

## CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000  
SAN FRANCISCO, CA 94105-2219  
VOICE AND TDD (415) 904-5200

Page: 1 of 10Date: April 24, 1997**W-18a****AMENDMENT TO ADMINISTRATIVE PERMIT**

**Application No.:** E-97-02-A1

**Applicant:** Unocal Corporation

**Agent:** Tom Jordan, Jordan Environmental Services

**Project Location:** On sandy beach and intertidal and estuarine areas bounded by Front Street and Avila Beach Drive at Avila Beach, San Luis Obispo County. See Exhibit 1.

**Project Description:** Relocation of temporary groundwater monitoring well/piezometer clusters and stilling pipes, and installation of piezometers; data collection in the intertidal zone; and wellhead beautification.

**EXECUTIVE DIRECTOR'S DETERMINATION:** The findings for this determination, and for any special conditions, appear on subsequent pages.

**NOTE:** Public Resources Code Section 30624 provides that this permit shall not become effective until it is reported to the Commission at its next meeting. If one-third or more of the appointed membership of the Commission so request, the application will be removed from the administrative calendar and set for public hearing at a subsequent Commission meeting. Our office will notify you if such removal occurs.

This permit will be reported to the Commission at the following time and place:

Date: Wednesday May 14, 1997  
Time: Meeting begins at 9:00 a.m.  
Place: Radisson Hotel  
1111 E. Cabrillo Blvd.  
Santa Barbara, CA 93103  
(805) 963-0744

IMPORTANT: Before you may proceed with development, the following must occur:

Pursuant to 14 Cal. Admin. Code Sections 13150(b) and 13158, you must sign the enclosed duplicate copy acknowledging the permit's receipt and accepting its contents, including all conditions, and return it to our office. Following the Commission's meeting, and once we have received the signed acknowledgment and evidence of compliance with all special conditions, we will send you a Notice of Administrative Permit Effectiveness.

BEFORE YOU CAN PROCEED WITH DEVELOPMENT, YOU MUST HAVE RECEIVED BOTH YOUR ADMINISTRATIVE PERMIT AND THE NOTICE OF PERMIT EFFECTIVENESS FROM THIS OFFICE.

PETER DOUGLAS  
Executive Director  
California Coastal Commission

By: *Alison Dettm*  
Supervisor  
Energy and Ocean Resources Unit

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Acknowledgment:

The undersigned permittee acknowledges receipt of this permit and agrees to abide by all terms and conditions thereof.

The undersigned permittee acknowledges that Government Code Section 818.4 which states in pertinent part, that: "A public entity is not liable for injury caused by the issuance...of any permit..." applies to the issuance of this permit.

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Date

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Signature of Permittee or Representative

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**STANDARD CONDITIONS:**

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

**SPECIAL CONDITIONS:**

The conditions to Administrative Permit No. E-97-02 are hereby modified as follows:

1. Unocal shall submit ~~quarterly monitoring reports~~ a final monitoring report to the Executive Director by ~~the twentieth day after the end of the quarter~~ September 30, 1997.
2. Unocal shall provide a ~~“safety striping” finish on the well head casings acceptable to the Port San Luis Harbor District.~~ Unocal shall submit written proof of Harbor District approval of the “safety striping” design prior to the issuance of the coastal development permit.
6. All special conditions to the original permit (Administrative Permit No. E-97-02) not expressly deleted or modified by this amendment, i.e., Special Conditions Nos. 3-5, remain fully effective and applicable to the project.

**EXECUTIVE DIRECTOR'S DETERMINATION:**

The executive director hereby determines that the proposed development will cost less than \$100,000 and that on this basis it is within a category of development that qualifies for approval by the executive director through the issuance of an administrative permit, pursuant to Public Resources Code 30624. Subject to Standard and Special Conditions attached, said development is in conformity with the provisions of Chapter 3 of the Coastal Act of 1976, will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3, and will not have any significant impacts on the environment within the meaning of the California Environmental Quality Act. Because this development is located between the nearest public road and the sea, the Executive Director further finds it to be in conformity with the public access and public recreation policies of Chapter 3.

**FINDINGS FOR EXECUTIVE DIRECTOR'S DETERMINATION:**

**A. Background**

On December 12, 1996, the Regional Water Quality Control Board, Central Coast Region (RWQCB), issued Cleanup and/or Abatement Order (CAO) No. 96-56 which required Unocal to complete a study of groundwater migration at Avila Beach. On March 12, 1997, the Commission granted Administrative Permit No. E-97-02 to Unocal to install eight temporary groundwater monitoring well/piezometer clusters on Avila Beach and three one-inch stilling pipes off Avila Pier and in San Luis Obispo Creek in order to gather the data necessary to evaluate the potential for discharge of hydrocarbon-contaminated groundwater to the ocean or creek (See Exhibit 2).

After receiving the permit, Unocal determined that due to unanticipated field conditions, requests from the Port San Luis Harbor District (PSLHD) and accessibility problems, the location of four monitoring well/piezometer clusters and two stilling pipes needed to be changed. After leaving messages for Commission staff via telephone and fax, Unocal began implementing the revised project without approval of the executive director.

On March 20, 1997, Commission staff notified Unocal that by carrying out project modifications prior to approval by the executive director and, if necessary, the Coastal Commission, Unocal violated the terms and conditions of Administrative Permit No. E-97-02. Unocal has stopped all work on the beach pending consideration of this permit amendment request. On April 8, 1997, Unocal submitted an amendment request to authorize all project changes.

