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# Coastal Development Permit Application for the Oil Remainder Area

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September 29<sup>th</sup>, 2015

# Coastal Development Permit Application for the Oil Remainder Area Project Description Narrative & Supplemental Report

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#### **ACRONYMS**

Bbl (Barrel) A measure of volume for petroleum products in the United States. [1 bbl = 42 U.S. gallons].

BMPs Best Management Practices

BOP Blowout Preventer

CA-DTSC California Department of Toxic Substances Control

Caltrans California Department of Transportation

CA-OSHA California Occupational Safety Health Administration

CCC California Coastal Commission

CDP Coastal Development Permit Application CEQA California Environmental Quality Act

CLUP Coastal Land Use Plan
CNB City National Bank

CSFM California Department of Forestry & Fire Protection

DOGGR California Department of Conservation, Division of Oil, Gas & Geothermal Resources

GDP Gross Domestic Product
HDLLC Horizontal Development, LLC
HDPE High Density Polyethylene

hP Horsepower kW Kilowatt

LACT Lease Automatic Custody Transfer

LCP Local Coastal Program

NBRLLC Newport Banning Ranch, LLC

NOI Notification of Intent to Record a Notice of Violation

OCEPSD Orange County, Environmental Planning Services Division

OCSD Orange County, Sanitation District

ORA Oil Remainder Area

OSPR Office of Spill Prevention & Response psig Pounds per Square Inch Gauge

PVC Polyvinyl Chloride

SCAQMD South Coast Air Quality Management District
SPCCP Spill Prevention Countermeasure and Control Plan

TDS Total Dissolved Solids

TEOR Thermal Enhanced Oil Recovery Strategies
EPA United States Environmental Protection Agency

WNOC West Newport Oilfield Company



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# 1.0 INTRODUCTION

The applicant is Horizontal Development, LLC ("Applicant" or ("HDLLC") the owner of mineral rights under a portion of the West Newport Oil Field, including the 401 acre Newport Banning Ranch (NBR). HDLLC has been conducting oil recovery operations on the ORA since 1997. HDLLC also conducts oil operations on the NBR. The current surface owners of NBR are Aera Energy LLC ("Aera") and Cherokee Newport Beach, LLC ("Cherokee"). Newport Banning Ranch LLC ("NBRLLC") is seeking a Coastal Development Permit for a mixed use development on the NBR, excluding the ORA. This Coastal Development Permit Application is submitted by HDLLC for the ORA at the West Newport Oil Field on Newport Banning Ranch, Orange County, California. Oil recovery operations have been continuously conducted on the Newport Banning Ranch since the early 1940s (see Site Location Map – Appendix A). HDLLC conducts oil recovery operations on the NBR, both on and outside the ORA.. HDLLC proposes to consolidate future oil recovery operations into the ORA.

The ORA is approximately 14.88 acres, on which oil and gas development, production, processing, storage, maintenance, abandonment, and shipping operations are conducted. ORA North and ORA South are approximately 8 and 5 acres in size, respectively, and are located in areas that have been heavily impacted by the historic oil recovery operations. As a result of extended oil recovery operations, the ORA has little to no vegetation or biologic resources. The ORA will have no direct impacts to wetlands on the NBR. The Joint Use Area is easterly and immediately adjacent to an Orange County Sanitation District and Edison utility power easement. The utility easement is located within an improved gravel road used for vehicle traffic (including the City of Newport Beach for access to its oil operations). This road will also be used by ORA North related traffic.

An agreement between HDLLC, Aera and Cherokee established the ORA and responsibilities related to the conveyance of ORA North and ORA South to HDLLC, and the conduct of oil operations on the ORA and NBR. Until ORA North and ORA South are conveyed to HDLLC, HDLLC occupies these areas pursuant to an exclusive easement established under the agreement. HDLLC has a non-exclusive easement to use the Joint Use Area. Aera and Cherokee are responsible for the abandonment and removal of some wells and facilities on the ORA, as well as, the abandonment and remediation of a portion of ORA North. NBR and HDLLC have different operational goals. NBR's business opportunity involves surface ownership; whereas, HDLLC's business opportunity involves mineral ownership.



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#### 1.1 APPLICATION & PERMITTING PRECENDENCE

This CDP application is submitted by HDLLC pursuant to that certain Stipulation and Order Re Stay of Discovery and Continuance of Trial Date entered June 29, 2015 in Case No. 30-2014-00739490-CU-MC-CJC, Superior Court of the State of California, County of Orange, Central Justice Center, Horizontal Development, LLC, a California limited liability company, Armstrong Petroleum Corporation, a California corporation, and West Newport Oil Company, a California corporation, Plaintiffs, vs. California Coastal Commission, a California public agency, Defendants ("Stipulation and Stay").

HDLLC has owned the mineral rights within the West Newport Oil Field Oil Field since 1997.

HDLLC conducts oil and gas recovery operations on 14.88 acres, more or less, (ORA) located on the Newport Banning Ranch, Orange County, California (please see the attached Site Map). HDLLC utilizes West Newport Oil Company ("WNOC") to conduct the day-to-day operations on the ORA and WNOC is the designated "Operator" of the wells on the ORA with the California Department of Conservation, Division of Oil, Gas and Geothermal Resources ("DOGGR").

In May 2012, the California Coastal Commission, through Staff, delivered to WNOC a Vegetation Removal Notice alleging that vegetation removal had occurred on the Oil Field without a coastal development permit (the "Vegetation Removal Notice") and was, in Staff's opinion, beyond the scope of a Resolution of Coastal Exemption issued in 1973 (the "1973 Exemption") for the oil operations conducted on the NBR (see Appendix B).

In August 12, 2014, HDLLC initiated litigation against the Commission (the "Pending Litigation") by filing a "Complaint for Declaratory Relief" asking the court to resolve the scope of the 1973 Exemption for all purposes.

On August 19, 2014, Staff delivered to WNOC a "Notification of Intent to Commence Cease and Desist Order and Restoration Order Proceedings and Notification of Intent to Record a Notice of Violation" (the "NOI"). The Pending Litigation does not address specific violations alleged by the NOI, but rather addresses only the scope of the 1973 Exemption.

HDLLC and the Commission entered into the Stipulation and Stay to allow Applicant and the Commission an opportunity to resolve the NOI and Pending Litigation through the issuance of Coastal Development Permit(s) for the ORA on terms and conditions acceptable to Applicant and the Commission.



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# 2.0 BACKGROUND & PROJECT DISCUSSION

#### 2.1 HISTORY & BACKGROUND OF CA FIELD OIL RECOVERY OPERATIONS

Hundreds of years prior to European settlement in America, native Indians in the California territory excavated oil seeps. The oil was used for lubrication and as a water-proofing sealant. In the late 19th century, geologists discovered oil reservoirs in California. Commercial quantities of oil were produced. In 1903, California was the leading oil producing state in America. It remained ranked first or second in production through 1930. In 2012, California was the third most prolific oil producing state. In the past century, the state oil industry ranked first in GDP export.

The West Newport Field is the southernmost producing field in the state. There are no productive fields south of the West Newport Field. The Field is the structurally highest field along the Newport-Inglewood fault zone. The Newport-Inglewood fault complex is one of the main trapping mechanisms in the Los Angeles Basin. To date, fields within the Los Angeles basin remain very productive. Modern techniques have enabled many fields to consolidate operations so as to free up the majority of producing areas for other land use.

The DOGGR references the discovery well in the West Newport Field as being drilled in 1923. The Field began commercial producing operations in the early 1940's. Production from the West Newport Field is characterized as heavy California crude. Local refineries like the Field production because it yields good lube oil and can be readily refined for asphalt mix and as a binder in roofing shingles (uses similar to those of the native Indians – lubrication and sealants).

#### 2.2 SITE LOCATION, ZONING AND LOCAL INTERESTS

#### 2.2.1 LOCATION OF ORA

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The ORA is comprised of three areas:

- 1. ORA South (approximately 4.8 acres) adjacent to West Coast Highway containing oil and gas development and production operations for both Applicant and the City of Newport Beach;
- 2. ORA North (approximately 8.6 acres) containing Applicant's oil and gas development and production operations; and
- 3. Joint Use Area, a non-exclusively easement of approximately 3.1 acres for ingress and egress, as well as, utilities.

The ORA lies entirely within the 401 acre property known as the Newport Banning Ranch, is located in unincorporated Orange County, within the sphere of influence of the City of Newport Beach as adopted by Orange County Local Agency Formation Commission, and is within the boundary of the Coastal Zone as established by the Coastal Act.



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The South ORA is bounded by Newport Banning Ranch to the north, West Pacific Coast Highway, a State Highway, to the south, Newport Banning Ranch to the east, and Semeniuk Slough (Oxbow Loop) to the west.

The Joint Use Area lies entirely within the Newport Banning Ranch, a portion of which is 50 feet in width and a portion of which is 35 feet in width. The west 15 feet of the Joint Use Area is subject to an Orange County Sanitation District Sewer Easement and contains forced main sewer lines and a gravel road. The gravel road is also used by the City of Newport Beach for access to its oil operations. A portion of the western boundary of the ORA Easement is bounded by Semeniuk slough.

#### 2.2.2 ZONING AND REGIONAL & LOCAL INTERESTS

#### City of Newport Beach

The City of Newport Beach ("City") General Plan was adopted by the City Council on July 25, 2006, and its land use plan was approved by the voters on November 6, 2006. The General Plan establishes criteria for land use development and provides policy and land use guidance for properties in the City and its Sphere of Influence.

The City's Coastal Land Use Plan (CLUP) was approved by the Coastal Commission on October 13, 2005. A Major CLUP amendment was later approved by the Coastal Commission on February 5, 2009, and was adopted by the City on July 14, 2009 (Resolution No. 2009-53). However, because the City does not currently have a certified Local Implementation Plan for its Local Coastal Program (LCP), the Coastal Commission retains coastal development permit authority for all development requiring a coastal permit within the City's Coastal Zone area. In addition, the ORA is located in an Area of Deferred Certification, within which the City's certified CLUP does not serve as the standard of review for new development. Therefore, new development on the requiring a coastal development permit is subject to a consistency review with applicable Chapter 3 policies of the Coastal Act, with the City's CLUP providing guidance for the Chapter 3 consistency analysis.

#### **Orange County**

The ORA is located in unincorporated Orange County, but within the City off Newport Beach Sphere of Influence and retains County zoning designations. As depicted on Orange County Zoning Maps, Existing Zoning, County zoning for the ORA includes overlay zones, including Oil Production. The entire ORA has a County of Orange General Plan Land Use Element designation of Open Space (5). The Land Use Element states, "The Open Space (5) category indicates the current and near-term use of the land, most of which is zoned agricultural. It is not necessarily an indication of long-term commitment to open space use".



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The Land Use Element Table III-1, Building Intensity/Population Density Standards, notes that the Open Space (5) category "...provides for limited land uses that do not require a commitment of significant urban infrastructure. Examples of compatible uses include: land containing non-renewable and renewable resource areas; prime agricultural soils and water resource areas; materials recovery/recycling facilities if the design of the facility does not adversely impact its open space surroundings, or if the facility is operated in conjunction with other refuse-oriented facilities (i.e., landfills); employment uses in conjunction with large open space areas if they are consistent with the open space character of the area; opportunities for low-intensity, high technology, industrial, research and development, office and educational uses and childcare facilities which do not require a commitment of significant urban infrastructure".

The Land Use Element notes that building sites within this Category should be large; the maximum building height would be 35 feet; the maximum site coverage for structures and parking should not exceed 20 percent; and the number of employees per acre would be 9 employees.

#### California Division of Oil, Gas, and Geothermal Resources (DOGGR)

Oilfield operations on the ORA are regulated by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources ("DOGGR"). In order to implement Section 3208.1 of the California Public Resources Code (PRC), the DOGGR has developed the Construction Site Plan Review Program for abandonment or reabandonment, if necessary, of oil wells. Before building permits or grading permits are issued, a local permitting agency must review and implement DOGGR's preconstruction well requirements.

#### Santa Ana Region Water Quality Control Board (Santa Ana RWQCB)

The oil operations have had environmental regulatory oversight by both the California Regional Water Quality Control Board – Santa Ana Region (Santa Ana RWQCB) and the Orange County Health Care Agency (OCHCA). Since about 1992, both agencies have been involved in overseeing certain aspects of cleanup activities and ORA operations. Currently, the lead regulatory agency (Santa Ana RWQCB) for the ORA has approved a Remedial Action Plan (RAP) being implemented on the ORA.



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#### 2.2.3 PROJECT CONSISTENCY WITH THE CALIFORNIA COASTAL ACT

The ORA is located within the Coastal Zone in an Area of Deferred Certification as designated by the City of Newport Beach; therefore, unless exempt or authorized under the Coastal Act, operations on the ORA are subject to comply with the policies of the California Coastal Act under the jurisdiction of the California Coastal Commission (CCC or Commission).

#### Section 30260 Location or Expansion

Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

#### Section 30262 Oil and Gas Development

- a) Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:
  - 1) The development is performed safely and consistent with the geologic conditions of the well site.
  - 2) New or expanded facilities related to that development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.
  - 3) Environmentally safe and feasible subsea completions are used when drilling platforms or islands would substantially degrade coastal visual qualities unless use of those structures will result in substantially less environmental risks.
  - 4) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, as determined in consultation with the United States Coast Guard and the Army Corps of Engineers.
  - 5) The development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence.
  - 6) With respect to new facilities, all oilfield brines are reinjected into oil-producing zones unless the Division of Oil and Gas, Geothermal Resources of the Department of Conservation determines to do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental risks. Exceptions to reinjections will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provision is made for the elimination of petroleum odors and water quality problems.



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- 7) (A) All oil produced offshore California shall be transported onshore by pipeline only. The pipelines used to transport this oil shall utilize the best achievable technology to ensure maximum protection of public health and safety and of the integrity and productivity of terrestrial and marine ecosystems.
  - (B) Once oil produced offshore California is onshore, it shall be transported to processing and refining facilities by pipeline.
  - (C) The following guidelines shall be used when applying subparagraphs (A) and
    - I. "Best achievable technology," means the technology that provides the greatest degree of protection taking into consideration both of the following:
    - II. Processes that are being developed, or could feasibly be developed, anywhere in the world, given overall reasonable expenditures on research and development.
    - III. Processes that are currently in use anywhere in the world. This clause is not intended to create any conflicting or duplicative regulation of pipelines, including those governing the transportation of oil produced from onshore reserves.
    - IV. "Oil" refers to crude oil before it is refined into products, including gasoline, bunker fuel, lubricants, and asphalt. Crude oil that is upgraded in quality through residue reduction or other means shall be transported as provided in subparagraphs (A) and (B).
    - V. Subparagraphs (A) and (B) shall apply only to new or expanded oil extraction operations. "New extraction operations" means production of offshore oil from leases that did not exist or had never produced oil, as of January 1, 2003, or from platforms, drilling island, subsea completions, or onshore drilling sites, that did not exist as of January 1, 2003. "Expanded oil extraction" means an increase in the geographic extent of existing leases or units, including lease boundary adjustments, or an increase in the number of well heads, on or after January 1, 2003.
    - VI. For new or expanded oil extraction operations subject to clause (iii), if the crude oil is so highly viscous that pipelining is determined to be an infeasible mode of transportation, or where there is no feasible access to a pipeline, shipment of crude oil may be permitted over land by other modes of transportation, including trains or trucks, which meet all applicable rules and regulations, excluding any waterborne mode of transport.
- 8) If a state of emergency is declared by the Governor for an emergency that disrupts the transportation of oil by pipeline, oil may be transported by a waterborne vessel, if authorized by permit, in the same manner as required by emergency permits that are issued pursuant to Section 30624.
- 9) In addition to all other measures that will maximize the protection of marine habitat and environmental quality, when an offshore well is abandoned, the best achievable technology shall be used.



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- b) Where appropriate, monitoring programs to record land surface and near-shore ocean floor movements shall be initiated in locations of new large-scale fluid extraction on land or near shore before operations begin and shall continue until surface conditions have stabilized. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.
- c) Nothing in this section shall affect the activities of any state agency that is responsible for regulating the extraction, production, or transport of oil and gas.

#### **Energy and Ocean Resources Related Projects**

Notwithstanding the fact that coastal-dependent industrial developments may have significant impacts on coastal resources, the Coastal Act provides for the siting and development of coastal dependent industrial uses, including energy related uses, to ensure that inland, as well as, coastal resources are preserved while ensuring orderly economic development within the state. Coastal-dependent developments are those which require a site on, or adjacent to the sea to be able to function at all. Coastal-dependent industrial developments are given priority in the Coastal Act over other land uses, except agriculture, and are permitted reasonable long-term growth where consistent with Chapter 3 policies.

These developments are encouraged to locate and expand within existing sites. Location and expansion beyond an existing site are permitted only if alternative locations are infeasible or more environmentally damaging, to do otherwise would adversely affect the public welfare and adverse impacts are mitigated to the maximum extent feasible.

# Section 30601.3 Coastal development permit application; processing criteria; standard of review; application fee; adoption of guidelines

- (a) Notwithstanding Section 30519, the commission may process and act upon a consolidated coastal development permit application if both of the following criteria are satisfied:
  - (1) A proposed project requires a coastal development permit from both a local government with a certified local coastal program and the commission.
  - (2) The applicant, the appropriate local government, and the commission, which may agree through its executive director, consent to consolidate the permit action, provided that public participation is not substantially impaired by that review consolidation.
- (b) The standard of review for a consolidated coastal development permit application submitted pursuant to subdivision (a) shall follow Chapter 3 (commencing with Section 30200), with the appropriate local coastal program used as guidance.
- (c) The application fee for a consolidated coastal development permit shall be determined by reference to the commission's permit fee schedule.
- (d) To implement this section, the commission may adopt guidelines, in the same manner as interpretive guidelines adopted pursuant to paragraph (3) of subdivision (a) of Section 30620.



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In accordance with Section 30260 and 30262 of the Coastal Act, the ORA will continue to involve oil recovery operations on the ORA work sites; therefore, consolidation of operations is consistent with the goals and policies of the Coastal Act.

#### Section 30212 (a): Public Access

Section 30212 (a) of the Coastal Act provides public roadway to the shoreline and along the coast shall be provided in new development projects, except where (1) if is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to open to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

West Newport Oil Company is landward of the Pacific Coast Highway and the ORA does not contain ocean fronting property, therefore, public access to the shoreline is not available. Therefore, the ORA work sites would not conflict with Section 30212(a) of the Coastal Act.

#### 2.2.4 LIST OF BIOLOGICAL INFORMATION & SITE DATA

- 1. Vicinity map.
- 2. Site map.
- 3. Biological studies and maps:
  - Wetland delineation. Map to include description of various habitat types. Map shows proposed project site with respect to wetland and habitat.
  - Topographic map.
  - Vegetation map.
  - Soils map.
  - Description and analysis of the existing ecological conditions within and adjacent to the proposed site.
    - Discussion of the ecological value of plants and animals within and adjacent to the site
  - Discussion of project impact on the functional capacity of the site and adjacent areas
- 4. Historical aerial photographs.

A copy of this Biological Assessment/Jurisdictional Delineations Report is provided in the Appendix B.



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## 3.0 OIL RECOVERY OPERATIONS & PROCESSES

Oil recovery operations are broken down into several interdependent processes -

- Drilling operations
- · Production operations
- · Oil well servicing subsurface
- Oil/water separation systems
- Water disposal systems
- Storage
- Oil sales
- Office and human resources

All of the above described activities in place and are on-going operations on the ORA, and have been for over 60 years. These operations will be explained in more detail below. Attached are site plans for the existing infrastructure in ORA North and South (see Appendix A for the "ORA North Existing Site Plan" and "ORA South Existing Site Plan"), and the proposed operations infrastructure in ORA North and ORA South (see Appendix A for the "ORA North Proposed Site Plan" and "ORA South Proposed Site Plan"). These site plans will be referred to in the description of the oil recovery operations and processes.

#### 3.1 DRILLING OPERATIONS

Over 50 wells have been drilled in the ORA. There are currently 17 active wells in ORA North and 11 active wells in ORA South (the City of Newport Beach operates 13 wells in ORA South). There have been drilling operations within ORA North and ORA South since the early 1940s. Typical drilling operations are conducted as a program that involves the sequential drilling of a group of wells.

Drilling operations can be conducted 24 hours a day, 7 days a week – continuous until the well is secure or completed. In some cases, there may be procedures that can be used to conduct drilling operations for less than 24 hours per day – in some cases as few as 16. Care must be taken to stop operations at the right time and to properly secure the well if drilling is not continuous.

#### 3.1.1 DRILLING OPERATION PROGRAM & INSTALLATION

Prior to moving in drilling equipment, the drill site is leveled and cleared with a backhoe/front loader. This work does not involve cut and fill, but is simply smoothing the site surface. Any excess surface dirt generated can be used for well site boundary berming.

The location is then prepared with a well cellar, conductor pipe and possibly even a surface string of casing cemented to a depth of 10% of the total depth. This "pre spud" work can be accomplished in a more efficient manner when appropriately sized equipment is used. A larger drilling rig is not needed to drill a 40' conductor hole or set a 5' deep conductor can. A small, single truck auger driller can do this preliminary work.



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Installation of a well cellar involves an auger driller creating an 8' diameter hole, 6' deep. A piece of corrugated steel conduit is placed in the hole. This serves as the well cellar. Within the well cellar a 24" open hole is auger drilled to 40'. A joint of 16" conductor steel pipe is landed in the hole and the open hole/conductor annulus is filled with concrete as well as the floor of cellar. These operations may take a couple of hours to accomplish. The spoils pipe is not large and can be used for berms around the site boundary. ORA well spacing is 20' - 25' from center of conductor to center of conductor. All wells in the drilling program will be prepared with cellars and conductors prior to the arrival of heavy drilling equipment.

Mobilization of drilling equipment involves increased truck traffic over a couple of days. Depending on the rig size, there may be five to ten trucks required to haul in drilling equipment. Drilling equipment is highly specialized. Field operators employ contract drillers that supply equipment and crews. Specialized services such as directional drilling experts, mud logging and mud engineering require additional equipment and mobilization effort.

The truck traffic for support specialists is substantially less than that of the rig mobilization. Individual drilling support equipment can normally be mobilized by a single truck trip. Moving drilling equipment from well to well, within a site, is a much easier exercise than the initial move in, rig up configuration of equipment or the final rig down, move out of the drilling equipment. A single crane is normally all that is needed to move within a site. Rig moves within a site can normally be done in less than a day.

Drilling a well in the West Newport Field has historically taken less than 10 days from rig up to rig down. A drilling program, consisting of multiple wells, may involve drilling operations for up to two months.

Drilling operations attempt to be a closed system. Open sumps are no longer used in drilling operations. All fluids are contained in process tanks or vessels. During a multiple well program, drilling mud can be impounded in rental tanks and reused on site from well to well.

At the end of the program, if there is drilling activity in the vicinity, the mud can be trucked offsite for reuse. Formation solids are circulated to the surface in the drilling mud and mechanically separated from the mud circulation system. The volume of solids can be minimized by processing mud cake through a centrifuge to dewater. The resultant dry formation material is impounded in a roll off bin and trucked offsite for disposal.



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#### 3.1.2 DRILLING OPERATIONS & PERMITTING PROCESSES

Drilling program planning begins with a permitting process that involves local and state regulatory agencies. The lead local permitting agency is Orange County. The County's oil well permitting process involves an application and plan that explains site specifics and procedures, a CEQA review, and project approval in the form of a permit to drill. The application for a permit to drill includes the following information:

- Operator identification and contact information
- Bonding
- Drilling contractor name and equipment information
- · Legal description, site and vicinity maps
- Zoning review
- CEQA determination
- Water Quality Management Plan

In addition, it has been HDLLC's practice to include an analysis of the potential impact to biological resources relating to new oil well drilling. This analysis has been performed by contracted biological experts. The report is submitted to the County along with the other required project information.

In 2007, the Orange County Environmental Planning Services Division (OCEPSD) completed a full CEQA analysis for the drilling of three wells within the ORA. The CEQA review led the OCEPSD to issue a Notice of Determination of a Negative Declaration. Alternatively, the County may issue a Notice of Exemption – Categorical Exemption 15301: Class 1 for existing facilities. This determination for this categorical exemption is based upon site location and the proximity of the project to other oil recovery infrastructure.

Orange County has a Drilling and Production Code. Division 8, Article 1, Section 7-8-1 through 53 of the County Code involve the regulations of drilling and production of petroleum.

The California Department of Conservation, Division of Oil, Gas & Geothermal Resources (DOGGR or "Division") was formed in 1915 to address the needs of the state, local governments, and industry by regulating statewide oil and gas activities with uniform laws and regulations. The Division supervises the drilling, operation, maintenance, and plugging and abandonment of onshore and offshore oil, gas, and geothermal wells, preventing damage to: (1) life, health, property, and natural resources; (2) underground and surface waters suitable for irrigation or domestic use; and (3) oil, gas, and geothermal reservoirs. The Division's programs include: well permitting and testing; safety inspections; oversight of production and injection projects; environmental lease inspections; idle-well testing; inspecting oilfield tanks, pipelines, and sumps; hazardous and orphan well plugging and abandonment contracts; and subsidence monitoring.



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DOGGR permitting involves submission of a site location, a step by step drilling program, issuance of a drilling permit and follow up drilling history and well summary reports. During the course of drilling a well, there are milestone points that require the operator to notice DOGGR field personnel to witness, inspect and/or test the integrity of the drilling equipment. In addition, during the drilling and completion of the well program, there are periodic progress inspections and testing of the installed casing that must be okayed witnessed and approved by the DOGGR prior to advancing the program execution.

Drilling operations result in from engine operation, pipe handling and verbal communication between crew members. Engine noise is best attenuated by proper muffler selection. "Hospital quality" mufflers are the best management practice currently employed. When necessary, sound screens can be used to reflect noise away from sensitive or populated areas. Pipe handling noise is commonly associated with dropping, dragging, or laying down pipe on the pipe walk. Best management practices for control pipe handling noise are to rubberize key areas of the walk, employ specialized pipe handing equipment and techniques, and to try to avoid pipe tripping operations during sensitive periods of the day. Noise from crew communications can be minimized by used of walkie-talkies and education during safety meetings.

Noise is regulated by local agencies. Orange County has a noise regulation code of standards. The Code describes the allowable decibel levels in frequency and magnitude over different periods of the day and week.

Drill site lighting is needed for nighttime safety. Lighting should be directed towards work spots. It is not necessary to broadcast lighting much beyond the point spots of work. Floodlights are rarely needed and when used should be directed downwards. When appropriate, screens and other such barriers can be applied to control light impact off site. Rig mast lighting is required by local codes. The rig crown must be lit at night. This lighting is small and does not have to be project downwards.

Activity associated with drilling operations is continuous and coincidental. Drilling activity is routine and methodical. It normally occurs within the inner core area of the drilling operations and is associated with rig floor activity. Visual barriers can be established to shield drill site activity.

Fluids contamination is potentially the most likely and largest risk associated with drilling operations. There are several mitigating strategies employed to reduce the likelihood and magnitude of fluid contamination. They include:

- Water Quality Management Plan, WQMP County
- Spill Prevention Countermeasure and Control Plan, SPCC EPA
- Blow Out Prevention DOGGR
- Rig and hole monitoring systems DOGGR and contractor best management practices
- Property boundary barrier 20" high, impervious concrete block



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The strategies to control fluid contamination rely upon the following management practices:

- Secondary containment
- Liquid level monitoring equipment and alarms
- Fail safe shut down equipment
- Written rules and procedures
- · Crew training and testing
- Site design and proper fluid and work flow configurations
- Proper inventory management on site stock of well control materials and spare parts for critical equipment

Drilling operations are not conducted 52 weeks per year as are the other oil recovery processes. Drilling operations will occur on a periodic basis determined by results from prior drilling operations, economic and environmental conditions. Typical well spacing is 20 - 25' from wellhead to wellhead. If a six well program is drilled, the drill site may occupy an area within the ORA of approximately 50' x 200'. Drilling rig equipment can be configured in a manner to minimize drill site footprint and equipment moves from well to well.

The ORA site plans show exiting well locations and proposed Equipment Areas for new well cellar locations. The number of proposed well cellars in ORA North and ORA South is based upon a well spacing of 25' from center to center of the well cellar. The well cellars are 8' diameter. The following Table summarizes the proposed number of well cellars.

Equipment Area, ORA	Number of Well Cellars
A, North	7
B, North	5
C, North	5
D, North	4
E, North	27
F, North	5
G, North	19
H, North	5
A, South	15
TOTAL	92

The proposed ORA well cellars have a minimum setback of 25' from a concrete block/fence line. This area provides for routine monitoring activity, well maintenance and production operations activities.



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#### 3.2 PRODUCTION OPERATIONS

Production operations are characterized as primary recovery or secondary recovery. Primary recovery involves using reservoir forces such as solution gas drive and gravity flow to mobilize reservoir fluid. Secondary recovery involves adding energy to the reservoir to improve fluid flow through viscosity reduction, pressure maintenance or mass displacement. Both primary and secondary recovery production operations are conducted in the ORA.

Production operations involve those tasks which occur after the well is drilled. Surface equipment is installed. A typical configuration of surface equipment will include the following items:

- Artificial lift equipment pumping unit
- Electrical power system to operate the pumping unit
- Oil pipeline gathering and flow system
- Gas pipeline gathering and flow system

Once the production equipment is installed, the well runs continuously. Surface equipment is mechanical and located in a marine environment. There are routine repair and maintenance operations that can be expected with production operations. Wherever there are moving parts, friction causes wear. The outdoor environment creates rust, corrosion, and vegetation growth. Typical repair and maintenance of surface equipment involves lubrication of the pumping unit, replacement of pipe and fittings, repair or replacement of electrical components, coating and painting and well site vegetation control.

#### 3.2.1 PRODUCTION OPERATION SCHEDULE

A typical production day (7am to 7am) involves the following work site activity flow:

Time	Activity	Work site impact
6:30 - 7:00	Daylight employee arrival	Personal vehicle traffic
7:00 - 7:30	Line out crew activity	<ul> <li>Review night shift log</li> </ul>
		Review well work
		<ul> <li>Check oil/water separation systems</li> </ul>
7:30 – 11:00	Crew and operations work	Well servicing activity
		<ul> <li>Field monitoring – well inspections</li> </ul>
		<ul> <li>Field maintenance – site duties as</li> </ul>
		needed
11:00 - 12:00	Lunch break	Some personal vehicle traffic
12:00 - 15:00	Crew operations work	<ul> <li>Well servicing activity</li> </ul>
		<ul> <li>Field monitoring – well inspections</li> </ul>
		<ul> <li>Field maintenance – site duties as</li> </ul>
		needed
15:00 – 15:30	End of daylight tour – Start of swing shift	Personal vehicle traffic
15:00 - 23:00	Swing shift	One employee manning the field for monitoring
		and site security
23:00 - 7:00	Graveyard shift	One employee manning the field for monitoring
		and site security



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#### 3.2.2 OPERATIONS & MAINTENANCE ACTIVITIES (O&M)

#### Standard Operating Procedures & Routine O&M Activities

Normal repair and maintenance associated with production operations involve pickup truck based equipment and hand tools. Pipe wrenches, shovels and manpower are commonly employed. Unless emergency call out is required, production operations repair and maintenance is daylight work. Typical production operations do not involve outside contractors.

Production operations also involve monitoring and surveillance of the production pipelines, producing, storage and shipping facilities and well sites. Personnel are on site 24 hour/day to conduct production operations. Monitoring and surveillance of production wells is part of the Environmental Protection Agency (EPA) Spill Prevention Control and Countermeasure Plan (SPCCP) required by the EPA. Monitoring and surveillance is accomplished by field operators making periodic pickup truck trips. Verifying facility, well site and pipeline integrity is the objective.

Earthen berms are the containment method employed as part of the ORA SPCCP. Pipelines have been routed so that secondary containment using small earthen berms can be employed. In addition, earthen berms are often used to compartmentalize sections of pipeline. Small (<30" high), concrete block walls have been used as part of the SPCCP. Concrete block wall is perhaps the most efficient and effective barrier to fluid migration.

Secondary recovery operations used in the ORA are described as thermal enhanced oil recovery strategies (TEOR). The crude oil produced from the ORA is characterized as heavy (API deg gravity less than 16). Heavy oil tends to have high viscosity and a low overall primary recovery percentage of oil-in-place (often less than 15% of the oil-in-place). TEOR has been applied extensively in one producing zone with an overall recovery percentage close to 50%. TEOR has been applied to a much lesser extent other producing zones. Steam injection in production and central pattern wells has been commonly used in heavy crude California TEOR operations. Steam injection has been employed as a secondary recovery mechanism in ORA operations. Steam injection involves the generation of thermal energy in surface facilities and the transfer of that energy to reservoir fluids. Steam generation facilities consist of water softening equipment, boiler feed-water pumps, a combustion and heat exchanger chamber, and air blowers. There is noise associated with the mechanical equipment and thermodynamic processes. The SCAQMD issues permits for all equipment that has potential for air emissions. Existing steam generation equipment is permitted by the SCAQMD.

The steam generation equipment is sited on a concrete slab to insure proper mechanical foundation. The equipment is enclosed in a building. Steam generation is a continuous process. Operations require monitoring and maintenance. The steam is routed to production and injection wells via insulated pipelines. The pipeline infrastructure is designed to minimize pipe surface area. There is a central steam header and branch lines to wells that are isolated with valves.



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#### 3.3 PROPOSED WORKPLAN: ORA NORTH, ORA SOUTH, & JOINT USE AREA

#### 3.3.1 PROPOSED EQUIPMENT AREAS ON ORA

A mechanical description and pictures of a typical steam generation facility are presented in Appendix A. The existing steam generation facility is identified as Device ID "SG" on the ORA North Proposed Site Plan. Additional steam generation facilities will be installed as additional wells are drilled. The proposed steam generation facilities are identified as Equipment Area "O" and "P" on the ORA North Site Plan.

Equipment Area "O" is an existing warehouse slab and structure (see Project Plans, Appendix A). This warehouse will be used to house steam generation equipment that is currently located outside the ORA, but within the West Newport Field.

The equipment will be moved from outside the ORA to Equipment Area "O". This relocation work is expected to take a couple of days and can be accomplished with a tractor loader and small crane. Equipment Area "P" will be a new facility with new slab and steam generation equipment. An existing building from outside ORA North will be moved to house the new equipment. This site requires little or no grading. Smoothing of the existing surface will be required. Spoils from this activity can be used to create or augment SPCCP earthen berms in the ORA. Slab construction will be done with on site equipment, with the exception of the concrete placement. The building move and equipment installation will be done with on site equipment.

Production wells are powered by high efficiency electrical motors. The motors are typically 5 to 15 Hp in size depending on the completion depth of the well. The Field demand load has varied from over one megawatt in the past to 190 kW currently. The ORA load is approximately 100 kW. Within the ORA, a portion of the electrical load is self generated, using process gas to power a microturbine. The heat from microturbine exhaust has been captured and used to make the oil/water separation systems more efficient. Systems that combine electrical generation with heat recovery are known as cogeneration facilities.

A mechanical description and picture of the microturbine electrical generation system is provided in the schematics/exhibits (See Appendix). The ORA site plans provides for additional microturbines when electrical demand increases. The additional microturbine locations are shown as Equipment Area "N" on the ORA North Proposed Site Plan and Equipment Area "C" on the ORA South Proposed Site Plan. The additional microturbine units will be functionally, if not identical to the existing unit. Additional microturbine units will be housed in an enclosure similar to the existing microturbine. The new microturbine units will be installed using on site equipment.



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ORA soil impacted by ORA operations will be impounded in an engineered bioremediation cell. A bioremediation cell uses naturally occurring bacteria to break down complex hydrocarbons into water and carbon dioxide. The bioremediation process can be stimulated by soil tilling and adding fertilizer. Soil remediation progress is monitored by soil testing for total petroleum concentrations. Use of a bioremediation cell has been employed in the West Newport Field to support production operations. An existing bioremediation cell is outside the ORA. A new bioremediation cell is identified as Equipment Area "I" on the ORA North Proposed Site Plan. The bioremediation cell is 50' x 100' and constructed and operated in a manner similar to the existing cell. Cell construction will be accomplished with on-site equipment and resources. The cell liner may require installation by a specialty contractor.

#### On-Site In Use Equipment/Vehicle Fleet

On-site equipment and vehicles include

- · Backhoe with front end loader
- All terrain skip loader
- Two dump trucks
- 7 ton crane
- Three 60 barrel vacuum trucks, one equipped with a high pressure positive displacement pump
- Electrical boom truck
- · Portable electric generators
- HDPE pipeline fusing machine
- Portable cutting, grinding and welding equipment
- Portable air
- Portable gasoline powered transfer pumps

Secondary recovery involves adding energy back into the reservoir to stimulate fluid mobility. Equipment used for TEOR involves fans, pumps and compressors. TEOR equipment is housed inside a building structure to protect it from the marine climate and contain noise.

The SPCC, maintenance and monitoring, and on-site berms and barriers together provide measures designed to reduced and minimize the likelihood and magnitude of impacts from ORA operations. Earthen berms are proposed for those areas not already enclosed by concrete block walls.

An alternative to earthen berms is to place a small concrete block wall. A perimeter concrete wall no more than 20 - 30" high can provide an efficient, permanent barrier to help minimize the likelihood and magnitude of fluids contamination outside the ORA. A hybrid perimeter barrier might employ earthen berms or a short block wall with slatted chain-link fencing on top of the fluid barrier. Slatted chain-link fencing can reduce potential noise, lighting and security issues.



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#### 3.3.2 OIL WELL SERVICING - SUBSURFACE

When an oil well is put on production, there are both surface and subsurface mechanical systems. The circular motion of the pumping unit crank arms are converted to a reciprocating motion through a gear box. The pumping unit causes a string of sucker rods to move up and down within a suspended tubing string. This action lifts (on the upstroke) and displaces (on the downstroke) fluid from the wellbore. Motion causes friction and mechanical parts become subject to failure. Work on subsurface piping, rods and pump components requires hoisting equipment to access failed system parts. A well service rig is the appropriate equipment for this job. The well service rig is a self-propelled vehicle that can be rigged up over a well and, through a power train transfer case, translate shaft horsepower to a hoisting mechanism. The well service rig is much smaller and typically less structural than a drilling rig. While a drilling rig may take a couple of days to configure, the well service rig can be rigged up in less than an hour.

There are two on-site service rigs currently used on the ORA. The well service rig is used in the ORA work site areas when needed and are powered by a diesel engine and classified as in-service, off road fleet vehicle.

Each production well has a concrete cellar or corrugated pipe/concrete cellar established around the casing head and production tree piping. The concrete cellar is established prior to drilling operations. The cellar serves as a temporary impound area for fluids that may strip from subsurface components during well servicing operations. After remedial efforts have been made, any fluid collect in the well cellar is removed and processed in the oil/water separation system. NOTE: Well servicing hours are typically 7am to 3pm.

#### 3.3.3 OIL/ WATER SEPARATION SYSTEMS

The oil/water separation system centers around the process equipment. Oil/Water separation equipment are designed to handle reservoir fluids - oil, water and gas. In addition, fine solids may flow into the well bore and be suspended and produced along with reservoir fluids.

Reservoir fluids are gathered and commingled through networked pipelines that terminate at a centrally located oil/water separation facility. Both ORA North and South have an existing oil/water separation facility (the City of Newport Beach oil/water separation facility is located on ORA South). A process flow diagram and oil/water separation equipment layout may be found in Appendix A.

Oil/water separation is accomplished through retention time and gravity separation, chemical emulsion breakers, and heating the liquids to enhance viscosity differences, thus promoting the separation of oil and water flows.

The oil/water separation system operates 24 hours/day. Process vessel operations are closely monitored. As the fluid flow through the separation system, oil, water, gas and solids become increasingly concentrated into their respective constituency.



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The ultimate goal is for oil to the storage tank to be less than 3% sand and water. Waste water is to be less than 100 parts per million oil with total toxic organics less than 0.58 parts per million. Process gas is scrubbed to remove all liquids and used to supplement purchased natural gas in facility equipment. Solids are blown down from the bottom of process vessels and impounded for disposal in an above ground sump.

There are two freewater knockout vessels (one in service, one on standby). There are two heater treater vessels (one in service, one on standby). There are two impound sumps (one in service, one on standby). Having redundant capacity helps to maintain operational control and minimizes risk of upsets and down time.

Every five years (or longer) a vessel may need to be cleaned. At such time, the equipment is taken out of service and maintenance operations performed. Typical maintenance operations include, recoating the interior, replacing sacrificial cathodic protection anodes, repairing external piping and replacing control equipment. Vessel turnaround operations are normally handled by staff.

All air emission sources are permitted by the South Coast Air Quality Management District (SCAQMD). The bulk of the SCAQMD facility permit involves the oil/water separation equipment. The SCAQMD regulatory oversight is affected by reporting of emissions based upon emission factors or equipment throughput, annual auditing, and spot check inspections. Fugitive emissions are reported for every piping component and are based upon organic concentrations within the flow. Combustion devices are required to have non-resettable fuel meters. The SCAQMD is interested in the process flow from wellhead to truck loading and everything in between.

The oil/water separation equipment has the capacity to hold significant volume of fluid. As part of the SPCC plan, an impermeable block wall surrounds the oil/water separation facility on three sides. The fourth side is protected from spills migration by the topography – rising land elevation. The block wall is only 30" high, but encompasses an area far in excess of the oil/water separation vessel volume.

The oil/water separation system operates 24 hours per day and is centrally located in ORA North, and has been located in at this site, and operated in essentially the same manner since it was constructed in the 1940s. A SPCCP concrete block wall encloses the oil/water separation facility. Within the ORA North there is idle process equipment. These are identified on the ORA North Existing Site Plan and are not identified on the ORA North Proposed Site Plan. The idle process equipment will be removed by Aera and Cherokee.



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#### 3.3.4 WATER DISPOSAL SYSTEMS FOR THE ORA

Produced water is characterized as a brine wastewater. The formation water has Total Dissolved Solids of over 20,000 ppm. There are two wastewater disposal methods used on the ORA – subsurface injection to the oil producing reservoir and disposal to the Orange County Sanitation District (OCSD). The two methods are complementary.

The wastewater is separated from oil and flows into a wastewater pump charging tank. The tank feeds water disposal pumps. One pump goes to the injection wells, the other to the sewer disposal tank. The pumps are operated on liquid level float switches. The injection pump float switch is set to pump water to the injection well all the time, unless there is no water in the tank. The sewer pump float switch is set to cycle on and off depending on the level of wastewater within the tank. When the water level gets too high the sewer pump trips on and pumps the tank down until the level drops below the set point.

The Applicant has a Class 1 industrial wastewater discharge permit with OCSD. There are special permit conditions that govern the quality of water discharged and how to monitor and report the volume and quality of water discharges.

The DOGGR has approved produced water disposal into the B Zone. The injection fluid needs to be isolated to the interval approved by the DOGGR. There are mechanical means to achieve such isolation and the piping systems used must be tested periodically to insure their integrity. The DOGGR will typically require notice of such testing and will witness the casing and tubing pressure tests. The DOGGR limits the injection pressure depending on the reservoir depth and the fracture gradient. The DOGGR requires produced water injection volumes to be constantly recorded and reported monthly by well.

The two disposal systems are complementary in that they help to insure the continuous disposal of wastewater. No long term impounding of wastewater is necessary. The injection pipeline system operates at maximum of 130 psig. At this low pressure, HDPE piping is able to be used. HDPE piping has great protection against corrosion, but is limited to approximately 160 psig. The sewer disposal system operates by gravity flow (less than 25 psig). This piping system is also HDPE and has great protection against corrosion. Both injection and sewer disposal piping systems have earthen berm secondary spill protection unit/containment system.

Water disposal pipelines are routed in areas that are easily monitored. Pipelines have adequate secondary containment. Water disposal tanks, vessels and pipelines are designed to withstand the somewhat corrosive nature of the wastewater. Steel tanks are coated with two part epoxy systems. Process vessels are fiberglass. Process piping is either PVC or polyethylene.

There is a proposed wastewater desalination facility shown as Equipment Area "M" on the ORA North Proposed Site Plan. In addition to the desalination reverse osmosis and membrane equipment, there will be a water storage tank for useable water. The site is shown to be 30' x 100'. The desalination equipment is skid mounted and may require a concrete slab and shed enclosure. The personnel and equipment to construct this facility will be provided through on site sources.



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#### 3.3.5 OIL STORAGE EQUIPMENT/FACILITIES

Storage tanks are a permit item identified by the SCAQMD. The permit is for a storage capacity of three, 1000 barrel tanks within the ORA. This capacity is not expected to change. Tank construction is bolted steel panel, epoxy lined. The life of a storage tank varies, but it is finite. Tanks are required to be mechanically inspected every five years.

Oil storage tanks have external gauge equipment to monitor the oil level inside the tank. The tanks are equipped with a vapor recovery system. The oil storage tanks are located with the SPCCP secondary containment block wall, a 30" high block wall surrounding the oil/water facility.

#### 3.3.6 OIL SALES & TRUCK LOADING FOR THE ORA

Oil is trucked off site. The point of custody transfer is where the truck loading arm attaches to the tanker truck. There are two Lease Automatic Custody Transfer (LACT) meters that serve to load trucks with produced oil. The LACT pumps can be started and stopped at either the truck loading rack, or the LACT meter. These two start/stop points are within 50 feet of each other. Truck loading typically takes one hour from stopping the truck to staring the truck.

The truck loading facility is within the SPCCP block wall that provides secondary containment. Truck loading operations at night require lighting of the work area for safety. This lighting is work spot focused; in addition, truck headlights are on only during travel to and from the ORA.

The ORA South Proposed Site Plan provides a second location for a truck loading facility that could replace the existing ORA North truck loading facility. ORA South currently includes the CNB oil operations truck loading facility. Equipment Area "B" is identified on the ORA South Proposed Site Plan. This facility will enable the truck loading operations to be moved from ORA North to ORA South. This facility will require SPCCP compliance, including a concrete block wall enclosure. The block wall will be designed as secondary containment for truck loading operations.

### 3.3.7 FIELD OFFICE BUILDINGS (MOBILE TRAILERS) FOR THE ORA

Buildings on the ORA serve as office space, warehouse, parts inventory and a change room. The buildings are modular, mobile trailers, tinned sided sheds, and container type size structures. The buildings are moveable, though some more easily than others.

When all oil recovery operations become fully established within the ORA, additional building space will be required. The office space will need to be expanded for administration personnel. In addition, the warehouse structure will need to be enlarged to secure additional parts and inventory for oil recovery operations. Within the warehouse, an area for shop activities such as welding, cutting and vehicle repair can be established.

The office and warehouse buildings are designated as Equipment Areas "J and "L" on the ORA North Proposed Site Plan. These structures are shown to be 50'x75' and 40'x60' respectively. A 25'x50' office is identified as Equipment Area "D" on the ORA South Proposed Site Plan.



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#### 3.4 WORK SITES & CONNECTING CORRIDOR SITE SELECTION CRITERIA

ORA North and ORA South were configured considering the following:

- · Historic and current oil operations
- Minimizing impacts from operations
- Geology and potential to recovery remaining oil reserves
- Compatibility with adjoining uses

The analysis for the configuration of the Joint Use Area connecting ORA North and ORA South followed a similar analysis. Along the selected corridor there exists a production pipeline, a produced gas pipeline, a water disposal pipeline and an interconnecting pipeline with the City of Newport Beach oil/water separation facility.

An OCSD and Edison power easement road (also used by the City of Newport Beach to access its oil operations) immediately adjoins the Joint Use Area providing maximum utilization of this area. All pipelines will be high density, polyethylene material, bermed and/or buried, and should require minimal maintenance.

#### 3.4.1 PROPOSED WORK SITE ACTIVITIES & OPERATING STRATEGY

All ORA oil recovery activities are currently in place and on-going in the ORA. The activities proposed include the processes previously described: drilling, production operations, oil well servicing, oil/water separation, water disposal, oil storage, oil transportation and office/building infrastructure.

There may be technological improvements in the way the processes are executed, but the fundamental nature and purpose of the processes will not change. For example, instrumentation and control advancement may allow process vessels to be more remotely monitored, yet the oil/water separation process is the same. Water disposal may incorporate a desalination module so that a portion of the produced water can be used in secondary oil recovery operations, but the water disposal process is still fundamental.

ORA North is a larger work site. It is favorably located for oil recovery operations. It is anticipated that directionally drilled wells from ORA North can access all producing oil reserves and is situated to minimize operational impacts. ORA North is primarily designated to conduct ongoing and future oil recovery operations.

The smaller ORA South is a heavily constrained area, including the City of Newport Beach oil recovery operations, OCSD easement and pump station, and narrow width.



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# 4.0 SUMMARY AND CONCLUSIONS

Oil recovery activity within the West Newport Field has been on-going and continuous since the 1940s.

This CDP application involves the continuation of oil recovery operations on the West Newport Oil Field historically operated from over 400 acres on just two work sites comprised of approximately 14.88 acres. The new operational plan has a footprint that is twenty times smaller than the areas currently occupied by oil recovery operations.

The Oil Remaining Area consists of two interconnected work sites: ORA North and ORA South. The interconnecting pipeline and transportation corridor is closely aligned with an existing utility easement and road.

The ORA was chosen for ongoing oil recovery activity has been heavily impacted by previous oil recovery activity and has no or minimal coastal resource impacts. Sections 30260 and 30262 of the Coastal Act specifically encourage consolidation of coastal-dependent industrial facilities, and Section 30250 encourages the consolidation of all development. Consolidating oil operations is consistent with the goals of the Coastal Act. The CDP application explains existing oil recovery systems and processes within the ORA. The application also looks forward – it proposes systems and processes that are needed for oil recovery activity from within the ORA so that a valuable natural resource can be efficiently recovered with minimal impacts.



