

File: Coop w/CCC

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

NOTED - DUNAWAY

REVISED FINDINGS

Consistency Certification No. CC-9-81

APPLICANT FOR FEDERAL PERMITS:

Chevron, USA, Inc.

FEDERAL PERMITS FOR WHICH COMMISSION
CONCURRENCE WITH APPLICANT'S CONSISTENCY
CERTIFICATION IS REQUIRED:

U.S. Geological Survey Exploratory
Well Drilling Permit; OCS Exploration
Plan; U.S. Coast Guard Approval of
U.S. Army Corps of Engineers Permit
Application

FEDERAL PERMIT ACTIVITY LOCATION:

On the Outer Continental Shelf on OCS
P-0205, in the Santa Clara Unit in the
Santa Barbara Channel, approximately
6.8 nautical miles north of Anacapa
Island and about 11 miles southwest of
Ventura

FEDERAL PERMIT ACTIVITY DESCRIPTION:

Drilling up to two exploratory wells
on OCS P-0205 to search for oil and
gas from an anchored drillship,
the Glomar Coral Sea.

PUBLIC HEARING AND VOTE:

Public hearing and action at the
Commission's April 20-23, 1982 meeting
in Los Angeles.

PREVAILING COMMISSIONERS:

Hillibrand, McCarthy, McNeil, Nutter,
Ramos, Renner, Ryan, Wornum.

STAFF NOTE: CONSISTENCY

The Commission concurred in Chevron's consistency certification for OCS P-0205 on January 6, 1982. However, to respond to concerns brought out at the public hearing, the Commission directed staff to submit revised air quality findings, included on page 3.

Applicant's Consistency Certification and Findings. The applicant has submitted a consistency certification stating that the proposed activity described in detail in the Plan of Exploration will be conducted in a manner consistent with California's Coastal Management Program.

I. Concurrence

The Commission hereby concurs with the consistency certification made by Chevron for OCS P-0205, Plan of Exploration, as consistent with the policies and objectives of the California Coastal Management Program.

II. Findings and Declarations

The Commission finds and declares as follows:

A. Amended Plan. Chevron has submitted an amended OCS Plan of Exploration for OCS P-0205 to drill up to two exploratory wells in the Santa Clara Unit in the Santa Barbara Channel. Originally, Chevron had requested approval of an OCS Plan of Exploration for one exploratory well on OCS P-0205 that was within 6 nautical miles of Anacapa Island and within 500 meters of the northbound sea lane of the U.S. Coast Guard-established Vessel Traffic Separation Scheme (VTSS). The Commission objected to Chevron's certification of consistency with the CCMP and Chevron did not appeal that objection. Instead, Chevron has resubmitted a modified Plan of Exploration, moving the proposed drilling sites further away from Anacapa Island, but still within 500 meters of the sea lane. This location is within the "buffer zone", which is a 500-meter-wide strip adjacent to the sea lane.

B. Project Description. Chevron proposes to drill two wells to delineate, or define the limits of proven reservoirs within the southern portion of the Santa Clara Unit. The oil field, the Sockeye Field, lies almost wholly within the northbound sea lane, according to previous exploratory drilling data. Because of the risk to passing ships created by drilling within the lane itself and the Commission's objections to drilling within the boundaries of the Channel Islands National Marine Sanctuary, Chevron has proposed well locations outside the sea lane but within the buffer, and outside the sanctuary, which it believes are technically possible without undue risk and still providing necessary information. To drill from the proposed location, a directional well must be drilled at an angle that represents the limits of present technology. Information from the first well will determine whether the second well will be drilled. Information from both of these wells will be used by Chevron to decide whether to develop the Sockeye Field and where to install a platform. Chevron is proceeding with its Development Plan even though information from these exploratory wells could cause Chevron to decide against development of the field. Chevron proposes to take approximately 6 months to drill both of these wells, a longer period than usual because of the increased time necessary to drill a directional well and because of the extended testing procedures. The wells would be drilled in a water depth of 720 feet.

C. Air Quality. Section 30253 of the Coastal Act provides:

New development shall:

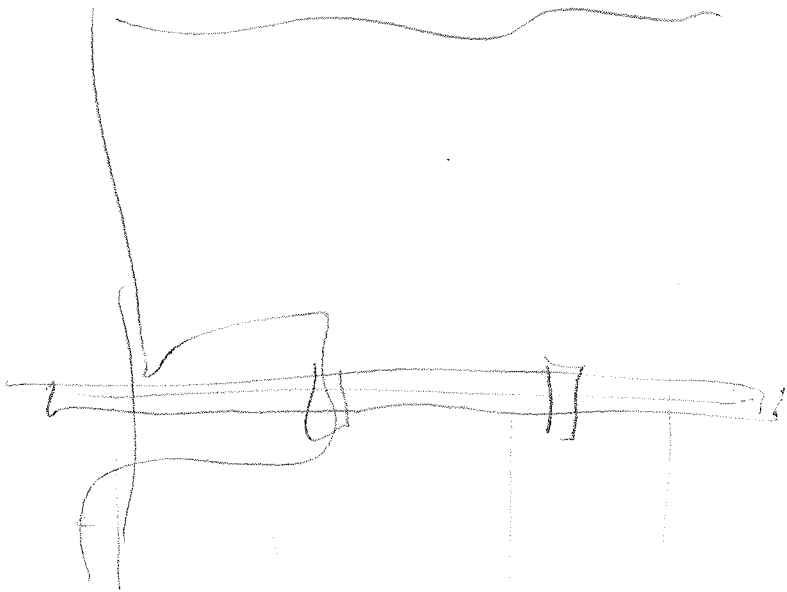
"...(3) Be consistent with requirements imposed by an air pollution control district of the State Air Resources Control Board as to each particular development."

The California Air Resources Control Board (ARB) has reviewed the proposed exploratory well drilling operations of Chevron and finds that the drillship emissions would violate onshore state and federal ambient air quality standards, and that mitigation measures are available. ARB studies submitted to the Executive Director in a letter dated November 12, 1981 documented the potentially significant effects of exploration on OCS P-0205. These studies indicate that oxides of nitrogen (NOx) are transported onshore by prevailing winds. The resulting increase in NOx concentration is predicted to exacerbate an existing ozone problem. The ARB studies also contend that reasonable mitigation measures are available to Chevron to either reduce the drillship emissions or to offset the onshore effects by reducing the emissions from existing sources or subsidies to mass transportation. The ARB withdrew its recommendation that the Commission object to Chevron's consistency certification and will continue its dialogue with Chevron on air quality impacts and mitigation measures.

Chevron representatives assert that ARB's modelling results for NO_x are overly conservative and unrealistic. Using reasonable worst-case assumptions, Chevron claims the NO_x emissions result in a NO₂ impact that is much smaller than ARB predicts. Further, Chevron states it is NO₂ that can cause health problems; NO_x can create ozone, "smog". Chevron believes that the impact of the emissions from the drilling activities is less than that from an onshore source that is considered insignificant by the Santa Barbara County Air Pollution Control District regulations. Finally, Chevron claims that ARB has presented no evidence to show that the ozone problem is exacerbated from emissions of NO_x from the drilling. Until a more sophisticated analysis of the interaction between NO_x, NO₂ and ozone is made for the Santa Barbara Channel area, Chevron asserts the ARB claim of NO_x emission impacts on ozone is without basis.

The Commission has considered the positions of both Chevron and the ARB and finds that there is an effect on air quality from drilling emissions and steps should be taken to mitigate these impacts. However, these steps have not been identified at this time. The Commission finds that Chevron's efforts to fund a study to investigate means of reducing NO_x emissions from drilling activities indicates a good faith effort by Chevron to address the air quality problem. Further, Chevron has agreed to abide by the results of the study and to implement any mitigation measures identified by the study. The Commission adopted a resolution on January 6, 1982, setting forth policies for dealing with air quality issues during the course of the study. This proposal by Chevron is consistent with that policy and incorporated in these findings. Therefore, the Commission finds that the proposed project is consistent with Section 30253 of the Act.

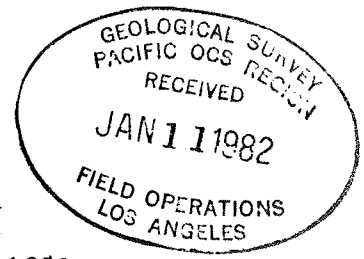
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P 0205 GEN. CORP.

④ 0205:324
CHEVRON

CALIFORNIA COASTAL COMMISSION
1015 Broadway Street San Francisco 94105 — (415) 543-8555



NOTED - DUNAWAY

January 8, 1982

TO: See Distribution List
FROM: Mari Gottdiener, Offshore Oil Coordinator
SUBJECT: Chevron Plan of Exploration for OCS P-0205

NOTED - CLIFTON

On January 6, 1982, the California Coastal Commission found Chevron's Plan of Exploration for OCS P-0205, wells 3 and 4, consistent with California's Coastal Management Program. The Commission also found consistent the U.S. Army Corps of Engineers permit to conduct exploratory drilling on OCS P-0205. The Commission adopted the staff recommendation, with minor changes still to be approved on air quality findings. However, this does not affect the Commission's concurrence decision.

If you have any questions, please contact me at the above telephone number.

Mari Gottdiener

① 0205:324
CHEVRON

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

January 26, 1982

TO: INTERESTED PARTIES

NOTED - SUMMARY

NOTED - CYPHER

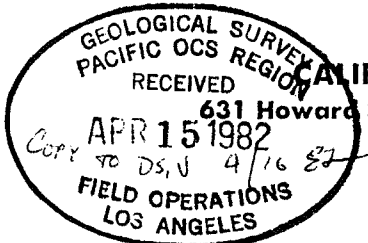
FROM: MARI GOTTDIENER, OFFSHORE OIL COORDINATOR

SUBJECT: CHEVRON'S PLAN OF EXPLORATION FOR OCS P-0205

Attached are revisions, based on Commission action at the January 6, 1982 meeting, of the staff report on Chevron's consistency certification and Plan of Exploration for OCS P-0205, Wells 3 and 4. The Commission concurred in the certification for both wells at that meeting, with the changes reflected in Section IIC. No further action is required.



