

**EXHIBIT G**

**California State Lands Commission Presurvey Notice Requirements for  
Permittees to Conduct Geophysical Survey Activities**

All parts of the Presurvey Notice must be adequately filled out and submitted to the CSLC staff a minimum of twenty-one (21) calendar days prior to the proposed survey date to ensure adequate review and approval time for CSLC staff. Note that one or more of the items may require the Permittee to plan well in advance in order to obtain the necessary documentation prior to the Notice due date (e.g., permits from other State or Federal entities).

Please use the boxes below to verify that all the required documents are included in the Presurvey Notice. If "No" is checked for any item, please provide an explanation in the space provided. If additional space is needed, please attach separate pages.

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	Geophysical Survey Permit Exhibit F
<input type="checkbox"/>	<input type="checkbox"/>	Survey Location (including a full-sized navigation chart and GPS coordinates for each proposed track line and turning point) Explanation: _____
<input type="checkbox"/>	<input type="checkbox"/>	Permit(s) or Authorization from other Federal or State agencies (if applicable) Explanation: _____
<input type="checkbox"/>	<input type="checkbox"/>	21-Day Written Notice of Survey Operations to Statewide Geophysical Coordinator/
<input type="checkbox"/>	<input type="checkbox"/>	U.S. Coast Guard Local Notice to Mariners/
<input type="checkbox"/>	<input type="checkbox"/>	Harbormaster and Dive Shop Notifications Explanation: _____
<input type="checkbox"/>	<input type="checkbox"/>	Marine Wildlife Contingency Plan Explanation: _____
<input type="checkbox"/>	<input type="checkbox"/>	Oil Spill Contingency Plan Explanation: _____
<input type="checkbox"/>	<input type="checkbox"/>	Verification of California Air Resources Board's Tier 2-Certified Engine Requirement Explanation: _____
<input type="checkbox"/>	<input type="checkbox"/>	Verification of Equipment Service and/or Maintenance (must verify sound output) Explanation: _____
<input type="checkbox"/>	<input type="checkbox"/>	Permit(s) or Authorization from California Department of Fish and Wildlife for surveys in or affecting Marine Protected Area(s) (if applicable) Explanation: _____

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NOTE: CSLC staff will also require verification that current biological information was obtained and transmitted as outlined in Section 5 of this permit.

**EXHIBIT F**

**PRESURVEY NOTIFICATION FORM**

Applicant/Permittee's Mailing Address \_\_\_\_\_  
\_\_\_\_\_

Jurisdiction: Federal \_\_\_\_\_ State \_\_\_\_\_ Both \_\_\_\_\_  
If State: Permit #PRC \_\_\_\_\_  
Region: \_\_\_\_\_  
Area: \_\_\_\_\_

Date: \_\_\_\_\_

**GEOPHYSICAL SURVEY PERMIT**

Check one: \_\_\_\_\_ New survey \_\_\_\_\_ Time extension of a previous survey

\_\_\_\_\_ (Applicant/Permittee) will conduct a geophysical survey offshore California in the survey area outlined on the accompanying navigation chart segment. If you foresee potential interference with commercial fishing or other activities, please contact the person(s) listed below:

**FEDERAL WATERS (outside 3 nautical miles)**

- 1) Applicant's representative
- 2) Federal representative (e.g., Bureau of Ocean Energy Management [BOEM] or National Science Foundation [NSF])

NOTE: Any comments regarding potential conflicts in Federal waters must be received by the Applicant's Representative and lead Federal agency within ten (10) days of the receipt of this notice.

**STATE WATERS (Inside 3 nautical miles)**

- 1) Permittee's representative
- 2) CSLC representative

NOTE: Any comments regarding potential conflicts in State waters should be received as soon as possible by the Permittee's representative, no more than fifteen (15) days after the receipt of this notice.

- 1. Expected Date of Operation \_\_\_\_\_
- 2. Hours of Operation \_\_\_\_\_
- 3. Vessel Name \_\_\_\_\_
- 4. Vessel Official Number \_\_\_\_\_
- 5. Vessel Radio Call Sign \_\_\_\_\_
- 6. Vessel Captain's Name \_\_\_\_\_
- 7. Vessel will monitor Radio Channel(s) \_\_\_\_\_
- 8. Vessel Navigation System \_\_\_\_\_

9. Equipment to be used \_\_\_\_\_
- a. Frequency (Hz, kHz) \_\_\_\_\_
  - b. Source level (dB re 1  $\mu$ Pa at 1 meter (m) [root mean square (rms)]) \_\_\_\_\_
  - c. Number of beams, across track beamwidth, and along track beamwidth \_\_\_\_\_  
\_\_\_\_\_
  - d. Pulse rate and length \_\_\_\_\_
  - e. Rise time \_\_\_\_\_
  - f. Estimated distances to the 190 dB, 180 dB, and 160 dB re 1  $\mu$ Pa (rms) isopleths \_\_\_\_\_  
\_\_\_\_\_
  - g. Deployment depth \_\_\_\_\_
  - h. Tow speed \_\_\_\_\_
  - i. Approximate length of cable tow \_\_\_\_\_

Applicant's Representative:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

California State Lands Representative  
 Richard B. Greenwood  
 Statewide Geophysical Coordinator  
 200 Oceangate, 12th Floor  
 Long Beach, CA 90802-4331  
 (562) 590-5201

BOEM Representative  
 Joan Barminski  
 Regional Supervisor  
 Office of Strategic Resources  
 770 Paseo Camarillo  
 Camarillo, CA 93010  
 (805) 389-7585

Other Federal Representative (if not BOEM):

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## LOCAL NOTICE TO MARINERS

## Notice of Survey Operations

**DEPARTMENT OF HOMELAND SECURITY  
UNITED STATES COAST GUARD  
COMMANDER, 11<sup>TH</sup> COAST GUARD DISTRICT**

Building 50-2 Coast Guard Island

Alameda, CA 94501-5100

LNM Point of Contact

BM1 Alfred K Albert:

510-437-2980

[Alfred.K.Albert@uscg.mil](mailto:Alfred.K.Albert@uscg.mil)

1. Name of Contractor: *FUGRO*
2. Type of Operation: *Side Scan Sonar and Bathymetric Survey*
3. Location / Position Information: *Offshore El Segundo, California  
(See Attached Map)*
4. Start and End Dates: *Start: October 15, 2016, End: November 23, 2016*
5. Vessel(s) Involved (include FCC Call Sign): *M/V Julie Ann*
6. Radio Yes / No, VHF Freq's Monitored: *Yes, VHF 16*
7. Any other pertinent Info: *The Julie Ann will be towing up to 300 feet of cable astern of the vessel. Daylight operations will be conducted.*
8. POC Name & Telephone Number(s): *Cindy Pratt or Eddie Stutts (Fugro)  
805-650-7000*
9. Chart Number: *18744*

**SOUTHERN CALIFORNIA-SURVEY OPERATIONS  
OFFSHORE EL SEGUNDO, CALIFORNIA**

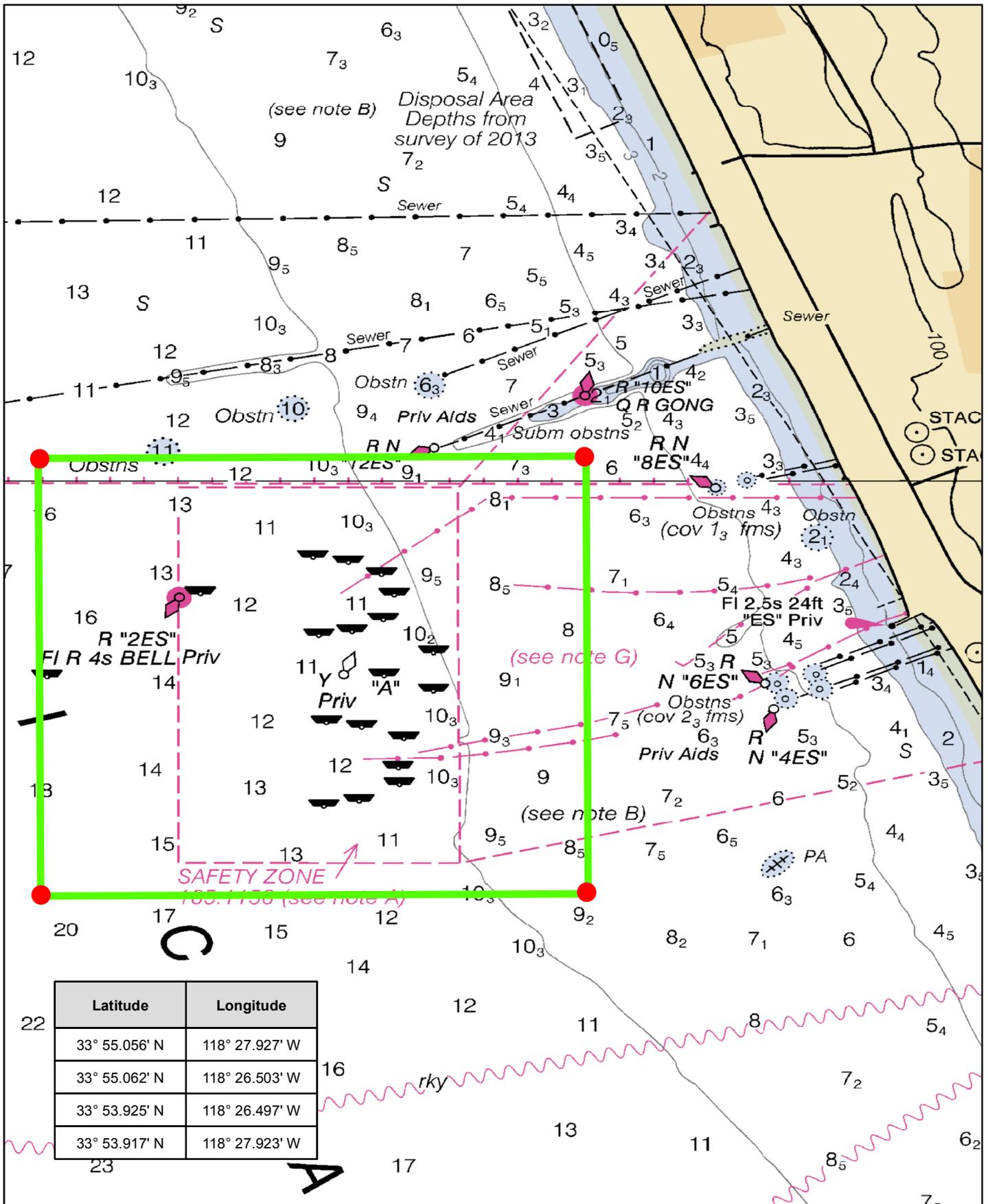
Fugro will be conducting a bathymetric and side scan sonar survey from the M/V Julie Ann in the area outlined on the attached portions of Chart 18744. Operations will last approximately 2 days and be carried out between October 15 to November 23, 2016 (Daylight operations). The M/V Julie Ann will be towing up to 300 feet of cable during mapping operations. The survey area is outlined by the following coordinates.

