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: <u>No other required</u>
✓		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: QSK 19 MCRS Fuel System- Cummins Engines are EPA Tier2 - Attached
•		Verification of Equipment Service and/or Maintenance (must verify sound output) Explanation: to be attached
	~	Permit(s) or Authorization from California Department of Fish and Wildlife for surveys in or affecting Marine Protected Area(s) (if applicable) Explanation: <u>not applicable</u>

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			Date:	September 9, 2016
FUGRO PELAGOS INC.	Jurisdiction:	Federal	State	Both 🔽
4820 McGRATH STREET SUITE 100		If State: Permit #	PRC 839	1
VENTURA, CALIFORNIA 93003		Region:	2	
attached and shape file provided		Area:	Offshore Ver	ntura
<u>GEOPH</u>	YSICAL SUR	VEY PERMIT		
Check one: New survey		Time extension of	f a previous	s survey
Fugro Pelagos Inc. (Applicant/Per	mittee) will cond	uct a geophysical s	survey offs	hore California in
the survey area outlined on the accompa interference with commercial fishing or	nying navigation other activities, p	chart segment. If lease contact the p	you forese erson(s) lis	e potential sted below:
 FEDERAL WATERS (outside 3 nau 1) Applicant's representative 2) Federal representative (e.g., E Science Foundation [NSF]) NOTE: Any comments regardin Applicant's Representative this notice. 	tical miles) Bureau of Ocean H ng potential confli ve and lead Feder	Energy Managemer cts in Federal wate al agency within te	nt [BOEM] ers must be en (10) day	or National received by the s of the receipt of
 STATE WATERS (Inside 3 nautical 1) Permittee's representative 2) CSLC representative NOTE: Any comments regardir as possible by the Permittee's representative 	miles) ng potential confli presentative, no n	ets in State waters nore than fifteen (1	should be 5) days aft	received as soon ter the receipt of
1. Expected Date of Operation 10/1/201	6 - 10/31/2016 (2 E	Days)		
2. Hours of Operation Daylight hour oper	ations			
3. Vessel Name M/V Theory		,		
4. Vessel Official Number 1217549				
5. Vessel Radio Call Sign N/A				
6. Vessel Captain's Name Brayton Pointe	er	- Lasta Anger and an		a - y -
7. Vessel will monitor Radio Channel(s	<u>;)</u> 16			

8. Vessel Navigation System DGPS

- 9. Equipment to be used Side Scan Sonar
 - a. Frequency (Hz, kHz) 400 kHz, and 900 Khz
 - b. Source level (dB re 1 µPa at 1 meter (m) [root mean square (rms)]) 213.5 dB rms

 - 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=25/60m 180=9/22m 190=4/9
 - g. Deployment depth 2 to 50 meters below sea surface (varies depending on water depth)
 - h. Tow speed 4.0 Knots
 - i. Approximate length of cable tow 5 to 150 meters (varies depending on water depth)

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):

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 Alfred K Albert: 510-437-2980 Alfred.K.Albert@uscg.mil

1. Name of Contractor:	FUGRO
2. Type of Operation:	Side Scan Sonar Survey
3. Location / Position Information:	Offshore Ventura, California (See Attached Map)
4. Start and End Dates:	Start: October 1, 2016, End: October 31,2016
5. Vessel(s) Involved (include FCC Call Sign):	M/V Theory
6. Radio Yes / No, VHF Freq's Monitored:	Yes, VHF 16
7. Any other pertinent Info:	The Theory will be towing up to 500 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:

SOUTHERN CALIFORNIA-SURVEY OPERATIONS – OFFSHORE VENTURA, CALIFORNIA Fugro will be conducting a side scan sonar survey from the M/V Theory in the area outlined on the attached portion of Chart 18725. Operations will last approximately 2 days and be carried out between October 1 to October 31, 2016 during daylight hours only. The M/V Theory will be towing up to 500 feet of cable during survey operations. The survey area is outlined by the following coordinates.

LATITUDE	LONGITUDE
34° 22.057' N	119° 27.550' W
34° 20.380' N	119° 30.290' W
34° 20.386' N	119° 31.542' W
34° 20.351' N	119° 32.139' W
34° 20.357′ N	119° 32.651' W
34° 20.179′ N	119° 33.347′ W
34° 19.994' N	119° 33.328′ W
34° 20.037′ N	119° 32.431′ W
34° 20.165′ N	119° 32.085′ W
34° 20.210′ N	119° 31.539′ W
34° 20.140′ N	119° 30.166' W
34° 21.872′ N	119° 27.402' 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 18725 with Proposed Survey Area

Offshore Ventura, 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 <u>ALWAYS</u> 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.