(42) 0205:384
CHEVRON
9/81



CALIFORNIA COASTAL COMMISSION

631 Howard Street, San Francisco 94105 — (415) 543-8555

REVISED FINDINGS

APPLICANT FOR FEDERAL PERMITS:

Consistency Certification No. CC-9-81

Chevron, USA, Inc.

FEDERAL PERMITS FOR WHICH COMMISSION CONCURRENCE WITH APPLICANT'S CONSISTENCY CERTIFICATION IS REQUIRED:

U.S. Geological Survey Exploratory Well Drilling Permit; OCS Exploration Plan; U.S. Coast Guard Approval of U.S. Army Corps of Engineers Permit Application

FEDERAL PERMIT ACTIVITY LOCATION:

On the Outer Continental Shelf on OCS P-0205, in the Santa Clara Unit in the Santa Barbara Channel, approximately 6.8 nautical miles north of Anacapa Island and about 11 miles southwest of Ventura

FEDERAL PERMIT ACTIVITY DESCRIPTION:

Drilling up to two exploratory wells on OCS P-0205 to search for oil and gas from an anchored drillship, the Glomar Coral Sea.

PUBLIC HEARING AND VOTE:

Public hearing and action at the Commission's April 20-23, 1982 meeting in Los Angeles.

PREVAILING COMMISSIONERS:

Hillenbrand, McCarthy, McNeil, Nutter, Ramos, Renner, Ryan, Wornum.

STAFF NOTE: CONSISTENCY

The Commission concurred in Chevron's consistency certification for OCS P-0205 on January 6, 1982. However, to respond to concerns brought out at the public hearing, the Commission directed staff to submit revised air quality findings, included on page 3.

Applicant's Consistency Certification and Findings. The applicant has submitted a consistency certification stating that the proposed activity described in detail in the Plan of Exploration will be conducted in a manner consistent with California's Coastal Management Program.

I. Concurrence

The Commission hereby concurs with the consistency certification made by Chevron for OCS P-0205, Plan of Exploration, as consistent with the policies and objectives of the California Coastal Management Program.

II. Findings and Declarations

The Commission finds and declares as follows:

A. Amended Plan. Chevron has submitted an amended OCS Plan of Exploration for OCS P-0205 to drill up to two exploratory wells in the Santa Clara Unit in the Santa Barbara Channel. Originally, Chevron had requested approval of an OCS Plan of Exploration for one exploratory well on OCS P-0205 that was within 6 nautical miles of Anacapa Island and within 500 meters of the northbound sea lane of the U.S. Coast Guard-established Vessel Traffic Separation Scheme (VTSS). The Commission objected to Chevron's certification of consistency with the CCMP and Chevron did not appeal that objection. Instead, Chevron has resubmitted a modified Plan of Exploration, moving the proposed drilling sites further away from Anacapa Island, but still within 500 meters of the sea lane. This location is within the "buffer zone", which is a 500-meter-wide strip adjacent to the sea lane.

B. Project Description. Chevron proposes to drill two wells to delineate, or define the limits of proven reservoirs within the southern portion of the Santa Clara Unit. The oil field, the Sockeye Field, lies almost wholly within the northbound sea lane, according to previous exploratory drilling data. Because of the risk to passing ships created by drilling within the lane itself and the Commission's objections to drilling within the boundaries of the Channel Islands National Marine Sanctuary, Chevron has proposed well locations outside the sea lane but within the buffer, and outside the sanctuary, which it believes are technically possible without undue risk and still providing necessary information. To drill from the proposed location, a directional well must be drilled at an angle that represents the limits of present technology. Information from the first well will determine whether the second well will be drilled. Information from both of these wells will be used by Chevron to decide whether to develop the Sockeye Field and where to install a platform. Chevron is proceeding with its Development Plan even though information from these exploratory wells could cause Chevron to decide against development of the field. Chevron proposes to take approximately 6 months to drill both of these wells, a longer period than usual because of the increased time necessary to drill a directional well and because of the extended testing procedures. The wells would be drilled in a water depth of 720 feet.

C. Air Quality. Section 30253 of the Coastal Act provides:

New development shall:

"...(3) Be consistent with requirements imposed by an air pollution control district of the State Air Resources Control Board as to each particular development."

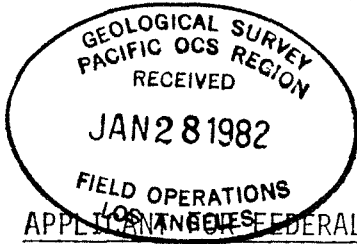
The California Air Resources Control Board (ARB) has reviewed the proposed exploratory well drilling operations of Chevron and finds that the drillship emissions would violate onshore state and federal ambient air quality standards, and that mitigation measures are available. ARB studies submitted to the Executive Director in a letter dated November 12, 1981 documented the potentially significant effects of exploration on OCS P-0205. These studies indicate that oxides of nitrogen (NOx) are transported onshore by prevailing winds. The resulting increase in NOx concentration is predicted to exacerbate an existing ozone problem. The ARB studies also contend that reasonable mitigation measures are available to Chevron to either reduce the drillship emissions or to offset the onshore effects by reducing the emissions from existing sources or subsidies to mass transportation. The ARB withdrew its recommendation that the Commission object to Chevron's consistency certification and will continue its dialogue with Chevron on air quality impacts and mitigation measures.

Chevron representatives assert that ARB's modelling results for NOx are overly conservative and unrealistic. Using reasonable worst-case assumptions, Chevron claims the NOx emissions result in a NO₂ impact that is much smaller than ARB predicts. Further, Chevron states it is NO₂ that can cause health problems; NOx can create ozone, "smog". Chevron believes that the impact of the emissions from the drilling activities is less than that from an onshore source that is considered insignificant by the Santa Barbara County Air Pollution Control District regulations. Finally, Chevron claims that ARB has presented no evidence to show that the ozone problem is exacerbated from emissions of NOx from the drilling. Until a more sophisticated analysis of the interaction between NOx, NO₂ and ozone is made for the Santa Barbara Channel area, Chevron asserts the ARB claim of NOx emission impacts on ozone is without basis.

The Commission has considered the positions of both Chevron and the ARB and finds that there is an effect on air quality from drilling emissions and steps should be taken to mitigate these impacts. However, these steps have not been identified at this time. The Commission finds that Chevron's efforts to fund a study to investigate means of reducing NOx emissions from drilling activities indicates a good faith effort by Chevron to address the air quality problem. Further, Chevron has agreed to abide by the results of the study and to implement any mitigation measures identified by the study. The Commission adopted a resolution on January 6, 1982, setting forth policies for dealing with air quality issues during the course of the study. This proposal by Chevron is consistent with that policy and incorporated in these findings. Therefore, the Commission finds that the proposed project is consistent with Section 30253 of the Act.

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

COMMISSION ACTION ON CONSISTENCY CERTIFICATION



APPLICANT'S FEDERAL PERMITS:

FEDERAL PERMITS FOR WHICH COMMISSION
CONCURRENCE WITH APPLICANT'S CONSISTENCY
CERTIFICATION IS REQUIRED:

FEDERAL PERMIT ACTIVITY LOCATION:

FEDERAL PERMIT ACTIVITY DESCRIPTION:

PUBLIC HEARING AND VOTE:

PREVAILING COMMISSIONERS:

SUBSTANTIVE FILE DOCUMENTS:

Consistency Certification CC-9-81

3 Month Period Ends: 1-7-82

Chevron, USA, Inc.

U.S. Geological Survey Exploratory Well Drilling Permit; OCS Exploration Plan; U.S. Coast Guard Approval of U.S. Army Corps of Engineers Permit Application

On the Outer Continental Shelf on OCS P-0205, in the Santa Clara Unit in the Santa Barbara Channel, approximately 6.8 nautical miles north of Anacapa Island and about 11 miles southwest of Ventura (Exhibits 1 and 2)

Drilling up to two exploratory wells on OCS P-0205 to search for oil and gas from an anchored drillship, the Glomar Coral Sea.

Public hearing and action at the Commission's January 6, 1982 meeting in San Francisco.

Hillenbrand, McCarthy, McNeil, Hutter, Ramos, Renner, Wornum.

1. Chevron Environmental Report for Proposed Exploratory Wells P-0205 #3 and 4, Santa Barbara Channel.
2. Chevron Amended Exploration Plan for Wells P-0205 #3 and 4, Santa Clara Unit Area.
3. U.S. Geological Survey Environmental Assessment of Chevron USA, Inc. Lease OCS P-0205.
4. U.S. Army Corps of Engineers Permit to Conduct Exploratory Drilling.
5. Coast Guard Letter of Approval.
6. Final Report Santa Barbara Channel Risk Management Program, National Maritime Research Center.
7. CC-7-80, previous decision on P-0205.
8. Comments of the Air Resources Board, November 12, 1981.

STAFF NOTE: CONSISTENCY

Under regulations which implement the Federal Coastal Zone Management Act, the United States Geological Survey, the Environmental Protection Agency, and the Corps of Engineers cannot grant a permit for any activity described in an Outer Continental Shelf (OCS) Plan of Exploration until the Coastal Commission concurs with a certification by the oil company applicant that the activity is consistent with the California Coastal Management Program (CCMP) or determines that the activity has no effect on the coastal zone.

Applicant's Consistency Certification and Findings. The applicant has submitted a consistency certification stating that the proposed activity described in detail in the Plan of Exploration will be conducted in a manner consistent with California's Coastal Management Program. The certification is attached as Attachment 1.

I. Concurrence

The Commission hereby concurs with the consistency certification made by Chevron for OSC P-0205, Plan of Exploration, as consistent with the policies and objectives of the California Coastal Management Program.

II. Findings and Declarations

The Commission finds and declares as follows:

A. Amended Plan. Chevron has submitted an amended OCS Plan of Exploration for OCS P-0205 to drill up to two exploratory wells in the Santa Clara Unit in the Santa Barbara Channel (Exhibits 1 and 2). Originally, Chevron had requested approval of an OCS Plan of Exploration for one exploratory well on OCS P-0205 that was within 6 nautical miles of Anacapa Island and within 500 meters of the northbound sea lane of the U.S. Coast Guard-established Vessel Traffic Separation Scheme (VTSS). The Commission objected to Chevron's certification of consistency with the CCMP and Chevron did not appeal that objection. Instead, Chevron has resubmitted a modified Plan of Exploration, moving the proposed drilling sites further away from Anacapa Island, but still within 500 meters of the sea lane. This location is within the "buffer zone", which is a 500-meter-wide strip adjacent to the sea lane. The Commission has until January 7, 1982, three months from the date of the Commission's receipt of the OCS Plan, to object to or concur with this amended plan; after that time, federal regulations provide that non-action by the Commission will be deemed concurrence with the OCS Plan.

