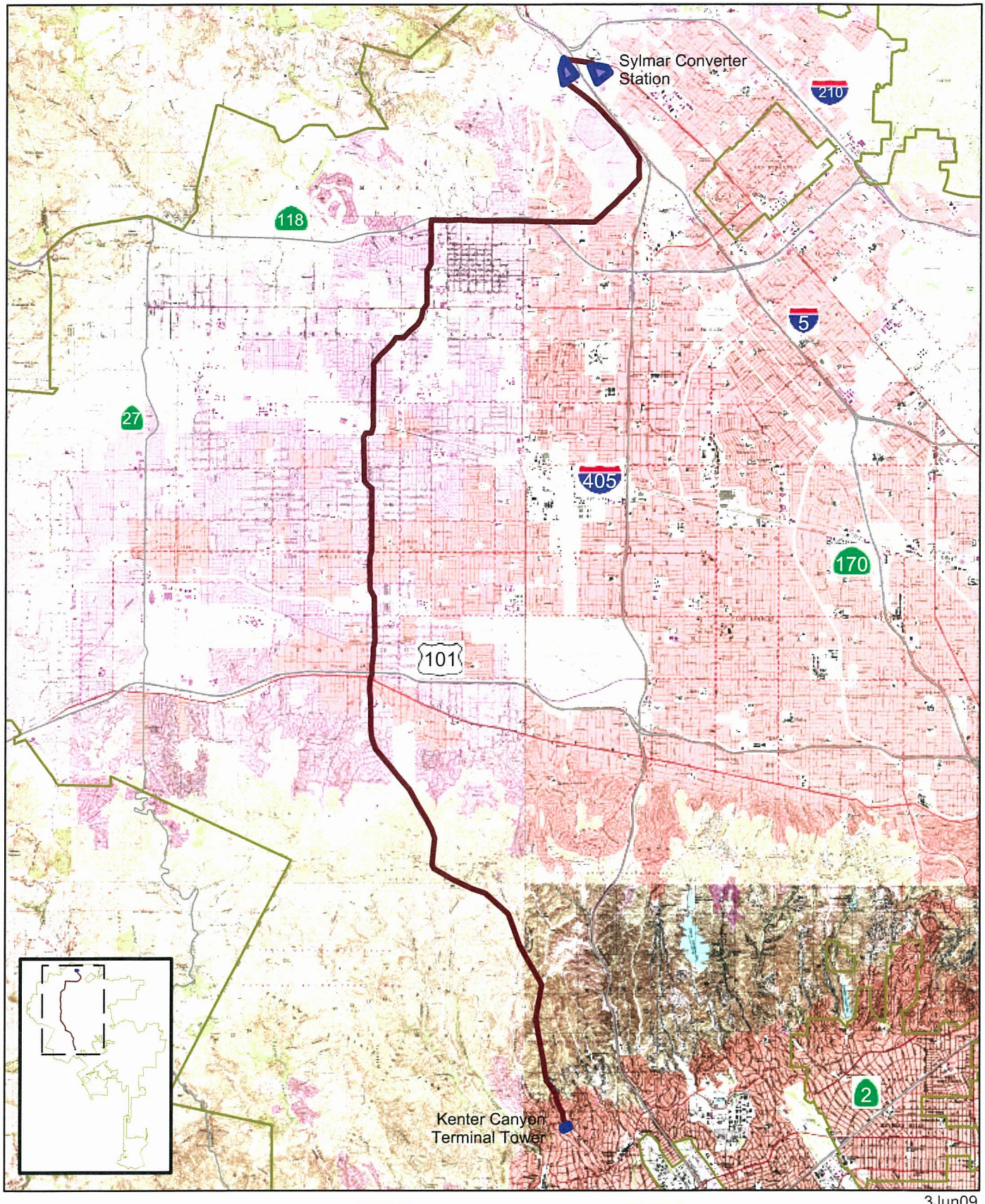
Your participation in this local planning process is important. If you have any additional knowledge of Native American Sacred Lands or other cultural resources on or near the study area, or any comment on the project, please contact me at your earliest convenience at (714) 444-9199 or via email at pmaxon@bonterraconsulting.com, with a subject line referencing the “Sylmar-Kenter Electrode Upgrade Project”.

Sincerely,
BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director, Cultural Resources

R:\Projects\MWatson\J012\NA Letters-090909.doc



3Jun09

Electrode Route | Overhead Terminal | Los Angeles City Boundary

Pacific DC Intertie Electrode Upgrade - Overhead

TRANS GIS

Identical originals sent to addressees on the attached list.

bc/enc: Charles C. Holloway
FileNet ES15-0234

June 12, 2015

Mr. Andrew Salas, Chairperson
Gabrieleno Band of Mission Indians--Kizh Nation
P.O. Box 393
Covina, CA 91723

Dear Mr. Salas:

Subject: Revised Sylmar Ground Return System Replacement Project

The Los Angeles Department of Water and Power (LADWP) is performing cultural resource analysis for the revised Sylmar Ground Return System Replacement Project, which would be located in the City of Los Angeles community of Pacific Palisades and the Santa Monica Bay (see enclosed map). The project area would extend into the Santa Monica Bay from an existing underground vault located in a parking lot on the south side of Pacific Coast Highway near its intersection with Sunset Boulevard. Please note this inquiry is related only to the area described above. Past inquiries were made in relation to overhead and underground portions of the Sylmar Ground Return System on land. However, these portions of the system are no longer included as part of the current replacement project.

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demand for power, and to help increase the available share of renewable resource energy.