Section 2014 Secti

- 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

Updated August 2016



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 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.

Updated August 2016



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



Emergency Notification

PHONE LIST

Fire Emergency	California State Lands 24-Hour Emerge	Fugro , Inc. Office
911	; Commission ncy Number	805-650-7000
911	562-590-5201	

Medical Emergency

911

911

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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 <u>one</u> 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.





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

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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

Updated August 2016



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

oo gallolio

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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.

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VERIFICATION OF ENGINE REQUIREMENTS

M/V Theory

QSB5.9 for Recreational Marine - Cummins Engines

	CUMMINS MERCRUISER DIESEL	INC. FOR CM	Engine No. 4	688249;	3 EPA		WAR	MINC.
* *	Assembled in the U.S	S.A.	Family 80	EXM0359AAA	72 10	X+ N	Ox+ warra	nty is 1
	Date of Mfg. 04-07-08 Mc	odel QSB5.9-355 INT	Catalyst No.	1	0.30 P		Values	for the
	CPL 8464 L/CYL 1.0 C.I	I.D./L 359 / 5.9	Inj. Set	Advertised H	P 355	2000	INIPORT/	WIT ENG
	Fuel Hate at adv. HP	138 mm ³ / Stroke	Firing Order	Valve lash co	id . 0.010 i	1 2000 r	pm marine c	with the
	E.C.S.		153624	IMO Family	MIOQTA	. U.U.Z.U 1	only.	73/78 /
	- maintaine	Governed Speed (rpm)	0	Inj. Timing C	ode ELEC	TRONIC	- Partient	
		047		8		T	1	
	<i>6</i> #**	047		8	82495	EPA	-	
	MANUFACTURED BY CUMMIN CUMMINS MERCRUISER DIES	NS INC. FOR SEL, LLC		8 No. 4683	B2495	EPA 7.2 TH		
	MANUFACTURED BY CUMMIN CUMMINS MERCRUISER DIES Assembled in the	NS INC. FOR SEL, LLC U.S.A	Engine Family	8 No. 4688	B2495	EPA 7.2 TF 0.30 F		XHC PM
	MANUFACTURED BY CUMMIN UMMINS MERCRUISER DIES Assembled in the Date of Mfg. 04-07-08	NS INC. FOR SEL, LLC U.S.A Model QSB5.9-355 II	Engine Family NT Cataly	8 No. 4688 8 CEXM st No.	B2495	EPA 7.2 TF 0.30 F		X+C PN
	MANUFACTURED BY CUMMIN CUMMINS MERCRUISER DIES Assembled in the Date of Mfg. 04-07-08	NS INC. FOR SEL, LLC U.S.A Model QSB5.9-355 II C.I.D./L 359 / 5.9	Engine Family NT Cataly	e no. 4688 scexn st No. Set Ad	B2495 N0359AAA	EPA 7.2 TF 0.30 F P 355	K+ NO iC T 2M 1 at 2800 Int 0.020	x+HC PM rpm Exh.
	MANUFACTURED BY CUMMIN CUMMINS MERCRUISER DIES Assembled in the Date of Mfg. 04-07-08 CPL 8464 L/ CYL 1.0 Evol Bath at adv. HP	NS INC. FOR SEL, LLC U.S.A Model QSB5.9-355 II C.I.D./L 359 / 5.9 138 mm ² / 5.9	Engine Family NT Cataly Stroke Firing	8 No. 4688 8 No. 4688 8 CEXM rst No. Set Ad y Order y Order	B2495 NO359AAA	EPA 7.2 TF 0.30 F P 355 5 old 0.010	K+ NO ic T int 2800 int. 0.020	x+C PM pm Exh.
	MANUFACTURED BY CUMMAIN CUMMINS MERCRUISER DIES Assembled in the Date of Mfg. 04–07–08 CPL 8464 L/CYL 1.0 Fuel Rate at adv. HP Date of Mag. 4018966	NS INC. FOR SEL, LLC U.S.A Model QSB5.9-355 II C.I.D./L 359 / 5.9 138 mm ³ / 1	Engine Family NT Cataly Stroke Firing 153	e No. 4688 st No. Set Ad g Order 6 2 4 IN	B2495 M359AAA Ivertised H live lash co IO Family	EPA 7.2 TP 0.30 F P 355 TO 0.4 0.010 M100T	K+ NO Int. 0.020 TA FCTBONIC	x+tC PM pm Exh.