B. Project Description. Chevron proposes to drill two wells to delineate, or define the limits of, proven reservoirs within the southern portion of the Santa Clara Unit. The oil field, the Sockeye Field, lies almost wholly within the northbound sea lane, according to previous exploratory drilling data. (Exhibit 2) Because of the risk to passing ships created by drilling within the lane itself and the Commission's objections to drilling within the boundaries of the Channel Islands National Marine Sanctuary, Chevron has proposed well locations outside the sea lane but within the buffer, and outside the sanctuary, which it believes are technically possible without undue risk and still providing necessary information. To drill from the proposed location, a directional well must be drilled at an angle that represents the limits of present technology. Information from the first well will determine whether the second well will be drilled. Information from both of these wells will be used by Chevron to decide whether to develop the Sockeye Field and where to install a platform. Chevron is proceeding with its Development Plan even though information from these exploratory wells could cause Chevron to decide against development of the field. Chevron proposes to take approximately 6 months to drill both of these wells, a longer period than usual because of the increased time necessary to drill a directional well and because of the extended testing procedures. The wells would be drilled in a water depth of 720 feet.

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New development shall:

"...(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development."

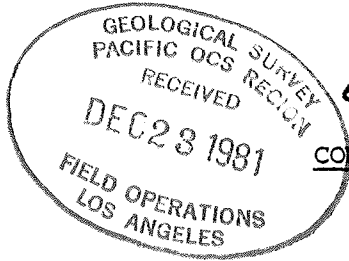
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Chevron representatives assert that ARB's modelling results for NOx are overly conservative and unrealistic. Using reasonable worst-case assumptions, Chevron claims the NOx emissions result in a NO₂ impact that is much smaller than ARB predicts. Further, Chevron states it is NO₂ that can cause health problems; NOx can create ozone, "smog". Chevron believes that the impact of the emissions from the drilling activities is less than that from an onshore source that is considered insignificant by the Santa Barbara County Air Pollution Control District regulations. Finally, Chevron claims that ARB has presented no evidence to show that the ozone problem is exacerbated from emissions of NOx from the drillship. Until a more sophisticated analysis of the interaction between NOx, NO₂ and ozone is made for the Santa Barbara Channel area, Chevron asserts the ARB claim of NOx emission impacts on ozone is without basis.

The Commission has considered the positions of both Chevron and the ARB and finds that there is an effect on air quality from drilling emissions and steps should be taken to mitigate these impacts. However, these steps have not been identified at this time. The Commission finds that Chevron's efforts to fund a study to investigate means of reducing NOx emissions from drilling activities indicates a good faith effort by Chevron to address the air quality problem. Further, Chevron has agreed to abide by the results of the study and to implement any mitigation measures identified by the study. The Commission adopted a resolution on January 6, 1982 setting forth policies for dealing with air quality issues during the course of the study. This proposal by Chevron is consistent with that policy which is included as Attachment 5 and incorporated in these findings. Therefore, the Commission finds that the proposed project is consistent with Section 30253 of the Act.

D. Oil Spill Risks from Vessel Collision. Chevron's proposed exploratory wells are located within the buffer zone of the northbound traffic lane of the Vessel Traffic Separation Scheme in the Santa Barbara Channel. (Exhibits 1, 2) The drilling site is about 4 miles northwest of the "dog leg", or bend, in the VTSS. A minimum of 3 miles from the dog leg is necessary as a margin of safety to allow vessels to make late turns in the bend and still return to the sealane before reaching the drillship. (pers. communication P., Reese)

Section 30232 of the Act requires protection against the spillage of crude oil, petroleum products and other hazardous substances, as set forth in Attachment . The Commission must assure that an approved project can meet that requirement. A related and more specific requirement applies to coastal-dependent industrial facilities (specifically platforms and islands) and is found in Section 30262(d) of the Act which states:



CALIFORNIA COASTAL COMMISSION

631 Howard Street, San Francisco 94105 — (415) 543-8555

CONSISTENCY CERTIFICATION AND STAFF RECOMMENDATION

P0205
Santa Clara
P-0205
12/3/81
POE

NOTED-DUNAWAY

Consistency Certification CC-9-81

3 Month Period Ends: 1-7-82

Chevron USA, Inc.

APPLICANT FOR FEDERAL PERMITS:

U.S. Geological Survey Exploratory Well Drilling Permit; OCS Exploration Plan; U.S. Coast Guard Approval of U.S. Army Corps of Engineers Permit Application

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FEDERAL PERMIT ACTIVITY LOCATION:

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PUBLIC HEARING AND VOTE:

Public hearing and possible action at the Commission's January 6-8, 1982 meeting in San Francisco

SUBSTANTIVE FILE DOCUMENTS:

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2. Chevron Amended Exploration Plan for Wells P-0205 #3 and 4, Santa Clara Unit Area
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STAFF NOTE: CONSISTENCY

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STAFF RECOMMENDATION

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The California Air Resources Control Board (ARB) has reviewed the proposed exploratory well drilling operations of Chevron and finds that the drillship emissions would violate onshore state and federal ambient air quality standards, and that mitigation measures are available. ARB studies submitted to the Executive Director in a letter dated November 12, 1981 documented the potentially significant effects of exploration on OCS P-0205. These studies indicate that oxides of nitrogen (NOx) are transported onshore by prevailing winds. The resulting increase in NOx concentration is predicted to exacerbate an existing ozone problem. The ARB studies also contend that reasonable mitigation measures are available to Chevron to either reduce the drillship emissions or to offset the onshore effects by reducing the emissions from existing sources or subsidies to mass transportation. The ARB, therefore, recommends that the Commission object to Chevron's existing proposal.

Chevron representatives assert that ARB's modelling results for NOx are overly conservative and unrealistic. Using reasonable worst-case assumptions, the NOx emissions result in a NO₂ impact that is much smaller than ARB predicts. It is NO₂ that can cause health problems; NOx can create ozone, "smog". Chevron believes that the impact of the emissions from the drilling activities is less than that from an onshore source that is considered insignificant by the Santa Barbara County Air Pollution Control District regulations. Finally, Chevron claims that ARB has presented no evidence to show that the ozone problem is exacerbated from emissions of NOx from the drillship. Until a more sophisticated analysis of the interaction between NOx, NO₂ and ozone is made for the Santa Barbara Channel area, the ARB's claim of NOx emission impacts on ozone is without basis.

The Commission has considered the positions of both Chevron and the ARB and finds that there is an effect on air quality from drilling emissions and steps should be taken to mitigate these impacts. However, these steps have not been identified at this time. The Commission finds that Chevron's efforts to fund a study to investigate means of reducing NOx emissions from drilling activities indicates a good faith effort by Chevron to address the air quality problem. Further, Chevron has agreed to abide by the results of the study and to implement any mitigation measures identified by the study. Therefore, the Commission finds that the proposed project is consistent with Section 30253 of the Act.

D. Oil Spill Risks from Vessel Collision. Chevron's proposed exploratory wells are located within the buffer zone of the northbound traffic lane of the Vessel Traffic Separation Scheme in the Santa Barbara Channel. (Exhibits 1, 2) The drilling site is about 4 miles northwest of the "dog leg", or bend, in the VTSS. A minimum of 3 miles from the dog leg is necessary as a margin of safety to allow vessels to make late turns in the bend and still return to the sealane before reaching the drillship. (pers. communication P. Reese)

Section 30232 of the Act requires protection against the spillage of crude oil, petroleum products and other hazardous substances, as set forth in Attachment . The Commission must assure that an approved project can meet that requirement. A related and more specific requirement applies to coastal-dependent industrial facilities (specifically platforms and islands) and is found in Section 30262(d) of the Act which states:

...(d) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, determined in consultation with the United States Coast Guard and the Army Corps of Engineers.

Section 30262 and Section 30232, read together, require the Commission to consider whether the location of permanent and temporary offshore drilling structures within the buffer zone of the northbound VTSS in the Channel present a hazard to vessel traffic and a potential subsequent oil spill from vessel collision with the drillship. The Commission will undertake a comprehensive review of this matter because it is obligated to carefully consider coastal-dependent industrial facilities according to the requirements of Section 30260 of the Act. Section 30260, discussed more fully in Section G, requires the Commission to further consider approval of projects even though they may be inconsistent with other Coastal Act policies, such as Section 30232. Section 30260 subjects a project to three tests - one of which concerns maximum feasible mitigation. Thus, a coastal-dependent industrial project which is not approvable may be considered for approval if it provides maximum feasible mitigation. In an effort to determine both the hazards to shipping from OCS drilling activities and the ways to mitigate such hazards, additional background to this Commission's findings is essential.

1. Previous Commission Position. The Commission objected to Chevron's consistency certification for the original OCS Plan of Exploration for OCS P-0205, partially because of the location within the buffer zone. The U.S. Coast Guard had made no objection to this location but the Commission nevertheless objected based on testimony from the shippers that a hazard to navigation would be created by the mere presence of a drillship so close to the sea lane. Since that time two studies have considered this matter in some depth. These studies are important to the Commission's consideration of this certification because they suggest some measures or requirements which may make this project consistent with Section 30260 by incorporating maximum feasible mitigation. Therefore, these studies will be addressed in some detail.

(a) National Maritime Research Center (NMRC) Study. In an effort to resolve what measures constitute maximum feasible mitigation and to determine the hazards to shipping, the Commission funded the NMRC through CEIP to do a study, for \$298,000. The study included a review of risks presented by drilling near the lanes. The staff presented a briefing to the Commission on the results of this study at its last meeting, December 13, 1981. The study concludes:

"The presence of even temporary structures (e.g. drillships, drilling rigs, or other resource recovery-related obstacles) within 500 meters of the sea lane poses some threat. While mitigation measures detailed below will reduce this threat, there is not adequate information at this time to conclude that it would be reduced to an acceptable level." (emphasis added)

Further, "permanent structures should not be sited within 500 meters of the boundary of a Traffic Separation Scheme lane in order to maintain the integrity of the established lane width. The erection of two structures on opposite sides of a traffic lane so as to form a "gated" configuration should not be permitted if either structure would be sited within 1000 meters of the nearest lane boundary (but not closer than 500 meters in any case), no structure should be permitted to be erected on the opposite side of the traffic lane within 1000 meters of the opposite boundary for a distance of at least two nautical miles in either direction along the lane from the initial structure."

