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

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

FUGRO PELAGOS, INC.

4820 McGRATH STREET SUITE 100

VENTURA, CALIFORNIA 93003

attached and shape file provided

Date: September 16, 2015

Jurisdiction: Federal ☐ State ☑ Both ☐

If State: Permit #PRC 8391.9

Region: 2

Area: Morro Bay Offshore

GEOPHYSICAL SURVEY PERMIT

Check one: ☑ New survey ☐ Time extension of a previous survey

Fugro Pelagos Inc. (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 October 19, 2015 to November 25, 2015
2. Hours of Operation Daylight Hours Only (6am - 6pm)
3. Vessel Name R/V Julie Ann
4. Vessel Official Number CF 5942 SS
5. Vessel Radio Call Sign N/A
6. Vessel Captain's Name Shaun Akins
7. Vessel will monitor Radio Channel(s) 16
8. Vessel Navigation System DGPS

9. Equipment to be used Side Scan Sonar, Single Beam Echosounder

   a. Frequency (Hz, kHz) 400 Khz, and 210 Khz

   b. Source level (dB re 1 μPa at 1 meter (m) [root mean square (rms)]) 195.6 to 213.5 dB rms

   c. Number of beams, across track beamwidth, and along track beamwidth
   CV100 beamwidth: 3 degrees side scan sonar 4125 0.46 degrees along track x 50 degrees across track

   d. Pulse rate and length pulse rate 0.1 (ms) length: 2.8 (ms)

   e. Rise time N/A

   f. Estimated distances to the 190 dB, 180 dB, and 160 dB re 1 μPa (rms) isopleths
   160=66/85m 160= 66/85 180=9/22m 190=4/9

   g. Deployment depth 2 meters below sea surface

   h. Tow speed 4.0 Knots

   i. Approximate length of cable tow 30 meters

Applicant's Representative:
Eddie Stutts
Fugro Pelagos Inc.
4820 McGrath St. Suite 100
Ventura, CA 93003
(805) 289-3891

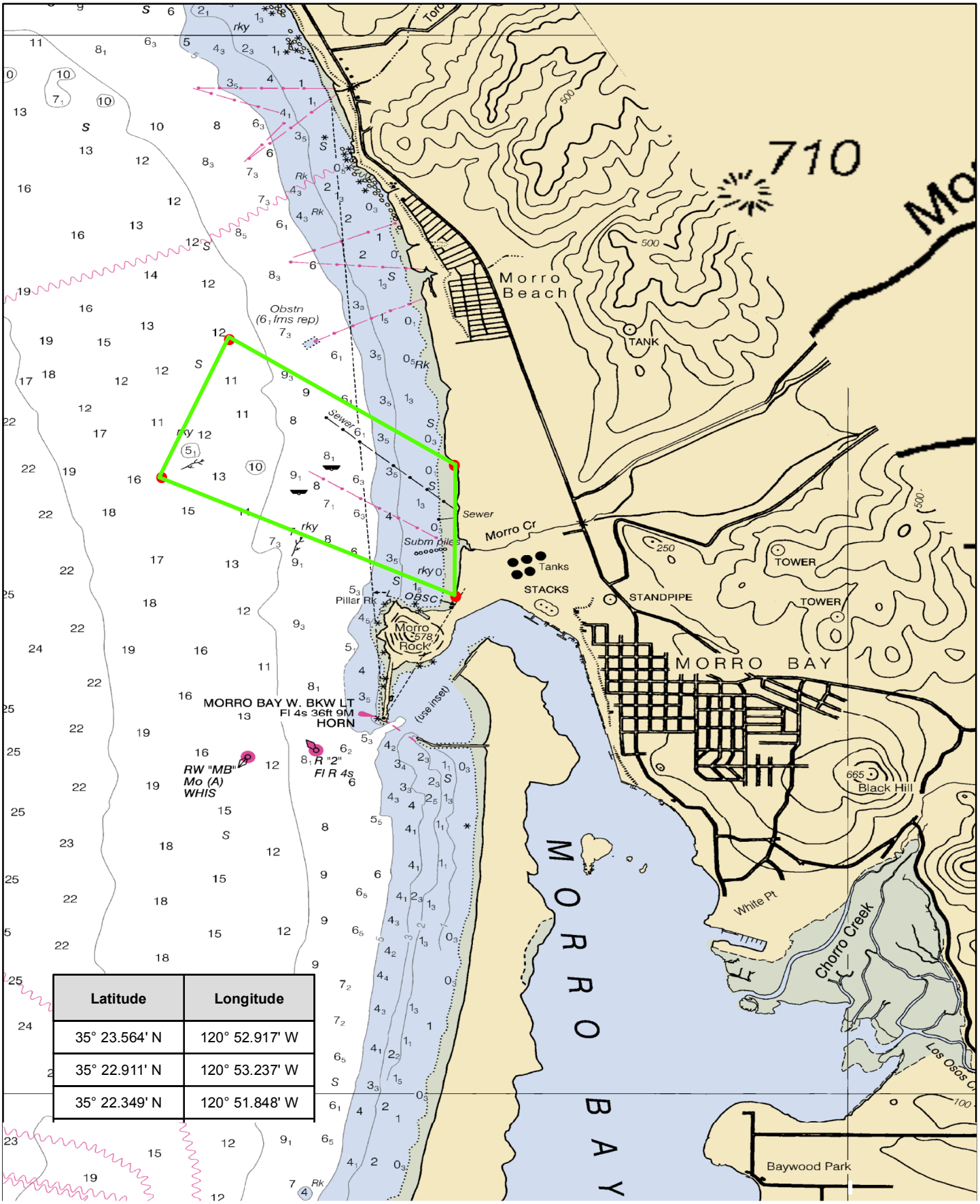
California State Lands Representative
Richard B. Greenwood
Statewide Geophysical Coordinator
200 Oceangate, 12th Floor
Long Beach, CA 90802-4331
(562) 590-5201

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):

NOAA Nautical Chart 18700 with Proposed Survey Area

Side Scan Survey and Single Beam Survey Notice
Offshore Morro Bay, California



Latitude	Longitude
35° 23.564' N	120° 52.917' W
35° 22.911' N	120° 53.237' W
35° 22.349' N	120° 51.848' W

MARINE WILDLIFE CONTINGENCY PLAN

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

MARINE WILDLIFE CONTINGENCY PLAN

BATHYMETRIC AND SURFICIAL FEATURES SURVEY
MORRO BAY, SAN LUIS OBISPO COUNTY, CALIFORNIA

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 2015

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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 bathymetric and surficial features survey located offshore of Morro Bay, 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 area.

This MWCP is specific to the 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 southern California marine waters, and have been shown to be effective in reducing or eliminating potential impacts to marine mammals and turtles.

1.1 PURPOSE AND OBJECTIVES

The proposed survey will utilize a side scan sonar and a single beam duel frequency bathymetry system to acquire seafloor imaging of existing conditions and features within the Project area boundaries as an update to a previous survey completed in 2004. Refer to Figure 1.1 – Proposed Survey Area. The survey will be completed by Fugro in accordance with requirements specified by Longitude123/Associated Pacific Constructors statement of work.