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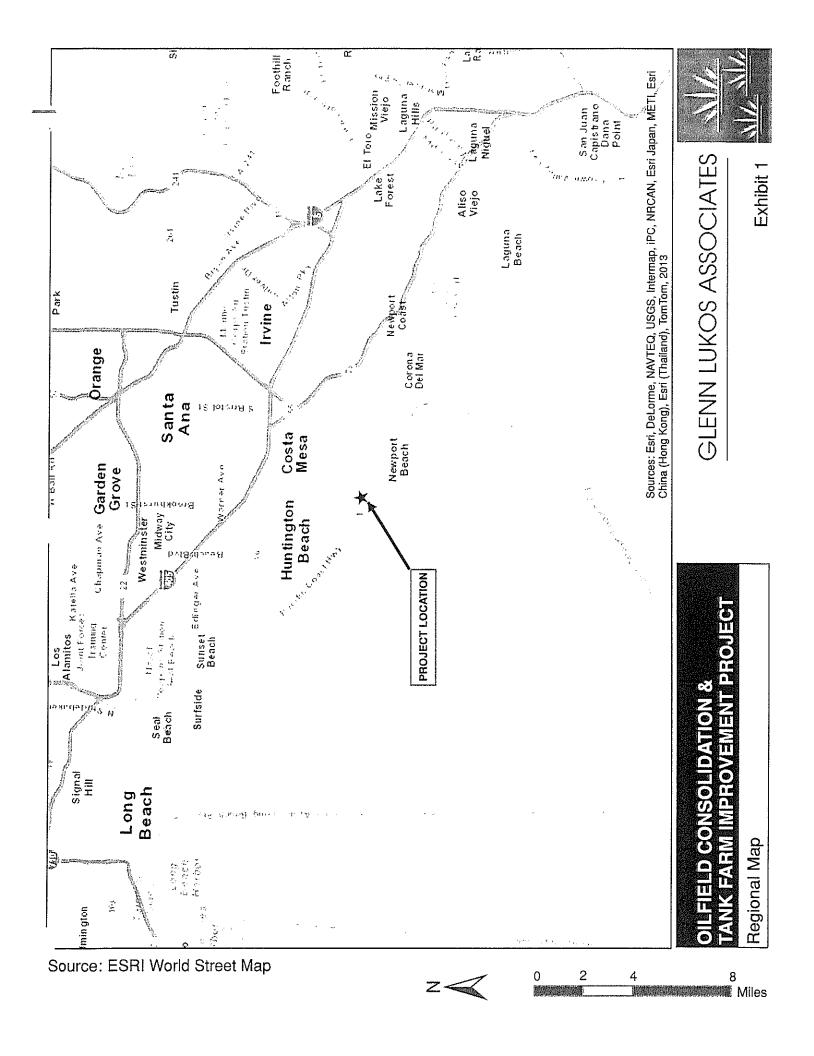
# Appendix A EXHIBITS & SCHEMATIC DRAWINGS

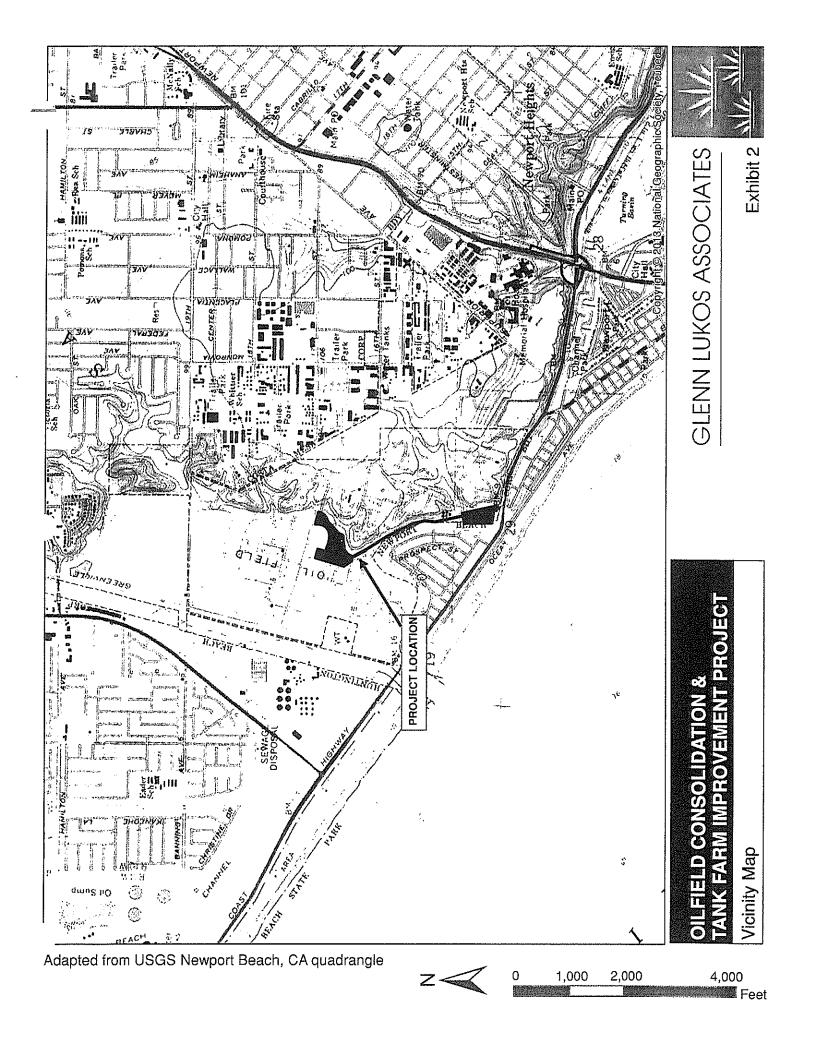


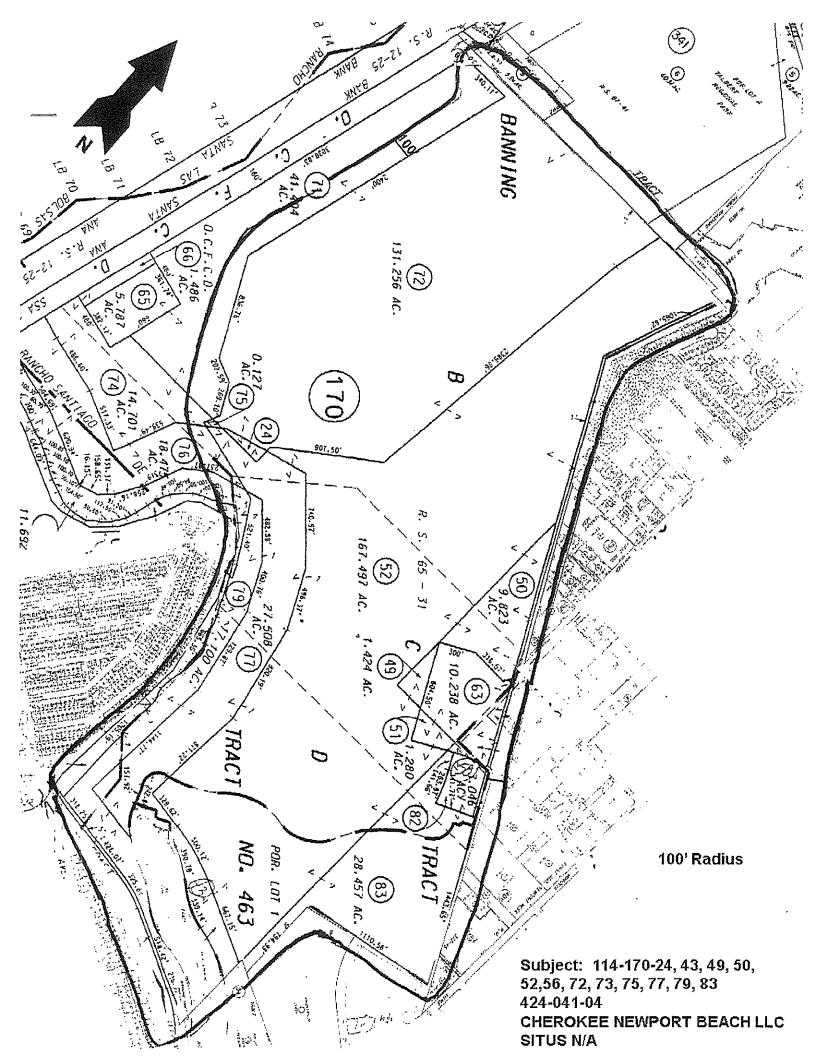
#### **HEADQUARTERS OFFICE**

Malibu Office 29350 Pacific Coast Hwy., #12 Malibu, CA 90265 P: (310) 589-0773 F: (310) 589-0353

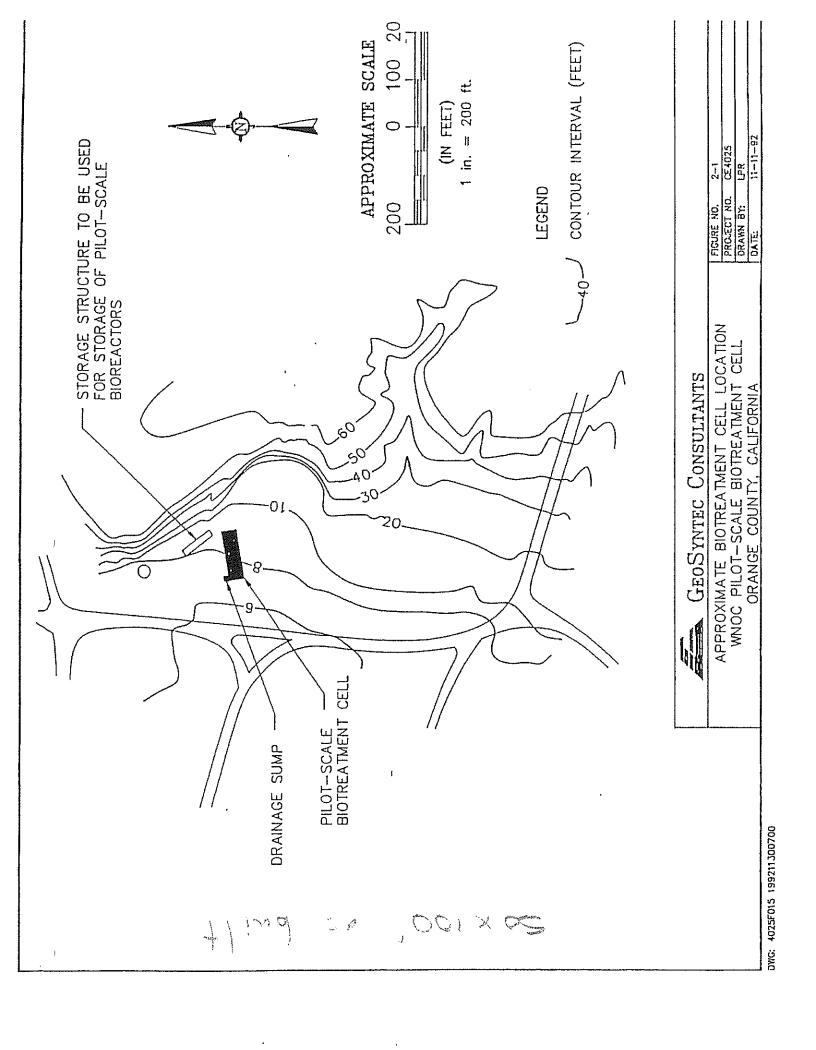
#### **REGIONAL OFFICE**

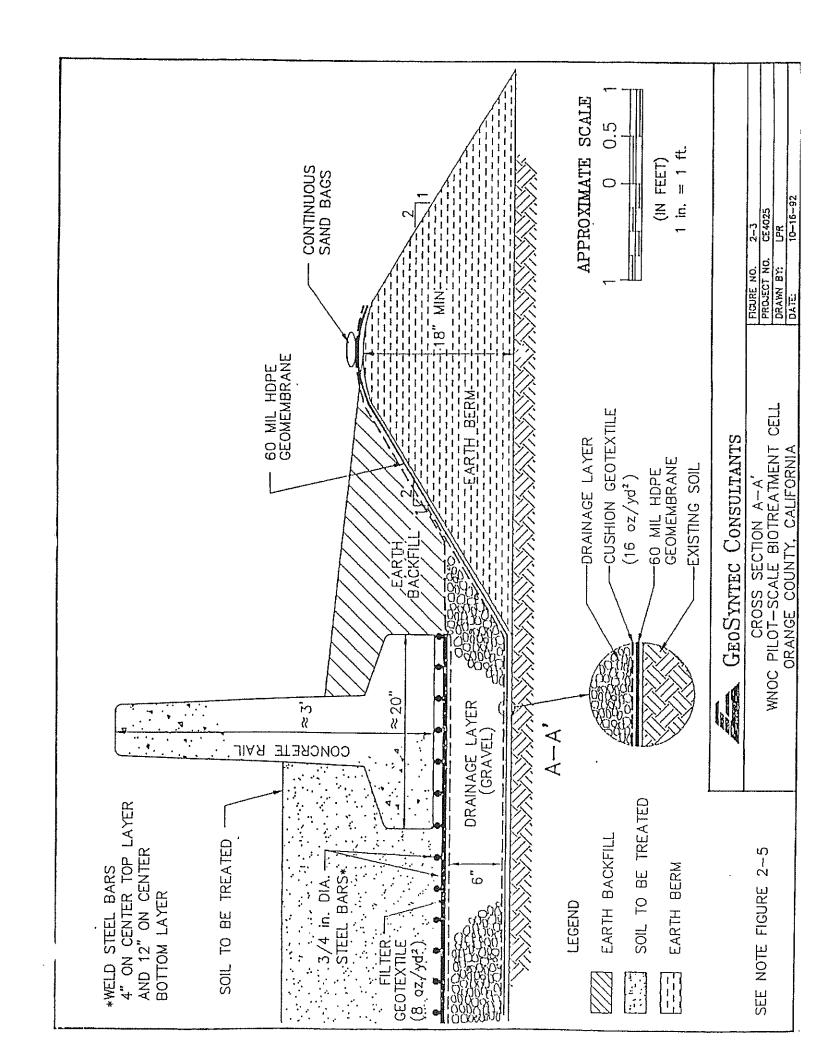


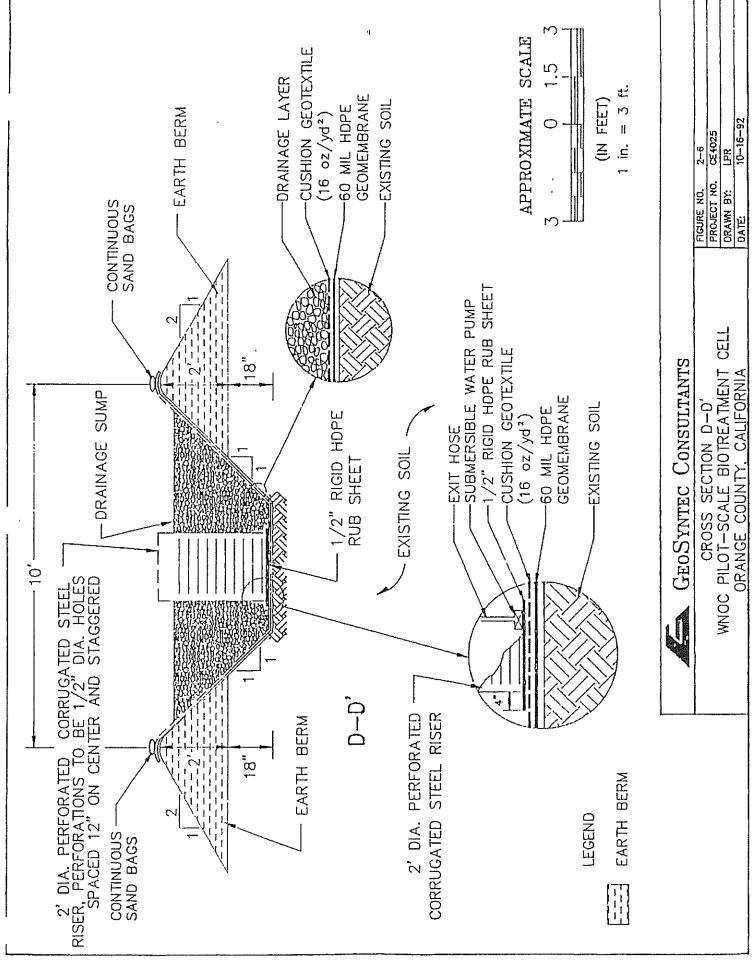




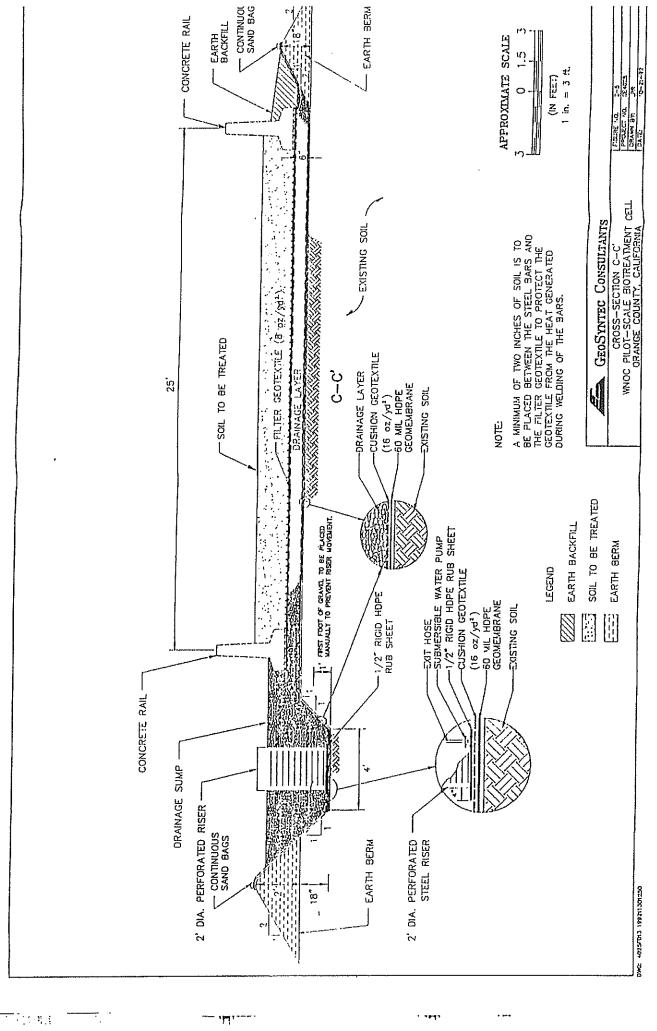
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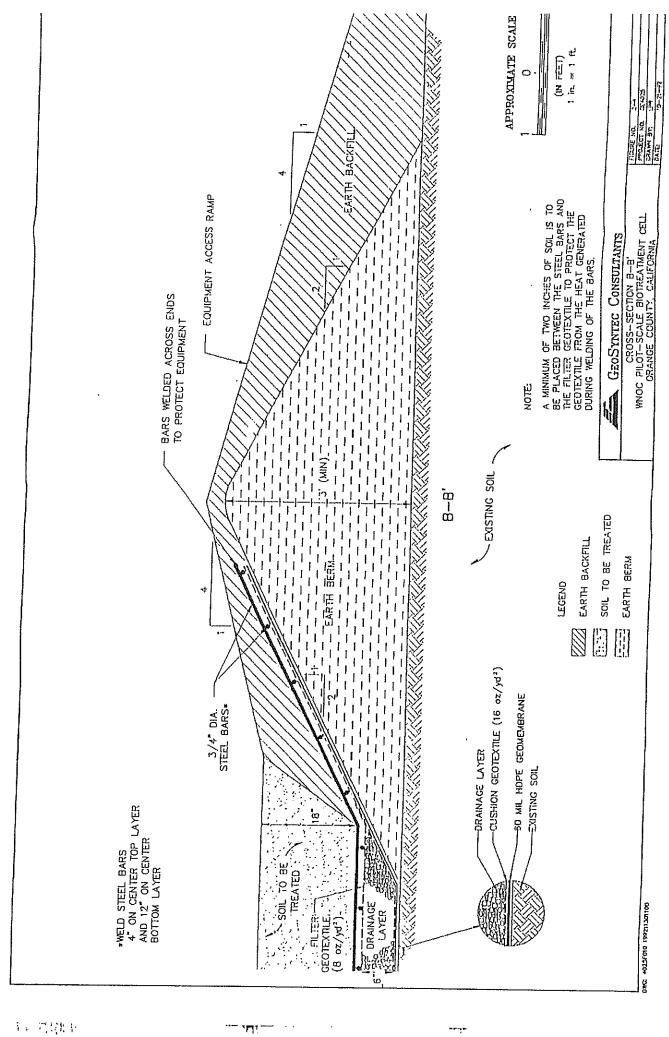


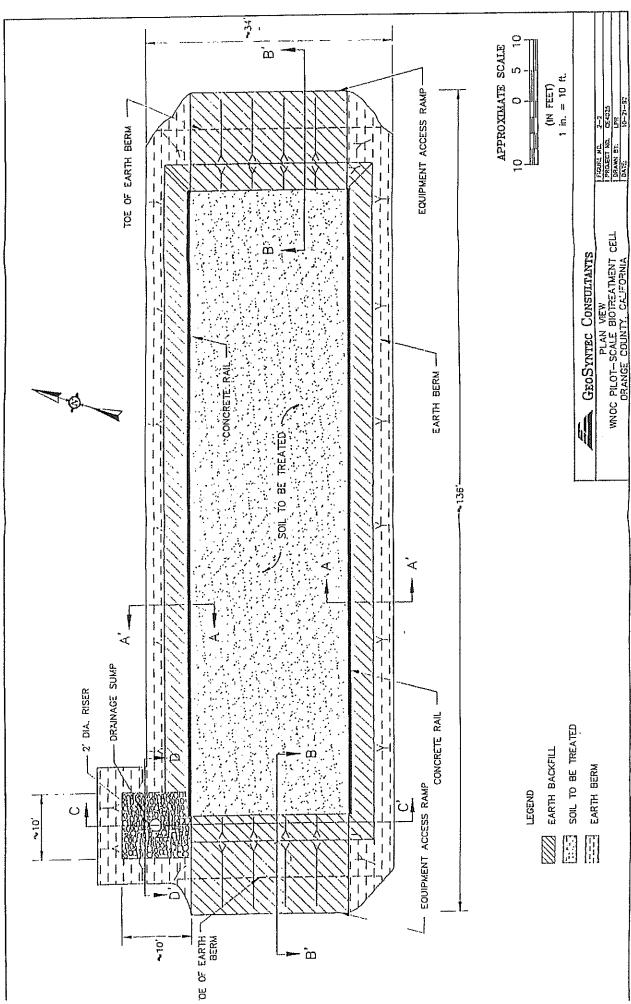




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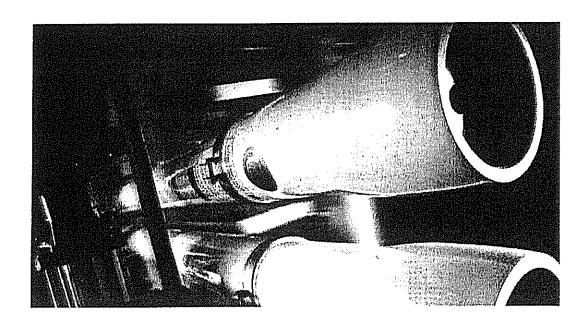
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i



## Seawater RO Package Specifications 15 GPM Production



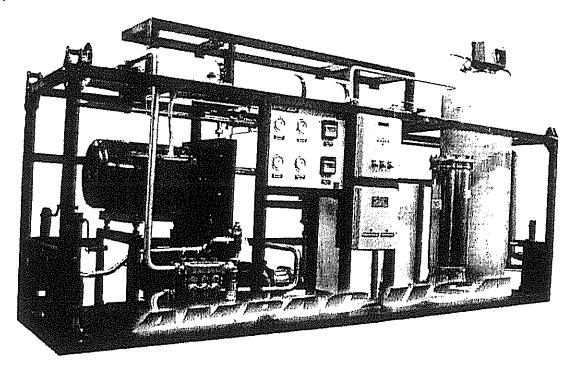
#### Ampac USA

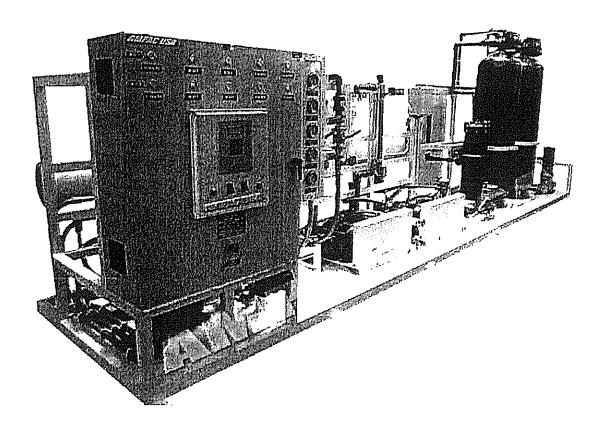
7949 Deering Ave Canoga Park, CA 91304 USA Phone: (818) 700-8015

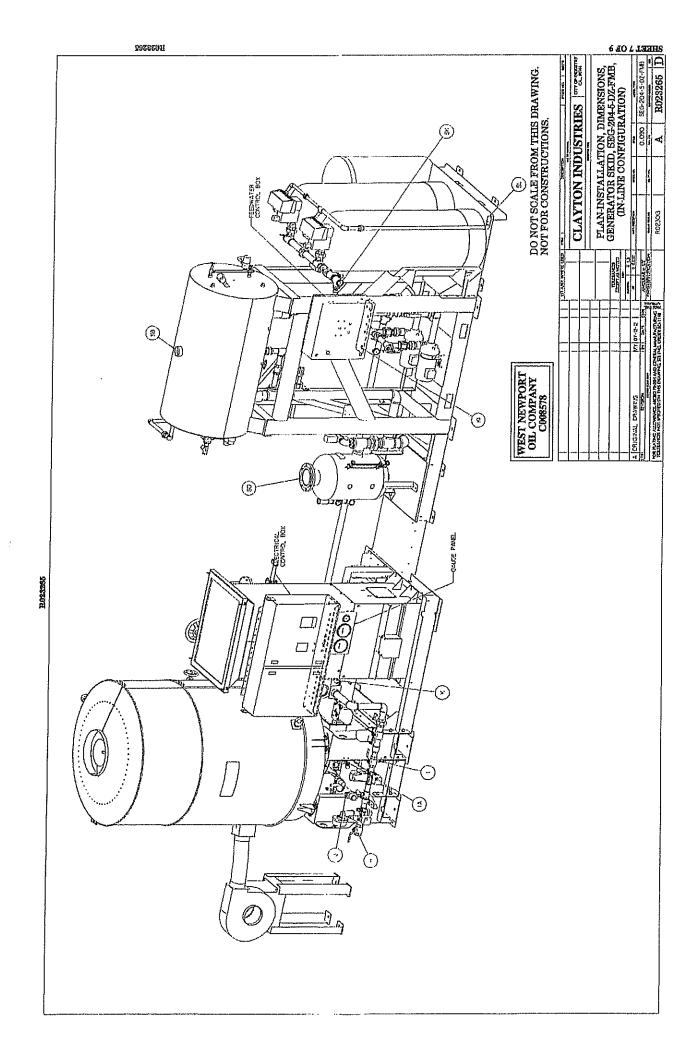
Fax: (818) 700-2895

Website: www.ampac1.com

These sample photos show similar packages by Ampac USA, but do not portray the exact configuration proposed:







Horizontal Development LLC, West Newport Oil Field – Coastal Development Permit Application Project Description Narrative & Supplemental Report Appendix B SUPPORTING LITERATURE & DOCUMENTS

#### Appendix B SUPPORTING LITERATURE & DOCUMENTS



#### **HEADQUARTERS OFFICE**

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# FOR HORIZONTAL DEVELOPMENT LLC OIL REMAINDER AREA

### WEST NEWPORT OIL FIELD ORANGE COUNTY, CALIFORNIA

#### Prepared for:

Horizontal Development LLC P.O. Box 1487 Newport Beach, CA 92659 Telephone:

#### Prepared By:

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September 2015

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#### **EXECUTIVE SUMMARY**

This report addresses the proposed Horizontal Development LLC ("HDLLC") oil operations conducted on 14.88 acres, more or less, ("ORA") in unincorporated Orange County, California ("Project Site"). The Project Site is located north of Pacific Coast Highway, east of the Santa Ana River, south of 19<sup>th</sup> Street and Talbert Regional Park, and west of existing residential and commercial areas. The Project Site lies entirely within the 401+/- acre property commonly known as "Newport Banning Ranch".

#### **Existing Conditions**

The Newport Banning Ranch has been degraded by oil extraction operations for decades. The Newport Banning Ranch is divided into two distinct areas, an upper mesa area bisected by canyons and a "lowland" area covering approximately 110 acres at the northwest corner of the site.

The majority of the Newport Banning Ranch is dominated by non-native vegetation and a number of invasive species are locally dominant; however, scattered patches of native vegetation remain intact on the site. The 14.88-acre Project Site is divided into three areas including the "North ORA", which occurs at the southeast corner of the lowland portion of the Newport Banning Ranch, which is currently occupied by an existing tank farm and a number of producing and injection wells; the "South ORA, which is located immediately north of Pacific Coast Highway at the extreme southwest corner of the Newport Banning Ranch, and the "ORA Easement", which is a narrow corridor for pipelines and transportation access which currently is occupied by two adjacent access roads.

As noted, the North ORA is already occupied by existing oilfield operations and contains essentially no native habitat due to, continuous, ongoing, long-term oil operations. A drainage swale traverses the northern edge of the North ORA and supports highly degraded wetland habitat subject to U.S. Army Corps of Engineers (Corps) jurisdiction pursuant to Section 404 of the federal Clean Water Act and Section 10 of the Rivers and Harbors Act and herbaceous riparian habitat subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the California Fish and Game Code. Portions of the drainage swale also meet the California Coastal Act (CCA) definition of wetlands.

The South ORA, located at the southwest corner of the Newport Banning Ranch consists of an area with oil wells, storage tanks and other infrastructure and contains no native habitats. The South ORA contains no drainage features and no wetlands meeting the definition of the CCA.

The ORA Easement is a narrow corridor that links the North and South ORAs and consists of the existing Orange County Sanitation District (OCSD) gravel access road, and an adjacent 15-foot wide area where pipelines and oil operations infrastructure will be installed, requiring only short-term temporary impacts to an existing dirt and gravel road.

Although highly degraded by invasive plants and ongoing oil operations, areas generally to the east and adjacent to the Project Site support scattered upland scrub habitats that support special-

status plants as well as the federally listed coastal California gnatcatcher. Adjacent lowlands, north and/or west of the Project Site support a number of wetland habitats, including areas of tidal coastal salt marsh that supports the state-listed endangered Belding's savannah sparrow, and southern black willow forest that supports the state and federally listed endangered least Bell's vireo, and a variety of special-status nesting raptors including the white-tailed kite. The lowlands also support special-status plants including substantial populations of southern tarplant, which occurs in limited areas and low numbers in the North ORA.

The Project Site and adjacent areas were evaluated for the presence of Environmentally Sensitive Habitat Area ("ESHA") as defined by the City of Newport Beach CLUP. While the Project Site contains no habitats that meet the minimal definition of ESHA, potential upland scrub ESHA occurs on the slopes to the east of the Project Site and includes areas consistent with the CLUP definitions of maritime succulent scrub/encelia scrub, buckwheat scrub, and southern coastal bluff scrub. Potential ESHA that meets the definition of either wetland or riparian, or both wetland and riparian occurs in the adjacent lowlands and includes mud flats, southern black willow forest, and southern coastal salt marsh. The Project Site is included within Critical Habitat defined by the USFWS for the coastal California gnatcatcher; although the area contains very limited Primary Constituent Elements (PCEs).

#### **Impacts**

Because the majority of the Project Site is currently the site of extensive oil operations, there are very limited biological resources within the boundaries of the Project Site. Limited areas of coast brittle bush scrub and coastal sage scrub will be avoided as these occur as slivers along the eastern edge of the ORA Easement and South ORA, and can be avoided. Impacts to the drainage swale subject to Corps and CDFW jurisdiction and also CCA wetlands will be avoided. There would be impacts to 82 individuals of southern tarplant which would be significant and subject to mitigation. There would be no direct impacts to special-status animals, and potentially significant indirect impacts to special-status animals would be mitigated to less than significant.

#### Mitigation

One significant impact to 82 individuals of southern tarplant was identified and will be mitigated through seed collection and establishment of a replacement population within preserved lowland portions of the site. Potential indirect impacts to the California gnatcatcher and coastal cactus wren will be mitigated as necessary as described in Section 6.0 below. Similarly, if vegetation is removed during the breeding season, mitigation will be implemented to ensure that no impacts to nesting birds occur.

#### 1.0 INTRODUCTION

Biologists from Glenn Lukos Associates, Inc. (GLA), Bonterra Consulting (Bonterra), and Dudek (Dudek) conducted comprehensive surveys on the Newport Banning Ranch between 2007 and the present in support of proposed development, oil field remediation and restoration of portions of the property associated with a Newport Banning Ranch LLC development proposal. The surveys were conducted in order to identify the presence of special-status species or habitats capable of supporting special-status species on the site or adjacent to the site in areas that could be affected by the project. In addition, the 401-acre West Newport Oil property was evaluated for the presence of areas potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act and Section 10 of the 1899 Rivers and Harbors Act, the California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the California Fish and Game Code, and wetlands as defined under the California Coastal Act (CCA). Finally, the Newport Banning Ranch was evaluated relative to potential impacts to Environmentally Sensitive Habitat Area (ESHA) as defined under Section 30240 of the California Coastal Act, as well as Section 4.1.1 of the City's Coastal Land Use Policies.

This report includes an analysis of the potential biological resources associated with the Project Site as it pertains to special-status species and habitats.

Potential impacts (direct and/or indirect) to special-status species and habitats are addressed below for purposes of review under the California Coastal Act (CCA). In addition, impacts to species listed as threatened or endangered under the federal Endangered Species Act (ESA) or their designated Critical Habitat are regulated by the U.S. Fish and Wildlife Service (USFWS) and species listed as threatened or endangered by the State of California are regulated by the California Department of Fish and Wildlife (CDFW) pursuant to the State ESA and are addressed below. Wildlife that are assigned other designations by CDFW (i.e., species of special concern, fully-protected species, etc.), and plants given special status by the California Native Plant Society (CNPS) are not granted additional protection, except that impacts to these species generally require evaluation pursuant to the CCA as they could be associated with ESHA. This report also provides an analysis of requirements of the Regional Water Quality Control Board specifically as they relate to areas of Corps jurisdiction pursuant to Section 401 of Clean Water Act.

For purposes of this report, direct impacts are considered for the 14.88-acre Project Site, including the North and South ORAs as well as the ORA Easement. Indirect impacts are assessed within an approximate 300-foot buffer extending from the 14.88 acre Project Site. Exhibit 3 depicts the 14.88-acre Project Site as well as the 300-foot "Buffer Area" evaluated for potential indirect impacts.

#### 1.1 Location of Project Site

As noted, the Project Site lies within the Newport Banning Ranch, which covers approximately 401 acres and is located in unincorporated Orange County and the City of Newport Beach (Exhibit 1). The Project Site covers approximately 14.88-acres in the unincorporated portion of

the Newport Banning Ranch and includes three component areas: the North ORA, which occurs at the southeast corner of the lowland portion of the Newport Banning Ranch, which is currently occupied by the existing tank farm and a number of producing and injection wells; the South ORA, which is located immediately north of Pacific Coast Highway at the extreme southwest corner of the West Newport Oil site, and the ORA Easement, which is a narrow corridor for pipelines and transportation access. Each of these is designated on Exhibit 2, which is the U.S. Geological Survey (USGS) topographic map Newport Beach, California [dated 1965 and photorevised in 1981] and Exhibit 3, an aerial photograph. The Project Site is situated within unsectioned areas of Township 6 South, and Range 10 West.

#### 1.2 Project Description

The North and South ORA sites have been used continuously for oil and natural gas extraction, storage, and processing since the early 1940s. Existing oil and natural gas uses will be ongoing following the proposed site improvements, which will include installation of connecting pipelines between the North and South ORA sites as depicted on Exhibit 3.

#### 1.3 Existing Conditions

The North and South ORA sites have been the subject of ongoing oilfield operations over an extended period of time. The North ORA has essentially no native habitat with the exception of a small amount of Menzie's goldenbush scrub in the northeast portion of the North ORA. The South ORA contains no native habitat and the ORA Easement consists entirely of roads and associated road shoulders and also contains no native habitat. Vegetation Types and/or Land Cover types are summarized in Table 4-1 below.

Areas adjacent to and east of the North ORA support a mosaic of native and non-native habitats including disturbed coast brittle bush scrub (CBBS), which includes a number of associations as set forth in Table 4-2 below along with areas dominated by non-native species such as ice plant mats (IPM), non-native annual grassland, and upland mustard. Similarly, areas to the south of the North ORA consist primarily of IPM and disturbed CBBS.

Areas adjacent to and east of the ORA Easement similarly support a mosaic of native and non-native habitats including disturbed CBBS, which includes a number of associations as set forth in Table 4-2 below along with mulefat thickets (MFT) and saltgrass mats. These are mixed with areas dominated by non-native species such as IPM, myoporum groves, pepper tree stands and golden wattle acacia. A limited area of saltgrass dominated wetland, that meets the CCA wetland definition but not the Section 404 requirements, occurs in an artificial swale created at the toe of the adjacent slope for oil field pipelines and hoses. West of the ORA Easement include ornamental vegetation, beyond which are patches of IPM and limited areas of coastal salt marsh growing in occasional thin strips along the margins of the Semeniuk Slough.

Areas adjacent to and east of the South ORA support a mosaic of disturbed CBBS, ice plant mats (IPM), and myoporum groves. Areas to the west of the South ORA include existing oil facilities, ornamental pines and eucalyptus, IPM, Semeniuk Slough and costal salt marsh.

Oilfield activities have been ongoing at the site for over 75 years. Given the extensive production history of the site, oil wells, pipelines, and related facilities have been added and/or replaced over a long period.

Facilities associated with Project Site and 300-foot Buffer fall into several categories:

- (1) Oil Operations Areas. These areas were historically used in the oil and gas producing operations. This includes all roads, wells and surrounding wellpads, tanks and facilities, pipeline and utility corridors and general staging and work areas. These areas have generally been graded and may be surfaced with gravel, asphalt, crude oil, crude oil tank sediments, or other materials. In some cases vegetation (mostly non-native) has grown around or amongst these facilities and surface materials.
- (2) Oil Wells and Pads. These areas consist of the surface locations of the existing or abandoned oil wells. The oil well pad generally included an area of 10 to 30 feet around each oil well that contained pipelines, concrete pads, pumping and power equipment, and the work area for large workover rigs, trucks, and tanks.
- (3) Oil Pipeline Corridors. These corridors are areas where one or more pipelines exist to convey oil, water and gas from each well to larger group lines and on to each processing facility. Most lines are above ground with some sitting on pipeline support structures that are cemented into the ground to raise the actual pipeline above the ground surface. Some older lines may still exist below the surface, and the locations of some historic pipelines will likely not be known until grading for remediation begins.
- (5) Facilities. There are numerous facility areas within the Project Site and 300-foot Buffer. These vary from large facility areas that include extensive piping, oil separation and processing tanks, power facilities, mechanics and workshops, and other equipment, to smaller individual tanks, vessels, equipment storage yards, sheds or staging areas.

#### 2.0 METHODOLOGY

As summarized in Table 2-1, the 401 acre Newport Banning Ranch has been subject to a suite of biological surveys during the last few decades, with some survey efforts extending back to the early 1990s. More recently, beginning in 2006, GLA conducted detailed biological surveys, including 1) focused for special-status plants and animals, 2) vegetation mapping, 3) delineation of wetlands and other aquatic resources, and 4) general biological surveys to obtain floral and faunal inventories. GLA's work has been augmented and updated by BonTerra and Dudek, which have conducted 1) focused surveys for special-status animals, 2) refinement of the vegetation mapping, and 3) ongoing general biological surveys. These survey efforts have created a substantial database of biological resources for the Newport Banning Ranch, of which the Project Site comprises only a limited part. Furthermore, as already noted and discussed in more detail below, the North ORA, South ORA and ORA Easement areas exhibit essentially no native habitat and as such exhibit no potential for significant direct impacts on sensitive biological resources.

Impacts to sensitive biological resources are limited to potential indirect impacts due to noise, lighting and other indirect effects. In order to address potential indirect impacts, the previously mentioned 300-foot Buffer around the North ORA, South ORA and ORA Easement was established in order to fully evaluate potential indirect impacts on special-status species, special-status habitats, and wetlands (as defined by the Corps and by the Coastal Act). Mapping of special-status plants for the 14.88-acre Project Site was updated during the July and August 2015 surveys and as necessary, refinements to the vegetation mapping and jurisdictional delineation were also performed, as addressed below.

#### 2.1 Summary of Surveys

As noted, the 401-acre Newport Banning Ranch site has been the subject of numerous and detailed biological surveys extending back to the early 1990s. While the 14.88-acre Project Site comprises only a small part of the property, many of the surveys were conducted in adjacent areas, and as such, provide extensive data for analyzing the project. For many of the species (e.g., listed fairy shrimp, burrowing owl) there is no potential habitat within the Project Site or the 300-foot buffer; however, because of the extensive biological survey efforts, it is possible to accurately evaluate the potential impacts of the Project.

Survey Date	Survey Type	Personnel; Company	Weather Conditions
11/26/91	Wintering Raptor	R. Erickson; LSA	Clear (smoggy), mild, light wind
12/19/91	Wintering Raptor	R. Erickson; LSA	Clear, cool, strong northwest wind
1/14/92	Wintering Raptor	R. Erickson; LSA	Clear, cool, light wind
2/27/92	Wintering Raptor	R. Erickson; LSA	Clear, warm, light wind
1992	CAGN	LSA	Various
3/16/94	CAGN; CAWR	E. Anderson, Hamilton; LSA	62°F; overcast early, clearing mid- morning; light wind
3/25/94	CAGN; CAWR	R. Hamilton; LSA	60°F; partly cloudy, 3-10 mph wind
3/29/94	CAGN; CAWR	R. Hamilton; LSA	64-72°F; 100-70% cc; 0-5 mph wind
3/28/95	CAGN; CAWR	R. Erickson, R. Hamilton, LSA	NR
4/4/95	CAGN; CAWR	R. Erickson, R. Hamilton, LSA	NR
4/5/95	CAGN; CAWR	R. Erickson, R. Hamilton, LSA	NR
3/21/96	CAGN; CAWR	R. Erickson; LSA	NR
3/22/96	CAGN; CAWR	R. Erickson; LSA	NR
3/28/96	CAGN; CAWR	R. Erickson; LSA	NR
4/3/96	CAGN; CAWR	R. Erickson; LSA	NR
7/1/1997	CAGN	Ruben Ramirez; PCR Services	NR
7/8/1997	CAGN	Ruben Ramirez; PCR Services	NR
7/13/1997	CAGN	Ruben Ramirez; PCR Services	NR
7/22/1997	CAGN	Ruben Ramirez; PCR Services	NR
7/28/1997	CAGN	Marc Blain, Jason Berkler, Mike Klinefelter; PCR Services	63-80°F; 0-100%cc
8/11/1997	CAGN	Ruben Ramirez; PCR Services	NR

Survey Date	Survey Type	ary of Biological Surveys 1991 to Personnel; Company	Weather Conditions
8/13/1997	CAGN	Ruben Ramirez; PCR Services	NR
1/19/2000	FS	T. Bomkamp; GLA	NR
2/29/2000	FS	T. Bomkamp; GLA	NR
3/13/2000	Jurisdictional Delineation	T. Bomkamp; GLA	NR
3/15/2000	FS	T. Bomkamp; GLA	NR
3/21/2000	FS	T. Bomkamp; GLA	NR
4/7/2000	FS	T. Bomkamp; GLA	NR
5/19/2002	CAGN	GLA	NR
5/22/2002	CAGN	GLA	NR
5/26/2002	CAGN	GLA	NR
5/29/2002	CAGN	GLA	NR
6/2/2002	CAGN	GLA	NR
6/5/2002	CAGN	GLA	NR
6/9/2002	CAGN	GLA	NR
6/12/2002	CAGN	GLA	NR
6/16/2002	CAGN	GLA	NR
6/19/2002	CAGN	GLA	NR
6/25/2002	CAGN	GLA	NR
6/26/2002	CAGN	GLA	NR
5/31/2005	BUOW	Marshall Cliff; LSA Associates, Inc. (LSA)	NR
6/7/2005	BUOW	Richard Erickson, Paul Schwartz; LSA	NR
6/20/2005	BUOW	Ingri Baroni, Stan Spencer; LSA	NR
12/19/2005	BUOW	Ingri Baroni, Leo Simone; LSA	NR
12/20/2005	BUOW	Ingri Baroni, Leo Simone; LSA	NR
12/21/2005	BUOW	Ingri Baroni, Leo Simone; LSA	NR
12/22/2005	BUOW	Ingri Baroni, Leo Simone; LSA	NR
4/7/2006	CAGN	Ingrid Chlup, David Moskovitz; GLA	55-65°F, 20-50%cc, 1-3mph wind
4/14/2006	CAGN	David Moskovitz; GLA	62-68°F, 100%cc, 0-3
4/21/2006	CAGN	Ingrid Chlup, Kevin Livergood, Tony Bomkamp Jeff Ahrens; GLA	64-73°F, 100%cc, 1-5mph wind
4/24/2006	BUOW	Ingri Baroni; LSA	
4/28/2006	CAGN	Ingrid Chlup, Kevin Livergood, Jeff Ahrens; GLA	58-68°F, 100%cc, 1-5mph wind
5/3/2006	BUOW	Ingri Baroni, Liz Delk; LSA	NR
5/5/2006	CAGN	Ingrid Chlup, Kevin Livergood, Jeff Ahrens; GLA	62-72°F, 100%cc, 0-3mph wind
5/11/2006	BUOW	Ingri Baroni; LSA	NR
5/17/2006	CAGN	Ingrid Chlup, Kevin Livergood, Jeff Ahrens; GLA	67-73°F, 100%cc, 1-3mph wind
5/24/2006	BUOW	Ingri Baroni, Michael Weller; LSA	NR
6/16/2006	CAGN	David Moskovitz, GLA	70-80°F, 0%, 1-3mph wind

Survey Date	Survey Type	ary of Biological Surveys 1991 to Personnel; Company	Weather Conditions
3/19/2007	CAGN	Ingrid Chlup; GLA	62-70°F, 100%cc, 0-1mph wind
3/26/2007	CAGN	Ingrid Chlup; GLA	62-72°F, 100%cc, 1-2mph wind
4/2/2007	CAGN	Ingrid Chlup,Kevin Livergood; GLA	56-72°F, 10-30%cc, 0-2mph wind
4/9/2007	CAGN	Jeff Ahrens, Kevin Livergood; GLA	61-75°F, 0-30%cc, 0-4mph wind
4/16/2007	CAGN	Jeff Ahrens; GLA	61-66°F, 0%cc, 1-6mph wind
4/23/2007	CAGN	Ingrid Chlup, Kevin Livergood; GLA	59-68°F, 0-30%cc, 0-5mph wind
5/31/2007	FS	D. Lloyd, A. Kessans, T. Bomkamp, K. Livergood; GLA	NR
6/13/2007	FS	D. Lloyd, A. Kessans,T. Bomkamp, K. Livergood; GLA	NR
6/15/2007	FS	D. Lloyd, A. Kessans, T. Bomkamp, K. Livergood; GLA	NR
6/21/2007	FS	D. Lloyd, A. Kessans, T. Bomkamp, K. Livergood; GLA	NR
6/22/2007	FS	D. Lloyd, A. Kessans, T. Bomkamp, K. Livergood; GLA	NR
7/30/2007	FS	D. Lloyd, A. Kessans, T. Bomkamp, K. Livergood; GLA	NR
9/29/2007	FS	D. Lloyd, A. Kessans, T. Bomkamp, K. Livergood; GLA	NR
12/14/2007	FS	D. Lloyd, A. Kessans, T. Bomkamp, K. Livergood; GLA	NR
12/17/2007	FS	D. Lloyd, A. Kessans, T. Bomkamp, K. Livergood; GLA	NR
12/18/2007	FS	D. Lloyd, A. Kessans, T.Bomkamp, K. Livergood; GLA	NR
2/7/2008	FS	D.Moskovitz; GLA	NR
12/23/2008	FS	E.Bomkamp; GLA	NR
1/22/2009	BUOW	Rudalevige; BonTerra	60°F,0-5mph wind
1/23/2009	BUOW	Rudalevige; BonTerra	60°F, 0-5mph wind
1/26/2009	BUOW	Rudalevige, Messett; BonTerra	58°F,0-7mph wind
1/27/2009	BUOW	Rudalevige, Messett; BonTerra	67°F, 0-3mph wind
1/28/2009	BUOW	Rudalevige, Messett; BonTerra	47°F, 0-2mph wind
1/29/2009	BUOW	Rudalevige, Messett; BonTerra	48°F, 0-1mph wind
1/30/2009	BUOW	Rudalevige, Messett; BonTerra	77°F, 0-13mph wind
2/18/2009	FS	E.Bomkamp; GLA	NR
2/26/2009	FS	E.Bomkamp; GLA	NR
3/3/2009	FS	E.Bomkamp; GLA	NR
3/25/2009	CAGN	Brian Daniels; BonTerrra	NR
4/1/2009	CAGN	Brian Daniels; BonTerrra	NR
4/9/2009	CAGN	Brian Daniels; BonTerrra	NR
4/13/2009	LBVI	BonTerra	NR
1/16/2009	CAGN	Brian Daniels; BonTerrra	NR
1/23/2009	CAGN	Brian Daniels; BonTerrra	NR

	Summary of Biological Surveys 1991 to 2015					
Survey Date	Survey Type	Personnel; Company	Weather Conditions			
4/24/2009	LBVI	BonTerra	NR			
4/30/2009	CAGN	Brian Daniels; BonTerrra	NR			
5/4/2009	LBVI	BonTerra	NR			
5/11/2009	BUOW	Rudalevige, Messett; BonTerra	68°F, 0-9mph wind			
5/13/2009	BUOW	Rudalevige; BonTerra	60-66°F, 0-5mph wind			
5/14/2009	LBVI	BonTerra	NR			
5/20/2009	BUOW	Rudalevige, Messett; BonTerra	64-70°F, 0-5mph wind			
5/21/2009	BUOW	Rudalevige, Messett; BonTerra	61°F, 0-5mph wind			
5/25/2009	LBVI	BonTerra	NR			
5/29/2009	BUOW	Messett;BonTerra	62°F, 0-3mph wind			
6/4/2009	LBVI	BonTerra	NR			
6/15/2009	LBVI	BonTerra	NR			
6/25/2009	LBVI	BonTerra	NR			
7/3/2009	LBVI	BonTerra	NR			
7/9/2009	LBVI	BonTerra	NR			
11/5/2010	FS	D.Moskovitz; GLA	NR			
11/11/2010	FS	D.Moskovitz; GLA	NR			
11/22/2010	FS	D.Moskovitz; GLA	NR			
11/24/2010	FS	D.Moskovitz; GLA	NR			
12/13/2010	FS	D.Moskovitz; GLA	NR			
23-Dec	FS	D.Moskovitz; GLA	NR			
12/27/2010	FS	D.Moskovitz; GLA	NR			
1/6/2011	FS	D.Moskovitz; GLA	NR			
1/20/2011	FS	D.Moskovitz; GLA	NR			
2/1/2011	FS	D.Moskovitz; GLA	NR			
2/17/2011	FS	D.Moskovitz; GLA	NR			
4/1/2011	FS	D.Moskovitz; GLA	NR			
4/14/2011	Raptor	Tony BomKamp; GLA	46-56°F, 0% cc, 0-6 mph wind			
4/16/2011	Raptor	John Davis, Dave Compton; Dudek Jeff Ahrens; GLA	53-70°F, 50%-0% cc, 0-2 mph wind			
4/15/2011	FS	D.Moskovitz; GLA	NR			
10/12/2011	FS	Kevin Livergood; GLA	NR			
10/12/2011	FS	K.Livergood; GLA	NR			
10/20/2011	FS	K. Livergood; GLA	NR			
10/20/2011	FS	K.Livergood; GLA	NR			
11/9/2011	FS	K. Livergood; GLA	NR			
11/9/2011	FS	K.Livergood; GLA	NR			
11/17/2011	FS	K. Livergood; GLA	NR			
11/17/2011	FS	K.Livergood; GLA	NR			
11/23/2011	FS	K. Livergood; GLA	NR			
11/23/2011	FS	K. Livergood; GLA	NR			
11/28/2011	FS	K.Livergood; GLA	NR			

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Survey Date	Survey Type	ry of Biological Surveys 1991 t Personnel; Company	Weather Conditions
11/28/2011	FS	K.Livergood; GLA	NR
12/2/2011	FS	K.Livergood; GLA	NR
12/2/2011	FS	K.Livergood; GLA	NR
12/12/2011	FS	K.Livergood; GLA	NR
12/13/2011	FS	K.Livergood; GLA	NR
12/27/2011	FS	K. Livergood; GLA	NR
12/27/2011	FS	K.Livergood; GLA	NR
1/16/2012	FS	K. Livergood; GLA	NR
1/16/2012	FS	K.Livergood; GLA	NR NR
2/3/2012	FS	K. Livergood; GLA	69°F
2/3/2012	FS	K.Livergood; GLA	NR
2/22/2012	FS	K. Livergood; GLA	67°F
2/22/2012	FS	K.Livergood; GLA	NR
4/2/2012	FS	K. Livergood; GLA	65°F
4/2/2012	FS	K. Livergood; GLA  K. Livergood; GLA	NR
4/11/2012	BUOW	Dudek	59-64°F, 50-90%cc, 2-10mph wind
4/11/2012	BUOW	GLA	
4/11/2012	FS	K.Livergood; GLA	59-64°F, 2-10mph wind
4/14/2012	BUOW	Dudek	NR 40 5085 0 40% 5 40 1 1 1
4/14/2012	BUOW		46-53°F, 0-10%cc, 5-10mph wind
		GLA (Control Discourse de CI A	46-53°F, 5-10mph wind
4/17/2012 4/17/2012	FS FS	Kevin Livergood; GLA	63°F
		K.Livergood; GLA	NR
4/25/2012	FS	Kevin Livergood; GLA	65°F
4/25/2012	FS	K.Livergood; GLA	NR
5/1/2012	Raptor	Tony Bomkamp, Jeff Ahrens; GLA Dave Compton, John Davis; Dudek	59-63°F, 100%cc, 0-7mph wind, drizzle
5/1/2012	BUOW	Dudek	60-60°F, 90-100%cc, 1-3mph wind
5/1/2012	Jurisdictional Delineation	T. Bomkamp; GLA	NR
5/1/2012	BUOW	GLA	60°F, 1-3mph wind
5/2/2012	FS	Kevin Livergood; Dudek	64°F
5/7/2012	BUOW	Dudek	60-61°F, 90-100%cc, 0-1mph wind
5/7/2012	BUOW	GLA	60-61°F, 0-1mph wind
5/10/2012	Jurisdictional Delineation	T. Bomkamp; GLA	NR
5/12/2012	FS	K.Livergood; GLA	NR
5/15/2012	Raptor	Jeff Ahrens, Jason Fitzgibbon; GLA Dave Compton, Traci Caddy; Dudek	59-71°F, 100-50% cc, 0-8mph wind
5/17/2012	Grassland Assessment	John Davis, Heather Moine, Tony Bomkamp; Dudek	60-70°F, 100-20% cc, 2-7 mph wind
5/23/2012	Grassland Assessment	John Davis, Heather Moine; Dudek	62-73°F, 100-40% cc, 7-16 mph wind
5/29/2012	Raptor	Jeff Ahrens., Jason Fitzgibbon; GLA Dave Compton, John Davis; Dudek	63- 72°F, 0% cc, 0-10 mph wind

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Survey Date	Survey Type	Personnel; Company	Weather Conditions
5/29/2012	Grassland Assessment	Dave Compton, Heather Moine; Dudek	63- 72°F, 0% cc, 0-10 mph wind
6/1/2012	BUOW	Dudek	62-63°F, 90-100%cc, 0-1mph wind
6/1/2012	BUOW	GLA	62-63°F, 0-1mph wind
6/2/2012	BUOW	Dudek	61-63°F, 90-100%cc,0-3mph wind
6/2/2012	BUOW	GLA	61-63°F, 0-3mph wind
6/9/2012	Jurisdictional Delineation	Tony Bomkamp; GLA	NR
6/12/2012	Raptor	Jeff Ahrens., Jason Fitzgibbon; GLA Dave Compton, John Davis; Dudek	Overcast to partly cloudy with northwest to southwest winds at 0-7 mph. Temperatures ranged from 56°F to 58°F.
6/12/2012	Grassland Assessment	Dave Compton, Heather Moine	Overcast to partly cloudy with northwest to southwest winds at 0-7 mph. Temperatures ranging from 56°F to 58°F.
6/18/2012	Vegetation Mapping	John Davis, Dave Compton, Heather Moine; Dudek	Hazy with winds at 4-8 mph and temperatures ranging from 62°F to 68°F.
6/19/2012	Vegetation Mapping	John Davis; Dudek	Mostly cloudy early and clearing later. Winds 2-8 mph out of the southwest and temperatures ranging from 60°F to 70°F.
6/20/2012	Grassland Assessment and Vegetation Mapping	Heather Moine, Dave Compton; Dudek	Overcast clearing to partly cloudy. Winds 3-8 mph out of the south and temperatures ranging from 63°F to 70°F.
6/21/2012	Vegetation Mapping	Heather Moine, Dave Compton; Dudek	Mostly cloudy early and clearing later. Winds 3-7 mph out of the south to southwest and temperatures ranging from 62°F to 72°F.
6/22/2012	Vegetation Mapping	Heather Moine, Dave Compton; Dudek	Overcast and clearing later with winds 0-10 mph out of the southwest and temperatures ranging from 62°F to 71°F.
6/25/2012	BUOW	Dudek	61-63°F, 15-50%cc, 0-1mph wind
6/25/2012	BUOW	GLA	61-63°F, 0-1mph wind
6/26/2012	BUOW	Dudek	60-61°F, 0-50%cc, 0-1mph wind
6/26/2012	BUOW	GLA	60-61°F, 0-1mph wind
7/19/12	Vegetation Mapping	John Davis; Dudek	Sunny and clear above with slight to moderate breeze. Thin clouds to the east and temperatures approximately 65°F.
7/23/2012	Pacific Pocket Mouse	Phil Behrends; Dudek	65-73°F, 0-100%cc, 5-3mph winds
10/4/2012	Vegetation mapping	Heather Moine; Dudek	Sunny and clear with winds approximately 4 mph out of the south southwest and temperatures ranging from 72°F to 75°F.