The NMRC study further proposes measures that would reduce, not eliminate, the risks presented. Because of the uncertainty behind the recommendation on drilling within the buffer zone, NMRC recommended that "further study" should be made to investigate the sufficiency of these proposed mitigating measures and their application to temporary structures located closer than 500 meters to the traffic lane." The study discusses mitigating measures such as 24-hour radar surveillance by a qualified radar observer on board to observe passing ships and immediate access to VHF radio communication equipment to permit contacting these ships. In other words, the study did not conclusively find that all hazards could be eliminated where drillships operate within 500 meters of the sea lanes, but did suggest mitigation measures that could be applied to reduce these hazards.

(b) "White Paper" Study. A second study done since the Commission's objection to the original POE for OCS P-0205 concerns the earlier objection by the shipping organizations. The Western Oil and Gas Association (WOGA), in cooperation with the Pacific Merchant Shipping Association and the Los Angeles Steamship Association, published a position paper, called the "White Paper", on the Santa Barbara Channel sea lanes. Briefly, the statement recommends that no permanent drilling rigs, that is, platforms, be permitted within 500 meters of the traffic lanes but that exploratory structures be allowed in all areas of the Channel except in the sea lanes and the fairway approach to Port Hueneme. Six conditions are recommended for siting temporary rigs in the buffer zone:

1. Anchors and equipment shall be submerged at least 100 feet below the sea lane water surface;
2. The drilling vessel should have 24-hour radar VHF and radar transmitting and receiving capability;
3. The drilling vessel should have 24-hour radar surveillance;
4. Temporary drilling vessels shall be at least three miles apart from one another;
5. Drilling vessels should have proper lighting and adequate sound signals, prescribed by International Law; and
6. The radio and radar operator should be properly trained and capable of identifying approaching vessels so that the operator may attempt to contact any vessel that appears to be approaching close to the drilling rig

The White Paper represents a significant departure by the shippers from their previous position taken before the Commission against the location of drilling rigs in the VTSS buffer zone. The shippers believe that with the safeguards taken above, the risk to navigating vessels is reduced to an acceptable level.

2. Coast Guard Position. The Coast Guard submitted a letter to staff setting out its criteria and conditions for drilling rigs in buffer zones. (Attachment 2). First, it is important to remember that buffer zones are a concept unique to Southern California and exist nowhere else in the country. The Coast Guard established the buffer zones to enhance navigation safety in the Channel and to respond to concerns of Californians regarding conflicts between OCS oil drilling activities and navigation. The Coast Guard believes that drilling can safely take place within the buffer zones if several conditions are met. The Coast Guard would object to a proposal for drilling within 500 meters of the sea lanes unless the proposal meets the following tests:

- a) Has the need to drill in the buffer zone been satisfactorily established both geographically and economically? The Coast Guard relies on the U.S. Geological Survey to make this determination. If there is any way the oil company applicant can feasibly obtain desired results by drilling outside the buffer zone, the Coast Guard will not approve the buffer location.
- b) The drilling site must be as far from the edge of the sea lane as possible.
- c) No drilling within the buffer can occur if a "gated" situation exists; in other words, if other structures, whether permanent or temporary, are located within 1000 meters of the opposite side of the lane for a distance of two miles.

If the drilling proposal can satisfy the above requirements, the Coast Guard then will apply the following conditions:

- a) A Notice to Mariners, at least 60 days in advance of the drilling start-up, and preferably 120 days, for any drilling activity located within two miles of the traffic lane.
- b) Class A navigation aids must be used, including four 5-mile visibility quick-flashing lights and a 3-mile audibility foghorn;
- c) No buoys permitted within the lanes themselves;
- d) Chains from the drillship to the anchors must be at least 100 feet below the surface of the lane.

The U.S.G.S. and the Coast Guard have a Memorandum of Understanding to allow inspections to enforce these conditions. If these conditions are not met, the company is fined \$100,000 per day of violation.

The Coast Guard also considers whether the buffer zone is adjacent to an inbound or outbound lane. If the outbound lane is the one affected, the risk to navigation can be reduced through a special notice to all captains leaving southern California ports advising them of the location of a drilling rig in the buffer zone in the Channel.

The Coast Guard requires Class A navigation aids on every drillship and platform, regardless of location. Therefore, this is not a special condition for this proposal. The Coast Guard also routinely boards vessels in the Ports of Los Angeles and Long Beach on a random basis to enforce its navigation requirements, such as checking that radar and radio equipment are in working order and that charts are updated. These inspections, then, will be in force during Chevron's proposed exploratory drilling.

3. Get Oil Out, Inc. Get Oil Out continues to urge the Commission to object to locations of drilling rigs located 1000 meters of the sea lane. This position is based on the NMRC study and past positions of shippers.

4. Moving the Sea Lanes. The Coast Guard has indicated that it will consider moving the VTSS for the entire Santa Barbara Channel one-half mile south if Chevron decides to develop the Sockeye Field. By moving the lanes, Chevron will be able to place a platform directly over the center of the field and produce the field in the most efficient manner from Chevron's point of view. If the lanes are not moved, a platform would have to be a) located in the center of the sea lane if it is placed directly over the center of the field, a location not previously permitted by the Coast Guard; or b) located outside of the VTSS with all wells slant-drilled to extract the oil and gas, and possibly a second platform to extract oil from the other side of the field.

Chevron is proceeding with its plans to develop the Sockeye Field even though it is not certain it will ultimately develop the field and install a platform. Results from the two exploratory wells proposed in the present consistency certification will determine whether, in fact, the extent of the oil and gas resources justify the expense of constructing and installing a platform. If these two wells yield disappointing results for Chevron, no platform will be installed and the sea lanes will not be moved.

The Commission supports the concept of a Vessel Traffic Separation Scheme and is aware of the high degree of compliance with the VTSS by mariners through the Santa Barbara Channel in the thirteen years since the VTSS was first established. Moving the lanes could significantly reduce the level of compliance because mariners may not become aware of the change immediately. Also, moving the lanes to accommodate a single company's Plan of Development sets a precedent that would allow similar changes in the future for other Plans of Development. Continual lane changes will lead to confusion among the mariners as to where the VTSS is and non-compliance with the VTSS.

The "White Paper", discussed above, was written to address the problem of multiple development plans. The Coast Guard, a participant in the study, has indicated that if the lanes are moved, it would be a "one-time-only" modification of the VTSS that would meet concerns of all lessees in the Channel and would be done only if Chevron decides to develop the Sockeye Field.

The Commission finds that moving the VTSS is an extraordinary measure that, if done should only be done once, but not done for exploratory activities. Maintaining the existing VTSS is the best way to ensure the highest degree of compliance by mariners. Further, the Commission finds that Chevron's drilling the two proposed exploratory wells may eliminate the need for moving the lanes if sufficient reserves are not found in the Sockeye Field to justify its development. To allow drilling in the buffer zone now may avoid moving the VTSS in the future.

5. Other Possible Mitigation Measures. Other steps can further reduce risks to navigation resulting from the siting of the drillship in the buffer zone. Chevron has agreed to issue a special notice to each captain leaving the southern California ports to advise him of the location of the drillship and include a diagram of the exact location of the rig. Chevron will work with the pilots' association to distribute this flyer. This notice would be in addition to the notice to mariners sent by the Coast Guard to all captains around the world 60-120 days in advance of the drilling. Because the Special Notice would be handed to the navigators immediately before their departure from the port up through the Santa Barbara Channel, it will be more effective than the notice to mariners in reaching all navigators travelling past the rig. The notice would be approved by the Executive Director before it is distributed.

Chevron has also agreed to track by radar every vessel passing the drill ship while it is on location, to determine the maneuvers necessary to clear the rig by a safe distance. Although this is not a mitigating measure, it would provide data to analyze navigation patterns of passing vessels. This type of recording responds to the risk management study's finding that "further study should be made to investigate the sufficiency of these proposed mitigating measures and their application to temporary structures located closer than 500 meters to the traffic lanes." (p. 9-3) The "proposed mitigating measures" to be studied would be required of Chevron by the U.S. Coast Guard. Under current practice, the radar observer is not an employee of Chevron but is under contract to the drillship owner and is a member of a union from which a vessel radar observer must be drawn. The radar observer, therefore, would be independent of Chevron.

Both the radar observers chosen and the content of the "further study" must be approved by the Executive Director before drilling can occur. The study shall include a questionnaire distributed to all captains leaving southern California ports to travel north through the Channel, a log of observations kept by the radar observer, and records of radar trackings of vessels approaching from the south of the drillship.

The Commission finds that Chevron's Plan of Exploration, with the added mitigating measures outlined by the Coast Guard as well as those detailed above will implement the requirement of maximum feasible mitigation as required in Section 30260. This is further discussed in Section G. The Commission notes, however, that this finding should be viewed as an exceptional case because it serves the need to provide further study, as indicated in the risk management study, to determine whether the Commission should permit drilling in the buffer zone of the VTSS. This finding is made under Section 30260, as discussed in Section G, "Industrial Development", since the project would not comply with Section 30232, "Protection Against the Spillage of Crude Oil", discussed in Attachment .

Approval represents a special effort to provide further consideration of the hazard to shipping presented by OCS activities and the measures necessary to reduce the hazard. Any future projects located within the VTSS buffer zone will be thoroughly re-examined. Therefore, this finding of consistency should not be interpreted as a change of Commission position on the location of exploratory drilling in VTSS buffer zones. Company applicants should continue all efforts to drill outside those zones.

E. Protection of Marine Resources. Section 30230 of the Coastal Act provides for protection of marine resources:

"Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Use of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes."