LATITUDE	LONGITUDE
33° 55.056' N	118° 27.927' W
33° 55.062' N	118° 26.503' W
33° 53.925' N	118° 26.497' W
33° 53.917' N	118° 27.923' W

The vessel will have limited maneuverability during operations and mariners are advised to use due caution when transiting in the area. For more details or comments contact Eddie Stutts or Cindy Pratt at 805-650-7000.

# NOAA Nautical Chart 18744 with Proposed Survey Area

Side Scan Survey Notice  
El Segundo, California



# OIL SPILL CONTINGENCY PLAN

# FUGRO 2016 ON-BOARD SPILL CONTAINMENT AND CLEAN-UP PLAN

THIS PLAN IS FOR FUGRO PERSONNEL TO READ *BEFORE* A SPILL OCCURS --AND TO KEEP HANDY FOR REFERENCE DURING AN EMERGENCY.

↳ **THE KEY TO SPILL PROTECTION IS *EARLY* RESPONSE AND ACTION.**

THIS PLAN IS FOR ALL EMPLOYEES ON A VESSEL OR BARGE. IT OUTLINES THE COMPANY PRIORITIES, THE LOCATION OF SPILL RESPONSE EQUIPMENT, INSTRUCTIONS ON HOW TO RESPOND, DIRECTIONS TO EMERGENCY MEDICAL FACILITIES, AND NOTIFICATION NAMES AND PHONE NUMBERS.

## **SPILL RESPONSE**

### PRIORITIES

In the event of a spill, on-site personnel are in the best position to take prompt action to minimize and control the spill.

#### **Our company priorities are:**

1. Personnel Safety
2. Prevention of Fire or Explosion
3. Elimination of Spill Source
4. Containment of the Spill
5. Collection and Storage of Contaminated Debris and Materials
6. Notification of Spillage
7. Preparation of Reports

**SAFETY OF PERSONNEL IS ALWAYS OUR FIRST PRIORITY.**



## SPILL RESPONSE MEASURES

In case of an actual spill, take the following actions IF IT IS SAFE TO DO SO:

Call 911 for medical or fire emergency assistance if needed

Isolate and administer to injured persons if necessary

TAKE NECESSARY STEPS TO REDUCE THE RISK OF FIRE

- Turn off equipment, valves, or pumps
- Turn off or extinguish any sources of hot surfaces or flame

**STOP SPILL AT SOURCE IF SAFE AND POSSIBLE**

- Stop equipment leaks by crimping hoses, plugging holes, or isolating parts
- Upright turned over oil/grease or paint buckets
- Stop tank leaks by placing in additional containment or plugging hole

CONTAIN ON-DECK SPILL FROM SPREADING OVERBOARD

- Berm around spreading spill with absorbent material (rags, kitty litter, sock boom, etc)
- Apply granular absorbent ("kitty litter") in sufficient quantity to soak up entire spill
- Wipe small spills with cotton rags

CONTAIN WATER-BORNE SPILLS TO AS SMALL AN AREA AS POSSIBLE

- Apply absorbent pads to spilled material
- Deploy oil boom/absorbent sock boom

☞ **IF SPILL IS LARGE, CALL THE FUGRO SUPERINTENDENT OR VICE PRESIDENT AS SOON AS POSSIBLE.**

☞ **FOR IMMEDIATE DEPLOYMENT OF LARGE OIL BOOM, CALL ONE OF THE FOLLOWING COMPANIES.**

- Clean Seas, LLC (805) 684-3838
- Marine Spill Response Corporation (MSRC) Tel: (510) 478-0702
- National Response Corporation (NRC) Tel: (562) 506-2060
- Patriot Environmental Services (562) 244-2204
- Foss Maritime or another closer response team and request response to clean up the fuel

CLEAN UP SPILL AND USED SPILL MATERIALS

- Gather soaked rags, absorbents, boom and dirt
- Place in leak proof containers for storage and disposal



## **EMPLOYEE TRAINING ON OIL SPILL CONTINGENCY PLAN**

Prior to the departure of the vessel for any activities, all Captain and crew members on the vessel will have read the Oil Spill Contingency Plan, understand procedures to be implemented in the event of an oil spill, and know where the oil spill kit is located on the vessel.

## **EMERGENCY EQUIPMENT**

### **LOCATION**

As part of each job start-up safety meeting, the spill containment and cleanup material will be discussed and verified.

### **EQUIPMENT**

The Spill Containment and Cleanup Materials include:

- 1 Box of 20 Gloves: in spill kit box located in front compartment of vessel
- 2 pair Goggles: in spill kit box located in front compartment of vessel
- 1 Box of Rags: in spill kit box located in front compartment of vessel
- 1 Box of 20 Garbage bags: in spill kit box located in front compartment of vessel
- 30 each Absorbent pads: spill kit box located in front compartment of vessel
- 1 Small Oil Boom: located on back deck
- 1 12lb Bag Granular absorbent (“kitty litter”): located in front compartment of vessel
- 1 Shovel: located on back deck

**FIRE EXTINGUISHERS ARE MOUNTED ON ALL VESSELS, PICKUP TRUCKS AND THERE IS ONE IN THE OFFICE. THE FIRE EXTINGUISHER WILL BE CHECKED FOR EXPIRATION DATE AND THE LOCATION DISCUSSED AT EACH SAFETY MEETING.**

## **INVENTORY & RESTOCKING**

The on-board spill containment and cleanup materials are inventoried by the Foreman at the start of every job, at least monthly and after a spill response. Depleted items are to be reported to the Superintendent or any member of the office staff. Items are to be ordered immediately and restocked promptly.





## **NOTIFICATIONS**

In case of a spill, notify a Fugro 24 hour representative (see addendum 1 for names and phone numbers).

GIVE THE FOLLOWING INFORMATION TO THE BEST OF YOUR ABILITY:

- Your name
- Location
- Date of spill
- Time of spill
- Substance spilled
- Quantity spilled
- Potential for continued spill
- Possible health hazard
- Source of spill
- Actions taken
- Threatened resources/utilities

THE ENVIRONMENTAL COORDINATOR WILL:

- Notify the applicable local, state and federal authorities
- Coordinate and disseminate information to the media
- Handle the legal obligations and responsibilities of the company





**Addendum 1**

**Emergency Notification**

**PHONE LIST**

**Fugro , Inc.**  
Office                      805-650-7000

**California State Lands Commission**  
24-Hour Emergency Number                      562-590-5201

**Fire Emergency                      911                      911**

**Medical Emergency                      911                      911**





## Addendum 2

### Guide for Fugro Management

1. Call for outside assistance if appropriate for the spill.
2. Call the Company Environmental and Safety Coordinator to coordinate the legal notifications and media inquiries:
3. If there is an **actual** release to the environment, the U.S. EPA Emergency Response Program requires notification to **one** of the following organizations:

<b>NATIONAL RESPONSE CENTER</b>	1-800-424-8802
<b>U.S. COAST GUARD MARINE SAFETY OFFICE</b>	1-510-437-3073
	1-510-437-3074

4. Other organizations that may be involved:

U.S. EPA Hazardous Waste	1-415-744-2000
California Office of Emergency Services	1-800-852-7550
Additional number	1-916-427-4287
State of California Water Quality	1-510-286-1255
State of California Fish & Game	1-707-944-5512
After hours and weekends	1-916-445-0045
Vessel Traffic	1-415-556-2760
Ca Oiled Wildlife Care Network	1-916-445-0045

5. The information that will be requested is attached as Addendum # 6.





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## **Addendum 3**

### **Fugro ,Owner, and Management Information**

#### **Fugro Environmental and Safety Coordinator**

Jeffery Ripper                      858-427-2017

#### **Officers of the Corporation**

David Millar                        858-945-3699

Eddie Stutts                        805-432-2213



## Addendum 4

### OPERATIONAL INFORMATION

#### NORMAL OPERATIONS

We contract with public and private entities to conduct high resolution low energy geophysical and geotechnical engineering surveys.

To accomplish this work, we purchase equipment, tools, material, and supplies which are gathered at various mobilization sites and loaded onto vessels and barges which are berthed alongside a dock. When needed tugboats move barges to and from the jobsites. At the completion of projects, the reverse process takes place - unloading equipment, materials, tools, and supplies.

#### POTENTIAL SPILLS DUE TO NORMAL OPERATIONS

##### **Oil, grease, fuel, or hydraulic fluid leak from machinery or equipment**

Cranes, winches, generators, light plants and boats require fluids to operate.

- Fluids could leak onto the vessel or into the water

##### **Oil, grease, or fuel spill from storage**

Oil and grease are stored in the vessels and/or barges in 5 gallon or smaller plastic buckets.

- Buckets could be dropped or punctured in transport

Fuel is stored in steel tanks housed on the vessels.

- Tanks could be punctured by sharp objects

##### **Paint spill**

Paint is generally purchased and utilized as needed. If extra is kept, one gallon pails and spray cans could be stored below deck.

- Pails could be punctured or tipped over during use





## **Addendum 5**

### **PRODUCT USAGE INFORMATION**

#### CHEMICALS AND FUELS (DESCRIPTION & QUANTITIES)

SDS sheets are available on the vessel, and the Fugro office.

Oil	< 4 quarts
Gasoline	< 100 gallons





## **Addendum 6**

### **SPILLS RESULTING FROM VESSEL FUELING**

All vessel fueling will be conducted on land at a gas station or at an approved docking facility. No cross vessel fueling will be performed.



# MARINE WILDLIFE CONTINGENCY PLAN

# **MARINE WILDLIFE CONTINGENCY PLAN**

## **CHEVRON BERTHS 3 AND 4 SIDE SCAN SONAR SURVEY EL SEGUNDO, CALIFORNIA**

**Project No. 1602-2771**

**Prepared for:**

Fugro Pelagos, Inc.  
4820 McGrath St., Suite 100  
Ventura, California 93003

**Prepared by:**

Padre Associates, Inc.  
369 Pacific Street  
San Luis Obispo, California 93401

**September 2016**



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## APPENDICES

Appendix A: Marine Wildlife Monitor Resumes

## 1.0 INTRODUCTION

This Marine Wildlife Contingency Plan (MWCP) has been developed for Fugro Pelagos, Inc. (Fugro), in support of the Chevron El Segundo Marine Terminal Berths 3 and 4 side scan sonar survey along existing pipeline routes, located offshore of El Segundo, California. This MWCP has been prepared in accordance with the requirements in the existing California State Lands Commission (CSLC)-issued geophysical and geologic sampling permit No. 8391.9. This MWCP is designed to reduce or eliminate adverse impacts to marine wildlife resources within the survey areas.