M/V Theory

QSB5.9 for Recreational Marine - Cummins Engines

	CUMMINS MERCRUISER DIESEL	INC. FOR CM	Engine No. 4	688249;	3 EPA		WAR	MINC.
* *	Assembled in the U.S	S.A.	Family 80	EXM0359AAA	72 10	X+ N	Ox+ warra	nty is 1
	Date of Mfg. 04-07-08 Mc	odel QSB5.9-355 INT	Catalyst No.	1	0.30 P		Values	for the
	CPL 8464 L/CYL 1.0 C.I	I.D./L 359 / 5.9	Inj. Set	Advertised H	P 355	2000	INIPORT/	WIT ENG
	Fuel Hate at adv. HP	138 mm ³ / Stroke	Firing Order	Valve lash co	id . 0.010 i	1 2000 r	pm marine c	with the
	E.C.S.		153624	IMO Family	MIOQTA	. U.U.Z.U 1	only.	73/78 /
	- maintaine	Governed Speed (rpm)	0	Inj. Timing C	ode ELEC	TRONIC	- Partient	
		047		8		T	1	
	<i>6</i> #**	047		8	82495	EPA	-	
	MANUFACTURED BY CUMMIN CUMMINS MERCRUISER DIES	NS INC. FOR SEL, LLC		8 No. 4683	B2495	EPA 7.2 TH		
	MANUFACTURED BY CUMMIN CUMMINS MERCRUISER DIES Assembled in the	NS INC. FOR SEL, LLC U.S.A	Engine Family	8 No. 4688	B2495	EPA 7.2 TF 0.30 F		XHC PM
	MANUFACTURED BY CUMMIN UMMINS MERCRUISER DIES Assembled in the Date of Mfg. 04-07-08	NS INC. FOR SEL, LLC U.S.A Model QSB5.9-355 II	Engine Family NT Cataly	8 No. 4688 8 CEXM st No.	B2495	EPA 7.2 TF 0.30 F		X+C PN
	MANUFACTURED BY CUMMIN CUMMINS MERCRUISER DIES Assembled in the Date of Mfg. 04-07-08	NS INC. FOR SEL, LLC U.S.A Model QSB5.9-355 II C.I.D./L 359 / 5.9	Engine Family NT Cataly	e no. 4688 scexn st No. Set Ad	B2495 N0359AAA	EPA 7.2 TF 0.30 F P 355	K+ NO iC T 2M 1 at 2800 Int 0.020	x+HC PM rpm Exh.
	MANUFACTURED BY CUMMIN CUMMINS MERCRUISER DIES Assembled in the Date of Mfg. 04-07-08 CPL 8464 L/ CYL 1.0 Evol Bath at adv. HP	NS INC. FOR SEL, LLC U.S.A Model QSB5.9-355 II C.I.D./L 359 / 5.9 138 mm ² / 5.9	Engine Family NT Cataly Stroke Firing	8 No. 4688 8 No. 4688 8 CEXM rst No. Set Ad y Order y Order	B2495 NO359AAA	EPA 7.2 TF 0.30 F P 355 5 old 0.010	K+ NO ic T int 2800 int. 0.020	x+C PM pm Exh.
	MANUFACTURED BY CUMMAIN CUMMINS MERCRUISER DIES Assembled in the Date of Mfg. 04–07–08 CPL 8464 L/CYL 1.0 Fuel Rate at adv. HP Date of Mag. 4018966	NS INC. FOR SEL, LLC U.S.A Model QSB5.9-355 II C.I.D./L 359 / 5.9 138 mm ³ / 1	Engine Family NT Cataly Stroke Firing 153	e No. 4688 st No. Set Ad g Order 6 2 4 IN	B2495 M359AAA Ivertised H live lash co IO Family	EPA 7.2 TP 0.30 F P 355 TO 0.4 0.010 M100T	K+ NO Int. 0.020 TA FCTBONIC	x+tC PM pm Exh.