1.2 PROPOSED SURVEY ACTIVITIES AND AREA

The survey is scheduled to occur from mid- to late-October and will be completed over a two day period. The survey will utilize Fugro's (SV) *Julie Ann* vessel designed specifically for hydrographic surveying. The vessel will be mobilized in Morro Bay Harbor and will transit to the survey area in the morning of each day. The survey will be completed during daylight hours (no nighttime operations are proposed). The vessel will return to the Morro Bay Harbor at the completion of each survey day. The proposed survey area is located within state waters with depths ranging from approximately 6 to 16 meters (m) (20 to 55 feet [ft]) within the Project area.

1.3 SURVEY EQUIPMENT

Fugro proposes to use the following equipment to collect the required data:

- Trimble DGPS Receiver;
- TSS Meridian Gyrocompass or equivalent;
- Navigation Computer with Navigation Software;
- Odom CV-100 Single Beam Dual Frequency Bathymetry System 210 Khz or equivalent; and
- Edgetech 4125 digital Side Scan Sonar System 400 Khz.

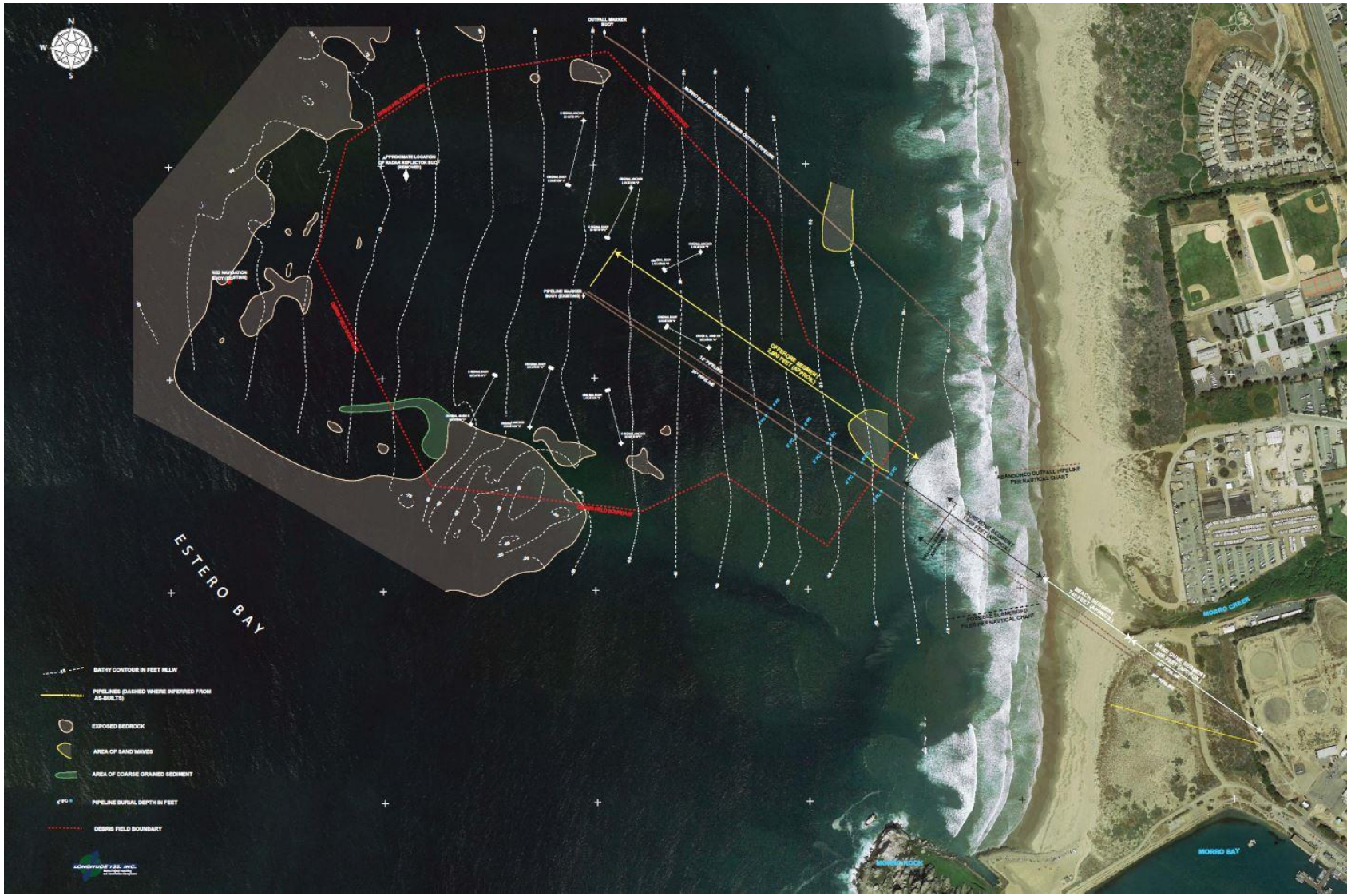


Figure 1.1. Proposed Survey Area

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 Central California coast (Table 2.1). 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 2.2). 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) and therefore are more abundant during specific months. Within the project region, resident, seasonal, and migrant taxa could be expected to occur.

Table 2.1. Abundance Estimates for Marine Mammals and Reptiles within Central California (Point Conception to California/Oregon Border)

Common Name *Scientific Name*	Population Estimate	Current Population Trend
REPTILES		
Cryptodira*		
Olive Ridley turtle *Lepidochelys olivacea*	1.15 to 1.62 million (Eastern Tropical Pacific)	Increasing
Green turtle *Chelonia mydas*	3,319 to 3,479 (Eastern Pacific Stock)	Increasing
Leatherback turtle *Dermochelys coriacea*	361 (California)	Decreasing
Loggerhead turtle *Caretta caretta*	7,138 (California)	Decreasing
MAMMALS		
Mysticeti		
California gray whale *Eschrichtius robustus*	18,017 (Eastern North Pacific)	Increasing
Blue whale *Balaenoptera musculus*	1,551 (Eastern North Pacific)	Stable
Fin whale *Balaenoptera physalus*	2,598 (California/Oregon/Washington)	Increasing
Humpback whale *Megaptera novaeangliae*	1,876 (California/Oregon/Washington)	Increasing
Minke whale *Balaenoptera acutorostrata*	202 (California/Oregon/Washington)	No long-term trends suggested
Sei whale *Balaenoptera borealis*	83 (Eastern North Pacific)	No long-term trends suggested
Northern Pacific right whale *Eubalaena japonica*	25 (Eastern North Pacific)	No long-term trend is suggested
Odontoceti		
Short-beaked common dolphin *Delphinus delphis*	343,990 (California/Oregon/Washington)	Unable to determine
Long-beaked common dolphin *Delphinus capensis*	76,224 (California)	Unable to determine
Harbor porpoise *Phocoena phocoena*	28,833 (Northern California/Southern Oregon Stock)	Increasing

