MINUTE ITEM

Item No. 30

30 Item

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12/19/85

CALENDAR ITEM

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RESUMPTION OF OFFSHORE DEVELOPMENT DRILLING OPERATIONS ON STATE OIL AND GAS LEASE PRC 3033

LESSEE/OPERATOR:

Union Oil Company of California
Attn: Mike Bridges
P. O. Box 6176
Ventura, California 93001

AREA, TYPE LAND AND LOCATION:

State Oil and Gas Lease PRC 3033 contains approximately 2113 acres of tide and submerged lands located approximately 2.5 miles west offshore of Huntington Beach. Existing drilling and production are from Platform Eva, located on the lease approximately 2.1 miles off Huntington Beach, Orange County.

LEASE INFORMATION:

State Oil and Gas Lease 3033 was originally issued to Union Oil Company of California on July 25, 1963. The Lease provided an initial drilling term of three years and a continuous drilling obligation of one hundred twenty days between wells. Platform Eva was installed on the lease in 1964 and presently produces approximately 2,400 barrels of oil and 400 MCF of gas per day from 37 wells.

SUMMARY:

Union proposes to resume development drilling operations from Platform Eva. Union is presently proposing a total of five development wells. Hydrocarbons encountered will enter Platform Eva's existing production system and be transported to Union's existing onshore processing facility in Huntington Beach. No new facilities are proposed as a part of the project.

(PAGES 130-130.47 ADDED 12/16/85)
(NON-SUBSTANTIVE REVISION 01/24/86)

OTHER PERTINENT INFORMATION:

1. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (14 Cal. Adm. Code 15025), the staff has caused to be prepared Negative Declaration identified as EIR ND. 390, State Clearinghouse No. 85022007. Such Negative Declaration was prepared and circulated for public review pursuant to the provisions of the CEQA.

   Based upon the Initial Study, the Proposed Negative Declaration, and the comments received in response thereto, there is no substantial evidence that the project will have a significant effect on the environment (14 Cal. Adm. Code 15074(b)).

2. This activity involves lands identified as possessing significant environmental values pursuant to P.R.C. 6370, et seq. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

STATUTORY AND OTHER PERTINENT INFORMATION:

A. P.R.C.: Div. 6, Parts 1 and 2.

B. Cal. Adm. Code: Title 2, Div. 3; Title 14, Div. 6.

AB 884: 12/10/85.

AGREEMENT FOR THE PROTECTION OF THIRD PERSONS:

Staff has prepared agreements which are additions to the present lease requirements, are acceptable to the Operator, and offer increased protection to third persons for any damages that may arise from operations conducted under the leases. The agreements provide:

1. Union will furnish the State Lands Commission with a certificate of insurance

in the amount of $10 million for the lease, evidencing insurance against liability for damages to third persons.

2. Procedures shall be established for the prompt processing of all claims and the prompt payment of uncontested claims.

3. Union will agree to arbitration and mediation procedures approved by the Executive Officer, after consultation with the Office of the Attorney General, to facilitate the settlement of contested claims by third persons without the necessity of litigation.

EXHIBITS:

A. Other Permits Required.
B. Location Map.
C. Negative Declaration ND 390.

IT IS RECOMMENDED THAT THE COMMISSION:

1. CERTIFY THAT A NEGATIVE DECLARATION, EIR ND. 390 (STATE CLEARINGHOUSE NO. 85022007), WAS PREPARED FOR THIS PROJECT PURSUANT TO THE PROVISIONS OF CEQA, AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

2. DETERMINE THAT THE PROJECT, AS APPROVED, WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT.

3. FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED FOR THE LAND PURSUANT TO P.R.C. 6370, ET SEQ.

4. CONDITION APPROVAL OF UNION'S APPLICATION ON ITS ACCEPTANCE OF AN AMENDMENT OF STATE OIL AND GAS LEASE PRC 3033 TO PROVIDE FOR COMPLIANCE WITH CURRENT AND FUTURE STATE LANDS COMMISSION REGULATIONS.

5. AUTHORIZE THE RESUMPTION OF DEVELOPMENT DRILLING OPERATIONS ON STATE OIL AND GAS LEASE PRC 3033 IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE LEASE AND THE RULES AND REGULATIONS OF THE STATE LANDS COMMISSION SUBJECT TO THE UNDERSTANDING THAT UNION HAS AGREED TO THE FOLLOWING PROVISIONS:

A. UNION WILL FURNISH TO THE STATE LANDS COMMISSION A CERTIFICATE OF INSURANCE FROM A RECOGNIZED INSURANCE COMPANY DOING BUSINESS IN CALIFORNIA IN THE SUM OF $10 MILLION, INCLUDING THE STATE AS A NAMED INSURED AND EVIDENCING INSURANCE AGAINST LIABILITY FOR DAMAGES TO THIRD PERSONS CAUSED BY ANY AND ALL DRILLING ACTIVITIES UNDER SAID LEASE. THIS CERTIFICATE SHALL NOT BE CANCELLED, EXCEPT UPON 30 DAYS WRITTEN NOTICE THAT UNION IS REPLACING SAID CERTIFICATE OF INSURANCE WITH A SIMILAR ONE WHICH FULFILLS THE ABOVE REQUIREMENTS, AND SHALL BE IN EFFECT AT ALL TIMES UNTIL ALL DRILLING FROM SAID LEASE TERMINATES AND ALL WELLS HAVE BEEN PROPERLY ABANDONED IN THE MANNER REQUIRED BY LAW.

B. SHOULD ANY EVENT OCCUR CAUSING A SUBSTANTIAL NUMBER OF CLAIMS FOR DAMAGES TO BE FILED AGAINST UNION, AS A RESULT OF OPERATIONS UNDER SAID LEASE, UNION SHALL WITHIN TEN DAYS AFTER SUCH EVENT, CAUSE TO BE OPENED OR OPEN A CLAIMS OFFICE WITHIN THE CITY OF HUNTINGTON BEACH STAFFED WITH SUFFICIENT PERSONNEL AND AUTHORITY TO PROCESS ALL CLAIMS AND TO SETTLE ALL UNCONTESTED CLAIMS. BARRING UNUSUAL CIRCUMSTANCES, THE STAFFING OF SAID OFFICE SHALL BE SUFFICIENT TO PROCESS ALL CLAIMS AND SETTLE ALL UNCONTESTED CLAIMS WITHIN 60 DAYS OF THE ESTABLISHMENT OF SAID OFFICE.

C. TO FACILITATE THE SETTLEMENT OF CONTESTED CLAIMS BY THIRD PERSONS WITHOUT THE NECESSITY OF LITIGATION, UNION AGREES TO ARBITRATION AND MEDIATION PROCEDURES APPROVED BY THE EXECUTIVE OFFICER AFTER CONSULTATION WITH THE OFFICE OF THE ATTORNEY GENERAL.

D. ALL DRILLING SHALL BE CONDUCTED UNDER LEASE PRC 3033, IN ACCORDANCE WITH APPLICABLE LAWS, THE RULES AND REGULATIONS OF THE STATE LANDS COMMISSION AND THE DIVISION OF OIL AND GAS, AND AS REFERENCED OR DESCRIBED IN THE NEGATIVE DECLARATION INCLUDING MITIGATIONS, RELATING TO DEVELOPMENT DRILLING OPERATIONS BY UNION ON STATE OIL AND GAS LEASE PRC 3033, ADOPTED BY THE STATE LANDS COMMISSION.