This MWCP is specific to the geographic location, equipment, and activities that are proposed for the survey. The proposed monitoring and mitigations have been successfully used in agency-approved MWCPs for similar offshore surveys in California marine waters, and have been shown to be effective in reducing or eliminating potential impacts to marine mammals and turtles (marine wildlife).

### 1.1 PURPOSE AND OBJECTIVES

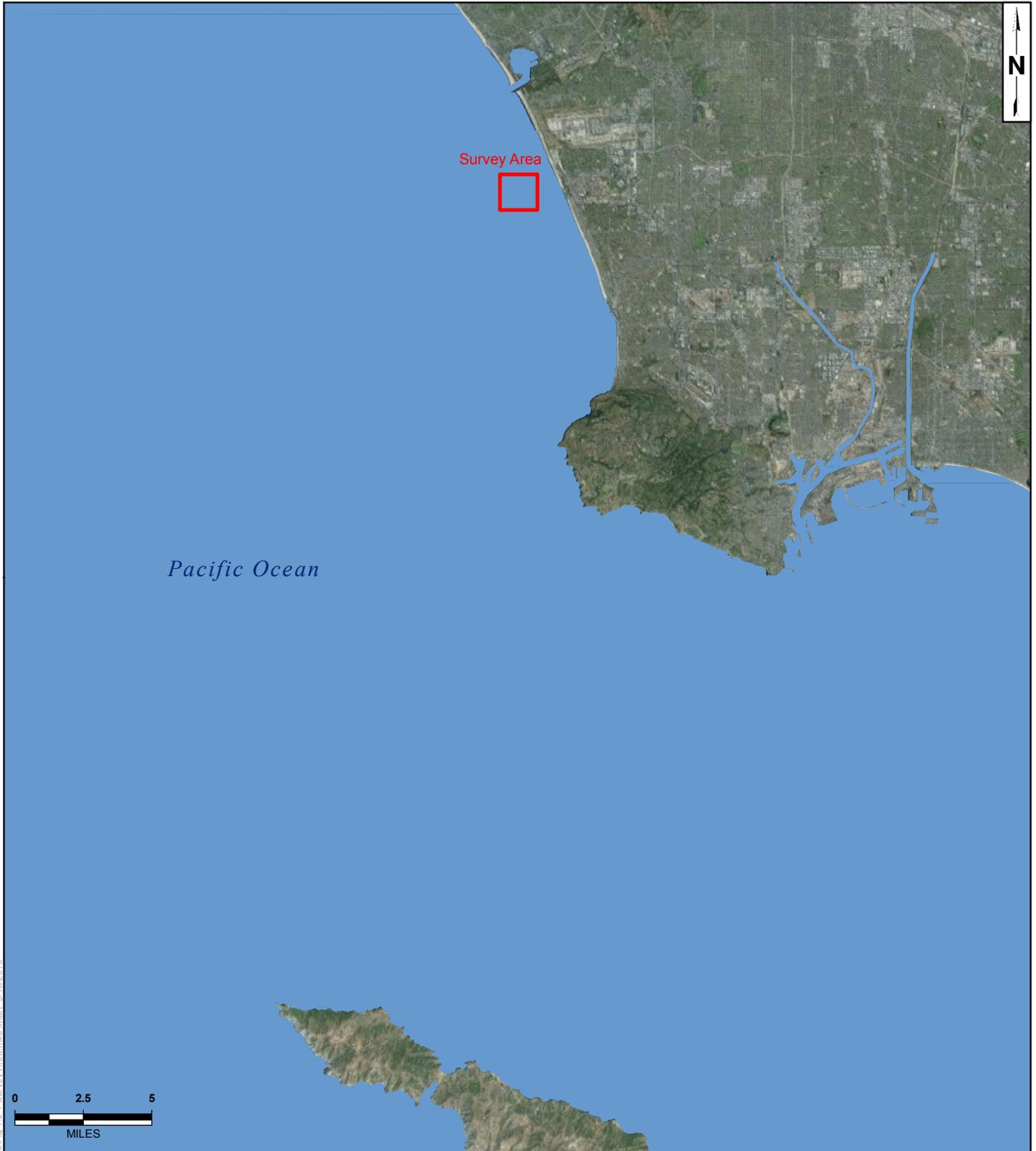
The proposed survey will utilize a side scan sonar system to conduct bathymetry and seafloor features mapping in the vicinity of the Chevron El Segundo Marine Terminal Berths 3 and 4 (Survey Area) (Figure 1.1-1). The survey will be completed by Fugro in accordance with requirements specified by Chevron statement of work.

### 1.2 PROPOSED AREA AND ACTIVITIES

The proposed survey's objective is to investigate sea floor conditions and water depths at the Chevron mooring berths. The proposed survey is estimated to be completed in two days and the Survey Area is located approximately 1.6 kilometers (km) (1.0 mile [mi]) directly offshore of the El Segundo Refinery. The survey will cover each berth and will extend in all directions to a minimum of 213 meters (m) (700 feet [ft]) beyond the anchors of the existing mooring system. Survey depths are estimated to range from 15 to 28 m (50 to 95 ft). The vessel will depart from and return to Marina del Rey each survey day. The survey will take place during daylight hours (no nighttime operations are proposed).

### 1.3 SURVEY EQUIPMENT

The survey will utilize the survey vessel (SV) *Julie Ann*, a 7.9 m (26 ft) which is designed specifically for hydrographic surveying. Survey equipment will include the Edgetech 4125 side scan sonar system with operating frequencies of 400 and 900 kilohertz (kHz).



**LEGEND:**

 Survey Area

**MAP EXTENT:**



Source: Esri Online  
 Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet  
 Notes: This map was created for informational and display purposes only.



PROJECT NAME: CHEVRON EL SEGUNDO BERTH SIDE SCAN SONAR SURVEY LOS ANGELES COUNTY, CA	
PROJECT NUMBER: 1602-2771	DATE: September 2016

**SURVEY AREA**

**FIGURE  
1.2-1**

Z:\Kris\GIS Maps\Map Project\Chevron\_El\_Segundo\Fig 1.2-1 Survey Area.mxd khart 9/16/2016

## 2.0 MARINE WILDLIFE

Multiple species of marine turtles, cetaceans (whales, dolphins, and porpoises), pinnipeds (seals and sea lions), and fissipeds (sea otter) have been recorded along the California coast (Table 2.0-1). Most of the recorded species can occur within the survey region, although seasonal abundances of these taxa vary; pinnipeds and some dolphins are year-round residents (Table 2.0-2). Other species are migratory, such as the gray whale (*Eschrichtius robustus*), or seasonal, such as the blue and humpback whales (*Balaenoptera musculus* and *Megaptera novaeangliae*, respectively); therefore, are more abundant during specific months. Within the survey region, resident, seasonal, and migrant taxa could be expected to occur.

**Table 2.0-1. Abundance Estimates for Marine Mammals and Reptiles within Southern California (California/Mexico Border to Point Conception)**

Common Name Scientific Name	Population Estimate	Current Population Trend
<b>REPTILES</b>		
<b>Cryptodira</b>		
Olive Ridley turtle <i>Lepidochelys olivacea</i>	1.1 million (Eastern Tropical Pacific DPS)	Stable
Green turtle <i>Chelonia mydas</i>	20,112 (Eastern Pacific DPS)	Stable
Loggerhead turtle <i>Caretta caretta</i>	7,138 (California)	Decreasing
Leatherback turtle <i>Dermochelys coriacea</i>	361 (California)	Decreasing
<b>MAMMALS</b>		
<b>Mysticeti</b>		
California gray whale <i>Eschrichtius robustus</i>	18,017 (Eastern North Pacific Stock)	Fluctuating annually
Fin whale <i>Balaenoptera physalus</i>	2,598 (California/Oregon/Washington Stock)	Increasing off California
Humpback whale <i>Megaptera novaeangliae</i>	1,876 (California/Oregon/Washington Stock)	Increasing
Blue whale <i>Balaenoptera musculus</i>	1,551 (Eastern North Pacific Stock)	Unable to determine
Minke whale <i>Balaenoptera acutorostrata</i>	202 (California/Oregon/Washington Stock)	No long-term trends suggested
Northern Pacific right whale <i>Eubalaena japonica</i>	31 (based on photo-identification) (Eastern North Pacific Stock)	No long-term trends suggested
Sei whale <i>Balaenoptera borealis</i>	83 (Eastern North Pacific Stock)	No long-term trends suggested
<b>Odontoceti</b>		
Short-beaked common dolphin <i>Delphinus delphis</i>	343,990 (California/Oregon/Washington Stock)	Unable to determine
Long-beaked common dolphin <i>Delphinus capensis</i>	76,224 (California Stock)	Unable to determine
Dall's porpoise <i>Phocoenoides dalli</i>	32,106 (California/Oregon/Washington Stock)	Unable to determine
Pacific white-sided dolphin <i>Lagenorhynchus obliquidens</i>	21,406 (California/Oregon/Washington Northern and Southern Stock)	No long-term trends suggested
Risso's dolphin <i>Grampus griseus</i>	4,913 (California/Oregon/Washington Stock)	No long-term trends suggested
Short-finned pilot whale <i>Globicephala macrorhynchus</i>	465 (California/Oregon/Washington Stock)	No long-term trends suggested

**Table 2.0-1. Abundance Estimates for Marine Mammals and Reptiles within Southern California (California/Mexico Border to Point Conception)**

Common Name Scientific Name	Population Estimate	Current Population Trend
Striped dolphin <i>Stenella coeruleoalba</i>	8,231 (California, Oregon, Washington)	No long-term trends suggested
Baird's beaked whale <i>Berardius bairdii</i>	466 (California, Oregon, Washington)	No long-term trends suggested
Cuvier's beaked whale <i>Ziphius cavirostris</i>	4,481 (California, Oregon, Washington Stock)	No long-term trends suggested
Mesoplodont beaked whales	389 (California, Oregon, Washington)	No long-term trends suggested
Bottlenose dolphin <i>Tursiops truncatus</i>	684 (California/Oregon/Washington Offshore Stock)	No long-term trends suggested
	290 (California Coastal Stock)	No long-term trends suggested
Northern right whale dolphin <i>Lissodelphis borealis</i>	6,019 (California/Oregon/Washington Stock)	No long-term trends suggested
Sperm whale <i>Physeter macrocephalus</i>	751 (California/Oregon/Washington Stock)	No long-term trends suggested
Dwarf sperm whale <i>Kogia sima</i>	Unknown (California, Oregon, Washington)	No long-term trends suggested
Pygmy sperm whale <i>Kogia breviceps</i>	271 (California/Oregon/Washington Stock)	No long-term trends suggested
Killer whale <i>Orcinus orca</i>	162 (Eastern North Pacific Offshore Stock) 354 (West Coast Transients)	No long-term trends suggested
<b>Pinnipedia</b>		
California sea lion <i>Zalophus californianus</i>	153,337 (U.S. Stock)	Unable to determine; increasing in most recent three year period
Northern fur seal <i>Callorhinus ursinus</i>	6,431 (California - San Miguel Island Stock)	Increasing
Guadalupe fur seal <i>Arctocephalus townsendi</i>	3,028 (Mexico Stock) Undetermined in California	Increasing
Northern elephant seal <i>Mirounga angustirostris</i>	74,913 (California Breeding Stock)	Increasing
Pacific harbor seal <i>Phoca vitulina richardsi</i>	26,667 (California Stock)	Stable
<b>Fissipedia</b>		
Southern sea otter <i>Enhydra lutris nereis</i>	3,272	Unable to determine

Source: Allen, 2011; NMFS, 2015a,b; and Tinker and Hatfield, 2016.