Common Name *Scientific Name*	Population Estimate	Current Population Trend
	6,745 (San Francisco/Russian River Stock)	No long-term trends suggested
	1,079 (Monterey Bay Stock)	Declining
	1,478 (Morro Bay Stock)	Increasing
Dall's porpoise *Phocoenoides dalli*	32,106 (California/Oregon/Washington)	Unable to determine
Pacific white-sided dolphin *Lagenorhynchus obliquidens*	21,406 (California/Oregon/Washington Northern and Southern)	No long-term trends suggested
Risso's dolphin *Grampus griseus*	4,913 (California/Oregon/Washington)	No long-term trends suggested
Northern right whale dolphin *Lissodelphis borealis*	6,019 (California/Oregon/Washington)	No long-term trends suggested
Bottlenose dolphin *Tursiops truncatus*	684 (California/Oregon/Washington Offshore)	No long-term trends suggested
	290 (California Coastal)	No long-term trends suggested
Sperm whale *Physeter macrocephalus*	751 (California/Oregon/Washington)	No long-term trends suggested
Short-finned pilot whale *Globicephala macrorhynchus*	465 (California/Oregon/Washington)	No long-term trends suggested
Killer whale *Orcinus orca*	85 (Eastern North Pacific Southern Resident)	Decreasing
	162 (Offshore California/Oregon/Washington)	Unable to determine
	243 (West Coast Transient)	Unable to determine
Pinnipedia		
Northern fur seal *Callorhinus ursinus*	6,722 (California)	Increasing
Guadalupe fur seal *Arctocephalus townsendi*	3,028 (Mexico; Undetermined in California)	Increasing
California sea lion *Zalophus californianus*	153,337 (U.S.)	Increasing
Northern elephant seal *Mirounga angustirostris*	74,913 (California Breeding)	Increasing
Pacific harbor seal *Phoca vitulina richardsi*	26,667 (California)	Increasing
Fissipedia		
Southern sea otter *Enhydra lutris nereis*	2,944**	Increasing

* Estimates are based on number of current numbers of nesting females.
** Estimate provided by USGS (2014).

Source: NMFS, 2014, and Allen et al., 2011

Table 2.2. Marine Wildlife Species and Periods of Occurrence within Central California (Point Conception to California/Oregon Border)

Family / Common Name	Month of Occurrence[1]											
	J	F	M	A	M	J	J	A	S	O	N	D
REPTILES												
Cryptodira												
Olive ridley turtle (T)[2]												
Green turtle (T)[2]												
Leatherback turtle (E)[2]												
Loggerhead turtle (T)[2]												
MAMMALS												
Mysticeti												
California gray whale												
Blue whale (E)												
Fin whale (E)												
Humpback whale (E)												
Minke whale												
Sei whale (E)												
Northern right whale (E)												
Odontoceti												
Dall's porpoise												
Harbor 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												
Striped dolphin												
Sperm whale												
Dwarf sperm whale												
Pygmy sperm whale												
Baird's beaked whale												
Cuvier's beaked whale												
Mesoplodont beaked whales												
Killer whale												
Pinnipedia												
Northern fur seal[3]												
Guadalupe fur seal												
California sea lion												
Northern elephant seal[4]												
Pacific harbor seal												
Steller sea lion												
Fissipedia												
Southern sea otter (T)[5]												

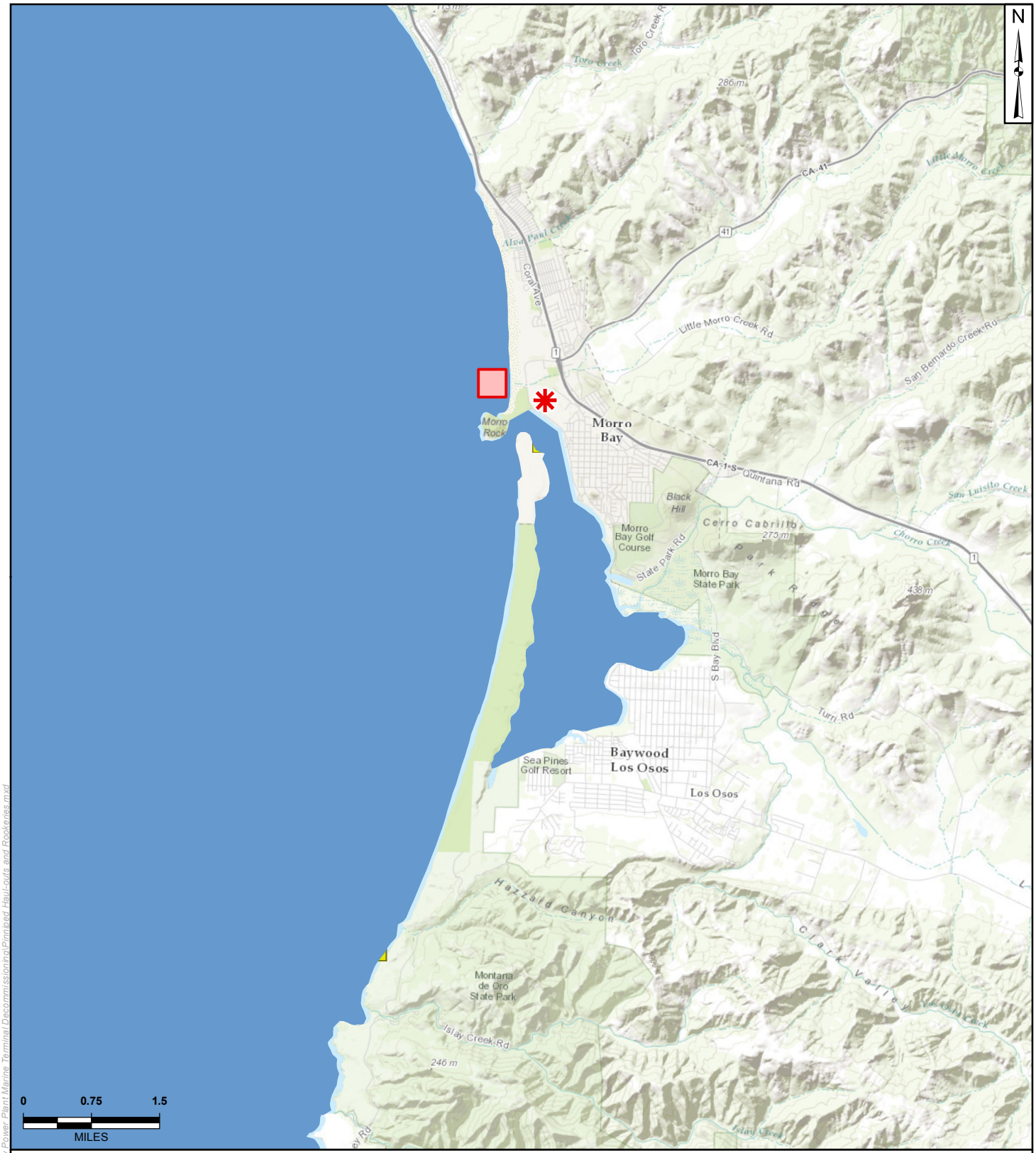
Rare with uniform distribution | Not expected to occur due to seasonal distribution | More likely to occur due to seasonal distribution | Present Year Round

(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).
(5) Only nearshore (diving limit 100 feet).

Sources: Bonnell and Dailey,1993; NMFS, 2014 (a,b); NCCOS, 2007; and Allen, 2011

2.1 PINNIPED HAUL-OUTS AND ROOKERIES

The proposed survey activities will occur within one mile of known pinniped haul-out and/or rookeries located within Morro Bay Harbor. Figure 2.1 depicts the locations of haul-outs and rookeries in the region. No negative impacts are anticipated to occur due to the land barrier between the Project survey area and the known haul out and/or rookery.