**B. Description of Amendments****1. Project Description***Relocation of monitoring well/piezometer clusters*

The two monitoring well/piezometer clusters originally proposed to be located adjacent to the Avila Beach Drive bridge abutments were moved approximately 50 feet east due to sand erosion from around the base of the abutments. The two clusters proposed south of San Juan Avenue were moved east in order to be placed in line with the lifeguard stand, pursuant to a request from the PSLHD. The well cluster located south of San Antonio Street was drilled but not constructed due to the low volume of groundwater encountered. The locations of the three clusters proposed south of San Miguel Street, adjacent to the pier foundations, did not change.

In addition, a stilling well originally proposed just east of Avila Pier was moved to the west side for accessibility reasons, and a stilling well proposed upstream of the Avila Beach Drive bridge was moved southwest and downstream of the bridge due to sand deposits in the original location that rendered it unusable for measuring surface water. All revised locations are shown in Exhibit 1.

*Piezometer installation and well cluster beautification*

Three piezometers will be installed at each of the monitoring well/piezometer cluster sites (which were installed during the week of March 17, 1997, and are contained within an 18-inch steel casing). Each piezometer will consist of one to four-inch PVC casing and will have at least a five foot-long screen. The piezometers will house and position transducers (the actual measuring devices) at various depths--approximately 10 feet, 20 feet and 40 feet. Water elevation, salinity and temperature will be measured and recorded in data loggers, and water samples may be collected for laboratory analysis. (Note: Hereafter in this permit, the term "piezometer" will include the piezometer itself plus the associated measuring devices it houses such as the transducer and the data logger.)

A "direct push technology" rig mounted on a Case 1840 skip loader will be used to install the piezometers. The loader moves on rubber tracks designed for low impact and will access the beach through a maintenance right-of-way near San Juan Avenue. The field effort will also use a small all-terrain recreational-type vehicle with rubber flotation tires.

Piezometer installation activities will require ten days to complete, and will occur between May 15 and May 30, 1997. All work will be scheduled so as to avoid weekends and holidays.

After installing the piezometers, Unocal will apply to each monitoring cluster casing a pier-like motif improvement which was designed by Cal Poly University students and approved by the Port San Luis Harbor Commission on March 25, 1997. Under this improvement program, the casings will be painted to resemble wooden pilings, and two or three wood pier posts of staggering height

will be installed around them. Unocal will be responsible for maintaining these improvements throughout the life of the project.

#### *Data collection in the intertidal zone*

Pursuant to a request by the CDFG, Unocal will install temporary piezometers in the intertidal zone to collect data necessary to study the mixing, fate, and transport of the subsurface groundwater. In each data collection event, data will be collected twice from two areas, one aligned with the transect of monitoring clusters along the pier and the other aligned with the clusters seaward of the lifeguard tower (see Exhibit 1). Water elevation, salinity and temperature will be measured, and water and sediment samples may be collected for laboratory analysis. The first data collection event will occur in early summer (late May). Other collection events are proposed for July or August as agreed upon by Unocal and the CDFG.

The piezometers will be installed, the data collected, and the piezometers and all equipment removed in a single day. Activities may begin shortly before sunrise and be completed by sunset. Installation will use a "direct push technology" rig and an all-terrain vehicle, as described for the upland clusters.

Data must be collected during the approximate lunar low tide cycle to allow access to the furthest reaches of the intertidal area and to acquire subsurface water samples reflective of presumed maximum discharge conditions. Activities must also be performed during daylight hours. Each collection event will require four days using one field crew or two days using two field crews. Thus, data will be collected during four-day periods between May 27 and August 31, 1997.

All work will be scheduled so as to avoid weekends and holidays.

## **2. Special Conditions**

This amendment modifies Special Condition No. 1 of the original permit to allow Unocal to submit one final monitoring report to the Executive Director instead of submitting quarterly monitoring reports, in order to better reflect the goals of the monitoring effort.

This amendment removes Special Condition No. 2 of the original permit to allow Unocal to implement the wellhead improvement project as described in their amendment request. The wellhead improvements replace the "safety-striping" finish that was originally required.

Finally, this amendment adds Special Condition No. 6 to clarify that all special conditions to the original permit (Administrative Permit No. E-97-02) not expressly deleted or modified by this amendment, i.e., Special Conditions Nos. 3-5, remain fully effective and applicable to the project.

**C. Coastal Act Issues**

**I. Marine Resources**

Coastal Act Section 30230 states:

*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. Uses 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.*

Coastal Act Section 30231 states in part:

*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 through, among other means, minimizing adverse effects of waste water discharges...*

Impacts to marine resources and habitat were addressed in the Commission's original permit (No. E-97-02) approval.

With respect to marine resources, all modifications included in this amendment that relate to relocating the monitoring well/piezometer clusters, installing piezometers in the upland areas, and implementing the wellhead casing improvements are not significant changes from what was originally approved. Specifically, (1) the monitoring well/piezometer clusters are still located above the mean high tide line in areas where no unique, rare or endangered species are present; (2) the piezometers will be installed at these existing cluster areas; and (3) the wellhead improvement program simply replaces the originally-planned "safety striping" design.

Thus, these activities remain within the scope of the original permit. The executive director therefore finds that as conditioned in the original approval, these activities remain consistent with Sections 30230 and 30231 of the Coastal Act.