QSB5.9 QUANTUM SERIES ENGINE

Features

Fuel System: Bosch High-Pressure Common-Rail, Front mounted spin-on Fleetguard fuel filter

Lubrication System: Front mounted spin-on Fleetguard lube filter

Electrical System: 12-volt and 24-volt systems available

Air Intake System: Light duty or servicable type air cleaner

Coolant System: Sea Water heat exchanger cooling system; Keel cooled system available

Emissions: EPA Tier 2, IMO, and RCD certified

Breather System: Open or closed

Engine Updates: Optional dry run SW pump and an alternate fuel capability (JP8, JP5)

Engine Specifications

Configuration	In-line 6-cylinder, 4-stroke diesel
Bore & Stroke	102 mm x 120 mm (4.02 in x 4.72 in)
Displacement	5.9 L (359 in ³)
Aspiration	Turbocharged / Aftercooled
Rotation	Counterclockwise facing flywheel

Engine Overview

- Unmatched peformance driven through a perfectly matched turbocharger and a new 24-valve cylinder head that delivers industry-leading power density
- Quiet operation, including an 80-percent reduction in noise at idle, is one of the many benefits from the common-rail fuel system
- Enhanced sociability from the high-pressure common-rail design virtually eliminates smoke and improves the whole boating experience
- Maximize vessel performance and access comprehensive vessel diagnostic information via SmartCraft[®] electronics
- Peace of mind delivered by the Cummins Captain's Briefing and global service network



Power Ratings

Rating	HO/GS	НО	ID/HO	HO/GS	ID/HO	НО	MD/HO	HD/HO	ID/HO
Metric hp	480	440	425	380	355	330	305	230	230
bhp	472	436	420	375	350	325	300	225	227
KW	352	325	313	280	261	243	224	168	169
Rated rpm	3400	3400	3000	3000	2800	2800	2600	2600	3000
Max Torque ft-lbs	942	913	908	898	853	830	783	670	510
Max Torque N-m	1278	1238	1231	1218	1156	1125	1062	908	691
rpm @ max torque	2200	2000	2000	2000	2000	1800	1800	1600	1600

Ratings and specifications subject to change without notice. Not responsible for typographical errors.

Fuel Consumption (Prop Curve)

Rating	QSE	15.9 - 4	180 HQ)/GS	QS	SB5.9	- 440	НО	QS	B5.9 -	425 IC)/НО	QSE	35.9 - 3	380 H()/GS	QSE	35.9 -	355 ID	/HO
rpm	3400	3200	3000	2800	3400	3200	3000	2800	3000	2800	2600	2400	3000	2800	2600	2400	2800	2600	2400	2200
KW	352	348	340	334	325	319	318	310	313	307	299	292	280	279	281	271	261	259	256	254
l/hr	97.4	79.1	62.8	52	90.6	72.8	58.7	48.6	81.3	65.5	53	43.4	76.2	60.6	48.1	39.5	68.1	55.2	44.3	36.2
bhp	472	466	456	448	436	427	426	416	420	411	401	391	375	374	377	364	350	347	343	340
gal/hr	25.7	20.9	16.6	13.7	23.9	19.2	15.5	12.8	21.5	17.3	14	11.5	20.1	16	12.7	10.4	18	14.6	11.7	9.6

Rating	Q	SB5.9	- 330	НО	QSE	35.9 - 3	305 MI	D/HO	QSE	35.9 - 2	230 HI	D/HO	QS	B5.9 -	230 ID)/HO
rpm	2800	2600	2400	2200	2600	2400	2200	2000	2600	2400	2200	2000	3000	2800	2600	2400
KW	243	238	240	238	224	221	222	213	168	162	167	165	169	168	162	217
l/hr	63.3	50.8	41.6	33.5	57.3	47	37.9	30.8	42.2	36.8	29.7	23.3	47	40	33	26.8
bhp	325	319	321	320	300	296	287	286	225	217	225	222	227	226	217	207
gal/hr	16.7	13.4	11	8.9	15.1	12.4	10	8.1	11.1	9.7	7.9	6.1	12.5	10.6	8.7	7.1

Fuel consumption data represents performance along a 2.7 fixed pitch propeller curve (for HO, ID, MCD, 3.0 for HD and CON ratings). Fuel consumption is based on fuel of 35° API gravity at 16°C (60°F) having an LHV of 42, 780 KJ/KG (18,390 BTU/lb) when used at 29°C (85°F) and weighing 838.9 g/liter (7.001 lb/US gal). Observed horsepower is certified within ±5% of rated horsepower. Consult your local Cummins professional for further information.