Power Plant Location

Harbor Seal Haul-Out

Project Area

Source: ESRI Online Basemap, NOAA
Coordinate System: NAD 19 StatePlane California V FIPS 0405 Feet
Notes: This map was created for informational and display purposes only

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME:
DYNERGY MORRO BAY POWER PLANT
MARINE TERMINAL DECOMMISSIONING

PROJECT NUMBER: 1502-2741

DATE: September 2015

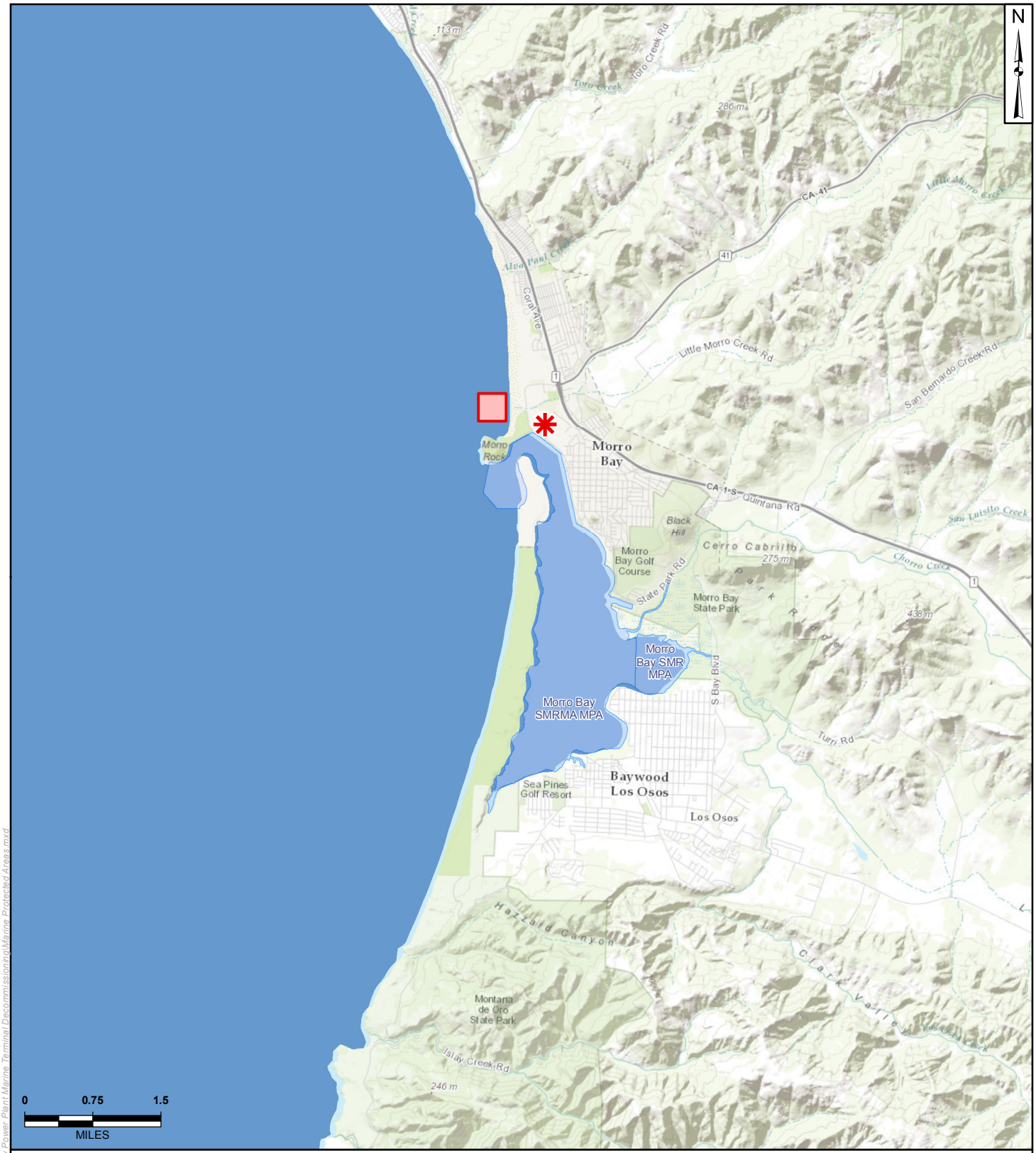
PINNIPED HAUL-OUTS AND ROOKERIES

FIGURE 2.1

Z:\Active\GIS Maps\Map Project\Dynegy Morro Bay Power Plant Marine Terminal Decommissioning\Pinniped Haul-outs and Rookeries.mxd

3.0 MARINE PROTECTED AREAS

The proposed survey area is not located within a designated marine protected area (MPA). The Morro Bay MPA is located one mile south of the survey area (Figure 3.1); however, no survey activities are planned to occur within the MPA.



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

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME:
DYNERGY MORRO BAY POWER PLANT
MARINE TERMINAL DECOMMISSIONING

PROJECT NUMBER: 1502-2741

DATE: September 2015

MARINE PROTECTED AREAS

FIGURE 3.1

Z:\Kristin\GIS Maps\Map Projects\Dynegy Morro Bay Power Plant Marine Terminal Decommissioning\Marine Protected Areas.mxd

4.0 ONBOARD MONITORING AND OTHER MITIGATIONS

4.1 VESSEL TRANSIT

Following mobilization, the survey vessel will transit approximately one nautical mile from Morro Bay Harbor to the survey area. During vessel transit to and from the survey area, there is a potential for encountering marine wildlife and therefore onboard monitoring will occur. A qualified marine wildlife monitor (MWM) will be onboard the vessel throughout the period of the vessel transit and data collection activities. The MWM will be approved by National Oceanic and Atmospheric Administration (NOAA) Fisheries and/or experienced in marine wildlife observations, refer to Appendix A for MWM qualifications.

During transit periods, a MWM will be positioned on the vessel so that they will have a clear view of the area of ocean that is in the direction of the course of travel. The MWM will monitor for marine mammals and turtles (marine wildlife) and will initiate measures to avoid potential collisions if animals are encountered in the vessels path. To minimize the chance of collision with or disturbance of marine wildlife, the vessel will maintain a minimum distance of 91 m (300 ft) from observed marine wildlife in accordance with CSLC-issued geophysical and geologic sampling permit requirements. If the MWM should observe a marine mammal or reptile within the path of the transiting vessel, the MWM 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 comply with the following guidelines:

- Maintain a minimum distance of 91 m (300 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.

4.2 FISHING GEAR CLEARANCE

In addition to submitting the required Notice to Mariners that will alert commercial fishers of pending on-water activities prior to the start of each survey day, the vessel will traverse the proposed survey corridor to note and record the presence of deployed fishing gear. The type and location of fishing gear (buoys) will be noted, and the California Department of Fish and Wildlife (CDFW) 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 4.1).

Table 4.1. Fishing Gear Contact Information

California Department of Fish & Wildlife, San Luis Obispo
Sandy Owen San Luis Obispo Field Office 3196 South Higuera Street, Suite A San Luis Obispo, California 93401 (805) 772-1261 Sandy.Owen@wildlife.ca.gov

4.3 SURVEY MONITORING

Three days prior to the initiation of the survey, Padre marine scientists will contact 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 mammals offshore Morro Bay and the surrounding area. That information will be conveyed to the vessel operator and crew prior to departure for the survey area.

The onboard MWM responsible for observations during vessel transit will also be responsible for monitoring during the data collection efforts. Monitoring will be completed by MWM using binoculars while located at a high vantage point onboard the survey vessel. During survey activities, the MWM will observe the immediate area around the vessel, centered on the sound source, when survey equipment is operating. The proposed survey equipment will be operated above 200 Khz, therefore a safety zone will not be required as specified in the CSLC-issued Geophysical and Geologic Sampling Permit.