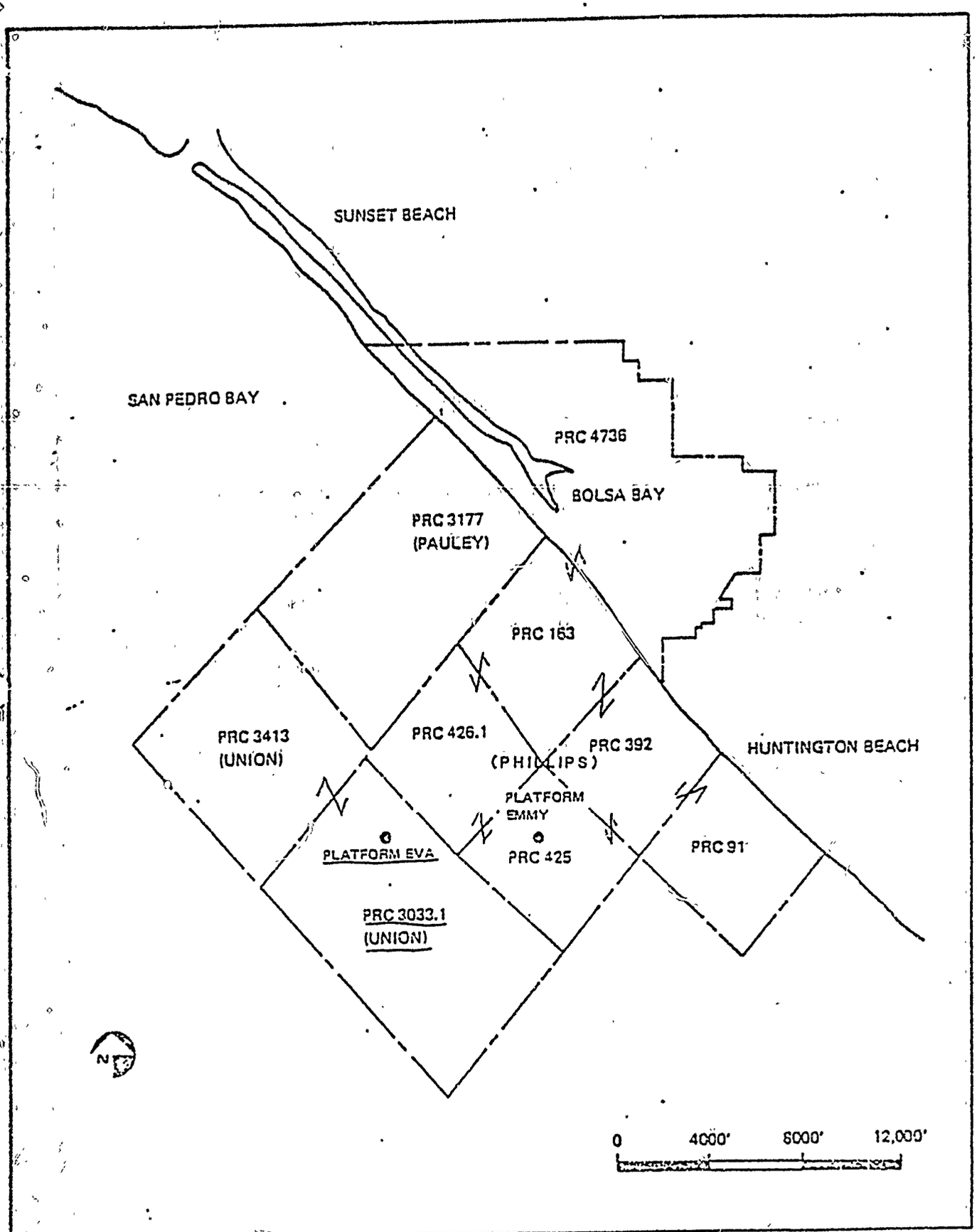
E. UNION SHALL IMPLEMENT AND MAINTAIN THE OIL SPILL CONTINGENCY PLAN ON FILE WITH THE STATE LANDS COMMISSION.

OTHER

PERMIT REQUIREMENTS FOR PRODUCTION OPERATIONS STATE OIL AND GAS LEASE PRC 3033.1

AGENCY	PERMIT	ACTIVITY
California Coastal Commission	o Coastal Development Permit	Production drilling
Division of Oil and Gas	o Notice of Intention to Drill	Performance of any well drilling or well reworking operations
State Water Resources Control Board	o Revisions to existing NPDES Permit	Discharge of drill mud and cuttings, domestic wastewater and industrial cooling water
South Coast Air Quality Management District	o Air Quality Permit	Drilling rig diesel generator

EXHIBIT A



Project Site

EXHIBIT B

WESTEC Services, Inc.

STATE OF CALIFORNIA–STATE LANDS COMMISSION

GEORGE DEUKMEJIAN, *Governor*

STATE LANDS COMMISSION
1807 13TH STREET
SACRAMENTO, CALIFORNIA 95814

EXHIBIT "C"

PROPOSED NEGATIVE DECLARATION

EIR ND 390

File Ref.: W 40448

SCH#: 85022007

Project Title: Resumption of Drilling, Platform Eva on State Oil and Gas Lease PRC 3033

Project Proponent: Union Oil Company of California

Project Location: Tide and submerged lands lying approximately 2 miles off shore, west of Huntington Beach, Orange County.

Project Description: Union proposes to drill four(4) development(infill) wells and one redrill from existing platform Eva. No new facilities (other than a temporary deisel rig) will be involved.

Contact Person: Daniel Gorfain Telephone: (916)322-7829

This document is prepared pursuant to the requirements of the California Environmental Quality Act(Section 21000 et seq., Public Resources Code), the State CEQA Guidelines(Section 15000 et seq., Title 14, California Administrative Code), and the State Lands Commission regulations(Section 2901 et seq., Title 2, California Administrative Code).

Based upon the attached Initial Study, it has been found that:

[ ] the project will not have a significant effect on the environment.

[x] mitigation measures included in the project will avoid potentially significant effects.

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Form 13.17 (5/85)

Comment (US Coast Guard):

Under Federal Regulations (33 CRF 153, Subpart B), the person in charge of the offshore facility must immediately notify the U.S. Coast Guard as soon as he or she has knowledge of any discharge of oil or a hazardous substance. This may be accomplished by calling the National Response Center 24 hour number, 1-800-424-8802. The National Response Center will, in turn, immediately notify this office. For faster response, the person in charge may notify this office at 213-590-2315 (24 hours) or 213-590-2341 (0730 - 1600 hours).

Response:

The Oil Spill Contingency Plan, which had previously identified the National Response Center as an alternative for notification of oil spill to the Office of Emergency Service, has been revised to require notification of both offices.

Comment (US Coast Guard):

On Page 27, there are conflicting statements in the same paragraph. The first sentence in the third paragraph states that "the potential for an oil spill due to normal operations or accidents for the proposed project is negligible". Further in the same paragraph it states that "a well blowout from the proposed wells is considered highly possible". If this sentence is true then the potential for an oil spill is also highly possible and the proposed project should be re-evaluated.

Response:

The last phrase "highly possible" is inaccurate and is hereby corrected to read "highly unlikely".

Comment (California Department of Fish and Game):

The project, as proposed, has the potential to impact marine resources and water quality as a result of the discharge of drilling fluids and from an oil spill. The document adequately describes existing fish and wildlife resources and potential impacts to those resources and their habitats, and provides mitigation, which if implemented, should reduce the potential

impacts to an insignificant level. We believe a Negative Declaration which includes mitigation conditions as a part of the project is appropriate. Mitigation measures for potential impacts from discharges of drilling fluids would stem from acceptance, by Union Oil Company, of the terms of the NPDES permit to be issued by the Regional Water Quality Control Board. We will have the opportunity to review that permit and recommend conditions to assure existing water quality and resource values. We believe it is appropriate that the NPDES permit be completed and included as part of the proposed project berore a Negative Declaration is issued.

Response:

Union is in the process of applying for an appropriate NPDES permit, but it is not possible for the permit to be issued before this document is certified. The SLC requires Union to obtain a valid permit from the Regional Water Quality Control Board, and has structured this mitigated Negative Declaration in a manner which is intended to give the RWQCB the ability to require any information it requires to act on a permit application from Union, in order to fully mitigate any impacts to water quality and resource values which may result from discharge of drilling fluids.

INITIAL STUDY

RESUMPTION OF PRODUCTION DRILLING OPERATIONS AT UNION OIL COMPANY'S PLATFORM EVA ORANGE COUNTY

State Oil and Gas Lease PRC 3033.1
(W40448)

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I. INTRODUCTION/SUMMARY

Union Oil Company of California is requesting the approval of the California State Lands Commission to drill five development wells from existing Platform Eva off the Orange County coastline in Southern California. Production from these wells will go into the existing processing system which is currently producing a total of about 2,400 barrels of oil and 400 MCF of gas per day from the Upper Main and Main Zone reservoirs. Total project time is expected to be 150 days. Total drilling time is anticipated to be 90 days. Union plans to drill these wells in 1985.

The objective of the project is the continued development of oil and gas reserves within the currently producing Upper Main and Main Sands geologic formation. This document describes: 1) Union's Production-Drilling Plans; 2) evaluates any potential environmental impacts which might result from the resumption of drilling operations; and 3) identifies mitigation measures which will reduce or eliminate identified potentially significant environmental effects. The areas discussed are:

A. Geologic and Geotechnical Parameters
B. Air Quality
C. Marine Water Quality
D. Marine Biology
E. System Safety and Oil Spill Analysis
F. Boating and Recreation
G. Marine Traffic and Navigation
H. Acoustic Environment
I. Visual Resources
J. Land Use and Infrastructure

II. HISTORY OF PROJECT AREA DEVELOPMENT

A. Project Location

Platform Eva is located on State Tidelands Oil and Gas Lease PRC 3033, approximately 2.5 miles (4.3 km) west of the city of Huntington Beach and 4 miles (6 km) south of Sunset Beach, in Orange County. The lease contains approximately 855 ha (2,113 acres) and is situated next to Phillips' State Leases 426 and 425 (Platform Emmy) on its easterly boundary and Union's State Lease 3413 on the north (Figure 1).