Data collection in the intertidal zone will not significantly affect marine resources because (1) all activities will occur in sandy beach habitat areas, thus no impacts to hard-bottom substrate or communities will be caused by the project activities; (2) the area of disturbance will be very small (the installation rig measures 5 ft. x 12 ft. and the steel casings associated with the piezometers measure less than six inches in diameter); (3) sandy beach invertebrates reside in a dynamic habitat area, and thus are naturally tolerant of habitat disturbance; (4) the number and biomass of any invertebrate organisms lost will be extremely low due to the small project area, and will not represent any rare or endangered species; (5) any nearshore turbidity increases will be reduced or completely avoided because the project will be performed in periods of low tide; and (6) any

disturbance will be very temporary (all activities will be initiated and completed at each site between just-before-sunrise to sunset).

Furthermore, **Special Condition No. 5** from Administrative Permit No. E-97-02 which ensures that grunions will not be adversely affected by any project activity remains in effect.

Finally, like the previously-approved activities, data collection from the intertidal zone is necessary to evaluate the potential for discharge of hydrocarbon-contaminated groundwater to the ocean, and thus will facilitate eventual remediation.

Hence, data collection in the intertidal zone will facilitate maintaining and possibly restoring marine resources; will be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain existing populations of all species of marine organisms; and will facilitate minimizing or preventing discharge of contaminated groundwater to the ocean. The executive director therefore finds that as conditioned, all activities described in this amendment are consistent with Coastal Act Sections 30230 and 30231.

## 2. **Public Access and Recreation**

Coastal Act Section 30210 states:

*In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Impacts to public access and recreation were addressed in the Commission's original permit (No. E-97-02) approval. With respect to public access and recreation, the activities described in this amendment are not significant changes from what was originally approved.

Specifically, (1) the monitoring well/piezometer clusters are still located in areas that do not interfere with recreational use of the beach and ocean; (2) data collection activities in the intertidal zone will be conducted in the same general project area in which the upland clusters are located; (3) the wellhead improvement program simply replaces the originally-approved "safety striping" finish in an effort to better address the aesthetics of the wells; (4) impacts from the most intrusive activities--installation and removal activities--are still very temporary (up to ten days for piezometer installation; up to seven days for monitoring well/piezometer cluster removal; up to four days for each intertidal data collection event); and (5) the entire project remains temporary in duration (as described in the original permit, the site will be restored to pre-project conditions by December 1, 1997).

All work will be scheduled so as to avoid weekends and holidays. Furthermore, Unocal is obligated (through a license issued by the PSLHD) to comply with requests by the PSLHD concerning minimizing impacts to recreation and ensuring public safety. Unocal must pre-notify



the PSLHD in writing of all activities planned for beach areas, and must coordinate with the PSLHD staff on a daily basis during project implementation. Unocal may be restricted from performing various activities during times of high beach use at the discretion of the Harbor Manager.

Given the scope and duration of the project activities, and the existing license between Unocal and the PSLHD governing beach access and use, public access and recreation opportunities will not be significantly affected. The executive director therefore finds that as conditioned, the project is consistent with Coastal Act Section 30210.

### 3. *Visual Resources*

Coastal Act Section 30251 states:

#### Section 30251.

*The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*

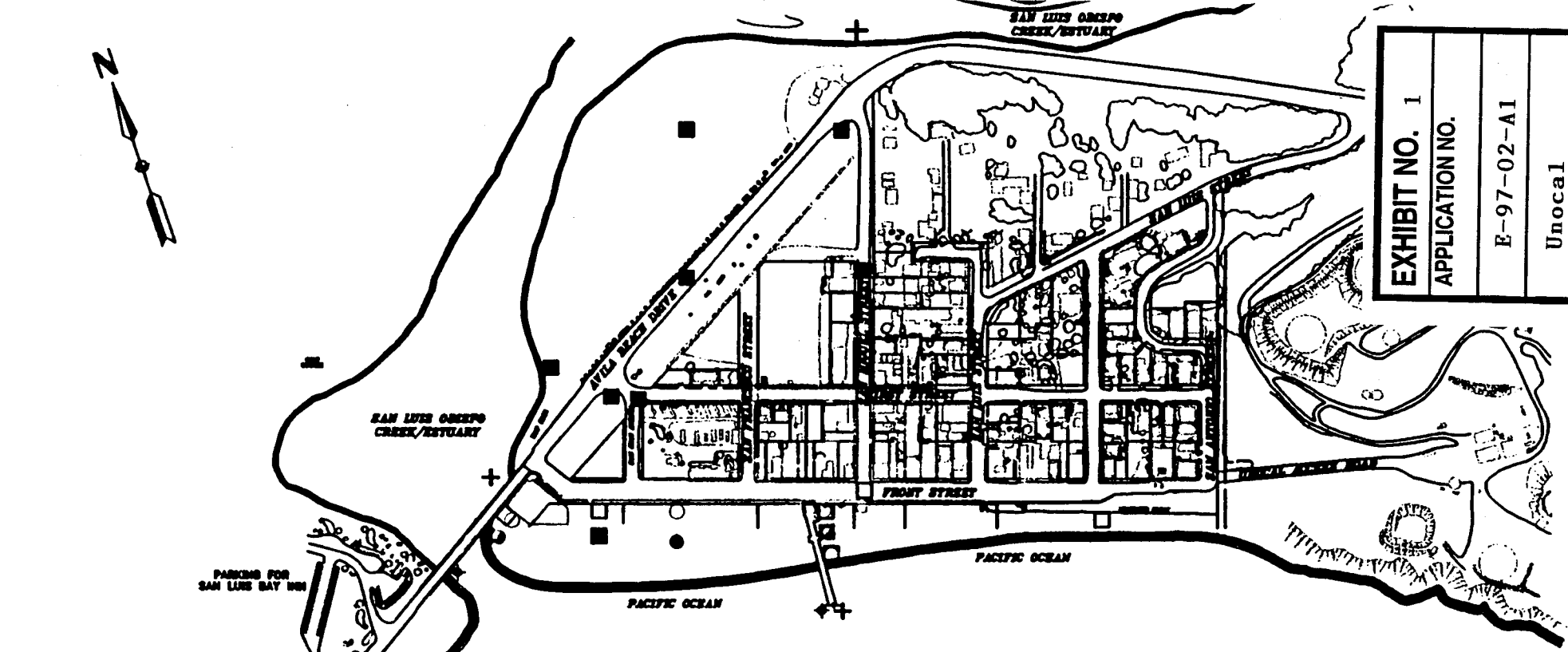
Impacts to visual resources were addressed in the Commission's original permit (No. E-97-02) approval. With respect to visual resources, the activities described in this amendment are not significant changes from what was originally approved. In addition, several changes result in enhanced visual qualities in the project area.