\* Estimates are based on known data of the population of nesting females for eastern Pacific Distinct Population Segments.

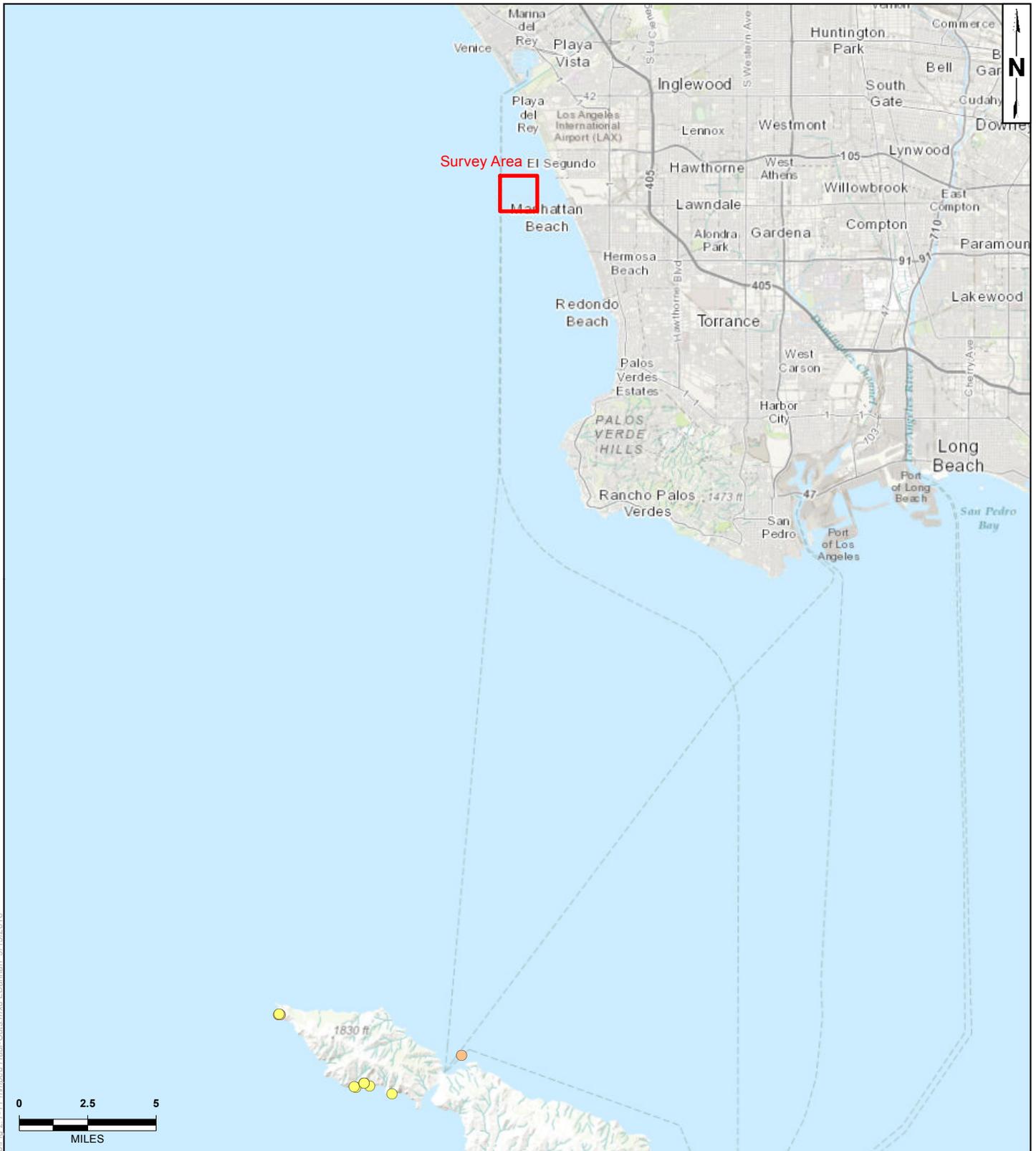
**Table 2.2-1. California Marine Wildlife Species and Periods of Occurrence within Southern California (California/Mexico Border to Point Conception)**

Family Common Name	Month of Occurrence <sup>(1)</sup>											
	J	F	M	A	M	J	J	A	S	O	N	D
<b>REPTILES</b>												
<b>Cryptodira</b>												
Olive ridley turtle (T) <sup>(2)</sup>												
Green turtle (T) <sup>(2)</sup>												
Leatherback turtle (E) <sup>(2)</sup>												
Loggerhead turtle (T) <sup>(2)</sup>												
<b>MAMMALS</b>												
<b>Mysticeti</b>												
California gray whale												
Blue whale (E)												
Fin whale (E)												
Humpback whale (E)												
Minke whale												
Sei whale (E)												
Northern right whale (E)												
<b>Odontoceti</b>												
Dall's porpoise												
Short-beaked common dolphin												
Long-beaked common dolphin												
Pacific white-sided dolphin												
Risso's dolphin												
Short-finned pilot whale												
Bottlenose dolphin												
Northern right whale dolphin												
Sperm whale												
Dwarf sperm whale												
Pygmy sperm whale												
Baird's beaked whale												
Cuvier's beaked whale												
Mesoplodont beaked whales												
Killer whale												
<b>Pinnipedia</b>												
Northern fur seal <sup>(3)</sup>												
Guadalupe fur seal												
California sea lion												
Northern elephant seal <sup>(4)</sup>												
Pacific harbor seal												
<b>Fissipedia</b>												
Southern sea otter (T) <sup>(5)</sup>												

Rare with uniform distribution		Not expected to occur due to seasonal distribution		More likely to occur due to seasonal distribution		Present Year Round	
(E)	Federally listed endangered species.						
(T)	Federally listed threatened species.						
(1)	Where seasonal differences occur, individuals may also be found in the "off" season. Also, depending on the species, the numbers of abundant animals present in their "off" season may be greater than the numbers of less common animals in their "on" season.						
(2)	Only a small percent occur over continental shelf (except near San Miguel rookery, May-November).						
(3)	Common near land during winter breeding season and spring molting season.						
(4)	Only nearshore (diving limit 100 feet).						

## 2.1 PINNIPED HAUL-OUTS AND ROOKERIES

The proposed Survey Area is not located near any pinniped haul-outs and/or rookeries (Figure 2.1-1). The closest pinniped haul-out or rookery is located on Catalina Island, 49 km (30.4 mi) from the Survey Area.



**LEGEND:**

- Harbor Seal Haul-Out
- California Sea Lion Haul-Out
- Survey Area

**MAP EXTENT:**



Source: Esri Online, NOAA  
 Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet  
 Notes: This map was created for informational and display purposes only.



PROJECT NAME: CHEVRON EL SEGUNDO BERTH SIDE SCAN SONAR SURVEY LOS ANGELES COUNTY, CA	
PROJECT NUMBER: 1602-2771	DATE: September 2016

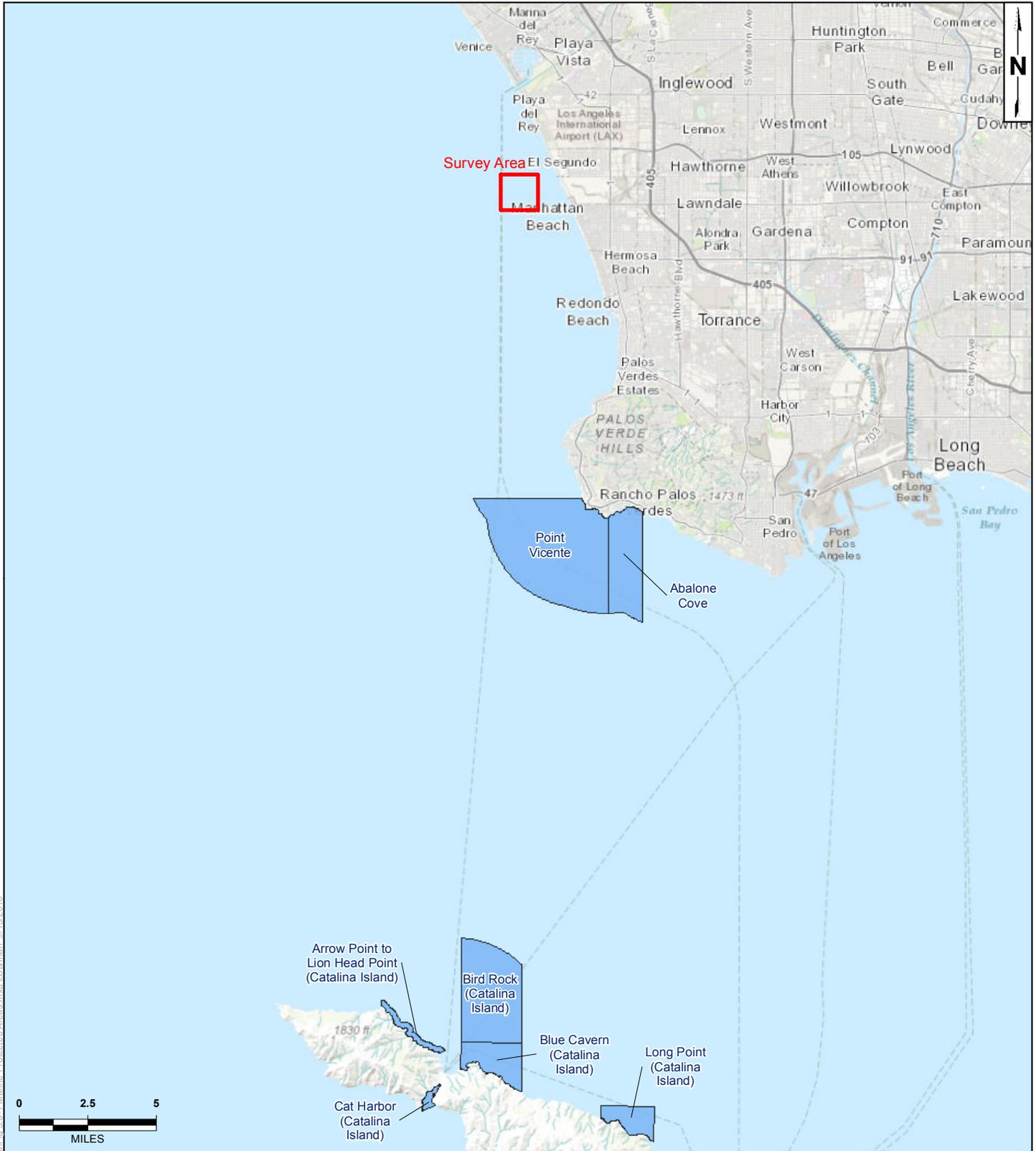
**PINNIPED HAUL-OUTS**

**FIGURE  
2.1-1**

Z:\Kristin\GIS Maps\Map Project\Chevron El Segundo\Fig 2.1-1 Pinniped Haul-Outs.mxd L.Bannan 9/15/2016

### **3.0 MARINE PROTECTED AREAS**

Proposed survey activities will not occur within any Marine Protected Areas (MPA). The closest MPA (Point Vicente MPA) is located approximately 18.8 km (10.5 mi) south of the Survey area (Figure 3.0-1).