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We are interested in receiving input from the Native American community regarding any concerns related to the proposed project site or surroundings. If you have any knowledge of cultural resources on or near the project that we should take into account in our analysis, please contact Ms. Nancy Chung, Environmental Specialist, of my staff via email at Nancy.Chung@ladwp.com.

Sincerely,

ORIGINAL SIGNED
CHARLES C. HOLLOWAY

Charles C. Holloway
Manager of Environmental Planning and Assessment

NC:mg NC
Enclosure
By Certified Mail with Return Receipt
c/enc: Ms. Nancy Chung

ES15-0234, ADDRESSEES, Revised Sylmar Ground Return System Replacement Project, Response to NAHC Tribe Consult.06.12.2015.nc

Addressee	Title, Organization, and Address
Mr. Andrew Salas	Chairperson Gabrieleno Band of Mission Indians--Kizh Nation P.O. Box 393 Covina, CA 91723
Mr. Anthony Morales	Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians P.O. Box 693 San Gabriel, CA 91778
Mr. Robert F. Dorame	Tribal Chair/Cultural Resources Gabrielino Tongva Indians of California Tribal Council P.O. Box 490 Bellflower, CA 90707
Mr. Sam Dunlap	Cultural Resources Director Gabrielino/Tongva Nation P.O. Box 86908 Los Angeles, CA 90086
Ms. Sandonne Goad	Chairperson Gabrielino/Tongva Nation 106 1/2 Judge John Aiso Street Los Angeles, CA 90012
Mr. Bernie Acuna	Co-Chairperson Gabrielino-Tongva Tribe 1999 Avenue of the Stars, Suite 1100 Los Angeles, CA 90067-4618
Mr. Conrad Acuna	Gabrielino-Tongva Tribe 1999 Avenue of the Stars, Suite 1100 Los Angeles, CA 90067-4618
Ms. Linda Candelaria	Co-Chairperson Gabrielino-Tongva Tribe 1999 Avenue of the Stars, Suite 1100 Los Angeles, CA 90067-4618
Mr. John Tommy Rosas	Tribal Administrator Tongva Ancestral Territorial Tribal Nation 578 Washington Boulevard, #384 Marina Del Rey, CA 90292

PROPOSED ELECTRODE FACILITY

SYLMAR GROUND RETURN SYSTEM REPLACEMENT PROJECT

Feet
0 2,500

POWER ENGINEERS

LA DWP

June 12, 2015

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Gabrieleno Band of Mission Indians--Kizh Nation
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Covina, CA 91723

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Sincerely,

Charles C. Holloway
Manager of Environmental Planning and Assessment

NC:mg
Enclosure
By Certified Mail with Return Receipt
c/enc: Ms. Nancy Chung

Los Angeles Department of Water & Power

ERIC GARCETTI
Mayor

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MICHAEL F. FLEMING
CHRISTINA E. NOONAN
BARBARA E. MOSCHOS, *Secretary*

MARCIE L. EDWARDS
General Manager

June 12, 2015

Mr. Anthony Morales, Chairperson
Gabrieleno/Tongva San Gabriel Band of Mission Indians
P.O. Box 693
San Gabriel, CA 91778

Dear Mr. Morales:

Subject: Revised Sylmar Ground Return System Replacement Project

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Sincerely,

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MARCIE L. EDWARDS
General Manager

June 12, 2015

Mr. Robert F. Dorame
Tribal Chair/Cutural Resources
Gabrielino Tongva Indians of California Tribal Council
P.O. Box 490
Bellflower, CA 90707

Dear Mr. Dorame:

Subject: Revised Sylmar Ground Return System Replacement Project

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Sincerely,

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Manager of Environmental Planning and Assessment

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Los Angeles Department of Water & Power

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BARBARA E. MOSCHOS, *Secretary*

MARCIE L. EDWARDS
General Manager

June 12, 2015

Mr. Sam Dunlap
Cultural Resources Director
Gabrielino/Tongva Nation
P.O. Box 86908
Los Angeles, CA 90086

Dear Mr. Dunlap:

Subject: Revised Sylmar Ground Return System Replacement Project

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June 12, 2015

Ms. Sandonne Goad
Chairperson
Gabrielino/Tongva Nation
106 1/2 Judge John Aiso Street
Los Angeles, CA 90012

Dear Ms. Goad:

Subject: Revised Sylmar Ground Return System Replacement Project

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Charles C. Holloway

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Los Angeles Department of Water & Power

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CHRISTINA E. NOONAN
BARBARA E. MOSCHOS, *Secretary*

MARCIE L. EDWARDS
General Manager

June 12, 2015

Mr. Bernie Acuna
Co-Chairperson
Gabrielino-Tongva Tribe
1999 Avenue of the Stars, Suite 1100
Los Angeles, CA 90067-4618

Dear Mr. Acuna:

Subject: Revised Sylmar Ground Return System Replacement Project

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June 12, 2015

Ms. Linda Candelaria
Co-Chairperson
Gabrielino-Tongva Tribe
1999 Avenue of the Stars, Suite 1100
Los Angeles, CA 90067-4618

Dear Ms. Candelaria:

Subject: Revised Sylmar Ground Return System Replacement Project

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CHRISTINA E. NOONAN
BARBARA E. MOSCHOS, *Secretary*

MARCIE L. EDWARDS
General Manager

June 12, 2015

Mr. John Tommy Rosas
Tribal Administrator
Tongva Ancestral Territorial Tribal Nation
578 Washington Boulevard, #384
Marina Del Rey, CA 90292

Dear Mr. Rosas:

Subject: Revised Sylmar Ground Return System Replacement Project

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Manager of Environmental Planning and Assessment