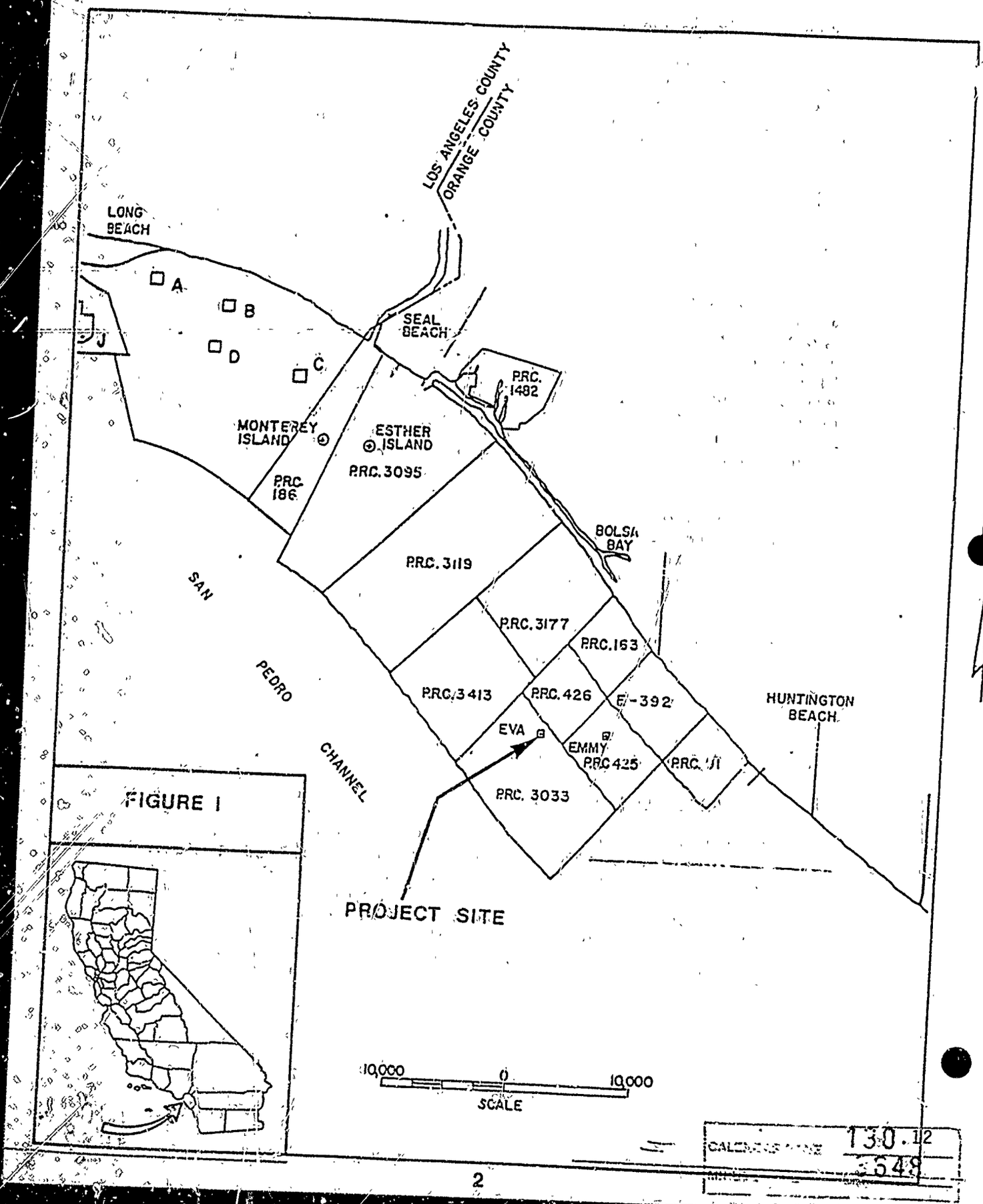


FIGURE 1

CALENDAR PAGE 130.12
549

The surface location of the proposed wells is 2.1 miles (3.3 km) offshore at Platform Eva, at the following coordinates (measured center of platform);

Loran-C:	X = 28215.2	Y = 40943.6
Latitude:	33°39'43.462"	
Longitude:	118°03'40.043"	
Cal Zone 6:	X = 1448 916	Y = 548 783

The drilling program for the new wells is designed to allow penetration of the hydrocarbon-bearing Upper Main and Main Sands along the same structural trend found to be productive in previous well drilling operations from Union's Platform Eva, and Phillips' Platform Emmy.

B. Past Development of the Huntington Beach Oil Field

The Huntington Beach Oil Field is bisected by the Newport-Inglewood fault zone into a north block and a south block. In 1920, Standard Oil Company of California discovered the onshore portion of the field. By May 1930, development extended seaward to the southern limits of the field, and the first offshore (tidelands) well was completed. Offshore development began in 1938 and has continued until the present time.

The formations and the geologic structure of the offshore portion of the field has been delineated by the extensive development over the last 40 years. By 1968, production of primary reserves from the existing offshore Huntington Beach Field leases had accounted for the recovery of 20 to 25 percent of the original oil in place. Enhanced oil recovery methods were then initiated through repressuring of the formations by water reinjection. The onshore south areas of the field have undergone an extensive waterflood program since 1964, which was expanded in 1971 to the offshore area.

Presently, the offshore-lease portions of the field are operated primarily by Phillips Petroleum (successor to Signal Oil and Gas Company) from directionally drilled onshore locations and at Platform Emmy (PRC 425), and by Union Oil Company of California at Platform Eva (PRC 3033). Platform Emmy, located 1.3 miles (2.1 km) offshore, was installed in 1963. In January 1977, Phillips resumed drilling operations on Platform Emmy which

have continued to the present. Wells have been drilled and completed from its 52 available well slots and are currently producing from the Jones and Main formations.

Effective January 1, 1985, there were 26 producing wells and 11 shut-in wells on Platform Eva. These wells produce a total of about 2,424 barrels of oil and 400 MCF of natural gas per day from the Main and Upper Main formations on State Oil and Gas Leases PRCs 3033 and 3413.

III. EXISTING FACILITIES

A. Platform Eva Equipment Characteristics

1. Platform

Platform Eva was constructed in 1964 on a fine sand bottom at a depth of approximately 60 feet (18 m). The platform is an oil drilling and production platform which contains two main decks and a sub-deck.

The top main deck is used for drilling and contains 42 well slots. The top main deck also contains pipe racks, cranes, mud pumps and tanks, air compressors, cement unit and storage, generators, crew quarters, and an elevated heliport. The lower main deck is used for preliminary production treatment and contains well heads and production flowlines, hydraulic pumps, and separation equipment. Onboard, gas and wet oil are separated and then transported to onshore facilities. The sub-deck is used for the auxiliary piping and drainage sump tank and provides access to the production deck from the boat dock.

Power required for routine platform production operations is provided by electricity via one 12 kW armored submarine power cable. The power cable is rated to carry 3,326 kW (0.8 power factor) and will adequately carry the additional load requirement to operate the additional five wells once they are in production. No structural changes are planned for the platform.

2. Pollution Control

Platform Eva is equipped with a safety control system designed to shut-in electric power to all producing wells in case of emergency. Safety equipment, such as pressure controlled valves, gas detectors, and fire fighting systems have been designed to minimize and prevent accidental spillage of oil and other pollutants. Records are maintained showing the present condition and status of all such devices. The integrated safety control system has been reviewed and approved by the State Lands Commission

3. Deck Drainage

To minimize or prevent spills of oil or other pollutants from reaching the ocean, Platform Eva is equipped with drainage collection systems in all areas where spills are likely to occur. This system is designed to contain any predictable and incidental spills and route it into the oil handling system. The deck has been designed so that, under normal operations, discharge of oil into the ocean should not occur.

4. Oil Spill Handling

A site-specific Oil Spill Contingency Plan has been prepared by Union Oil Company. This plan makes use of pollution abatement and control equipment aboard the platform and that of the oil spill cooperative, Clean Coastal Waters (CCW). In addition, during the drilling operations, Union will provide for a 750 foot boom to be stored on "Eva" and for its deployment by the dedicated drilling crewboat.

Once a spill has been detected and the source located, the field supervisor on the platform initiates the level of response required and establishes appropriate contact with CCW,, Union management, and the Office of Emergency Services. The Office of Emergency Service will notify other appropriate regulatory agencies such as the Coast Guard, Department of Fish and Game, the Environmental Protection Agency, and the State Interagency Oil Spill Committee

(SIOSC). The primary categories of oil spill containment and removal procedures include:

Deployment of Booms using Containment Work Boats

Skimmers

Possible use of Chemical Collecting Agents or Dispersants requires prior approval of State and Federal Authorities.

5. Critical Operations and Containment Plan

Union has filed a Critical Operations and Containment Plan with the State Lands Commission, specifying those operations that should be ceased, limited, or not begun under certain circumstances and conditions arising from meteorological, oceanographic, and logistical situations that may occur during the drilling activity. The purpose of this plan is to ensure that an operator does not lose control of a well when containment of a spill would be difficult.