At the time of equipment start-up, marine mammals/reptiles within the survey will be noted. The MWM will have the authority to recommend halting data collecting operations if a mammal or turtle is observed within the survey area and is reacting to the survey-generated 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 mammals and/or reptiles. Periodic reevaluation of weather conditions and reassessment of the continuation/cessation recommendation will be completed by the MWM.

4.4 MITIGATION MEASURES

In addition to the measures discussed above, the following operation-related actions will be implemented:

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 safety zone 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 safety zone. 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 safety zone;

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; and

4. Unless the safety of the vessel or crew would be in jeopardy, avoidance measures instituted during vessel transit will be implemented during geophysical data collection as well.

With the incorporation of the avoidance and mitigation measures presented in this document, the proposed offshore survey activities are unlikely to cause injury and/or disturb marine wildlife.

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 (refer to Section 5.3 below) which will be provided to the CSLC and/or other agencies if requested.

5.2 COLLISION RESPONSE

If a collision with marine mammal or reptile occurs, the vessel operator 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 an observer 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.

If a collision 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 5.1).

Table 5.1. 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 Long Beach, California (562) 590-5132	California State Lands Commission Mineral Resources Management Division Long Beach, California (562) 590-5071

The Marine Mammal Protection Act (MMPA) requires that collisions with or other Project-related impacts to marine wildlife will be reported promptly to the NOAA National Marine Fisheries Service (NMFS) Stranding Coordinator. From the report, the NMFS Stranding Coordinator will coordinate subsequent action, including enlisting the aid of marine mammal rescue organizations, if appropriate.

From the vessel's base of operations, a telephone call will be placed to the National Marine Fisheries Service West Coast (California) Stranding Coordinator in Long Beach, to obtain instructions. Alternatively, the vessel captain may contact the NMFS Stranding Coordinator directly using the marine operator to place the call or directly from an onboard telephone, if available to:

National Marine Fisheries Service
West Coast Stranding Coordinator
501 West Ocean Blvd, Suite 4200
Long Beach, CA 90802
(562) 980-3230
Contact: Justin Viezbicke

Email: justin.viezbicke@noaa.gov

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, observations of marine wildlife, and a summary of encounters with any marine mammals and/or turtles, and subsequent 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.

Fugro Pelagos, Inc. 2014. Survey Proposal, Bathymetric and Geophysical Survey, Taylor Ranch Outfall. Prepared for Longitude 123, Inc. and Padre Associates, Inc. April 9, 2014.

National Marine Fisheries Service. 2011. Revised Critical Habitat Designation for the Endangered Loggerhead Sea Turtle. Final Rule. 114p.

National Marine Fisheries Service. 2012. Biological opinion on continued operation of the Hawaii-based Shallow-set Longline Swordfish Fishery – under Amendment 18 to the Fishery Management Plan for Pelagic Fisheries of the Western Region. Pacific Islands Regional Office. January 30, 2012

National Marine Fisheries Service. 2014a. Marine Mammal Stock Assessment Reports by Species. Website: http://www.nmfs.noaa.gov/pr/sars/species.htm. Updated June 11, 2013 accessed on April 2, 2014.

National Marine Fisheries Service 2014b. Status of Marine Turtles Website: http://www.nmfs.noaa.gov/pr/species/turtles/ Updated January 8, 2014 accessed on April 2, 2014.

National Marine Fisheries Service and U.S. Fish and Wildlife Service. 2007a. Loggerhead Sea Turtle (*Caretta caretta*). 5-Year Review: Summary and Evaluation. 81 p.

National Marine Fisheries Service and U.S. Fish and Wildlife Service. 2007b. Leatherback Sea Turtle (*Dermochelys coriacea*). 5-Year Review: Summary and Evaluation. 67 p.

National Marine Fisheries Service and U.S. Fish and Wildlife Service. 2007c. Olive Ridley Sea Turtle (*Lepidochelys olivacea*). 5-Year Review: Summary and Evaluation. 67 p.

National Marine Fisheries Service and U.S. Fish and Wildlife Service. 2007d. Green Sea Turtle (*Chelonia mydas*). 5-Year Review: Summary and Evaluation. 105 p.

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.

U.S Geological Surveys (USGS). 2014. Spring 2014 California Sea Otter Census Results. website: http://www.werc.usgs.gov/ProjectSubWebPage.aspx?SubWebPageID=23&ProjectID=91

APPENDIX A

MARINE WILDLIFE MONITOR RESUMES

Jennifer Klaib

Marine Biologist/Biologist

EDUCATION:

B.S. Aquatic Biology (Marine Emphasis)
University of California – Santa Barbara, 2006.

QUALIFICATIONS:

- Biological Surveying and Monitoring
- Biological Resource Surveys/Reports
- Contingency Plans
- Restoration and Mitigation Plans
- Permit Compliance Monitoring
- Permit Applications
- Agency Communications
- Off-Shore Marine Mammal Monitoring
- Wildlife Rescue and Relocation

Ms. Klaib joined Padre Associates, Inc. in 2006. As a marine biologist with Padre she has experience in environmental assessments of coastal and offshore development projects, monitoring of construction impacts on biological resources, and in the 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.

Ms. Klaib has also worked for the Marine Science Institute at the University of California – Santa Barbara where she participated in subtidal and rocky intertidal field research associated with long-term monitoring of biological resources on the Channel Islands and in San Diego County. She also has 6 years of supervisonal experience in marine mammal rescue and rehabilitation with the Santa Barbara Marine Mammal Center.

MARINE PROJECT EXPERIENCE SUMMARY:

Ms. Klaib has over 2,000 hours of offshore monitoring experience and is a NOAA Fisheries-qualified marine mammal monitor. Ms. Klaib was responsible for monitoring the effects of construction on marine mammals and turtles during geophysical surveys throughout the California coast, for the PG&E deep seismic surveys offshore Point Buchon, during the installation of pile-supported piers at South Bay Boat Yard in San Diego Bay, and during the replacement of a power cable offshore of Carpinteria. Ms. Klaib has also participated in aerial surveys off the central coast of California. She has logged 40 hours of aerial observations of marine mammals and reptiles.

Ms. Klaib has participated in construction monitoring activities for the Calleguas Municipal Water District Hueneme Outfall Replacement Project, AT&T AAG Fiber Optic Cable Project, the US Coast Guard Floating Dock Repair Project (San Diego Sector), Fifth Avenue Landing/Water Transportation Center Marina Enhancement Project and during the installation of pile-supported piers at South Bay Boat Yard in San Diego Bay. She was responsible for monitoring the effects of construction on

marine mammals, turtles and marine avifauna. Ms. Klaib also participated in turbidity monitoring activities for the later projects and for the PG&E pipeline remediation project in the Sacramento and San Joaquin rivers (delta region), ensuring permit compliance. She has also participated in post-construction monitoring of the recovery of surf grass (*Phyllospadix spp*) at the decommissioned Cojo Marine Terminal near Point Conception.

Prior to joining Padre Associates, Ms. Klaib participated in field studies that included monitoring of the effects of demolition of offshore oil and gas facilities in Santa Barbara Channel on fish, marine mammals and birds. The involvement included the collection and identification of fish species as well as recording aerial and shipboard observations of marine mammals.