Engine Dimensions

Length		W	idth	He	eight	Weigh	nt (Dry)*
mm	in	mm	in	mm	in	kg	lb
1036	40.8	836	32.9	880	34.6	612	1350
*D +	Description of the state of the						

*Does not include exhaust connection. Weights vary by rating. Length to flywheel housing. Length measured from back of flywheel to engine front. Overall height includes dipstick.

Available Accessories

Engine Controls: Digital Throttle and Shift; Electronic Throttle and Shift (ETS) and optional potentiometer for mechanical controls

Instrumentation: SmartCraft® 2.2 digital displays and/or analog gauges provide data on engine speed, oil pressure, engine load and more

Vessel System Integration: SmartCraft® 2.2 monitors fluid level, vessel range, depth, vessel speed, rudder position, temperatures and more

Ratings Definitions

Heavy Duty (HD): Intended for nearly continuous use in variable load applications, where full power is limited to eight hours out of every ten hours of operation. Also, reduced power operation must be at or below cruise rpm, which is 200 rpm below the maximum rated speed. This rating is for applications operating less than 5000 hours per year.

Medium Continuous (MD): Intended for moderate use in variable load applications, where full power is limited to six hours out of every twelve hours of operation. Also, reduced power operation must be at or below cruise rpm, which is 200 rpm below the maximum rated speed. This rating is for applications operating less than 3000 hours per year.

Intermittent (ID): Intended for intermittent use in variable load applications, where full power is limited to two hours out of every eight hours of operation. Also, reduced power operation must be at or below cruise rpm, which is 200 rpm below the maximum rated speed. This rating is for applications operating less than 1500 hours per year.

Government Service (GS): Intended for infrequent use in variable load applications, where full power is limited to one hour out of every eight hours of operation. Also, reduced power operation must be at or below cruise speed (rpm). Cruise speed (rpm) is dependent on the engine rated speed (rpm), Refer to Table 1 below. For applications operating less than 500 hours per year. Engines with this rating are restricted to non-revenue generating government service propulsion applications. It is not to be used in any revenue generating commercial applications, nor is it to be used in recreational/pleasure applications

High Output (HO): Intended for infrequent use in variable load applications, where full power is limited to one hour out of every eight hours of operation. Also, reduced power operation must be at or below cruise speed (rpm). Cruise speed (rpm) is dependent on the engine rated speed (rpm), Refer to Table 1 below. For applications operating less than 500 hours per year. Engines with this rating are intended for powering recreational/pleasure use vessels only.

Commercial use is defined as any work or employment related use of the product, or any use of the product which generates income, for any part of the warranty period, even if the product is only occasionally used for such purposes.

Rating Conditions: Declared power ratings are based upon ISO 15550 reference conditions/ air pressure of 100kPa (29.612 in Hg) air temperature of 25° C (77°F) and 30% relative humidity. Propeller Shaft Power represents the net power available after typical reverse/reduction gear losses and is 97% of rated power. Power rated in accordance with IMCI procedures.

Ratings and specifications subject to change without notice. Not responsible for typographical errors.



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SB5.9 QUANTUM SERIES ENGINE

IIS A

Table 1	
Rated Speed	Cruise Speed (reduction from rated)
2000 to 2800 rpm	200 rpm
2801 to 3500 rpm	300 rpm
3501 to 4500 rpm	400 rpm

MARINE WILDLIFE CONTINGENCY PLAN AND PROPOSED RUNLINES

MARINE WILDLIFE CONTINGENCY PLAN

SIDE SCAN SONAR SURVEY PACIFIC OPERATORS OFFSHORE, LLC PIPELINE INSPECTION SURVEY OFFSHORE CARPINTERIA, CALIFORNIA

Project No. 1402-2401

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

AUGUST 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 side scan sonar survey along several pipelines interconnecting Platforms Houchin and Hogan then continuing onto shore, all located offshore of Carpinteria, California (Figure 1). 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. 8392.9. 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 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 acquire seafloor imaging of existing pipelines and document the seafloor conditions within the pipeline right of ways. The survey will also identify locations where pipelines are exposed and buried. The survey will be completed by Fugro in accordance with requirements specified by Pacific Operators Offshore, LLC statement of work.

1.2 PROPOSED AREA AND ACTIVITIES

The survey will be completed over a two day period and will utilize Theory Maine Services LLC's survey vessel (SV) Jab, a 13.1 meter (m) (43 foot [ft]) vessel designed specifically for hydrographic surveying. The vessel will be mobilized in Ventura Harbor and will transit to the survey area on the morning of each day. The survey will be completed during daylight hours (no nighttime operations are proposed). The vessel will return to the Ventura Harbor at the completion of each survey day.