B. Pipeline and Onshore Processing Facilities

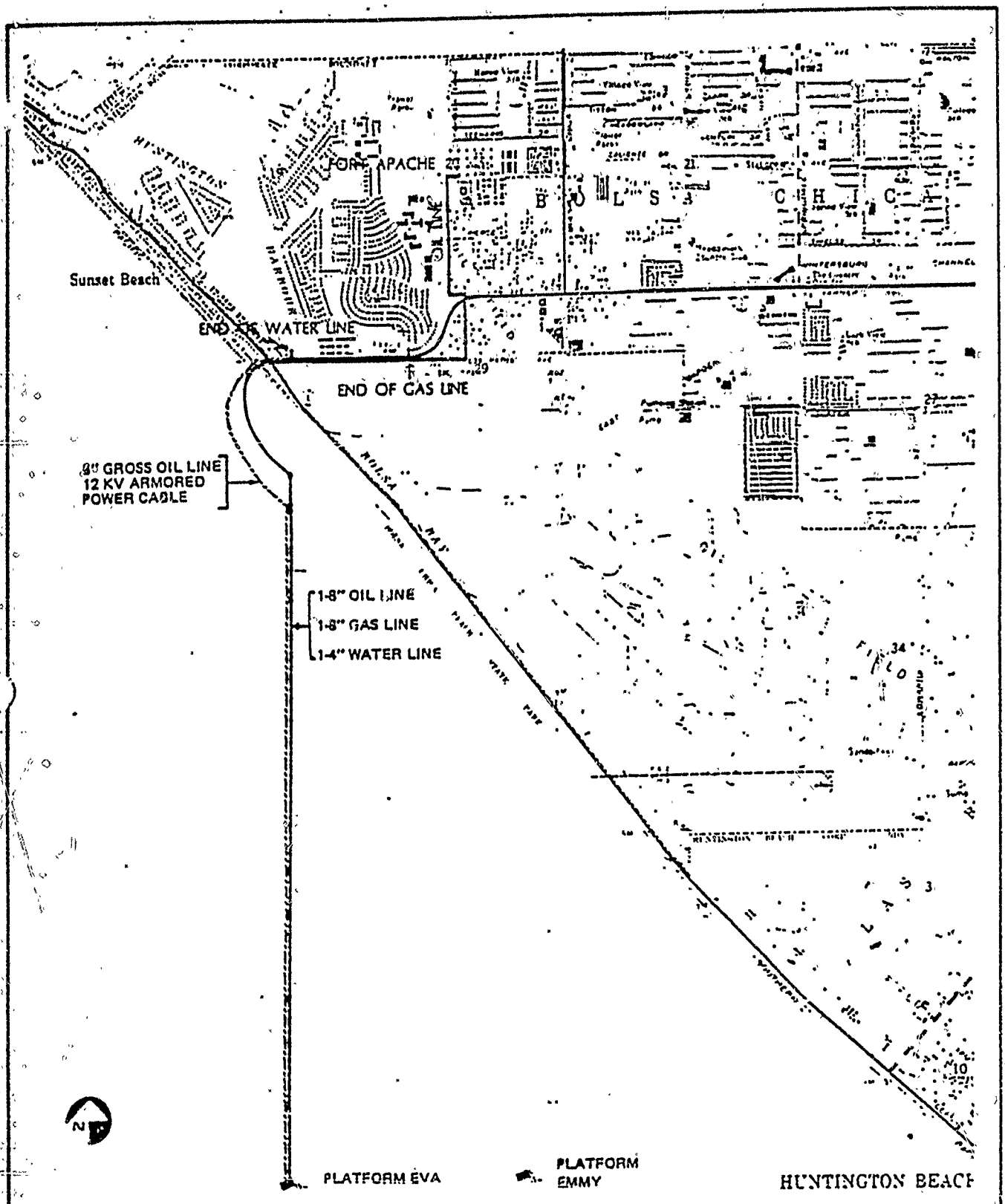
Two existing pipelines currently transport gas and wet oil from Platform Eva to shore. Figure 2 shows the route of these lines. One pipeline is an 8-inch gas line, approximately 21,500 feet (6,550 m) long, transporting gas from the platform to the tie-in with the Phillips gas-gathering system in the vicinity of Warner Avenue and Edgewater Avenue in Huntington Beach. The other pipeline is an 8-inch oil line approximately 26,000 feet (7,925 m) long transporting wet oil from the platform to the Union onshore site at Heil and Algonquin streets (Fort Apache). Additionally, a separate water system services Platform Eva, which includes one 4-inch freshwater line approximately 19,000 feet (5,790 m) long, transporting domestic and drilling water to the platform from Warner Avenue near the city limits of Huntington Beach. Approximately 6,000 gallons of water/day will be used over the 90 day drilling period.

Current flow through the pipeline is approximately 6,000 barrels gross fluid per day with a net of

2,300 barrels of oil per day (BOPD). Final oil and water separation will occur at Union's existing "Fort Apache" facility.

The "Fort Apache" production facility has a design capacity of 13,000 barrels gross fluid/day and 10,000 barrels of oil/day. Crude storage capacity on site is 1,000 barrels.

Produced gas is delivered from Platform Edith to Union's 8-inch gas pipeline at Platform Eva. This gas is metered at Eva, commingled with Union's gas production from Eva and shipped via the 8-inch gas pipeline to Phillips' onshore facilities in Huntington Beach for processing and sales.



Existing Pipeline Infrastructure

FIGURE
- 2

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IV. PROPOSED PROJECT

Union Oil Company of California (Union) proposes to resume development drilling for oil and gas resources underlying State Oil and Gas Lease PRC 3033. The project involves drilling four new wells and the redrilling of one existing well on the existing platform to maximize resource recovery from known reservoirs and maintain economic production rates from the leasehold.

Estimated volumes of 120 barrels of oil per day (BOPD) and 20 thousand cubic feet per day (MCFD) of natural gas may be produced per well. Hydrocarbons produced will receive preliminary treatment from existing facilities onboard Platform Eva (i.e., wet oil and gas separation), and will then be transported to shore for processing via existing gas and wet oil shipping lines. No expansion of the platform structure, existing pipelines, or or hore facilities are proposed or needed to accommodate this new production.

A. Proposed Drilling Program

A detailed drilling program will be submitted to the State Lands Commission's engineering staff for approval prior to the drilling of each well. All casing will be inspected and/or tested in a manner approved by the State Lands Commission and the Division of Oil and Gas.

The following well casing requirements, excerpted from SLC regulations for oil and gas drilling, will be adhered to by Union:

> "All wells shall be cased and cemented in such a manner as to protect all zones that contain oil, gas, or fresh water, so as to provide well control during drilling operations.
>
> The casing setting depths shall be based upon relevant geological and engineering factors, including the presence of shallow geological anomalies, the presence or absence of hydrocarbons, formation fracture gradients, formation pore pressures, water depth, and zones of lost circulation or of other unusual characteristics.

The lessee shall utilize appropriate cementing technology and casing equipment in order to achieve adequate cement fillup and bonding on all casing cementing operations."

Cement slurry discharge will take place where well casing is being cemented. Cement slurry will be discharged to the ocean without further treatment. Estimates for excess cement slurry volumes are difficult to make but should not exceed 19 cubic yards per completed well.

The estimated duration of the five well drilling and production program is 150 days, as follows:

ACTIVITY	DAYS
Project Initiation	30
Drilling	60
Setting/Cementing Casing	14
Equipment Test/Repair/Logging	6
Preparation for Production	10
Project Completion	30
TOTAL	150

Each of the four new wells will require approximately 15 days to drill and 2 days to complete. The proposed A-1-A redrill well will require about 22 days to drill and complete. Thus, the duration of these proposed drilling and completion activities is estimated to be 90 days.

A drill rig will be transported to the platform and temporarily installed on the drilling deck. Drilling operations require up to five Caterpillar Model 3408 DI-TA turbocharged diesel engines which provide power to the drawworks, mud pumps, and electric generator units totalling 2,375 hp.

B. Drill Muds and Cuttings

Rotary drilling rigs use a continuous circulation of drilling mud which travels down the drillpipe and through the drill bit and transports the drill cuttings (i.e., the drilled-up formation the bit is traveling through), up the annulus between the drillpipe and the walls of the bore hole and/or casing to the surface. At the surface, the drill cuttings are physically separated from the mud by

screening and washing techniques. The cuttings are then discharged through a subsurface outfall pipe extending from the platform and terminating 40 feet (12 m) below sea level. In addition to removing the cuttings, the mud also serves to lubricate and cool the bit, control well pressure, control borehole wall properties, and minimize corrosion in the protective casing and drill string.