Specifically, (1) several monitoring well/piezometer clusters were relocated to areas that reduce their visual impact; (2) the wellhead improvement program replaces the originally-approved "safety striping" finish in an effort to better address the aesthetics of the wells; (3) the most intrusive adverse visual impacts--those from installation and removal activities--will still be extremely temporary (up to ten days for piezometer installation; up to seven days for monitoring well/piezometer cluster removal; up to four days for each intertidal data collection event); and (4) the entire project remains temporary in duration (as described in the original permit, the site will be restored to pre-project conditions by December 1, 1997).

Given the scope and duration of the project activities, the scenic and visual qualities at the project area will be protected. The executive director therefore finds that as conditioned, the project is consistent with Coastal Act Section 30251.

**D. California Environmental Quality Act (CEQA)**

With the changes described in this amendment and as conditioned, the environmental impacts of the project are no more injurious to the environment than those of the project as originally approved by the Executive Director. Therefore, the Executive Director's original CEQA finding is still valid.



<b>EXHIBIT NO. 1</b>
<b>APPLICATION NO.</b>
<b>E-97-02-A1</b>
<b>Unocal</b>

**LEGEND FOR APPROXIMATE AS-BUILT LOCATIONS**

○	4"-Fully Screened Well and 3 2"-Piezometers
●	3 2"-Piezometers
⊕	2"-Stilling Well

**LEGEND FOR PROPOSED LOCATIONS SUBMITTED AS EXHIBIT 2 IN CCC PERMIT**

□	4"-Fully Screened Well and 3 2"-Piezometers
■	3 2"-Piezometers
+	2"-Stilling Well
⊞	Weather Station

NOTE: THE AS-BUILT LOCATIONS ARE APPROXIMATE, DERIVED FROM PACING AT THE BEACH. THE LOCATIONS WILL BE SURVEYED BY CANNON ASSOCIATES AT A LATER DATE.



<b>E N T R I X</b>
<b>APPROXIMATE AS-BUILT WELL LOCATIONS AT THE BEACH</b>
<b>UNOCAL CORPORATION AVILA BEACH, CA</b>
PROJ. NO: 307419   CK: SIM   DATE: 3/25/97

**CALIFORNIA COASTAL COMMISSION**

45 FREMONT, SUITE 2000  
 SAN FRANCISCO, CA 94105-2219  
 VOICE AND TDD (415) 904-5200



Page: 1 of 10  
 Date: February 20, 1997

**ADMINISTRATIVE PERMIT**

**Application No.:** E-97-02 **W-5a**

**Applicant:** Unocal Corporation

**Agent:** Kim Tulledge, Cannon Associates

**Project Location:** South of San Antonio, San Miguel and San Juan Streets, on sandy beach east and west of Avila Pier. Stilling pipe locations include San Luis Estuary. See Exhibit 1.

**Project Description:** Temporary installation and operation of three one-inch stilling pipes (two in San Luis Creek and one in the ocean adjacent to Avila Pier) and eight groundwater monitoring well/piezometer clusters. The well clusters are proposed on Avila beach.

**EXECUTIVE DIRECTOR'S DETERMINATION:** The findings for this determination, and for any special conditions, appear on subsequent pages.

**NOTE:** Public Resources Code Section 30624 provides that this permit shall not become effective until it is reported to the Commission at its next meeting. If one-third or more of the appointed membership of the Commission so request, the application will be removed from the administrative calendar and set for public hearing at a subsequent Commission meeting. Our office will notify you if such removal occurs.

This permit will be reported to the Commission at the following time and place:

Date: Wednesday, March 12, 1997  
 Time: Meeting begins at 9:00 a.m.  
 Place: Carmel Mission Inn  
 3665 Rio Road  
 Carmel, CA 93923  
 (408) 624-1841

<b>EXHIBIT NO. 2</b>
<b>APPLICATION NO.</b>
E-97-02-A1
Unocal

IMPORTANT - Before you may proceed with development, the following must occur:

Pursuant to 14 Cal. Admin. Code Sections 13150(b) and 13158, you must sign the enclosed duplicate copy acknowledging the permit's receipt and accepting its contents, including all conditions, and return it to our office. Following the Commission's meeting, and once we have received the signed acknowledgment and evidence of compliance with all special conditions, we will send you a Notice of Administrative Permit Effectiveness.

BEFORE YOU CAN PROCEED WITH DEVELOPMENT, YOU MUST HAVE RECEIVED BOTH YOUR ADMINISTRATIVE PERMIT AND THE NOTICE OF PERMIT EFFECTIVENESS FROM THIS OFFICE.