**LEGEND:**

- Survey Area
- Marine Protected Area (MPA)

Source: Esri Online, NOAA  
 Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet  
 Notes: This map was created for informational and display purposes only.

**MAP EXTENT:**



Z:\Kristin\GIS Maps\Map Project\Chevron\El Segundo\Fig. 3.0-1 Marine Protected Areas.mxd LBaman 9/15/2016

## **4.0 ONBOARD MONITORING AND OTHER MITIGATIONS**

### **4.1 PRE-SURVEY NOTIFICATIONS**

A Notice to Mariners will be submitted to the United States Coast Guard (USCG), and all applicable agencies, prior to the start of the survey. The Notice to Mariners will provide information regarding proposed activities and coordinates of the survey location. In addition, Fugro will notify the local harbormasters' office and dive shops prior to the start of survey activities.

Three days prior to the initiation of the survey, Padre marine scientists will contact National Oceanic and Atmospheric Administration (NOAA) Fisheries Long Beach office staff and local private whale-watching operations to acquire information on the recently-observed composition and relative abundance of marine wildlife in the survey areas. That information will be conveyed to the vessel crew and survey team prior to departure for the survey area.

### **4.2 MARINE WILDLIFE MONITORS**

A qualified marine wildlife monitor (MWM), approved by NOAA Fisheries, will be onboard the vessel for the duration of the survey (Appendix A – Marine Wildlife Monitor Resumes). In accordance with the CSLC-issued geophysical and geologic sampling permit, the MWM will be monitoring during transit and survey activities.

### **4.3 VESSEL TRANSIT**

The survey vessel will transit from Marina del Rey to the survey areas during daylight hours, and return to Marina del Rey at the end of each survey day. During transit periods, there is a potential for encountering marine wildlife; therefore, onboard monitoring will be conducted by the MWM. If nighttime transit is required, Fugro will send request to CSLC, per the geophysical permit requirements, prior to start of the survey.

During transit periods, the MWM will be positioned on the vessel so that he/she has a clear view of the area of ocean that is in the direction of the course of travel. The MWM will identify marine wildlife and will institute measures to avoid potential collisions with those animals. To minimize the chance of collision with or disturbance, the vessel will maintain a minimum distance of 91 m (300 ft) from marine wildlife. If the MWM observes an animal within the path of the transiting vessel, the monitor will immediately report that observation to the vessel operator who will, unless those actions will jeopardize the safety of the vessel or crew, slow the vessel and/or change course in order to avoid contact.

When whales are in the survey area and/or are observed proximal to the vessel during transit periods the vessel operator will observe the following guidelines:

- Maintain a minimum distance of 100 m (330 ft) from sighted whales;
- Refrain from crossing directly in front of or across the path of sighted whales;

- Transit parallel to whales and maintain a constant speed that is not faster than the whale's speed;
- Avoid positioning the vessel in such a manner to separate a female whale from her calf;
- Do not use the vessel to herd or drive whales; and
- If a whale engages in evasive or defensive action, slow the vessel and move away from the animal until the animal calms or moves out of the area.

#### 4.4 FISHING GEAR CLEARANCE

In addition to submitting the required Notice to Mariners that will alert commercial fishers of pending survey activities, the vessel will traverse the proposed survey corridor to note and record the presence of deployed fishing gear. If fishing gear is observed, the location of fishing gear (buoys) and license number indicated on the gear will be noted, and the California Department of Fish and Wildlife (CDFW) Southern District Enforcement Office will be contacted. No survey lines will be completed within 30 m (100 ft) of any observed fishing gear. The survey crew will not remove or relocate any fishing gear; removal or relocation will only be accomplished by the owner or by an authorized CDFW agent (Table 4.4-1).

**Table 4.4-1. Fishing Gear Contact Information**

Enforcement Dispatch Desk California Department of Fish and Wildlife, Southern District	California Department of Fish and Wildlife, Marine Division	Joint Oil Fisheries Liaison Office (JOFLO)
(562) 598-1032	(831) 649-2870	(805) 963-8819

#### 4.5 SURVEY MONITORING AND MITIGATION MEASURES

During the data collection efforts, the MWM will use binoculars to observe the water surface in the general survey area while located at a high vantage point onboard the survey vessel. As specified in the CSLC-issued geophysical and geologic sampling permit, surveys utilizing equipment with an operating frequency greater than 200 kHz will not require a designated safety zone. The MWM will have the authority to recommend halting data collecting operations if marine wildlife is observed reacting negatively to the survey-related activities.

The MWM will also have the authority to recommend continuation or cessation of operations during periods of limited visibility based on the observed abundance of marine wildlife. Periodic reevaluation of weather conditions and reassessment of the continuation/cessation recommendation will be completed by the MWM. With the incorporation of these measures and additional mitigation measures listed below, the proposed survey activities have a low potential of injury and/or disturbance to marine wildlife.

The following operation-related actions will be implemented in accordance with CSLC permit requirements:

1. Survey operator shall use a “soft start” technique at the beginning of survey activities each day (or following a shutdown) to allow any marine mammal that may be in the Project area to leave before the sound sources reach full energy. The survey operator will initiate each piece of equipment at the lowest practical sound level, increasing the output no greater than six (6) decibels (dB) per 5-minute period;
2. During operations, if an animal’s actions are observed to be “irregular” the MWM will have the authority to recommend the cessation of data collection until the animal moves out of the Survey Area. If the behavior is observed, the equipment will be shut-off and will be restarted and ramped-up to full power or will not be started until the animal(s) is/are outside of the Survey Area;
3. The MWM will have the authority to recommend halting data collecting operations if a large concentration of diving birds/sea birds is observed in the immediate vicinity;
4. Unless the safety of the vessel or crew would be in jeopardy, avoidance measures instituted during vessel transit will also be implemented during geophysical data collection; and
5. Survey operator shall follow, to the maximum extent possible, the guidelines of Zykov (2013) as they pertain to the use of side-scan sonar, including:
  - a. Using the shortest possible pulse length; and
  - b. Lowering the pulse rate (pings per second) as much as feasible.

## 5.0 RECORDING AND REPORTING PROCEDURES

### 5.1 OBSERVATION RECORDING

The MWM will record observations on pre-printed forms and will photo-document observations whenever possible. The completed forms will be used as the primary data sources for the post-survey report (see Section 5.3 below) which will be provided to the CSLC and/or other agencies, if requested.

### 5.2 COLLISION RESPONSE

The Marine Mammal Protection Act (MMPA) requires that collisions with or other survey-related impacts to marine wildlife will be reported promptly to the National Marine Fisheries Service (NMFS) Stranding Coordinator.

If a collision or impacts to marine wildlife occurs, the vessel should stop, if safe to do so. However, the vessel is not obligated to stand by and may proceed after confirming that it will not further damage the animal by doing so. The vessel will then communicate by radio or telephone all details to the vessel's base of operations (Table 5.2-1).

**Table 5.2-1. Collision Contact Information**

Federal	State	State
Justin Viezbicke Stranding Coordinator National Marine Fisheries Service Long Beach, California (562) 980-3230	Enforcement Dispatch Desk California Department of Fish and Wildlife Los Alamitos, California (562) 598-1032	California State Lands Commission Division of Environmental Planning and Management Sacramento, California (916) 574-1938

The vessel operator, with guidance from the MWM, must document the conditions under which the accident occurred, including the following:

- Location (latitude and longitude) of the vessel when the collision occurred;
- Date and time of collision;
- Speed and heading of the vessel at the time of collision;
- Observation conditions (e.g., wind speed and direction, swell height, visibility in miles or kilometers, and presence of rain or fog) at the time of collision;
- Species of marine wildlife contacted (if known);
- Whether a MWM was observing for marine wildlife at the time of collision; and
- Name of vessel, vessel owner/operator (the company), and captain or officer in charge of the vessel at time of collision.

It is unlikely that the vessel will be asked to stand by until NMFS or CDFW personnel arrive; however, this will be determined by the NMFS Stranding Coordinator. According to the MMPA, the vessel operator is not allowed to aid injured marine wildlife or recover the carcass unless requested to do so by the NMFS Stranding Coordinator.

Although NMFS has primary responsibility for marine mammals in both State and Federal waters, the CDFW will also be advised that an incident has occurred in State waters affecting a protected species.

### **5.3 MONITORING REPORT**

A technical report will be prepared documenting the project activities, a summary of observations and any encounters with marine wildlife, and subsequent avoidance actions taken during the survey. The report will be submitted to Fugro within two weeks of completion of field data collection. Fugro will then submit the monitoring report to the appropriate agencies.