ENVIRONMENTAL DOCUMENTATION:

Ms. Klaib's NEPA experience includes preparation of technical sections for environmental assessment documents for a proposed liquefied natural gas facility off the coast of California; for a proposed marina expansion; and for a proposed hydrogen gas pipeline between the cities of Martinez and Benicia in the Carquinez Straits area of San Francisco Bay. She has also participated in the preparation of permit applications and application support packages for shipyard and marina expansion projects in San Diego Bay.

Ms. Klaib's experience in CEQA projects includes preparation of environmental documents consisting of mitigated negative declarations (MND), initial studies, environmental assessments, monitoring reports, technical reports and environmental impact reports (EIR).

Ms. Klaib has experience in the development of monitoring plans, including the observation and reporting protocols that focus on the documentation of marine operations, oil spill prevention, and marine mammal and bird mitigation compliance.

BIOLOGICAL OPINIONS / PERMITS:

CDFG Scientific Collecting Permit (No. SC-11935) authorizing *capture and release* of marine fishes, and marine/tidal invertabrates. This permit also authorizes the salvage of marine aquatic plants.

CDFG Scientific Collecting Permit (No. SC-12730) authorizing *sacrifice* of marine aquatic plants, and marine/tidal invertabrates.

CERTIFICATIONS:

Certified SCUBA Diver (SSI, 2002)
Certified AAUS Research Diver (2003)
Certified *Caulerpa* Survey Specialist (2008)
40-Hr. Hazardous Waste Certification (HAZWOPER)
1st Aid, CPR, and Oxygen Administration Certified (Bi-annual Refresher)
Offshore Survival/Helicopter Underwater Egress *Training (*H.U.E.T) (2008)
NOAA Basic Aviation and Aviation Health Safety Course (2012)
Confined Space Attendant and Entrant
San Ardo/Coalinga – EHS Site Specific Orientation.
Smith System Defensive Driving Course.

Michaela Hoffman

Staff Biologist

EDUCATION:

B.S. Biology, Concentration: Marine Science and Fisheries
California Polytechnic State University, San Luis Obispo, 2009

QUALIFICATIONS:

- Biological Surveying and Monitoring
- Biological Resource Surveys/Reports
- Marine Wildlife Contingency Plans
- Essential Fish Habitat Assessments
- NOAA Approved Offshore Protected Species Observer
- Wildlife Rescue and Relocation
- Botanical Restoration Monitoring

Ms. Hoffman has four years of experience as a staff biologist and is responsible for mitigation monitoring of protected species, preparing permit applications, contingency plans, biological resource assessments, conducting sensitive species surveys, 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. Prior to joining Padre in 2011, Ms. Hoffman's experience consisted of both research-based and rehabilitation experience with marine and terrestrial wildlife.

ONSHORE EXPERIENCE:

While at Padre, Ms. Hoffman has participated in biological construction monitoring at remediation projects within the Chevron Casmalia Mineral Fee and Estero Marine Terminal sites. She also has experience conducting protocol surveys for blunt nose leopard lizard within Chevron Midway Sunset and Coalinga San Joaquin Valley oil fields. Ms. Hoffman has participated in numerous protocol-level surveys for California red-legged frog and western burrowing owl at the Chevron San Luis Obispo Tank Farm site within San Luis Obispo County. In addition, Ms. Hoffman retains a 10(A)(1)(a) Recovery Permit from U.S. Fish and Wildlife Service (USFWS) for Federally listed vernal pool branchiopods and has acquired experience in Solano, San Luis Obispo, Santa Barbara, and Ventura counties.

Ms. Hoffman has assisted in implementing restoration plans (ie. seed collection, planting, botanical monitoring and weed abatement) for several Chevron Environmental Management Company (CEMC) projects in San Luis Obispo and Santa Barbara counties.

Ms. Hoffman's has experience handling and triaging oiled wildlife, as well as wildlife rehabilitation experience working with Wolf Hollow Rehabilitation Center, San Juan Island, Washington and the Marine Mammal Center, Morro Bay, CA. Ms. Hoffman was responsible for the care of special-status marine, terrestrial, and

avian wildlife.

OFFSHORE EXPERIENCE: Ms. Hoffman has more than 125 sea-days offshore monitoring marine wildlife and is a National Oceanic and Atmospheric Administration (NOAA) qualified marine wildlife monitor for low energy geophysical surveys and marine construction projects. She has worked within the oil fields offshore the Los Angeles, Santa Barbara, and San Luis Obispo County coast lines. Ms. Hoffman also participated in monitoring wildlife during the PG&E 3D geophysical survey and seismometer deployments offshore San Luis Obispo County in 2011, 2012, and 2013.

Ms. Hoffman has experience preparing marine wildlife contingency plans and Incidental Harassment Assessments (IHA) for offshore geophysical surveys, oil and gas pipe replacements, marine terminal decommissioning, and pier construction projects.

Ms. Hoffman has experience in both animal husbandry and acoustical impacts research with California sea lions and Atlantic bottlenose dolphins. Ms. Hoffman also has experience with the Marine Mammal Center in Morro Bay, California, where her responsibilities included transporting sick and injured animals, and providing medical aid for protected species such as California sea lions, Pacific harbor seals, northern elephant seals, fur seals, and southern sea otters.

CERTIFICATIONS:

Certified SCUBA Diver, PADI December 2008

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

NAUI Master SCUBA Diver. September 2015.

40-Hr. Hazardous Waste Certification (HAZWOPER), 2011: 8 hour refresher February 2015

STCW Certified Personal Survival Techniques, Cal Maritime Academy, September 2011

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

BIOLOGICAL WORKSHOPS:

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

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

California Red-Legged Frog Workshop 2014 *May 2014.* Presented by Trish Tartarian

Western Burrowing Owl Workshop 2014 *July 2014.* Presented by Dr. Lynn Trulio

BIOLOGICAL OPINONS / PERMITS

Guadalupe Dunes Restoration Project Biological Opinion (BO # 1-8-03-FC-57). Ms. Hoffman was authorized to conduct 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 (No. TE-13636B-0) authorizing the take federally protected vernal pool branchiopods in conjunction with surveys for the purpose of enhancing their survival.

VERIFICATION OF EQUIPMENT SERVICE

4 Little Brook Rd., West Wareham, MA 02576
Tel: (508) 291-0057 Fax: (508) 291-2491
Email: info@edgetech.com Web: www.edgetech.com

CERTIFICATE OF CONFORMANCE

CUSTOMER: Fugro

CONTRACT / PURCHASE ORDER NUMBER: 131267

EDGETECH SALES ORDER NUMBER: SO7177

We certify that the following items have met all product requirements and sound source verification as set forth in EdgeTech's approved assembly and Factory Acceptance Test documentation.