NC:mg
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By Certified Mail with Return Receipt
c/enc: Ms. Nancy Chung

Pat Maxon - Re: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

From: Johntommy Rosas <tattnlaw@gmail.com>
To: Angie Chu <AChu@bonterraconsulting.com>
Date: 9/11/2009 10:12 AM
Subject: Re: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California
CC: Pat Maxon <PMaxon@bonterraconsulting.com>

THANKS - I WILL REVIEW THE DOCUMENT -AGAIN NOT ANY INFO-REALLY

AND WE DO HAVE OTHER RIGHTS TO DEFEND UNDER OUR INDIGENOUS RIGHTS-CULTURAL,ENVIRONMENTAL- ETC-JOHNTOMMY

On Fri, Sep 11, 2009 at 8:53 AM, Angie Chu <AChu@bonterraconsulting.com> wrote:

> Mr. Rosas,
> Attached is the Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California.
> If you have questions, please call Pat Maxon at (714) 444-9199.
> Thank you,
> ANGIE CHU
> Office Assistant
> BonTerra Consulting
> Costa Mesa | Pasadena
> 151 Kalmus Drive, Suite E-200
> Costa Mesa, CA 92626
> T: (714) 444-9199 F: (714) 444-9599
> www.BonTerraConsulting.com

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JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
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TATTN / TRIBAL NOTICE OF CONFIDENTIALITY:

TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

July 8, 2010

Mr. Patrick Maxon, RPA, Director – Cultural Resources
Bonterra Consulting
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

Sent by FAX TO: 714-444-8535
No. of Pages: 4

Re: Request for a Sacred Lands File Search and Native American Contacts List for the proposed **"Sylmar Ground Return Replacement Project"** located in the north San Fernando Valley; Los Angeles County, California

Dear Mr. Maxon:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources. The NAHC SLF search, **did not indicate** the presence of Native American cultural resources within one-half mile of the proposed project site (APE).

Also, this letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American India tribes and interested Native American individuals as 'consulting parties' under both state and federal law.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amended in 2009) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Culturally-affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g.APE). We recommend that you contact persons on the attached list of Native American contacts. Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) at the Office of Historic Preservation Coordinator's office (at 916-653-7272, for referral to the nearest Information Center of which there are 10.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2), the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq*. and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes.

Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetary'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code 5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code 6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of he NHA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Attachment: Native American Contact List

Native American Contacts
July 7, 2010
Los Angeles County

Charles Cooke
32835 Santiago Road
Acton , CA 93510
(661) 733-1812 - cell
suscol@intox.net
Chumash
Fernandeno
Tataviam
Kitanemuk

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez
981 N. Virginia
Covina , CA 91722
(626) 339-6785
Yowlumne
Kitanemuk

Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand Oaks, CA 91362
805 492-7255
(805) 558-1154 - cell
folkes9@msn.com
Chumash
Tataviam
Ferrnandeño

San Fernando Band of Mission Indians
John Valenzuela, Chairperson
P.O. Box 221838
Newhall , CA 91322
tsen2u@hotmail.com
(661) 753-9833 Office
(760) 885-0955 Cell
(760) 949-1604 Fax
Fernandeño
Tataviam
Serrano
Vanyume
Kitanemuk

Fernandeno Tataviam Band of Mission Indians
William Gonzales, Cultural/Environ Depart/Rudy Ortega
601 South Brand Boulevard, Suite 102
San Fernando CA 91340
rortega@tataviam-nsn.us
(818) 837-0794 Office
(818) 837-0796 Fax
Fernandeno
Tataviam

Randy Guzman - Folkes
655 Los Angeles Avenue, Unit E
Moorpark , CA 93021
ndnRandy@yahoo.com
(805) 905-1675 - cell
Chumash
Fernandeño
Tataviam
Shoshone Paiute
Yaqui

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th Street, Rm.
Los Angeles , CA
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 FAX

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of [illegible]
Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. Also
federal National Environmental Policy Act (NEPA), National Historic [illegible]
eral NAGPRA. And 36 CFR Part 800.3.

[illegible] Similar Ground Mount Replacement Project, located in the north San Fernando Valley; Los Angeles County, California
for which a Record [illegible] Cultural Resources for the proposed
[illegible] is requested.

BonTerra CONSULTING

PASADENA COSTA MESA

T: (714) 444-9199 F: (714) 444-9599
www.BonTerraConsulting.com

151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

August 2, 2010

Mr. Ron Andrade, Director
LA City/County Native American Indian Comm.
3175 W. 6th Street, Rm. 403
Los Angeles, California 90020

Subject: Sylmar Ground Return Replacement Project, Los Angeles County, California

Dear Mr. Andrade:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar Ground Return Replacement Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

In September 2009, BonTerra Consulting mailed you a letter requesting cultural resources information for the northern portion of this project, extending from the Sylmar Converter Station south to the Kenter Canyon Terminal Tower in the Santa Monica Mountains. Since that time, the project has been expanded and is described below.

An updated Sacred Lands File Search conducted by the Native American Heritage Commission (NAHC) did not indicate the presence of Native American cultural resources in the immediate project area. The NAHC also provided BonTerra Consulting with a list of Native American individuals/organizations that may have knowledge of cultural resources in the project area. Your name and contact information was included on the list.

An archaeological/historic records search was conducted at the South Central Coastal Information Center, California State University, Fullerton. No resources are recorded within any of the alignments, but several sites are known in close proximity. A pedestrian survey of the project site will be conducted.