## 6.0 REFERENCES

- Allen, S., Mortenson, J., and Webb, S.. 2011. Field Guide to Marine Mammals of the Pacific Coast: Baja, California, Oregon, Washington, British Columbia. University of California Press. Berkeley and Los Angeles, California.
- Bonnell, M.L., and Dailey, M.D.. 1993. Ecology of the Southern California Bight: A Synthesis and Interpretation. Berkeley, CA: University of California Press.
- National Marine Fisheries Service. 2016a. Marine Mammal Stock Assessment Reports by Species. Website: <http://www.nmfs.noaa.gov/pr/sars/species.htm>. Updated June 17, 2016 accessed on August 10, 2016.
- National Marine Fisheries Service 2016b. Status of Marine Turtles Website: <http://www.fisheries.noaa.gov/pr/species/turtles/> Updated April 5, 2015 accessed on August 10, 2016.
- NOAA National Centers for Coastal Ocean Science (NCCOS). 2007. A Biogeographic Assessment off North/Central California: In Support of the National Marine Sanctuaries of Cordell Bank, Gulf of the Farallones and Monterey Bay. Phase II - Environmental Setting and Update to Marine Birds and Mammals. Prepared by NCCOS's Biogeography Branch, R.G. Ford Consulting Co. and Oikonos Ecosystem Knowledge, in cooperation with the National Marine Sanctuary Program. Silver Spring, MD. NOAA Technical Memorandum NOS NCCOS 40. 240 pp.
- Tinker, M.T., and Hatfield, B.B. 2016. California sea otter (*Enhydra lutris nereis*) census results, spring 2016: U.S. Geological Survey Data Series 1018, 10 p., <http://dx.doi.org/10.3133/ds1018>.
- Zykov, M. 2013. Underwater Sound Modeling of Low Energy Geophysical Equipment Operations. JASCO document 00600, Version 2.0. Technical Report by JASCO Applied Sciences for CSA Ocean Sciences Inc.

## **APPENDIX A**

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### **MARINE WILDLIFE MONITOR RESUMES**

## Resume

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# Patrick R. Crooks

Staff Environmental Specialist

**EDUCATION:** B.S. Environmental Science, Ferrum College, Ferrum, Virginia, 2009

**QUALIFICATIONS:** Environmental Specialist

**EXPERIENCE:** Mr. Crooks joined Padre Associates, Inc. in 2010. As a Staff Environmental Specialist, his work focuses on permitting assistance and environmental monitoring to ensure project compliance with permit conditions promulgated by regulatory agencies and mitigating measures developed during project compliance with the California Environmental Quality Act and the National Environmental Policy Act. Mr. Crooks has also assisted with the implementation of post-construction restoration and mitigation plans, environmental sensitivity trainings, and sensitive species surveys. Mr. Crooks has over 5 years of offshore monitoring experience and is a National Oceanic and Atmospheric Administration (NOAA) Fisheries-approved marine wildlife monitor.

Representative projects Mr. Crooks has worked on include the following:

**Beta Offshore – Pipeline Replacement Project - Environmental Assessment (EA) – Environmental Compliance – Marine Mammal Observation.** Mr. Crooks assisted in preparing revisions to previous Environmental Assessment (EA) submittals to the Bureau of Safety and Environmental Enforcement (BSEE) and the Bureau of Ocean Energy Management (BOEM) including development of a Compliance Monitoring Plan incorporating all conditions of approval. Mr. Crooks then provided offshore support to Beta Offshore onboard the Project vessel *Intrepid* as a compliance monitor and marine mammal observer. Subsequently, Mr. Crooks assisted in the development of the Final Project Completion Reports, Final Compliance Monitoring Plan and Supporting Documentation, which were submitted to BSEE and BOEM to document successful completion of the Project.

**DCOR – Pipelines Replacement Project – Environmental Assessment – Environmental Compliance – Marine Mammal Observation.** Mr. Crooks assisted in the revisions to previous EA submittals to BSEE and BOEM including development of a Compliance Monitoring Plan incorporating all conditions of approval. Mr. Crooks then provided offshore support to DCOR onboard the Project vessel *Intrepid* as a compliance monitor and marine mammal observer. Subsequently, Mr. Crooks assisted in the development of the Compliance Monitoring Report and Supporting Documentation, which were submitted to BSEE and BOEM to document successful completion of the Project.

**ExxonMobil/Fugro West, Inc. – Santa Ynez Unit – Marine Mammal Observation.** Mr. Crooks provided marine mammal monitoring services for ExxonMobil and Fugro West, Inc. aboard the Project vessel the *Toby Tide* during side scan sonar surveys.

**Beta Offshore – Platform Edit to Platform Elly Power Cable Project – Environmental Assessment (EA) – Environmental Compliance – Marine Mammal Observation.** Mr. Crooks assisted in preparing revisions to previous EA submittals to BSEE and BOEM including development of a Compliance Monitoring Plan integrating all conditions of approval. Mr. Crooks then provided offshore support to Beta Offshore onboard the project vessel, Barge 185-3 (operated by L-3 MariPro), as a compliance monitor and marine mammal observer. Subsequently, Mr. Crooks assisted in the development of the Final Project Completion Reports, Final Compliance Monitoring Plan and Supporting Documentation, which were submitted to BSEE and BOEM to document the successful completion of the Project.

**California State Lands Commission (CSLC) – Santa Barbara Channel Hazards Removal Program – Environmental Compliance.** Mr. Crooks coordinated removal efforts with CSLC staff, provided recommendations, evaluated current site conditions related to hazards, and reviewed permit restrictions related to timing prior to in-field mobilization. Mr. Crooks documented environmental compliance during removal activities that took place during winter and spring low-tide cycles (winter season of 2011 through spring of 2016). Along with daily field observations, Mr. Crooks verified adherence to the Project's IS/MND, conditions of approval, permit conditions, and the Mitigation Monitoring Program (MMP) associated with the Project. Following the completion of work at specific sites a Project Progress Summary was prepared for CSLC. Mr. Crooks worked in the field alongside and at the direction of CSLC staff, regularly communicating and providing recommendations to their staff. Additionally, Mr. Crooks provided pre-Project environmental sensitivity trainings to all Project personnel.

### TRAINING AND CERTIFICATIONS:

OSHA 40-Hour HAZWOPR and Yearly 8-Hour Refresher Course  
8-Hour CPR and First Aid Training  
Certified SCUBA Diver (NAUI, 2011)  
Chevron Business Partner Safety Orientation and Overhead Power Lines Training  
Chevron Safe Work Practice Training – Person Leading Work (PLW)  
STCW Basic Safety Training in Personal Survival Techniques  
Smith System Defensive Driving Course On-Road Format  
CEQA Workshop 2011 Update  
California Oil Producers Contractor Safety Orientation  
Marine Mammal Monitoring Training (internal Padre training)  
DCOR Platform Orientation and Swing Rope Training  
Passport Card – Requisite Safety Training  
Workplace Fire Safety Training

## Resume

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# Jennifer Klaib

Project Biologist/Marine Biologist

**EDUCATION:** B.S. Aquatic Biology, University of California, Santa Barbara, 2006

**EXPERIENCE:** Ms. Klaib joined Padre Associates, Inc. in 2006 and has over 10 years of experience in environmental assessment of coastal and offshore development projects, monitoring of construction impacts on marine resources, and permitting of coastal projects. Ms. Klaib is responsible for biological surveys, permit compliance monitoring, contingency plans, permit applications, environmental sensitivity trainings, sensitive species surveys, water quality sampling, and wildlife rescue and relocation. In addition, Ms. Klaib is experienced in regulatory agency permitting involving the National Marine Fisheries Service (NMFS), California Coastal Commission (CCC), California State Lands Commission (CSLC), Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), and various local planning agencies throughout California.

Ms. Klaib has over 11 years of offshore monitoring experience and is a National Oceanic and Atmospheric Administration (NOAA) Fisheries-qualified marine mammal monitor. Ms. Klaib was responsible for monitoring the effects on marine mammals and turtles during geophysical surveys and construction projects throughout the California coast. Ms. Klaib has also worked with agencies to design and implement Aerial Monitoring Plans, to monitor the distribution of cetaceans, pinnipeds, and turtles offshore of central California. Ms. Klaib has participated in aerial surveys where she observed and recorded species, location, and abundance of cetaceans, pinnipeds, and turtles offshore of California.

In addition, Ms. Klaib is an American Academy of Underwater Sciences (AAUS) certified research diver and has over 200 logged dives conducting biological surveys offshore of California. She has experience in designing and implementing scientific dive plans for habitat assessments, eelgrass mapping, anchor clearance, *Caulerpa* surveys, and pre- and post-project impact studies.

Representative projects Ms. Klaib has managed or assisted with include:

**Fugro Pelagos, Inc. Low-Energy Marine Geophysical Surveys, Offshore California.** Ms. Klaib has been the Padre Project Manager and has been responsible for marine wildlife monitoring and reporting for surveys conducted by Fugro Pelagos, Inc. (Fugro) throughout coastal California. She has completed numerous Marine Wildlife contingency Plans (MWCPs) in accordance to Fugro's CSLC issued geophysical permit. Ms. Klaib has been onboard various survey vessels recording mammal and turtle sightings and assuring that potential impacts were avoided. Ms. Klaib has completed these plans and provided monitoring services for Fugro projects that ranged from one-day bathymetry surveys to multi-week low-energy geophysical data collection efforts.

**Cayucos Pier Restoration Project, San Luis Obispo County, California.** Ms. Klaib was the Project Manager and was responsible for marine wildlife and water

## Resume

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quality monitoring during the demolition and reconstruction of the Cayucos Pier. Water quality monitoring included conducting daily baseline monitoring one week prior to and providing weekly monitoring during construction activities that included analyzing water samples for turbidity, dissolved oxygen, pH, and conducting visual assessments for floating particulates. Ms. Klaib conducted marine wildlife monitoring during pile driving operations to mitigate for potential noise impacts to marine mammals and sea turtles. In addition, Ms. Klaib prepared final project completion reports for the County of San Luis Obispo.

**PG&E Point Buchon Ocean Bottom Seismometer Project, Offshore San Luis Obispo County, California State Waters.** Ms. Klaib was responsible for monitoring marine wildlife during the placement and recovery of ocean bottom seismometer offshore San Luis Obispo County in 2011 through 2016. In support of the project, Ms. Klaib prepared a Marine Wildlife Contingency Plan and submitted survey completion reports to National Marine Fisheries Service (NMFS) and California State Lands Commission (CSLC).

### **CERTIFICATIONS, PERMITS AND TRAINING:**

American Academy of Underwater Sciences (AAUS) Scientific Diver. September 2003.

National Association of Underwater Instructors (NAUI) Master SCUBA Diver. September 2003.

Standards of Training Certifications and Watchkeeping (STCW) Certified Personal Survival Techniques, Cal Maritime Academy. February 2016

Passive Acoustic Technician. October 2014

National Marine Fisheries Service and California Department Fish and Wildlife Certified Caulerpa Survey Specialist since 2008

Guadalupe Dunes Restoration Project Biological Opinion. Ms. Klaib is authorized to independently monitor, survey, handle and relocate California Red-Legged frogs (CRLF).

San Simeon Creek Bridges Replacement Project Biological Opinion. Ms. Klaib is authorized to independently monitor, survey, handle and relocate California Red-Legged frogs (CRLF).

California Red-Legged Frog Biology and Conservation Workshop. April 2010.