All drill mud components proposed to be used by Union are generic muds approved for use by the Environmental Protection Agency (EPA) and the California Department of Health Services (DOHS). The major components include seawater, magensium silicate clay, chrome-free lignosulfonate, lignite, caustic soda, potassium chloride, and barite. Furthermore, a low toxicity mineral oil must be used as no diesel is allowed. Each new well will use and discharge a total of about 2,800 barrels of mud and cuttings, with maximum daily discharge limited to 800 barrels. The total volume of discharged drilling mud and cuttings associated with the proposed redrilled well A-1A is approximately 1,400 barrels.

Each of the five wells drilled from Platform Eva is expected to produce approximately 6000 cubic feet of drill cuttings. These cuttings will be thoroughly washed to remove and recover fines, drilling mud, and oil and grease. They will then be periodically discharged to the ocean through a vertical pipe or cuttings chute whose terminus will be approximately 10 feet (3 m) below the ocean surface. All oil-contaminated cuttings will be shipped to shore and trucked to an approved disposal site.

During drilling, DOHS-approved, clean, water-based muds and completion fluid (approximately 1,500 barrels per well) will periodically be discharged to the ocean. These quantities of used drilling muds will be discharged into the ocean through the cutting chute in accordance with a National Pollution Discharge Elimination System (NPDES) permit and in conformance with Outer Continental Shelf (OCS) Order No. 7. Oil-contaminated drilling muds will be collected and shipped to shore for disposal at an approved disposal site.

C. Systems Safety

Blowout prevention equipment (BOPE), which enables the driller to prevent or control the flow of fluids from the well, will be installed operated, tested, and maintained in accordance with State Lands Commission and Division of Oil and Gas regulations. The following, excerpted from SLC oil and gas drilling regulations, summarizes BOPE requirements:

> "Blowout prevention equipment systems consist of several component systems that function to operate the blowout preventers and to assist in well control under varying rig and well conditions. These systems include the blowout preventers, closing unit, kill and choke lines, choke manifold, fillup line, diverter, marine riser, and auxiliary equipment.
>
> Blowout prevention equipment shall be installed, used, maintained, and tested in a manner necessary to assure well control throughout the drilling, completion or abandonment of a well.
>
> All portions of a blowout prevention system shall be designed so that alternate methods of well control are available in the event of failure of any one portion of the system. If one component of the system that is vital to well control becomes inoperative, drilling operations shall be suspended as soon as possible without danger to the well until the inoperative equipment is repaired or replaced."

Union Oil's drilling foremen and drilling contractor toolpushers will have attended yearly well control schools or seminars concerning blowout prevention, as required by the State of California. Written verification of this training will be filed with the State Lands Commission. Other onsite drilling personnel will be given training as required to become familiar with blowout prevention equipment and that portion of well control procedures for which they are responsible.

Mud monitoring equipment will be installed and maintained for all drilling below the 20-inch diameter conductor casing, primarily for the purpose of well control.

The long production history of this area of the Huntington Beach offshore field indicates that Hydrogen Sulfide (H_2S) will not be encountered. Thus, an H_2S detector, alarm, and protection equipment are not necessary to this project.

Lifesaving and fire supression systems are maintained on the platform at all times. Procedures for evacuation vary depending on the situation; however, life rafts and life jackets are easily accessible.

Platform Eva is equipped with Class 1 Coast Guard approved navigation aids. All navigational components are connected to an emergency standby generator. Derrick lights will be approved and installed for the drilling phase.

D. Production System

After the casing is set, production tubing will be installed. A hydraulic pump will be used, providing artificial lift, to lift the hydrocarbons from the reservoir up the production tubing to the well head on the platform.

From this system, the flow stream will be directed to the initial treatment facilities onboard the platform. This equipment consists of a gas/wet oil separator and gas scrubber.

The resultant natural gas will be compressed, scrubbed, metered and then transported to shore via the existing gas shipping line to the point of connection to Phillips' 12-inch gas gathering line near the intersection of Warner Avenue and Edgewater Lane in Huntington Beach (Figure 2). The wet oil will be shipped under pressure to shore via existing subsea pipelines and ultimately to Union's oil treatment facility at "Fort Apache" in Huntington Beach.

Implementation of the proposed project will increase the current rate of field production at Platform Eva by approximately 25 percent. As stated above, existing off- and onshore production and treatment facilities will be able to accommodate this new production without modification.

E. Personnel Requirements and Support Systems

The drilling crew required during drilling operations will consist of six people for each 12-hour shift, commuting once a day from the Los Angeles-Orange County Area. In addition to the drilling crew, six personnel will serve the platform on a 24 hour basis. No other personnel will be required on a full-time basis, either offshore or onshore, for implementation of the proposed production drilling program.

Project personnel and supplies will be transported to Platform Eva by boat from the Beach Marina and via existing helicopter service which originates from Phillips' Huntington Beach lease near the corner of Golden West and Pacific Coast Highway with no increase in the number of flights. Traffic to and from the platform is anticipated to be two round trips/day for the crew boat the approximately two round trips/week for the supply boat, with the exception of project initiation and completion. During these phases, the supply boat will travel to the platform every day for 15 days for rig support. Approximate travel time is one hour/one-way trip. On return trips the supply boat will transport any waste material generated from onboard activities that require onshore disposal. The drilling rig, heavy drilling equipment, rig supplies, and bulk drilling mud and cement materials will be shipped to the platform from the Long Beach Harbor via the supply boat.

There will be no need for modifications or expansion of supply yard to accommodate this project nor will there be any demand for additional support personnel. Support services will be provided out of the Los Angeles Basin area from existing service companies using presently existing industry bases.

F. Additional Discharges

All sanitary and domestic wastes will be treated prior to release with a chlorine residual maintained at approximately 1 mg/l and thus will have a minimum impact on water quality. Treated wastewater from these sources will be discharged through a disposal caisson. Galley discharges will pass through grease traps before treatment and discharge. Due to the

distance of the site from the shoreline and the dilution factors involved, no detrimental effects on water quality are anticipated.

All deck drainage will be routed to the sump system. Oily water and liquid hydrocarbons are pumped from the sump system back to the production treatment system for separation and treatment.

V. REGULATORY SETTING

A. Permits

Table 1 provides a brief outline of the necessary permit requirements for the proposed production operations.

Table 1
PERMIT REQUIREMENTS FOR DRILLING AND PRODUCTION OPERATIONS
STATE OIL AND GAS LEASE PRC 3033.1

AGENCY	PERMIT	ACTIVITY
State Lands Commission	Authorization to Resume Drilling	Drilling Project
	Notice of Intention to Drill	Performance of any well drilling or well reworking operations
California Coastal Commission	Coastal Development Permit	Production drilling
Division of Oil & Gas	Notice of Intention to Drill	Performance of any well drilling or well reworking operations
State Water Resources Control Board	Revision to existing NPDES Permit	Discharge of drill mud and cuttings, domestic wastewater and industrial cooling water
South Coast Air Quality Management District	Air Quality Permit	Drilling rig diesel generator

B. Drilling Operations

Operations associated with drilling will be performed using conventional drilling equipment and procedures, and will be in compliance with the following State Lands Commission regulations:

Article 3.3 - Regulations for Oil and Gas Drilling Operations on State Tide and Submerged Lands.

Article 3.5 - Regulations for Pollution Control on State Tide and Submerged Lands.

Detailed well drilling procedures will be submitted to the State Lands Commission (SLC) staff for review and approval, prior to drilling. Drilling operations will not be altered without the prior approval of the SLC staff

The California Division of Oil and Gas (DOG.), as mandated by Section 3106 of the Public Resources Code, will regulate and supervise the drilling operation, maintenance, and abandonment of the wells. Union Oil Company will submit a Notice of Intent to Drill to the State Oil and Gas Supervisor which includes a detailed description of the drilling and casing program proposed for each well. A list of additional project-related materials must be on file with the DOG before drilling operations begin and shall include approved plan of Blowout Prevention and Control Oil Spill Contingency Plan, and an indemnity bond to secure the state against any expense the state may incur in obtaining operator compliance with applicable laws and regulations.

VI. ENVIRONMENTAL EVALUATION

A. Geology and Geotechnical Parameters:

1. Environmental Setting:

The proposed project is located in the Huntington Beach Field in the southern part of the Los Angeles Basin, within the submerged or continental borderland portion of the Penninsular Ranges Province of Southern California. Platform Eva is located in the northern portion of that Province.

The Huntington Beach Field is one of a group of fields which lies in a step formation along the Inglewood-Newport fault zone. Its regional geology, stratigraphy, seismicity, and earthquake history and potential, are well known. (For more detail see Union's Production Drilling Pond and Environmental Report (PDP and ER) on file with the SLC.)

Some subsidence has occurred in the Huntington Beach oil field over the past 40 years as oil and gas withdrawal from the subsurface reservoir has lowered pore-fluid pressure. That problem has been brought under control by an ongoing salt-water injection program which replaces the withdrawn fluids and maintains formation pressures.

2. Environmental Impacts:

Because no new offshore facilities are proposed and based on the operating experience of Platform Eva and the Huntington Beach Field, no new significant adverse geology related impacts are anticipated, given compliance with SLC's drilling and production regulations. These include the injection of salt-water to prevent subsidence.