Model/Part #: 4125 Description: Side Scan Towfish Serial #: ETN48145

Tow Fish specifications:
(Dual Frequency – 400/900 kHz or 600/1600 kHz)
Material Stainless Steel Construction
Tow Body dimensions 96 mm (3.75 in) OD, 980 mm (39 in) Length
Weight 15.4 Kg (34 Lbs) in air
(Optional weight available for deep operation)
Operating Depth 200 meters max.
Tow Speed 1-8 knots
Safety shear pin 420 Kg (930 Lbs)
Input power DC 70V, 50 watts maximum
Data link interface Ethernet, 10Mbit/s
Beam width 400 kHz Horizontal, 0.46°, All Sidelobes < -36dB
Vertical, 50°
Beam width 900 kHz Horizontal, 0.28°, All sidelobes < -36dB
Center Frequency 400 kHz/ 900 kHz
Sound Source Level: 210db//uPa

EdgeTech

Jim Allan

Digitally signed by Jim Allan
DN: cn=Jim Allan, o=EdgeTech, ou, email=jim.allan@edgetech.com, c=US
Date: 2014.06.24 09:19:11 -04'00'

By: _____

Date: June 24, 2014

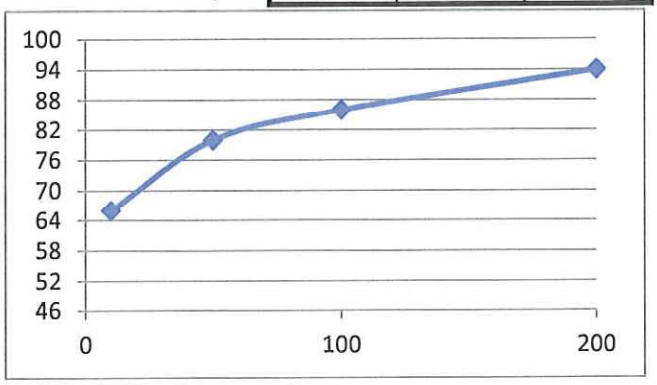
TELEDYNE
ODOM HYDROGRAPHIC
A Teledyne Technologies Company

ETCV100

Date	06/23/2014
Serial #	003241

Receiver Sensitivity

High Freq	200	KHz



Power Supply (2417-0001-REVC)

Input Voltage (DC +24V)	√
+12V (TP8	√
+24V (J3 Pin 1, 3)	√
+5V (J3 Pin 2, 4)	√

Communication (2416-0019-REVA)

+5V (TP2)	√
+24V (TP1)	√

Transceiver Board (2416-0012-REVB)

+12V (TP1)	√
-12V (TP5)	√
-5V (TP4)	√
+5V (TP2)	√

High Frequency Transmit Power (50ohm)

Settings	Low (1)	Med (6)	High (12)
Ch1	16.25V	80.62V	310.90V

Communications

Com 1 (Depth I/O)		√
Com 2 (Remote)		√
Com 3 (GPS In)		√
Com 4 (Heave)		√
Ethernet		√

Reverse Polarity Alarm		√
Total Burn In Time	24 Hrs Minimum	√

Board Identification	SN	SW Ver
Ethernet / Comm I/O	11278	
Communications CPU	13092	4.09
Power Supply	13091	
High Freq Transceiver	12099	1.22
High Freq DSP	12224	4.02

TELEDYNE ODOM HYDROGRAPHIC INC.
CORPORATE
SEAL
BATON ROUGE, USA

Crystal Braswell
6/23/2014

OIL SPILL CONTINGENCY PLAN

FUGRO
2014 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 FUGEO SUPERINTENDENT OR VICE PRESIDENT AS SOON AS POSSIBLE.**

➧ **<u>FOR IMMEDIATE DEPLOYMENT OF LARGE OIL BOOM</u>, 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 launching 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 fron 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/utilites

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:

NATIONAL RESPONSE CENTER	1-800-424-8802
U.S. COAST GUARD MARINE SAFETY OFFICE	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.

Addendum 3

Fugro ,Owner, and Management Information

Fugro Environmental and Safety Coordinator

Jeffery Ripper	858-427-2017

Officers of the Corporation

Robin Villa	805-815-5812
Jeff Carothers	805-212-0008

Addendum 4

OPERATIONAL INFORMATION

NORMAL OPERATIONS

We contract with public and private entities to conduct hi 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 along side 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)

MSDS 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.

LOCAL NOTICE TO MARINERS

Notice of Survey Operations

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD
COMMANDER, 11TH COAST GUARD DISTRICT
Building 50-2 Coast Guard Island
Alameda, CA 94501-5100
LNM Point of Contact
BM1 John Hinson: 510-437-2980
D11LNM@uscg.mil

1. Name of Contractor:	***FUGRO***
2. Type of Operation:	***Side Scan Sonar and Bathymetric Survey***
3. Location / Position Information:	***Offshore Morro Bay, California (See Attached Map)***
4. Start and End Dates:	***Start: October 19, 2015, End: November 25, 2015***
5. Vessel(s) Involved (include FCC Call Sign):	***R/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 100 feet of cable astern of the vessel. Operations will be conducted only during daylight hours.***
8. POC Name & Telephone Number(s):	***Cindy Pratt or Eddie Stutts (Fugro) 805-650-7000***
9. Chart Number:	

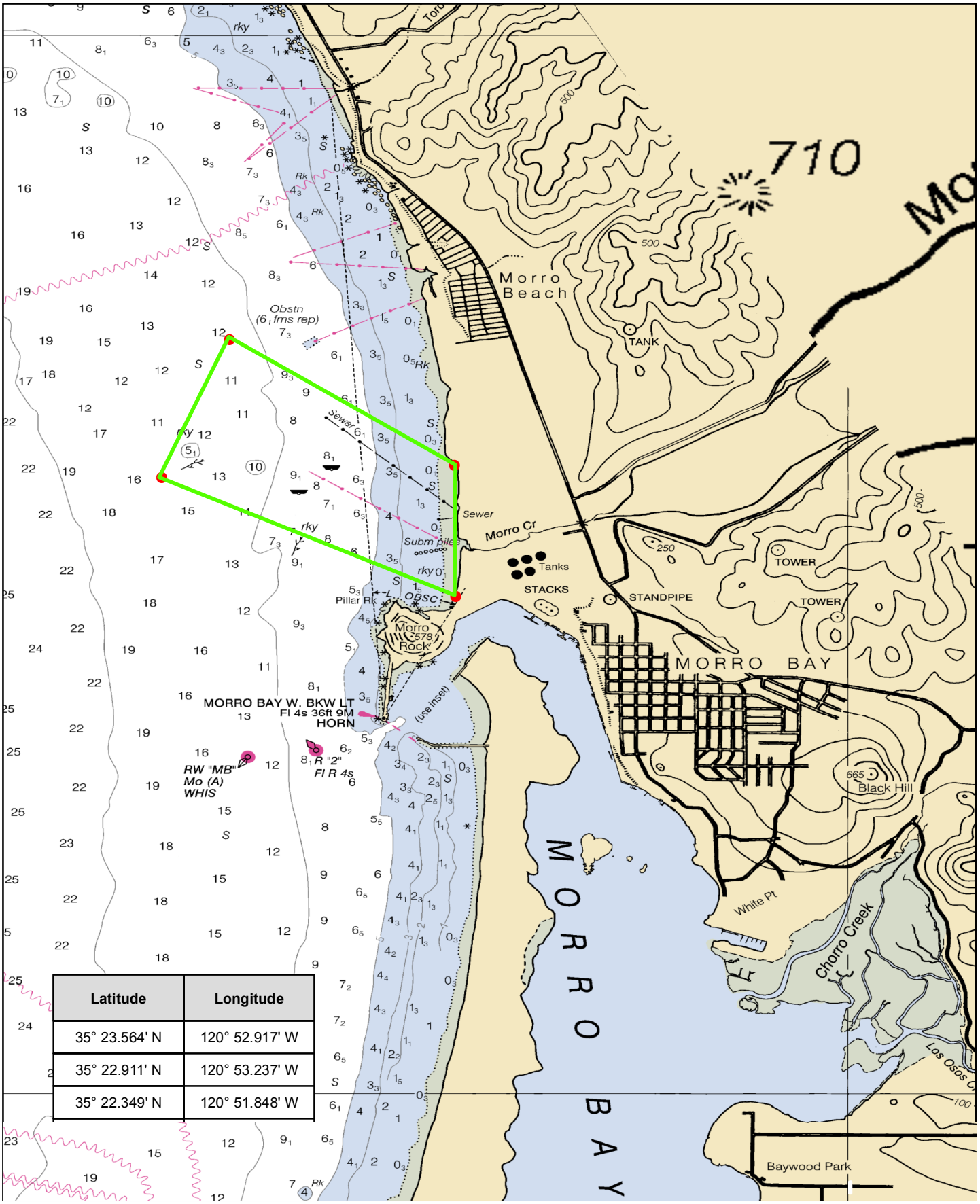
CALIFORNIA-SURVEY OPERATIONS – OFFSHORE MORRO BAY
Fugro will be conducting a side scan sonar and Bathymetric survey from the R/V Julie Ann in the area outlined on the attached portion of Chart 18700. Operations will last approximately 2-3 days and be carried out between October 19 and November 25, 2015 during daylight hours only. The R/V Julie Ann will be towing up to 100 feet of cable during mapping operations. The survey area is outlined by the following coordinates.