Survey Date	Survey Type	Personnel; Company	Weather Conditions
10/4/2012	Jurisdictional Delineation	John Davis IV, Tricia Wotipka, Heather Moine; Dudek	NR
10/22/2012	FS	D.Moskovitz; GLA	NR
10/25/2012	FS	D.Moskovitz; GLA	NR
10/28/2012	FS	D.Moskovitz; GLA	NR
11/9/2012	Vegetation mapping	Heather Moine, John Davis; Dudek	Sunny to partly cloudy with winds 14- 15 mph out of the west and temperatures ranging from 61°F to 64°F.
11/15/2015	Vegetation mapping	Dave Compton, Heather Moine; Dudek	Overcast with winds 2-7 mph out of the south and temperatures ranging from 56°Fto 67°F.
12/11/2015	Vegetation mapping	Dave Compton, John Davis, Heather Moine; Dudek	Clear with winds 5-8 mph out of the south. Temperatures ranging from 52°F to 69°F.
2/15/2013	Wetland Assessment	GLA	NR
2/22/2013	Wetland Assessment	GLA	NR
4/8/2013	CAGN	Tricia Wotipka, Brock Ortega, Traci Caddy, Thomas Liddicoat, Kam Muri, Melissa Blundell, Dave Compton, Karen Mullen, Patricia Schuyler; Dudek	57-61°F, 10-100%cc, 3-10mph wind
4/9/2013	CAGN	Tricia Wotipka, Traci Caddy, Brock Ortega, Thomas Liddicoat, Paul Lemons, Melissa Bundell, Dave Compton, Emily Wier, Karen Mullen, Patricia Schuyler; Dudek	52-67°F, 0%cc, 0-5mph wind
4/19/2013	LBVI	Dave Compton; Dudek	55-75°F, 0%cc, 1-5mph wind
4/25/13	Red-tailed hawk nest survey	Karen Mullen; Dudek	64-70°F, 0%cc, 3-5mph wind
4/29/2013	LBVI	Dave Compton; Dudek	56-57°F, 100-100%cc, 2-4mph wind
5/13/2013	LBVI	Karen Mullen; Dudek	60-84°F, 100%cc, 0-3mph wind
5/23/2013	Wetland Assessment	GLA	NR
5/24/2013	Wetland Assessment	GLA	NR
5/27/2013	LBVI	Karen Mullen; Dudek	59-72°F, 0-70%cc, 1-3mph wind
6/6/2013	Wetland Assessment	GLA	NR
6/7/2013	Wetland Assessment	GLA	NR
6/10/2013	LBVI	Melissa Bundell; Dudek	63-72°F, 50-100%cc, 0-4mph wind
6/25/2013	LBVI	Melissa Bundell; Dudek	64-66°F, 90-100%cc, 0-3mph wind
7/3/2013	Wetland Assessment	GLA	NR
7/9/2013	Wetland Assessment	GLA	NR
7/8/2013	LBVI	Karen Mullen; Dudek	72-75°F, 10-20%c, 0-1mph wind
7/19/2013	LBVI	Melissa Bundell; Dudek	64-66°F, 100%cc, 0-3mph wind
10/10/2013	FS	Andrew Holstein; Dudek	NR
11/21/2013	FS	Andrew Holstein; Dudek	NR
11/30/2013	FS	Andrew Holstein; Dudek	NR

	Summ	ary of Biological Surveys 1991 to	
Survey Date	Survey Type	Personnel; Company	Weather Conditions
12/4/2013	FS	Thomas Liddicoat; Dudek	NR
12/8/2013	FS	Andrew Holstein; Dudek	NR
12/18/2013	FS	Thomas Liddicoat; Dudek	67-70°F, 80%cc, 1-5mph wind
12/20/2013	FS	Andrew Holstein; Dudek	NR
12/31/2013	FS	Thomas Liddicoat; Dudek	NR
1/8/2014	BUOW	Karen Mullen, Chris Kallstrand; Dudek	56-68°F, 0-100%cc, 0-1mph wind
1/9/2014	BUOW	Karen Mullen; Dudek	56-62°F, 0-100%cc, 0-1mph wind
1/14/2014	FS	Thomas Liddicoat; Dudek	NR
1/16/2014	BUOW	Karen Mullen; Dudek	55-70°F, 100-100%cc, 0-1mph wind
1/23/2014	BUOW	Karen Mullen; Dudek	50-62°F, 50-100%cc, 1-3mph wind
1/30/2014	BUOW	Karen Mullen; Dudek	56-59°F, 100-100%cc, 0-1mph wind
3/3/2014	FS	Andrew Holstein; Dudek	NR
3/10/2014	FS	Thomas Liddicoat; Dudek	NR
3/17/2014	FS	Karen Mullen, Brock Ortega; Dudek	58-68°F, 0-100%cc, 0-1mph wind
3/17/2014	FS	Thomas Liddicoat; Dudek	NR
4/2/2014	FS	Andrew Holstein; Dudek	NR ·
4/7/2014	FS	Thomas Liddicoat; Dudek	NR
4/21/2014	FS	Thomas Liddicoat; Dudek	NR
4/26/2014	FS	Andrew Holstein; Dudek	NR
4/30/2014	FS	Thomas Liddicoat; Dudek	NR
5/9/2014	CAGN	Paul Lemons, Melissa Blundell; Dudek	62-71°F, 5-10%cc, 0-5mph wind
5/14/2014	CAGN	Thomas Liddicoat, Melissa Blundell; Dudek	65-94°F, 0%cc, 0-20mph wind
5/20/2014	CAGN	Paul Lemons, Emily Wier; Dudek	59-69°F, 30-90%cc, 1-6mph wind
5/22/2014	CAGN	Thomas Liddicoat; Dudek	62-68°F, 100%cc, 1-6mph wind
5/24/2014	FS	Brock Ortega; Dudek	NR
5/28/2014	CAGN	Brock Ortega; Dudek	60-65°F, 100%cc, 0-3mph wind
6/2/2014	CAGN	Brock Ortega; Dudek	60-67°F, 100%cc, 0-1mph wind
6/4/2014	CAGN	Tricia Wotipka; Dudek	62-71F, 45-95%cc, 0-2mph wind
6/9/2014	CAGN	Traci Caddy; Dudek	63-68°F, 100%cc, 0-3mph wind
6/16/2014	CAGN	Thomas Liddicoat; Dudek	67-73°F, 0-75%cc, 3-8mph wind
6/18/2014	CAGN	Tricia Wotipka; Dudek	62-70°F, 10-95%cc, 2-4mph wind
6/23/2014	CAGN	Traci Caddy, Emily Wier; Dudek	64-72°F, 25-100%cc, 2-4mph wind
6/26/2014	CAGN	Tricia Wotipka; Dudek	67-73°F, 95-100%cc, 1-2mph wind
10/29/2014	FS	Andrew Holstein; Dudek	NR
12/18/2014	FS	Brock Ortega; Dudek	NR
3/2/2015	FS	Thomas Liddicoat; Dudek	59°F; 80% cc; 0-1 mph wind
4/1/2015	CAGN	Paul Lemons; Dudek	62-67°F; 50-75% cc, 0-3 mph wind
4/2/2015	CAGN	Traci Caddy; Dudek	57-66°F; 0-50% cc; 2-3mph wind
4/3/2015	CAGN	Brock Ortega; Dudek	56-64°F; 40-70% cc; 0-4mph wind
4/8/2015	CAGN	Tricia Wotipka; Dudek	57-69°F; 0% cc; 1-4 mph wind
4/9/2015	CAGN	Traci Caddy; Dudek	51-55°F; 0-20% cc; 1-2mph wind

Table 2-1
Summary of Biological Surveys 1991 to 2015

Survey Date	Survey Type	Personnel; Company	Weather Conditions
4/15/2015	CAGN	Thomas Liddicoat; Dudek	55-68°F; 0-100% cc; 0-4 mph wind
4/16/2015	CAGN	Paul Lemons; Dudek	63-74°F; 0-100% cc; 0-4 mph wind
4/17/2015	CAGN	Brock Ortega; Dudek	55-66°F; 0-50% cc; 0-3mph wind
4/20/2015	Vegetation Assessment	Britney Strittmater and Heather Moine; Dudek	60-63°F; 10-100% cc; 1-7mph wind
4/21/2015	Vegetation Assessment	Britney Strittmater and Heather Moine; Dudek	60-64°F; 80-100% cc; 5-7mph wind
4/22/2015	Vegetation Assessment	Britney Strittmater and Heather Moine; Dudek	57-64°F; 80-90% cc; 1-3 mph wind
4/22/2015	CAGN	Thomas Liddicoat; Dudek	57-61°F; 100% cc; 1-5 mph wind
4/23/2015	Vegetation Assessment	Britney Strittmater and Heather Moine; Dudek	61-68°F; 50-80% cc; 1-6 mph wind
4/24/2015	CAGN	Brock Ortega; Dudek	55-56°F; 100% cc; 3mph wind
4/29/2015	CAGN	Traci Caddy; Dudek	59-71°F; 0% cc; 2-3mph wind
4/30/2015	CAGN	Paul Lemons; Dudek	65-71°F; 10-40% cc; 0-4 mph wind
5/1/2015	CAGN	Thomas Liddicoat; Dudek	61-63°F; 20% cc; 0 mph wind
5/6/2015	CAGN	Thomas Liddicoat; Dudek	61-63°F; 100% cc; 0-3mph wind
5/7/2015	CAGN	Traci Caddy; Dudek	63-68°F; 0-50% cc; 0-1 mph wind
5/13/2015	CAGN	Thomas Liddicoat; Dudek	64-67°F; 0% cc; 1-4mph wind
5/19/2015	CAGN	Emily Wier; Dudek	59-70°F; 0-10% cc; 0-3mph wind
5/21/2015	CAGN	Thomas Liddicoat; Dudek	58-68°F; 40-98% cc; 1-3mph wind
7/24/2015	Vegetation Mapping & Wetland Delineation	Tony Bomkamp	NR
7/28/2015	Wetland Delineation	Tony Bomkamp	NR
7/30/2015	Rare Plant Surveys	Tony Bomkamp	NR
8/3/2015	Vegetation Mapping	Tony Bomkamp	NR
8/4/2015	Wetland Delineation	Tony Bomkamp	NR
8/7/2015	Wetland Delineation	Tony Bomkamp	NR

NR = Not Recorded

Survey Conditions: cc = cloud cover; °F = degrees Fahrenheit; mph = miles per hour

#### 2.2 Soil Resources

The Soil Conservation Service (SCS)<sup>1</sup> has mapped the following soil types as occurring on the project site:

#### 2.2.1 Bolsa

The Bolsa series consists of somewhat poorly drained soils on alluvial fans. These soils formed in mixed alluvium. They have slopes of 0 to 2 percent, are nearly level and occur on large

<sup>&</sup>lt;sup>1</sup> SCS is now known as the National Resource Conservation Service or NRCS.

alluvial fans. The following Bolsa series soil type was mapped on the Newport Banning ranch property:

Bolsa Silt Loam (122)

#### 2.2.2 Capistrano

The Capistrano series consists of well-drained soils. These soils formed in sedimentary alluvium of the coastal foothills. Slopes are 9-15 percent. The soil is medium acid throughout.

Capistrano Sandy Loam, 9-15 percent slopes (136).

#### 2.2.3 Myford

The Myford series consists of moderately well drained soils on marine terraces. These soils formed in sandy sediments. Slopes range from nearly level to a moderately sloping 9 percent, and from 9 to 30 percent, eroded.

- Myford Sandy Loam, 0-2 percent slopes (172)
- Myford Sandy Loam, 2-9 percent slopes (173)
- Myford Sandy Loam, 9-30 percent slopes, eroded (177)

#### 2.2.4 Tidal Flats

Tidal Flats are nearly level areas adjacent to bays and lagoons along the coast. Periodically they are covered by tidal overflow. Some of the higher areas are only covered during very high tides. Tidal flats are stratified clayey to sandy deposits. They are poorly drained and high in salts.

Bolsa silt loam (122), Myford sandy loam (172 and 173), and Tidal Flats (211) are listed as hydric in SCS's Field Office Official List of Hydric Soil Map Units for Orange & Part of Riverside Co., California.<sup>2</sup>

It is important to note that under the Arid West Supplement, the presence of mapped hydric soils is no longer dispositive for the presence of hydric soils. Rather, the presence of hydric soils must now be confirmed in the field independent of previous mapping.

<sup>&</sup>lt;sup>2</sup> United States Department of Agriculture, Soil Conservation Service. 1992. Hydric Soil Lists, Field Office Technical Guide, Davis California.

#### 2.3 Botanical Resources

A site specific survey program was designed to accurately document the botanical resources for the 14.88-acre Project Site and 300-foot Buffer, which consisted of (1) a literature review; (2) review of previously compiled lists of target special-status plant species and sensitive vegetation communities that could occur on site; (3) general field reconnaissance surveys; (4) updated vegetation mapping; (5) focused surveys for special-status plants; and (6) preparation of an updated vegetation map, including the location of any sensitive vegetation communities found on site. Scientific nomenclature and common names for plant species referred to in this report follow recently published (2012) second edition of the Jepson Manual<sup>3</sup> and vegetation mapping follows A Manual of California Vegetation, Second Edition (MCVII).

In addition, prior to conducting fieldwork a review of the latest CNPS inventory, and a review of the most recent CNDDB was conducted for the USGS 7.5' Newport Beach and Seal Beach quadrangles to evaluate what special-status species might have the potential to occur on site. Site reconnaissance was conducted in such a manner as to allow inspection of all areas of potential habitat on the Project Site by direct observation. Observations of all plants were recorded in field notes during each visit. A complete list of plant species observed within the Project Site is provided in Appendix A.

#### 2.3.1 General Surveys

During general surveys and the jurisdictional delineation on the Project Site, all plants observed were recorded in field notes.

#### 2.3.2 Focused Surveys

Focused botanical surveys were initiated for the entire Newport Banning Ranch in fall 2006, with a focus on southern tarplant, which flowers in late summer and early fall. Focused surveys were also performed in spring 2007; however, because of the 2007 drought conditions, surveys were repeated in 2008 beginning in March, and extending through May 2008. Additional surveys were conducted over a limited portion of the site in March 2009. Because southern tarplant is the only special-status plant with potential to occur within the 14.88-acre Project Site, focused surveys were conducted during late July and early August 2015 during the peak blooming for this plant during the 2015 season. Because the species was detected in full-flower, it was not necessary to use reference sites to determine phenology of this species for the 2015 surveys season, which were performed on July 30, 2015.

#### 2.4 Wildlife Resources

Because of the extensive survey record for many special-status species for the entire WNO Site as noted in Table 1 above, additional focused surveys were not conducted for the 14.88-acre site or for adjacent areas where there could be potential indirect impacts. Rather, existing survey

<sup>&</sup>lt;sup>3</sup> Baldwin, Bruce G., et al, (Eds.) 2012. The Jepson Manual, Vascular Plants of California. University of California Press. P. 1471.

data including data generated as recently as spring 2015 by Dudek was used for preparation of maps with the location of special-status animal species have been found on site or within the 300-foot Buffer for the 14.88-acre Project Site.

Relative to previous surveys, prior to conducting earlier fieldwork a review of the CNDDB was conducted for the USGS 7.5' Newport Beach and Seal Beach quadrangles to evaluate what special-status species might have the potential to occur on site. Wildlife species were evaluated and detected during field surveys by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the Project Site by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during each visit. A complete list of wildlife species observed or that are expected to occur within the Project Site is provided in Appendix B. Scientific nomenclature and common names for vertebrate species referred to in this report follow Collins<sup>4</sup> for amphibians and reptiles, Jones, et al.<sup>5</sup> for mammals, and AOU Checklist<sup>6</sup> for birds. The methodology (including any applicable USFWS survey protocols) utilized to conduct the focused surveys or the habitat assessments of each listed or special-status animal are discussed below.

#### 2.4.1 General Surveys

#### 2.4.1.1 Birds

During general surveys of the 14.88 acre Project Site, birds were identified opportunistically. Birds were detected by both direct observation and by vocalizations, and were recorded in field notes.

#### **2.4.1.2** Mammals

During general surveys of the 14.88 acre Project Site, mammals were identified incidentally. Mammals were detected both by direct observation and by the presence of diagnostic sign (i.e. tracks, burrows, scat, etc.).

#### 2.4.1.3 Reptiles and Amphibians

During general surveys of the 14.88 acre Project Site, reptiles and amphibians were identified. Habitats were examined for diagnostic reptile signs, which include shed skins, scat, tracks, snake prints, and lizard tail drag marks. All reptiles and amphibian species observed, as well as diagnostic sign, were recorded in field notes.

 <sup>&</sup>lt;sup>4</sup> Collins, J. T. 1990. Standard common and scientific names for North American amphibians and reptiles.
 Herpetological Circular (25), 4th ed. Society for the Study of Amphibians and Reptiles, Lawrence, Kansas.
 <sup>5</sup> Jones, J. K., R. S. Hoffman, D. W. Rice, C. Jones, R. S. Baker, and M. D. Engstrom. 1992. Revised checklist of North American mammals North of Mexico, 1991. Occasional Papers The Museum Texas Tech University (146):1-23.

<sup>&</sup>lt;sup>6</sup> American Ornithologists' Union. 1998. Checklist of North American Birds, Seventh Edition.

#### 2.4.2 Focused Surveys for Coastal California Gnatcatcher

The 14.88-acre Project Site contains no suitable habitat for the coastal California gnatcatcher. Protocol focused surveys for the coastal California gnatcatcher (*Polioptila californica californica*, CAGN) were performed on numerous occasions between 1992 and 2015, as summarized in Table 2-1 in all areas of suitable habitat on the Newport Banning Ranch, which includes areas within the 300-foot buffer for the Project Site. Surveys performed after 1997 were conducted in accordance with the 1997 U.S. Fish and Wildlife Service (USFWS) guidelines, which stipulate that during the breeding season, six surveys shall be conducted in all areas of suitable habitat with at least seven days between site visits. The USFWS survey guidelines also stipulate that no more than 80 acres of suitable habitat shall be surveyed per biologist per day.

#### 2.4.3 Focused Surveys for Least Bell's Vireo

The 14.88-acre site contains no suitable habitat for least Bell's vireo (*Vireo bellii pusillus*, LBV), a state and federally listed endangered bird. The LBV is a small, gray, migratory songbird that inhabits riparian habitats of nine southern California counties. The breeding season generally extends from April 10<sup>th</sup> to July 31<sup>st</sup>.

#### 2.4.5 Focused Surveys for Fairy Shrimp

As summarized in Table 2-1, numerous surveys for listed fairy shrimp have been conducted on the 401-acre Newport Banning Ranch; however, no suitable habitat occurs within the 14.88-acre Project Site or within the 300-foot Buffer and as such, the potential for listed fairy shrimp is not further addressed in this report.

#### 2.4.6 Focused Surveys for Burrowing Owl

As summarized in Table 2-1, numerous surveys for burrowing have been conducted on the 401-acre Newport Banning Ranch; however, no suitable habitat occurs within the 14.88-acre Project Site or within the 300-foot Buffer and as such, the potential for burrowing owl on the Project Sire or within the 300-foot Buffer is not further addressed in this report.

#### 2.5 Jurisdictional Delineation

The results of the jurisdictional delineation prepared for the Project Site and associated 300-foot Buffer is provided in an updated stand-alone report dated September 22, 2015. The field work was conducted in late July and early August, 2015 (see table 2-1 above). The methodology for determining the presence and limits of wetland areas followed the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual<sup>7</sup> (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (Arid West

<sup>&</sup>lt;sup>7</sup> Environmental Laboratory. 1987. <u>Corps of Engineers Wetlands Delineation Manual</u>, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

Region Manual)<sup>8</sup>. While in the field, the limits of Corps jurisdiction were recorded onto a 200-scale color aerial photograph using visible landmarks or mapped using GPS Technology. Other data were recorded onto wetland data sheets. Similarly, wetlands as defined under the CCA were recorded onto a 200-scale color aerial photograph using visible landmarks or mapped using GPS Technology.

While in the field, the limits of CDFW jurisdiction were recorded onto a 200-scale color aerial photograph using visible landmarks or mapped using GPS Technology. Other data were recorded onto wetland data sheets.

#### 3.0 REGULATORY SETTING

The Oilfield Consolidation and Tank Farm Improvements project is subject to state and federal regulations associated with a number of regulatory programs, as well as local regulations such as the City of Newport Beach Coastal Land Use Plan (CLUP) Policies. These programs often overlap and were developed to protect natural resources, including state- and federally-listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

#### 3.1 State and/or Federally Listed Plants and Animals

#### 3.1.1 State of California Endangered Species Act

California's Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an Endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a "threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as

<sup>8</sup> U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J.S. Wakeley, R.W. Lichevar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

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threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not list invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

#### 3.1.2 Federal Endangered Species Act

The FESA of 1973 defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification that result in injury to, or death of species as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a Federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

In addition to the prohibitions on the take of listed species, the Service is also required to designate areas of "Critical Habitat" for species listed under the FESA. The FESA defines critical habitat as "the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and specific areas outside the geographical area occupied by the species at the time it is listed that are determined by the Secretary to be essential for the conservation of the species." A designation does not set up a preserve or refuge and only applies to situations where Federal funding, permits, or projects are involved.

#### 3.1.3 State and Federal Take Authorizations for Listed Species

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).
- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.
- Sections 2090-2097 of the California Endangered Species Act (CESA) require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

#### 3.2 California Coastal Commission (CCC)

The CCA protects important coastal biological resources including wetlands, riparian habitats and other areas defined as Environmentally Sensitive Habitat Areas (ESHA) by the CCC in accordance with the Coastal Act. The Coastal Act Section 30107.5 defines an ESHA as:

...any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

As already noted, the 14.88-acre Project Site does not include habitat areas that potentially fall into one or more categories that are protected from impacts associated with development under Coastal Act including wetlands, riparian areas, and sensitive upland habitats. However, areas within the 300-foot Buffer include habitat areas that potentially fall into one or more categories that are protected from impacts associated with development, specifically indirect impacts, under Coastal Act including wetlands, riparian areas, and sensitive upland habitats. In addition, the City of Newport Beach has an approved Coastal Land Use Plan (CLUP) that describes allowable land uses for areas within the Coastal Zone. Although the WNO Site was not included in the CLUP, the City's CLUP is highly detailed in addressing specific wetland, riparian, and upland habitats that are generally considered ESHA within the City, providing a useful tool for evaluation of resources on the project site. As discussed immediately below and summarized in Table 4-4, there are areas of overlap between certain habitat categories such that careful distinctions are necessary when evaluating each as potential wetland areas or as potential ESHA. For example, not all wetlands are considered ESHA (e.g., wetlands dominated by non-native invasive species); however, they are still protected under Section 30233 of the Coastal Act.

Similarly, some riparian areas are not wetlands because they lack wetland hydrology and/or the plants are growing as phreatophytes rather than hydrophytes, but may be ESHA due to their importance in the ecosystem. Other non-wetland riparian areas may be so limited in size, degraded, or isolated that they do not meet the minimum threshold under the Coastal Act or City's CLUP for ESHA. Each of these is addressed below.

#### 3.2.1 Wetlands as Defined by the Coastal Act

Pursuant to the California Coastal Act (California Public Resources Code Section 30233), the CCC regulates the diking, filling, or dredging of wetlands within the coastal zone. The Coastal Act Section 30121 defines "wetlands" as land "which may be covered periodically or permanently with shallow water." The 1981 CCC Statewide Interpretive Guidelines state that hydric soils and hydrophytic vegetation, "are useful indicators of wetland conditions, but the presence or absence of hydric soils and/or hydrophytes alone are not necessarily determinative when the Commission identifies wetlands under the Coastal Act. In the past, the Commission has considered all relevant information in making such determinations and relied upon the advice and judgment of experts before reaching its own independent conclusion as to whether a particular area will be considered wetland under the Coastal Act. The Commission intends to continue to follow this policy."

The location of all wetlands potentially subject to CCC jurisdiction is provided on Exhibit 7B.

#### 3.2.2 Riparian Areas Defined by the Coastal Act and City's CLUP

The 1981 CCC Statewide Interpretive Guidelines defines riparian habitats as follows:

A "riparian habitat" is an area of riparian vegetation. This vegetation is an association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other bodies of freshwater.

The project site includes areas of riparian habitat that meet the CCA definition of wetland, as well as areas of riparian habitat that do not meet the CCA definition of wetland. Similarly, the site contains wetland and riparian areas that meet the definition of ESHA as well as limited areas of riparian habitat that meet neither the wetland definition nor the ESHA definition. Finally, the site contains wetland areas, as defined under the coastal act that do not meet the thresholds for making an ESHA determination (e.g., wetland areas in the lowlands vegetated by monocultures of the invasive non-native plant poison hemlock).

#### 3.2.3 Upland ESHA Areas

The City of Newport Beach has carefully defined habitats, including habitats on the project site such as maritime succulent scrub and southern coastal bluff scrub, (these are consistent with the areas mapped and described as coast brittle bush scrub and associates in the MCVII) that generally meet the definition of ESHA, unless they are sufficiently degraded, isolated, or

otherwise affected by development that the habitat values are limited as detailed in Section 4.8 below.

#### 3.3. Federally Designated Special-Status Species

Within recent years, the USFWS instituted changes in the listing status of candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. Former C2 species (for which the USFWS had insufficient evidence to warrant listing) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected. However, some USFWS field offices have issued memoranda stating that former C2 species are to be considered federal Species of Concern (FSC). This term is employed in this document, but carries no official protections. All references to federally-protected species in this report (whether listed, proposed for listing, or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS. For this report the following acronyms are used for federal special-status species:

6	FE	Federally listed as Endangered
•	FT	Federally listed as Threatened
۰	FPE	Federally proposed for listing as Endangered
•	FPT	Federally proposed for listing as Threatened
•	FC	Federal candidate species (former C1 species)
•	FSC	Federal Species of Concern (former C2 species)

#### 3.4 State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (SFP) mammals or Fully Protected birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California Species of Special Concern (SPOC) are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's CNDDB project. Informally listed taxa are not protected, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For this report the following acronyms are used for State special-status species:

•	SE	State-listed as Endangered
•	$\operatorname{ST}$	State-listed as Threatened
•	SR	State-listed as Rare
•	SCE	State candidate for listing as Endangered
•	SCT	State candidate for listing as Threatened
•	SFP	State Fully Protected
•	SP	State Protected
•	CSC	California Special Concern Species

#### 3.5 California Rare Plant Rank

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The California Native Plant California Native Plant Society's Inventory of Rare and Endangered Plants of California separates plants of interest into six categories. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California (Tibor 2001). The list serves as the candidate list for listing as threatened and endangered by CDFW. CNPS and CDFW have jointly assigned five California Rare Plant Ranks (CRPR), which are categories of rarity that are summarized in Table 3-1

Table 3-1. California Rare Plant Ranks 1, 2, 3, & 4, and Threat Code Extensions.

CRPR List	Comments
List 1A – Presumed Extinct in California and Either Rare or Extinct Elsewhere	Thought to be extinct in California and either rare or extinct elsewhere based on a lack of observation or detection for many years.
List 1B – Rare or Endangered in California and Elsewhere	Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.
List 2A – Presumed Extinct in California, More Common Elsewhere	Species thought to be extinct in California but more common outside of California
List 2B - Rare or Endangered in California, More Common Elsewhere	Species, which are generally rare in California but more common outside California.
List 3 – Need More Information	Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific list. In addition, many of the List 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.
List 4 – Plants of Limited Distribution	Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for List 3 species above, CNPS lacks survey data to accurately determine status in California. Many species have been placed on List 4 in previous editions of the "Inventory" and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized.
Extension	Comments
.1 – Seriously endangered in California	Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.
.2 – Fairly endangered in California	Species with 20-80% of occurrences threatened.
.3 – Not very endangered in California	Species with <20% of occurrences threatened or with no current threats known.

#### 4. RESULTS

### 4.1 Reconnaissance Surveys

The 14.88-acre Project Site consists almost entirely of developed areas. The Site has been utilized as the oil field tank farm for over 50 years and ongoing oil extraction operations, including paved and dirt roads and remnant oil wells, support facilities (buildings, storage areas, etc.) and pipelines occur throughout the site. Topographically, the Site is generally flat at the southeast corner of the lowlands. As described above, areas within the 300-foot Buffer include a variety of native and non-native habitats as described above under existing conditions.

# 4.2 Vegetation Mapping and Surveys

As noted, GLA biologists conducted mapping of vegetation associations and other land cover types in 2006, 2007 and 2008 over the entire WNO Property. The vegetation/land cover mapping was updated and modified where appropriate on July 28, August 3 and 4, 2015 for the North ORA, ORA Easement and South ORA plus an approximate 300-foot Buffer adjacent to these areas. A vegetation map is provided as Exhibit 4. Descriptions of the vegetation associations have been separated into "upland habitats" and "wetland/riparian habitats". In some cases, certain vegetation associations include both wetland and non-wetland stands (e.g., mulefat scrub), where the upland/wetland status was based on a predominance of wetland indicator species as well as soils and hydrological conditions. Table 4-1 summarizes the detailed information below.

Table 4-1. Summary of Vegetation Associations on 14.88-Acre Project Site

Summary of Vegetation Associations on 14.88-Acre Site	Acres
Upland Habitats	
Annual Brome Grassland	0.00
Coastal Sage Scrub	0.12
Disturbed California Brittle Bush Scrub	0.04
Disturbed California Brittle Bush Scrub - California Buckwheat Scrub	0.03
Disturbed Coastal Prickly Pear Scrub	0.02
Disturbed Mulefat Thicket	0.02
Disturbed/Developed	12.46
Ice Plant Mats	0.83
Menzies's Golden Bush Scrub	0.04
Mulefat Thicket	0.04
Myoporum Grove	0.10
Ornamental	0.51
Ruderal	0.59
Upland Habitats Subtotal	14.80
Wetland	
Disturbed Pickleweed	0.08

Table 4-1. Summary of Vegetation Associations on 14.88-Acre Project Site

Summary of Vegetation Associations on 14.88-Acre Site	Acres
Wetland Subtotal	0.08
Grand Total	14.88

#### Onsite Vegetation Associations and Land-Use Cover Types

The 14.88 acre Project Site includes limited areas of disturbed native vegetation associations, totaling 0.37 acre with the remaining 14.51 acres consisting of previously developed areas, areas with non-native ruderal vegetation that is regularly maintained and areas of non-native ornamental or invasive vegetation.

#### **Upland Habitats**

Coastal Sage Scrub – California Sagebrush Scrub accounts for approximately 0.12 acre at the southeast corner of the South ORA. The area is dominated by California sagebrush (*Artemisia californica*) with a few individual of California brittlebush (*Encelia californica*).

**Menzies's Golden Bush Scrub** accounts for approximately 0.04 acre and occurs on a small slope between two roads near the northeast corner of the North ORA. The area exhibits approximately 20-percent cover by the goldenbush with a dense understory of red brome (*Bromus madritensis* ssp. *rubens*).

**Disturbed California Brittle Bush Scrub - California Buckwheat Scrub** accounts for approximately 0.04 acre at the southeast corner of the North ORA. The area is dominated by California buckwheat (*Eriogonum fasciculatum*) with a few individual of California brittlebush (*Encelia californica*).

**Disturbed Coastal Prickly Pear** accounts for approximately 0.02 acre at the northeast corner of the North ORA. The area consists of coastal prickly pear (*Opuntia littoralis*) with non-native grasses and forbs.

**Disturbed Mulefat Thicket** accounts for 0.02 acre and occur in two small patches one at the northeast corner of the Project Site and the other at the southeast corner. The habitat is characterized by monocultural areas of mulefat (*Baccharis salicifolia*).

**Disturbed/Developed** areas comprise 12.46 acres of the 14.88-acre Project Site and consist of paved, gravel and dirt roads and pads, oil storage tanks, oil wells, support buildings, and other infrastructure. Developed areas are the primary land cover in the North and South ORAs as well as the ORA Easement which is a highly traveled gravel and dirt access road.

Ruderal areas comprise 0.59 acres of the 14.88-acre Project Site and consist of areas regularly maintained to control non-native weeds for purposes of eliminating fire risk. Species within these areas are limited to non-native weeds such as five-horn smother weed (*Bassia hyssopifolia*), small-flowered iceplant (*Mesembryanthemum nodiflorum*), small horseweed

(Conyza bonariensis), stinkwort (Dittrichia graveolens), and tall horseweed (Conyza Canadensis). These areas are most common in the North ORA.

**Iceplant Mats** are common along the boundaries of the North ORA, ORA Easement and on the eastern edge of the South ORA, accounting for 0.83 acre. These areas are composed of essentially monocultural mats of *Carpobrotus edulis*.

Myoporum Grove and Oranamental areas occur in small scattered patches and account for 0.58 acre within the 14.88-acre Project Site.

### Wetland Habitats

**Disturbed Pickleweed** occurs near the west end of the drainage ditch that traverses the northern portion of the North ORA. The pickleweed (*Salicornia virginica*) is sparse, with an average cover of less than 20-percent. The area also contain small amounts of saltgrass (*Distichlis spicata*) and saltwort (*Batis maritima*).

Table 4-2. Summary of Vegetation Associations within Buffer for Oilfield Consolidation and Tank Farm Improvement Area

Summary of Vegetation Associations on Site	Acres
Upland Habitats – Scrub	
California Brittle Bush Scrub	0.92
California Brittle Bush Scrub - Coastal Prickly Pear Scrub	2.97
Coastal Sage Scrub	0.53
Disturbed California Brittle Bush Scrub	4.79
Disturbed California Brittle Bush Scrub - California Buckwheat Scrub	1.17
Disturbed California Brittle Bush Scrub - Coastal Prickly Pear Scrub	5.43
Disturbed California Brittle Bush Scrub - Coastal Prickly Pear Scrub - Mulefat Thicket	0.11
Disturbed California Brittle Bush Scrub - Mulefat Thicket	0.32
Disturbed Coastal Prickly Pear Scrub	0.35
Disturbed Coastal Prickly Pear Scrub - Mulefat Thicket	0.23
Disturbed Coastal Sage Scrub	0.11
Disturbed Menzies's Golden Bush Scrub - Mulefat Thicket	0.12
Disturbed Mulefat Thicket	4.08
Menzies's Golden Bush Scrub	0.23
Mulefat Thicket	1.43
Quailbush Scrub	0.09
Scrub Subtotal	22.88
Other Uplands - Developed/ Disturbed /Invasive Exotics and Other Non-Natives	
Acacia	0.20
Annual Brome Grassland	1.83
Debris/Stockpile	0.03

Table 4-2. Summary of Vegetation Associations within Buffer for Oilfield Consolidation and Tank Farm Improvement Area

Summary of Vegetation Associations on Site	Acres
Disturbed/Developed	17.89
Eucalyptus Grove	0.15
Fivehorn Smotherweed	0.06
Ice Plant Mats	3.33
Ice Plant/Salt Grass Mats	0.13
Myoporum Grove	2.30
Ornamental	2.15
Pepper Tree Stand	0.26
Pampas Grass Patches	0.37
Purple Needle Grass Grassland	0.57
Ruderal	2.14
Upland Mustard	0.65
Other Uplands Subtotal	32.06
Riparian Habitats	
Mulefat Thicket	1.43
Black Willow Thicket	0.25
Disturbed Black Willow Thicket	0.89
Riparian Subtotal	2.57
Wetland Habitats	
Alkali Heath Marsh	1.11
Disturbed Alkali Heath Marsh	0.13
Coastal Salt Marsh	1.70
Mudflats	1.18
Pickleweed Mats	1.92
Open Water	7.19
Salt Grass Flats	0.20
Wetland Subtotal	13.43
Grand Total	70.94

# Upland Scrub Vegetation Associations within 300-Foot Buffer

### Coast Brittle Bush Scrub Scrub

Scrub dominated by coast brittle bush (*Encelia californica*) is the dominant upland scrub habitat adjacent to the east and southeast of the North ORA and east of ORA Easement and South ORA. Much of this scrub habitat, which totals 10.92 acres within the 300-foot buffer is characterized as "disturbed" due to ongoing oil operations and high densities of non-native species. A portion of

the coast brittle bush-dominated areas consists of monocultural stands of coast brittle bush while other areas support co-dominants or sub-dominant scrub species as noted in Table 4-2 above. Co- or sub-dominants include coast cholla (Opuntia prolifera), prickly pear (Opuntia littoralis), bladderpod (Isomeris arborea), California buckwheat (Eriogonum fasciculatum), and mulefat (Baccharis salicifolia). A few California boxthorn (Lycium californicum) and wooly seablite (Suaeda taxifolia) are common along with California buckwheat (Eriogonum fasciculatum) overlooking the South ORA. Areas described as "Disturbed" have been designated as such due to a substantial component of non-native invasive species including iceplant, tree tobacco (Nicotiana glauca), tocalote (Centaurea melitensis), black mustard (Brassica nigra), summer mustard (Hirschfeldia incana), sweet fennel (Foeniculum vulgare), and non-native Mediterranean grasses, mostly consisting of bromes (Bromus spp.) and oats (Avena spp).

### Coastal Sage Scrub - California Sagebrush Scrub

California sagebrush scrub within the 300-foot buffer is limited to two areas on the site adjacent to the South ORA and covering 0.53 acre. California sagebrush scrub is dominated by California sagebrush (*Artemisia californica*) with coast brittle bush and California buckwheat contributing less than approximately 25-percent of the cover.

#### Coastal Prickly Pear Scrub

Small patches of coastal prickly pear scrub, which often consist of nearly pure stands of coast prickly pear (*Opuntia littoralis*) occur to the east of the North ORA as well as east of the ORA Easement and South ORA. Some patches are best characterized as "disturbed" do the presence of an understory of non-native grasses and mustard.

#### Menzies's Goldenbush Scrub and Menzies's Goldenbush Scrub - Mulefat Scrub

This vegetation association within the 300-foot buffer is limited to 0.35 acres and supports a mixture of scrub dominated by coastal goldenbush (*Isocoma menziesii* ssp. *vernonioides*). Typically the patches are small, often occurring in areas that were formerly disturbed by oil field operations, as this species is a good colonizers of disturbed ground. In many areas, the goldenbush is growing with mulefat, and in many areas the Menzies's goldenbush scrub and Menzies's Goldenbush Scrub – Mulefat Scrub are characterized as "disturbed" and include a substantial component of non-native invasives such as hottentot fig, pampas grass, black mustard, castor bean or sweet fennel.

# 4.2.1.10 Quailbush Scrub

Limited areas along the southern edges of the site covering 0.09 acre consist of a nearly monocultural stand of quail bush (Atriplex lentiformis ssp. breweri).

# Other Uplands - Developed/ Disturbed /Invasive Exotics and Other Non-Natives in 300-Foot Buffer

#### **Annual Brome Grassland**

The mesa portion of the West Newport Oil site supports substantial areas of annual grassland dominated by non-native grasses, typically of Mediterranean origin, of which 1.83 acres occur the east of the South ORA. Dominant species include red brome (Bromus madritensis ssp. rubens), slender oats (Avena barbata), ripgut (Bromus diandrus), soft chess (Bromus hordeaceus), hare barley (Hordeum murinum ssp. leporinum), and rattail fescue (Vulpia myuros). This association also includes limited areas with a mix of non-native grassland and ruderal upland species including black mustard (Brassica nigra), wild radish (Raphanus sativus), tocalote (Centaurea melitensis), Russian thistle (Salsola tragus), Australian saltbush (Atriplex semibaccata), cheeseweed (Malva parviflora), telegraph weed (Heterotheca grandiflora), and fascicled tarplant (Deinandra fasciculata).

#### Developed

The 300-foot buffer includes a variety of areas subject to previous development in support of the oil operations, covering 17.89 acres. Developed areas include paved, gravel and dirt roads and pads, oil storage tanks, oil wells, support buildings, and other infrastructure. Developed areas are common land cover types to the north, northwest and west of the North ORA as well as west of the ORA Easement and South ORA, which is a highly traveled gravel and dirt access road. These areas are generally unvegetated or support only occasional weedy species that are able to colonize highly disturbed areas, compacted soils, even when such areas remain subject to regular routine maintenance.

#### Ruderal

Areas characterized as ruderal exhibit a predominance of non-native forbs in addition to non-native annual grasses and occur primarily east of the north ORA totaling 2.14 acres. In addition to cover by the non-native annual grasses noted in AG, ruderal areas support black mustard, wild radish, tocalote, Russian thistle, Australian saltbush, cheeseweed, telegraph weed, and fascicled tarplant.

#### Invasive/Ornamental

Because of the history of disturbance associated with the oil field operations, the West Newport Oil site supports substantial areas of non-native invasive or ornamental vegetation. Areas mapped as I/O vary according to location and can include the following as noted in Table 4-2 above.

- blue gum eucalyptus (Eucalyptus globulus), and myoporum
- large stands/mats of hottentot fig,
- dense patches or thickets of pampas grass (mostly in the lowland),
- areas of myoporum (Myoporum laetum),

- thickets of Sydney golden wattle (Acacia longifolia)
- scattered individuals or small patches of Brazilian pepper (Schinus terebinthifolius),

#### Marsh and Herbaceous Wetland Vegetation Associations within 300-Foot Buffer

Marsh and herbaceous wetland associations are generally restricted to the lowlands with limited areas on the mesa or in the canyons that also support vegetation associations that exhibit a predominance of wetland indicator plant species with an indicator status of FAC or wetter. Substantial portions of these associations exhibit hydric soils and wetland hydrology and as such meet the Section 404 three-criteria definition of wetlands. Limited areas fail to exhibit hydric soils and therefore are wetlands under the Coastal Act but not under Section 404. In a few instances, areas with FAC or FACW species demonstrably lacked hydric soils and wetland hydrology and do not meet either the Section 404 or Coastal Act definition of wetlands.

#### Alkali Heath Marsh

This vegetation association is common in the lowlands and occurs at a number of locations in the lowlands to the north, northwest, and west of the North ORA covering 1.24 acres within the 300-foot buffer. This association generally consists of monocultural stands of alkali heath (Frankenia salina), which in some cases includes alkali mallow (Malvella leprosa), and alkali weed (Cressa truxillensis).

#### Southern Coastal Salt Marsh

This vegetation association covers 1.70 acres within the 300-foot buffer in the lowland portion of the Newport Banning Ranch. This association is limited to a small area in the southwest portion of the lowlands that receives muted tidal flows. Component species include common pickleweed (Salicornia virginica, OBL), alkali heath (Frankenia salina), fleshy jaumea (Jaumea carnosa), saltgrass (Distichlis spicata), shoregrass (Monanthochloe littoralis), and saltwort (Batis maritima).

#### Tidal Mudflat

Muted tidally connected mudflats cover 1.18 acres of the 300-foot buffer on the Newport Banning Ranch. These areas are limited to the tidally connected areas in the southwest corner of the site and forms a matrix with areas of coastal salt marsh within those limited portions of the lowlands that receive muted tidal flows. Tidal mudflats are unvegetated except for algal mats.

### **Riparian Vegetation Associations**

Riparian associations are most prevalent in the lowlands and also occur in each of the arroyos on the Newport Banning Ranch. As noted for the wetland associations described above, some of these areas exhibit wetland hydrology, hydric soils and a predominance of hydrophytes and are wetlands subject to Section 404 jurisdiction. Some of these areas, while exhibiting a predominance of hydrophytes and wetland hydrology, lack hydric soils and are therefore only considered wetlands under the Coastal Act. Some of these areas associated with the arroyos

exhibit a predominance of wetland indicator species but lack hydric soils and wetland hydrology, and are therefore considered riparian but not Coastal Act wetlands. Finally, areas that support riparian indicator species that do not predominate (e.g., mulefat) that also lack hydric soils and wetland hydrology are included in the upland associations above.

#### Mulefat Thicket

This vegetation association, which includes all mulefat scrub and disturbed mulefat within the 300-foot buffer covers 5.51 acres on site. This association consists of dense stands of mulefat (Baccharis salicifolia, FAC) with native understory that varies from location to location but may include one or more of the following species: alkali heath (Frankenia salina, FACW), saltgrass (Distichlis spicata, FAC), seaside heliotrope (Heliotropum curassivicum, FACU), alkali mallow (Malvella leprosa, FACU), with non-natives that include Spanish sunflower (Pulicaria paludosa, FACW), curly dock (Rumex crispus, FACW), and bristly ox-tongue (Picris echioides, FAC). Areas designated as disturbed is due to the presence of substantial amounts of hottentot fig (Carpobrotus edulis, UPL), pampas grass (Cortedaria selloana, UPL) as well as myoporum (Myoporum laetum, UPL), or the other non-native species in combination with the hottentot fig and/or pampas grass.

# Southern Black Willow Forest

This vegetation association covers 1.14 acres within the 300-foot buffer on the Newport Banning Ranch. This association consists of a closed canopy of and black willow (Salix gooddingii) that includes arborescent forms of arroyo willow (Salix lasiolepis) with an understory that varies substantially throughout the site but that may include one or more of the following species: saltgrass, western goldenrod (Euthamia occidentalis, OBL), tall nutsedge (Cyperus eragrostis, FACW), willowherb (Epilobium ciliatum, FACW), seaside heliotrope, alkali mallow (Malvella leprosa, FACU), with non-natives that include Spanish sunflower, curly dock. As for the mulefat thickets, disturbed areas support a substantial component of pampas grass, giant reed (Arundo donax, FACW), poison hemlock (Conium maculatum, FACW), castor bean (Ricinus communis, FACU), and/or Spanish sunflower.

### 4.3 Special-Status Plants

Table 4-3 provides a summary of all plants evaluated for this report based on: 1) plants identified by the December 2015 CNDDB as occurring (either currently or historically) on or in the USGS Newport Beach and Seal Beach Quadrangles and a review of the 2007 California Native Plant Society (CNPS) inventory, and 2) any other special-status plants that are known to occur within the vicinity of the property based on numerous surveys, or for which potentially suitable habitat occurs on site. Following the table, additional discussions are provided for any special-status plants observed on site or for which potentially suitable habitat occurs on the property.