3. Mitigation Measures:

a) Plans and equipment to contend with emergencies such as well blowouts, are already provided at Platform Eva. They are being reviewed to ensure their adequacy in light of the drilling and operations of the additional wells.

b) Proper engineering design of the well program, based on the consideration of maximum credible earthquake, to protect against possible adverse impacts resulting from seismically-induced hazards.

B. Air Quality

1. Environmental Setting:

Platform Eva is located off the Orange County shoreline within the South Coast Air Basin. The Basin lies between the Pacific Ocean and

the inlands mountain range, has low average wind speeds, high solar radiation and strong temperature inversions. The basin's coastal and offshore areas generally enjoy better air quality than inland areas, although pollutants generated along the coast are transported inland by the region's prevailing climatological conditions.

The South Coast Air Basin is a non-attainment area. The proposed project is subject to the New Source Review (NSR) rules of the South Coast Air Quality Maintenance District's (SCAQMD) Regulation XIII, which imposes stringent requirements on new (or modified) sources with emissions greater than specified threshold amounts established for each regulated polluvant. Any new source or expansion of an existing source that emits more than these specified amounts may be subject to an air quality impact analysis and an emission offset program. Its goal is to achieve a net air quality benefit within the non-attainment area.

2. Environmental Impacts:

Union has committed to the use of a portable diesel drilling rig for a period not to exceed 90 days during the project's well drilling and completion phases. The diesel and other emission levels will vary depending on the stage of the well drilling and completion operations. These may be found in Tables C-1, 2 and 3 of the PDP & ER of file in the Commission office. The highest quantity of direct pollutants emitted will be NO_x, with other pollutants generated at lower levels. All these emissions will be temporary.

Indirect air quality impacts will result from the increase in electrical power consumption at the platform via the existing 12 kV armored submarine power cable currently serving the platform. This added consumption will occur during project initiation and completion and production. These impacts will be insignificant since this power originates in Southern California Edison's power grid.

Because of its short duration, the proposed project is expected to be exempted from SCAQMD's Regulation XIII, Rule 1304. Such exemption must be approved by its Executive Officer.

3. Mitigation Measures:

a) Standard condition in the Commission's authorization which provides that the applicant shall obtain all other required governmental approvals prior to the project initiation, including the SCAQMD approval of an exemption from NSR Regulations.

C. Marine Water Quality

1. Environmental Setting

Platform Eva is located in open water 2.1 miles (3.3 km) west of Huntington Beach. The ocean water environment at the platform is typical of the Southern California Bight.

At Platform Eva, wind and wave action create a high energy environment. The ocean floor at the platform is sandy, and no significant traces of the drill muds and cuttings dumped from the platform during the 1960's remains.

2. Impacts

The discharge of project-related drilling muds and cuttings, treated sewage, deck drainage and domestic waste waters would have a negligible impact on marine water quality including local temperature, salinity and conductivity profiles. Nutrients and trace metals will be incrementally increased in the local marine environment. The primary sources of these materials are sewage effluent, deck drainage, and drilling fluid disposal. Discharges will be regulated by an NPDES permit from the Regional Water Quality Control Board (RWQCB).

A temporary increase in local water column turbidity will result during periods of cuttings disposal, with no significant long-term impact anticipated. Well casing

cement slurry will not disperse into the ocean but will harden in place and will not affect water quality.

Water quality may be degraded as a result of a large accidental oil spill but the probability of such an event, based on the application and observance of the Commission's regulations, is insignificant.

It is the responsibility of the RWQCB to ensure that project discharges into state waters are permitted only to the extent they will not degrade the marine environment. Accordingly, all contaminated muds and cuttings will be barged to shore.

The Board may allow discharge of uncontaminated muds and cuttings offshore coupled with a monitoring program designed to ensure that offshore disposal will not adversely affect the ambient marine environment. Union has agreed to limit any offshore discharge of muds and cuttings to strictly comply with the NPDES permit requirements for the disposal of muds and cuttings from proposed drilling and to institute whatever monitoring program the Board may require in order to determine the effects of discharges in the marine environment.

3. Mitigation

Two measures will mitigate the potential adverse effects of the project on marine water quality:

a) Union will cooperate with the Regional Water Quality Control Board and comply with the terms of the NPDES permit developed by the Regional Board to minimize the adverse effects of the project on marine water quality.

b) Please refer to Section E, System Safety and Oil Spill Analysis, for mitigation discussion of oil spill impact.

D. Marine Biology

1. Environmental Setting

PLATFORM EVA IMMEDIATE SURROUNDINGS

The Platform Eva is constructed on a fine sand bottom 2 miles (3 km) offshore of Huntington Beach, California (latitude 33° 40' north, longitude 118° 93' west). From roughly mean tide level to the sea floor, the well casings of Eva are thickly fouled by two species of mussel Mytilus californianus and Mytilus edulis. Other conspicuous fouling organisms include the anemone Corynactis california and two species of asteroids Pisaster ochraceus and Pisaster giganteus.

Benthic Epifauna - The substrate beneath and adjacent to Eva has been altered by biological fallout from the platform's fouling community. Wolfson estimated 16.8 metric tons of asteroids were concentrated in the area under the platform along with numerous sea cucumbers, Parastichopus spp.

The Sand Community - Mean grain diameter of sand varies from 170 microns to 88 microns from center under the Platform out.

Representative epifauna includes the tube-dwelling deposit feeder or herbivore polychaete Diopatra ornata, by far the most abundant species present, and an additional 47 other species of polychaetes. The remainder are peracarid crustaceans and bivalve and gastropod molluscs.

REGIONAL ENVIRONMENT

Recent studies of the intertidal zone in the vicinity of Platform Eva indicate that Long Beach, Inner Cabrillo and Outer Cabrillo beaches have depauperate faunas, thought to be related to the frequent beach maintenance activities.

Intertidal surveys have been done for the oil islands in the vicinity of Platform Eva. The dominant species were the barnacles Chthamalus

sp. and Balanus sp. the shorecrab Pachygrapsus crassipes, the sea anemone Anthopleura elegantissima, and numerous polychaetes, limpets, mussels, asteroids and the marine algae Ulva sp.

Benthic Community - Platform Eva is part of the San Pedro Shelf, an area of considerable heterogeneity and complexity. The number of species and species abundance are the highest in nearshore regions and lowest in the deep basins offshore. The ophiuroid, Amphiodia is one of the most dominant species. This is considered to be the most widely distributed species on the coastal shelves of Southern California. Two other faunal associations are found on the San Pedro Shelf, the Chloeia-Pectinaria, and the Northria-Tellina.

The project site has a rich benthic invertebrate fauna (see Fouling Community) dependent upon a fine sand to soft bottom sediment and rich detrital material.

Planktonic Community - The plankton community, composed of both zooplankton and phytoplankton, is characterized by patchiness in distribution, composition and abundance. Plankton is associated with moving water masses governed largely by currents, so they are described for the whole Southern California Bight. Productivity is a function of many interacting factors as seasonal upwelling, runoff from land and sewage discharges. Phytoplankton, the primary producers in the food web, is composed primarily of Diatoms and dinoflagellates. Zooplankton is comprised of members of every phylum.

Kelp Community - Kelp beds 10 and 11 are the closest to Platform EVA. These beds are no longer at a harvestable level. Past and present nearshore water quality is implicated in the degradation and elimination of these beds.

Fishes - The succession of fouling organisms which become attached to artificial structures and the attraction of fishes has been well documented. Typical rig fishes include species

of surfperches, sea basses, damsel-fishes and rockfishes. Pacific Mackeral and Anchovy are the two primary pelagic species in the vicinity of the platform.

Commercial and Sport Fisheries - Platform Eva lies within the California Department of Fish and Game Fish Block 739. Commercial fishing has been significant in the platform vicinity. Pacific Mackerel, Jack Mackerel and Anchovy are among the fisheries in the area. The primary fishery is a purse seine fishery for Anchovy and Pacific Mackeral with about 5-10% being taken from the San Pedro Channel.

Recreational fishing in the Long Beach area represents an important economical component of Southern California's local economics.

Marine Mammals - The marine mammal fauna of the Southern California Bight consists of several species of cetaceans and pinnipeds. Most of these are migratory, and seasonal fluctuations in both the number of species and populations occur. There are no significant pinniped haul-outs or rookeries in the immediate vicinity of the Platform. There have been no sea otter sightings farther south than the Northern Santa Barbara Channel. Otters are not expected to occur in the project area.

Marine Birds - The Southern California Bight is noted for its rich marine avifauna. The abundance and diversity of bird life is greatly influenced by the Channel Islands. The shoreline in the project area receives a high amount of human use which substantially reduces the area as valuable bird habitat.