PETER DOUGLAS  
Executive Director

By: *Alain R. [Signature]*  
Supervisor  
Energy and Ocean Resources Unit

**STANDARD CONDITIONS:**

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the Executive Director of the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

**SPECIAL CONDITIONS**

This permit is granted subject to the following special conditions:

1. Unocal shall submit quarterly monitoring reports to the Executive Director by the twentieth day after the end of the quarter.
2. Unocal shall provide a "safety striping" finish on the well head casings acceptable to the Port San Luis Harbor District. Unocal shall submit written proof of Harbor District approval of the "safety striping" design prior to the issuance of the coastal development permit.

3. Commencing within sixty (60) days of completion of the groundwater monitoring program required in the Regional Water Quality Control Board's December 12, 1996 Cleanup or Abatement Order 96-59, but commencing no later than November 1, 1997 and concluding no later than December 1, 1997, Unocal shall remove all wells and associated equipment approved under this permit and restore the site to pre-project conditions. Extensions of these deadlines may be approved at the discretion of the executive director upon a showing a good cause.
4. In addition to any immunities provided for by law, in exercising this permit, Unocal agrees to hold harmless and indemnify the California Coastal Commission, its officers, employees, agents, successors and assigns from any claims, demands, costs, expenses and liabilities for any damage to public or private property or personnel injury that may result directly or indirectly from the project.
5. If any construction or abandonment activities are conducted during the California grunion spawning season (March 1-September 1), the project site shall be monitored by a professional biologist, approved by the executive director, to determine if grunion runs are occurring. If grunion runs are observed, Unocal shall cease all construction and abandonment activities during any forecasted four-day grunion spawning period, and if eggs are found, all activities on the beach shall cease until grunion eggs have hatched.

**EXECUTIVE DIRECTOR'S DETERMINATION:**

The executive director hereby determines that the proposed development will cost less than \$100,000 and that on this basis it is within a category of development that qualifies for approval by the executive director through the issuance of an administrative permit, pursuant to Public Resources Code 30624. Subject to Standard and Special Conditions attached, said development is in conformity with the provisions of Chapter 3 of the Coastal Act of 1976, will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3, and will not have any significant impacts on the environment within the meaning of the California Environmental Quality Act. If located between the nearest public road and the sea, this development is in conformity with the public access and public recreation policies of Chapter 3.

**FINDINGS FOR EXECUTIVE DIRECTOR'S DETERMINATION:**

**1. Project Description**

Unocal proposes to conduct a groundwater monitoring program at Avila Beach in San Luis Obispo County to gather the data necessary to evaluate the potential for discharge of hydrocarbon contaminated groundwater to the intertidal zone. Unocal estimates that the total cost of the temporary monitoring well proposal is \$35,000.

On December 12, 1996, the Regional Water Quality Control Board issued Cleanup or Abatement Order 96-59 and thereby directed Unocal to install temporary groundwater monitoring wells at the Avila Beach site. Eight wells clusters are to be located as shown on Exhibit 2. The four inch and two inch diameter wells shall be screened at intervals ranging from two feet above mean sea level (MSL) to fifteen feet below MSL.

All well clusters will be located in areas which will not interfere with recreational use of the beach and ocean. One well cluster south of San Antonio Street will be located adjacent to the seawall. Three clusters south of San Miguel Street will be located adjacent to pier foundations. Two clusters south of San Juan Avenue will be located on the open beach in areas which will not interfere with use of other facilities and two clusters will be located adjacent to foundations of Avila Beach Drive bridge. All wells will be constructed in locations and with sufficient vertical exposure, allowing each cluster to be readily visible during a combined high tide and storm surge event.

A hollow stem auger rig with a ten inch auger will be used to install the wells. The drilling rig, a little larger than a pickup truck, will have all terrain capability and will access the site through a maintenance right-of-way. The monitoring well project construction, to be implemented in March 1997, is expected to take three days to complete. All drill cuttings will be stored immediately in Department of Transportation (DOT) approved 55-gallon drums and transported to a properly licensed disposal facility.



The wells located on the beach will be drilled to a depth of 25 feet. Schedule 40 PVC pipe will be used for casing and screen (screen slot size = 0.020"). The casing interval is from approximately 4.5 feet above the surface to approximately 3 feet below grade, and the screen interval from approximately 3 feet below grade to 25 feet below grade. A course-grain sand pack will fill the annulus from 2 feet to 25 feet. A 1 foot bentonite seal will be placed above the sand, followed by cement grout to the surface. The well head casing will protrude 4-5 feet above the surface of the sand, be anchored by a concrete foundation (2 feet square on each side) and have a safety striping finish. The top six inches of the concrete foundation and 3-5 feet of the well head casing will normally be exposed above the surface of the sand.

Three one-inch stilling pipes designed to accurately measure surface water elevations will be installed in San Luis Creek (two) and in the ocean at the end of the Avila pier (one). The pipes will be hand placed and thus will not require the use of heavy equipment in potentially sensitive habitat areas.

Once the temporary wells and equipment are installed, data will be collected routinely through the period ending April 30, 1997. Beginning May 1, 1997 and continuing through October 31, 1997, data may be collected periodically to assess conditions during summer months. Starting November 1, 1997 the monitoring wells and piezometers will be removed.

## 2. Local Approvals

On February 25, 1997, the Port San Luis Harbor District Board of Commissioners will consider issuing to Unocal a Use License for the installation and operation of the groundwater monitoring wells. Unocal's Use License is limited to those activities necessary to comply with the Regional Water Quality Control Board's Cleanup or Abatement Order 96-59 for the temporary monitoring well project.

