EXPLORATION AND PRODUCTION DEPARTMENT
Production Division

February 29, 1968

Re: OCS-P-0166 Lease - Platform B,
"Houchin", Santa Barbara
Channel, Offshore Carpinteria
Area, California

United States Geological Survey
7744 Federal Building
300 North Los Angeles Street
Los Angeles, California 90012

Attention: Mr. D. W. Solanas

Gentlemen:

Please refer to my letter of January 25, 1968, which stated that a second platform would be installed to develop the western portion of OCS-P-0166 Lease. An application has been submitted to the U. S. Army Corps of Engineers for Platform B, "Houchin" at the following location:

Zone V Coordinates

X = 1,521,438
Y = 807,513

Zone VI Coordinates

X = 1,003,110
Y = 804,900

Platform "Houchin" will have a capacity for 30+ wells and the typical design is shown in the two attached elevation drawings.

Design criteria for Platform "Houchin" are listed below:

1. Seismic loading - The platform shall be designed using a minimum seismic factor of 0.1 in accordance with the latest edition of the "Uniform Building Code" for Zone 3.

2. Wind loading - The maximum wind velocity for design purposes shall be 90 miles per hour. This force shall be assumed to act on all exposed surfaces including drill pipe standing in the derrick and simultaneously with and in the same direction as current forces.

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3. Wave and Current loading - The platform will be designed to resist the forces of the maximum 100 year wave. A wave and current study conducted by A. H. Glenn and Associates is being used to determine these forces.

4. Biological fouling - The buildup of marine organisms, such as kelp, barnacles, etc., is assumed to increase the diameter of the piling by 2 feet to -10' MLLW and by 1 foot from -10' MLLW to the mud line.

5. A soils report including pile capacity values for the platform site has been prepared by Dames and Moore, soils consultants. Pile capacity as installed will be 150% of the maximum design load.

6. Welding - All welding shall conform to requirements of the American Welding Society "Code for Welding in Building Construction" (AWS D1.0). Welding shall be inspected by radiographic and ultrasonic methods in accordance with procedures and techniques outlined in applicable ASME and ASTM Codes.

7. Corrosion protection - The structure will be painted with dimetcote No. 5 to a depth of -8 MLLW. All wetted surfaces will also be cathodic protected with an impressed current anode system to provide 10 Milliamperes current per square foot of exposed metal above the mud line and 1 Milliampere per square foot below the mud line. The main structural members in the splash zone will also have, as additional protection, an extra $\frac{1}{2}$" metal thickness.

8. Safety and aids to navigation - The platform will be equipped with guard rails, stairways, emergency life rafts, litters, first aid equipment, and navigation aids to meet or exceed applicable U. S. Coast Guard and State of California regulations.

9. Appearance - The structure will be painted with DuPont's "Blue Haze" paint to blend with the natural sea and sky colors.

Considerable planning has been done in designing the platform to eliminate sources of water pollution during drilling and production operations. Waste disposal will be accomplished by three separate discharge systems with outfalls a minimum of -60' MLLW. The first system is used for formation cuttings disposal. The drilling mud containing formation cuttings is returned to the drilling deck and passes over a shale shaker which removes cuttings from the mud stream. The drilling fluid is then returned to steel mud tanks and is

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continuously recirculated. The cuttings pass to a Medearis cuttings washing system where they are washed with sea water to remove all contaminents prior to disposal at -60 MLLW.

Both the production and drilling decks will be equipped with curbs, gutters, and a sump tank to prevent direct runoff to the ocean. All water used for washdown, cuttings wash, and well clean up fluids will also be collected in a skimming tank where oily wastes will be skimmed off and pumped to shore. Clean oil free water will then pass to a skimming pipe outfall system for disposal at -140 MLLW. In case of equipment malfunction this skimming pipe can be pumped out and the contaminated fluids pumped to shore.

Sanitary facilities for the drilling and production crew will also be installed on the platform. These facilities discharge into an extended aeration type sewage treatment plant which will produce a chlorinated effluent which is discharged at -100 MLLW.

All produced fluids will be transported through an undersea pipeline to the shore site for treating.

We consider the subject platform to be designed to equal or exceed established design criteria and to conform with all applicable construction codes. The anti-pollution equipment will also provide adequate safeguards to protect marine life and the esthetic values of the Southern California coastline.

Please advise your concurrence or comments on the above design consideration for Platform "Houchin".

Very truly yours,

F. R. Davis
District Production Superintendent

RDS:sj
Attach.

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