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Table 4-3. Special-status Plants Evaluated for this Report

Species	Status	Habitat	Potential for
			Occurrence
Aphanisma Aphanisma blitoides	Federal: None State: None CRPR: 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils.	Not detected during surveys. No potential to occur within 14.88 acre site.
Biochman's dudleya Dudleya blochmanae ssp. Blochmanae	Federal: None State: CSC CRPR: 1B.1	Coastal bluff scrub, chaparral, coastal scrub, valley and foothill grassland. Rocky, often clay or serpentinite soils.	No potential to occur on site due to lack of suitable habitat.
California Box-thorn Lycium californicum	Federal: None State: None CRPR: 4.2	Coastal bluff scrub, coastal scrub.	Observed on bluffs above South ORA, no suitable habitat on 14.88 acre site.
Chaparral sand verbena Abronia villosa var. aurita	Federal: None State: None CRPR: 1B.1	Sandy soils in chaparral, coastal sage scrub.	Not detected during surveys. No potential to occur on site due to lack of suitable habitat.
Cliff spurge Euphorbia misera	Federal: None State: None CRPR: 2.2	Coastal bluff scrub, coastal scrub, mojavean desert scrub. Rocky soils.	Not detected during surveys. No potential to occur on site.
Coast woolly-heads Nemacaulis denudata var. denudata	Federal: None State: None CRPR: 1B.2	Coastal dunes.	Not detected during surveys. No potential to occur on site due to lack of suitable habitat.
Coulter's goldfields Lasthenia glabrata ssp. coulteri	Federal: None State: None CRPR:1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Not detected during surveys. Low potential to occur in salt marsh areas in adjacent lowlands.
Coulter's saltbush Atriplex coulteri	Federal: None State: None CRPR: 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Not detected during surveys. No potential to occur on site due to lack of suitable habitat.
Davidson's saltscale Atriplex serenana var. davidsonii	Federal: None State: None CRPR: 1B.2	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Not detected during surveys. No potential to occur on site due to lack of suitable habitat.
Estuary seablite Suaeda esteroa	Federal: None State: None CRPR: 1B.2	Coastal salt marsh and swamps. Occurs in sandy soils.	Not detected during surveys. Low potential to occur in salt marsh areas in adjacent lowlands.
Gambel's water cress Rorippa gambellii	Federal: FE State: ST CRPR: 1B.1	Marshes and swamps.	Not detected during surveys. No potential to occur on site.
Giardner's yampah Perideridia gairdneri ssp. Gairdneri	Federal: None State: CSC CRPR: 4.2	Broadleafed upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools. Vernally mesic soils.	Not detected during surveys. No potential to occur on site.
Golden-spined cereus Bergerocactus emoryi	Federal: None State: None CRPR: 2.2	Closed-cone coniferous forest, chaparral, coastal scrub. Sandy soils.	Not detected during surveys. No potential to occur on site.

Species	Status	Habitat	Potential for
			Occurrence
Los Angeles sunflower Helianthus nuttallii ssp. parishii	Federal: None State: None CRPR: 1A	Salt and freshwater marshes, historically in Los Angeles, Orange, Riverside and San Bernardino Counties.	Not detected during surveys. No potential to occur on site due to lack of suitable habitat
Many-stemmed dudleya Dudleya multicaulis	Federal: None State: None CRPR: 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Not detected during surveys. No potential to occur on site due to lack of suitable habitat.
Mud nama Nama stenocarpum	Federal: None State: None CRPR: 2.2	Marshes and swamps.	Not detected during surveys. No potential to occur on site.
Oval-leaved live-forever Santa Monica Mountains dudleya	Federal: None State: None CNPS: List 1B.2	Chaparral, coastal scrub. Volcanic and/or rocky soils.	Not detected during surveys. No potential to occur due to lack of suitable habitat.
Palmer's grapplinghook Harpagonella palmeri	Federal: None State: CSC CRPR: 4.2	Chaparral, coastal scrub, valley and foothill grassland. Clay soils.	Not detected during surveys. No potential to occur on site.
Prostrate navarretia Navarretia prostrata	Federal: FSC State: None CRPR: 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Not detected during surveys. No potential to occur on site.
Rayless ragwort Senecio aphanactis	Federal: None State: None CRPR: 2.2	Chaparral, cismontane woodland, coastal scrub. Sometimes alkaline soils.	Not detected during surveys. Moderate potential to occur on site.
Robinson's pepper-grass Lepidium virginicum var. robinsonii	CRPR: 1B.2	Chaparral, coastal scrub.	Not detected during surveys. No potential to occur on site.
Salt marsh bird's-beak Cordylanthus maritimus ssp. maritimus	CRPR:1B.2	Coastal dune, coastal salt marshes and swamps.	surveys. Potentially suitable habitat present in salt marsh areas in adjacent lowlands.
San Bernardino aster Symphyotrichum defoliatum	State: None CRPR:1B.2	Meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, grassland. Vernally mesic grassland or near ditches, streams and springs; disturbed areas.	Not detected during surveys. No potential to occur on site due to lack of suitable habitat.
Chorizanthe parryi var. fernandina		Coastal sage scrub, occurring on sandy soils.	Not detected during surveys. No potential to occur on site.
Sagittaria sanfordii	Federal: None State: None CRPR: 1B.2	Marshes and swamps.	Not detected during surveys. No potential to occur on site due to lack of suitable habitat
Calystegia sepium ssp.	Federal: None State: None CRPR: 1A	-	Not detected during surveys. No potential to occur on site due to extinction in California.
	Federal: None State: None		Not detected during surveys. No potential to

Species	Status	Habitat	Potential for Occurrence
	CRPR: 1B.1		occur due to location being outside of range and lack of detection.
Seaside calandrinia Calandrinia maritima	Federal: None State: None CRPR: 4.2	Coastal bluff scrub, coastal scrub, valley and foothill grassland. Sandy soils.	Not detected during surveys. Low potential to occur on site.
South coast saltscale Atriplex pacifica	Federal: None State: None CRPR: 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, playas.	Not detected during surveys. No potential to occur on site.
Southern tarplant Centromadia parryi ssp. australus	Federal: None State: None CRPR: 1B.1	Disturbed habitats, margins of marshes and swamps, vernally mesic valley and foothill grassland, vernal pools.	Observed in lowlands on site with two occurrences within 14.88-acre site.
Southwestern spiny rush Juncus acutus ssp. Leopoldii	Federal: None State: None CRPR: 4.2	Mesic coastal dunes, alkaline meadows and seeps, coastal salt marshes and swamps.	A few individuals occur within salt marsh in the adjacent lowlands on site.
Ventura Marsh milk-vetch Astragalus pycnostachyus var. Ianosissimus	Federal: FE State: SE CNPS: List 1B.1	Coastal salt marsh. Within reach of high tide or protected by barrier beaches, more rarely near seeps on sandy bluffs.	Not detected during surveys. Low to Moderate potential to occur in marsh areas in lowlands on site.
Western dichondra Dichondra occidentalis	Federal: None State: None CRPR: 4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland.	Not detected during surveys. Low potential to occur on site.
Wooly seablite Suaeda taxifolia	State: None	Coastal bluff scrub, coastal dunes, margins of coastal salt marshes and swamps.	Observed on berms in lowlands and on slope above South ORA. No suitable habitat within 14.88 acre site.

# 4.4 Special-Status Plants Observed or With the Potential to Occur on Site

The only special-status plant observed within the 14.88-acre Project Site was southern tarplant. Although other special-status plants occur in adjacent areas, no other special-status plants occur or have potential to occur within the 14.88-acre Project Site.

#### 4.4.13 Southern tarplant (Centromadia parryi ssp. australus)

Southern tarplant is an annual herb designated as a CRPR 1B.1 that is known from Los Angeles, Orange, Santa Barbara, Santa Catalina Island, San Diego Ventura and Baja California. Southern tarplant occurs at the margins marshes and swamps, valley and foothill grasslands, and disturbed areas. The flowering period occurs from May to November. This species was detected in at two locations within the 14.88-acre Project Site during 2015 surveys as depicted on Exhibit 5. The occurrence at the northwest corner of the North ORA totals 120 individuals of which 72 individuals are within the project site and 48 are outside of the project site. A second small patch occurs near the northeast portion of the North ORA totaling 10 plants. It is important to note that southern tarplant is and annual plant that highly adapted to disturbance. It is highly receptive to translocation by means of seed collection and broadcasting in suitable areas.

# 4.5 Wildlife Surveys

#### 4.5.1 Birds

Avian species commonly observed within the 14.88-acre Project Site are limited by the lack of habitat and includes species adapted to urban areas, habituated to human occupation and include American crow (Corvus brachyrhnchos), house finch (Carpodacus mexicanus), bushtit (Psaltriparus minimus), song sparrow (Melospiza melodia), Anna's hummingbird (Calypte anna), lesser goldfinch (Carduelis psaltria), California towhee (Pipilo crissalis), northern mockingbird (Mimus polyglottos), and mourning dove (Zenaida macroura). There is no suitable habitat for special-status avian species within the 14.88-acre Project Site.

Special-status birds detected within the WNO Property include Least Bell's vireo (Vireo bellii pusillus), yellow-breasted chat (Icteria virens), California gnatcatcher (Polioptila californica californica), ashy rufous-crowned sparrow (Aimophila ruficeps), yellow warbler (Dendroica petechia), coastal cactus wren (Campylohrynchus brunneicapillus), white-tailed kite (Elanus leucurus), Belding's savannah sparrow (Passerculus sandwichensis beldingi), nesting Cooper's hawks (Accipiter cooperii), foraging/wintering merlin (Falco columbarius), foraging/wintering northern harrier (Circus cyaneus), and foraging/wintering sharp-shinned hawk (Accipiter striatus).

#### 4.5.2 Mammals

Mammals detected on site either by direct observation or by physical evidence included coyote (Canis latrans), California ground squirrel (Spermophilus beechyi), Audubon's cottontail (Sylvilagus audubonii), brush rabbit (Sylvilagus bachmani), Botta's pocket gopher (Thomomys bottae), raccoon (Procyon lotor), and domestic dog (Canis lupus familiaris).

### 4.5.3 Reptiles and Amphibians

Herpetofauna observed included western fence lizard (Sceloporus occidentalis) and sideblotched lizard (Uta stansburiana).

# 4.6 Special-Status Animals

Table 4-4 provides a summary of all species evaluated for this report based on: 1) species identified by the 2015 CNDDB as occurring (either currently or historically) on or in the USGS Newport Beach and Seal Beach Quadrangles, and 2) any other special-status species that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on site. Following the table, additional discussions are provided for any special-status animals observed on site or for which potentially suitable habitat occurs on the property.

Table 4-4. Special-status Wildlife Evaluated for this Report

Species Name	Status	Habitat Requirements	Potential for Occurrence	
NVERTEBRATES				
Quino checkerspot butterfly Euphydryas editha quino	Federal: FE State: None CDFW: None	Meadow habitats dominated by western plantain and/or owl's clover	No potential to occur on site due to a lack of suitable habitat and extirpation from Orange county.	
San Diego fairy shrimp Branchinecta sandiegonensis	Federal: FE State: None CDFW: None	Seasonal vernal pools	No suitable habitat within 16- 5 acre site. Occurs elsewhere on West Newport Oil site but not within 300-foot adjacent areas.	
Riverside fairy shrimp Streptocephalus wootoni	Federal: FE State: None CDFW: None	Deep seasonal vernal pools, with warm water, and low to moderate dissolved solids, that remained filled for extended periods of time. Annual grasslands, or patches.	No suitable habitat within 16- 5 acre site. Does not occur on West Newport Oil site	
AMPHIBIANS				
Arroyo southwestern toad Bufo microscaphus californicus	Federal: FE State: None CDFW: CSC	currently in headwaters, sandy washes	No potential to occur on site due to a lack of suitable habitat.	
California red-legged frog Rana aurora draytonii	Federal: FT State: None CDFW: CSC	Permanent flowing water sources, including marshes, streams, lakes	No potential to occur on site due to a lack of suitable habitat.	
Western spadefoot toad Scaphiopus hammondi	Federal: None State: None CDFW: CSC	Coastal sage scrub, vernal pools, and grasslands; breeds in associated temporary pools and riparian areas.	No potential to occur on site due to significant habitat disturbance.	
REPTILES				
Coast patch-nosed snake Salvadora hexalepis virgultea	Federal: None State: None CDFW: CSC	Open areas within coastal sage scrub, chaparral, grassland, desert scrub, washes, sand flats, & rocky areas.	No potential to occur on site due to significant habitat disturbance.	
Orange-throated whiptail Aspidoscelis hyperythra	Federal: None State: None CDFW: CSC	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes & other sandy areas with patches of brush & rocks. Perennial plants necessary for its major food —termites.		
Red diamond rattlesnake Crotalus ruber ruber	Federal: None State: None CDFW: CSC	Chapparal, woodland, grassland, & desert areas from coastal San Diego county to the eastern slopes of the mountains. Occurs in rocky areas & dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	No potential to occur on site due to location being out of range.	
San Diego horned lizard Phrynosoma coronatum blainvillei	Federal: None State: None CDFW: CSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and	No potential to occur on site due to significant habitat disturbance.	

Species Name	Status	Habitat Requirements	Potential for Occurrence
		riparian woodlands. Sandy soils.	
Silvery legless lizard Anniella pulchra pulchra	Federal: None State: None CDFW: CSC	Sparse coastal sage scrub, chaparral, grassland, riparian and woodland habitats within moist sandy soil.	No potential to occur on site due to significant habitat disturbance.
Two-striped garter snake Thamnophis hammondii	Federal: None State: None CDFW: CSC	Highly aquatic. Found in freshwater marshes and riparian habitats, in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	No potential to occur on site due to lack of suitable habitat
BIRDS			
American Peregrine Falcon Falco peregrinus anatum	Federal: None State: SE CDFW: None	Near wetlands, lakes, rivers or other water, on cliffs, banks, dunes, mounds, also human-made structures.	Observed foraging on West Newport Oil site. No suitable habitat for foraging on 14.88- acre site.
Bank swallow Riparia riparia	Federal: None State: ST CDFW: None	Colonial nester; nests primarily in riparian and other lowland habitats west or the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not observed on site. No potential to occur on site due to lack of suitable habitat.
Belding's savannah sparrow Passerculus sandwichensis beldingi	Federal: None State: SE CDFW: None	Coastal salt marshes. Nests in Salicornia sp. and about margins of tidal flats.	No suitable habitat within 14.88-acre site. Observed in adjacent lowland salt marsh areas.
Bell's sage sparrow Amphispiza belli belli	Federal: None State: None CDFW: CSC	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above the ground.	No potential to occur on site due to lack of suitable habitat.
Black skimmer <i>Rynchops niger</i>	Federal: None State: None CDFW: CSC	Nests on gravel bars, low islets and sandy beaches, in unvegetated sites.	Not observed on site. No potential to occur on site. Low potential to forage adjacent to site.
Burrowing owl Athene cunicularia	Federal: None State: None CDFW: CSC	dependent upon burrowing mammals, most notably, the California ground	Wintering burrowing owls have been observed on West Newport Oil mesa well removed from 14.88 acre site. No suitable habitat associated with 14.88 acres site or adjacent areas.
California black rail Laterallus jamaicensis coturniculus	Federal: None State: ST CDFW: None	Salt marshes bordering larger bays,	No potential to occur on site due to lack of suitable habitat.
California Brown Pelican Pelecanus occidentalis californicus	Federal: FE State: SE CDFW: None	Coastal, salt bays, ocean, beaches.	Not observed on site. No potential occur on site due to lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
California horned lark Eremophila alpestris actia	Federal: None State: None CDFW: CSC	Coastal regions in Southern California. Short-grass prairies "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Not observed on site. No potential to nest on site due to lack of suitable habitat.
California least tern Sterna antillarum browni	Federal: FE State: SE CDFW: CFP	Flat, vegetated substrates near the coast. Occurs near estuaries, bays, or harbors where fish is abundant.	Not observed on site. No potential to nest or forage on site or in adjacent 300 feet.
Coastal cactus wren Campylorhynchus brunneicapillus couesi	Federal: None State: None CDFW: CSC	Southern California coastal sage scrub. Wrens require tall opuntia cactus for nesting and roosting.	No suitable habitat within 14.88 acre site. Observed in limited areas of cactus on West Newport Oil Site.
Coastal California gnatcatcher Polioptila californica californica	Federal: FT State: None CDFW: CSC	Low elevation coastal sage scrub and coastal bluff scrub.	No suitable habitat within 14.88 acre site. Observed in sage scrub vegetation in adjacent areas within 300 feet of site.
Double Crested cormorant Phalacrocorax auritus	Federal: None State: None CDFW: CSC	Coasts, bays, lakes, rivers.	Not observed on site. No potential to nest on site. No potential to forage adjacent to site.
Ferruginous hawk Buteo regalis	Federal: FSC State: None CDFW: CSC	Only present as wintering individuals. Prefers open grasslands and agricultural areas.	No potential to nest on site. No potential to forage on site.
Golden Eagle Aquila chrysaetos	Federal: None State: None CDFW: CFP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Not observed on site. No potential to occur on site due to lack of suitable habitat.
Least Bell's vireo Vireo belii pusilus	Federal: FE State: SE CDFW: CSC	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	No potential to occur onsite due to lack of suitable habitat. Observed in riparian areas in the lowlands on site during focused surveys; however, no occurrences within 300 feet.
Light-footed clapper rail Rallus longirostris levipes	Federal: FE State: SE CDFW: CFP	Found in salt marshes where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover, feeds on mollusks and crustaceans.	Reported to occur in limited marsh areas in the Army Corps mitigation area well beyond 300 feet. No potential to nest or forage on site.
Loggerhead shrike Lanius ludovicianus	Federal: None State: None CDFW: CSC	Broken woodlands, savannah, pinyon- juniper, Joshua tree & riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting with perches for scanning and fairly dense shrubs and brush for nesting.	No suitable habitat within 14.88 acre site. Observed in the lowlands on site.
Long-eared owl Asio otus	Federal: None State: None CDFW: CSC	Riparian bottomlands grown to tall willows & cottonwoods; also belts of live oak paralleling stream courses. Require adjacent open land productive of mice and presence of old nests of	Not observed on site. Low potential to occur in riparian woodlands on site.

Species Name	Status	Habitat Requirements	Potential for Occurrence
	Total and the second se	crows.	
Merlin Falco columbarius	Federal: None State: None CDFW: CSC	Only present as wintering individuals. Forages in a variety of habitats including riparian areas such as present on the site.	Observed one merlin foraging on site in the winter of 2008 on mesa well beyond the 300 foot adjacent area
Northern harrier (nesting) Circus cyaneus	Federal: None State: None CDFW: CSC	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	No suitable habitat within 14.88 acre site. Observed foraging on West Newport Oil site and may forage within the 300-foot adjacent areas.
Osprey Pandiohn haliaetus	Federal: None State: None CDFW: CSC	Ocean shore, bays, fresh-water lakes, and larger streams. Large nests built in treetops within one mile of a good fish-producing body of water.	No suitable habitat within 14.88 acre site. Observed foraging on West Newport Oil site and may forage within the 300-foot adjacent areas.
Tri-colored blackbird Agelaius tricolor	Federal: None State: None CDFW: CSC	Requires open water, protected nesting & foraging area with insect prey within a few km of the colony.	Not observed on site. No potential to occur on site due to lack of suitable habitat.
Short-eared owl Asio flammeus	Federal: None State: None CDFW: CSC	Found in swamplands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	Not observed on site during surveys. High potential to occur during winter in lowlands on site.
Southwestern willow flycatcher Empidonax traillii extimus	Federal: FE State: SE CDFW: CSC	Riparian woodlands in southern California.	No suitable habitat within 14.88 acre area. Not observed on West Newport Oil site during previous focused surveys.
Swaìnson's Hawk Buteo swainsoni	Federal: None State: ST CDFW: None	Breeding habitat consists of grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands. Requires adjacent suitable foraging areas such as grasslands or alfalfa or grain fields that support rodent populations.	Not observed on site. No potential to occur on site due to lack of suitable habitat.
Western least bittern Ixobrychus exilis hesperis	Federal: None State: None CDFW: CSC	Colonial nester in marshlands and borders of ponds and reservoirs that provide ample cover. Nests usually placed low in tules over water.	Not observed on site. Low potential to occur in the limited marsh areas adjacent to site.
Western snowy plover Charadrius alexandrinus nivosus	Federal: FT State: None CDFW: CSC	coast, estuarine salt ponds, alkali lakes, and at the Salton Sea.	No suitable habitat within 14.88 acre area. Not observed on West Newport Oil site during previous surveys.
White-tailed kite (nesting) Elanus leucurus	Federal: FSC State: None CDFW: CFP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and	No suitable habitat within 14.88 acre area. Suitable nesting areas within lowlands within 300-foot adjacent areas.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Yellow-breasted chat Icteria virens	Federal: None State: None CDFW: CSC	Summer resident; inhabits riparian thickets of willow & other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	No potential to occur onsite due to lack of suitable habitat. Observed in riparian areas in the lowlands on site during focused surveys; potential habitat within 300 feet.
Yellow warbler Dendroica petechia brewsteri	Federal: None State: None CDFW: CSC	Riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores & alders for nesting & foraging. Also nests in montane shrubbery in open conifer forests.	No potential to occur onsite due to lack of suitable habitat. Observed in riparian areas in the lowlands on site during focused surveys; potential habitat within 300 feet.
MAMMALS			
American badger Taxidea taxus	Federal: None State: None CDFW: CSC	Occurs in drier shrub, forest, and herbaceous habitats. Needs open, uncultivated ground and friable soils for digging burrows. Preys on burrowing rodents.	Not observed on site. No potential occur on site due to lack of suitable habitat.
Big free-tailed bat Nyctinomops macrotis	Federal: None State: None CDFW: CSC	Occurs in low-lying arid areas in Southern California. Roosts in high cliffs or rocky outcrops.	No potential occur on site due to lack of suitable habitat.
Hoary bat Lasiurus cinereus	Federal: None State: None CDFW: CSC		No potential occur on site due to lack of suitable habitat.
Pacific pocketmouse Perognathus longimembris pacificus	Federal: FE State: None CDFW: CSC	Seems to prefer soils of fine alluvial sands near the ocean.	No potential to occur on site due to a lack of suitable habitat.
South coast marsh vole Microtus californicus stephensi	Federal: None State: None CDFW: CSC	Tidal marshes in Los Angeles, Orange and southern Ventura Counties.	No potential occur on site due to lack of suitable habitat.
Southern California salt marsh shrew Sorex ornatus salicornicus	Federal: None State: None CDFW: CSC	Coastal marshes in Los Angeles, Orange and southern Ventura Counties. Requires dense vegetation and woody debris for cover.	No potential to occur in 14.88-acre site. Low potential to occur in the limited marsh areas adjacent to site.
Western mastiff bat Eumops perotis californicus	Federal: None State: None CDFW: CSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, & tunnels.	No potential occur on site due to lack of suitable habitat.

# Federal

FE – Federally Endangered FT – Federally Threatened

FSC - Federal Species of Special Concern

### State

SE – State Endangered ST – State Threatened

CSC - California Species of Special Concern CFP - California Fully Protected Species

# 4.7 Special-status Animals Observed or With the Potential to Occur on 14.88-Acre Site

The 14.88-acre Project Site is almost entirely developed and the limited areas of native vegetation that remain within the Project Site are highly degraded. As such, there is no habitat capable of supporting listed or other special-status animals.

# 4.8 Special-status Animals Observed or With the Potential to Occur Adjacent to 14.88-Acre Site

The following special-status animals have been documented as occurring within the adjacent 300-foot Buffer.

# 4.7.3 Belding's Savannah Sparrow (Passerculus sandwichensis beldingi)

The Belding's savannah sparrow is a State Endangered bird, and a candidate species for federal protection. This species is a non-migratory subspecies that occurs in coastal salt marshes between Goleta Slough, Santa Barbara County, and Bahia de San Quentin in Mexico. The Belding's savannah sparrow is entirely dependent on salt marshes for nesting and foraging, and thus resides year-round in this habitat. This species nests preferentially in pickleweed (Salicornia pacifica). The Belding's savannah sparrow was observed in the Buffer within the limited saltmarsh areas west and southwest of the 14.88-acre Project Site and is presumed to breed on site.

# 4.7.8 Coastal cactus wren (Campylorhynchus brunneicapillus couesi)

The cactus wren in southern California is considered to comprise two distinct subspecies. The coastal cactus wren occurs in coastal Orange and San Diego Counties, extending into Mexico, while the coastal-slope populations in Riverside, San Bernardino, Los Angeles, Ventura, and northern Orange counties are classified as, the same subspecies that occurs in the deserts of California and Western Arizona. The coastal subspecies is considered a California Species of Special Concern, while the inland species is not considered to be rare or sensitive (USFS 1999). The cactus wren is usually associated with habitats dominated by prickly pear or cholla cactus. This species was observed in areas of cactus scrub on near the large arroyo and has not been documented within the 300-foot Buffer.

# 4.7.9 Coastal California Gnatcatcher (Polioptila californica californica)

The coastal California gnatcatcher is a federally listed threatened species that occurs in areas of coastal sage scrub habitats. California gnatcatchers have been mapped within areas of CBBS throughout the upland portions of the WNO Property including areas within the 300-foot buffer as depicted on Exhibit 6.

# 4.7.12 Least Bell's vireo (Vireo belii pusillus)

Least bell's vireo is a State and Federally listed endangered migratory songbird that breeds in riparian habitats in southern California. This vireo nests and forages almost exclusively in multi-layered riparian woodland habitats. The least Bell's vireo was detected in the lowlands during 2006, 2007 and 2013. The locations, none of which occur within the 300-foot buffer are located more than 600 feet to the north of the Project Site.

### 4.7.13 Light-footed clapper rail (Rallus longirostris levipes)

The light-footed clapper rail is a federally listed endangered, State listed endangered, and California fully protected species. In southern California, the clapper rail is a year-round resident that prefers coastal salt marshes, but also inhabits freshwater marshes. There is no suitable salt marsh habitat for nesting in the WNO lowlands due to a lack of cordgrass. This species has been observed breeding in the restored cordgrass habitat at the mouth of the Santa Ana River adjacent to the site.

#### 4.7.31 White-tailed kite (Elanus leucurus)

The white-tailed kite is a state fully protected species that occurs through much of California. In California, the white-tailed kite is a year-round resident in coastal and valley lowlands. It prefers open habitats including grasslands, open shrub, agricultural areas, wetlands dominated by grasses, fence rows and irrigation ditches adjacent to grazed lands, riparian, oak woodlands, coastal sage scrub, and salt marsh. White-tailed kites were observed foraging and nesting in the riparian areas of the lowlands on site; however, no nesting has been observed within the 300-foot Buffer.

#### 4.7.32 Yellow-breasted chat (*Icteria virens*)

The yellow-breasted chat is a California Species of Special Concern. This species is a migratory songbird that breeds in riparian habitats in southern California, with habitat requirements similar to least Bell's vireo. Suitable habitat typically consists of multi-layered riparian scrub or willow woodland. Yellow-breasted chats were observed in the riparian areas of the lowland on site, and are presumed to nest on site and potentially within the 300-foot Buffer.

### 4.7.33 Yellow warbler (Dendroica petechia)

The yellow warbler is a California Species of Special Concern. This species is a migratory songbird that breeds in riparian habitats in southern California with habitat requirements similar to least Bell's vireo. Suitable habitat typically consists of multi-layered riparian scrub or willow. Yellow warblers were observed in the riparian areas of the lowland on site, and are presumed to nest on site and potentially within the 300-foot Buffer.

# 4.8 Special-Status Habitats

A review of the September 2015 CNDDB identified the following special-status habitats as occurring within the Newport Beach Quadrangle: southern coastal salt marsh, southern cottonwood willow riparian forest, southern dune scrub and southern foredunes. Of the habitats identified in the CNDDB, none occur within the 14.88-acre Project Site and only one special-status habitat, southern coastal salt marsh, occurs within the adjacent areas. Special-status habitats identified in the City of Newport Beach Coastal Land Use Policies, Section 4.0 Coastal Resource Protection and Section 4.1 Biological Resources (as potential ESHA) do not occur on the site however, habitat consistent with southern coastal bluff scrub, maritime succulent scrub, and coastal sage scrub (CBBS) occur within 300 feet of the 14.88-acre Project Site. In addition to the adjacent southern coastal salt marsh, a variety of wetland and riparian habitats occur in the adjacent 300 feet including southern black willow forest. Although not included in the City's CLUP, mud flats are also included as such areas are covered by tidal water on a regular basis and are considered wetlands under the Coastal Act definition (descriptions for each of these habitats are provided in Section 4.2 above).

# 4.8.1 Environmentally Sensitive Habitat Areas (ESHA)

There are no habitats within the 14.88-acre Project Site that are consistent with the policies set forth below under Coastal Land Use Policies Section 4.1.1 (et seq.). For areas in the adjacent 300-foot Buffer the following criteria were used to determine whether each habitat would be considered ESHA under Section 4.1.19. In addition, because of the highly fragmented and disturbed character of nearly all the habitat within the 300-foot Buffer, it was necessary to extend the evaluation to specific patches such that in some cases (for example), large intact areas of CBBS with only limited disturbance were determined to be ESHA, whereas, small isolated fragments, exhibiting high levels of disturbance were determined to not meet the minimum requirements for ESHA. The Criteria set forth in Section 4.1.1 are as follows:

- The presence of natural communities that have been identified as rare by the California Department of Fish and Game.
- The recorded or potential presence of plant or animal species designated as rare, threatened, or endangered under State or Federal Law.
- The presence or potential presence of plant or animal species that are not listed under State or Federal law, but for which there is other compelling evidence of rarity, such as designation as a 1B or 2 species by the California Native Plant Society.
- The presence of coastal streams.
- The degree of habitat integrity and connectivity to other natural areas.

<sup>9</sup> It is important to note that the potential ESHA designations discussed in this report are based on GLA's best professional judgment of all applicable laws, regulations, and policies, but only the City in accordance with the CLUP or the CCC in accordance with the Coastal Act can make a final ESHA determination.

In addition, in accordance with section 4.1.1, CSS is specifically identified by the City as potential ESHA as follows:

"Another important habitat within the City of Newport Beach is coastal sage scrub (CSS). Although CSS has suffered enormous losses in California (estimates are as high as 85%), there are still thousands of acres in existence and this community type is no longer listed as rare by CDFW. Nevertheless, where CSS occurs adjacent to coastal salt marsh or other wetlands, or where it is documented to support or known to have the potential to support rare species such as the coastal California gnatcatcher, it meets the definition of ESHA because of its especially valuable role in the ecosystem. CSS is important transitional or "edge" habitat adjacent to salt marsh, providing important function such as supporting pollinators for wetland plants and essential habitat for edge-dependent animals like several species of butterflies that nectar on upland plants but whose caterpillars require wetland vegetation. CSS also provides essential nesting and foraging habitat for the coastal California gnatcatcher, a rare species designated threatened under the Federal Endangered Species Act."

Areas of CBBS, "are presumed to be ESHA unless there are strong site-specific reasons to rebut that presumption. Factors that should be considered when making site-specific assessments include:

- Patch size and connectivity. Very small patches of habitat that are effectively isolated from other natural areas may lose many of their natural ecological functions. Functional patch size is dependent upon both the ecological needs of the species of importance supported by the habitat and the spatial scale of the habitat. For example, what is isolated for a small mammal may not be for a bird and what is small for a coyote may not be for some insects.
- Dominance by invasive, non-native species. Non-native species often provide poorer habitat for wildlife than native vegetation and proliferation of exotic plant species alters ecosystem processes and may threaten certain native species with extirpation. However, there are probably no habitats in southern California that have not been invaded by exotic species, and the remaining stands of native grassland are almost always dominated by non-native annual species. Only where exotic species are so overwhelmingly dominant that the native community can no longer perform its functions in the ecosystem should the presence of exotic species rebut the presumption of ESHA.
- Disturbance and proximity to development. Disturbance is the negative effect of human activities such as dumping, vegetation removal, development, pollution, etc. Habitat areas bordering development may be subject to impacts from negative edge effects, such as lighting, non-native invasive plant species, domestic

- animals, and human activity. The negative effects of disturbance are strongest immediately adjacent to development and decline with distance from the edge. However, where very small patches of habitat are effectively surrounded by development, these impacts may be severe. In general, disturbance by itself is not enough to rebut the finding of ESHA. Disturbance that is clearly reversible (e.g., presence of trash or illegal dumping) is not determinative.
- Fragmentation and isolation. Where there are large areas of moreor-less continuous development, native communities may be reduced to small islands of habitat that are distant from other natural habitats. This fragmentation and isolation can create barriers to migration, reduce wildlife food and water resources and generally compress territory size to reduce existing wildlife populations to non-viability. The smaller a particular habitat patch is, the greater the proportion of its area that experiences negative edge effects."

# 4.8.1.1 ESHA Determination for Adjacent Upland Habitats (Within 300 feet)

Potential upland ESHA includes areas of CBBS occupied by the coastal California gnatcatcher and mapped on Exhibit 9. Based on these sightings, areas with suitable habitat are considered "occupied" by the gnatcatcher and potential ESHA in accordance with the City's Coastal Land Use Policies. As discussed below application of the criteria that would allow rebutting of the presumed ESHA status does not lead to a conclusion that the subject areas are not ESHA.

In addition, the west-facing bluffs near the western boundary of the site support degraded southern CBBS. In general, the CBBS on slopes that are too steep and the vegetation is too sparse for the California gnatcatcher. Limited portions of the CBBS, near the southwest corner of the site support scattered individuals or patches of California boxthorn, a CNPS List 4 taxon (one of three special-status plants on the site) as well as scattered individuals of wooly seablite (Exhibit 5).

#### 4.8.1.2 ESHA Determination for Wetland and/or Riparian Habitats

The majority of wetlands and/or riparian habitat within the adjacent lowlands are considered ESHA. Specifically, the lowlands within 300 feet of the 14.88-acre Project Site support southern coastal salt marsh, mud flats, and southern black willow forest. Mulefat scrub in the lowlands is not ESHA, though they are subject to wetland protections outlined in the Coastal Act. Exhibit 9 depicts the potential lowland ESHA areas as well.

Table 4-5. Lowland Wetlands and Associated Special-Status Species

Wetland Type	Associated Listed or Special-Status Species
Coastal Salt Marsh	Belding's savannah sparrow
Alkali Heath Marsh	Southern tarplant, White-tailed Kite (foraging)
Black Willow Forest	Least Bells Vireo

#### 4.9 Critical Habitat

The USFWS has designated Critical Habitat for two listed species on the site: the federally listed threatened coastal California gnatcatcher<sup>10</sup> and the federally listed endangered San Diego fairy shrimp<sup>11</sup>. The San Diego fairy shrimp critical habitat is outside of both the 14.88-acre Project Site and the 300-foot Buffer and is not further discussed.

#### 4.9.1 California Gnatcatcher

The limits of Critical Habitat Unit for the California gnatcatcher, cover the entire Newport Banning Ranch site, extending offsite to the west and south to the Corps' Santa Ana River restoration site as well as to southeast to City of Newport Beach property. Only limited areas exhibit primary constituent elements that for the California gnatcatcher are defined as:

For inclusion in a critical habitat designation, habitat within the geographical area occupied by the species at the time it was listed must first have features that are essential to the conservation of the species. Critical habitat designations identify, to the extent known using the best scientific data available, habitat areas that provide essential life cycle needs of the species (areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to designate as critical habitat within the geographical areas occupied by the species at the time of listing, USFWS considers the physical and biological features "primary constituent elements", or PCEs, that are essential to the conservation of the species and that may require special management considerations or protection.

These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

There are no areas on the 14.88-acre Project Site that exhibit these characteristics and PCE's are limited to areas within the 300-foot buffer depicted on Exhibit 9. This includes areas of CBBS and disturbed CBBS that are of sufficient size to support breeding behaviors, provide sufficient resources to meet nutritional or physiological requirements, as well as cover and shelter. In

<sup>&</sup>lt;sup>10</sup> Fish and Wildlife Service, Interior. Federal Register: December 19, 2007 (Volume 72, Number 243). Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Coastal California Gnatcatcher (*Polioptila californica californica*). Page 72009-72058

<sup>&</sup>lt;sup>11</sup> Fish and Wildlife Service, Interior. Federal Register: December 12, 2007 (Volume 72, Number 238). Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the San Diego Fairy Shrimp (*Branchinecta sandiegonensis*). Page 70647-70714

addition to the CBBS, the riparian habitat areas in the Buffer portions of the lowlands are also utilized by gnatcatchers for food sources during the summer and are also considered to exhibit PCEs.

#### 4.10 Jurisdictional Delineation

Because only a limited area is subject to tidal flooding due to construction of berms put in place more than 50 years ago, it is not possible to determine the extent of Section 10 Waters based on current site conditions. Therefore, the limit of the tidal flats soil series in conjunction with the limit of Mean High Water Mark (MHWM) was generally used as a surrogate in consultation with Mr. Jae Chung of the Corps of Engineers<sup>12</sup>. Using the MHWM, Corps jurisdiction pursuant to Section 10 of the Rivers and Harbors Act totals 6.58 acres within the Project Site. Corps jurisdiction, pursuant to Section 404 of the CWA within the Project Site totals approximately 0.08 acre, of which 0.04 acre consist of jurisdictional wetlands.

CDFW jurisdiction within the site totals approximately 0.08 acre, of which approximately 0.04 acre consist of sparsely vegetated herbaceous riparian habitat.

Wetlands defined under the California Coastal Act total approximately 0.078 acre within the site and additional wetlands within adjacent areas up to 300 feet of the site.

#### 5.0 IMPACT ANALYSIS

The following discussion examines the potential impacts to plant and wildlife resources that may occur as a result of implementation of the project. Project-related impacts can occur in two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or wildlife, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability. Other impacts, such as loss of foraging habitat, can occur although these areas or habitats are not directly removed by project development; i.e., indirect impacts. Indirect impacts can also involve the effects of increases in ambient levels of noise or light, unnatural predators (i.e., domestic cats and other non-native animals), competition with exotic plants and animals, and increased human disturbance such as hiking and dumping of green waste on site. Indirect impacts may be associated with the subsequent day-to day activities associated with project build-out, such as increased traffic use, permanent concrete barrier walls or chain link fences. exotic ornamental plantings that provide a local source of seed, etc., which may be both shortterm and long-term in their duration. These impacts are commonly referred to as "edge effects: and may result in a slow replacement of native plants by exotics, and changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundances in habitats adjacent to project sites.

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<sup>&</sup>lt;sup>12</sup> Personal communication with Jae Chung on July 3, 2008 regarding Section 10 jurisdiction.

The potential for significant adverse effects, either directly or through habitat modifications, on any special-status plant, animal, or habitat that could occur as a result of project development is discussed below.

# 5.1 California Environmental Quality Act

#### **5.1.1** Thresholds of Significance

Environmental impacts relative to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California:

"Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

"The project has the potential to substantially degrade the quality of the environment, substantially 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 wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species, ..."

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the Proposed Project.

# 5.1.2 Criteria for Determining Significance Pursuant to CCA and CLUP

Determination of significance pursuant to the CCA and CLUP is based on the following criteria:

- Direct impacts to ESHA;
- Indirect impacts that cause degradation of ESHA;
- Direct impacts to wetlands where such impacts are not associated with allowable uses;
- Indirect impacts to wetlands or riparian ESHA that degrades ESHA; or
- Direct or indirect significant impacts to special-status species
- Direct or indirect significant impacts on special-status habitats.

# 5.2 Impacts to Vegetation Associations from Site Development

# **5.2.1** Proposed Project

Permanent impacts to Vegetation/Land Use/Land Cover on the 14.88-acre Project Site is summarized in Table 5-1 below. Upon completion of construction activities, a 25-foot buffer will be established at the outer limits of the project site, such that no activities will be conducted in these areas once project construction is complete.

Table 5-1. Summary of Vegetation Impacts on 14.88-Acre Project Site

Summary of Vegetation Associations on 14:88 Acre Site	Acres
Upland Habitats	
Annual Brome Grassland	
Coastal Sage Scrub	
Disturbed California Brittle Bush Scrub – California Buckwheat Scrub	
Disturbed California Brittle Bush Scrub	
Disturbed Coastal Prickly Pear Scrub	
Disturbed Mulefat Thicket	
Disturbed/Developed	12.46
Ice Plant Mats	0.83
Menzies's Golden Bush Scrub	0.04
Mulefat Thicket	0.04
Myoporum Grove	0.10
Ornamental	0.51
Ruderal	0.59
Upland Habitats Subtotal	14.80
Wetland	
Disturbed Pickleweed	
Wetland Subtotal	0.08
Grand Total	14.88

# 5.3 Impacts to Special-Status Plants

#### 5.3.1 Proposed Project

The 14.88-acre Project Site contains one special-status plant, southern tarplant, which would be impacted by the project. A total of 130 tarplant occur within two locations. Two special-status plant species, woolly seablite and California boxthorn occur within the 300-foot Buffer on the slope above the South ORA and would not be subject to direct or indirect impacts.

# 5.4 Impacts to Special-Status Animals

#### 5.4.1 1 American Peregrine Falcon

There is no suitable breeding or foraging habitat within the 14.88-acre Project Site and the project exhibits no potential for direct impacts to breeding or foraging. The Buffer areas contain marginally suitable habitat for foraging and neither Project construction activities nor Project operation exhibit potential for significant impacts on the American peregrine falcon.

# 5.4.1.2 Belding's Savannah Sparrow

Belding's savannah sparrow was observed during surveys on site in areas to the west of the North ORA. There is no suitable breeding or foraging habitat within the 14.88-acre Project Site and the project exhibits no potential for direct impacts to breeding or foraging. Limited areas of coastal salt marsh habitat occur to the west and southwest of the 14.88-acre Project Site.

### 5.4.1.4 Burrowing Owl

Burrowing owls were observed on the mesa portions of the WNO Property; however none were recorded within the 300-Foot Buffer and neither Project construction activities nor Project operation exhibit potential for significant impacts on the burrowing owl.

### 5.4.1.5 California Black Rail

California black rail has not been observed during surveys on the site. Limited areas of suitable foraging habitat are present in the Buffer to the west and southwest of the 14.88-acre Project Site. Given the lack of detection during previous surveys, neither Project construction activities nor Project operation exhibit potential for significant impacts on the California black rail.

#### 5.4.1.6 Coastal Cactus Wren

There is no suitable breeding or foraging habitat within the 14.88-acre Project Site and neither Project construction nor Project operation exhibit potential for direct impacts to breeding or foraging. The Buffer areas contain suitable habitat for breeding and foraging as depicted on Exhibit 6; however, neither Project construction activities nor Project operation exhibit potential for significant impacts on the coastal cactus wren.

#### 5.4.1.7 Coastal California Gnatcatcher

There is no suitable breeding or foraging habitat for the coastal California gnatcatcher within the 14.88-acre Project Site and neither the Project construction nor Project operation exhibit potential for direct impacts to breeding or foraging.

The coastal California gnatcatcher was observed in portions of the 300-foot Buffer. Specifically, three "Use Areas" based on previous and the most up-to-date surveys conducted as recently as 2015 occur within the 300-foot buffer as depicted on Exhibit 6. In addition, one-time observations of solitary males or pairs have also occurred during the many surveys conducted on the site as summarized in Table 2-1, adjacent to the North and South ORAs as well as the ORA Easement as also depicted on Exhibit 6. Three factors need to be considered in evaluating potential indirect impacts to the gnatcatcher associated with the Project:

- Vertical/Topographical Separation;
- The Insignificant Changes to Ongoing Operations;
- Habituation to Disturbance by the Gnatcatcher

# Vertical/Topographical Separation

As noted, the North ORA is located in the southeast corner of the Newport banning Ranch lowlands, with a steep slope to the east and south, that provides vertical separation ranging from roughly 45 feet to 50 feet, which also provides visual separation between areas of coast brittle bush scrub and the North ORA. Similarly, the ORA Easement and the South ORA are located at the toe of steep slopes that are highly degraded with limited habitat for the California gnatcatcher other than for occasional foraging. The top of the slope averages about 50 feet above the ORA Easement and the South ORA. Work in the ORA Easement will be limited to installation of pipelines in the existing road while work in the South ORA will be limited to installation of new wells. Based on the locations of clustered gnatcatchers associated with the four use areas, there is either no or very limited line-of-sight between the Use Areas and the North ORA substantially limiting potential indirect impacts from light or noise.

### The Insignificant Changes to Ongoing Operations

The North ORA and South ORA have existing oil wells and associated storage tanks and related infrastructure. It is important to note, that these Use Areas have been regularly occupied by the gnatcatcher extending back into the 1990s, throughout which time, oil operations have been ongoing, including installation and/or maintenance wells within North ORA and South ORA. While the number of wells would be increased, the overall character of the sites would not be changed and there would be no changes that would potentially increase indirect impacts. Exhibit 8 shows active and/or historic oil well sites in overlain by gnatcatcher locations. In many cases, gnatcatchers occur within close to proximity to active oil well sites suggesting that noise from the oil wells does not disturbed the gnatcatchers. Based on new oil well locations, the nearest

wells in the North ORA will be 175 feet from gnatcatcher locations. Similarly, addition of wells in the South ORA will not change the distance between well sites and gnatcatcher locations. As such, there would be no change in potential impacts due to noise to the California gnatcatcher associated with Project Construction or Operations.

# Habituation to Disturbance by the Gnatcatcher

The California gnatcatcher has persisted on the WNP Property throughout the tenure of oilfield operations. The California gnatcatcher is generally habituated to nearby human occupation as evidenced by the population of the California gnatcatcher on the WNO site. Given the complete avoidance of direct impacts to areas of suitable habitat, the vertical and topographic separation between the Project Site and Use Area, the general lack of change to the site characteristics to the site, potential impacts to the gnatcatcher are below the level of significance. This is further enhanced by the habituation of the California gnatcatcher to modest levels of disturbance and human occupation.

Finally, in order to ensure that potential impacts associated with lighting are reduced to levels below significant, the project includes a project design feature relative to lighting that ensures that light spillage is not increased. Specifically, light spillage from the North and South ORAs will be unchanged or reduced in the final project configuration.

#### 5.4.1.8 Least Bell's vireo

There is no suitable breeding or foraging habitat for least Bell's vireo within the 14.88-acre Project Site and neither Project construction nor Project operation exhibit potential for direct impacts to breeding or foraging.

Similarly, while least Bell's vireos were observed in the riparian areas of the WNO lowland, none have been previously detected within the 300-foot Buffer, with the nearest location more than 500 feet from the North ORA and, as such, neither Project construction nor Project operation exhibit potential for indirect impacts to breeding or foraging.

### 5.4.1.9 Light-Footed Clapper Rail

There is no suitable breeding or foraging habitat for light-footed clapper rail within the 14.88-acre Project Site and neither Project construction nor Project operation exhibit potential for direct impacts to breeding or foraging.

Nesting individuals have been observed in the restored cordgrass habitat at the mouth of the Santa Ana River adjacent to the site approximately 900 feet beyond the 300-foot Buffer; neither Project construction nor Project operation exhibit potential for indirect impacts to breeding or foraging.

<sup>&</sup>lt;sup>13</sup> One California gnatcatcher location is mapped immediately adjacent to the southeast corner of the North ORA and it is important to note that this was a one-time occurrence of a solitary male mapped by GLA in 2006 and would not constitute a potential impact given the vertical separation and unsubstantial change in operation within the North ORA.

# 5.4.1.10 Osprey

There is no suitable breeding or foraging habitat for the osprey within the 14.88-acre Project Site and neither Project construction nor Project operation exhibit potential for direct impacts to breeding or foraging. There is only marginal foraging habitat within the 300-foot Buffer; neither Project construction nor Project operation exhibit potential for indirect impacts to breeding or foraging.

# 5.4.1.11 San Diego fairy shrimp

There is no suitable habitat for the San Diego fairy shrimp in the 14.88-acre Project Site or the 300-foot Buffer. There is no potential for direct or indirect impacts to the San Diego fairy shrimp with any component of the Project.

#### 5.4.1.12 White-tailed kite

There is no suitable breeding or foraging habitat for the yellow-breasted chat within the 14.88-acre Project Site and neither Project construction nor Project operation exhibit potential for direct impacts to breeding or foraging. There is breeding and foraging habitat within the 300-foot Buffer; however, neither Project construction nor Project operation exhibit potential for significant indirect impacts to breeding or foraging.

#### 5.4.1.13 Yellow-breasted chat

There is no suitable breeding or foraging habitat for the yellow-breasted chat within the 14.88-acre Project Site and neither Project construction nor Project operation exhibit potential for direct impacts to breeding or foraging. There is breeding and foraging habitat within the 300-foot Buffer; however, neither Project construction nor Project operation exhibit potential for significant indirect impacts to breeding or foraging.

#### 5.4.1.14 Yellow warbler

There is no suitable breeding or foraging habitat for the yellow warbler within the 14.88-acre Project Site and neither Project construction nor Project operation exhibit potential for direct impacts to breeding or foraging. There is breeding and foraging habitat within the 300-foot Buffer; however, neither Project construction nor Project operation exhibit potential for significant indirect impacts to breeding or foraging.

### 5.5 Impacts to Special-Status Habitats

As noted in Section 4.2 above, the 14.88-acre Project Site contains essentially no native habitat and no special-status habitats with the exception of very small remnants noted below. All of the habitats addressed below will be fully avoided.

#### 5.5.1 Disturbed California Brittle Bush Scrub

Disturbed California Brittle Bush Scrub accounts for approximately 0.04 acre at the southeast corner of the South ORA. The area is dominated by California brittlebush (*Encelia californica*). Project grading would result in no impacts to this habitat.

#### 5.5.2 Disturbed California Brittle Bush Scrub - California Buckwheat Scrub

Disturbed California Brittle Bush Scrub – California Buckwheat Scrub accounts for approximately 0.03 acre at the southeast corner of the North ORA transition to the ORA Easement. The area is dominated by California buckwheat (*Eriogonum fasciculatum*) with a few individual of California brittlebush (*Encelia californica*). Project grading will avoid impacts to 0.03 acre of this habitat within the Project Site.

#### 5.5.3 Coastal Sage Scrub

Coastal Sage Scrub accounts for approximately 0.12 acre at the southeast corner of the South ORA. The area is dominated by California sagebrush (*Artemisia californica*) with a few individual of California brittlebush (*Encelia californica*). Project grading would result in no impacts to this habitat.

### 5.5.4 Southern Coastal Salt Marsh (includes mudflat and Pickleweed Mats)

The Proposed Project has been designed to fully avoid all areas of southern coastal salt marsh and in addition, the Project will be set back a minimum of 50 feet from southern coastal salt marsh and mudflats consistent with the City's CLUP policies, with the exception of the disturbed pickleweed that occurs at the western portion of the drainage swale that traverses the North ORA. The drainage swale is highly degraded and currently does not exhibit a 50-foot buffer due to adjacent oil field operations. Therefore there will be no impacts to SCSM associated with Proposed Project.

#### 5.5.5 Alkali Heath Marsh

There is no alkali heath marsh within the 14.88-acre Project Site and as such, there would be no direct impacts to this habitat. In addition, the Project setback is greater than 50 feet from the alkali heath marsh, consistent with the City of Newport Beach CLUP.

#### 5.5.6 Southern Black Willow Forest

There is no southern black willow forest within the 14.88-acre Project Site and as such, there would be no direct impacts to this habitat. In addition, the Project setback is greater than 50 feet from the black willow forest, consistent with the City of Newport Beach CLUP.