Project

Upgrades to the existing Pacific DC Intertie system have necessitated upgrades to the Sylmar Electrodes. A new upgrade is now being planned which will require the replacement of the entire overhead portion of the Sylmar Electrode (22 miles) and is considering 3 underground alternatives for the southern portion that extends from the Kenter Tower south to the ocean. Three alternatives are being considered and include the Sunset Boulevard, San Vicente Boulevard, and the Topanga State Park alignments.

Location

The updated project area extends south from the Kenter Canyon Terminal Tower and follows three separate alternatives to the ocean. The project area is shown on the USGS Van Nuys, Canoga Park, Topanga, and Beverly Hills 7.5 Minute Quadrangles, Townships 1 North, 1 South and 2 South; Range 15 West and 16 West (multiple Sections) and on the attached map (refer to Exhibit 1). Please note, the project consists of the three southern segments beginning south of Mulholland Drive and not the red northern segment that extends up to Sylmar. That was covered in the previous study.

Your participation in this local planning process is important. If you have any additional knowledge of Native American Sacred Lands or other cultural resources on or near the study area, or any comment on the project, please contact me at your earliest convenience at (714) 444-9199 or via email at pmaxon@bonterraconsulting.com, with a subject line referencing the "Sylmar Ground Return Replacement Project".

Sincerely,

BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

August 2, 2010

Mr. Charles Cooke
Tehachapi Indian Tribe
32835 Santiago Road
Acton, California 93510

Subject: Sylmar Ground Return Replacement Project, Los Angeles County, California

Dear Mr. Cooke:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar Ground Return Replacement Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Sincerely,

BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

August 2, 2010

Ms. Delia Dominguez
Kitanemuk & Yowlumne Tejon Indians
981 N. Virginia
Covina, California 91722

Subject: Sylmar Ground Return Replacement Project, Los Angeles County, California

Dear Ms. Dominguez:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar Ground Return Replacement Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Patrick O. Maxon, RPA
Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

August 2, 2010

Mr. William Gonzales, Cultural/Environ Depart/Rudy Ortega
Fernandeno Tataviam Band of Mission Indians
601 South Brand Blvd. Suite 102
San Fernando, California 91340

Subject: Sylmar Ground Return Replacement Project, Los Angeles County, California

Dear Mr. Gonzales:

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Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

August 2, 2010

Mr. Randy Guzman-Folkes
655 Los Angeles Avenue, Unit E
Moorpark, California 93021

Subject: Sylmar Ground Return Replacement Project, Los Angeles County, California

Dear Mr. Guzman-Folkes:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar Ground Return Replacement Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Sincerely,

BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

August 2, 2010

Ms. Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand Oaks, California 91362

Subject: Sylmar Ground Return Replacement Project, Los Angeles County, California

Dear Ms. Salazar Folkes:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar Ground Return Replacement Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

August 2, 2010

Mr. John Valenzuela, Chairperson
San Fernando Band of Mission Indians
P.O. Box 221838
Newhall, California 91322

Subject: Sylmar Ground Return Replacement Project, Los Angeles County, California

Dear Mr. Valenzuela:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar Ground Return Replacement Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Director, Cultural Resources

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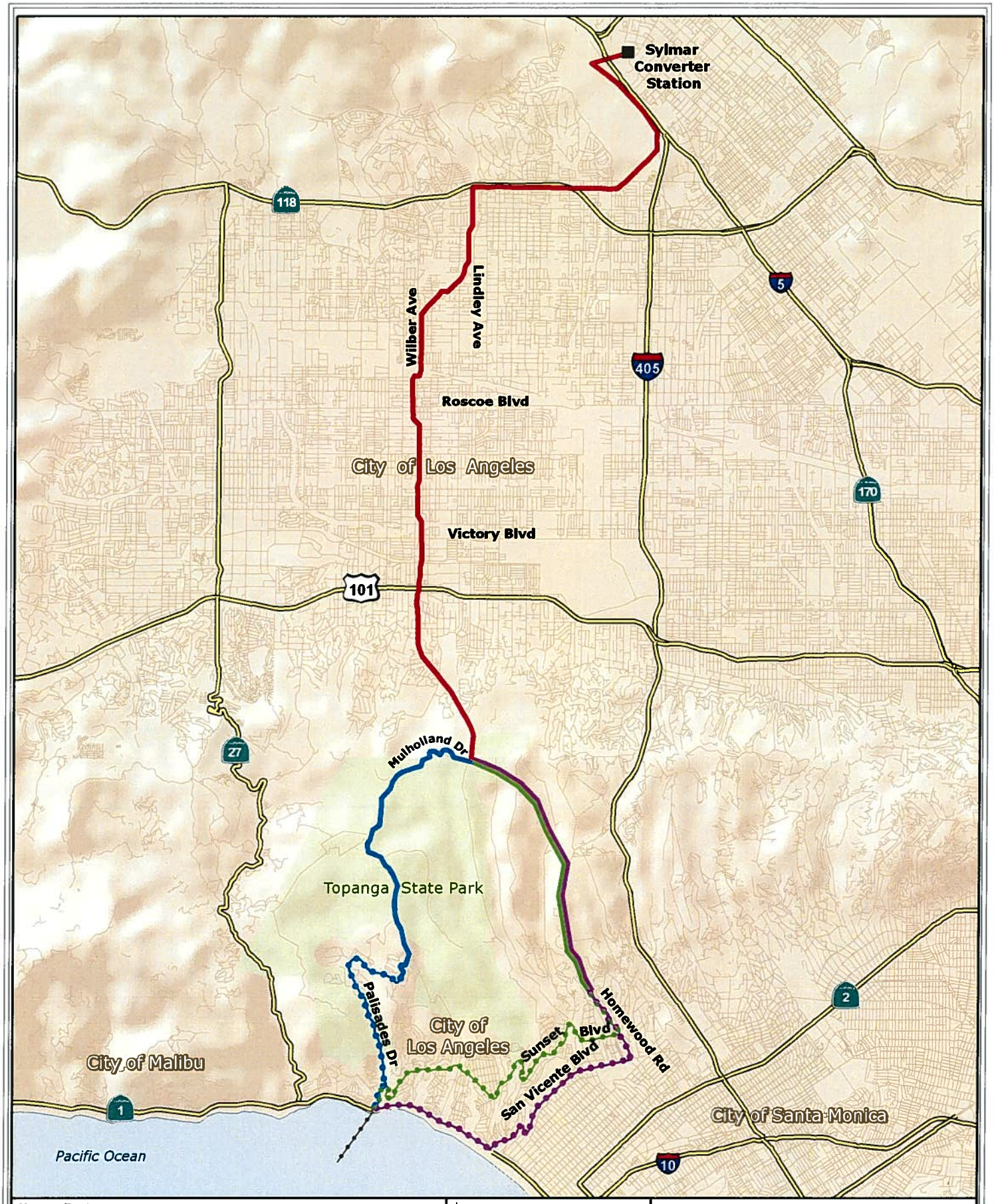