The Commission has a long history of concern about drilling within the marine sanctuary boundaries and has repeatedly advised the federal government and oil companies that drilling within the Channel Islands National Marine Sanctuary would be inconsistent with numerous policies of the Coastal Act. In June and August of 1981, the Commission submitted extensive comments to NOAA protesting its suspension of federal regulations prohibiting drilling in marine sanctuaries. The Commission notes that Chevron has responded to the Commission's concerns by moving the proposed wells outside the marine sanctuary boundary. However, because of the inadequacy of oil spill cleanup and containment equipment, as discussed in Attachment 3, the Commission cannot find that the proposed project meets the requirements of Section 30230 because it cannot find that marine resources are maintained.

F. Commercial Fishing. Section 30231 provides:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained, and where feasible restored....

Lease 0205 is within a trawling and purse-seining commercial fishing area and is within Fish Block 665. Spot prawns and anchovies are the primary targets of the trawling and purse-seining. Most of the fishing activities occur within 3-6 miles offshore the north side of Anacapa Island. Compared to other commercial fishing areas in the Channel, the yield for spot prawns in Block 665 is moderate, and slightly higher for anchovies. The heaviest fishing months of the year for the prawns is summer to late fall, and during the fall for anchovies.

There will be conflicts between the proposed exploratory drilling and commercial fishing activities--drilling could remove up to two miles square from commercial trawlers for up to six months, from late January through June or July. Also, the threat of oil spills poses danger to commercial fishing activities.

Based on discussions with the Department of Fish and Game, the best months in which Chevron could drill to interfere least with the spot prawns and anchovy fishing, would be in the winter, spring and early summer. Chevron is proposing to drill during these months of least conflict. Also, Chevron's amended plan is for drilling beyond six miles of Anacapa Island, further reducing conflicts with commercial fishing activities. However, because OCS exploratory drilling will conflict with commercial fishing and remove fishing space, the Commission cannot find that the proposal is consistent with Section 30231 of the Coastal Act.

G. Industrial Development. Coastal dependent industrial development is first required to meet all other applicable policies of Chapter 3. If coastal dependent industrial development can meet the other applicable policies of Chapter 3, then the less strict standards of Section 30260 do not apply. If coastal dependent industrial development cannot meet the other policies of Chapter 3, then it may only be accommodated consistent with three specific requirements of Section 30260. As indicated in the earlier findings, this project fails to meet the requirements of Sections 30230, 30231, and 30232. Therefore, it is necessary to discuss the three requirements of Section 30260.

The first requirement of Section 30260 allows coastal dependent industrial facilities if alternative locations are either infeasible or more environmentally damaging. Alternative locations to drill the two wells would require slant drilling at an angle considered unsafe by the U.S. Geological Survey, or a location within the sea lane presenting an even greater potential risk of collisions between the drillship and other vessels than the proposed location in the buffer zone (see Attachment 4, memo from staff geologist, Richard McCarthy). Drilling any farther from the oil field being delineated would not yield the data Chevron needs to determine whether sufficient oil and gas reserves exist to justify installation of a platform. For these reasons, the Commission finds that alternative locations are infeasible and less desirable. (See Exhibit 3, showing the drilling proposal).

The second requirement of Section 30260 concerns the public welfare. Clearly, it is in the interest of the public welfare to search for domestic sources of oil and gas. However, this is not the only consideration in determining whether the project meets the public welfare test. Commercial fishing activities, recreational uses, navigation, and biological resources must also be considered as significant aspects of the public welfare. The Commission has carefully weighed these competing factors in its decision as indicated below.

The proposed well would not be located within a designated biologically sensitive area or sanctuary, nor would it affect beach use unless an oil spill occurs. However, exploratory drilling would conflict with commercial fishing activities for about six months. As stated above in Section F, the six months in which Chevron proposes to drill, January through June or July, will be relatively light fishing months for the immediate area around the drilling site. Also, the drill site is beyond the primary prawn and anchovy commercial fishing area. Because the project will have the least effect during the months of proposed drilling, and is beyond the heavier-fished areas, commercial fishing activities will not be significantly curtailed. Therefore, the Commission finds that the project as revised meets the public welfare test in regard

As discussed in Section D, navigation could be significantly affected by the proposal to drill within the buffer zone of the Vessel Traffic Separation Scheme. The Commission's policy to discourage drilling within the VTSS buffer zone unless extraordinary circumstances exist is based in part of the public welfare to be served by navigational safety. In this proposal, Chevron's drilling would serve several purposes: 1) It would determine whether the Coast Guard will need to proceed with a tentative proposal to move the VTSS in the Santa Barbara Channel to accommodate Chevron's plans to develop the Sockeye Field; 2) It would determine whether sufficient oil and gas resources exist in the Sockeye Field to justify proceeding with plans to develop and produce the field; and 3) It would provide information through radar tracking and recording movements of passing vessels that the NMRC study concluded was necessary to determine whether exploratory drilling activities could safely occur within 500 meters of a VTSS.

The Commission finds that the above three factors further the public welfare in providing further information on navigation safety, providing the basis for a conclusive finding by the Commission on exploratory drilling within the buffer of a VTSS and thereby giving clear direction to oil company applicants, and determining whether oil and gas exist in sufficient quantities to develop and thereby increase the domestic supply.

The third requirement of Section 30260 is that adverse impacts be mitigated to the maximum extent feasible. By submitting this amended Plan of Exploration, Chevron has moved its original drilling site to a location outside of the Channel Islands National Marine Sanctuary, thereby mitigating to the maximum extent feasible potential impacts on the Sanctuary's resources. Further, by proposing to issue a Special Notice to all mariners and to agree to measures outlined in the NMRC study and the Coast Guard to minimize the risks of collision between passing vessels and the drillship, Chevron has mitigated to the maximum extent feasible the hazards to navigation. The Commission has discussed mitigation more fully in Section D and the Section D findings are incorporated here.

Chevron's provision of the best available onsite oil spill equipment, as discussed in Attachment, also meets the requirement of mitigation to the maximum extent feasible. The Commission will continue to examine the issue of oil spill equipment and may require additional protection in the development stages of this project. The Commission, therefore, finds that Chevron's Plan of Exploration for OCS P-0205, and related federal permits, meet the requirements of Section 30260 of the Act.

H. NPDES Permit. Because the proposed location for the exploratory drilling is beyond 1000 meters of the state's coastal zone, the Commission will not review the consistency of the activities permitted by the Environmental Protection Agency's National Pollutant Discharge Elimination System permit. At the March 21, 1980 meeting, and again at the September 17, 1981 meeting, the Commission determined that discharges of drill muds and cuttings from exploratory drilling operations conducted more than 1000 meters from the state's three-mile boundary cannot be shown at this time to affect the coastal zone. Therefore, no consistency review is required for the discharge activities in this consistency certification.

APPLICATION BY
CHEVRON U.S.A. INC.