# 5.6 CLUP- Avoidance of ESHA - Threshold (e)

Section 4.1.1-1 of the CLUP sets forth several attributes to be used when determining whether a habitat area meets the definition of ESHA. In addition to identifying those sensitive vegetation communities that could potentially be considered ESHA under the Coastal Act, the CLUP sets forth various policies that establish development restrictions for ESHA in the City's coastal zone, as follows:

- 4.1.1-3 Prohibit new development that would necessitate fuel modification in ESHA.
- 4.1.1-4 Protect ESHAs against any significant disruption of habitat values.
- 4.1.1-5 Design land divisions, including lot line adjustments, to preclude new development within and minimize impacts to ESHAs.
- 4.1.1-6 Require development in areas adjacent to environmentally sensitive habitat areas to be sited and designed to prevent impacts that would significantly degrade those areas, and to be compatible with the continuance of those habitat areas

A number of special-status habitats listed by the CNDDB were identified on the site. All of these habitats are also presumed to be ESHA by the City of Newport Beach, as set forth in the CLUP, unless site-specific evidence rebuts the ESHA presumption. Portions of the southern coastal bluff scrub, maritime succulent scrub/encelia scrub, and coastal sage scrub (designated as Coast Brittle Bush Scrub and its associates as defined by the CMVII) do not meet the City's ESHA threshold due to one or more of the following reasons/conditions: small patch size, isolation, dominance by non-native species, disturbance, or fragmentation. As such, proposed direct impacts to those identified areas Coast Brittle Bush Scrub would not affect ESHA as these impacts would be associated with limited areas with very low habitat function.

Other areas that meet the definition of ESHA will be fully avoided except for unavoidable impacts to Disturbed California Brittle Bush Scrub - California Buckwheat Scrub at the southwest corner of the North ORA as addressed below.

#### 5.6.1. Coast Brittle Bush Scrub

All of the Brittle Bush Scrub and Coastal Sage Scrub will be avoided by project grading.

### 5.6.2 Southern Coastal Salt Marsh (includes mudflat)

The proposed project has been designed to fully avoid all areas of southern coastal salt marsh and in addition, the Project will be set back a minimum of 50 feet from southern coastal salt marsh and mudflats consistent with the City's CLUP policies, with the exception of the disturbed pickleweed that occurs at the western portion of the drainage swale that traverses the North ORA. The drainage swale is highly degraded and currently does not exhibit a 50-foot buffer due

to adjacent oil field operations. Therefore there will be no significant direct impacts to SCSM associated with proposed project.

#### 5.6.3 Alkali Heath Marsh

There is no alkali heath marsh within the 14.88-acre Project Site and as such, there would be no direct impacts to this habitat. In addition, the Project setback is greater than 50 feet from the alkali heath marsh, consistent with the City of Newport Beach CLUP.

#### 5.6.4 Southern Black Willow Forest

There is no southern black willow forest within the 14.88-acre Project Site and as such, there would be no direct impacts to this habitat. In addition, the Project setback is greater than 50 feet from the black willow forest, consistent with the City of Newport Beach CLUP.

# 5.7 Impacts to Raptor Foraging Habitat – Threshold (d)

The 14.88-acre Project Site contains very limited suitable foraging area for raptors. Certain areas within the 300-foot buffer, specifically in the lowlands contain potentially suitable raptor foraging habitat, specifically the areas of coastal salt marsh, mud flat, and alkali heath marsh. As noted above, these areas are set back a minimum of 50 feet from the project site and there would be no significant impacts to raptor foraging.

### 5.8 Nesting Birds and Migratory Bird Treaty Act Considerations

The 14.88-acre Project Site contains a limited number trees and/or shrubs that have the potential to support nesting birds. Impacts to migratory nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA), and would be significant pursuant to Threshold (d)<sup>14</sup>. Mitigation is necessary to reduce potential impacts to less than significant.

# 5.9 Impacts to Critical Habitat

#### 5.9.1.1 California Gnatcatcher

As noted, the entire WNO Property is located within designated Critical Habitat for the California gnatcatcher. The 14.88-acre Project Site exhibits very limited amounts of native vegetation that is highly degraded and represents minimal Primary Constituent Elements. Impacts associated with the project would not result in an adverse modification to Critical Habitat.

<sup>&</sup>lt;sup>14</sup> The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

# 5.10 Impacts to Corps, CDFW, and CCC Jurisdictional Waters

### 5.10.1 Corps Jurisdiction - Section 10

A portion, 6.58 acres, of the 14.88-acre Project Site is located within Section 10 Waters pursuant to Section 10 of the 1899 Rivers and Harbors Act as determined by the Corps based on soil type (tidal flats) and/or elevation (Mean High Water). None of the areas potentially affected by the project are currently navigable and there would be no actual impacts on navigability; however, it will be necessary to obtain authorization from the Corps for the proposed work in this area.

#### 5.10.2 Corps Jurisdiction - Section 404

Corps jurisdiction within the Oilfield Consolidation and Tank Farm Improvement site is limited to the Drainage Swale that traverses the northern edge of the North ORA and totals approximately 0.08 acre of which 0.04 acre consist of jurisdictional wetlands. The Project will avoid impacts to the swale during construction and as such will avoid the need to obtain authorization for discharge of fill into the swale pursuant to Section 404 of the CWA.

### 5.10.3 CDFW Jurisdiction

CDFW jurisdiction within the Oilfield Project Site is limited to the Drainage Swale that traverses the northern edge of the North ORA and totals approximately 0.08 acre of which 0.04 acre consist of herbaceous riparian habitat. The Project will avoid impacts to the swale during construction and as such will avoid the need to obtain authorization for alteration of the swale pursuant to Section 1602 of the Fish and Game Code.

#### 5.10.4 CCA Wetlands

Coastal Commission wetlands within the Project Site is limited to the Drainage Swale that traverses the northern edge of the North ORA and totals approximately 0.08 acre. The Project will avoid impacts to the swale during construction and as such will avoid the need to obtain authorization for impacts to the swale pursuant to the CCA.

#### 6.0 MITIGATION MEASURES

# 6.1 Special-Status Plants

The Proposed Project would impact 82 individuals of southern tarplant, a taxon with 1B status in the California Rare Plant Rank. Impacts to 1B plant are considered significant; however, this can be mitigated through seed collection of the impacted population and dispersal within other suitable areas of the lowland. With mitigation (see below), the impacts to southern tarplant can be reduced to less than significant.

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# 6.2. Potential Impacts During Construction

If construction occurs during the breeding season (February 15 to July 15) for the California gnatcatcher and coastal cactus wren, a biological monitor will conduct weekly surveys of the coastal sage scrub within 300 feet of grading activities. If California gnatcatcher and coastal cactus wren nests are located within 300 feet, noise monitoring will be implemented and where construction noise exceeds 60 decibels and the birds appear to be distressed, noise mitigation will be implemented and may include (but not be limited to), construction of noise barriers, change in grading arrays, or other means determined appropriate by the project biologist.

In addition to California gnatcatcher and coastal cactus wren construction within the 14.88-acre Project Site will affect a limited number trees and/or shrubs that have the potential to support nesting birds. Impacts to migratory nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA), and would be significant pursuant to Threshold (d)<sup>15</sup>. Mitigation is necessary to reduce potential impacts to less than significant. Therefore, it is recommended that vegetation be removed outside the avian breeding season (February 15 to July 15). If it is not possible to remove the vegetation outside of the nesting season, a qualified biologist will conduct a survey for nesting birds no more than three days prior to removal of the vegetation. If nesting birds are detected, construction will be halted and an appropriate buffer as determined by the biologist and no work will be performed in the area until the fledglings have left the nest and are no longer dependent upon the nest.

# 6.3. Indirect Permanent Impacts to Habitat from Lighting

In order to ensure that project lighting on the site does not cause significant impacts to nesting CAGN or CAWR the following measures will be implemented:

- 1. All lighting within 100 feet of coastal sage scrub will be directed away from coastal sage scrub habitat.
- 2. All lighting within 100 feet of coastal sage scrub will consist of the lowest intensities that still provide for adequate safety.
- 3. A qualified biologist will review lighting plans prior to construction to ensure that the proposed lighting minimizes potential impacts on the CAGN or CAWR.

### 6.4 Mitigation for Impacts to Southern Tarplant

As noted the Project will impact 82 individuals of southern tarplant. With the following mitigation, the impacts would be reduced to less than significant.

<sup>&</sup>lt;sup>15</sup> The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

#### 6.4.1 Seed Collection

Prior to seed collection, existing populations were monitored to track phenology and determine the optimal period for seed collection. Seed will be collected during the fall of the year prior to the start of construction.

#### 6.4.2 Selection of Receptor Site(s)

Receptor sites for the translocation of southern tarplant will consist of mesic areas with alkaline soils adjacent to existing alkali marsh habitats, alkali meadows, and riparian habitats within the lowland portion of Newport Banning Ranch. Areas will have less than 20-percent cover by weedy species to reduce efforts in site preparation. Because the impact area is approximately 0.30 acre, the mitigation site will cover between 0.30 and 0.40 acre.

#### 6.4.3 Site Preparation

Prior to seeding, non-native species cover will be reduced to less than 10-percent.

#### 6.4.3 Seed Introduction

Seed will be introduced to the receptor sites by hand-broadcasting during September of the year that construction begins.

#### 6.4.4 Maintenance

Because southern tarplant does not emerge until late spring and does not flower until July or August, the potential for removing this species accidentally during weeding is high. Therefore, no weeding will be performed in areas where southern tarplant is introduced. In addition, no herbicides will be used within the southern tarplant reintroduction areas.

### 6.4.5 Monitoring

Translocated southern tarplant will be monitored annually for the five-year monitoring period. As with most annuals, the number of germinating individuals can vary significantly from year to year based on rainfall and for this species, disturbance. Because population sizes can vary from year to year, the relative sizes of extant and translocated populations are expected to vary widely from year to year. Because of this, development of performance standards can be difficult. As such, the performance standards are intended to evaluate general trends relative to performance and include flexibility, recognizing the inherent variability of this species. Under average conditions, populations should increase to carrying capacity over time; however, in any given year, southern tarplant may emerge in very low numbers if conditions are not appropriate. Therefore, if during any of the five-year period, the standard set forth for flowering individuals for year five is achieved, the program will be considered as having achieved the five-year performance standard. The performance standards set forth below are based

on expected average conditions; however, there is a high likelihood that numbers will vary substantially from year to year.

#### First-Year Monitoring

Southern tarplant typically flowers as early as June and sometimes into October and with peak flowering varying according to seasonal rainfall patterns. Monitoring of translocated populations will begin in on or about July 1, and will be conducted every two weeks until peak flowering occurs. When peak flowering occurs, as determined by the Restoration Specialist/Plant Ecologist, quantitative measurements (i.e. counts of flowering individuals) will be obtained. Success Standard: translocated populations combined to achieve 30 percent of number of individuals impacted. Based on the number of 82 impacted individuals, 30 percent equals 25 flowering individuals.

#### Second-Year Monitoring

Success Standard: translocated populations combined to achieve 45 percent of number of individuals impacted. Based on the number of 82 impacted individuals, 45 percent equals 37 flowering individuals.

#### Third-Year Monitoring

Success Standard: translocated populations combined to achieve 60 percent of number of individuals impacted. Based on the number of 82 impacted individuals, 60 percent equals 49 flowering individuals.

#### Fourth-Year Monitoring

Success Standard: translocated populations combined to achieve 75 percent of number of individuals impacted. Based on the number of 82 impacted individuals, 75 percent equals 62 flowering individuals.

#### Fifth-Year Monitoring

Success Standard: translocated populations combined to achieve 90 percent of number of individuals impacted. Based on the number of 82 impacted individuals, 90 percent equals 74 flowering individuals.

#### 7.0 CERTIFICATION

"CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief."

		Tony Bondand
DATE: September 28, 2015	SIGNED:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

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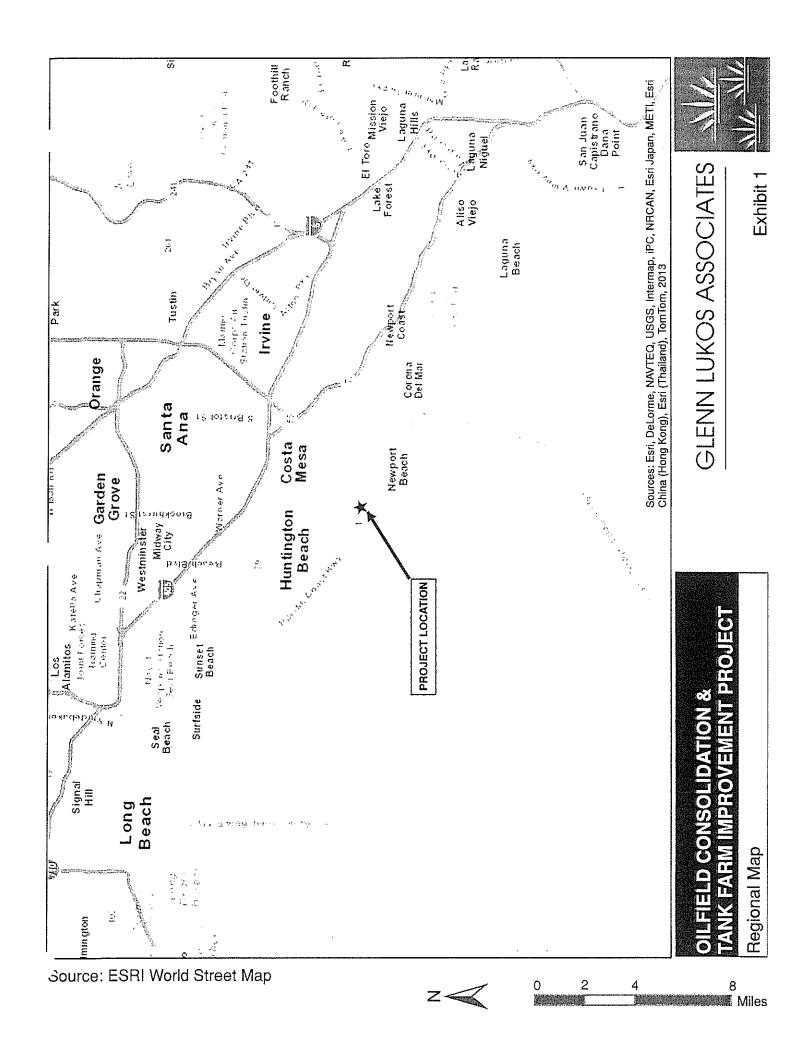
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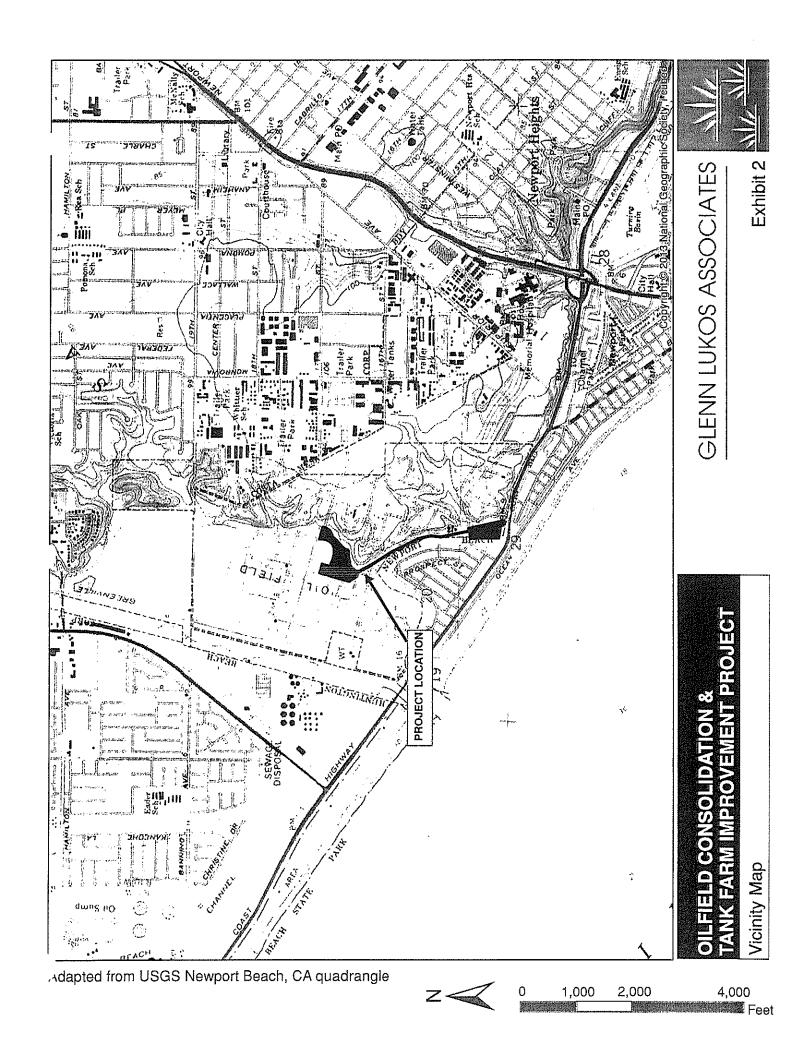
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September 22, 2015

Leonard Anderson, Esq. Horizontal Development LLC P.O. Box 1487 Newport Beach, California 92659

SUBJECT:

Jurisdictional Delineation for Horizontal Development LLC Oil Remainder Area at

West Newport Oil Field, Orange County, California.

Dear Mr. Anderson:

This letter report summarizes our preliminary findings of U.S. Army Corps of Engineers (Corps) and California Department of Fish and Wildlife (CDFW) jurisdiction for the above-referenced Horizontal Development LLC Oil Remainder Area at West Newport Oil Field (Project Site). This report also addresses wetlands as defined under the City of Newport Beach Local Coastal Program and the California Coastal Act for the Oil Remainder Area as well as offsite wetlands within approximately 300 feet of the Project Site.

The Horizontal Development LLC Oil Remainder Area at West Newport Oil Field, Orange County [Exhibit 1], comprises approximately 14.88 acres and contains no blue-line drainages (as depicted on the U.S. Geological Survey (USGS) topographic map Newport Beach, California [dated 1978 and photorevised in 1981]) [Exhibit 2]. On July 24 and 28, 2015 and August 4 and 7, 2015 regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the project site to determine the limits of (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act, (2) CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code, and 3) wetlands as defined under the California Coastal Act. Enclosed is a 50-scale map [Exhibit 3] that depicts the areas of Corps and CDFW jurisdiction as well as wetlands as defined under the California Coastal Act, within the Oil Remainder Area. Exhibit 4 depicts adjacent wetlands as defined under the Coastal Act within approximately 300 feet of the boundaries of the Project Site. Wetland data sheets are attached as Appendix A.

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<sup>&</sup>lt;sup>1</sup> This report presents our best effort at estimating the subject jurisdictional boundaries using the most up-to-date regulations and written policy and guidance from the regulatory agencies. Only the regulatory agencies can make a final determination of jurisdictional boundaries. If a final jurisdictional determination is required, GLA can assist in getting written confirmation of jurisdictional boundaries from the agencies.

Corps jurisdiction within the Project Site totals approximately 0.08 acre of which 0.04 acre consist of jurisdictional wetlands.

CDFW jurisdiction within the Project Site totals approximately 0.08 acre, of which approximately 0.04 acre consist of sparsely vegetated herbaceous riparian habitat.

Wetlands defined under the California Coastal Act total approximately 0.078 acre within the Project Site and additional wetlands within adjacent areas up to approximately 300 feet of the Project Site.

#### I. METHODOLOGY

The Horizontal Development LLC Oil Remainder Area and adjacent areas have been the subject of previous jurisdictional delineations. GLA submitted a jurisdictional delineation report dated Mach 5, 2009 that was finalized following field verification by the Corps on July 3, 2008. More recently, BonTerra Consulting prepared a jurisdictional delineation dated August 2011 that addressed Corps, CDFW jurisdiction and wetlands as defined under the Coastal Act. 3

Prior to beginning the field investigation, GLA reviewed the previous delineation reports, and also reviewed a variety of color aerial photograph, topographic base map of the property, and the previously cited USGS topographic map to determine the locations of potential areas of Corps/CDFW jurisdiction and wetlands defined by the California Act. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Potential wetland areas on the site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual<sup>4</sup> (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0<sup>5</sup> (Arid West Supplement). Within the 14.88 acre Project Site the limits of Corps and CDFW jurisdiction as well as the extent of wetlands were recorded using GPS technology with sub-meter accuracy. For areas within the buffers, sub-meter GPS was

<sup>&</sup>lt;sup>2</sup> Glenn Lukos Associates. March 5, 2009. U.S. Army Corps of Engineers Jurisdictional Delineation for the Newport Banning Ranch Property, City of Newport Beach and Unincorporated Orange County, Orange County, California.

<sup>&</sup>lt;sup>3</sup> Bonterra Consulting. August 2011. Draft Jurisdictional Delineation for Newport Banning Ranch, Newport Beach, California.

<sup>&</sup>lt;sup>4</sup> Environmental Laboratory. 1987. <u>Corps of Engineers Wetlands Delineation Manual</u>, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

<sup>&</sup>lt;sup>5</sup> U.S. Army Corps of Engineers. 2008. <u>Regional Supplement to the Corps of Engineers Wetland Delineation</u>
<u>Manual: Arid West Region (Version 2.0)</u>. Ed. J.S. Wakeley, R.W. Lichevar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center and Engineering Laboratory.

used where adjustment of previously delineated wetland boundaries was necessary. Other data were recorded onto wetland data sheets.

The Soil Conservation Service (SCS)<sup>6</sup> has mapped the following soil types, depicted on Exhibit 5, as occurring in the general vicinity of the project site:

#### Beaches (115)

Beaches consist of sandy, gravelly, or cobbly coastal shores that are washed and rewashed by tidal and wave action. These areas may be partly covered with water during high tides or stormy periods. Runoff is slow, and the erosion hazard is high.

#### Bolsa

The Bolsa series consists of somewhat poorly drained soils on alluvial fans. These soils formed in mixed alluvium. They have slopes of 0-2 percent, are nearly level and occur on large alluvial fans. The following Bolsa series soil type was mapped on the Banning ranch property:

Bolsa Silt Loam (122)

Myford

The Myford series consists of moderately well drained soils on marine terraces. These soils formed in sandy sediments. Slopes range from nearly level to a moderately sloping 9 percent, and from 9 to 30 percent, eroded.

- Myford Sandy Loam, 0-2 percent slopes (172)
- Myford Sandy Loam, 2-9 percent slopes (173)
- Myford Sandy Loam, 9-30 percent slopes, eroded (177)

#### Riverwash

Riverwash consists of areas of unconsolidated alluvium, generally stratified and varying widely in texture. Riverwash can be sandy, gravelly, or cobbly.

Riverside (185)

#### Tidal Flats

Tidal Flats are nearly level areas adjacent to bays and lagoons along the coast. Periodically they are covered by tidal overflow. Some of the higher areas are only covered during very high tides. Tidal flats are stratified clayey to sandy deposits. They are poorly drained and high in salts.

<sup>&</sup>lt;sup>6</sup> SCS is now known as the National Resource Conservation Service or NRCS.

Because only a limited area on the Newport Banning Ranch Site, covering approximately 11.94 acres is subject to tidal flooding, due to diking and berming more than 80 years ago, it is not possible to determine the extent of Section 10 Waters based on current site conditions. Therefore, the limit of the "Tidal Flats" soil series was used as a surrogate in consultation with Mr. Jae Chung of the Corps of Engineers <sup>7</sup> as depicted on Exhibit 6 with 6.58 acres of Section 10 Waters on the Project Site.

None of the above soil units are identified as hydric in the SCS's publication, *Hydric Soils of the United States*<sup>8</sup>. Myford sandy loam (172 and 173), Pits (185), Riverwash (185) and Tidal Flats (122) and (211) are listed as hydric in SCS's *Field Office Official List of Hydric Soil Map Units for Orange & Part of Riverside Co., California.*<sup>9</sup> It is important to note that under the Arid West Supplement, the presence of mapped hydric soils is no longer dispositive for the presence of hydric soils. Rather, the presence of hydric soils must now be confirmed in the field independent of previous mapping.

#### II. JURISDICTION

## A. Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a)<sup>10</sup> as:

- (1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (2) All interstate waters, including interstate wetlands;
- (3) The territorial seas:

<sup>7</sup> Personal communication with Jae Chung in 2000 regarding Section 10 jurisdiction.

<sup>&</sup>lt;sup>8</sup> United States Department of Agriculture, Soil Conservation Service. 1991. <u>Hydric Soils of the United States</u>, 3rd Edition, Miscellaneous Publication Number 1491. (In cooperation with the National Technical Committee for Hydric Soils.)

<sup>&</sup>lt;sup>9</sup> United States Department of Agriculture, Soil Conservation Service. 1992. Hydric Soil Lists, Field Office Technical Guide, Davis California.

<sup>&</sup>lt;sup>10</sup> As revised by the Corps and EPA, "Clean Water Rule: Definition of 'Waters of the United States"; Final Rule," 80 Federal Register 124 (29 June, 2015), pp. 37054-37127.

(4) All impoundments of waters otherwise identified as waters of the United States under this section;

(5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section;

(6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;

- (7) All waters in paragraphs (a)(7)(i) through (v) of this section where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. The waters identified in each of paragraphs (a)(7)(i) through (v) of this section are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section. Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.
  - (i) Prairie potholes. Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, located in the upper Midwest.
  - (ii) Carolina bays and Delmarva bays. Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.
  - (iii) Pocosins. Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.
  - (iv) Western vernal pools. Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depression, soils with poor drainage, mild, wet winters and hot, dry summers.
  - (v) Texas coastal prairie wetlands. Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.
- (8) All waters located within the 100- year floodplain of a water identified in paragraphs (a)(1) through (3) of this section and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1)

through (3) of this section. For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (3) of this section or within 4,000 feet of the high tide line or ordinary high water mark. Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

# 3. Wetland Definition Pursuant to Section 404 of the Clean Water Act

The term "wetlands" (a subset of "waters of the United States") is defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland Delineation Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

 more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands<sup>11</sup>);

<sup>&</sup>lt;sup>11</sup> Reed, P.B., Jr. 1988. <u>National List of Plant Species that Occur in Wetlands</u>. U.S. Fish and Wildlife Service Biological Report 88(26.10).

- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

## B. California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or manmade reservoirs." It is important to note that the Fish and game Code defines fish and wildlife to include: all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively).

Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence absence of vegetation types or communities. By long practice, CDFW defines a stream as "a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators."

# C. California Coastal Act/California Coastal Commission

Before addressing the specific findings for the subject site, it is important to understand the methods used by the Coastal Commission for defining wetlands and the approaches used by Coastal Commission staff in implementing the Coastal Wetland definition. The Commission's "one parameter" wetland definition, taken from the California Code of Regulations Title 14, states:

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats (14 CCR Section 13577).

The presence of any one of three wetland indicators (hydrology, hydrophytes or hydric soils) qualifies an area as a wetland, pursuant to the CCC's definition. Furthermore, the CCC establishes the upland limit of a wetland as:

- a. the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover
- b the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or
- c in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not (14 CCR Section 13577).

The Commission's determination of the presence of a "One Parameter Wetland" typically follows the methods contained U.S. Army Corps of Engineers 1987 Wetland Delineation Manual (Wetland Manual) and more recently, the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)<sup>13</sup>, which for federal wetlands requires the presence of wetlands hydrology, hydric soils, and a predominance of hydrophytic vegetation. For federal determinations, the corroboration provided by the required presence of both wetlands hydrology and hydric soils greatly reduces the possibility of misidentification of plants as growing in wetlands (as opposed to uplands). On the other hand, Commission staff and even Commissioners themselves casually refer to the Commission's standard for identifying wetlands as a "One-Parameter Test." This is a misleading description of how the Commission's delineation process described in Reg. §13577 actually works. In reality,

<sup>&</sup>lt;sup>12</sup> Environmental Laboratory. 1987. <u>Corps of Engineers Wetlands Delineation Manual</u>, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

<sup>&</sup>lt;sup>13</sup> U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Ed. J.S. Wakeley, R.W. Lichevar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

the Commission's "One Parameter" test only establishes a presumption that the other indicator(s) also are present. While the Commission takes the position that even if only one wetland indicator is present, a presumption is nonetheless established that a wetland is present – such a presumption can be "rebutted by strong, independent evidence of upland condition." (This is a quote from Staff Ecologist Dr. John Dixon at a Coastal Commission hearing on November 5, 2003.) Dr. Dixon also wrote in an opinion referenced in a staff report prior to that 2003 hearing that "In recognition of the fact that a proportion of wetland indicator plants occur in uplands, the wetland presumption may be falsified where there is strong, positive evidence of upland conditions." In setting forth such a position, the Commission has indicated that whereas the ACOE has the burden to demonstrate that all three indicators exist, the Commission has the burden to show that only one indicator exists. Once the Commission does that, the burden shifts to the applicant who must then prove that one or both of the other indicators does not exist.

Therefore, the Commission's position is NOT, as even the Commission itself sometimes seems to believe, that the presence of a single parameter establishes with certainty that a wetland is present, but rather that the presence of one of the three wetlands parameters creates a "rebuttable presumption" that the area in question is a wetland. This is a critical distinction because it allows a project applicant to demonstrate that, despite the presence of a single parameter (i.e., a predominance of species with an indicator status of FAC or wetter), the area is NOT a wetland.

#### III. RESULTS

The jurisdictional delineation addressed the potential for onsite features that could be subject to Corps, CDFW and CCC jurisdiction as well as offsite wetlands that meet the California Coastal Act definition of wetlands that occur within approximately 300 feet of the Horizontal Development LLC Oil Remainder Area.

## A. <u>Description of Project Site</u>

As noted, the Project Site covers 14.88 acres. For purposes of this discussion, the site includes three components, referred to as "Oil Remainder Areas" (ORA): the "North ORA", which occurs at the southeast corner of the lowland portion of the larger West Newport Oil site, which is currently occupied by the existing tank farm and a number of drill sites; the "South ORA, which is located immediately north of Pacific Coast Highway at the extreme southwest corner of the West Newport Oil site, and the "ORA Easement", which is a narrow corridor for connecting pipelines and transportation access. Each of these is designated on the Exhibit 3.

### B. <u>Corps Jurisdiction</u>

## 1. Drainage Ditch

The North ORA includes a single Drainage Ditch, which traverses the northern edge of the North ORA, totaling 0.08 acre of which 0.04 acre consists of jurisdictional wetlands. The ditch connects to down-stream tidal waters and is considered a Water of the U.S pursuant to Section 404 of the federal Clean Water Act. The North ORA, South ORA and ORA Easement areas contain no other Waters of the U.S. subject to Corps jurisdiction pursuant to Section 404.

The uppermost 43 feet of the drainage ditch with an average width of five feet and supports a predominance of upland vegetation including ripgut (Bromus diandrus, UPL), five-hook bassia (Bassia hyssopifolia, FACU), and salt-marsh heliotrope (Heliotropum curassivicum, FACU). This area contains sandy soils with no hydric indicators and does not exhibit wetland hydrology. Beginning approximately 43 feet from the start of the drainage ditch, the feature supports a predominance of wetland indicator plants, specifically rabbitsfoot grass (Polypogon monspeliensis, FACW) and occasional individuals of common pickleweed (Salicornia pacifica, OBL). Soils are sandy with a matrix of 10YR 3.3 with no redoximorphic features and groundwater at 14 inches. Vegetation remains sparse in the ditch with occasional patches of rabbitsfoot grass and pickleweed.

Beginning at approximately 350 feet from the start of the ditch, the feature supports stands of common pickleweed and rabbitsfoot grass and also exhibits hydric soils that exhibit a matrix of 10YR 3/2 with common redoximorphic features of 7.5YR 4/6. These areas exhibit wetland hydrology including standing water and saturation in the upper 12 inches.

#### 2. Section 10 Waters

As noted, the southwest corner of the Newport Banning Ranch site contains 11.94 acres of area that is subject to Corps jurisdiction pursuant to Section 10 of the 1899 Rivers and Harbors Act. Of the 11.94 acres, 6.58 acres occur within the Project Site as depicted on Exhibit 6.

#### B. <u>CDFW Jurisdiction</u>

## 1. Drainage Ditch

CDFW jurisdiction associated with the totals approximately 0.08 acre of which 0.04 acre consists of sparsely vegetated herbaceous riparian habitat.

## C. California Coastal Commission Wetlands Onsite

## 1. Drainage Ditch

As described above, the upper 43 feet of the Drainage Ditch supports a predominance of upland vegetation including ripgut (*Bromus diandrus*, UPL), five-hook bassia (*Bassia hyssopifolia*, FACU), and salt-marsh heliotrope (*Heliotropum curassivicum*, FACU). This area contains sandy soils with no hydric indicators and does not exhibit wetland hydrology.

Beginning approximately 350 feet from the start of the drainage ditch, the feature supports a predominance of wetland indicator plants, specifically rabbitsfoot grass (*Polypogon monspeliensis*, FACW) and occasional individuals of common pickleweed (*Salicornia pacifica*, OBL). Soils are sandy with a matrix of 10YR 3.3 with no redoximorphic features and groundwater at 14 inches. Vegetation remains sparse in the ditch with occasional patches of rabbitsfoot grass and pickleweed. The presence of a predominance of wetland plants meets the minimum definition for wetlands under the Coastal Act. Areas of the Drainage Ditch downstream of this location exhibit a combination of wetland plants, wetland hydrology or hydric soils (e.g., soils with a matrix of 10YR 3/2 with common redoximorphic features of 7.5YR 4/6) and as such, meet the Coastal Act definition of a wetland. The wetland limits are depicted on Exhibit 3 along with wetland data points "Ditch 1 and Ditch 2".

Above the ditch on the adjacent ground, 40 inches above the high-water mark in the channel, alkali weed (*Cressa truxillensis*, FACW) is growing on the bank is an obviously upland landscape position. Soils have a matrix of 10YR 3/3 and 10YR 4/3 with no redoximorphic features, and this location was determined to by upland, including for CCA defined wetlands.

# D. <u>California Coastal Commission Wetlands Offsite/Adjacent</u>

#### 1. Mulefat Scrub North of Road

A patch of mulefat scrub occurs to the north of the North ORA boundary that is characterized by a monoculture of mulefat (*Baccharis salicifolia*, FAC) with a sparse understory that includes alkali mallow (*Malvella leprosa*, FAC), Spanish sunflower (*Pulicaria paludosa*, FAC), and western goldenrod (*Euthamia occidentalis*, FACW). Soils consist of sandy loam and sandy clay loam with a matrix of 10YR 3/3 and no redoximorphic features. The area lacks wetland hydrology. Based on the predominance of plants with an indicator status of FAC or wetter, the area meets the minimum definition of a wetland under the California Coastal Act. Locations of data collection are depicted on Exhibit and include data on data sheets "Mulefat 1, Mulefat 2 and Mulefat 3" and "Palm 1".

#### 2. Black Willow Wetland

Offsite and north of the access road that runs in parallel and in proximity to the northern site North ORA boundary, is an area of black willow (Salix gooddingii, FACW) and mulefat (Baccharis salicifolia FAC), that also includes a drainage ditch that runs from north to south parallel to the eastern boundary of the North ORA "Extension" area near the northwestern corner of the site. The ditch supports California bulrush (Schoenoplectis californica, OBL) and alkali bulrush (Schoenoplectis maritimus, OBL) along with the black willow and mulefat (see data sheet "willow ditch 1"). The ditch also exhibits standing water (hydrology) and sulfitic odor (hydric soils), and meets the Coastal Act definition of a wetland.

## 3. Pickleweed Mats, Alkali Heath Mats, and Mulefat Scrub

Offsite and west of the North ORA Extension area noted above, is a mosaic of wetland types that include Pickleweed mats dominated by common pickleweed (Salicornia pacifica, OBL), alkali heath (Frankenia salina, FACW) and mulefat (Baccharis salicifolia FAC). Most of the areas do not exhibit wetland hydrology or hydric soils; however, an area of pickleweed, near the southeast corner of the wetland complex (see data sheet "Pickleweed 1") exhibit standing water and sulfitic odor. The wetland mosaic meets the minimum definition for wetlands under the Coastal Act based on a predominance of plants with a wetland indicator status of FAC or wetter, with at least limited areas also meeting the requirements for hydric soils and wetland hydrology.

## 4. Saltmarsh Marsh and Mudflat 1

Offsite and west of the North ORA site is an area of tidally influenced coastal salt marsh dominated by saltwort (*Batis maritima*, OBL) and unvegetated mud flats. The saltmarsh areas exhibit a predominance of wetland vegetation, hydric soils and wetland hydrology and the mudflats exhibit hydric soils and wetland hydrology. Both of the areas meet the Coastal Act definition of wetlands.

Between the North ORA and the area of saltmarsh/mudflat described above, is a small depressional area dominated by saltwort (*Batis maritima*, OBL) that receives tidal flows during high tide events. This saltmarsh area exhibits a predominance of wetland vegetation, hydric soils and wetland hydrology and meets the Coastal Act definition of wetlands.

## 5. Pickleweed 2 and Saltgrass 1

Offsite and west of the North ORA is a north-south trending closed depression that is vegetated predominately by upland coastal sage scrub species, ice plant mats (*Carpobrotus edilis*, UPL), and myoporum (*Myoporum laetum*, FACU) mixed with individuals of mulefat (*Baccharis* 

salicifolia, FAC). The depression includes two areas dominated by pickleweed saltgrass that meet the Coastal Act definition of wetlands.

Pickleweed Wetland 2 occurs near the northern end of the depression. This area supports common pickleweed (Salicornia pacifica, OBL), saltgrass (Distichlis spicata, FAC), and saltmarsh sand spurrey (Spergularia marina, OBL). The soil matrix is highly disturbed; however the zone from four to eight inches has a matrix of 10YR 3/2 with five-percent redoximorphic features of 10YR 4/6. This area exhibits a predominance of wetland vegetation and hydric soils and meets the Coastal Act definition of wetlands.

Saltgrass Wetland 1 occurs at the southern end of the depression. This area supports saltgrass (Distichlis spicata, FAC) and alkali heath (Frankenia salina, FACW). The sandy soils exhibit a matrix of 10YR 4/3 with five-percent redox, which is not sufficient for a hydric soil determination since the matrix must have a chroma of 2 or less. Nevertheless, This area exhibits a predominance of wetland vegetation and meets the Coastal Act definition of wetlands.

### 6. Saltmarsh Marsh and Mudflat 2

Offsite and west of the North ORA and the saltgrass areas noted above is an area of tidally influenced coastal salt marsh dominated by pickleweed (Salicornia pacifica, OBL) and unvegetated mud flats. The saltmarsh areas exhibit a predominance of wetland vegetation, hydric soils and wetland hydrology and the mudflats exhibit hydric soils and wetland hydrology. Both of the areas meet the Coastal Act definition of wetlands.

## 7. Saltmarsh Marsh and Mudflat 3 and Saltgrass 2

Offsite and south of the North ORA and the saltgrass areas noted above is an area of tidally influenced coastal salt marsh dominated by pickleweed (Salicornia pacifica, OBL) and unvegetated mud flats. The saltmarsh areas exhibit a predominance of wetland vegetation, hydric soils and wetland hydrology and the mudflats exhibit hydric soils and wetland hydrology. Both of the areas meet the Coastal Act definition of wetlands. Immediately east of the tidal saltmarsh area on an area of disturbance is a small but dense patch of saltgrass that is included in this larger wetland area.

## 8. Semeniuk Slough

Offsite and west of the ORA Easement is the Semeniuk Slough, which is a tidal slough that includes small areas of fringing coastal saltmarsh. The slough is separated from the ORA Easement by areas of ornamental trees, a gravel-covered access road, and chain-link fence. The slough and adjacent saltmarsh areas exhibit wetland hydrology, while the fringing saltmarsh also

exhibits a predominance of wetland vegetation and hydric soils. Both of the areas meet the Coastal Act definition of wetlands.

### 9. Saltgrass 3

Along the eastern edge of the ORA Easement is a narrow swale vegetated with saltgrass (*Distichlis spicata*, FAC). As summarized on data sheet "Saltgrass 3", Soils consist of sand and sandy loam with the upper six inches exhibiting a color of 2.5Y 4/2 with redoximorphic features.

### 10. Slope Wetland (Pickleweed 3)

Near the southern limit of the ORA Easement is a small slope wetland dominated by pickleweed (Salicornia pacifica, OBL) with saltgrass (Distichlis spicata, FAC) and Emoryi's baccharis (Baccharis emoryi, FACW). As summarized on data sheet "Pickleweed 3", Soils consist of sand and sandy loam with the upper six inches exhibiting a color of 2.5Y 4/2 with no redoximorphic features and from six to 14 inches, 2.5Y 4/2 with 10-percent redox of 10YR 4/6.

#### IV. DISCUSSION

### A. Impact Analysis

Under the current plan for the Horizontal Development LLC, Oil Remainder Area at West Newport Oil Field, there would be no direct impacts to wetlands due to grading. Work conducted within Section 10 Waters, while not affecting existing aquatic resources would require authorization from the Corps through issuance of a Department of the Army Permit.

If you have any questions about this letter report, please contact Tony Bomkamp at (949) 837-0404 ext. 41.

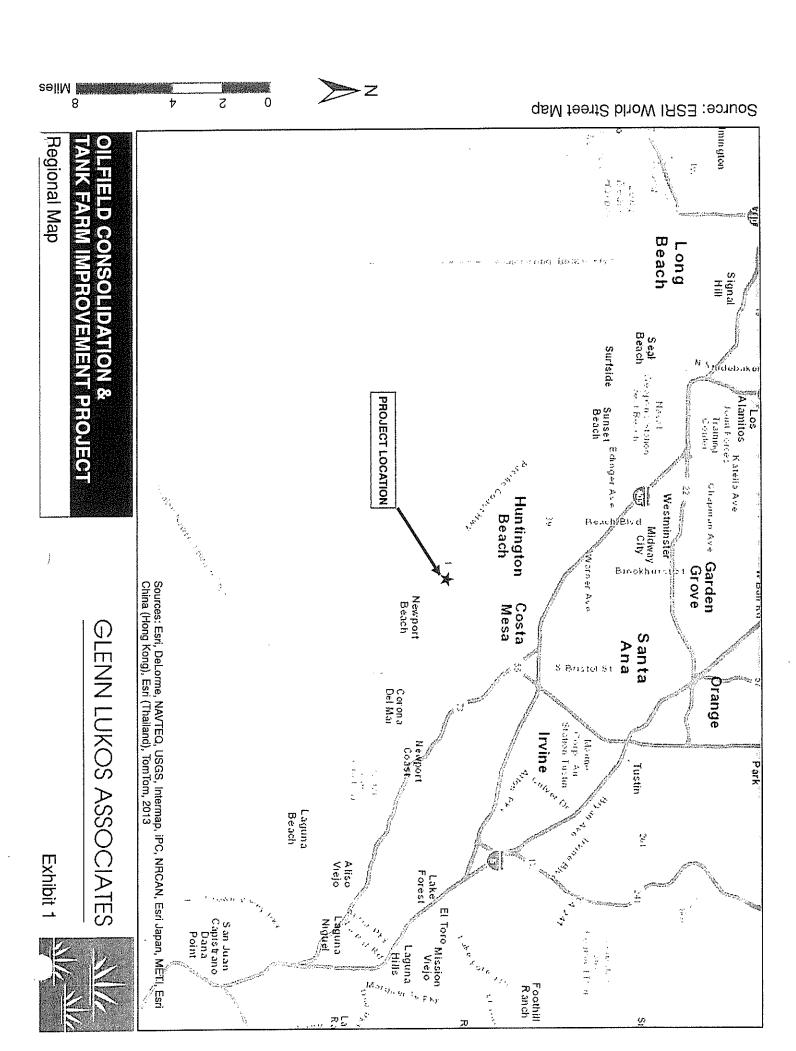
Sincerely,

GLENN LUKOS ASSOCIATES, INC.

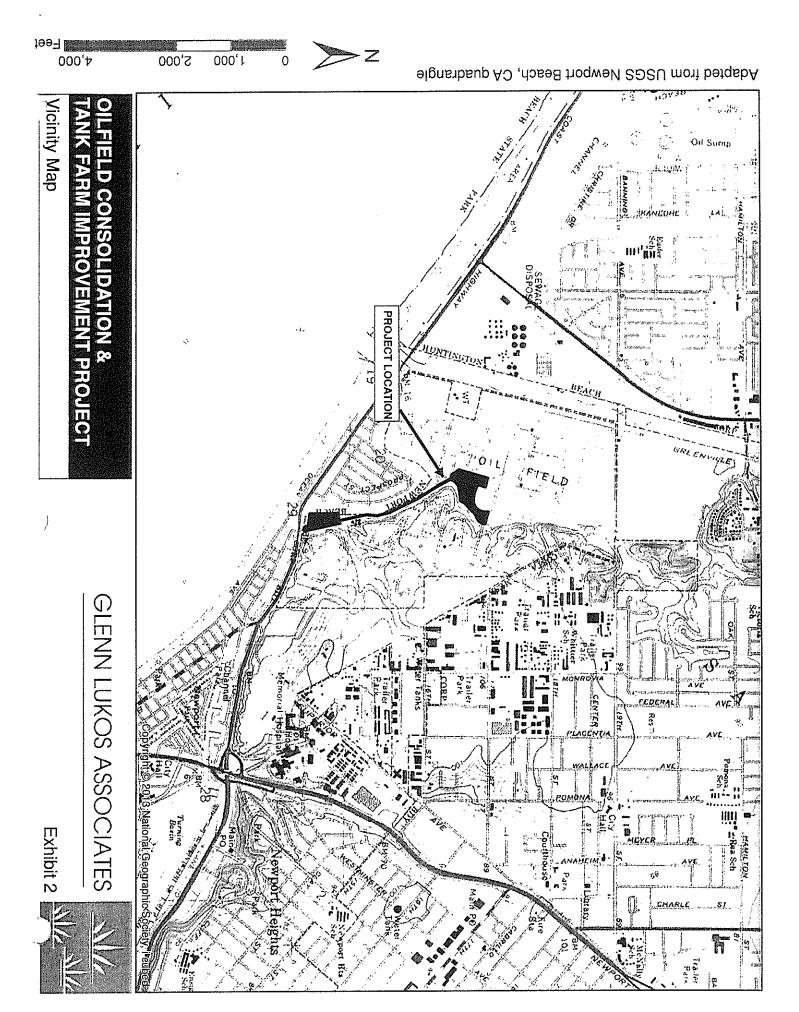
Tony Bomkamp Regulatory Specialist

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## WETLAND DETERMINATION DATA FORM - Arid West Region

Projecusite: WEST NEWFORT DIL THO	JK FARM_City/County:	An Line Sampling Date: X - H - 15
Applicant/Owner: WEST NEWPORT BLL		State: CA Sampling Point: Ditch 1
Investigator(s): Throntonp	Section, Township, I	Range: UNSCOTUTION, TSG, RIOW
Landform (billstone terrace etc.):	{ ocal relief (concav	e. convex. none): (SNCONE Slope (%): 3-5
Subregion (LRR):	Lat 23° 28' 0 4 32"	Long: 117° 56 45-87" Datum: NATO 6
Soil Map Unit Name: Tlaal Flats		NW classification: Palustria
Are climatic / hydrologic conditions on the site typical for	or this time of year? Yes X No	
		e "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		
SUMMARY OF FINDINGS - Attach site m	ap snowing sampling poin	t locations, transects, important features, etc.
Hydrophylic Vegetation Present? Yes	_ No Is the Sampl	ad Aras
Hydric Soil Present? Yes	No K within a West	& /
Wetland Hydrology Present? Yes	_ No <u> </u>	
Remarks:		
VEGETATION – Use scientific names of p	olants.	
	Absolute Dominant Indicate	Dominance Test worksheet:
Tree Stratum (Plot size;)	% Cover Species? Status	- Number of Continuate Species (
1		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4	= Total Cover	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	= Total Cuvel	That Are OBL, FACW, or FAC: (A/B)
1.		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x1=/
4		FACW species65 x2=130
5		FAC species x 3 = 15 FACU species x 4 =
Herb Stratum (Plot size:	= Total Cover	UPL species x 5 =
1. Pohipocon monspeliansis	60 Y FREL	Column Totals: 7/ (A) 136 (B)
2 Salleothia Partition	1 4 OBL	1 20
3. EuThamia occidentalis	_ <u> </u>	T TO FOLIO TO SINGON DITT
4. Bassia hycsopifolia		Hydrophytic Vegetation Indicators:
5		_ Dominance Test is >50%  ✓ Prevalence Index is ≤3,0 <sup>1</sup>
6		Morphological Adaptations¹ (Provide supporting
7		data in Remarks or on a separate sheet)
8	= Total Cover	Problematic Hydrophylic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)		
1		1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2		
50 A	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum 24 % C	Cover of Biotic Crust	Present? Yes No
Remarks:		