## 3. Marine Resources

Coastal Act Section 30230 states:

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. Uses of the marine environment shall be carried out in such a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organism adequate for long-term commercial, recreational, scientific, and educational purposes.

Coastal Act Section 30231 states in part:

The biological productivity 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 through, among other means, minimizing adverse effects of waste water discharges...

The installation of groundwater monitoring wells will occur above the mean high tide line in areas where no unique, rare or endangered species are present. All project work will occur adjacent to existing structures where no unique, rare or endangered species are anticipated. The proposed project is designed to assess the presence of, and characterize hydrocarbon contamination within the groundwater in the Avila Beach area. The monitoring well project will thus assure quantitative evaluation of groundwater contamination, and thus facilitate eventual remediation.

Grunion (*Leuresthes tenuis*) spawning activities have been reported at Avila Beach. The periods when the grunion lay their eggs are called grunion runs, since the grunion come ashore in masses. From late February to early September, spawning activity occurs only on the second, third and fourth nights following the peak tides of the 14-day lunar cycle, when the tides that follow will be lower than those the night before. The grunion are washed onto the beach by the waves. Between breakers, the female grunion digs a vertical burrow in the wet sand and deposits a mass of 1,000 to 3,000 eggs.

Since the construction project and subsequent well removal may be carried out during part of the grunion spawning season, the associated activities could potentially disturb grunion spawning activities. The executive director is thus requiring in **Special Condition 5** that the project shall be monitored by a professional biologist to determine if grunion runs are occurring. If grunion runs are observed, all construction or abandonment activities shall cease during any forecasted four-day grunion spawning period, and if eggs are found, all activities on the beach shall cease until the grunion eggs have hatched.

The executive director therefore finds that the monitoring well project will help to sustain the biological productivity of coastal waters by providing field data on the existing groundwater contamination at Avila Beach, and, in combination with Special Condition 5, is therefore consistent with Coastal Act Sections 30230 and 30231.

#### 4. Archaeological Resources

Coastal Act Section 30244 states:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

An archaeological monitoring report was prepared by Gibson's Archaeological Consulting for the project site. Archaeological field work was conducted between November 14, 1995 and December 14, 1995; supplemental field work was conducted on

January 8, 1996. No Prehistoric cultural materials or paleontological specimens were observed during the preliminary grading, pit excavation or excavation of the seawall.

Based on the archaeological field monitoring, no significant historic, prehistoric or paleontological resources are present at the project site. Thus, the executive director finds that the monitoring well project, as proposed, is consistent with section 30244 of the Coastal Act.

#### 5. Air Quality

Coastal Act Section 30253 (3) states:

New development shall be consistent with requirements imposed by the air pollution control district or the State Air Resources Control Board as to each particular development.

The San Luis Obispo County Air Pollution Control District (APCD) has reviewed Unocal's past monitoring well project and determined that there will be no significant emissions. The proposed monitoring well project will not result in significant increased air emissions. Air quality permits will not be required for the wells and ancillary equipment. The APCD will continue to monitor project equipment and emissions that may require air quality permits. The executive director thus finds that the project, as proposed, is consistent with Section 30253(3) of the Coastal Act.

#### 6. Public Access and Recreation

Coastal Act Section 30210 states:

In carrying out the requirements of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

The project is located at the Avila State Beach, adjacent to San Luis Creek. Public access to the shoreline and along the coast is available at the site. Coastal access and recreational use of the beach is a major consideration in evaluating the temporary monitoring well project. The project's relative proximity to the coastline and high beach use area increases concerns for public safety associated both with the underground contamination and operation of the monitoring well facilities.

Each well located on the sandy beach will include a protruding well head casing anchored by a concrete foundation with safety striping approved by the Port San Luis Harbor District. The top six inches of the concrete foundation and 4 - 5 feet of the well head casing will normally be exposed above the sand surface.

An all-terrain auger rig, approximately the size of a large pickup truck, will be used for well construction. Well construction should be completed within three days and will occur in late March. Subsequent abandonment will require less than one week. Construction-related public access impacts are not expected to be significant.

**Special Condition 2** requires Unocal to include "safety striping" on the well head casing, acceptable to the Port San Luis Harbor District. **Special Condition 3** limits the permit term to the monitoring program duration (thus abandonment is anticipated in less than one year from construction completion) and requires the wells to be fully removed and the site restored to pre-project conditions by December 1, 1997. The executive director therefore finds that the monitoring well project, as conditioned, is consistent with Coastal Act Section 30210.

## 7. Visual Resources

Coastal Act Section 30251 states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Avila State Beach is developed with a variety of facilities including fire pits, playground equipment and volleyball standards. The monitoring well project (particularly heavy equipment on the beach during the three-day construction period and during the one-week abandonment operation) will adversely affect visual resources in the public recreation area of Avila Beach. The well clusters will protrude up to five feet above the surface. However, these impacts will be of limited duration and **Special Condition 3** requires the applicant to return the site to pre-project conditions by December 1, 1997. The monitoring well project is not proposed in a highly scenic area, as designated in the California Coastline Preservation and Recreation Plan, nor will the project significantly impact views to and along the ocean. Once project construction is complete, the well head casings will be subordinate to the character of the semi-developed beach setting. Therefore, the executive director finds that as conditioned, the project's adverse impacts upon visual resources will be short-term and that the project is therefore consistent with Coastal Act section 30251.