The proposed survey area is located within State and Federal waters and will be conducted in water depths between 10 to 50 m (30 to 164 ft). Data will be collected within a survey corridor width of approximately 150 m (492 ft) (Figure 1).



1.3 SURVEY EQUIPMENT

Table 1.3-1 details the survey equipment used to collect the required data:

Table 1.3-1.	Survey	Equipment and	Frequency
--------------	--------	---------------	-----------

Sounder System Frequency (kHz)	Frequency (kHz)
Edgetech DSS 4125	400-900





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 Southern 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) and therefore are more abundant during specific months. Within the survey region, resident, seasonal, and migrant taxa could be expected to occur.

Common Name Scientific Name	Population Estimate	Current Population Trend
REPTILES		
Cryptodira		
Olive Ridley turtle	1.1 million	Otabla
Lepidochelys olivacea	(Eastern Tropical Pacific DPS)	Stable
Green turtle	20,112	Ctable
Chelonia mydas	(Eastern Pacific DPS)	Stable
Loggerhead turtle	7,138	Decreasing
Caretta caretta	(California)	Decreasing
Leatherback turtle	361	Decreasing
Dermochelys coriacea	(California)	Decleasing
MAMMALS		
Mysticeti		
California gray whale	18,017	Fluctuating annually
Eschrichtius robustus	(Eastern North Pacific Stock)	
Fin whale	2,589	Increasing off California
Balaenoptera physalus	(California/Oregon/Washington Stock)	
Humpback whale	1,876	Increasing
Megaptera novaeangliae	(California/Oregon/Washington Stock)	moreasing
Blue whale	1,551	Unable to determine
Balaenoptera musculus	(Eastern North Pacific Stock)	
Minke whale	202	No long-term trends suggested
Balaenoptera acutorostrata	(California/Oregon/Washington Stock)	
Northern Pacific right whale	31 (based on photo-identification)	No long-term trends suggested
Eubalaena japonica	(Eastern North Pacific Stock)	
Sei whale	83	No long-term trends suggested
Balaenoptera borealis	(Eastern North Pacific Stock)	
Odontoceti	1	
Dall's porpoise	32,106	
Phocoenoides dalli	(California/Oregon/Washington	Unable to determine
2	Stock)	
Short-beaked common dolphin	343,990	Unable to determine
Delphinus delphis	(California/Oregon/Washington Stock)	
Long-beaked common dolphin	76,224	Linable to determine
Delphinus capensis	(California Stock)	
Pacific white-sided dolphin	21,406	
Lagenorhynchus obliquidens	(California/Oregon/Washington	No long-term trends suggested
	Northern and Southern Stock)	
Risso's dolphin	4,913	No long-term trends suggested
Grampus griseus	(California/Oregon/Washington Stock)	the long term trends suggested

 Table 2.0-1. Abundance Estimates for Marine Mammals and Reptiles within

 Southern California (California/Mexico Border to Point Conception)



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
Short-finned pilot whale	465	No long-term trends suggested
Globicephala macrorhynchus	(California/Oregon/Washington Stock)	
Striped dolphin Stenella coeruleoalba	8,231 (California, Oregon, Washington)	No long-term trends suggested
Baird's beaked whale Berardius bairdii	466 (California, Oregon, Washington)	No long-term trends suggested
Cuvier's beaked whale Ziphius cavirostris	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	684 (California/Oregon/Washington Offshore Stock)	No long-term trends suggested
	290 (California Coastal Stock)	No long-term trends suggested
Northern right whale dolphin Lissodelphis borealis	6,019 (California/Oregon/Washington Stock)	No long-term trends suggested
Sperm whale Physeter macrocephalus	751 (California/Oregon/Washington Stock)	No long-term trends suggested
Dwarf sperm whale	Unknown (California Oregon Washington)	No long-term trends suggested
Pygmy sperm whale Kogia brevicens	271 (California/Oregon/Washington Stock)	No long-term trends suggested
Killer whale Orcinus orca	(Eastern North Pacific Southern Resident Stock) 354 (West Coast Transients) 162 (Eastern North Pacific Offeboro Stock)	No long-term trends suggested
Pinnipedia	(Lastern North Facilic Offshole Stock)	
California sea lion Zalophus californianus	153,337 (U.S. Stock)	Unable to determine; increasing in most recent three year period
Northern fur seal Callorhinus ursinus	6,692 (California - San Miguel Island Stock)	Increasing
Guadalupe fur seal Arctocephalus townsendi	3,028 (Mexico Stock) Undetermined in California	Increasing
Northern elephant seal Mirounga angustirostris	74,913 (California Breeding Stock)	Increasing
Pacific harbor seal Phoca vitulina richardsi	26,667 (California Stock)	Stable
Fissipedia	•	•
Southern sea otter Enhydra lutris nereis	2,944**	Unable to determine