$\sim \sim 1$	1
~ 11	

Sampling Point: Ditch 1

Hydric Soli Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1) Sandy Redox (S5) 1 cr Muck (A9 Histosol (A2) Stripped Matrix (S6) 2 cm Muck (A1 Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic Hydrogen Sulfide (A4) LOamy Gleyed Matrix (F2) Red Parent Ma Stratifical Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Dark Surface (F7) Thick Dark Surface (A12) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrolog Sandy Gleyed Matrix (S4)  Restrictive Layer (if present): Type: Depth (Inches): Hydric Soil Present Remarks:  YDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indi Surface Water (A1) Salt Crust (B11) Water Mark High Water Table (A2) Biotic Crust (B12) Sediment (A3) Aquatic Invertebrates (B13) Drift Depos Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage F Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Seaso Drift Deposits (B2) (Nonriverine) Presence of Reduced Iron (C4) Saturation Intundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Ac	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Mafrix, CS=Covered or Coaled Sand Grains.  **Location: Fydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9 Histosol (A2) Stripped Matrix (S6) 2 cm Muck (A9 Histosol (A2) Stripped Matrix (S6) 2 cm Muck (A1 Histosol (A2) Loarny Mucky Mineral (F1) Reduced Voltage (A4) Loarny Gleyed Matrix (F2) Red Parent Ma Straffied Layers (A9) (LRR C) Depleted Matrix (F2) Red Parent Ma Straffied Layers (A9) (LRR C) Depleted Matrix (F2) Red Parent Ma Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Parent Matrix (F2) Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrolog unless disturbed restrictive Layer (if present):  Type:	
Mydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Proi	
Indicators (Applicable to all LRRs, unless otherwise noted.)   Indicators for Proi	
Mydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Proi	
Mydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Proi	
Mydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Proi	
Histosol (A1)   Sandy Redox (S5)   1 cm Muck (A9   Histosol (A1)   Sandy Redox (S5)   1 cm Muck (A9   Histosol (A1)   Reduced Vertic   Stripped Matrix (S6)   2 cm Muck (A1   Black Histic (A3)   Loarny Mucky Mineral (F1)   Red vertic   Red Parent Ma   Stratified Layers (A5) (LRR C)   Depleted Matrix (F2)   Red Parent Ma   Stratified Layers (A5) (LRR C)   Depleted Matrix (F3)   Other (Explain   1 cm Muck (A9) (LRR D)   Redox Dark Surface (F6)   Depleted Below Dark Surface (A11)   Depleted Dark Surface (F7)   Thick Dark Surface (A12)   Redox Depressions (F8)   Sandy Mucky Mineral (S1)   Vernal Pools (F9)   Vernal Pools	
Histosol (A1)   Sandy Redox (S5)   1 cm Muck (A9   Histosol (A1)   Sandy Redox (S5)   1 cm Muck (A9   Histosol (A1)   Reduced Vertic   Stripped Matrix (S6)   2 cm Muck (A1   Black Histic (A3)   Loarny Mucky Mineral (F1)   Red vertic   Red Parent Ma   Stratified Layers (A5) (LRR C)   Depleted Matrix (F2)   Red Parent Ma   Stratified Layers (A5) (LRR C)   Depleted Matrix (F3)   Other (Explain   1 cm Muck (A9) (LRR D)   Redox Dark Surface (F6)   Depleted Below Dark Surface (A11)   Depleted Dark Surface (F7)   Thick Dark Surface (A12)   Redox Depressions (F8)   Sandy Mucky Mineral (S1)   Vernal Pools (F9)   Vernal Pools	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Histosol (A2)  Sandy Redox (S5)  1 cm Muck (A9  Black Histic (A3)  Loamy Mucky Mineral (F1)  Red Vertic  Red Parent Ma  Stratified Layers (A5) (LRR C)  Depleted Matrix (F2)  A composition of the Matrix (F3)  Other (Explain  1 cm Muck (A9) (LRR D)  Redox Dark Surface (F6)  Depleted Datrix (F3)  Depleted Datrix Surface (A11)  Depleted Datrix Surface (F7)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Wetral Pools (F9)  Depth (Inches):  Depth (Inches):  Hydric Soil Present:  **Type:**  Depth (Inches):  Saltrace Water (A1)  Salt Crust (B11)  High Water Table (A2)  Salturation (A3)  Aquatic Invertebrates (B13)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Craylish Bi  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Thin Muck Surface (C7)  Shallow Ac  Thin Muck Surface (C7)  Shallow Ac  Trace Water Present?  Yes  No  Depth (Inches):  Wetfand Hydrology Present  storation Present?  Yes  No  Depth (Inches):  Wetfand Hydrology Present  storation Present?  Yes  No  Depth (Inches):  Wetfand Hydrology Present  storation Present?  Yes  No  Depth (Inches):  Wetfand Hydrology Present  storation Present?  Yes  No  Depth (Inches):  Wetfand Hydrology Present	
Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9 Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9 Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9 Histosol (A1) Reduced Vertic Red Parent Ma Stratified Layers (A5) (LRR C) Depleted Matrix (F2) Red Parent Ma Stratified Layers (A5) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) And Surface (F7) Sandy Mucky Mineral (S1) Vernal Pools (F9)	DI
Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9 Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A1 Black Histic (A3) Loarny Mucky Mineral (F1) Reduced Vertic Hydrogen Sulfide (A4) Loarny Gleyed Matrix (F2) Red Parent Ma Stratified Layers (A5 (LRR C) Depleted Matrix (F3) Other (Explain 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sindicators of hydro wetland hydrolog sandy Gleyed Matrix (S4) unless disturbed estrictive Layer (if present): Type: Depth (Inches): Hydric Soft Present emarks:  (DROLOGY  (ettand Hydrology Indicators: finanty Indicators (Infilmum of one required; check all that apply) Secondary Indi Surface Water (A1) Salt Crust (B12) Sediment (B12) Saturation (A3) Aquatic Invertebrates (B13) Diff Deposit Sediment Deposits (B2) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage F Sediment Deposits (B2) (Nonriverine) Presence of Reduced Iron (C4) Craytish Bi Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation: Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Ac Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutred (Inundation Present? Yes No Depth (Inches):  dudes capillary fringe) Surface Water Present? Yes No Depth (Inches):  dudes capillary fringe) Surfice Recorded Data (stream gauge, monilloring well, aerial photos, previous inspections), if available:	PL=Pore Lining, M=Matrix.
Histic Epipedon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1)  Reduced Vertic (A4)  Stratified Layers (A5) (LRR C)  Depleted Matrix (F2)  Active Depleted Matrix (F3)  Other (Explain  Thick Dark Surface (A11)  Depleted Dark Surface (F6)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  estrictive Layer (if present):  Type:  Depth (Inches):  Depth (Inches):  Hydric Sofi Present  Saturation (A3)  Water Marks (B1) (Nonriverine)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Surface Sofi Cracks (B6)  Surface Sofi Cracks (B6)  Surface Sofi Cracks (B6)  Surface Sofi Cracks (B6)  Nor Depth (Inches):  Wetfand Hydrology Indicators:  Inimary Indicators (Inches):  Drift Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Surface Sofi Cracks (B6)  Nor Depth (Inches):  Surface Sofi Cracks (B6)  Nor Depth (Inches):  Wetfand Hydrology Present	
Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Ma Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Indicators of hydror wetland hydrology Sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrology unless disturbed estrictive Layer (if present):  Type:  Depth (Inches): Hydric Soft Present emarks:    Depth (Inches): Hydric Soft Present (B11) Surface (B13) Drift Deport (B14) Drift Deport (B14) Drift Deport (B14) Drift Deport (B15) Drift (B15) Dry-Seaso Drift (B15) (Nonriverine) Presence of Reduced Iron (C4) Crayfish B1 Surface Soil Cracks (B15) Recent Iron Reduction in Tilled Soils (C6) Saturation (Inchaston Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Ac Water-Stained Leaves (B15) Depth (Inches):  Indicators (B15) (Nonriverine) Depth (Inches): Urband Present? Yes No Depth (Inches): Urband Hydrology Present Inchaston Present? Yes No Depth (Inches): Urband Hydrology Present Inchaston Present? Yes No Depth (Inches): Urband Hydrology Present Inchaston Present? Yes No Depth (Inches): Urband Hydrology Present Inchaston Present? Yes No Depth (Inches): Urband Hydrology Present Inchaston Present? Yes No Depth (Inches): Urband Hydrology Present Inchaston Present? Yes No Depth (Inches): Urband Hydrology Present Inchaston Present? Yes No Depth (Inches): Urband Hydrology Present Inchaston Present? Yes No Depth (Inches): Urband Hydrology Present Inchaston Present? Yes No Depth (Inches): Urband Hydrology Present Inchaston Present	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Ma Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)  Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrolog unless disturbed estrictive Layer (if present):  Type: Depth (Inches): Hydric Soil Present emarks:    Depth (Inches): Surface (A12) Salt Crust (B11) Secondary India Surface (M11) Salt Crust (B11) Secondary India Surface (M22) Saturation (A3) Drift Deposits (B2) (Nonriverine) Hydrogen Sulfide Odor (C1) Drianage F Sediment Deposits (B2) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Bi Sulface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation (Matrix (B1)) Thin Muck Surface (C7) Shallow Ac Water-Stained Leaves (B8) Depth (Inches): FAC-Neutr (Inches): Inches (Inches	
Stratified Layers (A5) (LRR C) — Depleted Matrix (F3) — Other (Explain 1 cm Muck (A9) (LRR D) — Redox Dark Surface (F6) — Depleted Below Dark Surface (A11) — Depleted Dark Surface (F7) — Thick Dark Surface (A12) — Redox Depressions (F8) — Sandy Mucky Mineral (S1) — Vernal Pools (F9) — wetland hydrolog unless disturbed (Sandy Gleyed Matrix (S4) — Vernal Pools (F9) — Wetland hydrolog unless disturbed (Sandy Gleyed Matrix (S4) — Wetland Hydrology unless disturbed (Sandy Gleyed Matrix (S4) — Wetland Hydrology (Indicators of hydromarks:    Depth (Inches):	
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)  Depleted Below Dark Surface (A11) Depleted Dark Surface (F7)  Thick Dark Surface (A12) Redox Depressions (F8)  Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):  Type: Hydric Soil Present  Type: Hydric Soil Present  Temarks:   (DROLOGY  Retand Hydrology Indicators:  Inimary Indicators (minimum of one required; check all that apply) Secondary Indi Surface Water (A1) Salt Crust (B11) Water Mar  High Water Table (A2) Biotic Crust (B12) Sediment I Saturation (A3) Aquatic Invertebrates (B13) Drift Depos  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage F  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Seaso  Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Bi Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation (Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Ac  Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutr  eld Observations:  urface Water Present? Yes No Depth (inches): Wetland Hydrology Present Incided Soila (Stream gauge, moniltoring well, aerial photos, previous inspections), if available:	
Thick Dark Surface (A12)	•
Sandy Mucky Mineral (S1)	
Sandy Gleyed Matrix (S4)  unless disturbed  lestrictive Layer (if present):  Type:  Depth (Inches):  Emarks:    Depth (Inches):	phytic vegetation and
Restrictive Layer (if present): Type: Depth (Inches):  De	y must be present,
Type:	or problematic.
Depth (inches):	
PROLOGY    Secondary Indicators   Secondary Indicators	$\checkmark$
PROLOGY    Secondary Indicators   Secondary Indicators   Secondary Indicators   Secondary Indicators   Surface Water (A1)   Salt Crust (B11)   Sediment	? Yes No 🔼
Vettand Hydrology Indicators:  Inimary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment I Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutrine Water Present?  Yes No Depth (inches):  Sediment Bacterial Present (Present)  Wetland Hydrology Present (Inches):  Sediment I Water Ada (Stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Secondary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Invertebrates (B13)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (B7)  Water Marks (B1) (Nonriverine)  Presence of Reduced Iron (C4)  Crayfish Bit (C7)  Shallow Action Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutron Columbia (C6)  Saturation Present?  Yes  No  Depth (Inches):  Secondary Indicators (B12)  Water Marks (B12)  Sediment Invertebrates (B13)  Drift Deposits (B13)  D	
Surface Water (A1) Salt Crust (B11) Water Mar High Water Table (A2) Biotic Crust (B12) Sediment I Saturation (A3) Aquatic Invertebrates (B13) Drift Depos Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage F Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Seaso Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish BI Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Active Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutr eld Observations:  Surface Water Present? Yes No Depth (Inches):  Sur	
High Water Table (A2) Saturation (A3) Aquatic Invertebrates (B13) Drift Depose Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Bi Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutrel Conservations: Urface Water Present? Ves No Depth (Inches): Depth (Inches): Depth (Inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	icators (2 or more regulred)
Saturation (A3) Aquatic Invertebrates (B13) Drift Depos Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage F Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Seaso Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Bi Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Ac Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutr eld Observations:  Inface Water Present? Yes No Depth (Inches):  Inface Water Present? Yes No Depth (Inches)	rks (B1) (Riverine)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage F Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Seaso Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Bi Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Ac Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutr eld Observations:  Inface Water Present? Yes No Depth (Inches):  Inface	Deposits (B2) (Riverine)
Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Saturation  Thin Muck Surface (C7)  Shallow Ac  Edd Observations:  Inface Water Present?  Yes  No  Depth (Inches):  Depth (Inches):  Sturation Present?  Yes  No  Depth (Inches):  Sturation Present?  Yes  No  Depth (Inches):  Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	sils (B3) (Riverine)
Drift Deposits (B3) (Nonriverine)	Patterns (B10)
	n Water Table (C2)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Ac Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutrons:  Inface Water Present? Yes No Depth (inches): tater Table Present? Yes No Depth (inches): tater Table Present? Yes No Depth (inches): Wettand Hydrology Present (cludes capillary fringe)  Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	urrows (C8)
	Visible on Aerial Imagery (C
eld Observations:  urface Water Present? Yes No Depth (inches): later Table Present? Yes No Depth (inches): laturation Present? Yes No Depth (inches): Wetland Hydrology Present Includes capillary fringe)  escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	quitard (D3)
arface Water Present?  Yes No Depth (inches):  ater Table Present?  Yes No Depth (inches):  Attration Present?  Yes No Depth (inches):  Wetland Hydrology Present (inches):  Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	al Test (D5)
ater Table Present?  Yes No Depth (Inches): H  aturation Present?  Yes No Depth (Inches): Wetland Hydrology Present Cludes capillary fringe)  Sescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
aturation Present? Yes No Depth (Inches): The Wetland Hydrology Present includes capillary fringe)  escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
actudes capillary fringe) escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	t? Yes No. <u>iX</u>
emarks:	

Projecusite: WEST NEWPONT ALL TROUK	FARM C	City/County: <i>CDEA</i>	Sampling Date: 8-14-15
Applicant/Owner: WEST WEWFORT BILL			State: CA Sampling Point: D!+Ch 2
Investigator(s): Thanland		Section, Township, Ra	nge: UNSCHUMED, TSG, RIOW
Landform (hillslope, terrace, etc.): Swale		Local relief (concave,	convex, none): Slope (%):
Subregion (LRR):	Lat: 22 <sup>1</sup>	28 04 32"N	Long: 117° 56 55-87" Datum: NAO 2
Soil Map Unit Name: Tidal Flats			NWI classification: ES-NOVING
Are climatic / hydrologic conditions on the site typical for the	his time of yea	ar? Yes 📈 No_	
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology			
			ocations, transects, important features, etc.
Oblinia Attach Site map	Johnny	Jamping point	
Hydrophytlc Vegetation Present? Yes	No	Is the Sampled	I Area
	No	within a Wetla	1 <b>4</b>
	No		
Remarks:			
VEGETATION – Use scientific names of pla	nts.		
	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata:(B)
4.		= Total Cover	Percent of Dominant Species
Sapling/Shrub Stratum (Pfot size:)		, voice cover	That Are OBL, FACW, or FAC:(A/B)
1		<u> </u>	Prevalence Index worksheet:
2.			Total % Cover of: Multiply by:
3			OBL species x 1 =
4			FACW species x2 =
5			FACILIA Experies X 3 = X 4 =
Herb Stratum (Plot size:		= Total Cover	FACU species x 4 = UPL species x 5 =
1. Saligannia Parcifica	15	<u> 7 014</u>	Column Totals: 20 (A) 20 (B)
2. Batis Manitima		y orsh	,
3		í	Prevalence Index = B/A = 1:0
4	<del></del>		Hydrophytic Vegetation Indicators:
5			Dominance Test is >50%
6			M Prevalence Index is ≤3.0¹
7			Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8	~~~		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	11.1	= Total Cover	
1.			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2.			be present, unless disturbed or problematic.
		= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum 50 % Cov.	er of Biotic Cr	ust &	Vegetation Present? Yes No
Remarks:			11000111
Remarks.			

_	_	

Sampling Point: Ditch 2

Depth	Matrix		Redox Feature	S		
(inches)	Color (moist)		Color (molst) %		oc² Te	exture Remarks
0-12	104R 3/2	80	715446 21	0 C 1	Y OA	my Sand
	, , , , , , , , , , , , , , , , , , , ,		7-7			I
		······································				
<del></del>						
					<del></del>	
Type: C=Con	centration, D=Depletic	on, RM=Red	duced Matrix, CS=Covered	d or Coated Sa		<sup>2</sup> Location: PL=Pore Lining, M=Matrix
		e to all LRF	Rs, unless otherwise not	ed.)	In	dicators for Problematic Hydric Solis <sup>3</sup> :
Histosol (A	•		Sandy Redox (S5)			_ 1 cm Muck (A9) (LRR C)
Histic Epip			Stripped Matrix (S6)			_ 2 cm Muck (A10) (LRR B)
Black Histi	Sulfide (A4)		Loamy Mucky Minera		<b></b>	_ Reduced Vertic (F18)
	ayers (A5) (LRR C)	•	Loamy Gleyed Matrix Depleted Matrix (F3)	(F2)	_	Red Parent Material (TF2)
	(A9) (LRR D)		Redox Dark Surface (	FA)		Other (Explain in Remarks)
	selow Dark Surface (A	.11)	Depleted Dark Surfac			
	Surface (A12)		Redox Depressions (F		3In	dicators of hydrophytic vegetation and
Sandy Mud	ky Mineral (S1)		Vernal Pools (F9)	•		wetland hydrology must be present.
Sandy Gley	yed Matrix (S4)		` '			unless disturbed or problematic.
Restrictive Lay	er (if present):					
Type:	100	1.00			į.	
. , , , , , , , , , , , , , , , , , , ,	4-1-5-17-7	100				
	es):	<i>1</i> 5—			Hvd	Iric Soil Present? Ves K
Depth (Inche Remarks:	es):				Hyd	Iric Soll Present? Yes <u>K</u> No _
Depth (Inche Remarks:		<i>1</i> &			Hyd	Iric Soll Present? Yes K No
Depth (Inche Remarks: YDROLOGY	ſ				Нус	Iric Soll Present? Yes <u>K</u> No
Depth (Inche Remarks: YDROLOGY Vetland Hydro	( logy Indicators:				Hyd	·
Depth (Inche Remarks: /DROLOGY /etland Hydro	/ logy Indicators: ars (minimum of one re	eguired; che			Hyd	Secondary Indicators (2 or more required
Depth (Inche Remarks:  /DROLOGY /etland Hydro /imary Indicato / Surface Wa	/ logy Indicators: ors (minimum of one re iter (A1)	eguired; che	Salt Crust (B11)		Hyd	Secondary Indicators (2 or more required Water Marks (B1) (Riverine)
Depth (Inche Remarks: /DROLOGY /etland Hydro rimary Indicato Language Surface Wa High Water	( logy Indicators: ors (minimum of one re ter (A1) Table (A2)	equired; che	Salt Crust (B11) Biotic Crust (B12)		Hyd	Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Depth (Inche Remarks: /DROLOGY /etiand Hydro rimary Indicato Surface Wa High Water Saturation (	fogy Indicators: ors (minimum of one re ter (A1) Table (A2)	equired; che	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates		Hyd	Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Depth (Inche Remarks: YDROLOGY Vetland Hydro Inimary Indicato Surface Wa High Water Saturation ( Water Mark	fogy Indicators: ors (minimum of one rester (A1) Table (A2) (A3) s (B1) (Nonriverine)		Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd	or (C1)		Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Pattems (B10)
Depth (Inche Remarks: YDROLOGY Vetland Hydro trimary Indicato Surface Wa High Water Saturation ( Water Mark Sediment D	fogy Indicators: ors (minimum of one re ter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonrive	erine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd	or (C1) ≥s along Living		Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Pattems (B10) Dry-Season Water Table (C2)
Depth (Inche Remarks:  YDROLOGY Vetland Hydro rimary Indicato Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi	fogy Indicators: ors (minimum of one re ter (A1) Table (A2) (A3) s (B1) (Nonriverine) eposits (B2) (Nonrive ts (B3) (Nonriverine)	erine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced	or (C1) ≥s along Living I Iron (C4)	g Roots (C3)	Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Pattems (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Pepth (Inche Remarks:  YDROLOGY Vetland Hydro Trimary Indicato Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soil	fogy Indicators:  ors (minimum of one relater (A1)  Table (A2)  A3)  s (B1) (Nonriverine) eposits (B2) (Nonriverine) is (B3) (Nonriverine)	rine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Od Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction	or (C1) ≥s along Llving I Iron (C4) n in Tilled Soil	g Roots (C3)	Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Pattems (B10) Dry-Season Water Table (C2)
Depth (Inche Remarks:  YDROLOGY Vetland Hydro Trimary Indicato Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soil Inundation V	fogy Indicators:  ors (minimum of one relater (A1)  Table (A2)  (A3)  s (B1) (Nonriverine) eposits (B2) (Nonrive ts (B3) (Nonriverine) I Cracks (B6)  //sible on Aerial Image	rine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C	or (C1) es along Llving I Iron (C4) n in Tilled Soil 77)	g Roots (C3)	Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3)
Pepth (Inche Remarks:  YDROLOGY  Yetland Hydro  Trimary Indicato  Surface Wa  High Water  Saturation (  Water Mark  Sediment D  Drift Deposition of the control of the cont	( logy Indicators: lors (minimum of one re lter (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonrive is (B3) (Nonriverine) I Cracks (B6) //sible on Aerial Image ed Leaves (B9)	rine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Od Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction	or (C1) es along Llving I Iron (C4) n in Tilled Soil 77)	g Roots (C3)	Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery
Depth (Inche Remarks:  YDROLOGY  Vetland Hydro  Primary Indicato  Surface Wa  High Water  Saturation (  Water Mark  Sediment D  Drift Deposi  Surface Soil  Inundation V  Water-Stain	logy Indicators: ors (minimum of one rester (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) it (B3) (Nonriverine) I Cracks (B6) //sible on Aerial Image ed Leaves (B9) ons:	erine) ery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C) Other (Explain in Ren	or (C1) es along Llving I Iron (C4) n in Tilled Soil 77)	g Roots (C3)	Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3)
Depth (Inche Remarks:  YDROLOGY Vetland Hydro Primary Indicato Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soil Inundation \	logy Indicators: ors (minimum of one rester (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) it (B3) (Nonriverine) I Cracks (B6) //sible on Aerial Image ed Leaves (B9) ons:	erine) ery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C	or (C1) es along Llving I Iron (C4) n in Tilled Soil 77)	g Roots (C3)	Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3)
Depth (Inche Remarks:  YDROLOGY  Vetland Hydro  Primary Indicato  Surface Wa  High Water  Saturation (  Water Mark  Sediment D  Drift Deposi  Surface Soil  Inundation V  Water-Stain	logy Indicators: ors (minimum of one relater (A1) Table (A2) (A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) I Cracks (B6) //sible on Aerial Image ed Leaves (B9) ons: resent? Yes	erine) ery (B7) No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C Other (Explain in Ren Depth (Inches):	or (C1) es along Living I Iron (C4) n in Tilled Soil er) narks)	g Roots (C3)	Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3)
Depth (Inche Remarks:  YDROLOGY  Vetland Hydro  Primary Indicato  Surface Wa  High Water  Saturation (  Water Mark  Sediment D  Drift Deposi  Surface Soil  Inundation V  Water-Stain  leid Observation  urface Water P  //ater Table Prese	logy Indicators:  ors (minimum of one relater (A1) Table (A2) (A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) I Cracks (B6) //sible on Aerial Image ed Leaves (B9) ons: resent? Yes ent? Yes	erine) ery (B7) No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C Other (Explain in Ren Depth (Inches):	or (C1) es along Living I Iron (C4) n in Tilled Soil er) narks)	g Roots (C3) s (C6)	Secondary Indicators (2 or more required Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery Shallow Aquitard (D3)
Depth (Inche Remarks:  YDROLOGY Vetland Hydro Primary Indicato Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Inundation V Water-Stain Indid Observati urface Water P Vater Table Preseturation Prese	logy Indicators: ers (minimum of one rester (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) I Cracks (B6) /isible on Aerial Image ed Leaves (B9) ons: resent? yes_ ent? y fringe)	Prine) Pry (B7) NoNo	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (CO) Other (Explain in Ren Depth (Inches): Depth (Inches):	or (C1) es along Living I Iron (C4) n in Tilled Soil (7) narks)	g Roots (C3) s (C6) Wetland Hy	Secondary Indicators (2 or more required  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (Inche Remarks:  YDROLOGY Vetland Hydro Primary Indicato Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Inundation V Water-Stain Indid Observati urface Water P Vater Table Preseturation Prese	logy Indicators: ers (minimum of one rester (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) I Cracks (B6) /isible on Aerial Image ed Leaves (B9) ons: resent? yes_ ent? y fringe)	Prine) Pry (B7) NoNo	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C Other (Explain in Ren Depth (Inches):	or (C1) es along Living I Iron (C4) n in Tilled Soil (7) narks)	g Roots (C3) s (C6) Wetland Hy	Secondary Indicators (2 or more required  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (Inche Remarks:  YDROLOGY  Vetland Hydro  Primary Indicato  Surface Wa  High Water  Saturation (  Water Mark  Sediment D  Drift Deposi  Surface Soil  Inundation V  Water-Stain  leid Observati  urface Water P  //ater Table Presenciudes capillar escribe Record	logy Indicators:  ors (minimum of one rester (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) I Cracks (B6) //sible on Aerial Image ed Leaves (B9) ons:  oresent? Yes sent? Yes y fringe) ed Data (sfream gauge	ery (B7)  No No No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C) Other (Explain in Ren Depth (Inches): Depth (Inches):	or (C1) es along Living I Iron (C4) n in Tilled Soil 77) narks)	g Roots (C3) s (C6) Wetland Hy	Secondary Indicators (2 or more required  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  drology Present? Yes No
Depth (Inche Remarks:  YDROLOGY  Vetland Hydro  Primary Indicato  Surface Wa  High Water  Saturation (  Water Mark  Sediment D  Drift Deposi  Surface Soil  Inundation V  Water-Stain  leid Observati  urface Water P  //ater Table Presenciudes capillar escribe Record	logy Indicators:  ors (minimum of one rester (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) I Cracks (B6) //sible on Aerial Image ed Leaves (B9) ons:  oresent? Yes sent? Yes y fringe) ed Data (sfream gauge	ery (B7)  No No No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C) Other (Explain in Ren Depth (Inches): Depth (Inches):	or (C1) es along Living I Iron (C4) n in Tilled Soil 77) narks)	g Roots (C3) s (C6) Wetland Hy	Secondary Indicators (2 or more required  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  drology Present? Yes No
Depth (Inche Remarks:  /DROLOGY /etland Hydro rimary Indicato Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soil Inundation V Water-Stain eld Observati urface Water P fater Table Prese reludes capillar escribe Record	logy Indicators:  ors (minimum of one rester (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) I Cracks (B6) //sible on Aerial Image ed Leaves (B9) ons:  oresent? Yes sent? Yes y fringe) ed Data (sfream gauge	ery (B7)  No No No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C) Other (Explain in Ren Depth (Inches): Depth (Inches):	or (C1) es along Living I Iron (C4) n in Tilled Soil 77) narks)	g Roots (C3) s (C6) Wetland Hy	Secondary Indicators (2 or more required  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (Inche Remarks:  /DROLOGY /etland Hydro rimary Indicato Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soil Inundation V Water-Stain eld Observati urface Water P later Table Pre- saturation Prese cludes capillar escribe Record	logy Indicators:  ors (minimum of one rester (A1) Table (A2) A3) s (B1) (Nonriverine) eposits (B2) (Nonriverine) I Cracks (B6) //sible on Aerial Image ed Leaves (B9) ons:  oresent? Yes sent? Yes y fringe) ed Data (sfream gauge	ery (B7)  No No No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odd Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Thin Muck Surface (C) Other (Explain in Ren Depth (Inches): Depth (Inches):	or (C1) es along Living I Iron (C4) n in Tilled Soil 77) narks)	g Roots (C3) s (C6) Wetland Hy	Secondary Indicators (2 or more required  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  drology Present? Yes No

Projecusite: WEST MANPORT DIL TROKE FA	RM City/C	ounty: DA	Note Sai	mpling Date: 8-14-)
Applicant/Owner: WEST NEWFORT BLEE			State: CA Sai	mpling Point: (Yess &
Investigator(s): Therman				
Landform (hillstone terrace etc.): Storach Tem	ALL Local	relief (concave, o	onvex, none); CDNVa	∠ Slope (%): .5 □
Subregion (LRR): LPL-C L	at: 22° 25	3' D 4 32" N	Long: 117° 56 55-8	7 Datum: MAD
Soil Map Unit Name: TI Dat Flass		A		n: Palistrine
Are climatic / hydrologic conditions on the site typical for this time	o of year? V	as W No		
Are Vegetation, Soil, or Hydrology signif	ficantly dictur	hed? Jn Are "	Mormal Circumetanose" pres	ant? Yes K. No
Are Vegetation, Soil, or Hydrology natur				
SUMMARY OF FINDINGS – Attach site map sho				
	. f	spinig point it	Jeanons, nansects, in	aportant leatures, etc.
Hydrophytic Vegetation Present? YesNo		is the Sampled		. P
Hydric Soil Present? Yes No No		within a Wetlan	d? Yes	No K
Wetland Hydrology Present? Yes No No	, , , , , , , , , , , , , , , , , , ,			
Remarks.				
VEGETATION – Use scientific names of plants.	,			
I .		ninant Indicator cles? Stalus	Dominance Test worksho	
1.			Number of Dominant Spec That Are OBL, FACW, or F	
2				P
3.			Total Number of Dominant Species Across All Strata:	(B)
4.			•	
	= To	tal Cover	Percent of Dominant Speci That Are OBL, FACW, or F	
Sapling/Shrub Stratum (Plot size:)				
1			Prevalence Index worksh	
2			Total % Cover of: / OBL species	Muttiply by: x 1 =
3			FACW species 80	
5.				x3=
		tal Cover	FACU species	
Herb Stratum (Plot size:)			ł	
1. Cressa trupillensis	15	<u> </u>	Column Totals: <u>&amp;D</u>	x 5 =
2. Poly form warnspeliensis	_51	A FACN	Prevalence Index =	B/A = 2.0
3,			Hydrophytic Vegetation I	
4			Dominance Test is >5	<b>→</b> ℓ1aA
5,			Prevalence Index is ≤	
6. 7.			<i>*</i>	tions (Provide supporting
8			data in Remarks or	on a separate sheet)
<u> </u>		tal Cover	Problematic Hydrophy	tic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)				
1			<sup>1</sup> Indicators of hydric soil ar be present, unless disturbe	
2				70 01 protromado.
_	= To	tal Cover	Hydrophytic Vegetation	J
% Bare Ground in Herb Stratum % Cover of	Biotic Crust _		Present? Yes_	No
% Bare Ground in Herb Stratum % Cover of Remarks: Plants Marking on assistant with the Stratum of the Cover of of the	10US L	Pland La	undscape pos	interior w
Soils wil no Chydric	Chara	leristics	( Su below	) and
no Hydnology				.ear
I to the Adia Off				
1				

_	_	_
-	ı	1
30	ı	Ł

Sampling Point: Cressel

Depth <u>Matrix</u>	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup>	
0-8 10×12 3/3 50	NONE	Clay loom
10 YR 413 50	<u>NONF</u>	Sandy lam
2-14 10 VR 3/2 100	ALDNE	Sandu clan loom
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, CS=Covered or Coat	ed Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix,
Hydric Soil Indicators: (Applicable to all i		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Dark Surface (F7) Redox Depressions (F8)	3Indicators of fruits to the control of
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	voiliai i oola (i o)	unless disturbed or problematic.
Restrictive Layer (if present):		anous distarged of prodictions.
Type: KIA. IE		,
Depth (inches):	<del></del>	Hydric Soll Present? Yes No
Remarks:		Nyano don't leadent: Tea Roy
JVDPOLOCY		·
		·
Wetland Hydrology Indicators:		
Wetland Hydrology Indicators: Primary Indicators (minimum of one required:		Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)	Salt Crust (B11)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)	Salt Crust (B11) Biotic Crust (B12)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)	Water Marks (B1) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along l	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along   Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Thin Muck Surface (C7)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along   Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Fleid Observations:	— Salt Crust (B11) — Biotic Crust (B12) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along — Presence of Reduced Iron (C4 — Recent Iron Reduction in Tilled — Thin Muck Surface (C7) — Other (Explain in Remarks)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along   Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along i Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
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Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No (includes capillary fringe)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) d Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No (includes capillary fringe)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) d Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No  Water Table Present? Yes No  Saturation Present? Yes No  (includes capillary fringe)  Describe Recorded Data (stream gauge, monit	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) d Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No  Water Table Present? Yes No  Saturation Present? Yes No  (includes capillary fringe)  Describe Recorded Data (stream gauge, monit	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (Inches): Depth (Inches): Depth (Inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Living Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Primary indicators (minimum of one required:  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No (Includes capillary fringe)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches): Depth (inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Living Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No  Water Table Present? Yes No  Saturation Present? Yes No  (includes capillary fringe)  Describe Recorded Data (stream gauge, monit	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches): Depth (inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Living Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No  Water Table Present? Yes No  Saturation Present? Yes No  (includes capillary fringe)  Describe Recorded Data (stream gauge, monit	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (Inches): Depth (Inches): Depth (Inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Living Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No

Projecusite: WEST NEWPONT DIL TRONK FARA	City/County: OffAults Sampling Date: 3-3-15
	State: CA Sampling Point: MVLLT
Investigator(s): Thirmtand	Section, Township, Range: UNSCOTUTAGE, TSG. KIOW
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): Slope (%): Slope
Subregion (LRR):	32° 28'04 32"N Long: 117° 56 '55: 87'W Patum: 1/180 8
Soil Map Unit Name: 150 SR Silt WAM	NWI classification: Talvytrine
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significal	ntly disturbed? ND Are "Normal Circumstances" present? Yes K. No
Are Vegetation, Soil, or Hydrology naturally	problematic? ND (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map show	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	- Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Welland Hydrology Present? Yes No	
Remarks: & CCA Wettand e'n	by Based on Single Crithium
VEGETATION – Use scientific names of plants.	As Destination Destinate Province
Absolution	tte Dominant Indicator   Dominance Test worksheet:  ver Species? Status   Number of Dominant Species
1,	That Are OBL, FACW, or FAC: (A)
2	Total Number of Dominant
3	Species Across All Strata: (B)
4	= Total Cover   Percent of Dominant Species   That Are ORL FACW or FAC
Sapling/Shrub Stratum (Plot size:	(AD)
1. Bacchenis Salicifolia 75	Prevalence Index worksheet:
2	
3	1 2 1
5.	FAC species 97 x3 = 291
7:	> = Total Cover FACU species x 4 =
Herb Stratum (Plot size:	UPL species x 5 =
1. Malvella Legrosa IS 2. Pulicania Balvadosa 3	Column Totals: 100 (A) 29.7 (B)
3 ENDramia ocidentalis 7	Prevalence Index = B/A = 2.97
4.	Hydrophytic Vegetation Indicators:
5.	Dominance Test is >50%
6.	
7	and the state of t
8	Problematic Hydronhydia Vegetation (Cyntein)
Woody Vine Stratum (Plot size:)	= Total Cover — Problemant Hydrophylic Vegetation (explain)
1	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2	be present, unless disturbed or problematic.
	= Total Cover Hydrophytic
% Bare Ground In Herb Stratum	Vegetation CCrust Present? Yes No
Remarks:	
1	

Profile Description: (Describe to the dep	th needed to document the indicator or	confirm the absence of Indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %		Loc <sup>2</sup> Texture Remarks
0-9 10 yr 3/3 100	NONE	Sandy lann no redux
9-14 104K3B 100	NONE	Standay Clay lum no redox
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, CS=Covered or Coated S	Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soll Indicators: (Applicable to all I		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loarny Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	<b>Y</b>
Thick Dark Surface (A12)	Redox Depressions (F8)	Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Vernal Pools (F9)	wetland hydrology must be present,
Restrictive Layer (if present):		unless disturbed or problematic.
Type: NONE		
, - 0, -	<del></del>	
Depth (Inches):		Hydric Soil Present? Yes No X
Remarks:		
HYDROLOGY	-	
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required:	check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Sait Crust (B11)	Water Marks (B1) (Riverine)
High Water Table (A2)	Blotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Livir	` '
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	, , , , , , , , , , , , , , , , , , , ,
Surface Soli Cracks (B6)	Recent Iron Reduction in Tilled So	Crayfish Burrows (C8)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	
Water-Stained Leaves (B9)	Other (Explain in Remarks)	Shallow Aquitard (D3)
Field Observations:	Odlet (Explain in Remarks)	FAC-Neutral Test (D5)
Surface Water Present? Yes No	Depth (inches):	
Water Table Present? Yes No	/	
Saturation Present? Yes No	'. T	187.41-41.41-
(includes capillary fringe)	Depth (Inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspect	ions), if available:
•		
Remarks:	•	
		·

Project/Site: WEST NEWPORT BIL FANK	FARM City/County: ORF	Sampling Date: 8-6-1
Applicant/Owner: WEST NEWPOUT BLL		
Investigator(s): Thomamo	Section, Township, Ra	inge: Urisichimed, TSG, RION
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none): MKCANP Slope (%):
Subregion (LRR): LPR-C	Lat: <u>33° 28' 0 4 32" N</u>	_ Long: 117° 56 '55-87' J_Datum; NAC 8
Soil Map Unit Name: Bolsa Sult Loan		A HAVE at a section at large file of the part of the part of
Are climatic / hydrologic conditions on the site typical for th	nis time of year? YesK No _	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology		
Are Vegetation, Soll, or Hydrology	naturally problematic? NO (If no	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point l	ocations, transects, important features, etc.
1	No is the Sampled	d Area
1	No within a Wetla	nd? Yes No
Remarks:	<u> </u>	
VEGETATION - Use scientific names of plan		
Tree Stratum (Plot size:)	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet:
1.		Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1. Bacohmis Salicitolia	30 4 FRE	Prevalence Index worksheet:
2	<u> </u>	Total % Cover of: Multiply by:
3.	Aut	OBL species x 1 =
4		FAC species x2= FAC species x3= 75
O	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:	002 1 52	UPL species x 5=
1. Atripley patula	- 73 <del>/ 120</del>	Column Totals: 130 (A) 230 (B)
2. Enthamia occidentalis	•	Prevalence Index = B/A = 2:23
3.       4.		Hydrophytic Vegetation Indicators:
5		Dominance Test is >50%
6.		Prevalence Index is ≤3.0¹
7.		Morphological Adaptations <sup>1</sup> (Provide supporting
8		data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
NACE and a Village Collections (Diet sine)	= Total Cover	Froblematic Hydrophytic Vegetation (Explain)
Woody Vine Stratum (Plot size:)		<sup>1</sup> Indicators of hydric soil and welland hydrology must
1 2.		be present, unless disturbed or problematic.
	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % Cove	er of Biotic Crust 30	Vegetation Present? Yes No No
Remarks:		

		•	needed to document th				o or manacoral)
Depth (inches)	Matrix Color (molst)	<del></del>	Redox Featu Color (moist) %	res Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	10 YR 3/2	100	NONE		<u> </u>	DAM	ivenialys
\$ 13		<u>~~</u>					2 1
<u>0-18</u>	<u> 14.34 3/2</u>	<u>~10</u> _	10-yr-416		<u></u>	TOAMY	Sand
				<del></del>			
					<del></del>		
					***************************************		
<u> </u>							
							-
¹Type: C≃Cor	ncentration, D=Deplet	llon, RM=Re	educed Matrix, CS=Cove	ed or Coated	d Sand Gr		ocation: PL=Pore Lining, M=Matrix.
		ne to an er	Rs, unless otherwise n	oted.)			s for Problematic Hydric Solis <sup>3</sup> :
Histosol (	A1) pedon (A2)		Sandy Redox (S5) Stripped Matrix (S6)				Muck (A9) (LRR C)
Black Hist			Loamy Mucky Mine				Muck (A10) (LRR B) ced Vertic (F18)
	Sulfide (A4)		Loamy Gleyed Mate				Parent Material (TF2)
	Layers (A5) (LRR C)		Depleted Matrix (F3				(Explain in Remarks)
1 cm Muc	k (A9) (LRR D)		Redox Dark Surface				
	Below Dark Surface (	A11)	Depleted Dark Surf				
	k Surface (A12)		Redox Depressions	(F8)			s of hydrophytic vegetation and
	rcky Mineral (S1) eyed Matrix (S4)		Vernal Pools (F9)				hydrology must be present,
	yer (If present):					uniess	disturbed or problematic.
Type:	.yut (ii piouoiig.					ļ	
Depth (Inch	NONE		-				
Remarks:	ies)				····	Hydric Soi	I Present? Yes No
iverrains.							
							_
-IVDROLOG	Y						
		47-47-47-47-47-47-47-47-47-47-47-47-47-4					·
Wetland Hydro	ology Indicators;	regulred: ch	eck all that anniv)			Sagar	odov ladiostan (2 a serve a la la
Wetland Hydro	ology Indicators; tors (minimum of one	required; ch					ndary Indicators (2 or more required)
Wetland Hydro Primary Indicat Surface W	ology Indicators; tors (minimum of one later (A1)	required; ch	Salt Crust (B11)			v	Vater Marks (B1) (Riverine)
Wetland Hydro Primary Indicat Surface W High Wate	ology Indicators; tors (minimum of one ater (A1) r Table (A2)	required; ch	Salt Crust (B11)  Blotic Crust (B12)	ne (B13)		v s	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Wetland Hydro Primary Indicat Surface W High Wate Saturation	ology Indicators; tors (minimum of one later (A1) r Table (A2) (A3)		Salt Crust (B11)  Blotlc Crust (B12)  Aquatic Invertebrat			v s c	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mari	ology Indicators; tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine)	<b>)</b>	Salt Crust (B11)  Blotle Crust (B12)  Aquatic Invertebrat Hydrogen Sulfide C	dor (C1)	vina Roofs	v s c	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mart Sediment I	ology Indicators; tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriv	) verine)	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph	dor (C1) eres along Li	ving Roots	V S C C C C	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Oray Season Water Table (C2)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mari Sediment I Drift Depos	ology Indicators; tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine)	) verine)	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduc	dor (C1) eres along Li ed Iron (C4)		v c c c c	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Grayfish Burrows (C8)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mark Sediment I Drift Depos Surface So	ology Indicators; tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine	) rerine) :)	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduct  Recent Iron Reduct	dor (C1) eres along Li ed Iron (C4) ion in Tilled S		v s c c s (C3) c c	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mari Sediment I Drift Depos Surface So Inundation	ology Indicators; tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriv sits (B3) (Nonriverine	) rerine) :)	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduc	odor (C1) eres along Lir ed Iron (C4) ion in Tilled S (C7)		v c c s (C3) c s s	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Oralinage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) Oraturation Visible on Aerial Imagery (C9) Oralinage Patterns (D3)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mari Sediment I Drift Depos Surface So Inundation	ology Indicators; tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine bil Cracks (B6) Visible on Aerial Imagned Leaves (B9)	) rerine) :)	Salt Crust (B11)  Blotle Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduct  Recent Iron Reduct  Thin Muck Surface	odor (C1) eres along Lir ed Iron (C4) ion in Tilled S (C7)		v c c s (C3) c s s	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mari Sediment I Drift Depos Surface So Inundation Water-Stain	ology Indicators; tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine oil Cracks (B6) Visible on Aerial Imagined Leaves (B9)	yerine) e) gery (B7)	Salt Crust (B11)  Blotle Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduct  Recent Iron Reduct  Thin Muck Surface	odor (C1) eres along Lired Iron (C4) Ion in Tilled S (C7) emarks)		v c c s (C3) c s s	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Oralinage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) Oraturation Visible on Aerial Imagery (C9) Oralinage Patterns (D3)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mark Sediment I Drift Depose Surface So Inundation Water-Stain Field Observat Surface Water I	ology Indicators; tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine oil Cracks (B6) Visible on Aerial Imagined Leaves (B9) tions: Present? Yes	yerine) e) gery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduct Recent Iron Reduct Thin Muck Surface Other (Explain in Reduct) Depth (inches);	edor (C1) eres along Li ed Iron (C4) Ion in Tilled S (C7) emarks)	Soils (C6)	v c c s (C3) c s s	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Oralinage Patterns (B10) Ory-Season Water Table (C2) Orayfish Burrows (C8) Oraturation Visible on Aerial Imagery (C9) Oralinage Patterns (D3)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mari Sediment I Drift Depos Surface So Inundation Water-Stain Field Observat Surface Water I Water Table Pri	ology Indicators; tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) oil Cracks (B6) Visible on Aerial Imagined Leaves (B9) thons: Present? Yes _ esent? Yes _	yerine) e) gery (B7) No	Salt Crust (B11)  Blotle Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduct  Recent Iron Reduct  Thin Muck Surface  Other (Explain in Reduct)  Depth (inches):  Depth (inches):	dor (C1) eres along Li ed Iron (C4) Ion in Tilled 5 (C7) emarks)	Soils (C6)	V C C s (C3) C S S	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Grayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) AC-Neutral Test (D5)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mark Sediment I Drift Depose Surface So Inundation Water-Stain Field Observat Surface Water I Water Table Pres (Includes capilla	ology Indicators: tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine bil Cracks (B6) Visible on Aerial Image med Leaves (B9) thons: Present? esent? yes _ ent?	yerine)  gery (B7)  No 1  No No No 1	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduct Recent Iron Reduct Thin Muck Surface Other (Explain in Reduct) Depth (inches); Depth (inches):	edor (C1) eres along Li ed Iron (C4) Ion in Tilled S (C7) emarks)	Soils (C6)	V S C C C S S S F	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Grayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) AC-Neutral Test (D5)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mark Sediment I Drift Depose Surface So Inundation Water-Stain Field Observat Surface Water I Water Table Pres (Includes capilla	ology Indicators: tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine bil Cracks (B6) Visible on Aerial Image med Leaves (B9) thons: Present? esent? yes _ ent?	yerine)  gery (B7)  No 1  No No No 1	Salt Crust (B11)  Blotle Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduct  Recent Iron Reduct  Thin Muck Surface  Other (Explain in Reduct)  Depth (inches):  Depth (inches):	edor (C1) eres along Li ed Iron (C4) Ion in Tilled S (C7) emarks)	Soils (C6)	V S C C C S S S F	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Grayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) AC-Neutral Test (D5)
Primary Indicat Surface W High Wate Saturation Water Mari Sediment I Drift Depos Surface So Inundation Water-Stain Field Observat Surface Water I Water Table Pro Saturation Pres (Includes capilla) Describe Record	ology Indicators: tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine bil Cracks (B6) Visible on Aerial Image med Leaves (B9) thons: Present? esent? yes _ ent?	yerine)  gery (B7)  No 1  No No No 1	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduct Recent Iron Reduct Thin Muck Surface Other (Explain in Reduct) Depth (inches); Depth (inches):	edor (C1) eres along Li ed Iron (C4) Ion in Tilled S (C7) emarks)	Soils (C6)	V S C C C S S S F	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Grayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) AC-Neutral Test (D5)
Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mari Sediment I Drift Depos Surface So Inundation Water-Stain Field Observat Surface Water I Water Table Pro Saturation Pres (includes capillat Describe Record	ology Indicators: tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine bil Cracks (B6) Visible on Aerial Image med Leaves (B9) thons: Present? esent? yes _ ent?	yerine)  gery (B7)  No 1  No No No 1	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduct Recent Iron Reduct Thin Muck Surface Other (Explain in Reduct) Depth (inches); Depth (inches):	edor (C1) eres along Li ed Iron (C4) Ion in Tilled S (C7) emarks)	Soils (C6)	V S C C C S S S F	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Grayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) AC-Neutral Test (D5)
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Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mari Sediment I Drift Depos Surface So Inundation Water-Stain Field Observat Surface Water I Water Table Pro Saturation Pres (Includes capillat Describe Record	ology Indicators: tors (minimum of one later (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine bil Cracks (B6) Visible on Aerial Image med Leaves (B9) thons: Present? esent? yes _ ent?	yerine)  gery (B7)  No 1  No No No 1	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduct Recent Iron Reduct Thin Muck Surface Other (Explain in Reduct) Depth (inches); Depth (inches):	edor (C1) eres along Li ed Iron (C4) Ion in Tilled S (C7) emarks)	Soils (C6)	V S C C C S S S F	Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Grayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) AC-Neutral Test (D5)

Project/Site: WEST NEWPONT DIL TRONK FARM	City/County:	Sampling Date: 8-6-13
Applicant/Owner: WEST WEWPOIT BALL	·	State: CA Sampling Point: MULCAT
Investigator(s): Therman	_ Section, Township, Rar	nge: UNSecrtumed, TSG, KIOW
	_ Local relief (concave, c	convex, none): Nava Slope (%): 3
Subregion (LRR): Lat: 3		Long: 117° 56 '55-87' Datum: 1100 8
Soil Map Unit Name: Solsa Silt LOMM		NWI classification: Falustina
Are climatic / hydrologic conditions on the site typical for this time of y		
Are Vegetation, Soil, or Hydrology significant	ly disturbed? № Are "I	Normal Circumstances" present? Yes K. No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? NO (If ne-	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin	g sampling point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	- Is the Sampled	Area
Hydric Soil Present? Yes No	within a Wetlan	1%.
Wetland Hydrology Present? Yes No V	_	
Remarks:		
VEGETATION – Use scientific names of plants.		
Absolut   <u>Tree Stratum</u> (Plot size:)	e Dominant Indicator er Species? Status	Dominance Test worksheet:
	a Species r Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
3		Total Number of Dominant Species Across All Strata: (B)
4		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 30 /L)	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1. Enclia Californica 40	) y UPL	Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5	7	FAC species x 3 = FACU species x 4 = 20
Herb Stratum (Plot size: 30 P)	= Total Cover	UPL species 80 x5= 400
1. Carpobrotus edulis . 40	y y up	Column Totals: 85 (A) 425 (B)
2. Hetworopium Curassivicum 5	_ K BAEV	11016
3		Prevalence Index = B/A =
4		Dominance Test is >50%
5.       6.		Prevalence Index is ≤3.0¹
7		Morphological Adaptations <sup>1</sup> (Provide supporting
R		data in Remarks or on a separate sheet)
<u> </u>	∑ = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)  1		Indicators of hydric soil and wetland hydrology must
2		be present, unless disturbed or problematic.
	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % Cover of Blotic	Crust	Vegetation Present? Yes No
Remarks:		
		Constitution
		<b>1</b>