OCS-P- 0205

46N-- 61 W

Lease Map 6B

EXHIBIT NO. 1

APPLICATION NO.
CC-9-81



California Coastal Commission

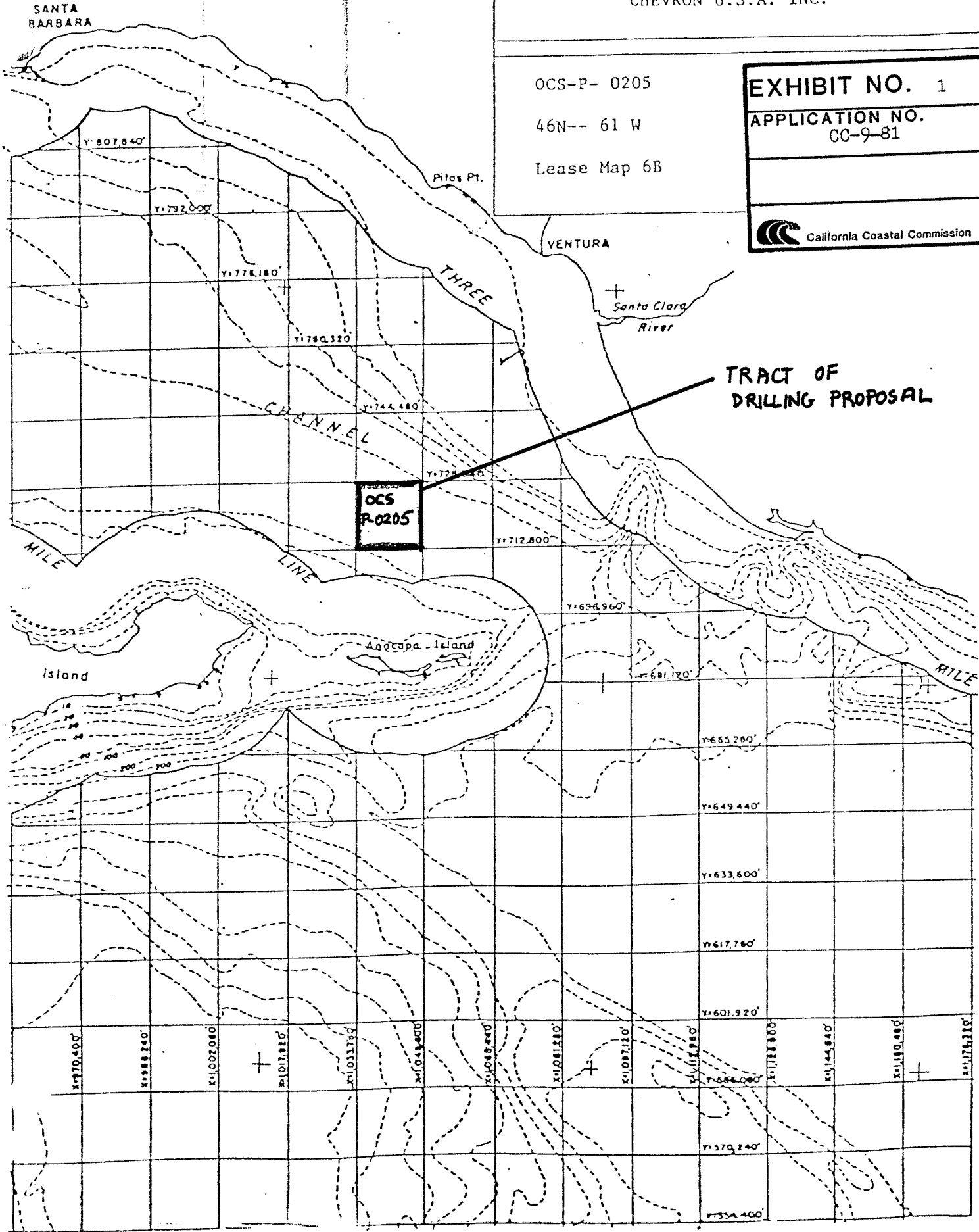

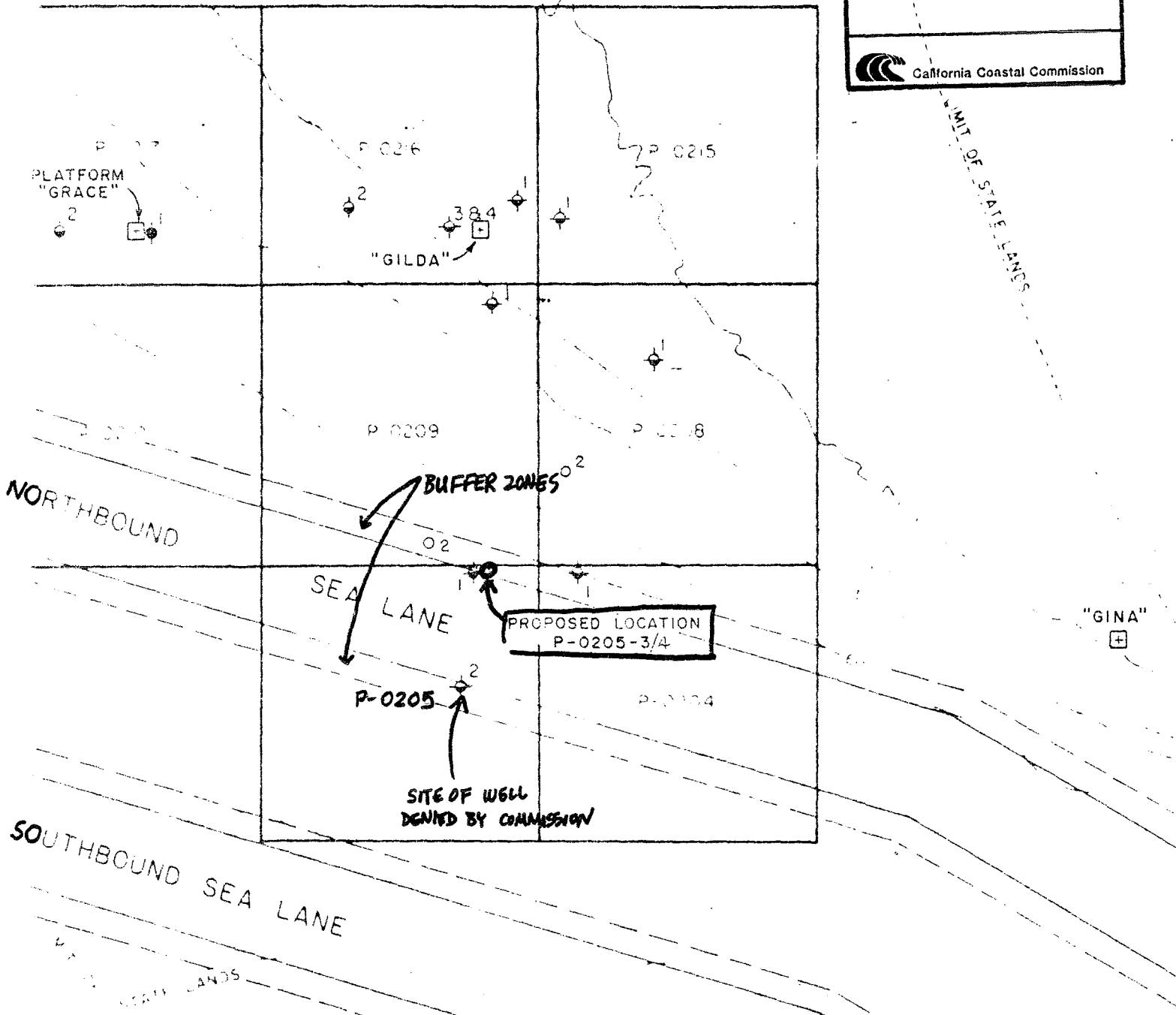


EXHIBIT NO. 2
APPLICATION NO. CC-9-81
 California Coastal Commission

760,320



Legend

- Well Location
- ◐ Uncompleted Idle Well
- ◑ Uncompleted Abandoned Well
- ◒ Completed Idle Well

SCALE:
1" = 8000'

EXHIBIT NO. 3	APPLICATION NO. CC-9-81	California Coastal Commission
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SOUTH

NORTH

← CHANNEL IS. MARINE SANCTUARY →

← SANTA CLARA UNIT →

← P-0205 → | ← P-0209 →

| BUFFER ZONE | ← SEA LANE → | BUFFER ZONE |

P-0205-2 (IDEAL LOCATION) P-0205-1

SEA LEVEL

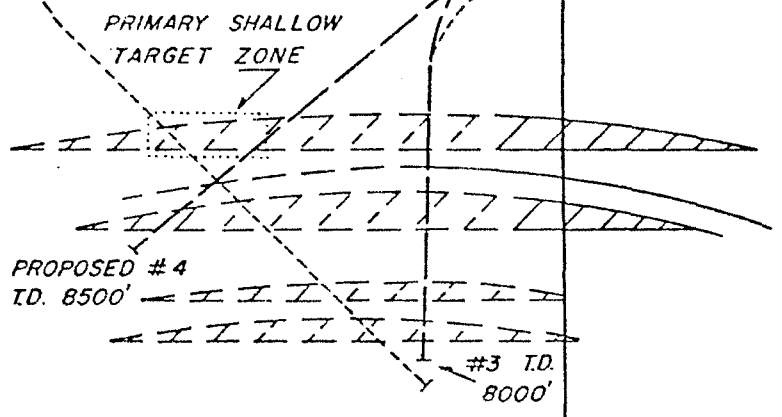
ORIGINAL P-0205-3 COURSE (NOT DRILLED)

ALTERNATIVE #3 COURSE (UNFEASIBLE)

FIGURE 3
DIAGRAMMATIC CROSS-SECTION
SOCKEYE FIELD
SHOWING P-0205-3 & 4 LOCS.

LEGEND
HYDROCARBON ZONES
POTENTIAL SEMI-PROVEN

SCALE
0 2000 ft. 4000 ft. 1 mile



T.D. 9000'
(P-0205-2)

T.D. 12,801'
(P-0205-1)

DR. BY S.M.N.



Chevron U.S.A. Inc.
2120 Diamond Boulevard, Concord, California
Mail Address: P.O. Box 8000, Concord, CA 94524

ATTACHMENT 1

Edward B. Scott II
District Land Supervisor
Outer Continental Shelf
Land Department, Western Region

July 8, 1981

EXPLORATION PLAN
LEASE OCS-P 0205
WELLS P-0205 #3 & P-0205 #4
SANTA CLARA UNIT

Mr. Michael L. Fisher
Executive Director
California Coastal Commission
631 Howard Street
San Francisco, CA 94105

Dear Mr. Fisher:

Chevron U.S.A. Inc. will be resubmitting the subject Exploration Plan.

This is necessitated by the Commission's previous (August 19, 1980) objection to Chevron's consistency certification for the Plan. After considering the Commission's concerns with respect to the original submission and after re-evaluating the necessity for drilling an exploratory well or wells to properly delineate the Sockeye Field, the resubmission proposes a No. 3 well and a No. 4 well which would be drilled depending upon the results obtained from No. 3. The surface location is identical for each of the proposed wells and is over six nautical miles from Anacapa Island. It will take 60-90 days to drill, test and abandon well No. 3. If well No. 4 is drilled it will immediately follow No. 3 and require an additional 60-90 days.

The Commission premised its objection to the original submission on the following bases:

1. Since the proposed surface location was in the buffer zone to the northbound sea lane, the Commission concluded that a substantial hazard to navigation was created.
2. Given the substantial hazard to navigation mentioned in #1 above, the Commission felt that the perceived risk of a collision between a vessel in the northbound sea lane and the drill ship created an unacceptable risk of an oil spill which, in turn, could endanger the brown pelicans on Anacapa Island.
3. The Commission concluded that the southerly extent of the Sockeye Field could be delineated from a platform on the field's northerly end.

Taking each of the above points in light of this resubmission, Chevron asserts that the desired delineation wells can be drilled in a manner consistent with the California Coastal Management Program.

On the question of whether a location in the buffer zone to the sea lane creates a substantial hazard to navigation, reference should be made to the U.S. Coast Guard's position with respect to the originally proposed buffer zone location. The Coast Guard had carefully considered such location and had stated that it did not object to it. Such statement of "no objection" was made in view of the mitigation measures which can be taken during drilling. Contrary to the conclusion reached by the Coastal Commission, it was not the Coast Guard's intention that its lack of objection be interpreted as implying that the proposed drilling location "could create a substantial hazard to navigation safety" (see the attached copy of the Coast Guard letter dated August 15, 1980). The mitigation measures which will be taken in connection with the subject exploratory wells are:

- a. The drill ship will be equipped with Class A aids to navigation.
- b. Mariners will be notified of the location of the drill ship in both the broadcast and published Notice to Mariners.
- c. The radar/radio equipment on the drill ship will be manned 24 hours per day.

As revised, the P-0205 #3 surface location, which will also be the surface location for P-0205 #4, is still a buffer zone location. This is necessary from a geological and technological perspective. The drilling angle from a surface location outside the buffer zone would be too steep for testing purposes and would prevent Chevron from reaching and testing the desired geological horizons. (See the attached diagram.)

It would be consistent with a recommendation in the "Santa Barbara Channel Risk Management Program" (April 1981) to permit Chevron to operate in this buffer zone. That recommendation reads, in pertinent part, as follows:

"Drill ships, drilling rigs, or other resource recovery-related obstacles should be permitted to operate up to the boundary of an existing traffic lane (but not within the lane itself)... provided that, if the obstacle is located within 1000 meters of the lane edge, a clear and unobstructed zone should be required outside the opposite land boundary of not less than 1000 meters in width and extending in either direction along the traffic lane for at least two nautical miles from the drill ship..."

The surface location for the proposed exploratory wells, as well as the originally proposed location, does not create the "gated" situation which the proviso contained in the above-quoted recommendation is designed to protect against. There will be a clear, unobstructed zone beyond the opposite edge of the northbound sea lane. This zone will extend through the entire width of the separation zone and the southbound lane. It will also traverse the northbound lane for much more than two nautical miles in either direction.