Source: Allen, 2011; NMFS, 2016a,b; and USGS, 2015

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

** Estimate provided by USGS, 2015



Table 2.0-2. California Marine Wildlife Species and Periods of Occurrence within Southern California (California/Mexico Border to Point Conception)

Family		(•••			Mont	th of		rence	1)	<u>,,</u>		
Common Name		F	м	Δ	M				6	0	N	П
	J		141	A	IAI	J	J		5			
Cryptodira												
Olive ridley turtle $(T)^{(2)}$		[[
Green turtle (T) ⁽²⁾												
Leatherback turtle (E) ⁽²⁾												
Loggerhead turtle $(T)^{(2)}$												
MAMMALS								// X //////////////////////////////////				
Mysticeti												
California grav whale									[
Blue whale (E)												
Fin whale (E)												
Humpback whale (E)												
Minke whale							x					
Sei whale (E)						Ì						
Northern right whale (E)												
Odontoceti			a			1						<u></u>
Dall's porpoise												
Short-beaked common dolphin												
Long-beaked common dolphin												
Pacific white-sided dolphin												
Risso's dolphin												
Short-finned pilot whale												1
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												
Pinnipedia												
Northern fur seal ⁽³⁾												
Guadalupe fur seal												
California sea lion												
Northern elephant seal ⁽⁴⁾												
Pacific harbor seal												
Fissipedia												
Southern sea otter (T) ⁽⁵⁾												
Rare with uniform distribution Not exped to season (E) Federally listed endangered	cted to o nal distri species	occur du ibution s.	e	Mor to s	e likely to seasonal	o occu distrib	r due ution	F	Present	Year Ro	ound	
 (T) Federally listed threatened s (1) Where seasonal differences numbers of abundant anima their "on" season. (2) Only a small percent occur of (3) Common near land during w 	species. s occur, als prese over cor vinter bre	individu ent in th ntinental eeding s	als may neir "off shelf (o season	y also be " season except ne and spri	found ir may be ear San ng moltir	n the "o greate Miguel ng seas	off" seas er than t rookery son.	on. Alsc the numl r, May-N	o, depen bers of l ovembe	iding on less com r).	the spea nmon ar	cies, the nimals in
(4) Only nearshore (diving limit Sources: Bonnell and Dailey 1993: NI	100 fee MFS, 20	t). 16a.b: a	ind NC	COS. 20	07: and /	Allen, 2	2011					



2.1 PINNIPED HAUL-OUTS AND ROOKERIES

The proposed survey activities will not occur near any known pinniped haul-out and/or rookeries (Figure 2 depicts the locations of haul-outs and rookeries in the region). The closest haul-out/rookery is approximately 4.8 kilometers (km) (3 miles [mi]) northwest of the survey area.





3.0 MARINE PROTECTED AREAS

The proposed survey area does not fall into a designated marine protected area (MPA). Campus Point and Goleta Slough State Marine Conservation Area (Figure 3) are the closest MPAs, located approximately 30 km (19 mi) southwest of the survey area.





4.0 ONBOARD MONITORING AND OTHER MITIGATIONS

4.1 MARINE WILDLIFE MONITORS

One qualified marine wildlife monitors, approved by NOAA Fisheries (refer to Appendix A for monitor qualifications), will be onboard the vessel for the duration of the survey. In accordance with the CSLC-issued geophysical and geologic sampling permit, one monitor will be monitoring during transit and survey activities within state waters.

4.2 VESSEL TRANSIT

Following mobilization, the survey vessel will transit the approximate 22 km (13.7 mi) between Ventura Harbor and 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 (approved by NOAA Fisheries – refer to Appendix A for monitor qualifications) will be onboard the vessel throughout the period of the vessel transit and data collection activities.