California Red-legged Frog Natural History Training, Guadalupe Oil Field Restoration Project, Guadalupe, CA. November, 2010.

## Resume

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# Michaela Hoffman

Project Marine Biologist

**EDUCATION:** B.S. Biology with a Concentration in Marine Science and Fisheries, California Polytechnic State University, San Luis Obispo, 2009

**EXPERIENCE:** Ms. Hoffman joined Padre in 2011 and has five years of experience as a field biologist. Ms. Hoffman's focus has been primarily in aquatic and marine biology. During her time at Padre, Ms. Hoffman has acquired enough sea-time as a marine wildlife monitor to be an approved Protected Species Observer by the National Oceanic and Atmospheric Administration (NOAA). Ms. Hoffman is responsible for mitigation monitoring of protected terrestrial and marine species, preparing support documents for environmental permit applications, preparing wildlife contingency plans, conducting biological resource surveys and habitat assessments, conducting protocol-level surveys for protected species, and implementing restoration plans. Ms. Hoffman's field experience extends to both onshore and offshore construction projects, as well as numerous remediation and restoration sites.

Representative projects Ms. Hoffman has participated in include:

**San Luis Obispo Tank Farm Remediation, Restoration, and Development Project, San Luis Obispo County, California.** In support of the Biological Assessment for the project, Ms. Hoffman participated in several protocol-level surveys for both state and federally protected species including, California Red-legged frog (*Rana draytonii*), burrowing owl (*Athene cunicularia hypugaea*), and large vernal pool branchiopods (*Branchinecta* sp., *Streptocephalus woottoni*, *Lepidurus packardii*). In addition, Ms. Hoffman managed the Surface Hydrocarbon Inspection and Monitoring Program for two years which consisting of weekly surveys for oiled wildlife, and if found, the rescue and recovery of oiled wildlife under the guidance of the California Department of Fish and Wildlife (CDFW). In support of operational maintenance on the project site, Ms. Hoffman conducts on-going, seasonal nesting bird surveys and biological clearances for sensitive and protected species.

**Point Buchon Ocean Bottom Seismometer Project, Offshore San Luis Obispo County, California State Waters.** Ms. Hoffman was responsible for monitoring marine wildlife during the seismic geophysical surveys and ocean bottom seismometer deployments offshore San Luis Obispo County in 2011 through 2015. In support of the project, Ms. Hoffman prepared a Marine Wildlife Contingency Plan and submitted survey completion reports to National Marine Fisheries Service (NMFS) and California State Lands Commission (CSLC).

**Cayucos Pier Restoration Project, San Luis Obispo County, California.** Ms. Hoffman was responsible for marine wildlife and ocean water quality monitoring during the demolition and reconstruction of the Cayucos Pier. Ms. Hoffman conducted marine wildlife monitoring during pile driving operations to mitigate for potential noise impacts to marine mammals and sea turtles. In addition, Ms. Hoffman prepared final project completion reports for the County of San Luis

## Resume

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Obispo.

**San Ardo Oil Field Biological Constraints Analysis, Monterey County, California.** In support of the project biological resources analysis, Ms. Hoffman conducted U.S. Fish and Wildlife Service (USFWS) protocol-level surveys for California red-legged frog and vernal pool branchiopods.

**Offshore Power System Reliability Project B, Santa Barbara Channel, California State and U.S. Federal Waters.** Ms. Hoffman participated in environmental compliance monitoring during the recovery and deployment of replacement power cable along the ocean floor within the Santa Ynez offshore field unit. In support of the project, Ms. Hoffman prepared a Marine Wildlife Monitoring and Contingency Plan, including protections for marine mammals, reptiles and pelagic birds.

**CERTIFICATIONS,  
PERMITS AND  
TRAINING:**

American Academy of Underwater Sciences (AAUS) Scientific Diver. September 2015.

National Association of Underwater Instructors (NAUI) Master SCUBA Diver. September 2015.

Divers Alert Network (DAN) CPR/AED and First Aid and Emergency Oxygen Administration for Diving Accidents Certified, September 2015.

Standards of Training Certifications and Watchkeeping (STCW) Certified Personal Survival Techniques, Cal Maritime Academy, September 2011

Certified SCUBA Diver, PADI December 2008

Guadalupe Dunes Restoration Project Biological Opinion. Ms. Hoffman is authorized to independently monitor, survey, handle and relocate California Red-Legged frogs (CRLF) within the Guadalupe Oil Field Remediation and Restoration Project.

USFWS Endangered Species Act 10(a)(1)(A) Recovery Permit authorizing the take federally protected vernal pool branchiopods in conjunction with surveys for the purpose of enhancing their survival.

California Red-Legged Frog Workshop, presented by Trish Tartarian, May 2014.

Western Burrowing Owl Workshop, presented by Dr. Lynn Trulio, July 2014.

Fairy Shrimp of California Identification Course, presented by Mary S. Belk March 2013.

Taxonomy and Ecology of Branchiopods of California and Oregon, presented by Christopher Rogers, December 2012.

**PROFESSIONAL  
AFFILIATIONS:**

California Central Coast Chapter of the Wildlife Society, member.

**Keen, Kelly@SLC**

---

**From:** Pratt, Cynthia [FPI] <cpratt@fugro.com>  
**Sent:** Friday, September 23, 2016 4:26 PM  
**To:** Albert, Alfred K BM1  
**Cc:** Villegas, Bradi [FPI]  
**Subject:** Local Notice to Mariners (Ref. 7194)  
**Attachments:** 7194 Notice to Mariners.pdf

Good Afternoon, Alfred,

Attached is a local notice to mariners for an upcoming side scan sonar and bathymetric survey offshore El Segundo.

Please contact me if you have any questions or further requirements.

Kind regards,  
Fugro Pelagos, Inc.

Cindy Pratt  
Survey Operations Manager - Ventura

T +1 805 289 3807 | C +1 805 279 1138 cpratt@fugro.com | www.fugro.com  
4820 McGrath Street, Suite 100, Ventura, CA 93003-7778, USA

**Keen, Kelly@SLC**

---

**From:** Pratt, Cynthia [FPI] <cpratt@fugro.com>  
**Sent:** Friday, September 23, 2016 4:34 PM  
**To:** dive@ScubaDiveLA.com  
**Cc:** Villegas, Bradi [FPI]  
**Subject:** Pre-survey notification - Dive Shop (Ref. 7194)  
**Attachments:** 7194\_HarborMaster\_DiveShops.pdf

Good Afternoon,

Per our geophysical notification requirements by California State Lands Commission (CSLC), I am submitting to you the attached notice for posting.

Please contact me if you have any questions or require further information.

Kind regards,  
Fugro Pelagos, Inc.

**Cindy Pratt**  
**Survey Operations Manager – Ventura**

T +1 805 289 3807 | C +1 805 279 1138  
[cpratt@fugro.com](mailto:cpratt@fugro.com) | [www.fugro.com](http://www.fugro.com)  
4820 McGrath Street, Suite 100, Ventura, CA 93003-7778, USA

**Keen, Kelly@SLC**

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**From:** Pratt, Cynthia [FPI] <cpratt@fugro.com>  
**Sent:** Friday, September 23, 2016 4:46 PM  
**To:** boating@bh.lacounty.gov  
**Cc:** Villegas, Bradi [FPI]  
**Subject:** Pre-survey notification - Harbor Master (Ref. 7194)  
**Attachments:** 7194\_HarborMaster\_DiveShops.pdf

Good Afternoon,

Per our geophysical notification requirements by California State Lands Commission (CSLC), I am submitting to you the attached notice for posting.

Please contact me if you have any questions or require further information.

Kind regards,  
Fugro Pelagos, Inc.

**Cindy Pratt**  
**Survey Operations Manager – Ventura**

T +1 805 289 3807 | C +1 805 279 1138  
[cpratt@fugro.com](mailto:cpratt@fugro.com) | [www.fugro.com](http://www.fugro.com)  
4820 McGrath Street, Suite 100, Ventura, CA 93003-7778, USA

Fugro Pelagos, Inc.  
Pre-Mobilization Equipment Inspection Record



Instrument/System Type/Description(s): Edge tech 4125 Side Scan

Make/Model Number(s): 4125 BGR 603682

Serial Number(s): 48241, 45690

General Parts	Premobilization Inspection Checks	Check	Notes	Technician Initials
Housing	Visual inspection of housing. Note any structural damage, signs of electrolysis and overall cleanliness. Repair/replace/clean as needed.	✓	48241 Slight damage on nose cone 45690 Decals Missing	MW
	Visually inspect transducers, sound sources or other sensors.	✓		MW
Cables & Connections	Check for damage along entire cable length of all cables, if a cable is marked with lengths, verify labels and distances.	✓		MW
	Check cable ends and connections for looseness, corrosion and any sign of electrical arcing at the pins. Repair/replace/clean as needed.	✓		MW
	Check all water proof connectors and apply appropriate lubrications - confirm good connection seals and seating.	✓		MW
	Check electronic continuity of all cables.	✓		MW
Hoses	Check entire length of any hoses for damage or leaks.	NA		MW
	Check any hose connections for damage or leaks.	NA		MW



Electronics	Check all power supply output voltages.	✓		MW
	Ensure all electronics power up properly and display appropriate indicator lights.	✓		MW
	No observed alarms (visual, audible, or other).	✓		MW
Programming	Confirm up to date firmware version(s).	✓		MW
	Confirm up to date software version(s).	✓		MW
	Confirm license expiration date(s).	NA		MW
Communications	Check all RS232 communications.	NA		MW
	Check all USB communications.	NA		MW
	Check all LAN communications.	✓		MW
	Check all wireless communications.	NA		MW
	Check all other communication types.	✓		MW
Testing	Bench test system appropriately (note type of test performed – rub test/tap test/audible test).	✓		MW
	Wet test system appropriately (note type of test performed).	NA		MW

Fugro Pelagos, Inc.  
Pre-Mobilization Equipment Inspection Record



Instrument/System Type/Description(s): Edge tech 4125 side scan and OPOM CV100

Make/Model Number(s): 4125 CV100

Serial Number(s): 48241, 45690, 002967

General Parts	Premobilization Inspection Checks	Check	Notes	Technician Initials
Housing	Visual inspection of housing. Note any structural damage, signs of electrolysis and overall cleanliness. Repair/replace/clean as needed.	✓	48241 Slight damage on nose cone 45690 Decals Missing	MW
	Visually inspect transducers, sound sources or other sensors.	✓		MW
Cables & Connections	Check for damage along entire cable length of all cables, if a cable is marked with lengths, verify labels and distances.	✓		MW
	Check cable ends and connections for looseness, corrosion and any sign of electrical arcing at the pins. Repair/replace/clean as needed.	✓		MW
	Check all water proof connectors and apply appropriate lubrications - confirm good connection seals and seating.	✓		MW
	Check electronic continuity of all cables.	✓		MW
Hoses	Check entire length of any hoses for damage or leaks.	NA		MW
	Check any hose connections for damage or leaks.	NA		MW



Electronics	Check all power supply output voltages.	✓		MW
	Ensure all electronics power up properly and display appropriate indicator lights.	✓		MW
	No observed alarms (visual, audible, or other).	✓		MW
Programming	Confirm up to date firmware version(s).	✓		MW
	Confirm up to date software version(s).	✓		MW
	Confirm license expiration date(s).	NA		MW
Communications	Check all RS232 communications.	NA		MW
	Check all USB communications.	NA		MW
	Check all LAN communications.	✓		MW
	Check all wireless communications.	NA		MW
	Check all other communication types.	✓		MW
Testing	Bench test system appropriately (note type of test performed – rub test/tap test/audible test).	✓	RUB	MW
	Wet test system appropriately (note type of test performed).	NA		MW

# VOLVO PENTA AQUAMATIC DUOPROP

## AD41P/DP

6-cylinder, 4-stroke, direct-injected turbocharged marine diesel engine with aftercooler and Duoprop drive. 147 kW (200 hp)\*

\* Crankshaft power according to ISO 8665

### Reliable marine engine

AD41P is a reliable and economic marine engine with considerable power resources, developed for planing craft. With its compact dimensions, it is excellent for twin installation.