2. Impacts

Potential impacts to marine biota could result from: 1) normal drilling and production operations; or 2) from accidental oil spills. Impacts from normal operation, as described below, are judged to be generally insignificant. The current environmental conditions are already disturbed and the proposed project will not contribute substantially to further degredation.

Impacts on the planktonic communities due to the operation of the platform should be highly localized. Very small and probably insignificant increases in nutrient levels near the drilling platform may occur due to a temporary increase in the discharge of secondary treated sewage. This could elevate phytoplankton production slightly. Any increase in water turbidity in the photic zone due to the deposition of drill cuttings and drilling muds would reduce phytoplankton production.

The organisms inhabiting the benthic environment near the platform will be subjected to burial by drill cuttings and drilling muds. Increased turbidity of the water will occur over a broader area due to the addition of fine particles of mud and cuttings to the seawater. The particles causing this turbidity may clog the respiratory organs and feeding mechanisms of many of the marine animals inhabiting the benthic environment. However, because of the limited nature of the project (no more than five wells are proposed) and the high energy environment and the fact that most of the affected organisms are rapid recolonizers, these impacts to benthic communities in the project vicinity are expected to be short-term and minor.

Limited disturbances of the fish population near the platform is expected. Impacts are anticipated to be largely from the deposition of drill cuttings and drilling muds and the resultant increase in turbidity. The alteration of benthic habitat is not expected to be significant and fishes associated with the bottom should not be affected. Demersal fishes are likely to be most affected, although fishes (particularly filter-feeding forms) that swim through the drilling area may be disturbed by the expected increase in suspended particles in the water. These impacts are considered temporary and not significant.

The proposed drilling program on the platform should have no significant impact on marine birds. Increased noise and boat traffic should

not affect the normal activity pattern, including feeding behavior of marine bird species.

The resumption of drilling on the platform should result in a limited impact on marine mammals. Although no generally accepted conclusions on the effects of noise generated by offshore oil development have been reached, whale migration through the Southern California Bight has not decreased since oil development began.

The greatest potential impact to marine biology from development of the platform would be expected to result from an accidental major oil spill. The proximity of the platform to shore makes the potential impact of an oil spill on the intertidal and shallow-water communities much more significant.

The extent to which an oil spill can inflict long-term damage on biological communities is a subject of some divergence of opinion as no two oil spills are alike. The influencing factors are dosage and type of oil, location of spill, time of year, method of cleanup and the impacted area's prior exposure.

Intertidal communities generally suffer the greatest impact from oil spills from the standpoint of the physical as well as the chemical effect, depending on the biological and geomorphic characteristics of the habitat (rocky vs sand vs marshland), on intertidal organisms. However, the low probability of: 1) an oil spill from this particular project occurring; or 2) of its reaching the intertidal area make this a very unlikely event.

The impact of oil spills on plankton communities varies between the phytoplankton and zooplankton components of the community. Studies of oil spill effects on phytoplankton have produced no strong evidence of major damage to these organisms. Impacts to zooplankton can range from lethal to sublethal depending on the conditions surrounding the oil spill. Because plankton can recolonize an area quickly, oil spill impacts to this community are judged to be of low significance.

Pelagic resources--those which live primarily or exclusively in open water--could be impacted by a major oil spill. Pelagic birds and marine mammals could all be severely impacted if they were covered by, or ingested oil. A potentially significant impact on marine birds could result from a major oil spill. Marine birds, particularly pelagic birds, have historically been severely affected by oil spills.

There have been conflicting reports concerning acute effects of oil spills on mammal and there is little information on chronic long-term effects. Different marine mammal groups have varying sensitivities to oil contamination. Mammals are also expected to avoid an oiled area.

No significant impacts from a major oil spill due to the proposed project are expected because of the low probability of an oil spill and the system safety characteristics of the project and of the existing Platform Eva. The potential for oil spill occurrence is discussed in more detail under "System Safety and Oil Spill Analysis," Section E.

3. Mitigation Measures

1. Please refer to Section C, Marine Water Quality for discussion of Muds and Cuttings.

2. Please refer to Section E, System Safety and Oil Spill Analysis for mitigation of oil spill impacts.

E. System Safety and Oil Spill Analysis

1. Environmental Setting

The baseline conditions with regard to system safety have been discussed previously under Existing Facilities. In summary, the existing pipelines, onshore facilities and platform all have been installed and operated under strict safety regulations, and stringent engineering designs for safety and reliability.

The most probable impacts related to system safety would be those related to an oil spill. The existing probability for a pipeline failure is estimated at about only 10^{-3} occurrences/year which is regarded as highly unlikely, while a platform or well spill is considered even less likely, with a predicted frequency of 10^{-4} to 10^{6} occurrences to year.

2. Environmental Impacts

As previously discussed, a major oil spill could cause significant effects on coastal resources, including marine biology and marine water quality. Two aspects of oil spills have been analyzed in this environmental evaluation:

a) the probability of an oil spill occurring; and,
b) the likely trajectory in the event of an oil spill.

The potential for an oil spill due to normal operations or accidents for the proposed project is negligible due to several factors. First, no structural changes to the existing platform and offshore pipelines are proposed. Second, because of the low reservoir pressure, wells from this field are not capable of flowing oil on their own, without pumping. Therefore, based on the Commission's extensive knowledge of the reservoir, a well-blowout from the proposed wells is considered highly possible. Lastly, the design of the well casings must conform to the rigorous safety standards of the State Lands Commission (See Project Description). Any potential of spillage due to casing failure is considered negligible.

Although a large spill due to the project is not expected to occur, trajectory analysis suggests a probability of 0.5 percentor less for a spill hitting shore within two hours. The Oil Spill Contingency Plan required by the Commission and committed to by Union in this case, provides for less than a one-hour response time. Cleanup and control equipment

should therefore be able to handle accidental spills before any damage to sensitive shoreline resources could occur. In addition, Union will not be conducting critical operations which could result in an oil spill during weather conditions which could preclude the effective use of the required oil spill equipment per the Commission's requirement and enforcement of a Critical Operations and Curtailment Plan.

3. Mitigation

a) The procedures mandated by the State Lands Commission for oil and gas exploration and development on State submerged lands provide an extensive level of control over accidental blowouts and spills from offshore production and transportation. Implementation of these procedures, as described in the well drilling program and production plan on file with the State Lands Commission, will provide adequate and state-of-the-art protection. The drilling program will be reviewed prior to approval by both the State Lands Commission and the Division of Oil and Gas and final approval will be given only after these agencies have determined the program to be sound.

b) The Oil Spill Containment Plan on file with the State Lands Commission will be implemented. This Plan is designed to limit, as far as practical, damage to property and harm to persons, wildlife or the environment from such a spill. Union will contract with Clean Coastal Waters for high speed response; in addition, the SLC is requiring that Union station a response boat onsite during drilling operations. During production operations, the SLC is requiring that Union have a boom on the platform which can be deployed from a crew boat in order to contain any oil spill within an hour. Clean Coastal Waters Oil Spill Cleanup and Containment Plan provides for the development of pre-set booms at the mouths of sensitive bays and rivers in the vicinity of Platform EVA, should they threatened.

F. Boating and Recreation

The proposed project will not significantly alter recreational opportunities in the project vicinity. The presence of the platform does not hinder recreational boating in the area and functions as a navigational aid. The small and temporary increase in crew and supply boat activity will, however, require boating enthusiasts to exercise more caution in navigating their craft.

G. Commercial and Sport Fisheries Impacts

Potential commercial fishing space has been lost at the platform location for the life of the platform. However, the proposed project is expected to have only a minor impact on commercial fisheries, since the majority of commercial fishing in the area is done in deeper water further offshore.

H. Marine Traffic and Navigation

Marine traffic support activities associated with the proposed drilling program will include approximately 350 round trips by crew and supply boats over 150-day period.

Travel time to the platform will be 25 to 35 minutes, with the boats generally leaving the Long Beach Pier or Marina. All support vessels will operate in waters which are at least 3 miles (5 km) from the designated marine traffic separation zones.

This is an identifiable increase in marine traffic but is temporary in nature. No adverse impacts to the area traffic patterns and current water use are anticipated. The use of appropriate navigational aids and vessel traffic patterns should preclude any traffic-related hazards. The platform is an established feature of the coastline, and most boaters recognize its location and allow for a conservative passing distance.

I. Acoustical Environment

Noise associated with drilling operations will be due primarily to the drilling rig and support equipment. Drilling operations will be audible to boaters in the vicinity of the platform; however,

because of the temporary nature of the drilling cycle (approximately 90 days) the expected short-term noise impacts are not considered significant. Simple attenuation with distance from the noise source will preclude noise impacts at onshore areas. After drilling is completed, there will be minimal noise impacts from Platform Eva, as all preliminary production operations are electrically driven. Noise impacts from the onshore facilities will not increase over existing conditions.