During transit periods, a marine wildlife monitor will be positioned on the vessel so that the monitor will have a clear view of the area of ocean that is in the direction of the course of travel. That monitor will observe marine mammals and turtles (marine wildlife) and will institute measures to avoid potential collisions with those animals. To minimize the chance of collision with or disturbance of marine mammals and turtles, the vessel will maintain a minimum distance of 91 m (300 ft) from marine wildlife in accordance with CSLC-issued geophysical and geologic sampling permit. If the marine wildlife monitor should observe a marine mammal or reptile 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.



4.3 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 location, 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) 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 4.2-1).

Table 4.2-1. 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		

4.4 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 in the Santa Maria Basin and the surrounding area. That information will be conveyed to the vessel operator and crew prior to departure for the survey area.

The onboard monitor who is responsible for observations during vessel transit, will also be responsible for monitoring during the data collection efforts. Monitoring will be completed using binoculars while located at a high vantage point onboard the survey vessel. As specified in the CSLC-issued geophysical and geologic sampling permit, a safety zone will not be required because the equipment will be operating at greater than 200 kilohertz within State waters.

At the time of equipment start-up equipment will be ramped up, any marine wildlife that enter the survey area will be noted. If any animals show behavioral changes during equipment start-up, either the equipment will be shut down until the animal(s) move out of the area, or after 15 minutes of the animal(s) remaining in the survey area, the equipment will be "ramped up" to full power.

During survey activities, the onboard monitor will observe for marine wildlife when survey equipment is operating. The onboard monitor will have the authority to recommend halting data collecting operations if marine wildlife is observed reacting to the survey-generated activities. The monitor 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 onboard monitor. With the incorporation of these



measures and the other mitigation measures discussed below, the proposed offshore survey activities are unlikely to have a high potential to injure and/or disturb marine wildlife.

4.5 MITIGATION MEASURES

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

- Survey operator shall use a "soft start" technique at the beginning of survey activities each day (or following a shutdown) to allow any marine wildlife 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 monitor 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;
- The monitor 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 utilized during geophysical data collection.

With the incorporation of the 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 onboard monitor will record observations on pre-printed forms and will photodocument 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

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 5.2-1).

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

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

The Marine Mammal Protection Act (MMPA) requires that collisions with or other surveyrelated impacts to marine wildlife will be reported promptly to the 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 survey 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

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APPENDIX A

MARINE WILDLIFE MONITOR RESUMES



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 contigency 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



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

TRAINING:

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.



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) Fisheriesapproved 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



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 Redlegged frog (*Rana draytonii*), burrowing owl (*Athene cunicularia hypugaea*), and large vernal pool branchiopods (*Branchinecta* sp., *Streptocephalus* woottoni, *Lepidurus packardi*). 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 ongoing, 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



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.						

7104 Local Notice to Mariners

 Pratt, Cynthia [FPI] [cpratt@fugro.com]

 Sent:
 Friday, September 09, 2016 2:29 PM

 To:
 Albert, Alfred K BM1 [Alfred.K.Albert@uscg.mil]

 Cc:
 Stutts, Eddie [FPI] [EStutts@fugro.com]; Villegas, Bradi [FPI] [BVillegas@fugro.com]

 Attachments:Notice to Mariners.pdf (2 MB)

Good Afternoon, Alfred,

Attached is a local notice to mariners for an upcoming side scan sonar project (ref. 7104).

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 <u>www.fugro.com</u> 4820 McGrath Street, Suite 100, Ventura, CA 93003-7778, USA

Pre-survey notification - Dive Shop (Ref. 7104)

Pratt, Cynthia [FPI] [cpratt@fugro.com]Sent:Friday, September 09, 2016 2:36 PMTo:staff@venturadive.comAttachments:7104_HarborMaster_DiveShop.pdf (528 KB)

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 <u>cpratt@fugro.com</u> | <u>www.fugro.com</u> 4820 McGrath Street, Suite 100, Ventura, CA 93003-7778, USA Reply Reply All Forward

Pre-survey notification - Harbor Master (Ref. 7104)

Pratt, Cynthia [FPI] [cpratt@fugro.com]

То:	smiler@venturaharbor.com
Cc:	Stutts, Eddie [FPI] [EStutts@fugro.com]; Villegas, Bradi [FPI] [BVillegas@fugro.com]
Attachments:	7104_HarborMaster_DiveShop.pdf (528 KB) [Open as Web Page]

Friday, September 09, 2016 2:35 PM

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 <u>cpratt@fugro.com</u> | <u>www.fugro.com</u> 4820 McGrath Street, Suite 100, Ventura, CA 93003-7778, USA