LATITUDE	LONGITUDE
35° 23.564' N	120° 52.917' W
35° 22.911' N	120° 53.237' W
35° 22.349' N	120° 51.848' W
35° 22.970' N	120° 51.854' 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 18700 with Proposed Survey Area

Side Scan Survey and Single Beam Survey Notice
Offshore Morro Bay, California



Latitude	Longitude
35° 23.564' N	120° 52.917' W
35° 22.911' N	120° 53.237' W
35° 22.349' N	120° 51.848' W

Reply Reply All Forward Chat

Local Notice to Mariners

Pratt, Cynthia FPI [cpratt@fugro.com]

To: 'D11LNM@uscg.mil'

Cc: Stutts, Eddie FPI [EStutts@fugro.com]

Attachments: Notice to Mariners.pdf (2 MB) [Open as Web Page]

Monday, September 28, 2015 5:26 PM

Good Afternoon,

Attached is a local notice to mariners for an upcoming project.

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

Reply Reply All Forward

Pre-survey notification - Dive Shop

Pratt, Cynthia FPI [cpratt@fugro.com]

To: shawnsteam@gmail.com

Cc: SLCOGPP@SLC

Attachments: HarborMaster_DiveShop.pdf (2 MB) [Open as Web Page]

Monday, September 28, 2015 4:05 PM

Good Afternoon, Shawn,

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

Reply Reply All Forward

Pre-survey notification - Harbor Master

Pratt, Cynthia FPI [cpratt@fugro.com]

To: EEndersby@morro-bay.ca.us

Cc: SLCOGPP@SLC

Attachments: HarborMaster_DiveShop.pdf (2 MB) [Open as Web Page]

Monday, September 28, 2015 4:06 PM

Good Afternoon, Mr. Endersby,

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

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.

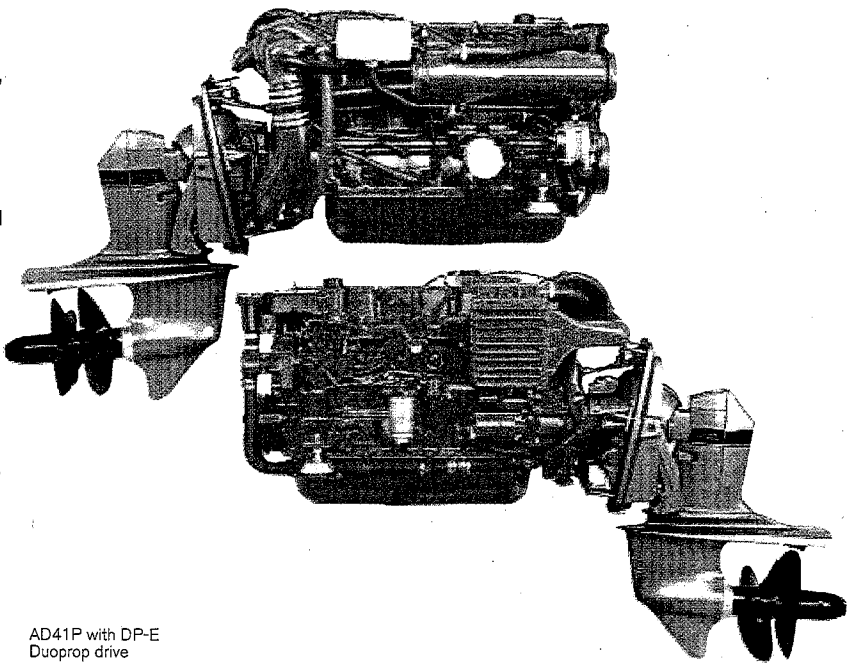
Low exhaust emission levels

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 turbocharger

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.

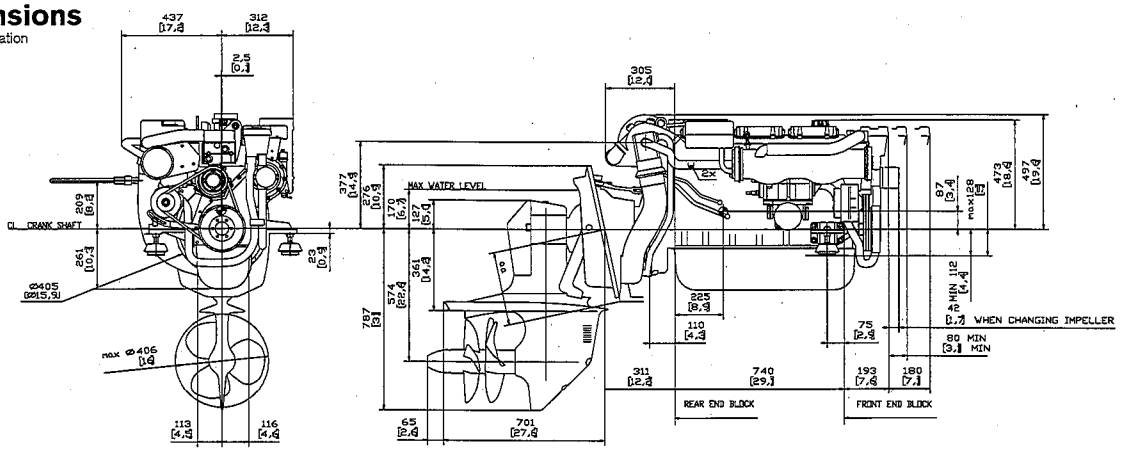
The engine illustrated may not be entirely identical to production standard engines.

Technical Data

Engine designation	**AD41P**
Crankshaft power, kW (hp)	147 (200)
Propeller shaft power, kW (hp)	139 (189)
Engine speed, rpm	3800
Displacement, l (in³)	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	**DP-E**
Ratio	1.95:1[1] (and 1.78:1)
Dry weight with DP, incl. prop., kg (lb)	538 (1186)

Duty rating: R5–R3
1) 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



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