J. Visual Resources

Expanded drilling and production from Platform Eva will result in insignificant aesthetic impacts to the general site and related environs because the platform has been in place since the 1900's, and no new facilities other than the temporary drill rig on the platform are planned. Further, the location of the drilling activity is considered to be in the distant ground perspective when viewed from shore. The most prominent feature to be viewed during the drilling cycle will be the erected drilling derrick on the upper deck of the platform. The tower will replace the existing production derrick temporarily but will not alter the general shape and silhouette of the offshore structure. Thus, no long-term adverse impacts are anticipated to the onshore and offshore visual quality in the project vicinity.

K. Land Use and Infrastructure

No adverse impacts on land use, in the nearsite area, are expected as a result of the proposed drilling and production project from Platform Eva. Offshore drilling will be conducted from an existing structure, and no permanent expansion of onboard facilities will occur. No new structures or storage facilities will be required to support the proposed drilling operations.

Increased production of oil and natural gas, associated with the completion of the additional production wells and with the subsequent transfer of these hydrocarbons to onshore facilities, will not require expansion of existing pipeline storage or processing facilities. Present land use patterns

will not be altered. Accordingly, the proposed project is consistent with existing zoning, plans, and other applicable land use controls.

VII. PREPARERS OF INITIAL STUDY

This Initial Study was prepared by Susan Livenick of the Commission's Extractive Development Division, with contributions by Daniel Gorfain, Diana Jacobs and Dr. Joyce Bradley of the Division of Research and Planning.

0281S

STATE LANDS COMMISSION

ENVIRONMENTAL IMPACT ASSESSMENT CHECKLIST – PART II
(Form 13.20 (7/82)

SCH No. 8502206
File Ref.: W 40448
PRC 3035

I. BACKGROUND INFORMATION

A. Applicant: Union Oil Company
P.O. Box 6176
Ventura, CA 93006
ATTENTION: Dan Vossler

B. Checklist Date: 8 / 13 / 85

C. Contact Person: Susan R. Livenick
Telephone: (213) 590-3215

D. Purpose: Resumption of drilling activity, Platform Eva

E. Location: Platform Eva, located on State tide and submerged lands of Huntington Beach, Orange County, California

F. Description: Union proposes to drill five wells (four infill wells and one redrill) from existing Platform Eva. No construction of new facilities is involved: oil and gas from the wells will be transported to shore in existing pipelines and processed at existing onshore facilities

G. Persons Contacted: Dan Vossler, Union Oil Company

II. ENVIRONMENTAL IMPACTS. *(Explain all "yes" and "maybe" answers)*

A. *Earth.* Will the proposal result in:

	Yes	Maybe	No
1. Unstable earth conditions or changes in geologic substructures?	☐	☐	X
2. Disruptions, displacements, compaction, or overcovering of the soil?	☐	☐	X
3. Change in topography or ground surface relief features?	☐	☐	X
4. The destruction, covering, or modification of any unique geologic or physical features?	☐	☐	X
5. Any increase in wind or water erosion of soils, either on or off the site?	☐	☐	X
6. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet, or lake?	☐	☐	X
7. Exposure of all people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	☐	☐	X

	Yes	Maybe	No
B. *Air.* Will the proposal result in:			
1. Substantial air emissions or deterioration of ambient air quality?	☐	☐	[X]
2. The creation of objectionable odors?	☐	☐	[X]
3. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	☐	☐	[X]
C. *Water.* Will the proposal result in:			
1. Changes in the currents, or the course or direction of water movements, in either marine or fresh waters?	☐	☐	[X]
2. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff?	☐	☐	[X]
3. Alterations to the course or flow of flood waters?	☐	☐	[X]
4. Change in the amount of surface water in any water body?	☐	☐	[X]
5. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?	[X]	☐	☐
6. Alteration of the direction or rate of flow of ground waters?	☐	☐	[X]
7. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	☐	☐	[X]
8. Substantial reduction in the amount of water otherwise available for public water supplies?	☐	☐	[X]
9. Exposure of people or property to water-related hazards such as flooding or tidal waves?	☐	☐	[X]
10. Significant changes in the temperature, flow or chemical content of surface thermal springs?	☐	☐	[X]
D. *Plant Life.* Will the proposal result in:			
1. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?	☐	☐	[X]
2. Reduction of the numbers of any unique, rare or endangered species of plants?	☐	☐	[X]
3. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	☐	☐	[X]
4. Reduction in acreage of any agricultural crop?	☐	☐	[X]
E. *Animal Life.* Will the proposal result in:			
1. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, or insects)?	[X]	☐	☐
2. Reduction of the numbers of any unique, rare or endangered species of animals?	☐	☐	[X]
3. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	☐	☐	[X]
4. Deterioration to existing fish or wildlife habitat?	☐	☐	[X]
F. *Noise.* Will the proposal result in:			
1. Increase in existing noise levels?	☐	☐	[X]
2. Exposure of people to severe noise levels?	☐	☐	[X]
G. *Light and Glare.* Will the proposal result in:			
1. The production of new light or glare?	☐	☐	[X]
H. *Land Use.* Will the proposal result in:			
1. A substantial alteration of the present or planned land use of an area?	☐	☐	[X]
I. *Natural Resources.* Will the proposal result in:			
1. Increase in the rate of use of any natural resources?	☐	☐	[X]
2. Substantial depletion of any nonrenewable resources?	☐	☐	[X]

	Yes	Maybe	No
J. *Risk of Upset.* Does the proposal result in:			
1. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation) in the event of an accident or upset conditions?	☐	☐	☒
2. Possible interference with emergency response plan or an emergency evacuation plan?	☐	☐	☒
K. *Population.* Will the proposal result in:			
1. The alteration, distribution, density, or growth rate of the human population of the area?	☐	☐	☒
L. *Housing.* Will the proposal result in:			
1. Affecting existing housing, or create a demand for additional housing?	☐	☐	☒
M. *Transportation/Circulation.* Will the proposal result in:			
1. Generation of substantial additional vehicular movement?	☐	☐	☒
2. Affecting existing parking facilities, or create a demand for new parking?	☐	☐	☒
3. Substantial impact upon existing transportation systems?	☐	☐	☒
4. Alterations to present patterns of circulation or movement of people and/or goods?	☐	☐	☒
5. Alterations to waterborne, rail, or air traffic?	☐	☐	☒
6. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?	☐	☐	☒
N. *Public Services.* Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:			
1. Fire protection?	☐	☐	☒
2. Police protection?	☐	☐	☒
3. Schools?	☐	☐	☒
4. Parks or other recreational facilities?	☐	☐	☒
5. Maintenance of public facilities, including roads?	☐	☐	☒
6. Other governmental services?	☐	☐	☒
O. *Energy.* Will the proposal result in:			
1. Use of substantial amounts of fuel or energy?	☐	☐	☒
2. Substantial increase in demand upon existing sources of energy, or require the development of new sources?	☐	☐	☒
P. *Utilities.* Will the proposal result in a need for new systems, or substantial alterations to the following utilities:			
1. Power or natural gas?	☐	☐	☒
2. Communication systems?	☐	☐	☒
3. Water?	☐	☐	☒
4. Sewer or septic tanks?	☐	☐	☒
5. Storm water drainage?	☐	☐	☒
6. Solid waste and disposal?	☐	☐	☒
Q. *Human Health.* Will the proposal result in:			
1. Creation of any health hazard or potential health hazard (excluding mental health)?	☐	☐	☒
2. Exposure of people to potential health hazards?	☐	☐	☒
R. *Aesthetics.* Will the proposal result in:			
1. The obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?	☐	☐	☒
S. *Recreation.* Will the proposal result in:			
1. An impact upon the quality or quantity of existing recreational opportunities?	☐	☐	☒

	Yes	Maybe	No
T. *Cultural Resources.*			
1. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archeological site?	☐	☐	X
2. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?	☐	☐	X
3. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?	☐	☐	X
4. Will the proposal restrict existing religious or sacred uses within the potential impact area?	☐	☐	X
U. *Mandatory Findings of Significance.*			
1. Does the project have the potential to degrade the quality of the environment, reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	X
2. Does the project have the potential to achieve short term, to the disadvantage of long-term, environmental goals?	☐	☐	X
3. Does the project have impacts which are individually limited, but cumulatively considerable?	☐	☐	X
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	X

III. DISCUSSION OF ENVIRONMENTAL EVALUATION *(See Comments Attached)*

C.5. and E.1.: Union proposes to dump muds and cuttings pursuant to NPDES requirements, and will apply to the Regional Water Quality Control Board for a permit to dump. Union has committed to comply with the terms of whatever permit the Regional Board (Region 8) may require, including a monitoring program. Any adverse impacts associated with the dumping of muds and cuttings will be short-term and localized and will be mitigated through the NPDES permit requirements. Refer to the discussion of Impact to the Marine Environment, pages 25-26 of this document.

IV. PRELIMINARY DETERMINATION

On the basis of this initial evaluation

☒ I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared.

☐ I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Date: / /

For the State Lands Commission

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3681

Form 13.20 (7/82)

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