

ANADARKO PETROLEUM CORPORATION

1201 LAKE ROBBINS DRIVE • THE WOODLANDS, TEXAS 77380

P.O. Box 1330 • HOUSTON, TEXAS 77251-1330



May 25, 2022 ([Revised June 16, 2023, for timing](#))

Jolie Harrison, Division Chief
Permits and Conservation Division, Office of Protected Resources,
1315 East-West Highway, F/PR1 Room 13805
Silver Spring, MD 20910

RE: Letter of Authorization (LOA) Application, 3D OBN Seismic Survey
Green Canyon, area around OCS block GC 517
BOEM G&G Permit Application L22-013

Dear Ms. Harrison:

Anadarko Petroleum Corporation (Anadarko) has attached for your review and approval a Letter of Authorization (LOA) application request for an incidental take authorization under section 101(a)(5) of the Marine Mammal Protection Act of 1972 (MMPA), as amended, for the potential take of marine mammals incidental to conducting a 3D Ocean Bottom Node (OBN) Seismic Survey referred as "K2 OBN" in the vicinity of the Marco Polo Tension Leg Platform (TLP), in the Green Canyon (GC) area, around block GC 517.

The K2 area has been covered in the past by Wide Azimuth (WAZ) multichannel streamer surveys. Those surveys provide near and mid seismic offsets, however, they lack the long offsets necessary to fully enable modern seismic processing, in particular techniques such as Full Waveform Inversion (FWI), Reverse Time Migration (RTM) and Least Square Reverse Time Migrations (LS-RTM). Those legacy survey also have inadequate low frequency content. Modern OBN surveys, like the proposed K2 OBN, on the contrary, provide long offsets, low frequencies, low noise, and full azimuths coverage, allowing the best seismic imaging available today, when combined with the existing WAZ. Therefore, in 2023 Anadarko plans to conduct a new OBN at K2. The new proposed survey would provide enhanced subsalt imaging, better estimate compartmentalization and faults, detect drilling hazards and optimize future well locations; the duration of the proposed source activity will be 40 days.

Anadarko's upcoming 3D OBN survey is subject to the provisions of the MMPA and the Regulations Governing Taking Marine Mammals Incidental to Geophysical Survey Activities in the Gulf of Mexico (50 CFR § 217, Subpart S); therefore, we are requesting issuance of a Letter of Authorization for the proposed activities.

Anadarko is requesting the LOA be issued with an effective period from [September 1, 2023, to August 31, 2024](#). The expected commencement date of the survey is [December 1, 2023](#).

If you have any questions or need additional information, please contact me at 713-557-9453 or by e-mail at Debbie_malbrough@oxy.com

Kind regards,

DocuSigned by:

A handwritten signature in black ink that reads "Deborah Malbrough".

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Deborah Malbrough

Consultant Regulatory, GOM Regulatory