### Direct injection

Direct injection (DI) results in a low thermal load and low fuel consumption compared with swirl chamber engines (IDI) with the same cylinder capacity.

### Turbocharging

The engine is turbocharged with an exhaust-driven turbocompressor. More air can be forced into the cylinder in this way with the result that more fuel can be injected and the engine runs more efficiently. Since combustion takes place in a turbo engine with excess air, the exhaust gases are cleaner than in a naturally-aspirated engine.

The turbo also acts as an additional silencer both on the induction side and on the exhaust side.

### Aftercooler

The air heats up and expands when it is compressed. In other words, it takes up more space. The aftercooler cools the compressed and heated air and raises its oxygen content so that the engine can use the fuel more efficiently.

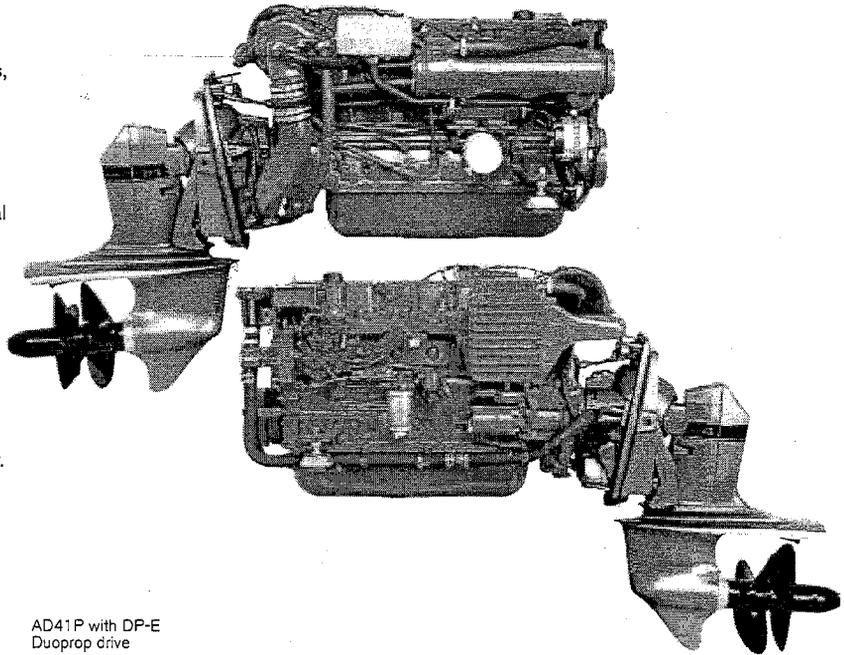
### Low exhaust emission levels

The direct injection, turbocharging and aftercooler contribute to minimizing noxious exhaust emissions and enhancing overall enjoyment of boating. The engine is certified according to SAV, IMO and IMO US/EPA.

### DP drive

The DP drive with its twin counter-rotating propellers produces a harmonious drive unit with unbeatable characteristics in the boat in terms of speed, acceleration and fuel economy.

It also produces less noise and vibrations, better steering and maneuvering characteristics, better grip in the water and a shorter time to planing compared with single propeller systems.



AD41P with DP-E  
Duoprop drive

The drive features standard power steering for maximum driving comfort.

### Comprehensive service network

Volvo Penta has a well-established network of authorized service dealers in more than 100 countries throughout the world. These service centers offer Genuine Volvo Penta Parts as well as skilled personnel to ensure that you enjoy the best possible service.

### Technical description:

#### Engine and block

- Cylinder block and cylinder head made of cast iron for good corrosion resistance and long service life
- Oil-cooled pistons with two compression rings and one oil scraper ring
- Replaceable wet cylinder liners
- Replaceable valve seats
- Seven-bearing crankshaft

#### Engine mounting

- Flexible mounting which provides sound and vibration insulation. The engine has two adjustable rubber mounts in front of the engine

and rubber suspension between flywheel housing and transom shield

#### Lubrication system

- Pressure lubrication system with easily replaced full-flow oil filter on the side of the engine
- Tubular oil cooler that can be cleaned

#### Fuel system

- Rotor-type injection pump with a mechanical governor for accurate speed control
- Smoke limiter
- Fine filter with water separator
- Feed pump with hand primer
- Electrically-operated stopping device

#### Air inlet and exhaust system

- Inlet system designed to produce optimal air rotation which provides perfect combustion. This results in high power and low fuel consumption.
- Air inlet silencer with replaceable filter
- Closed crankcase vent system
- Seawater-cooled exhaust elbow of cast iron with a stainless steel insert
- Complete connection for exhaust outlet through the drive
- Exhaust-driven freshwater-cooled turbo-charger

# VOLVO PENTA

# AD41P/DP

## Cooling system

- Thermostatically regulated freshwater cooling
- Tubular heat exchanger with separate transparent expansion tank
- Gear-driven seawater pump with rubber impeller
- Coolant system prepared for hot water outlet
- Seawater strainer

## Electrical system

- 12V corrosion-protected electrical system, complete with instrumentation
- 14V/60A marine alternator
- Charging regulator with battery sensor for voltage drop compensation
- The alternator is prepared for a bulkhead-mounted double-diode set which automatically distributes the charge current to two separate battery circuits
- Automatic fuse with manual reset
- Starter motor power 3.0 kW
- Extension cable harness with plug-in connection available in various lengths

## Instrument panel:

Separate instruments and harness or complete panel fitted with:

- Key switch
- Temperature gauge
- Instrument lighting
- Alarm for temperature, oil pressure and charging
- Voltmeter
- Rev counter
- Hour meter
- Oil pressure gauge
- Alarm test

## Drive

- Complete with transom shield, flywheel cover and installation components
- The drive can be tilted up by 42°
- Protective zinc anodes prevent corrosion
- The coolant water inlet at the front of the drive provides a reliable coolant water supply to the engine
- Built-in kick-up function to reduce possible damage, in the event the drive strikes an underwater object

## Power Trim

- Power Trim is an electrically-operated hydraulic system for trimming the drive angle

while in use. The actual trim angle is indicated with five LEDs and a digital display on the CD Trim instrument

- An analog instrument is also available

## Accessories

An extensive range of accessories for:

- Fuel system
- Cooling system
- Control system
- Steering system
- Instruments
- Electric system
- Comfort & Safety
- Propeller & Drive
- Maintenance

For detailed information, please see Accessory catalogues.

Contact your local Volvo Penta dealer for further information.

Not all models, standard equipment and accessories are available in all countries. All specifications are subject to change without notice.

The engine illustrated may not be entirely identical to production standard engines.

## Technical Data

Engine designation.....	<b>AD41P</b>
Crankshaft power, kW (hp).....	147 (200)
Propeller shaft power, kW (hp).....	139 (189)
Engine speed, rpm.....	3800
Displacement, l (in <sup>3</sup> ).....	3.6 (219)
Number of cylinders.....	6
Bore/stroke, mm (in.).....	92/90 (3.62/3.54)
Compression ratio.....	17.5:1
Volvo Penta Duoprop drive.....	<b>DP-E</b>
Ratio.....	1.95:1 <sup>1)</sup> (and 1.78:1)
Dry weight with DP, incl. prop., kg (lb).....	538 (1186)

Duty rating: R5-R3

<sup>1)</sup> R5 only

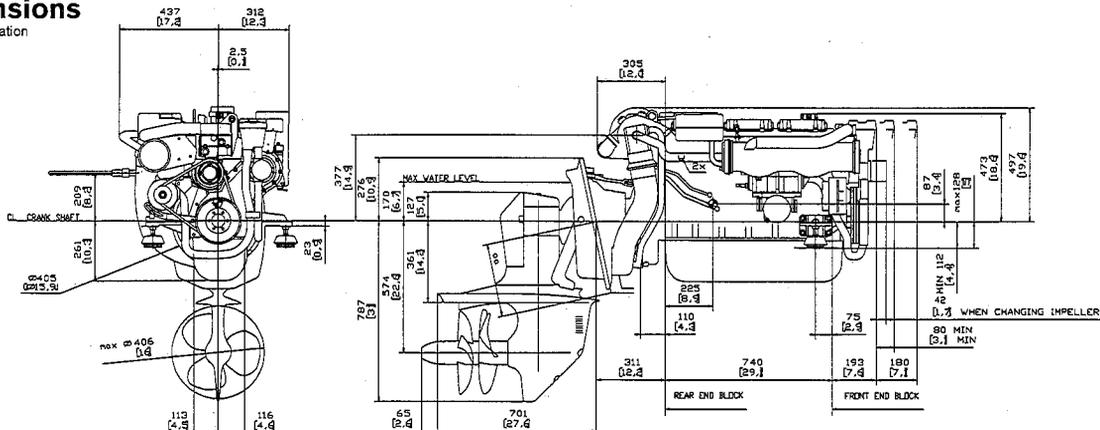
Technical data according to ISO 8665. Fuel with a lower calorific value of 42,700 kJ/kg and density of 840 g/liter at 15°C (60°F). Merchant fuel may differ from this specification which will influence engine power output and fuel consumption.

N.B. The product can also be used in an application with a higher rating than stated, e.g. R3 can be used for R4 or R5.

The engine is certified according to SAV, IMO and IMO US/EPA.

## Dimensions

Not for installation



# VOLVO PENTA

AB Volvo Penta  
SE-405 08 Göteborg, Sweden  
www.volvopenta.com