In view of the above discussion on the hazards to navigation or the lack thereof, one can see that the subject exploratory wells can be drilled in a safe and environmentally sound manner. The risk of collision will be mitigated to the maximum extent feasible, which in turn reduces the risk of an oil spill to an acceptable point. In the unlikely event of a collision and a resultant oil spill, the following factors should be emphasized:

1. The new surface location is 6.83 nautical miles away from Anacapa Island, which is beyond the 6 nautical mile limit which the Commission regards as a necessary distance from Anacapa Island to protect the brown pelicans.
2. As recognized at page 9 of the staff recommendation, adopted by the Commission at its August 19, 1980 meeting (hereinafter called the "original staff recommendation") existing oil spill containment and clean-up equipment "happens to represent the most up-to-date available". This finding has lead the Commission to find that mitigation to the maximum extent feasible is provided by such equipment. With respect to proper deployment of the requisite oil spill containment and clean-up equipment, Chevron has demonstrated subsequent to the drill referenced in the original staff recommendation that the boom can be fully and timely deployed. Successful boom deployment exercises have been witnessed by the USGS, Mr. J. K. Traub of the California Department of Fish and Game and Mr. B. E. Baird of the Commission.

Chevron's position is that the subject Exploration Plan, as revised, manifests that the proposed drilling operations can and will be conducted in a manner consistent with the requirements of the CCMP. It would not be necessary for the Commission to rely upon Section 30260 of the Coastal Act in order to concur in Chevron's consistency certification. However, if the Commission feels that this is necessary, Chevron asserts that the requirements of Section 30260 are satisfied and that the proposed operations can go forward. As stated at page 11 of the original staff recommendation, the Commission interprets Section 30260 as meaning that Coastal-dependent activities which the Commission concludes do not satisfy the other provisions of the CCMP may proceed if: (1) alternative locations are infeasible or more environmentally damaging, (2) to do otherwise would adversely affect the public welfare and (3) adverse environmental effects are mitigated to the maximum extent feasible.

As stated above, there are no alternative surface locations for the proposed exploratory wells from which Chevron can achieve the necessary field evaluation. Surface locations from outside the buffer zone would result in drilling angles too steep to permit adequate testing of the horizons penetrated by the well bore. As recognized at page 11 of the original staff recommendation, the State Lands Commission and the U.S. Geological Survey have concluded that drilling angles which would result from locations outside the buffer zone become so steep as to render the drilling operations "unsafe".

With respect to the feasibility of delineating the Sockeye Field from a platform located at the northerly end thereof, this is not feasible. The proposed exploratory wells are absolutely necessary to proper delineation of the Field and absent drilling such wells Sockeye development may not occur. Chevron feels that only one platform can be justified for Sockeye development and that these wells are required before a final decision can be made to install such platform. Contrary to the statement made at page 12 of the original staff

recommendation that a large platform could be constructed "assuming that the southern part of the field contains economic quantities of oil given the exploration information to date", Chevron cannot make such an assumption, which again emphasizes the necessity for the proposed wells.

With respect to mitigating adverse environmental effects to the maximum extent feasible, the following are the critical factors:

1. Chevron has moved the surface location to a point 6.83 nautical miles away from Anacapa Island, which will provide additional protection against any perceived risks to the brown pelican.
2. As previously recognized by the Commission (see page 9 of the original staff recommendation) the oil spill containment and clean-up equipment to be used is the most up-to-date available and, as stated earlier, Chevron has demonstrated an ability to properly and timely deploy such equipment.
3. The proposed surface location satisfies the requirements of the recommendation contained in the Risk Management Program in that a "gated" situation will not be created by locating the drill ship in the outer buffer zone to the northbound sea lane.
4. In accordance with Coast Guard requirements, the drill ship will be equipped with Class A aids to navigation, its radar/radio equipment will be manned 24 hours per day and mariners will be fully apprised of the ship's location through the broadcast and published Notice to Mariners.

The final factor to be considered in determining whether the proposed operations satisfy Section 30260 is whether approving them would adversely affect the public welfare. As stated above, the proposed wells are critical to a determination as to whether Sockeye Field development will proceed. As stated at page 13 of the Commission's original staff recommendation, the "national need for domestic oil and gas production is not disputed by the Commission". If this is the case, the proposed wells must be approved because without them the Sockeye Field may not be developed. Contrary to the Commission's earlier assertion, the southerly part of the field cannot be evaluated from a platform located at the northerly part of the field. Again, Chevron must know what is in the southerly portion of the field before a final decision on the installation of a production platform is made.

Based upon the above discussion, it is Chevron's position that the proposed operations are consistent with the CCMP. In particular, Chevron feels that the environment is protected to the maximum extent feasible, that the risk of an oil spill has been minimized to the maximum extent feasible and that there is not presented a substantial hazard to navigation.

In accordance with Section 13660.10 of the California Administrative Code, Chevron anticipates that the Commission's consistency decision will be made within three months of its receipt of the subject revised Exploration Plan.

Mr. Michael L. Fisher

July 8, 1981

If you have any questions, please call Mr. D. E. Uchikura at 680-3032.

Sincerely,


Edward B. Scott

DEU:mb
cc: U.S. Coast Guard
U.S. Geological Survey



DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS:
COMMANDER (M)
ELEVENTH COAST GUARD DISTRICT
UNION BANK BLDG.
400 OCEANGATE
LONG BEACH, CA. 90822

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Ms. Mari Gottdiener
California Coastal Commission
631 Howard Street
San Francisco, CA 94105

CALIFORNIA
COASTAL COMMISSION

Dear Ms. Gottdiener:

This is in response to your request for information concerning the U. S. Coast Guard's review of Chevron USA Inc.'s Plan of Exploration for drilling one to two exploratory wells on OCS lease P-0205 in the Santa Barbara Channel wherein the drilling vessel would be sited adjacent to the outbound traffic lane of the Traffic Separation Scheme (TSS).

The purposes of the exploratory drilling are to perform tests on and to delineate the boundaries of the multi-layered deposit formations known as the Sockeye Field. The field's main body underlies the outbound lane of the TSS and its two "buffer zones" one on either side of the lane. This activity is considered necessary by Chevron in order to evaluate the reservoir characteristics, to test deeper zone layers, and to locate the southern extent or boundaries of the known oil and gas reservoirs. These operations are necessary in order for Chevron to proceed with decisions toward development of the field including where best to construct a platform.

The drilling site would be from within the "buffer zone" on the north side of the vessel traffic lane. If the second well were drilled, based upon results of the first, it would be from the same entry hole, drilling off from within it at still another slant direction. From the point of view of drilling and what is known of the field's location, the ideal site would be near the center of the vessel traffic lane.

While the Coast Guard does not issue permits for either the temporary location of the drilling or the well, we have consistently maintained a position of objection to the Federal permitting agencies and industry, in advance, to any exploratory drilling within the lanes of the Santa Barbara Channel TSS. Note that the established rules for TSS's do not preclude it. On the otherhand, slant drilling technology generally enables exploratory objectives to be accomplished under these lanes from outside of the lane.

In order to enhance safety to navigation, the drill rig and the marine environment, the Eleventh Coast Guard District established its so called "buffer zones" on either side of each lane of the internationally adopted TSS's in our District's coastal waters. These are unique to Southern California. The buffer zones exist by virtue of a condition placed in the exploratory drilling permits of the Army Corps of Engineers. This requires the applicant to give us advance notice of their desired intentions so that we become an early participant in the actions that will follow and for the accomplishment of mitigation measures. These include:

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1. Notices to Mariners: Offshore drilling has in recent years become commonplace and is a known reality to most users of Southern California waters, especially in the Santa Barbara Channel. Their locations are published in weekly Local Notices to Mariners and in regular radio Broadcast Notices. In the case of rigs in close proximity, particularly those in the TSS and buffer zones, we want written notices to commence at least or approximately 60 days prior to the event. This lead time is important for the inbound lanes. It is less important for the outbound lanes as ships receive the Notices when in port. (Note, if a rig were to be in the lane itself, IMCO requires TSS lanes to be modified and for worldwide Notices to Mariners to commence at least 60 days in advance. Again, we are discussing the locally established buffer zones in this case, not the lanes.)

2. Need: Somewhat like the IMCO criteria for allowing drilling in IMCO adopted TSS lanes, we want proof of the geological need to drill from within the buffer zones. While we are generally familiar with drilling technology, we rely upon the case-by-case examination of each site by the U. S. Geological Survey and the variables involved. This varies with the geological information of each location, including the subsurface locations of layers, test objectives, fault and gas hazard locations, safe limitations of slant drilling suited to the individual well, etc. Gaining a 100 or so additional yards away from the lane boundary can complicate the drilling operation, lengthening the time on site as well as inviting problems in the hole, further lengthening the time on site. Thus, time on site can be a trade-off factor too, in addition to the well safety aspects. The type of well itself is a factor; initial seek-and-find drilling is one thing; delineation wells are more complex. This process allows for an intelligent evaluation of the need to be in a particular spot, the results of which may or may not be the same as that desired by the applicant. Given that USGS attests to the selected spot, we are then in the position to remove our up-front objection with time to implement the added advance Notices-to-Mariners, and our additional conditions for sites within the buffer zones. This attention and examination of the Sockeye wells has been made to our satisfaction. The drill vessel is to be anchored with no portion closer than 100 yards from the lane boundary.

3. Along with the above we look to other judgemental navigational factors.

a. Our primary concern would be the presense of other rigs, etc. that might be in the vicinity the lane. In this case, none.

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b. The ability of seagoing ships to safely navigate within the lanes is pretty well a given. Upgrading of vessel rules which are applicable to both U. S. and foreign ships require up to date charts, attention to Notices to Mariners, improved steering controls, modern electronic means of navigation, that primary navigation equipment (radar, gyro and fathometer) be maintained in operational condition, and that most ships (i.e. those of 10,000 gross tons or more) must have two independent radars meeting international standards. Further is the realization that many vessels, particularly tankers, passenger ships and modern cargo ships now have the added feature of automatic collision avoidance system coupled to their radar.

c. The ability to navigate in the lane in the Sockeye Field locality is further enhanced by Anacapa Island. In addition to its lighthouse, its relatively small size with sheer rock cliffs makes it an excellent radar target for easy position fixing.

d. Drill rigs due to their large size present excellent radar targets. Their normal working lights, additional to the required lights, literally lights them up like a "Christmas Tree", readily indentifying both their presense and what they are.