Key to Features

Overhead
- Main Overhead Alignment
- San Vicente Alignment
- Topanga State Park Alignment
- Sunset Alignment

Underground
- San Vicente Alignment
- Topanga State Park Alignment
- Sunset Alignment
- Submarine Alignment

N

0 0.5 1 2 Miles

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Date: January 21, 2010

Proposed Project Alignment Locations

Figure 1

MWH

BonTerra CONSULTING

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www.BonTerraConsulting.com
151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

October 15, 2010

Mr. Bernie Acuna
Gabrielino-Tongva Tribe
501 Santa Monica Bl., #500
Santa Monica, California 90401

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Acuna:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar-Kenter Electrode Upgrade Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Your participation in this local planning process is important. If you have any additional knowledge of Native American Sacred Lands or other cultural resources on or near the study area, or any comment on the project, please contact me at your earliest convenience at (714) 444-9199 or via email at pmaxon@bonterraconsulting.com, with a subject line referencing the "Sylmar-Kenter Electrode Upgrade Project".

Sincerely,
BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

October 15, 2010

Ms. Cindi Alvitre
Ti'At Society
6515 E. Seaside Walk, Apt C
Long Beach, California 90803

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Ms. Alvitre:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar-Kenter Electrode Upgrade Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Sincerely,
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Patrick O. Maxon, RPA
Director, Cultural Resources

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Costa Mesa, CA 92626

October 15, 2010

Ms. Linda Candelaria, Chairwoman
Gabrielino-Tongva Tribe
501 Santa Monica Blvd, #500
Santa Monica, California 90401

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Ms. Candelaria:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar-Kenter Electrode Upgrade Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Sincerely,
BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

October 15, 2010

Mr. Robert Dorame, Tribal Chair/Cultural Resources
Gabrielino Tongva Indians of California Tribal Council
PO Box 490
Bellflower, California 90707

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Dorame:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar-Kenter Electrode Upgrade Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Sincerely,
BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

October 15, 2010

Mr. Samuel H. Dunlap, Tribal Secretary
Gabrielino/Tongva Council / Gabrielino Tongva Nation
PO Box 86908
Los Angeles, California 90086

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Dunlap:

BonTerra Consulting has been retained to complete a cultural resources study for the proposed Sylmar-Kenter Electrode Upgrade Project located in Los Angeles County, California. This project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject the statutory requirements of Senate Bill 18 (Tribal Consultation Guidelines). However, as part of the background cultural resources research being conducted, this letter is to inform you of the proposed project and to request any relevant information you may have regarding cultural resources on or near the project site.

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Sincerely,
BONTERRA CONSULTING

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Costa Mesa, CA 92626

October 15, 2010

Mr. Anthony Morales, Chairperson
Gabrieleno/Tongva Tribal Council
P.O. Box 693
San Gabriel, California 91778

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Morales:

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Sincerely,
BONTERRA CONSULTING

Patrick O. Maxon, RPA
Director, Cultural Resources

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151 Kalmus Drive, Suite E-200
Costa Mesa, CA 92626

October 15, 2010

Mr. Freddie Romero
Santa Ynez Tribal Elders Council
P.O. Box 365
Santa Ynez, California 93460

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Romero:

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Patrick O. Maxon, RPA
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Costa Mesa, CA 92626

October 15, 2010

Mr. Andy Salas, Chairperson
Shoshoneon Gabrieleno Band of Mission Indians
P.O. Box 393
Covina, California 91723

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Salas:

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Patrick O. Maxon, RPA
Director, Cultural Resources

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Costa Mesa, CA 92626

October 15, 2010

Mr. John Tommy Rosas, Tribal Administrator
Tongva Ancestral Territorial Tribal Nation

VIA EMAIL
tattinlaw@gmail.com

Subject: Sylmar-Kenter Electrode Upgrade Project, Los Angeles County, California

Dear Mr. Rosas:

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Patrick O. Maxon, RPA
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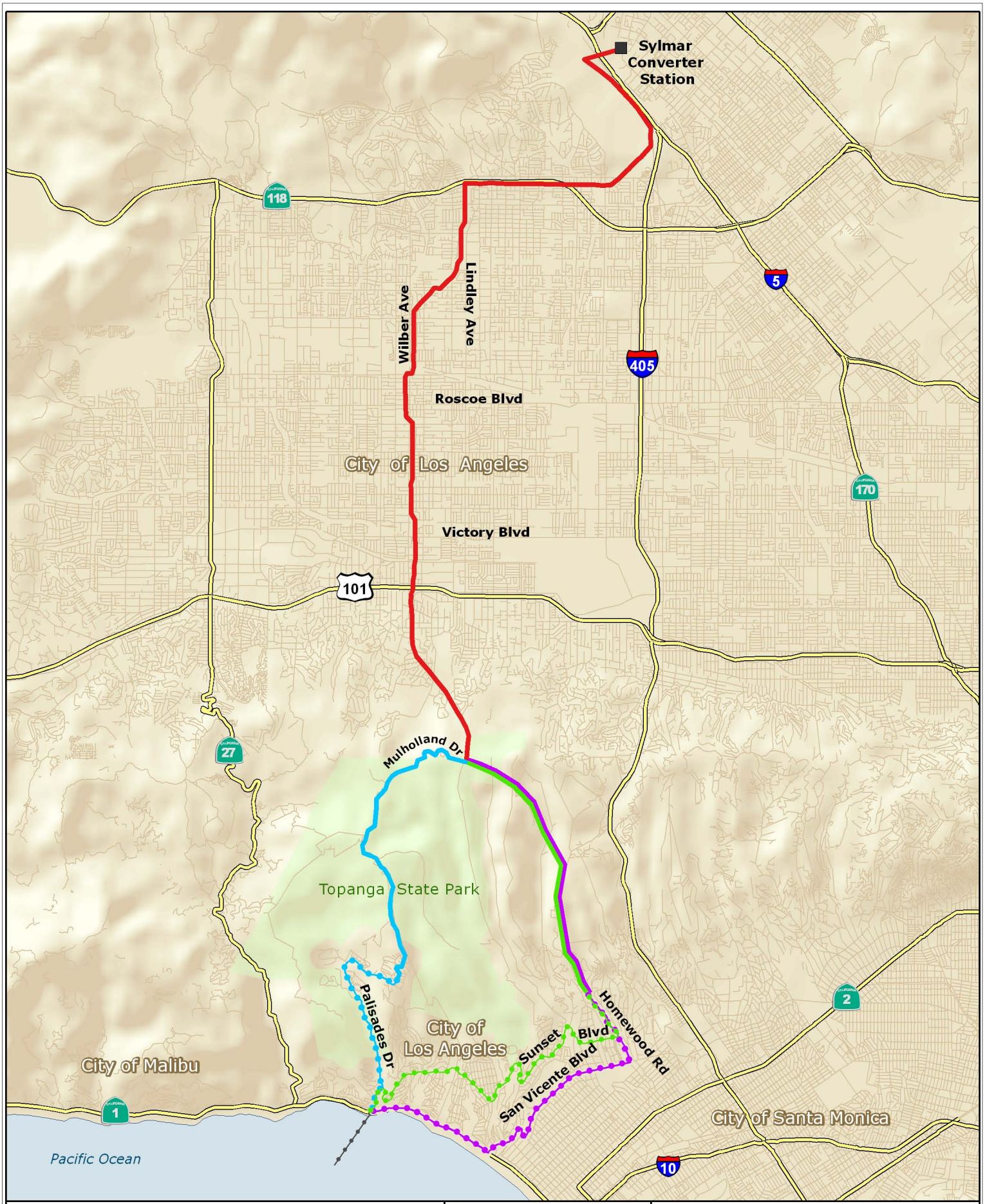
Sylmar Converter Station
118
Wilber Ave
Lindley Ave
5
405
Roscoe Blvd
City of Los Angeles
170
Victory Blvd
101
27
Mulholland Dr
Topanga State Park
Palisades Dr
Homewood Rd
City of Los Angeles
Sunset Blvd
San Vicente Blvd
2
City of Malibu
1
City of Santa Monica
Pacific Ocean
10
Key to Features
Overhead
Main Overhead Alignment
San Vicente Alignment
Topanga State Park Alignment
Sunset Alignment
Underground
San Vicente Alignment
Topanga State Park Alignment
Sunset Alignment
Submarine Alignment
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Date: January 21, 2010
Proposed Project Alignment Locations
Figure 1
MWH

Pat Maxon - Re: Cultural Resources Study for the Sylmar-Kenter Electrode Upgrade Project

From: Johntommy Rosas <tattnlaw@gmail.com>
To: Sheryl Kristal <SKristal@bonterraconsulting.com>
Date: 10/18/2010 9:30 AM
Subject: Re: Cultural Resources Study for the Sylmar-Kenter Electrode Upgrade Project
CC: Pat Maxon <PMaxon@bonterraconsulting.com>, Dave Singleton <ds_nahc@pacbe...

Thanks

actually that project will negatively affect our sacred sites there which is registered

I need a better project description and there appears to be a conflict within the documents info or its confusing to me going by the color coded

lines

so we officially OBJECT AND OPPOSE this project on grounds that the project will be in violation to numerous indigenous rights we have and therefor the project is illegal

thanks jt

On Mon, Oct 18, 2010 at 8:32 AM, Sheryl Kristal <SKristal@bonterraconsulting.com> wrote:

> Mr. Rosas,
>
> Attached is the Notification of a Cultural Resources Study for the Sylmar-Kenter Electrode Upgrade Project.
>
> If you have questions, or knowledge of Native American Sacred Lands or other cultural resources on or near the study area please call Pat Maxon at (714) 444-9199.
>
> Thank you,
> SHERYL KRISTAL
> Word Processor
> BonTerra Consulting
> Costa Mesa | Pasadena
> 151 Kalmus Drive, Suite E-200
> Costa Mesa, CA 92626
> T: (714) 444-9199 F: (714) 444-9599
> www.BonTerraConsulting.com

--
JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
OFFICIAL TATTN E-MAIL CONFIDENTIAL

Pat Maxon - Sylmer-Kenter Electrode Upgrade project

From: Freddie Romero <freddyromero1959@yahoo.com>
To: <pmaxon@bonterraconsulting.com>
Date: 10/29/2010 11:18 AM
Subject: Sylmer-Kenter Electrode Upgrade project

Ms. Maxon,

I have reviewed the info that was sent to the Santa Ynez band of Chumash indians Elders Council concerning tis project. After review of project material, the Elders Council do not see any issues with this project in terms of impacts to cultural sites and has no further comments in regards to this project.