**8. California Environmental Quality Act**

California Public Resources Code. Section 21080.5(d)(2)(i) states:

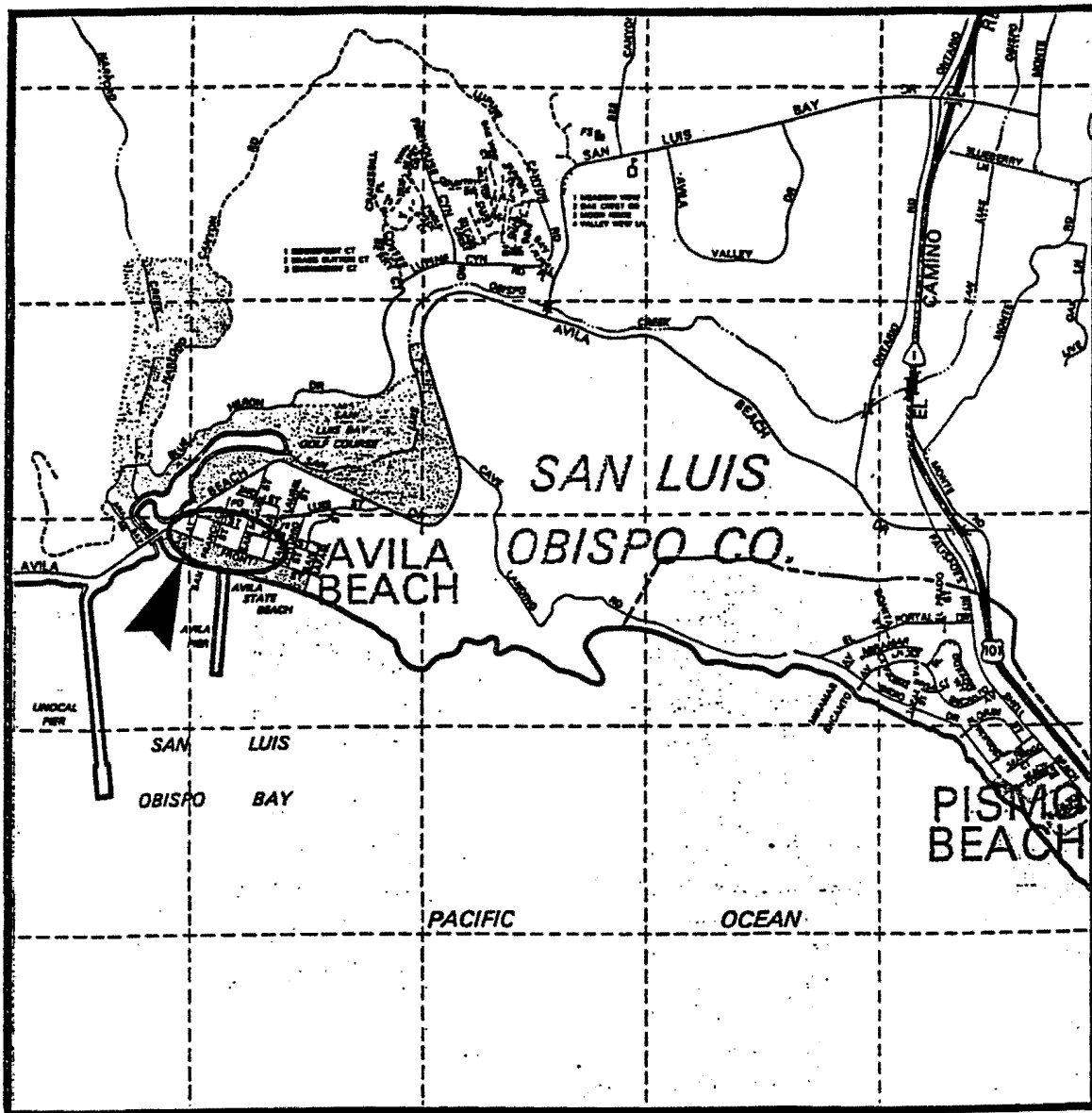
The rules and regulations adopted by the administering agency shall require that an activity will not be approved or adopted as proposed if there are feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment.

Thus, CEQA requires the consideration of feasible alternatives and mitigation measures to lessen any environmental impacts of the project to a level of insignificance.

Avila Beach soils and groundwater are contaminated with petroleum products. The Unocal Monitoring Well project is required by the RWQCB to evaluate the mobility and migration of the dissolved hydrocarbon plume and any free-phases hydrocarbons in the groundwater.

The "no project" alternative would preclude the evaluation of the groundwater and could thus handicap successful remediation efforts. Therefore the "no project" alternative is not a less environmentally damaging alternative. Further, Unocal is required to take action by RWQCB Cleanup or Abatement Order No. 96-59.

The project, as proposed and conditioned, meets the mitigatory requirements of Section 21080.5 (d)(2)(i) of the CEQA. Although the Commission believes that implementation of the monitoring well project has the potential to result in adverse impacts to coastal resources, the Commission finds no feasible less environmentally damaging alternatives or additional feasible mitigation measures that would substantially lessen any significant adverse impact which the activity may have on the environment, other than those identified herein. The Commission thus finds the proposed project, as conditioned, is consistent with the provisions of the CEQA.