SOIL	Samp

Sampling Point: MULTAT 3

Depth (inches)	Matrix Color (moist)	%	Redo Color (moist)	x Feature	s Type	Loc <sup>2</sup>	Tavtura		Damaster	
nicines)	ID AV SA	<del>70</del>	10412-46	<del>"</del>		. <u>Loc⁻</u> /∕∕\	Texture /	Λ- A-	Remarks Soil	
	10 40,0012	-70 -	10 9)270		ـــــــ		- Invaria	MM		
				<del></del>	<del></del>	· <del></del>			Clean	UPlan
										scope
									16517	on - 1
									Huo	LIC SO
								C	unfirme	1 23
								#	Novi II G	20100
		-						Comp Co	mand d	1/00
								on fi	····	7 426
	ncentration, D=Depletindicators: (Applicab					ed Sand Gr			=Pore Lining.	
_ Histosol		ie to an L	Sandy Redo		su.;				ematic Hydri	C Solis :
_	ipedon (A2)		Stripped Ma	- •				Jck (A9) ( Jck (A10)	(LRR B)	
Black His			Loamy Muci		(F1)			d Vertic (		
	n Sulfide (A4)		Loamy Gley					ent Mate	•	
	Layers (A5) (LRR C)		Depleted Ma	trlx (F3)					Remarks)	
	ck (A9) (LRR D)	V 4.43	Redox Dark	•	,					
	Below Dark Surface (/ rk Surface (A12)	477)	Depleted Da Redox Depre				31	. د د داع		
	ucky Mineral (S1)		Redox Depri	•	-0)				ytic vegetation	
	eyed Matrix (S4)		voman con	(1 0)					problematic.	20L,
strictive L	ayer (if present):								problemone.	****
	سأطعصان						Ī			<i>f</i>
Type:			<del>_</del>							
Type: Depth (incl	nes): 010 L		<del></del>				Hydric Soil P	resent?	Yes	No K
Depth (incl	nes):						Hydric Soil F	resent?	Yes	_ No <u>X</u>
Depth (incl marks:							Hydric Soil F	resent?	Yes	_ No <u>X</u>
Depth (incientaries:	SY						Hydric Soll F	resent?	Yes	_ No _X
Depth (inclemarks:  DROLOG  otland Hydi	SY rology Indicators:	regulred; o	theck all that annivi					-		No X
Depth (inclemarks:  DROLOG  otland Hydrimary Indica	SY rology Indicators: tors (minimum of one i	required; (		-			Second	ary Indica	ators (2 or mo	
Depth (inclemarks:  DROLOG otland Hydrimary Indica	iY rology Indicators: tors (minimum of one i	regulred; c	Salt Crust (I	311)			Second:	ary Indica ter Marks	ators (2 or mo (B1) (Riverii	ne)
Depth (inclemarks:  DROLOG otland Hydrimary Indica , Surface W , High Wate	ology Indicators: tors (minimum of one i vater (A1) er Table (A2)	regulred; o	Salt Crust (i Blotic Crust	311) (B12)	/B13\		Second Wa Sec	ary Indica ter Marks diment De	ators (2 or mo : (B1) (Riverii eposits (B2) (F	ne) Riverine)
Depth (incl marks: DROLOG tland Hydi mary Indica Surface W High Wate Saturation	ology Indicators: tors (minimum of one invater (A1) ar Table (A2)		Salt Crust (i Biotic Crust Aquatic Inve	311) (B12) ertebrates	, ,		Second Wa Sec	ary Indica ter Marks diment De t Deposit	ators (2 or mo : (B1) (Riverii :posits (B2) (i s (B3) (Riveri	ne) Riverine)
Depth (incl marks: DROLOG tland Hydi mary Indica Surface W High Wate Saturation Water Ma	Fology Indicators:  tors (minimum of one indicator (A1)  or Table (A2)  i (A3)  rks (B1) (Nonriverine)		Salt Crust (i Biotic Crust Aquatic Inve	311) (B12) ertebrates ulfide Odd	or (C1)	ivina Root	Second Wa Sec Drif Dra	ary Indica ter Marks diment De t Depositi inage Pa	ators (2 or mo : (B1) (Riverin eposits (B2) (F s (B3) (Riverin tterns (B10)	ne) Riverine) ine)
Depth (inclemarks:  DROLOG  atland Hydinary Indica  Surface W  High Wate  Saturation  Water Ma  Sediment	rology Indicators: tors (minimum of one i vater (A1) er Table (A2) i (A3) rks (B1) (Nonriverine) Deposits (B2) (Nonriv	erine)	Salt Crust (I Blotle Crust Aquatic Inve	311) (B12) ertebrates ulfide Odd izosphere	or (C1) es along l	-	Second Wa Sec Drif Dra s (C3)	ary Indica ter Marks diment De t Deposit inage Pa -Season	ators (2 or mo (B1) (Riveria posits (B2) (F s (B3) (Riveria tterns (B10) Water Table (	ne) Riverine) ine)
Depth (inclemarks:  DROLOGetland Hydrogetland Hydrogetland Hydrogetland Hydrogetland Hydrogetland High Water Marchallend Hydrogetland H	ology Indicators: tors (minimum of one interpretation (A1) or Table (A2) i (A3) rks (B1) (Nonriverine)	erine)	Salt Crust (I Blotle Crust Aquatic Inve Hydrogen S Oxidized Rh	311) (B12) ertebrates ulfide Odd izosphere Reduced	or (C1) es along l l Iron (C4	)	Second Wa Sec Drif Dra s (C3) Cra	ary Indica ter Marks Ilment De t Deposit Inage Pa -Season yfish Buri	ators (2 or mo (B1) (Riveri eposits (B2) (R s (B3) (Riveri tterns (B10) Water Table ( rows (C8)	ne) Riverine) ine) (C2)
Depth (inclemarks:  DROLOG  otland Hydromary Indicate  Surface Water Mater Mat	ology Indicators: tors (minimum of one intertal (A1) or Table (A2) (A3) rks (B1) (Nonriverine) Deposits (B2) (Nonriverine)	erine)	Salt Crust (I Blotle Crust Aquatic Inve	311) (B12) ertebrates ulfide Odd izosphere Reduced Reduction	or (C1) es along l I fron (C4 n in Tilled	)	Second Wa Second Drift Drift Drift Cra Sate	ary Indicater Marks diment De t Depositi inage Pa -Season yfish Buru uration Vi	ators (2 or mo (B1) (Riveri eposits (B2) (i s (B3) (Riveri tterns (B10) Water Table ( rows (C8)	ne) Riverine) ine)
Depth (inclemarks:  DROLOGE Etland Hydinary Indication Surface Water Mater Mat	ology Indicators: tors (minimum of one invater (A1) or Table (A2) (A3) rks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) oil Crack's (B6)	erine)	Salt Crust (I Biotle Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	311) (B12) ertebrates ulfide Odd ilzosphere Reduced Reduction lurface (C	or (C1) es along l I Iron (C4 n In Tilled 7)	)	Second: Wa Second: Drift Drift Dra s (C3) Dry Cra Satt Sha	ary Indicater Marks diment De t Depositi inage Pa -Season yfish Bun uration Vi illow Aqui	ators (2 or mo (B1) (Riveria eposits (B2) (B s (B3) (Riveria tterns (B10) Water Table ( rows (C8) sible on Aeria ttard (D3)	ne) Riverine) ine) (C2)
Depth (inclemarks:  DROLOG  atland Hydre  Burface Wellingh Water  Saturation  Water Ma  Sediment  Drift Depo  Surface Selinundation  Water-Sta	rology Indicators: tors (minimum of one i tater (A1) er Table (A2) i (A3) rks (B1) (Nonriverine) Deposits (B2) (Nonriverine sits (B3) (Nonriverine oil Cracks (B6) i Visible on Aerial Imagined Leaves (B9)	erine)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S	311) (B12) ertebrates ulfide Odd ilzosphere Reduced Reduction lurface (C	or (C1) es along l I Iron (C4 n In Tilled 7)	)	Second: Wa Second: Drift Drift Dra s (C3) Dry Cra Satt Sha	ary Indicater Marks diment De t Depositi inage Pa -Season yfish Bun uration Vi illow Aqui	ators (2 or mo (B1) (Riveri eposits (B2) (i s (B3) (Riveri tterns (B10) Water Table ( rows (C8)	ne) Riverine) ine) (C2)
Depth (inclemarks:  DROLOG  atland Hydinary Indica Surface W High Water Saturation Water Ma Sediment Drift Depo Surface Si Inundation Water-Sta	rology Indicators: tors (minimum of one interestation) ater (A1) ar Table (A2) i (A3) rks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) oil Cracks (B6) i Visible on Aerial Imagined Leaves (B9)	erine)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	311) (B12) crtebrates ulfide Odd cizosphere Reduced Reduction Gurface (C	or (C1) es along l Iron (C4 n in Tilleo 7) narks)	)   Soils (C6)	Second: Wa Second: Drift Drift Dra s (C3) Dry Cra Satt Sha	ary Indicater Marks diment De t Depositi inage Pa -Season yfish Bun uration Vi illow Aqui	ators (2 or mo (B1) (Riveria eposits (B2) (B s (B3) (Riveria tterns (B10) Water Table ( rows (C8) sible on Aeria ttard (D3)	ne) Riverine) ine) (C2)
Depth (inclemarks:  DROLOG  Stland Hydromary Indica Surface Water Mater	rology Indicators: tors (minimum of one of the following	erine) ) gery (B7)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	311) (B12) crtebrates ulfide Odd cizosphere Reduced Reduction curface (C clin in Rem	or (C1) es along l fron (C4 n in Tilleo 77) narks)	)   Soils (C6)	Second: Wa Second: Drift Drift Dra s (C3) Dry Cra Satt Sha	ary Indicater Marks diment De t Depositi inage Pa -Season yfish Bun uration Vi illow Aqui	ators (2 or mo (B1) (Riveria eposits (B2) (B s (B3) (Riveria tterns (B10) Water Table ( rows (C8) sible on Aeria ttard (D3)	ne) Riverine) ine) (C2)
Depth (inclemarks:  DROLOG  otland Hydromary Indicate Surface Water Mater Mate	rology Indicators: tors (minimum of one i vater (A1) er Table (A2) i (A3) rks (B1) (Nonriverine) Deposits (B2) (Nonriverine oil Cracks (B6) i Visible on Aerial Imagined Leaves (B9) itions: Present? Yes _ resent? Yes _ sent? Yes _	erine) ) gery (B7)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	311) (B12) entebrates ulfide Odd itzosphere Reduced Reduction iurface (C ein in Rem es):	or (C1) es along l Iron (C4 n in Tilled 77) narks)	Soils (C6)	Second Wa Sec Drif Dra s (C3) Dry Cra Sati FAC	ary Indicater Marks ilment De t Depositinage Pa -Season yfish Buru uration Vi	ators (2 or mo (B1) (Riverial eposits (B2) (Riverial s (B3) (Riverial tterns (B10) Water Table ( rows (C8) sible on Aerial itard (D3) Test (D5)	ne) Riverine) ine) (C2) al imagery (C9
Depth (inclemarks:  DROLOG  atland Hydiomary Indica Surface Water Mater Table Produces capill	rology Indicators: tors (minimum of one interval (A1) or Table (A2) i (A3) rks (B1) (Nonriverine) Deposits (B2) (Nonriverine) oil Cracks (B6) i Visible on Aerial Imagined Leaves (B9) tions: Present? Yes _ resent? Yes _ ary fringe)	erine) ) gery (B7) No No	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	B11) (B12) crtebrates ulfide Odd cizosphere Reduced Reduction curface (C clin in Rem es): es):	or (C1) es along l liron (C4 n in Tilleo 77) narks)	Soils (C6)  Wetlar	Second  Wa Sec Diff Dra Sec Cra Sate FAC	ary Indicater Marks ilment De t Depositinage Pa -Season yfish Buru uration Vi	ators (2 or mo (B1) (Riverial eposits (B2) (Riverial s (B3) (Riverial tterns (B10) Water Table ( rows (C8) sible on Aerial itard (D3) Test (D5)	ne) Riverine) ine) (C2)
Depth (inclemarks:  DROLOG  adland Hydinary Indica Surface Water Mater Surface Surface Surface Surface Water Table Progration Presolutes capill	rology Indicators: tors (minimum of one invater (A1) er Table (A2) (A3) rks (B1) (Nonriverine) Deposits (B2) (Nonriverine) oil Cracks (B6) In Visible on Aerial Imagined Leaves (B9) Itions: Present? Yes _ resent?	erine) ) gery (B7) No No	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	B11) (B12) crtebrates ulfide Odd cizosphere Reduced Reduction curface (C clin in Rem es): es):	or (C1) es along l liron (C4 n in Tilleo 77) narks)	Soils (C6)  Wetlar	Second Wa Second Drif Dra Dra Satu Sha FAC	ary Indicater Marks ilment De t Depositinage Pa -Season yfish Buru uration Vi	ators (2 or mo (B1) (Riverial eposits (B2) (Riverial s (B3) (Riverial tterns (B10) Water Table ( rows (C8) sible on Aerial itard (D3) Test (D5)	ne) Riverine) ine) (C2) al imagery (C9
Depth (inclemarks:  DROLOG  etland Hydrimary Indica Surface Water Ma Saturation Water Ma Sediment Drift Depo Surface Si Inundation Water-Sta  etd Observa rface Water ater Table Predudes capill	rology Indicators: tors (minimum of one rotater (A1) er Table (A2) 1 (A3) rks (B1) (Nonriverine) Deposits (B2) (Nonriverine) oil Cracks (B6) 1 Visible on Aerial Imagined Leaves (B9) tions: Present? Yes _ resent? Yes _ ary fringe)	erine) ) gery (B7) No No	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expla	B11) (B12) crtebrates ulfide Odd cizosphere Reduced Reduction curface (C clin in Rem es): es):	or (C1) es along l liron (C4 n in Tilleo 77) narks)	Soils (C6)  Wetlar	Second Wa Second Drif Dra Dra Satu Sha FAC	ary Indicater Marks ilment De t Depositinage Pa -Season yfish Buru uration Vi	ators (2 or mo (B1) (Riverial eposits (B2) (Riverial s (B3) (Riverial tterns (B10) Water Table ( rows (C8) sible on Aerial itard (D3) Test (D5)	ne) Riverine) ine) (C2) al imagery (C9
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Projecusite: West Newfort BIL TROKI	FARM_ City/County: Of	Sampling Date: LD - 15
Applicant/Owner: WEST WEWPONT BILL		
Investigator(s): Thomas	Section, Township, R	ange: UNSCOTUTARD OF TSG, KIOW
Landform (hillslope, terrace, etc.):	Local relief (concave	, convex, none):
Subregion (LRR):	Lat: 32 28 04 32 N	Long: 117 56 45 87 W Datum: 1910
Soll Map Unit Name: Bolsa Silty 100	<b>ક</b> ા	NWI classification: Falusion ne
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes 📈 No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologys	significantly disturbed? ಸ೦ Are	"Normal Circumstances" present? Yes K No
Are Vegetation, Soil, or Hydrologyr	naturally problematic? ぬる (If r	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point	locations, transects, important features, etc.
Hydric Soil Present? Yes N	lo (s the Sample	
Remarks:		
VEGETATION – Use scientific names of plan	ts.	
20.0	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 - 2)  1. Washing tonia Cobis to	% Cover Species? Status	Number of Dominant Specles That Are OBL, FACW, or FAC: (A)
2 Acacia longifolia	The Je UP	``
3.		Total Number of Dominant Species Across All Strata: (B)
4		Percent of Dominant Species
Casting/Charle Charters (Diet sing)	= Total Cover	That Are OBL, FACW, or FAC:
Sapling/Shrub Stratum (Plot size:)  1.		Prevalence Index worksheet:
2.		Total % Cover of: Multiply by:
3.		OBL species x 1 =
4		FACW species x 2 = 2D
5,		FAC species x 3 =
Herb Stratum, (Riot size:)	= Total Cover	FACU species
1. Kalobitshoot grass	20 y FACW	Column Totals: 100 (A) 320 (B)
2		Prevalence Index = B/A = 3:2
3 4		Hydrophytic Vegetation Indicators:
5		
6.		Prevalence Index is ≤3.01 kJO
7		Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8	~~~	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	Total Cover	
1	· — — — · · · · · · · · · · · · · · · ·	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2		
20	= Total Cover	Hydrophytic Vegetation
	r of Blotic Crust 50%	Present? Yes No
Remarks:		

Sampling Point: \_ Palm 1

I							n the absenc		•	-
DepthCol	Matrix ior (moist)	% Col-	Redox or (moist)	Features %	Type	Loc <sup>2</sup>	Texture		Rema	rke
Α ΙΔ .		<u> 80                                   </u>	Sul W.	200	TYDE	M	<b>4</b>		T/GIII6	iiks
100	13-212	<u> </u>	4/- 1/2	(20)	· Carrier	-3-3	1 1200	BEW -	446-	
				<del></del> .			19/1/2	1.00000	7 1 1/24	
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							Artivo	red	OV.	Hormany
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				<del></del> ,			·····	<u> </u>		
				<del></del>						
Type: C=Concentra						d Sand G		ocation: PL=P	ore Linir	ng, M=Matrix.
Hydric Soil Indicate	ors: (Applicable	to all LKKS,			<b>1.</b> ]			s for Problem	-	dric Solls":
Histosol (A1)			Sandy Redox					Muck (A9) (LI	•	
Histic Epipedon			Stripped Matr					Muck (A10) (I		
Black Histic (A3)			Loamy Mucky					ced Vertic (F1		
Hydrogen Sulfide	• •	_	Loamy Gleyer		r2)			Parent Materia		
Stratified Layers 1 cm Muck (A9)			Depleted Mate Redox Dark S		e)		Olhe	' (Explain in R	emarks)	
Depleted Below			Depleted Dark	•	•					
Thick Dark Surfa			Redox Depres				3jadlasta	n of huduante t	ie :'	ntinu nu d
Sandy Mucky Mi		_	Vernal Pools (	•	"			s of hydrophyt I hydrology ma		
Sandy Gleyed M			40mai 1 00i3 (	(1 0)				disturbed or p		
Restrictive Layer (if							T T T T T T T T T T T T T T T T T T T	disturbed of pr	- I O DIE II I AI	(IIV,
Type:	· ·									
Depth (inches):	NING	<del></del>							b	4
	V 20. 44				<u></u> .		Hydric Soi	l Present?	Yes	No
Remarks:										
HYDROLOGY										
HYDROLOGY Wetland Hydrology I	Indicators:									
Wetland Hydrology I		aulred: check	all that apply)				Sara	ndani Indicate	ura (2 os	Mara resultandà
Wetland Hydrology i Primary Indicators (m	inimum of one re	gulred; check		44\						more required)
Wetland Hydrology I Primary Indicators (m Surface Water (A	inimum of one re 1)	guired; check	Salt Crust (B	•			\	Vater Marks (f	B1) (Ríve	erine)
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table	inimum of one re 1)	<u></u>	Salt Crust (B Biotic Crust (	B12)			\	Vater Marks (i Sediment Dep	B1) (Ríve osits (B2	erine) ) (Riverine)
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3)	inimum of one re 1) : (A2)	<u></u>	Salt Crust (B Biotic Crust (I Aquatic Inver	B12) tebrates (	-		\	Vater Marks (f Sediment Depo Orift Deposits (	B1) (Rive osits (B2 (B3) (Riv	erine) ) (Riverine) rerine)
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1)	inimum of one re 1) e (A2) ) (Nonrîverine)	<u> </u>	Salt Crust (B Biotic Crust (I Aquatic Inver Hydrogen Su	B12) tebrates ( Ifide Odor	(C1)		(	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte	B1) (Rive osits (B2 (B3) (Riverns (B10	erine) ) (Riverine) rerine) ))
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit	inimum of one re 1) : (A2) ) (Nonriverine) ts (B2) (Nonriver	<u> </u>	Salt Crust (B Biotic Crust (i Aquatic Inver Hydrogen Su Oxidized Rhiz	B12) tebrates ( líide Odor zospheres	r (C1) s along Li	ving Rool	(	Vater Marks (f Sediment Depo Orift Deposits (	B1) (Rive osits (B2 (B3) (Riverns (B10	erine) ) (Riverine) rerine) ))
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	inimum of one re :1) : (A2) : (Nonrîverine) ts (B2) (Nonriver :) (Nonriverine)	<u> </u>	Salt Crust (B Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F	B12) tebrates ( líide Odor zospheres Reduced	r (C1) s along Li Iron (C4)		\ 1 1 1 ls (C3) 1	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte	B1) (Rive osits (B2 (B3) (Rive erns (B10 ater Tab	erine) ) (Riverine) rerine) ))
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Surface Soil Crace	inimum of one re :(1) :(A2) :(Nonrîverine) its (B2) (Nonrîver i) (Nonrîverine) iks (B6)	rine)	Salt Crust (B Biotic Crust (i Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F	B12) tebrates ( liide Odor zospheres Reduced I Reduction	r (C1) along Li Iron (C4) in Tilled		\ 1 1 1 ts (C3) 1	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burro	B1) (Rive osits (B2 (B3) (Rive erns (B10 ater Tab ws (C8)	erine) ) (Riverine) rerine) ))
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Surface Soil Crace Inundation Visible	inimum of one re.  (A2)  (Nonriverine)  (s (B2) (Nonriver)  (Nonriverine)  (Nonriverine)  ks (B6)  e on Aerial Image	rine)	Salt Crust (B Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F	B12) tebrates ( liide Odor zospheres Reduced I Reduction	r (C1) along Li Iron (C4) in Tilled		\ 1 1 1 2 ls (C3) 1	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burro	B1) (Riversity (B2) (B3) (Riversity (B1)) Eater Tabous (C8) bie on Ar	erine) ) (Riverine) rerine) )) le (C2)
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Surface Soil Crace	inimum of one re.  (A2)  (Nonriverine)  (s (B2) (Nonriver)  (Nonriverine)  (Nonriverine)  ks (B6)  e on Aerial Image	rine)	Salt Crust (B Biotic Crust (i Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F	B12) tebrates ( lifde Odor zospheres Reduced   Reduction urface (C7	(C1) s along Li lron (C4) in Tilled		\ 1 1 ls (C3) 1 (C3)	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burrov Saturation Visil	B1) (Riversits (B2) (B3) (Riversits (B10)	erine) ) (Riverine) rerine) )) le (C2)
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Surface Soil Crace Inundation Visible	inimum of one re.  (A2)  (Nonriverine)  (s (B2) (Nonriver)  (Nonriverine)  (Nonriverine)  ks (B6)  e on Aerial Image	rine)	Salt Crust (B Biotic Crust (I Aquatic Inver Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su	B12) tebrates ( lifde Odor zospheres Reduced   Reduction urface (C7	(C1) s along Li lron (C4) in Tilled		\ 1 1 ls (C3) 1 (C3)	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burro Saturation Visit Shallow Aquita	B1) (Riversits (B2) (B3) (Riversits (B10)	erine) ) (Riverine) rerine) )) le (C2)
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Surface Soil Crace Inundation Visible Water-Stained Le	inimum of one re- (1) (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine) (Nonriverine) (S (B6) (Con Aerial Image aves (B9)	rine)	Salt Crust (B Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain	B12) tebrates ( lifide Odor cospheres Reduced   Reduction triface (C7	r (C1) s along Li Iron (C4) in Tilled i)	Soits (C6)	\ 1 1 ls (C3) 1 (C3)	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burro Saturation Visit Shallow Aquita	B1) (Riversits (B2) (B3) (Riversits (B10)	erine) ) (Riverine) rerine) )) le (C2)
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Surface Soil Crace Inundation Visible Water-Stained Le Field Observations: Surface Water Presen	inimum of one re- (1) (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine) (Nonriverine) (S (B6) (On Aerial Imagelaves (B9) (T Yes	rine)	Salt Crust (B Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain	B12) tebrates ( lifide Odor cospheres Reduced   Reduction orface (C7 n in Rema	r (C1) s along Li Iron (C4) in Tilled : () arks)	Soils (C6)	\ 1 1 ls (C3) 1 (C3)	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burro Saturation Visit Shallow Aquita	B1) (Riversits (B2) (B3) (Riversits (B10)	erine) ) (Riverine) rerine) )) le (C2)
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Surface Soil Crace Inundation Visible Water-Stained Le Field Observations: Surface Water Present?	inimum of one re- (1) (A2) (Nonriverine) (s (B2) (Nonriverine) (Nonriverine) (Nonriverine) (ks (B6) (on Aerial Imagelaves (B9) (Yes	rine)	Salt Crust (B Biotic Crust (i Aquatic Inver Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain Depth (inche	B12) tebrates ( title Odor cospheres Reduced I Reduction orface (C7 n in Rema	r (C1) s along Li Iron (C4) in Tilled : ') arks)	Soils (C6)		Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burrov Saturation Visit Shallow Aquita (AC-Neutral To	B1) (Rive osits (B2) (B3) (Rive erns (B10 ater Tab ws (C8) bie on Ad rd (D3) est (D5)	erine) ) (Riverine) rerine) )) le (C2) erial Imagery (C9)
Wetland Hydrology I Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3 Surface Soil Crace Inundation Visible Water-Stained Le Field Observations; Surface Water Present? Saturation Present? (includes capillary fring	inimum of one re- (1) (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine) (Nonriverine) (S (B6) (Nonriverine) (Nonr	rine)  Ty (B7)  No  No  No  No  No  No  No  No  No  No	Salt Crust (B' Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain Depth (inche	B12) tebrates ( lifide Odor cospheres Reduced   Reduction orface (C7 n in Rema	f (C1) s along Li lron (C4) in Tilled f) arks)	Soils (C6)	\ 1 ts (C3) 1 (C3) 5 5 F	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burro Saturation Visit Shallow Aquita	B1) (Rive osits (B2) (B3) (Rive erns (B10 ater Tab ws (C8) bie on Ad rd (D3) est (D5)	erine) ) (Riverine) rerine) )) le (C2) erial Imagery (C9)
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Surface Soil Crace Inundation Visible Water-Stained Le Field Observations: Surface Water Present Water Table Present?	inimum of one re- (1) (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine) (Nonriverine) (S (B6) (Nonriverine) (Nonr	rine)  Ty (B7)  No  No  No  No  No  No  No  No  No  No	Salt Crust (B' Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain Depth (inche	B12) tebrates ( lifide Odor cospheres Reduced   Reduction orface (C7 n in Rema	f (C1) s along Li lron (C4) in Tilled f) arks)	Soils (C6)	\ 1 ts (C3) 1 (C3) 5 5 F	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burrov Saturation Visit Shallow Aquita (AC-Neutral To	B1) (Rive osits (B2) (B3) (Rive erns (B10 ater Tab ws (C8) bie on Ad rd (D3) est (D5)	erine) ) (Riverine) rerine) )) le (C2) erial Imagery (C9)
Wetland Hydrology I Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3 Surface Soil Crace Inundation Visible Water-Stained Le Field Observations; Surface Water Present? Saturation Present? (includes capillary fring	inimum of one re- (1) (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine) (Nonriverine) (S (B6) (Nonriverine) (Nonr	rine)  Ty (B7)  No  No  No  No  No  No  No  No  No  No	Salt Crust (B' Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain Depth (inche	B12) tebrates ( lifide Odor cospheres Reduced   Reduction orface (C7 n in Rema	f (C1) s along Li lron (C4) in Tilled f) arks)	Soils (C6)	\ 1 ts (C3) 1 (C3) 5 5 F	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burrov Saturation Visit Shallow Aquita (AC-Neutral To	B1) (Rive osits (B2) (B3) (Rive erns (B10 ater Tab ws (C8) bie on Ad rd (D3) est (D5)	erine) ) (Riverine) rerine) )) le (C2) erial Imagery (C9)
Wetland Hydrology I Primary Indicators (m. Surface Water (A. High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Surface Soil Crace Inundation Visible Water-Stained Le Field Observations: Surface Water Present Water Table Present? (includes capillary fring Describe Recorded Dase	inimum of one re- (1) (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine) (Nonriverine) (S (B6) (Nonriverine) (Nonr	rine)  Ty (B7)  No  No  No  No  No  No  No  No  No  No	Salt Crust (B' Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain Depth (inche	B12) tebrates ( lifide Odor cospheres Reduced   Reduction orface (C7 n in Rema	f (C1) s along Li lron (C4) in Tilled f) arks)	Soils (C6)	\ 1 ts (C3) 1 (C3) 5 5 F	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burrov Saturation Visit Shallow Aquita (AC-Neutral To	B1) (Rive osits (B2) (B3) (Rive erns (B10 ater Tab ws (C8) bie on Ad rd (D3) est (D5)	erine) ) (Riverine) rerine) )) le (C2) erial Imagery (C9)
Wetland Hydrology I Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3 Surface Soil Crace Inundation Visible Water-Stained Le Field Observations; Surface Water Present? Saturation Present? (includes capillary fring	inimum of one re- (1) (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine) (Nonriverine) (S (B6) (Nonriverine) (Nonr	rine)  Ty (B7)  No  No  No  No  No  No  No  No  No  No	Salt Crust (B' Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain Depth (inche	B12) tebrates ( lifide Odor cospheres Reduced   Reduction orface (C7 n in Rema	f (C1) s along Li lron (C4) in Tilled f) arks)	Soils (C6)	\ 1 ts (C3) 1 (C3) 5 5 F	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burrov Saturation Visit Shallow Aquita (AC-Neutral To	B1) (Rive osits (B2) (B3) (Rive erns (B10 ater Tab ws (C8) bie on Ad rd (D3) est (D5)	erine) ) (Riverine) rerine) )) le (C2) erial Imagery (C9)
Wetland Hydrology I Primary Indicators (m. Surface Water (A. High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Surface Soil Crace Inundation Visible Water-Stained Le Field Observations: Surface Water Present Water Table Present? (includes capillary fring Describe Recorded Dase	inimum of one re- (1) (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine) (Nonriverine) (S (B6) (Nonriverine) (Nonr	rine)  Ty (B7)  No  No  No  No  No  No  No  No  No  No	Salt Crust (B' Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain Depth (inche	B12) tebrates ( lifide Odor cospheres Reduced   Reduction orface (C7 n in Rema	f (C1) s along Li lron (C4) in Tilled f) arks)	Soils (C6)	\ 1 ts (C3) 1 (C3) 5 5 F	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burrov Saturation Visit Shallow Aquita (AC-Neutral To	B1) (Rive osits (B2) (B3) (Rive erns (B10 ater Tab ws (C8) bie on Ad rd (D3) est (D5)	erine) ) (Riverine) rerine) )) le (C2) erial Imagery (C9)
Wetland Hydrology I Primary Indicators (m. Surface Water (A. High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Surface Soil Crace Inundation Visible Water-Stained Le Field Observations: Surface Water Present Water Table Present? (includes capillary fring Describe Recorded Dase	inimum of one re- (1) (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine) (Nonriverine) (S (B6) (Nonriverine) (Nonr	rine)  Ty (B7)  No  No  No  No  No  No  No  No  No  No	Salt Crust (B' Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain Depth (inche	B12) tebrates ( lifide Odor cospheres Reduced   Reduction orface (C7 n in Rema	f (C1) s along Li lron (C4) in Tilled f) arks)	Soils (C6)	\ 1 ts (C3) 1 (C3) 5 5 F	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burrov Saturation Visit Shallow Aquita (AC-Neutral To	B1) (Rive osits (B2) (B3) (Rive erns (B10 ater Tab ws (C8) bie on Ad rd (D3) est (D5)	erine) ) (Riverine) rerine) )) le (C2) erial Imagery (C9)
Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3 Drift Deposits (B3 Surface Soil Crace Inundation Visible Water-Stained Le Field Observations: Surface Water Present? Saturation Present? (includes capillary fring Describe Recorded Dase	inimum of one re- (1) (A2) (Nonriverine) (S (B2) (Nonriverine) (Nonriverine) (Nonriverine) (S (B6) (Nonriverine) (Nonr	rine)  Ty (B7)  No  No  No  No  No  No  No  No  No  No	Salt Crust (B' Biotic Crust (I Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Thin Muck Su Other (Explain Depth (inche	B12) tebrates ( lifide Odor cospheres Reduced   Reduction orface (C7 n in Rema	f (C1) s along Li lron (C4) in Tilled f) arks)	Soils (C6)	\ 1 ts (C3) 1 (C3) 5 5 F	Vater Marks (I Sediment Depo Drift Deposits ( Drainage Patte Dry-Season W Craylish Burrov Saturation Visit Shallow Aquita (AC-Neutral To	B1) (Rive osits (B2) (B3) (Rive erns (B10 ater Tab ws (C8) bie on Ad rd (D3) est (D5)	erine) ) (Riverine) rerine) )) le (C2) erial Imagery (C9)

Project/Site: WEST NEWPORT DIL TROOK	FARM_ CILYIC	County: <u>ORA</u>	Sampling Date: 8-4-15
Applicant/Owner: WEST NEWFOUT BLL			4 8 4
Investigator(s): Thomas and	Section	on, Township, Rai	nge: UNSCHIMODI, TSG. RIOW
Landform (billstone terrace etc.):	to Loca	I relief (concave. o	convex. none): Slope (%):
Subregion (LRR): <u>LPR-C</u>	_ Lat: <u>33                                  </u>	30432N	Long: 117° 56 55 87 W Datum: NATO 8
Soil Map Unit Name: 11dal Flats			NWI classification: TalvSN/Nu
Are climatic / hydrologic conditions on the site typical for this	s time of year? Y	′es <u> </u>	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologys			
Are Vegetation, Soll, or Hydrology r	naturally problem	atic? N70 (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing san	npling point l	ocations, transects, important features, etc.
1	o	Is the Sampled	N. Carlotte and the control of the c
	0	within a Wetlar	id? Yes V No
Remarks:		<u> </u>	
VEGETATION – Use scientific names of plan	ts.		
		ninant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Spe		Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
3.			Total Number of Dominant Species Across All Strata:  (B)
4.			
Sapling/Shrub Stratum (Plot size: 20 R)	= To	tal Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: W )  1. Sal/ Y ground (NC) (1)	10	Y FACW	Prevalence Index worksheet:
2.		1 18000	Total % Cover of: Multiply by:
3			OBL species <u>60</u> x1= <u>60</u>
4			FACW species
5			FAC species x 3 =
Herb Stratum (Plot size: 10 1 2		fal Cover	FACU species x 4 =
1. Schoenoplectus Californica	<u>50                                    </u>	e orl	UPL species x 5 = Column Totals: (A) (B)
2 Scholmopleons Manitimus	lo r	<u>. الحاكا</u>	,
3	<del></del>		Prevalence Index = B/A = 1 1 11
4			Hydrophytic Vegetation Indicators:  Dominance Test is >50%
5			Prevalence Index is ≤3.0 <sup>t</sup>
6			Morphological Adaptations¹ (Provide supporting
8	•		data in Remarks or on a separate sheet)
	60 = To	tal Cover	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot slze:)			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1			be present, unless disturbed or problematic.
	= To	tal Cover	Hydrophytic ,
% Bare Ground in Herb Stratum % Cover	of Biolic Crust _	$\sim$	Vegetation Present? Yes No
Remarks:			

Sampling Point: Wallow Ditch

Profile Description: (Describe to the de Depth Matrix	epth needed to document the indicator of Redox Features	r confirm the absence of indicators.)
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture Remarks
D-b NOT C	Colored -	
	0161.	
	(, <del>5 (1906</del>	
<sup>1</sup> Type: C=Concentration, D=Depletion, RN	M=Reduced Matrix, CS=Covered or Coated	Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soll Indicators: (Applicable to a		Indicators for Problematic Hydric Solis <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
,Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
∐ Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	•
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	_
Thick Dark Surface (A12)	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)		unless disturbed or problematic.
Restrictive Layer (if present):		
Type:		<b>√</b>
Depth (Inches): 1001		Hydric Soil Present? Yes No
Remarks:		
YDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one require	d; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Salt Crust (B11)	Waler Marks (B1) (Riverine)
High Water Table (A2)	Blotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Liv	
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish Burrows (CB)
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled S	· · · · · · · · · · · · · · · · · · ·
Inundation Visible on Aerial Imagery (B		Shallow Aguitard (D3)
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)
ield Observations:		170 Neutral Test (DO)
Surface Water Present? Yes	No Depth (inches):	
	No Depth (inches):	
14	,	
saturation Present? Yes   includes capillary fringe)	No Depth (inches):	Wetland Hydrology Present? Yes No No
escribe Recorded Data (stream gauge, mo	onitoring well, aerial photos, previous inspec	tions), if available:
temarks:		

Project/Site: WEST NEWPORT BIL TROOK	FARINI C	City/County	, OPA	Sampling Date: 5-4-5
Applicant/Owner: WEST NEWFORT 13:L				$B \rightarrow 0$
Investigator(s): Thantano				
· -				convex, none): Loncave Slope (%): < 3
Subregion (LRR): LRC-C	Lat: 22	2810	# 20"N	Long: 117° 56 55-87" Datum: NAD 3
Soil Map Unit Name: Tipor Flats		-	1,100	NWI classification: Palus Fine
Are climatic / hydrologic conditions on the site typical for thi	is time of vea	r? Yes	No.	
Are Vegetation, Soll, or Hydrology				
Are Vegetation, Soil, or Hydrology				
				ocations, transects, important features, etc.
Hydrophytic Vegetation Present?	10	1		_
	10	1	ne Sampled	Λ
	10	With	in a Wetlar	id? Yes No
Remarks:		1	······································	
VEGETATION – Use scientific names of plan	ofe.			
Page 171101 Coc Scientific Rulles of plan	Absolute	Dominant	Indicator	Dominaπce Test worksheet:
Tree Stratum (Plot size:)				Number of Dominant Species
1.				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3			-	Species Across All Strata: (B)
4,		- Total Ca		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		= Total Co	ver	That Are OBL, FACW, or FAC: (A/B)
1				Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3				OBL species 50 x 1 = 50
4				MACVV species X2-
5		= Total Co		FAC species x 3 = FACU species x 4 =
Herb Stratum (Plot size: 5 14	puse	- rotarot	.4.61	
1. Saliwania Pacifica	20	<del></del>	000	UPL species x 5 = Column Totals: 60 (A) (B)
2. Frankoma Salina		$\rightarrow$	THEN	
3.				Prevalence Index = B/A = 1177
4.				Hydrophytic Vegetation Indicators:  Dominance Test is >50%
6,				Prevalence Index is ≤3.0¹
7				Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
	60	= Total Co	ver	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)				Modification of foresting will and produced by dust
1	-			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2	[an			Hydrophytic
40	r of Biotic Cr			Venetation /
	r of Biotic Cr	ust/		Present? Yes No No
Remarks:				
				P

Sampling Point: Pickleweed 1

Phone Santan		firm the absence of indicators.)
Depth Matrix	Redox Features	<del>, .</del>
(inches) Color (moist) %	Color (molst) % Type <sup>1</sup> Loc	<sup>2</sup> Texture Remarks
0-b NOT CO	lored -	
SURdic	MAN F	
JOH! WILL		
	ha Mock	
	•	
		PAN UNIVERSITY OF THE PARTY OF
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=R		
Hydric Soll Indicators: (Applicable to all LF	Rs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loarny Mucky Mineral (F1)	Reduced Vertic (F18)
	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Dark Surface (F7) Redox Depressions (F8)	Specifications of hydrochysters at
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	Verilar Fuois (F9)	wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if present):		onless distanced of problematic.
- 16		
Depth (inches):	_	W 11 0 11 0 11 11 11 11 11 11 11 11 11 11
		Hydric Soil Present? Yes No No
Remarks:		
YDROLOGY		
Wetland Hydrology Indicators:		
- <del>-</del> -	lands all that and A	
Primary Indicators (minimum of one required; cl		Secondary Indicators (2 or more regulred)
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Primary Indicators (minimum of one required; cl Surface Water (A1) High Water Table (A2)	Salt Crust (B11) Biofic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
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Primary Indicators (minimum of one required; ci Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	Salt Crust (B11) Biofic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
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Project/Site: WEST NEW PORT BIL TANK FARM City/County: Offi	Sampling Date: $8-9-15$
Applicant/Owner: WEST NEWFORT BILL	
Investigator(s): Theman Section, Township, R	ange: UNSCOTUTED TSG, RIOW
Landform (hillslope, terrace, etc.): Local relief (concave	convex, none): (IV) Slope (%): (2)
Subregion (LRR):	Long: 117 56 55-87 W Datum: 117 8
Soil Map Unit Name: TDAL Flats	NWI classification: FELUSTINE
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	
Are Vegetation, Soil, or Hydrology significantly disturbed? $\mu \vartheta$ _ Are	"Normal Circumstances" present? Yes K No
Are Vegetation, Soll, or Hydrology naturally problematic? $N\mathfrak{D}$ (If r	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soll Present?  Wetland Hydrology Present?  Remarks:  CA WILTEMA	<i>M</i>
VEGETATION – Use scientific names of plants.	
Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	Number of Dominant Species
1	That Are OBL, FACW, or FAC: (A)
3	Total Number of Dominant Species Across All Strata: (B)
4.	
= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:
Sapling/Strub Stratum (Plot size:)	Prevalence Index worksheet:
1.       2.	Total % Cover of: Multiply by:
3	OBL species 25 x1= 25
4	FACW species x2=
5	FAC species
Herb Stratum (Plot size:)	FACU species x 4 =
1. Saliconna facifica 10 4 OBL	UPL species x 5 =
2 Distichis Spicata 15 y Fren	
3. Spenaularia Marina IS Y BYELL 4. Bassia hissopitalia 5 FAC	• 1
	Hydrophytic Vegetation Indicators:  Dominance Test is >50%
6.	Prevalence Index is ≤3.0¹
7	Morphological Adaptations <sup>1</sup> (Provide supporting
8	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	Problematic hydrophytic vegetation (explain)
1	'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
= Total Cover  % Bare Ground in Herb Stratum   Cover of Biotic Crust	Hydrophytic Vegetation Present?  Yes No
Remarks:	-

Sampling Point: Picklewood 2

Profile Description: (Describe to the depth needed to document the Indicator or	confirm the absence of indicators.)
Depth Matrix Redox Features	
	Loc <sup>2</sup> Texture Remarks
0-2 Disturbed - OIL	7/ 11- 0
2-4 Sandy Panses 104x413 F	3/2 No Pedus
4-8 Sands 4-Clay 10/23/2 W/55	To Redox 104R4/6
Refusal AT & from Asphaltic Mart	<del>Vital</del>
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated S	
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6)	1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B)
Black Histic (A3) Loamy Mucky Mineral (F1)	Reduced Verlic (F18)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7)	
Thick Dark Surface (A12) Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Vernal Pools (F9)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):	unless disturbed or problematic.
h at the societies	
	√ × × × × × × × × × × × × × × × × × × ×
Depth (Inches):	Hydric Soil Present? Yes No
Remarks: Hiday Could under a top of the	400 001 05
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Hydric Soil Indicators due to which over to Disturbed Com  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  Salt Crust (B11)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Indicators due to Disturbed Communications due to Disturbed Communications due to Disturbe due to Dis	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Hydrology Indicators (B13)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
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HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Drift Deposits (B3) (Nonriverine)  Recent fron Reduction in Tilled Science Surface Soil Cracks (B6)  Recent fron Reduction in Tilled Science Surface Surface Soil Cracks (B6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Presence of Reduced Iron (C4)  Thin Muck Surface (C7)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Explain in Remarks)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Method Drift Deposits (B2) (Nonriverine)  Mater Stained Leaves (B9)  Field Observations:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soli Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Depth (Inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Depth (Inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soli Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Depth (Inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stalned Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Saturation Present?  Yes  Saturation Present?  Yes  Saturation Present?	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Depth (Inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturati	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stalned Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (Inches):  Saturation Present?  Yes  No  Saturation Present?  Yes  Saturation Present?  Yes  Saturation Present?	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
HYDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Drift Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water Stalined Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (Inches): Saturation Present? Yes No Depth (Inches): (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No

Project/Site: WEST NEWPOST DIL TROOK	<u>#4RM</u> city	//County:	2014-15 Sampling Date: 8-4-15
Applicant/Owner: WEST WEWFITT BILL			
			p, Range: UNSCHUMOd., TSG. KIOW
	MARKELO	cal reliet (cond	ave, convex, none): Cincare Slope (%): <
Subregion (LRR):	_ Lat: <u>33° 2</u>	7 <u>8'04 3</u> 2	"N Long: 117° 56 '55-87" Datum: WAD 8-
Soil Map Unit Name: TIOM Flads			NWI classification:
Are climatic / hydrologic conditions on the site typical for thi	s time of year?	Yes X	No (If no, explain in Remarks.)
Are Vegetation, Soll, or Hydrology	ignificantly dis	lurbed? NO	Are "Normal Circumstances" present? Yes _ K No
Are Vegetation, Soli, or Hydrology i	naturally proble	matic? ND	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sa	ampling po	int locations, transects, important features, etc.
Hydric Soil Present? Yes N	lo lok lo	Is the Sar within a V	npled Area (**) Vetland? Yes No
,			
VEGETATION – Use scientific names of plan	its.		
Tree Stratum (Plot size:) 1	Absolute D % Cover S	ominant Indic pecies? Sta	
2.			
3			Total Number of Dominant Species Across All Strata: (B)
4			Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	<u> </u>	Total Cover	That Are OBL, FACW, or FAC: (A/B)
1.			Prevalence Index worksheet:
2.			Total % Cover of: Multiply by:
3			OBL species x 1 = x 1 =
4	- <del></del>	***************************************	FACW species x 2 = 10
5.		T-1-1 O	FAC species X3 = 2.40 FACU species X4 =
Herb Stratum (Plot size: 5 12)	=	Total Cover	UPL species x 5 =
1. Distichlis sticata	<u> 8                                    </u>	Y F	Column Totals: < 7 (A) 252 (B)
2. Salicania pacifica		K on	56
, ,			37.20
4			Hydrophytic Vegetation Indicators:  Dominance Test is >50%
5			Prevalence index is ≤3.0¹
6. 7.			Morphological Adaptations¹ (Provide supporting
8			data in Remarks or on a separate sheet)
	87=	Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)			Indicators of hydric soil and wetland hydrology must
1			be present, unless disturbed or problematic.
2		Total Cover	Hydrophytic
% Bare Ground in Herb Stratum // % Cove.	r of Biotic Crust	_	Vegetation Present? Yes NoNo
Remarks:	<del>-</del>		
1			1

Sampling Point: Saltzness 1

Profile Desc Depth	ription: (Desc Mai		lepth need		rent the it		or contirm	i the absence	or indica	ors,)	
(Inches)	Color (mois		Cold	or (moist)	%	Type	Loc <sup>2</sup>	Texture		Remark	ks,
D-12	2,54	4/3 9	5 /	yr 4/t	-5		m	Sandy	10mm	Prof	wheds
										7 1047	LQ
									,		
								<u> </u>			
	ncentration, Danie ndicators: (A)						d Sand Gr			=Pore Lining ematic Hyd:	j, M=Matrix. ric Solls³:
Histosol (	(A1)			Sandy Redox	x (S5)			1 cm N	fuck (A9) (	LRR C)	
Histic Epi	lpedon (A2)			Stripped Mat	rix (S6)				luck (A10)		
Black His	stic (A3)			Loamy Muck		(F1)			ed Vertic (		
	n Sulfide (A4)			Loamy Gleye					arent Mate	•	
	Layers (A5) (L	.RR C)	_	Depleted Ma		·· -/				Remarks)	
	ck (A9) (LRR D			Redox Dark		-e)		0	(TANDIGHT III	remarkay	
	Below Dark Su	•			•	•					
	rk Surface (A12			Depleted Day				31	- <b>#</b> L		
				Redox Depre		0)				ytic vegetati	
	ucky Mineral (S			Vernal Pools	(F9)					must be pre	
	leyed Matrix (S							unless d	isturbed or	problematic	3.
	ayer (if preser	it):									
Туре:											h. #
Depth (incl	hes):							Hydric Soil	Present?	Yes	No <u>}</u>
Remarks:		*****						1		···	
	Y				· · · · · · · · · · · · · · · · · · ·	<del></del>				·	
Wetland Hydi	rology Indicate	ors:					<del></del>	***************************************			
Primary Indica	ators (minimum	of one requir	ed; check	all that apply)				Secon	dary Indica	ators (2 or m	ore required)
Surface V	Vater (A1)		K	Salt Crust (E	311)					(B1) (River	
	er Table (A2)		~-	Blotic Crust	· · · · · ·					posits (B2)	-
Saturation				Aquatic Inve		(B13)				s (B3) (Rive	
	rks (B1) (Nonri	iverine)		Hydrogen Si						tterns (B10)	
	Deposits (B2)			Oxidized Rh			hdaa Daat		_		
	, , ,	-	·/			-	waig root	—	-	Water Table	(C2)
	osits (B3) (Noni	•		Presence of			0-11- (05)		ayfish Bur		
	ioil Cracks (B6)			Recent from			20112 (CP)				rial Imagery (C
	r Visible on Aer		B7)	Thin Muck S	-	•			iallow Aqu		
	ined Leaves (B	19)		Other (Expla	in In Rem	iarks)		F/	C-Neutral	Test (D5)	
Field Observa		•	<i>_</i>								
Surface Water	Present?	Yes	No X	Depth (inch			·				•
Water Table P	resent?	Yes	No S	Depth (inch	es):					4	,
Saturation Prediction (Includes capill	lary fringe)	Yes	Le .	Depth (inch	es):		Wetlar	nd Hydrology	Present?	Yes_X	No
Describe Reco	orded Data (stre	am gauge, n	nonitoring v	vell, aerial ph	otos, prev	rious inspe	ections), if	available;			
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											

Project/Site: WEST NEWPOST DIL TRAKFARM City/County:	<u>Olfra35₹</u> Sampling Date: <u>10 − 4 − 1 − 1</u>
Applicant/Owner: WEST WEWFOST BILL	State: A Sampling Point: Salty 6
Investigator(s): Than Cano Section, Town	
Landform (hillslope, terrace, etc.): Local relief (co	oncave, convex, none): Slope (%):
Subregion (LRR):	32"N Long: 117° 56 55 87" Datum:
Soil Map Unit Name:	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? $\lambda^{17}$	D Are "Normal Circumstances" present? Yes K. No
Are Vegetation, Soil, or Hydrology naturally problematic? NT	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling	point locations, transects, important features, etc.
Hydric Soil Present?   Yes   No _/   }	Sampled Area Yes No
VEGETATION – Use scientific names of plants.	
Absolute Dominant In Species? S  1	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3	
4 = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
1	Prevalence Index worksheet;
2.	
3	· 1
4	FACW species x 2 =
5	FAC species 80 x3= 240
Herb Stratum (Plot size: SR)	
1. Distichlis Stream 80 y F	UPL species x 5 = (B)
2	
3	Prevalence Index = B/A = 3, 0
4	Hydrophytic Vegetation Indicators:
5	
6	Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting
8	data in Remarks or on a separate sheet)
SD = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:	
1	indicators of hydric soll and wetland hydrology must be present, unless disturbed or problematic.
= Total Cover	Vegetation
% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust 2	Present? Yes No
Remarks:	

c	a	f	ì	

Sampling Point: Salthass 2

Profile Description: (Describe to the depth	needed to document the indicator or	confirm the absence of Indicators.}
Depth <u>Matrix</u>	Redox Features	
(Inches) Color (molst) %	Color (moist) % Type 1	Loc <sup>2</sup> Texture Remarks
- Disduited (3		
- ad Jachan		
J. A. A. C.		
In the state of th	Commeted	
Arch ha	Win Miller	
	V	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=R	leduced Matrix, CS=Covered or Coated S	Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all Li		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11)     Thick Dark Surface (A12)	Depleted Dark Surface (F7) Redox Depressions (F8)	Hadisatore of historia
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present,
Sandy Gleyed Matrix (S4)		unless disturbed or problematic,
Restrictive Layer (if present):		
Туре:		
Depth (inches):		Hydric Soll Present? Yes No
Remarks:		
•		
		,
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; of	heck all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	XSalt Crust (B11)	Water Marks (B1) (Riverine)
High Water Table (A2)	Blotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Living	ng Roofs (C3) Dry-Season Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled So	ils (C6) Saturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)
Field Observations:	2	
	Depth (inches):	
	Depth (inches):	
	Depth (Inches):	Wetland Hydrology Present? Yes No No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitor	oring well serial photos previous inspect	ions) if available:
2000 11000 200 Date forestin Broße! Hollie	domai priotos, previous aispect	ionoji u avaliabio.
Remarks:		
Deliging.		

Project/Site: WEST WENTONT ALL TANK	FARM City/County: Du	Sampling Date: <u>8-6-11</u>
Applicant/Owner: WEST NEWFORT BIL	*	State: A Sampling Point: Saltson 4.16
Investigator(s): Thirmtann	Section, Township, Ra	ange: UNSCHWING & TSG, RIOW
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none): <u>Concarle</u> Slope (%): <u>&lt; 3</u> Long: 117° 56 '55: 87' Datum: NAO 8
Subregion (LRR): <u>VPR</u> -C	Lat: <u>33° Z8' 0 4 32" N</u>	Long: 117° 56 55-87" Datum: NAD 8
Soil Map Unit Name: プログラン		NWI classification: ta NS TIND
Are climatic / hydrologic conditions on the site typical for the	nis time of year? Yes 📈 No _	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology		
Are Vegetation, Soil, or Hydrology	naturally problematic? NO (If n	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is the Sample	el Avan
	No within a Wetla	<b>b</b> /'
	No	
Remarks:		***************************************
VEGETATION - Use scientific names of plan	nts.	
Teac Circles (Dictains	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
1		
3.		Total Number of Dominant Species Across Ali Strata: (B)
4		· · · · · · · · · · · · · · · · · · ·
	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
Sepling/Shrub Stratum (Plot size:)		
1		Prevalence Index worksheet:
2		
3		FACW species x 2 =
5.		FAC species 60 x3= 180
	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:)  1. V) sorvalls Spicara	1 Carpen	UPL species x 5 = Column Totals: (A) /SD (D)
	- 40 - 4 - 1119	Coldina 10(ais (A) (B)
2.		Prevalence Index = B/A =
3 4		Hydrophytic Vegetation Indicators:
5.		Dominance Test is >50%
6.		Prevalence Index is ≤3.01
7		Morphological Adaptations <sup>1</sup> (Provide supporting
8		data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Monday Man Stratum / Flot size:	= Total Cover	i Toolemano mydroprtydd vegetation (Explain)
Woody Vine Stratum (Plot size:)  1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2		be present, unless disturbed or problematic.
,	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % Cove	er of Biotic Crust	Vegetation Present? Yes No
Remarks:	. Ot 11000 O (100)	1 1030III. 163 NO
. Remarks.		