4. Our other conditions include:

a. The use of fixed structure type aids-to-navigation of Class A type (the highest of 3 classes) on the drilling vessel; i.e. quick-flashing lights of 5 mile all around minimum range of visibility, and a 2 mile fog horn.

b. With regard to the vessel's anchoring system, no buoys would be allowed in the traffic lane, anchor lines which extend beneath the lane are to be at 100 feet (in this case we specified 125') below the surface, and all other buoys are to be specially marked with orange and white vertical stripes and be equipped with white flashing lights.

5. In addition to our normal requirements, Chevron also offered, and it was so agreed, to maintain 24 hour radar observation with radio capability to communicate with approaching vessels. This is an extra precaution prudent in special circumstances such as in reduced visibility due to fog. It should be noted that this is an unprecedented mitigation measure. Other additional measures/conditions were mutually discussed between the Coastal Commission Staff and the Chevron representative, including special notices to outbound vessels and a one time traffic monitoring type "study", in a sense checking or supplementing the results of the Commission sponsored study done by the National Maritime Research Center...generally referred to a the CAORF study.

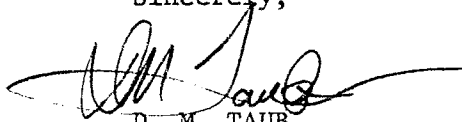
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6. It is worth noting this drill site falls within the parameters accepted by the ship operators as indicated in the recent joint shipping-tanker-oil development-industry "White paper" for drilling in the buffer zones. Its acceptability is also indicated by the CAORF study.

In conclusion, we find that the exploratory drilling operation proposed by Chevron USA Inc. would not create an unacceptable hazard to navigation, subject to the inclusion of our conditions, and therefore do not object to it. The additional voluntary mitigation measures discussed above would further enhance its safety, but are not conditions that we impose.

It is noteworthy to add that we have an interest in the results of this drilling. Our recent Port Access Route Study, mandated by the Port and Tanker Safety Act of 1978, which could lead to potential redesignations recognized the existence of this oil field and its unique location to the TSS. Thus our recommendations proposed a minor permanent relocation of the TSS away from the Sockeye Field based upon the anticipation that the field would be proven and lead to the installation of a platform for its development. We of course would want to provide an additional space margin between such a platform and the TSS, and have the opportunity to do so in this Port Access Route rulemaking project.

Sincerely,



D. M. TAUB

Captain, U. S. Coast Guard
Chief, Marine Safety Division
By direction of the District Commander

Protection Against the Spillage of Crude Oil

Regardless of the precautions taken against well blowouts and resulting spills of crude oil in the open ocean, there is always a risk of this occurring at a drill site. Such a spill may reach the coast of California and damage marine life, scenic areas, and recreational uses of the coast. Because of this risk, the proposed drilling operations must be consistent with Section 30232 of the Coastal Act, incorporated in Chapter 3 of the Coastal Management Program, which states:

"Protection against the spillage of crude oil, gas petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Oil Spill Liability

Under the OCS Lands Act Amendments of 1978, Chevron is liable for all removal and cleanup costs in the event of an oil spill plus \$35 million for damages of all kinds related to the spill. Beyond that amount, Chevron is a self-insurer.

Onsite Equipment (First Line of Defense)

Oil Spill containment and cleanup equipment stored on an exploratory drilling vessel or on a production platform is primarily designed to provide a first line defense for a major spill or to contain and clean up small spills that may occur. This equipment must be able to surround the largest areas possible within an acceptable period of time. If the equipment is too large and difficult to handle, then its purpose is defeated. The Office of Planning and Research report on Offshore Oil and Gas states, "Speed of response is critical to the success of such efforts because: oil slicks are thickest immediately after the spill occurs and thus most easily contained and removed; water-soluble toxic slick has less time to spread and move toward shore." The following list includes the equipment which the Commission has established as minimum requirements for Plan of Exploration consistency determinations in the past. The applicant has committed in its plan to include this equipment onboard the drilling vessel:

- 1) 1500 feet of open ocean oil spill containment boom;
- 2) one oil skimming device capable of open ocean use;
- 3) bales of oil sorbent material capable of containing 15 barrels of oil;
- 4) a boat capable of deploying the oil spill boom on the site at all times or within fifteen minutes of the drilling vessel; and
- 5) oil storage capacity of 29 barrels, minimum, for recovered oil.

It may be difficult to maintain a workboat or supplyboat onsite or within 15 minutes of the site during periods of adverse sea conditions exceeding 6 to 8 feet. Oil industry representatives have provided testimony to the Commission on the problems involved with mooring a boat near the drillship during these periods of adverse sea conditions. The Commission staff is currently reevaluating the oil spill equipment maintained on the site of drilling operations in the CEIP funded study of oil spill capabilities in California. The requirement of an onsite oil spill deployment

boat has been evaluated in depth in this study which is currently in the preliminary draft stage. Until the oil spill study is complete, the Commission believes that workboats and supplyboats should not be required to stay onsite in seas exceeding six feet because of the difficulty of maintaining these boats onsite under these conditions and because of the drastically reduced efficiency of oil spill equipment in seas over six feet.

Logistical problems with deploying oil spill containment boom in excess of 1500 feet would lengthen the deployment time and decrease the effectiveness of the onsite equipment. Therefore, an increase in the length of containment boom could actually be counterproductive to this first stage onsite containment effort.

Oil Spill Cooperatives (Major Spills, Second Line of Defense)

In the event of an oil spill, industry is required to notify the U.S. Coast Guard (Federla On-Scene Commander) and the State Department of Fish and Game (State operating authority) immediately, so that federal, State, and local agencies can begin to mobilize if the spill turns out to be large. However, under Federal law, the containment and removal of spilled oil in coastal or marine waters is undertaken by the party responsible for the spill, under the supervision and, if necessary, the direction of the U.S. Coast Guard. Because of this requirement, oil production companies operating in the Outer Continental Shelf belong to oil spill cooperatives which have equipment capable of dealing with large offshore spills. The oil spill cooperative used for the Santa Barbara Channel is Clean Seas. The oil spill cooperatives for the water south of Ventura include the Southern California Petroleum Contingency Organization (SCPCO) and Clean Coastal Waters (CCW). These cooperatives must be notified immediately in the event of a spill and will be called to the site if the spill is beyond the capability of the onsite equipment. The Coast Guard monitors the entire cleanup operations and if the On-Scene Coordinator thinks that the cooperative is not doing an adequate job of cleanup, the Coast Guard can provide direct aid.

Oil Spill Equipment Inspection

The U.S. Geological Survey and the applicant have made the following agreement for inspections:

"The State Agency for Oil Spill Contingency Planning, or their designated representative, may accompany the U.S. Geological Survey on unscheduled inspection or deployment exercises of the oil spill containment and recovery equipment. All unscheduled inspections or deployments will be arranged by representatives of the U.S. Geological Survey in cooperation with the State of California in conjunction with the U.S. Geological Survey's inspection program. The purpose of the inspection or deployment will be to verify the existence of the oil spill equipment and to ensure that the equipment can be deployed in an organized and timely manner. The applicant has agreed to allow state personnel on board the drilling vessel to observe the inspection or deployment exercises."

The Commission finds that the oil spill containment and cleanup equipment as provided in the proposed Plan of Exploration and consistency certification provide maximum feasible mitigation at this time and therefore concurs with the Consistency Certification of Chevron.

Concurrence by the Commission, however, is not an indication of satisfaction with the degree of protection afforded coastal resources by the oil spill containment and cleanup equipment referenced in this Plan of Exploration. The Commission's standard of review is based on the maximum feasible capacity to reduce the impacts of a spill, if one occurs. The case by case review of industry capabilities to respond to major oil spills has been difficult because of the complexity of oil spill cleanup technology and the contingency planning. The Commission is currently studying the capabilities of oil spill equipment, its location, and plans for its use along with the entire California coast. The study is being conducted in four phases, starting with evaluation of the Clean Seas oil spill cooperative in Santa Barbara (because of the high level of oil operations in this area). The first phase is now in the preliminary draft stage. The study may indicate the need to upgrade and increase standards for both onsite and onshore oil spill cleanup and containment capabilities. Such findings will be used in future consistency determinations and permit review.

State of California

Memorandum

To : Tom Tobin

Date : December 16, 1981

Subject: Chevron Well 0205-1;
Exploration PlansFrom : **California Coastal Commission**
Richard McCarthy, Staff Geologist

During the past twenty months I have had numerous meetings with technical personnel of Chevron USA to discuss the feasibility of locating exploratory well number P-0205 on the north side of the sea lane and in the buffer zone (see attached sheet). I have reviewed exploratory data, drilling data, cost projections, logs of existing wells, reservoir information, and subsurface geologic information depicting the entire play. I believe there is no feasible alternative location more distant from the sea lane because of the following points:

- Maximum useful deviation for exploratory wells is 50 to 60 degrees, depending on local conditions. Down-hole logging tools are difficult or impossible to run in holes deviated more than that amount and essential geological data cannot be obtained.
- Maximum allowable angle build-up to achieve a desired deviation is 6 degrees per 100 feet drilled. This 6 degree restriction must be maintained, otherwise a failure in the drill string or casing may occur. Because of the "double bend" (see Exhibit 3 of CC-9-81 in the Chevron program, the maximum rate of deviation is 5 degrees per 100 feet drilled.
- Extreme deviations and curvatures in a well lead to excessive friction between the drillpipe and the casing or hole wall. Caving and casing failure are common and such wells must be redrilled.
- Locating the surface location further to the north would be prohibitive in that it would not be possible to evaluate the reservoir properly due to the excessive hole deviation that would be required.
- The original surface location for well 0205 was on the south side of the sea lane. This well would have provided sufficient information to evaluate the reservoir. However, drilling from the north side of the sea lane will require two bottom hole locations (one well plus a redrill) from the same surface location to properly evaluate the reservoir.
- This plan enables Chevron to gain maximum subsurface information yet provides the minimum of on-site location time.