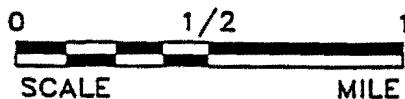
SOURCE: THOMAS BROS. MAPS.  
 SAN LUIS OBISPO  
 PAGE 248



QUAD LOCATION

 SITE LOCATION

SCALE: 1:31,680



GROUNDWATER  
 TECHNOLOGY

SITE LOCATION MAP

CLIENT:  
 UNOCAL CORPORATION  
 LOS ANGELES, CALIFORNIA

FILE:  
 1308-SL (1:1)

PROJECT NO.:  
 02230 00C

LOCATION:  
 AVILA BEACH, CALIFORNIA

REV.

DES.

SC

DET.

JC

DATE:

11/17/94

EXHIBIT NO. 1

APPLICATION NO.

E-97-02

Unocal

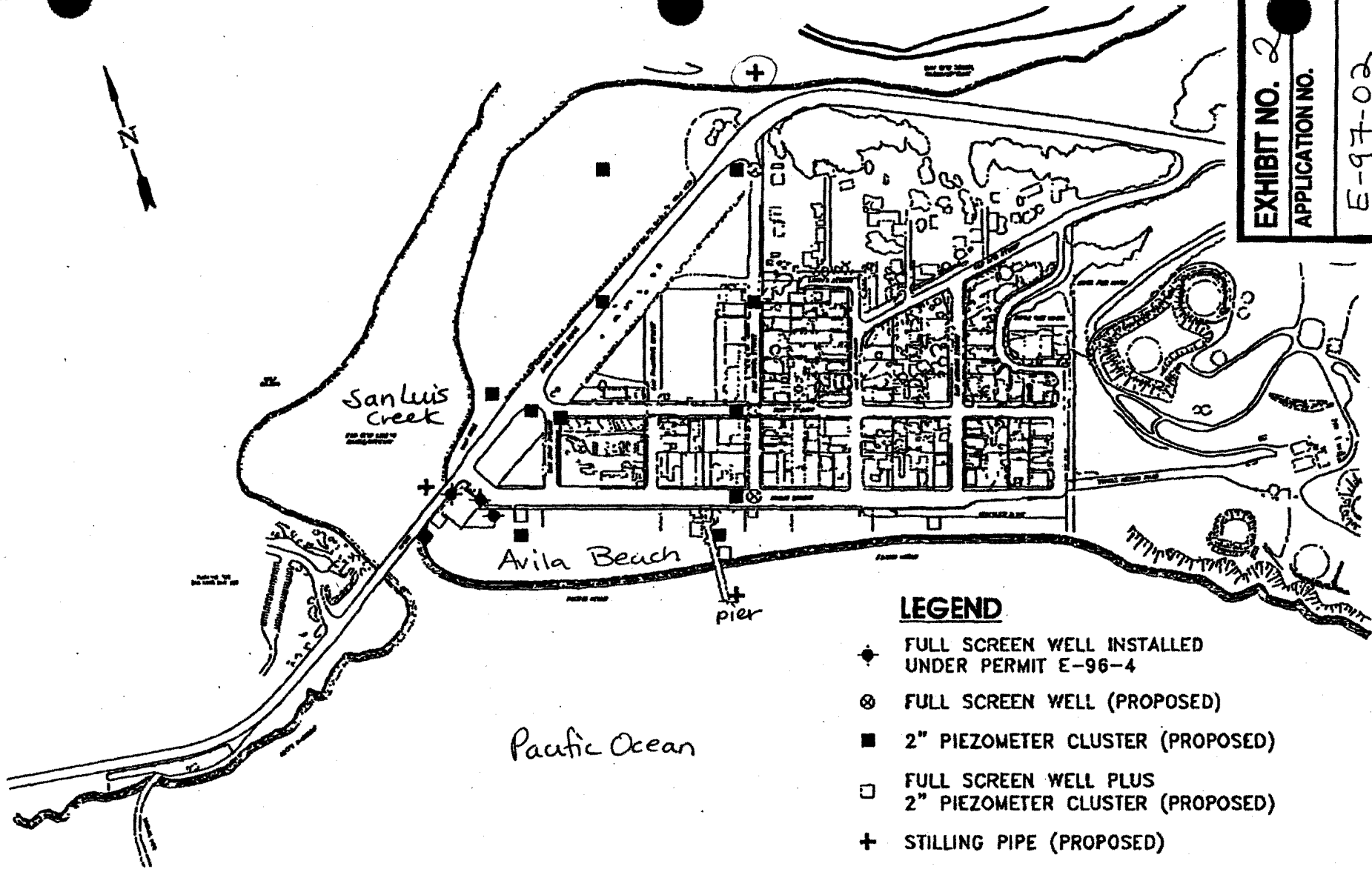



EXHIBIT NO. 2  
 APPLICATION NO. E-97-02  
 UNOCAL

**LEGEND**

- ◆ FULL SCREEN WELL INSTALLED UNDER PERMIT E-96-4
- ⊕ FULL SCREEN WELL (PROPOSED)
- 2" PIEZOMETER CLUSTER (PROPOSED)
- FULL SCREEN WELL PLUS 2" PIEZOMETER CLUSTER (PROPOSED)
- + STILLING PIPE (PROPOSED)

 <b>FLUOR DANIEL GTI</b>		CLIENT: UNOCAL CORPORATION			<b>TIDAL PUMP TEST</b>		
		LOCATION: AVILA BEACH PROJECT SAN LUIS OBISPO COUNTY, CALIFORNIA					
FILE: UASM0016 (1:1)	PROJECT NO.: 02230 0112	DES.: FC    DET.: SWL    DATE: 2/19/97			PN:	PE/RG:	FIGURE: 3
SCALE: 0 FEET 500							