Thank you for the notification and opportunity to review and comment.

Freddie Romero
Cultural Preservation Consultant
SYBCI Elders Council
805-688-7997 X37

From: Gabrieleno Band of Mission Indians <gabrielenoindians@yahoo.com>
To: Patrick Maxon <pmaxon@bonterraconsulting.com>
Date: 11/26/2010 7:47 PM
Subject: Sylmar- Kenter Electrode Upgrade

Dear Patrick
Sorry for the Late responce
This email is in response to your letter dated Oct 15, 2010 in regards to the subject project Sylmar- Kenter Electrode Upgrade. The proposed project is within one of our tribes villages and is in a highly culturally

sensitive area and in order to protect our resources we're requesting one of our

experienced & certified Native American monitors to be on site during all ground

disturbances.

Please contact our office regarding this project to coordinate a NA monitor to be present.

Sincerely,
Andy Salas
Chairman

STATE OF CALIFORNIA
NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

Edmond G. Brown, Jr. *Governor*

May 20, 2014

Nadia Parker
Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 90012

RE: SCH# 2010091041 Sylmar Ground Return System Replacement Project, Los Angeles County.

Dear Ms. Parker:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Completion (NOC) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. **USGS 7.5-minute quadrangle name, township, range, and section required**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) Guidelines §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered cultural items that are not burial associated, which are addressed in Public Resources Code (PRC) §5097.98, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, PRC §5097.98, and CEQA Guidelines §15064.5(e), address the process to be followed in the event of an accidental discovery of any human remains and associated grave goods in a location other than a dedicated cemetery.

Sincerely,

Katy Sanchez

Katy Sanchez
Associate Government Program Analyst

CC: State Clearinghouse

Native American Contact List
Los Angeles County
May 20, 2014

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Private Address
Gabrielino Tongva

tattnlaw@gmail.com
310-570-6567

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
P.O. Box 180
Bonsall , CA 92003
Gabrielino

palmsprings9@yahoo.com
626-676-1184- cell
(760) 636-0854 - FAX

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693
San Gabriel , CA 91778
Gabrielino Tongva

GTTribalcouncil@aol.com
(626) 286-1232 - FAX
(626) 286-1758 - Home
(626) 483--3564 cell
(626) 286-1262 -FAX

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393
Covina , CA 91723
Gabrielino

gabrielenoindians@yahoo.
(626) 926-4131

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
P.O. Box 86908
Los Angeles , CA 90086
Gabrielino Tongva

sgoad@gabrielino-tongva.com
951-845-0443

Gabrielino-Tongva Tribe
Conrad Acuna,
P.O. Box 180
Bonsall , CA 92003
Gabrielino

760-636-0854 - FAX

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
P.O. Box 490
Bellflower , CA 90707
Gabrielino Tongva

gtongva@verizon.net
562-761-6417 - voice
562-761-6417- fax

Gabrielino /Tongva Nation
Sam Dunlap, Cultural Resorces Director
P.O. Box 86908
Los Angeles , CA 90086
Gabrielino Tongva

samdunlap@earthlink.net
909-262-9351

Gabrielino-Tongva Tribe
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Bonsall , CA 92003
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(619) 294-6660-work
(310) 428-5690 - cell
(760) 636-0854- FAX

bacuna1@gabrielinotribe.org

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH # 2010091041 Sylmar Ground Return System Replacement Project, Los Angeles County.

STATE OF CALIFORNIA — Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

April 20, 2015

Sarah Perez, Project Coordinator
POWER Engineers, Inc.
731 East Ball Road, Suite 100
Anaheim, CA 912805

Sent by Fax: (714) 507-2799
Number of Pages: 3

Re: Sylmar Ground Return System Replacement Project, Los Angeles County.

Dear Ms. Perez,

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

Katy Sanchez

Katy Sanchez
Associate Government Program Analyst

Native American Contact List
Los Angeles County
April 13, 2015

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Gabrielino Tongva
tattnlaw@gmail.com
(310) 570-6567

Gabrielino-Tongva Tribe
Bernie Acuna, Co-Chairperson
1999 Avenue of the Stars, Suite 1100 Gabrielino
Los Angeles , CA 90067

(310) 428-5690 Cell

Gabrieleno/Tongva San Gabriel Band of Mission Indian
Anthony Morales, Chairperson
P.O. Box 693 Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 483-3564 Cell

(626) 286-1262 Fax

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sgoad@gabrielino-tongva.com
(951) 807-0479

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P.O. Box 393 Gabrielino
Covina , CA 91723
gabrielenoindians@yahoo.
(626) 926-4131

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
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Los Angeles , CA 90067

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed Sylmar Ground Return System Replacement Project, Los Angeles County.

Native American Contact List
Los Angeles County
April 13, 2015

Gabrielino /Tongva Nation
Sam Dunlap, Cultural Resources Director
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net
(909) 262-9351

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed Sylmar Ground Return System Replacement Project, Los Angeles County.

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Provided for a Sacred Lands File Search

Project: Sylmar Ground Return System Replacement Project

County: Los Angeles
USGS Quadrangles: Topanga, 7.5 Minute Series
Township 1S, Range 16W, Section 33

Company/Firm/Agency: POWER Engineers, Inc.

Contact Person: Sarah Perez, Project Coordinator

Street Address: 731 East Ball Road, Suite 100
Anaheim, CA 92805

Phone: 818-471-3006
Fax: 714-507-2799

Email: sarah.perez@powereng.com

Project Description:
At your earliest convenience, please conduct a search of the Sacred Lands File (SLF) for the revised Sylmar Ground Return System Replacement Project. The project area extends from a vault located on the south side of Pacific Coast Highway near its intersection with Sunset Boulevard into Santa Monica Bay. The project area is shown on Figure 1. Please note that the search should cover only the area described above. Previous SLF searches have been conducted for overhead and underground portions of the Sylmar Ground Return System replacement on land that are no longer proposed as part of the current project. Those previous NAHC SLF search results, addressed to Bonterra Consulting, were dated September 7, 2009, and July 8, 2010.

Under the current project, the existing marine cables and electrode array of the Sylmar Ground Return System are proposed to be replaced in a new location. The replacement would consist of marine cables installed several feet beneath the ocean floor connecting to a new electrode array situated on the ocean floor up to three miles offshore. The Sylmar Ground Return System is an integral component of the Pacific Direct Current Intertie Transmission Line, which transmits bulk power between Los Angeles and the Pacific Northwest. The Pacific Direct Current Intertie is a direct current system that cannot operate without a ground return component. Due to system deficiencies with the existing marine components of the Sylmar Ground Return System, which are also located offshore in Santa Monica Bay, its replacement is necessary to maintain the reliability and stability of the power generation and delivery system for Southern California; to continue to meet current and projected demand for power; and to help increase the available share of renewable resource energy.

Proposed Marine Facilities

- Proposed Marine Cables
- Approximate Location of Electrode Array

Existing Marine Facilities

- Existing Marine Cables
- Existing Electrode Array

PROJECT FACILITIES

SYLMAR GROUND RETURN SYSTEM REPLACEMENT PROJECT

POWER ENGINEERS

LA DWP

Sarah Perez 1-818-471-3006

Subject: FW: call today on ladwp letter

From: Johntommy Rosas [mailto:tattnlaw@gmail.com]
Sent: Monday, June 29, 2015 4:12 PM
To: Chung, Nancy; terrie.robinson@nahc.ca.gov
Subject: Re: call today on ladwp letter

On Mon, Jun 29, 2015 at 4:10 PM, Johntommy Rosas <tattnlaw@gmail.com> wrote:

thanks for call today
I am requesting any and all info regarding the
SYLMAR GROUND SYSTEM REPLACEMENT SYSTEM
we also request your letter to be amended to implement
ajr 42 and UNDRIP and the acknowledgement of our tribal OCEAN and SEA RIGHTS UNDER LAW OF NATIONS /UNDRIP-
we also believe this project requires full sec 106 NHPA tribal consultation so your amended letter should reflect that
and any sec 404 cwa permits or any other federal permits requirements -
thanks jt

--

JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
A TRIBAL SOVEREIGN NATION UNDER UNDRIP
AND AS A CALIFORNIA NATIVE AMERICAN TRIBE / SB18-AJ52-AJR 42
25 U.S. Code § 1679 - Public Law 85-671
August 18, 1958 | [H. R. 2824] 72 Stat. 619
Tribal sovereignty in the United States is the inherent authority of indigenous tribes to govern themselves within and outside the borders and waters of the United States of America .

TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©

tongvanation.org

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JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
A TRIBAL SOVEREIGN NATION UNDER UNDRIP
AND AS A CALIFORNIA NATIVE AMERICAN TRIBE / SB18-AJ52-AJR 42

25 U.S. Code § 1679 - Public Law 85-671
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TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©

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APPENDIX F: NOISE AND VIBRATION CALCULATIONS

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Vibration Annoyance Analysis

Equipment	Reference Vibration Level at 25 feet (VdB)	Vibration Level at 280 Feet (VdB)
Truck	86	55
Cable Puller (Hydra 985)	58	27

Equation: Lv(D) = Lv(25 ft) - 30log(D/25)

D = Distance (feet)
Lv(D) = Vibration Level

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* , May 2006.

Vibration Damage Analysis

Equipment	Reference Vibration Level at 25 feet (VdB)	Vibration Level at 280 feet (Inches Per Second)
Truck	86	0.00203
Cable Puller (Hydra 985)	58	0.00008

Equation: PPVequip = PPVref x (25/D)^1.5
PPV (equip) is the peak particle velocity in in/sec of the equipment adjusted for distance
PPV (ref) is the reference vibration level in in/sec at 25 feet from Table 12-2
D is the distance from the equipment to the receiver.

Source: Federal Transit Administration, *Noise and Vibration Model*, 2006

Summation of Noise Levels

Equation: Ns=10 x LOG10((10^(N1/10))+(10^(N2/10))+(10^(N3/10))+(10^(N4/10)))

Ns = Noise Level Sum
N1 = Noise Level 1
N2 = Noise Level 2
N3 = Noise Level 3
N4 = Noise Level 4

Source: California Department of Transportation, *Technical Noise Supplement* , 2009

Noise Distance Attenuation

Equation: Ni = No - 20(log Di/Do)
Ni = attenuated noise level of interest
No = reference noise level
Di = distance to receptor (Di>Do)
Do = reference distance

Source: (Bolt, Beranek, and Newman, 1971)

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