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u	·		

Sampling Point: Saltgrass 3

		onfirm the absence of indicators.)
Depth Matrix	Redox Features	Total Control
10-6 10VR3/2 95		n Sandy larm
		n Sandy Jeans
16-12 10412313 95.	10'y 2 46 5 C	- Sana
	-	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=F		
Hydric Soil Indicators: (Applicable to all L		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2) Black Histic (A3)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2)	Reduced Vertic (F18) Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	
Thick Dark Surface (A12)	Redox Depressions (F8)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):		unless disturbed or problematic.
Type:		
Depth (inches):	<del></del>	Hodds Oall Days (D. M. N.
Remarks:		Hydric Soil Present? Yes K No
Remarks.		
HYDROLOGY		
HYDROLOGY Wetland Hydrology Indicators:		
	check all that apply)	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Wetland Hydrology Indicators: Primary Indicators (minimum of one regulred;	Ksalt Crust (B11) Inthin the	Water Marks (B1) (Riverine)
Primary Indicators (minimum of one regulred; Surface Water (A1)		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one regulred;  Surface Water (A1)  High Water Table (A2)	KSalt Crust (B11)   n-KM  Fav Blotic Crust (B12)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	KSalt Crust (B11)   N-KM   KM Blotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Driff Deposits (B3) (Riverine)  Drainage Patterns (B10)  G Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	Salt Crust (B11) N-MM M Blotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Driff Deposits (B3) (Riverine)  Drainage Patterns (B10)  G Roots (C3)  Crayfish Burrows (C8)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soll Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  G Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  s (C6) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soll Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil  Thin Muck Surface (C7)  Other (Explain in Remarks)	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  g Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  s (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil  Thin Muck Surface (C7)  Other (Explain in Remarks)	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  g Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  s (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil  Thin Muck Surface (C7)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Driff Deposits (B3) (Riverine) Drainage Patterns (B10) g Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) s (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetfand Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil  Thin Muck Surface (C7)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  g Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  s (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No (includes capillary fringe)	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil  Thin Muck Surface (C7)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Driff Deposits (B3) (Riverine)  Drainage Patterns (B10)  GRoots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  s (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Wetfand Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil  Thin Muck Surface (C7)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Driff Deposits (B3) (Riverine)  Drainage Patterns (B10)  GRoots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  s (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No (includes capillary fringe)	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil  Thin Muck Surface (C7)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Driff Deposits (B3) (Riverine)  Drainage Patterns (B10)  GRoots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  s (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Water Table Present? Yes No (includes capillary fringe)  Describe Recorded Data (stream gauge, monit	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil  Thin Muck Surface (C7)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Driff Deposits (B3) (Riverine)  Drainage Patterns (B10)  GRoots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  s (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Water Table Present? Yes No (includes capillary fringe)  Describe Recorded Data (stream gauge, monit	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil  Thin Muck Surface (C7)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Driff Deposits (B3) (Riverine)  Drainage Patterns (B10)  GRoots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  s (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Water Table Present? Yes No (includes capillary fringe)  Describe Recorded Data (stream gauge, monit	Salt Crust (B11)  Blotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soil  Thin Muck Surface (C7)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Driff Deposits (B3) (Riverine)  Drainage Patterns (B10)  GRoots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  s (C6)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No

Project/Site: WEST NEWFORT ALL THINK	FARM City/County: 0	MANUE Sampling Date: 7-28-15
Applicant/Owner: WEST NEWFORT OAL		
Investigator(s): Thomtane		
Landform (hillslope, terrace, etc.):	Local relief (concay	ve, convex, none): <u>Concarle</u> Slope (%): <u>4</u>
Subregion (LRR):	Lat: <u>23° 28′ 0 4′ 32″</u>	N Long: 117° 56 55 87'1 Datum: NATO 8
Soil Map Unit Name: <u>BLAOW</u>		NWI classification: Yelustine
Are climatic / hydrologic conditions on the site typical for the	nis time of year? Yes N	lo (If no, explain in Remarks.)
Are Vegetation, Soll, or Hydrology	significantly disturbed? NO A	Are "Normal Circumstances" present? Yes <u>K</u> No
Are Vegetation, Soll, or Hydrology	naturally problematic? NO (I	ff needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling poir	nt locations, transects, important features, etc.
Hydrophytic Vegetation Present?	No is the Samr	alod Area
	No Is the Samp within a We	. 🖍
	No	100
Remarks:		
VEGETATION - Use scientific names of plan	nts.	
Tree Stratum (Plot size:)	Absolute Dominant Indicat	
1	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.		
3.		Total Number of Dominant Species Across All Strata: (B)
4.		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1. (Sarcharis Saliana	40 FREN Y	Prevalence Index worksheet:
2.  Socoma MbnZiesi	15 Fac 4	Total % Cover of: Multiply by:
3		OBL species 7.5 x1 = 7.5
4.		FACW species x 2 =
5	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	FAC species x3 = x3 = x3
Herb Stratum (Plot size:)-	= Total Cover	FACU species x4= UPL species x5 =
1. Saliwania Vivainica	75 Y 0180	Column Totals: 140 (A) 230 (B)
2 Distriction Stillata		<b>/</b>
3		Prevalence Index = B/A = 1165
4		Hydrophytic Vegetation Indicators:  Comminance Test is >50%
5.       6.		Prevalence Index is ≤3.0¹
7		Morphological Adaptations <sup>1</sup> (Provide supporting
8.		data in Remarks or on a separate sheet)
	= Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1		be present, unless disturbed or problematic.
2	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % Cove	er of Blolic Crust	Vegetation Present? Yes No No
Remarks:		1.000 N NO
- Contains		

_	-	•	

Sampling Point: Practeured 3

Depth	Matrix	~	Redox Featur	es		<b>-</b>	<b>_</b> ,
(inches)	Color (moist)		plor (molst) %	Type¹		Texture	Remarks
<del></del>	2544/2	$\frac{\sqrt{N_0}}{\sqrt{N_0}}$	Redox			<u> </u>	
6-14_	2154412	<u> 40 10</u>	YR4/3_10		<u>M</u>		
•	, ,	·	•				
			······································				
		······································					
				<u> </u>			
1						2.	
			ced Matrix, CS=Cover				tation: PL=Pore Lining, M=Matrix.
		to all ERRS,		reu.)	1		for Problematic Hydric Solis <sup>3</sup> :
Histosol (A1	•	*****	_ Sandy Redox (S5)		-		fuck (A9) (LRR C)
Histic Epipe		-	_ Stripped Matrix (S6)		-		fuck (A10) (LRR B)
Black Histic Hydrogen S			_ Loamy Mucky Miner		-		ed Vertic (F18)
	yers (A5) (LRR C)		_ Loamy Gleyed Matri Depleted Matrix (F3)		-		arent Material (TF2)
	A9) (LRR D)		Redox Dark Surface		-	Onler (	Explain in Remarks)
	low Dark Surface (A	11) <del>- {</del>	_ Depleted Dark Surfa				
	Surface (A12)	,	Redox Depressions		3	indicators	of hydrophytic vegetation and
	y Mineral (S1)		Vernal Pools (F9)	,			nydrology must be present,
	ed Matrix (S4)						sturbed or problematic.
Restrictive Laye							
					1		
Туре:	i mater				i i		
Туре:	- Donts				H	udric Sail	Present? Vos K No
	): DON'S				H	ydric Soil	Present? Yes K No
Type: Depth (inches	): DON'S				H	ydric Soil	Present? Yes No No
Type: Depth (inches Remarks:					H	ydric Soil	Present? Yes No No
Type: Depth (inches Remarks:  YDROLOGY					H	ydric Soil	Present? Yes No No
Type: Depth (inches Remarks:  YDROLOGY Vetland Hydrolo		equired; check	( all that apply)		H		
Type: Depth (inches Remarks:  YDROLOGY Vetland Hydrolo	ogy Indicators: s (minimum of one re	equired; check			H	Secon	dary Indicators (2 or more required)
Type:	ogy Indicators: s (minimum of one re er (A1)	equired; check	_ Salt Crust (B11)		H	Secon	dary Indicators (2 or more required) ater Marks (B1) (Riverine)
Type:	ogy Indicators: s (minimum of one re er (A1) 'able (A2)	equired; check	Salt Crust (B11) Biotic Crust (B12)	es (B13)	H	<u>Secon</u> W Ss	dary Indicators (2 or more required) ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
Type: Depth (inches Remarks:  YDROLOGY  Vetland Hydrolo Primary Indicator Surface Wate High Water T Saturation (A	ogy Indicators: s (minimum of one re er (A1) "able (A2) 3)	equired; check	_ Salt Crust (B11) _ Biotic Crust (B12) _ Aquatic Invertebrate	. ,	H	Seconi W. Se Dr	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) tit Deposits (B3) (Riverine)
Type: Depth (inches Remarks:  YDROLOGY  Vetland Hydrolo Primary Indicator Surface Wate High Water T Saturation (A Water Marks	ogy Indicators: s (minimum of one re er (A1) 'able (A2) 3) (B1) (Nonriverine)	_ _ 	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrate Hydrogen Sulfide O	dor (C1)		Secon. W. Se Dr Dr	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10)
Type: Depth (inches Remarks:  YDROLOGY  Vetland Hydrolo Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De	ogy Indicators: s (minimum of one reer (A1) Table (A2) (B1) (Nonriverine) posits (B2) (Nonrive	_ _ 	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe	dor (C1) res along Li		Secon W. Se Dr Dr Dr	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2)
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COUNTY CLERK

TO:

Recorded i.. Official Records, Orange County Tom Daly, County Recorder 

Project Charge No. PP34705

201185000799 12:23 pm 07/01/11 46 13 Z01 0.00 50.00 0.00 0.00 0.00 0.00 0.00

FILED

JUL 0 1 2011

PLANNING & DEVELOPMENT SERVICES

300 N. FLOWER STREET P. O. BOX 4048

SANTA ANA, CALIFORNIA 92702-4048

<u>Y</u>	OM DALY. CLERK-RECORDER
	DEPUT)

# NOTICE OF EXEMPTION

FROM: COUNTY OF ORANGE

10.	COUNTY OF ORAN	GE PLANNING 8	DEVELOPMENT SERVICES DEPARTMENT
Project	Title: OW	110003 - Banning 275	
Descrip capped	otion, Nature, Purpose oil Wells, "banning" 2	and Beneficiaries of Project: Environm 75 at West Newport Oil site on Newport E	ental Documentation for OW110003 to re-establish lanning Ranch property.
Project County.		th Street, Costa Mesa CA in the Newport	Banning Ranch property of unincorporated Orange
∵me o	f Public Agency Appro	ving Project: OC Planning	
Name of	f Person or Agency Ca	arrying Out Project: West Newpor	t Oil Company
Address	of Person or Agency	Carrying Out Project: 5800 Pacific Coast	Highway Costa Mesa
· -	Emergency Projection General Rule (Section Statutory Exemption)	ency (Sec. 15269 (a) ) ect (Sec. 15269(a)&(b) )	Date of Decision 7//// 15301: Class 1
Reasons	why project is exemp	: Class 1: Existing Facilities	
roject Co	ontact Person:	Soka Kong	Phone: (714) 667-8883
EQA Co	ntact Person:	Chris Uzo-Diribe	Phone: (714) 667-8845
			Signature: Clici 1/30/how. C. Title: Marmar 14
<b></b>			

FISH & GAME FEES:

Pursuant to Section 711.4(c)(2)(A) of the California Fish and Game Code, the project is Report Properties as it is # 4/42.31 exempt from CEQA.

JUL 0 1 2011

TOM DALY, CLERK-RECORDER

			غر

Orange County Oil Well Permitting Process – "Banning" 700

Application

#### West Newport Oil Company

P.O. Box 1487 Newport Beach, CA 92659 Tel. (949) 631-1100 Fax (949) 645-1127

May 8, 2007

County of Orange Environmental Management Agency 300 N. Flower Street P.O. Box 4048 Santa Ana, CA 92702 – 4048

RE: New Oil Well Permits in West Newport Oil Field

Dear Orange County Permitting,

West Newport Oil Company (WNOC) is requesting permits to drill three new oil wells, "Banning" 700, 702 and 703. These wells will be drilled from a centrally located drill site near the previously permitted "Banning" 701 (see OW060002).

The enclosed plot plan shows the surface well locations required by Orange County as part of the permitting process. These wells are all within the West Newport Oil Field as defined and regulated by the California Division of Oil and Gas and Geothermal Resources. Below are the surface coordinates from the northwest section corner of Section 20, T6S, R10W of the SBB&M system:

- "Banning" 700 1640' East & 3330' South of the NW Corner
- "Banning" 702 1600' East & 3350' South of the NW Corner
- "Banning" 703 1280' East & 3150' South of the NW Corner

For reference, "Banning" 701 is located 1620' East & 3340' South of the NW Section Corner. Also enclosed is are well location and site location grid maps for reference.

Thank you for your assistance in this matter. Ricky Swaringen and I are available to answer any questions that might arise.

Sincerely,

Tom McCloskey, PE Project Manager West Newport Oil Company Orange County Oil Well Permitting Process – "Banning" 700

Permitting Checklist



# County of Orange

Resources & Development Management Department

Main Office 300 N. Flower Street Santa Ana, CA 92702-4048

# Zoning Plan Check List

Building Permit Number: OW070001, 7

Date: May 08, 2007

Applicant:

West Newport Oil Company

**Applicant Phone:** 

949-631-1100

Job Address:

5800 Pacific Coast Highway, Cost

Additional Address:

Parcel Number(s):

A0111 AC NT

Zoning: PC/SP:

Description:

new oil well Banning 700

Owner:

West Newport Oil Company

Owner Phone: 949-631-1100 APN:

114-170-52

CAA:

CT:

Created By:

PFRDNET\powersj

John.Powers@pfrd.ocgov.com

Comments OK Information

Zoning Plan Check List

1. Additional Zoning/Land Use Requirements

School District(s) Elementary or Unified

1.1. Prior to zoning approval, applicant shall

1.1.1. submit for and be approved for CEQA clearance

1.1.2. provide plans demonstrating compliance with Oil Code, Noise Ordinance, including hours of operations

1.1.3. provide correct legal descriptions for oil wells (including 701)

J. Powers

J. Powers

J. Powers

J. Powers

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J. Powers

Site planning, en commental clearance

6878 UP 12AM PST 47011 9518 North Flower, Santa Ana C collon 300 North Flower, Santa Ana, Ca Signatory: Tom McCloskey Date: May 08, 2007 09:42AM PST Reason Notification 7 Location: 300 No

= Indicates line item not Cleared.

Orange County Oil Well Permitting Process – "Banning" 700

Noise Study

#### West Newport Oil Company

P.O. Box 1487 Newport Beach, CA 92659 Tel. (949) 631-1100 Fax (949) 645-1127

May 24, 2007

Mr. Michael Wellborn County of Orange Resources and Development Management 300 N. Flower Street P.O. Box 4048 Santa Ana, CA 92702 – 4048

RE: New Oil Well Permits in West Newport Oil Field

Dear Mr. Wellborn,

West Newport Oil Company (WNOC) is requesting permits to drill three new oil wells, "Banning" 700, 702 and 703. These wells will be drilled from a centrally located drill site near the previously permitted "Banning" 701 (see OW060002, attached w/ Notice of Exemption and documentation). The County of Orange (County) permitting process was initiated on May 8, 2006. At that time, WNOC was advised by the Zoning Plan Check that the County would require additional information regarding Noise Ordinance compliance.

The enclosed field grid map shows the surface well locations required by the County as part of the permitting process. These wells are all within the West Newport Oil Field as defined and regulated by the California Division of Oil and Gas and Geothermal Resources. A legal description of the drill site is also enclosed. The West Newport Oil Field has a County zoning designation of (O).

This letter describes a study WNOC has initiated to determine if it is reasonable to expect that operations on the proposed drill site can meet the nighttime County noise ordinance criteria.

WNOC hired Mestre and Greve Associates to assess the proposed drill site regarding expected noise levels in the surrounding areas. Mestre and Greve were familiar with WNOC drilling operations in so far as they helped measure noise levels from the August 2006 WNOC drill site on behalf of the County. The proposed drill site for "Banning" 700, 701, 702 and 703 is roughly 2500' away from the August 2006 drill site ("Banning" 350, 352 and 353 - see map attached).

Mestre and Greve Associates have produced a report that projects noise levels at the closest homes to the new drill site (attached). The expected noise levels are based upon the noise levels and the source distance measured during August 2006 drilling and the additional setback distance the new drill site affords. The modeled results indicate that noise from the new drill site will be substantially less at the closest homes than were the noise levels during August 2006 and that the levels will be below County nighttime restrictions.

WNOC, County May 25, 2007, pg2

The Mestre and Greve report points out that the topography of the new drill site may further mitigate noise propagation. Mestre and Greve also note that an upgrade of equipment mufflers has potential to reduce noise. WNOC intends to specify that all contractors use high quality mufflers on all internal combustion engines.

Mestre and Greve have also modeled the noise levels expected at the site of their August 2006 test that would result from drilling operations at the new drill site. These noise levels are expected to be very low and not significant.

During August 2006 operations WNOC complied with all County directives in a timely manner. WNOC intends to act in a responsible and compliant manner during this project as well. WNOC understands that additional field testing may be required to verify acceptable noise levels when operations begin. Furthermore, WNOC would like to establish real time data that demonstrates noise compliance capability.

Please distribute this information to interested parties at the County. I am available to answer any questions that might arise. I will be following up on the permitting process next week.

Sincerely,

Tom McCloskey, PE Project Manager West Newport Oil Company



May 16, 2007

Mr. Tom McCloskey
West Newport Oil Company
P. O. Box 1487
Newport Beach, CA 92659

COPY

Subject: Proposal for the Noise Analysis for "Banning Wells #700-703"

Dear Mr. McCloskey:

Mestre Greve Associates is pleased to submit this proposal to conduct a noise study for "Banning Wells #700-703" in the County of Orange. We will visit the site and discuss the feasibility of this location. Noise levels from the drilling rig will be projected for the homes nearest the new oil well locations. The effects of the existing berm will be included. The results will be presented in a letter report.

Cost. We propose to do letter report on a fixed fee basis of \$1,000. This cost includes all manpower, computer, and overhead expenses to complete the study. Our hourly rates are \$140 for Principal Engineers, \$80 for staff engineers, and \$65 for technicians.

If this proposal is acceptable to you, please sign on the line below and return the letter to our office (via fax is acceptable). The signed letter will serve as a binding contract for our services and once we have received the signed letter, we will initiate the work.

Sincerely,

**Mestre Greve Associates** 

Fred Greve, P.E.

Principal

West Newport Oil Company

Ton McClosky, 7E

Date

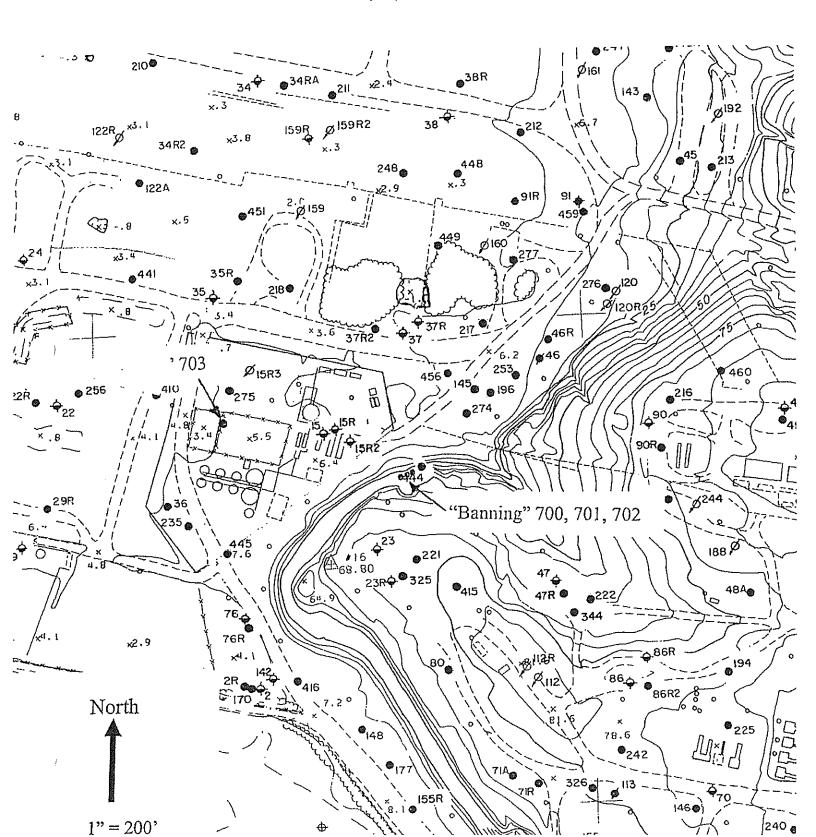
5/21/07

FG/mh

### West Newport Oil Company

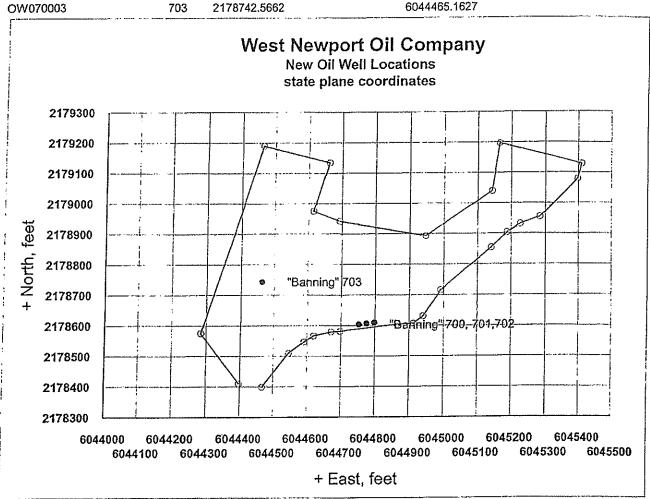
#### New Oil Wells

Contact – Tom McCloskey, Project Manager (949) 631-1100



Project Manager: Tom McCloskey (949) 631-1100

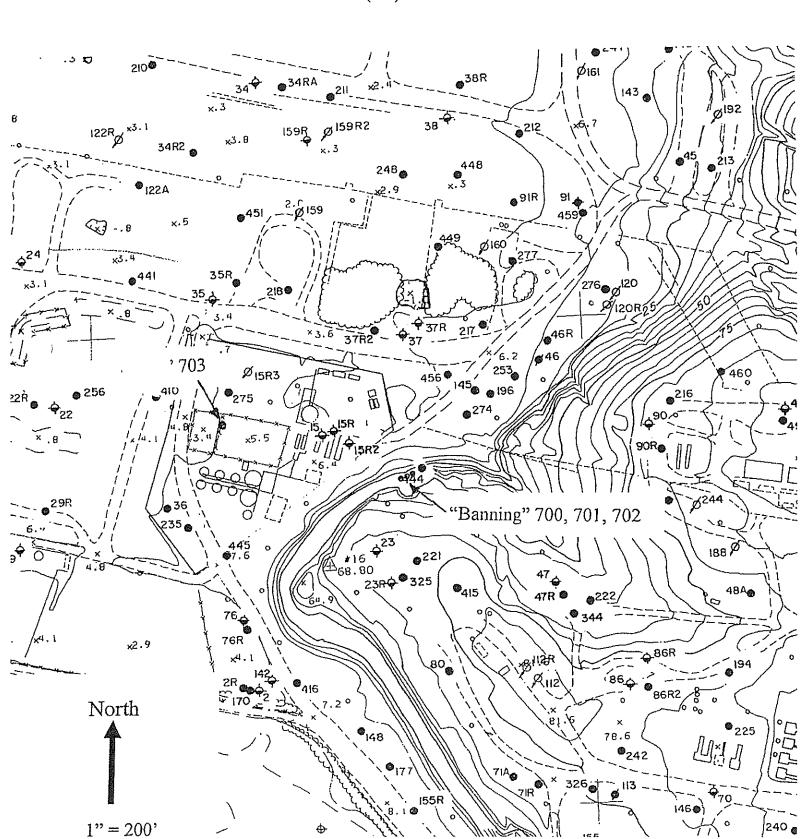
	wells	North	East
0141070004	700		6044799.5703
OW070001	700	2178608.9787	6044777.1144
OW060002	701	2178605.8705	**
OW070002	702	2178602.7623	6044754.6585
OW070003	703	2178742.5662	6044465.1627



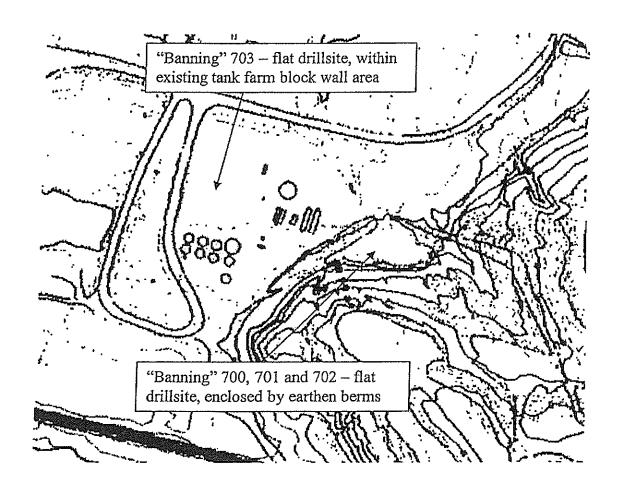
### West Newport Oil Company

#### New Oil Wells

Contact – Tom McCloskey, Project Manager (949) 631-1100



#### West Newport Oil Company "Banning" 700, 701, 702 and 703 Site Topographical Detail Map



Contact: Tom McCloskey Project Manager (949) 631-1100



#### Transmittal Letter

DATE:

May 23, 2007

TO:

**West Newport Oil Company** 

Attn: Mr. Tom McCloskey

P. O. Box 1487

Newport Beach, CA 92659

FROM:

Mike Holritz

SUBJECT:

Oil Wells: 700; 701; 702; and 703.

The following items are transmitted herewith:

(1) Report #07-95

(1) Report #07-98





May 23, 2007 Report #07-95 Page 1 of 3

Mr. Tom McCloskey
West Newport Oil Company
P. O. Box 1487
Newport Beach, CA 92659

Subject: Noise Analysis for Oil Wells 700, 701, 702, and 703, Orange County

Dear Mr. McCloskey,

We have visited the site of the proposed locations for Wells 700, 701, 702, and 703. The general location for these wells is shown in Exhibit 1.

There are existing homes to the north and to the south of the proposed equipment location. This report addresses the noise levels at these residences, and compares the noise levels to the Orange County Noise Ordinance limits.

The noise levels allowed by the County of Orange Noise Ordinance are listed below in Table 1.

Table 1
COUNTY OF ORANGE NOISE ORDINANCE CRITERIA

Time Period	Lmax	L1.7 1-min/60 min	L8.3 5-min/60 min	L25 25-min/60 min	L50 30-min/60min
Daytime (7 a.m. to 10 p.m.) Nighttime (10 p.m. to 7 a.m.)	75	70	65	60	55
	70	65	60	55	50

Note: If the noise source consists of speech or music, these levels are reduced by 5 dB.

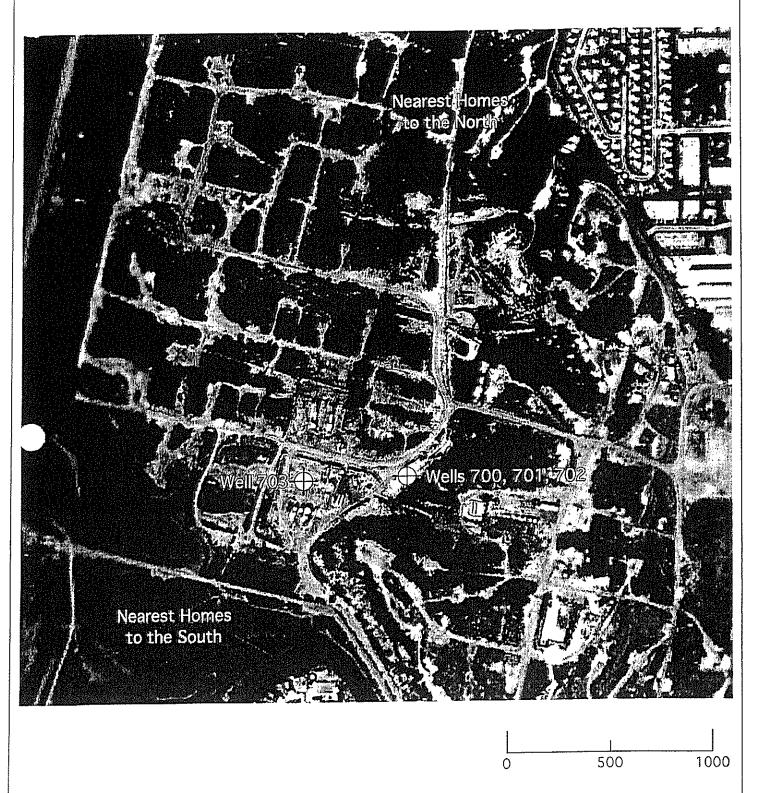




Exhibit 1 - Proposed Oil Well Sites and Adjacent Residential Areas Noise levels from the same type of drilling rig that will be used for these wells were measured previously by our firm on August 10, 2006. The results of the measurements are summarized below in Table 2. These noise levels were measured at a distance of 430 feet from the drill rig.

Table 2
MEASUREMENT RESULTS

Time Period	Lmax	L1.7	L8.3	L25	L50	Lmin
2200 to 2320	63.2	57.1	56.8	56.5	56.1	55.0

The homes to the north are approximately 1800 feet from the proposed site for Wells 700-702. Therefore, the noise levels at these homes will be about 12.4 dB lower than the noise levels presented above. The homes to the south are approximately 1100 feet from the proposed site for Wells 700-702. Therefore, the noise levels at these homes will be about 8.2 dB lower than the noise levels presented above.

The projected noise levels at the nearest residences (based upon the previously obtained measurements) are presented below in Table 3. To achieve these noise levels, the same mitigation measures used previously (mufflers, enclosures, sound attenuation blankets) should be used.

Table 3
PROJECTED NOISE LEVELS AT NEAREST ADJACENT RESIDENCES
FROM WELLS 700-703

Location	Lmax	L1.7 1-min/60 min	L8.3 5-min/60 min	L25 25-min/60 min	L50 30-min/60min
Homes North of Site	50.8	44.7	44.4	44.1	43.7
Homes South of Site	55.0	48.9	48.6	48.3	47.9
Nighttime Criteria	70	65	60	55	50

<sup>\* -</sup> Note: This table does not take into account topographic shielding that will result in lower noise levels for wells 700, 701, and 702. (Well 703 does not benefit much from this shielding).

The results in Table 3 indicate that all the noise levels from Wells 700-702 are projected to be below the County Noise Ordinance at the residences north and south of the proposed well sites. In addition, for Wells 700-702, the homes to the south of the proposed site will receive substantial shielding from the adjacent berm. Therefore, for these wells, the noise levels are projected to be substantially below the County's Noise Ordinance limits. Hospital grade mufflers, while not required, would further reduce the noise levels from the mechanical equipment.

It may also be advisable to perform measurements at the residences during the drilling operations for one of these wells to confirm that the noise levels are in compliance with the Noise Ordinance limits.

For Well 703, the preliminary analysis indicates that the noise levels may be below the Noise Ordinance limits, but it may be close. Since this site does not receive the benefit of the berm present at the other well sites, some additional shielding may be advisable for this site. We recommend that a more detailed study be performed when plans for Well 703 are finalized.

Please let us know if we can be of further assistance.

Sincerely,

**Mestre Greve Associates** 

M. Hobritz

Mike Holritz, INCE Sound Technician Orange County Oil Well Permitting Process – "Banning" 700

Water Quality Management Plan

RECEIVED

OCT - 6 2011

# WZV7-8025

## WNOC Water Quality Management Plan(WQMP)

#### For:

West Newport Oil Company - new oil well "Banning" 700, 702, 703

OW070001, OW070002, OW070003

Prepared for: West Newport Oil Company P.O. Box 1487 Newport Beach, CA 92659 (949) 631-1100

Prepared by:
West Newport Oil Company
contact: Tom McCloskey, Project Manager

June 6, 2007

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## Water Quality Management Plan(WQMP)

#### For:

West Newport Oil Company - new oil well "Banning" 700, 702, 703

OW070001, OW070002, OW070003

Prepared for: West Newport Oil Company P.O. Box 1487 Newport Beach, CA 92659 (949) 631-1100

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June 6, 2007

#### OWNER'S CERTIFICATION

#### WATER QUALITY MANAGEMENT PLAN

FOR PERMIT/PLANNING APPLICATION NUMBER OWOTOOOL, OWOTOOOZ, & TRACT/PARCEL MAP NUMBER 463 1 TR OWOTOOOZ

This Water Quality Management Plan (WQMP) has been prepared for West Newport Oil Company by West Newport Oil Company. The WQMP is intended to comply with the requirements of the County of Orange, Planning and Development Services Division (PDSD), Tract/Parcel Map No. 463 1 TR, Condition Number(s) N/A, and/or Site Development Permit/Application Number OW070001, Condition Number(s) N/A requiring the preparation of a Water Quality Management Plan.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana or San Diego Region Stormwater Runoff Management Program. Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement and amend the WQMP. An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Signed:

Name:

Tom McCloskey

Title:

Project Manager

Company:

West Newport Oil Company

Address:

P.O. Box 1487, Newport Beach, CA 92659

Telephone #:

(949) 631-1100

Date:

June 6, 2007

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Section VII Educational Materials Included
Attachments

Spill Prevention Control & Countermeasure Plan  $\,$ 

Watershed Map

Biological Activity Report

## Section I Discretionary Permit(s) and Water Quality Conditions

This project involves the County of Orange Permit Number OW070001, OW070002 and OW070003. The legal description is 463 1 TR. This project in within the existing West Newport Oil Field. There have been over 380 wells drilled in the West Newport Field since the early 1930's. The drill site is located within 463 1 TR.

The State of California Division of Oil and Gas and Geothermal Resources has regulatory oversight of all oil field operations. Included in those regulations is the maintenance of a Spill Prevention Control and Countermeasure Plan. The Plan is prepared by a registered engineer and updated periodically. Plan components are specified by the Division of Oil and Gas and Geothermal Resources. A copy of the Plan is attached to this submittal and is incorporated into this plan as practicable.

The location of the three new wells are shown on several site and area maps attached. There are currently over 80 producing and idle wells within the West Newport Oil Field. The addition of "Banning" 700, 702 and 703 as new wells will not require any additional permanent infrastructure beyond the pumping unit slab (approximately 6'x25', described herein).

## Section II Project Description

This project involves the drilling of three new oil wells within the existing West Newport Oil Field. The planned wells "Banning" 700 and 702 are within 50 feet of the permitted well "Banning" 701. They are both within 100 feet of the existing well "Banning" 444. The site is centrally located within the 400 +/- acre oil field. "Banning" 703 is within the enclosed tank farm block wall area of the West Newport Field, approximately 500 feet from the 700 and 702 drill site.

The Standard Industrial Code for the extraction of oil and gas is SIC 1311: Crude Petroleum and Natural Gas - establishments primarily engaged in operating oil and gas field properties. Such activities may include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; operation of separators, emulsion breakers, desilting equipment, and field gathering lines for crude petroleum; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property.

As previously described, the drilling, completion and operation of "Banning" 700, 702 and 703 will utilize the existing infrastruce of the West Newport Field. The incremental impact of this project is minimal.

There are attached site plan maps. As indicated, the drillsite will be approximately 50 feet wide by 200 feet long. This area totals less than .25 acres. The construction equipment footprint will be less than .18 acres. A generic equipment layout is also included.

The drill site is part of an existing well site. The ground is characterized as flat, sandy/clayey soil. The existing well site has no vegetation and is surrounded by a small earthern berm.

The project is anticipated to last approximately three weeks. Start date is pending equipment availability, but it is hoped that the drilling rig will be available in August 2007. Site preparations such as the installation of well cellar and surface conductor pipe must begin as soon as possible.

The well will have a 5 foot diameter, cylindrical, steel-sided and concrete floored well cellar upon which the drilling equipment is mounted. The cellar will catch any small spills during routine drilling operations. If fluid accumulates in the cellar, it is recycled by pumping it into the drilling fluid system tank.

The project will use a "closed system" approach with respect to all operations. Drilling materials will be recycled throughout the entire process. Above ground circulating tanks

resource Signification in insurance

will be employed. Any solids generated by operations will be impounded on site within a lined holding cell and either hauled offsite or recycled on site.

The drill site will have no fluid discharged from its boundary. Small earthen berms will insure than potential volumes are contained on site. In addition, there will be vacuum truck and backhoe/loader equipment available at all times on site. As such, there are np potential storm water pollutants associated with this project because there will be zero discharge from the sites.

West Newport Oil Company has managed numerous projects such as this in the past. Only highly qualified contractors are available for this type of work.

This project is also permitted by the lead regulatory agency, the California Division of Oil and Gas and Geothermal Resources. Throughout the project work, the Division of Oil and Gas and Geothermal Resources has inspection steps that must be witnessed and signed off prior to proceeding.

Upon completeion of drilling work, a pumping unit will be installed. The well cellar will remain in place. All other drilling equipment will be removed and the site will be restored to is original condition. The impact footprint at that time will be approximately 6 feet by 25 feet including the cellar area. This will be the permanent installation for operations of the new oil wells. The wells will be connected to the existing infrastructure via steel pipelines. The existing pipline infrastructure is within 100 feet of the new wells and conforms to the Spill Prevention Control and Countermeasure Plan maintained on site and attached herein.

### Section III Site Description

The site maps are included within this plan. The drilling operations will be centrally located, within a large number of existing wells and facility equipment. The area is zoning classification is R4 - (O) / (FP-2). There is a curb address of 1080 W. 17th Street, Costa Mesa, 92627 that enters to the property. There is also a curb address of 5800 West Coast Highway, Newport Beach, 92663. Orange County has previously located wells by the address of 23200 Pacific Coast Highway, Newport Beach.

There is no run off curb and gutter system within the oil field. The 400 acre oil field has natural drainage systems. The drill site and permanent well pads are isolated from naturally occuring drainage corridors/systems. If a spill of some kind was to occur on the drill site, it would be contained within the .25 acre site of "Banning" 700 and 702 by small earthern berms that surround the site. The well site of "Banning" 703 is within the concrete block wall that surrounds the West Newport Oil Company tank farm.

West Newport Oil Company has equipment and procedures in place to recycle most liquid waste associated with oil production activity. Solid waste is impounded in tanks for offsite removal and processing. Liquid waste or byproducts of oil well production is processed through a series of oil/water separation procedures that rely on retention time in large vessels. Most of the wastewater is injected back into the producing reservoir, however West Newport Oil Company does maintain an industrial discharge permit with the Orange County Sanitation District. The OCSD permit conditions impose both self-monitoring and District monitoring requirements that relate to water quality discharge directly to the sewer. The sewer connection is a single pipeline the is dedicated to the West Newport wastewater flow. This pipeline connects to a large junction box that accepts several large (30" and above) sewer mains.

There are no process flows discharge to the ground in the operation of the West Newport Field.

The project is located within the "Watershed D: Talbert - Greenville Banning Channel Area" as shown on the attached map. The West Newport Oil Field is located at the western termination of 17th Street on this map.

A biological activity report was prepared for West Newport Oil Company by Glenn Lukos Associates. This report is attached herein. The report concludes that the sites contain no sensitive habitats and that no biological impact is expected from this project.

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### Section IV Best Management Practices (BMPs)

Source Control BMPs

The following tables show source control BMPs (routine non-structural and routine structural) included in this project and those that were not included.

#### Routine Non-Structural BMPs

		Che	ck One	If not applicable, state brief
Identifier Name	Name	Included	Not Applicable	reason
N1	Education for Property Owners, Tenants and Occupants	X		
N2	Activity Restrictions	×		
N3	Common Area Landscape Management		×	beyond project scope
N4	BMP Maintenance	X		
N5	Title 22 CCR Compliance (How development will comply)		X	beyond project scope
N6	Local Industrial Permit Compliance		×	beyord project scope
N7	Spill Contingency Plan	X		
N8	Underground Storage Tank Compliance		×	all above ground
N9	Hazardous Materials Disclosure Compliance	X		
N10	Uniform Fire Code Implementation	X		
N11	Common Area Litter Control	X		
N12	Employee Training	Х		
N13	Housekeeping of Loading Docks		Х	beyond project scope
N14	Common Area Catch Basin Inspection		X	beyord project scape
N15	Street Sweeping Private Streets and Parking Lots		×	beyond project scape beyond project scape beyond project scape beyond project scape
N17	Retail Gasoline Outlets		X	beyond project supe

#### Regarding drilling operations:

N1 - Experienced operators and contractors will be conducting all work. DOGGR approved well plans will be followed. Prior to each significant operation or task, safety meetings are held.

N2 - Constant safety awareness is emphasized. Heavy equipment and lifts are closely monitored. A duty log is maintained and initialled by on site supervision. Drilling rig maintenance is routinely performed to prevent failure and accidents.

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WOMP

Section IV
Page 7

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- N3 Equipment such as vacuum trucks and backhoe/loaders are available 24 hours for emergency containment operations.
- N4 All plans and permits are centrally located on site.
- N7 A Spill Prevention Control and Countermeasure Plan is on site per DOGGR regulations.
- N8 All equipment tanks are above ground and capable of visual inspection for leaks or spills.
- N9 MSDS sheets are centrally located. Operations are routine and no special chemicals are anticipated to be required to conduct drilling activities.
- N10- Fire control equipment is maintained. A fresh water supply system is available for routine operations involving drilling fluid and can be used for fire prevention and control.
- N11 Rolloff or similar dumpsters are employed in drilling operations for waste and/or litter.
- N12 Each tour shift (eight hour shift) has a safety meeting and work plan briefing prior to shift start.
- N13-17 These identifiers are not applicable to the project's scope.

Regarding ongoing producing operations:

The exisitng infrastructure is capable of absorbing the three incremental producing wells without capacity or other issue. The primary reference BMP that will be practiced is containted in the Spill Prevention Control and Countermeasure Plan attached herein. In addition, standard job safety measures are practiced on a daily, weekly, monthly and quarterly basis. West Newport Oil Company has been the operator of the field for over 20 years without a reportable spill.

#### Routine Structural BMPs

Name	Chec	Not	If not applicable, state brief reason
	Included	Applicable	

WQMP rev1

Provide storm drain system stenciling and slanage	×	beyond scope of oilfield apportion
Design and construct outdoor material storage areas to reduce pollution introduction	×	l <sub>1</sub>
Design and construct trash and waste storage areas to reduce pollution introduction	×	l,
Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	×	L <sub>1</sub>
Protect slopes and channels and provide energy dissipation	Х	(1
Incorporate requirements applicable to individual priority project categories (from SDRWQCB NPDES Permit)	×	1.1
a. Dock areas		
b. Maintenance bays		
c. Vehicle wash areas		
d. Outdoor processing areas		
e. Equipment wash areas		
f. Fueling areas		
g. Hillside landscaping		
h. Wash water control for food preparation areas		
i. Community car wash racks		

#### Site Design BMPs

The following table shows site design BMPs that are included in this project. A description of each BMPs follows:

Site Design BMPs

included?		Brief Description of Method	
Yes	No	Differ Description of months	
	Х	No impervious barriers	
	入	beyond project impact	
×		berned site, enclosed site	
<u>Ж</u>		site returned to natural	
	Yes	Yes No X X	

#### Design Objectives

The following guidelines address specific concerns highlighted by the Regional Water Quality Control Boards and should be implemented if applicable to the proposed project:

- o Onsite irrigation drainage and any sub-drain systems should not discharge in an uncontrolled manner down bluffs;
- o Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain;
- o Landscaping plans for slopes exceeding one acre and all upland common areas should utilize only native, drought-tolerant landscape materials; and
- o Irrigation system plans should not include irrigation lines for the bluff-side of a coastal parcel.

Treatment Control BMPs

The following table shows treatment BMPs that are included in this project. A description of each BMP follows:

#### Treatment Control BMPs

	inc	luded?	if yet anallands state brief years	
Name	Yes	No	If not applicable, state brief reason	
Vegetated (Grass) Strips		×	beyond project scope	
Vegetated (Grass) Swales		×	11	
Proprietary Control Measures		×	V	
Dry Detention Basin		×	(1	
Wet Detention Basin		7		
Constructed Welland		×	VI	
Detention Basin/Sand Filter		*	\1	
Porous Pavement Detention		×	N. C.	
Porous Landscape Detention		×	4	
Infiltration Basin		X	١,	
Infiltration Trench		×	11	
Media Filter		X	L1	
Proprietary Control Measures	×		berns a block walls to	

enclose site

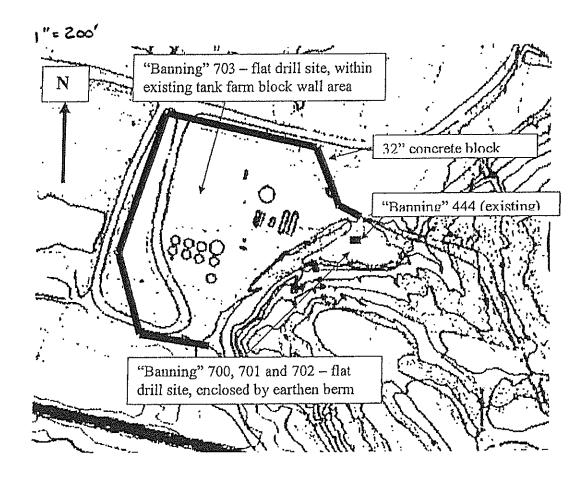
There will be no run off from the site of any fluids.

## Section V Inspection/Maintenance Responsibility for BMPs

West Newport Oil Company is the on site management entity and responsible party for all operations. 24 hour oversite will be maintained by West Newport Oil Company. Contact telephone numbers are (949) 631-1100 office and (949) 735-9904 drill site.

## Section VI Location Map, Plot Plan & BMP Details

#### West Newport Oil Company "Banning" 700, 701, 702 and 703 Site Topographical Detail Map



The "Banning" 703 drill site is within the enclosed West Newport Oil oil/water separation facility. The facility is enclosed by a 32" high concrete block wall on three sides. The fourth side (east side) is enclosed by an increasingly higher grade elevation.

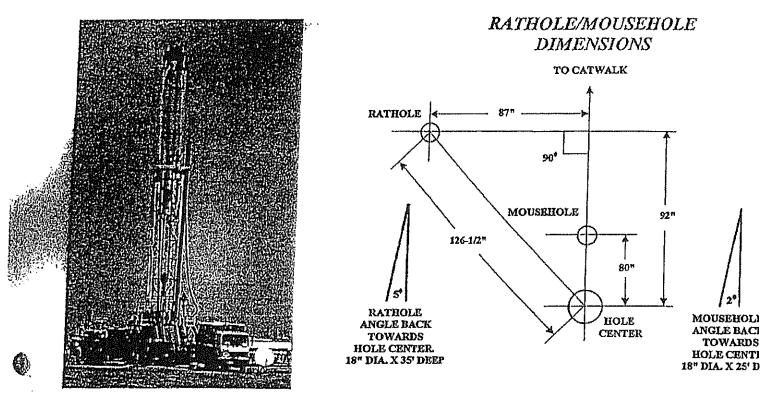
The "Banning" 700, 701 and 702 drill site shares the existing "Banning" 444 well site. This site is roughly 8 feet higher than the adjoining oil/water separation facility grade. This site is enclosed on three sides by a small earthen berm. Towards the south from this site, closure is accomplished by increasingly higher grade elevation.

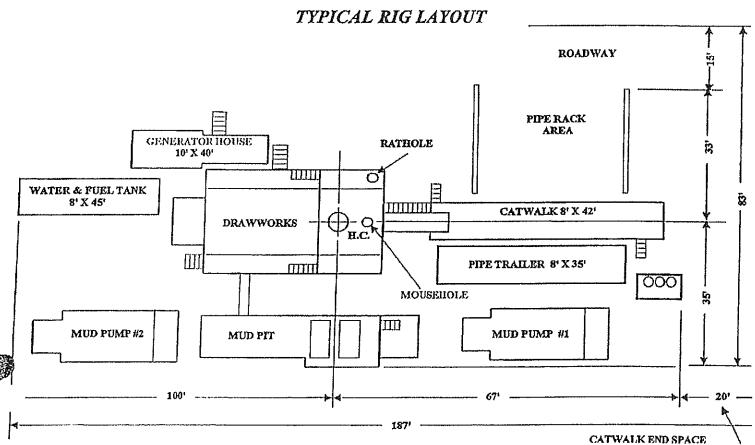
Contact: Tom McCloskey Project Manager (949) 631-1100



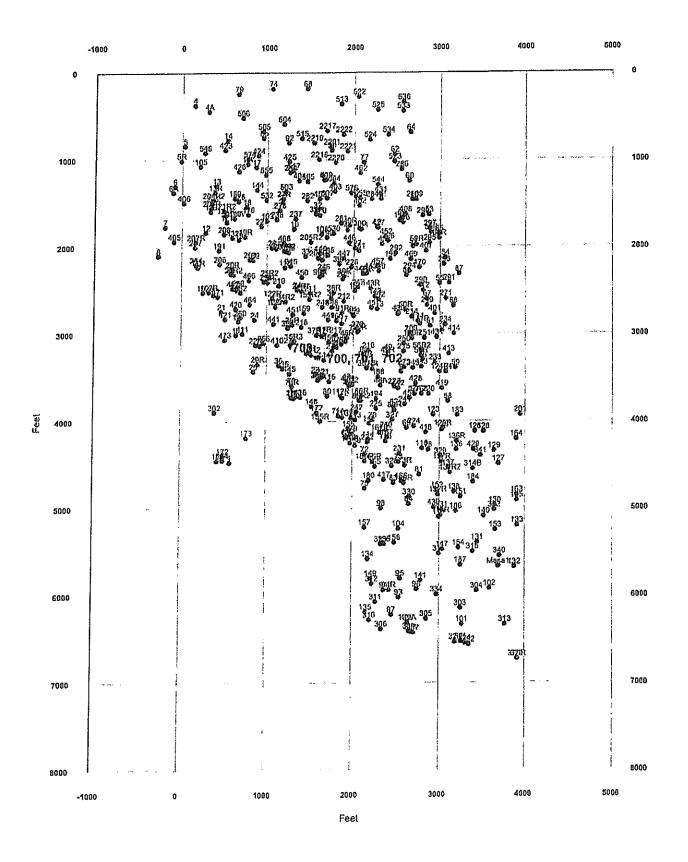
#### West Newport Oil Company

#### Typical Drilling Equipment and Site Layout





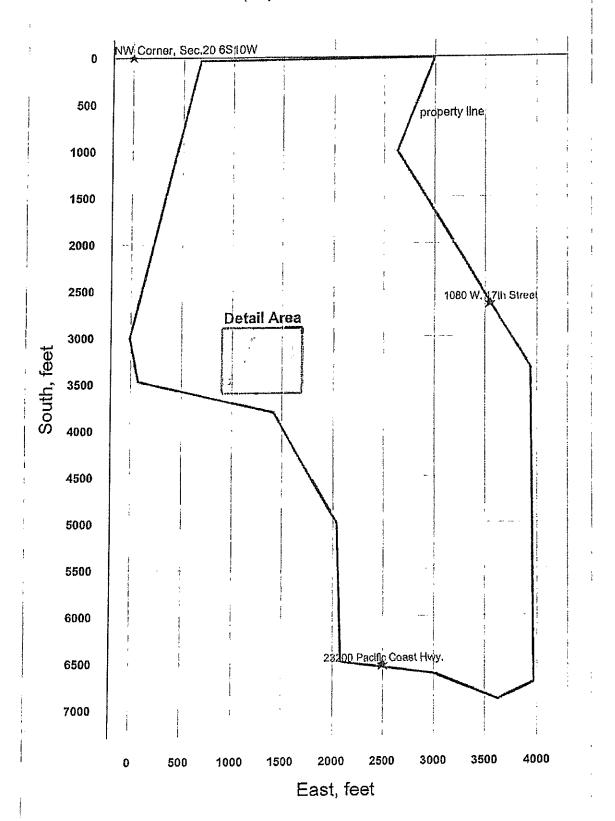
#### West Newport Oll Field New Well Locations



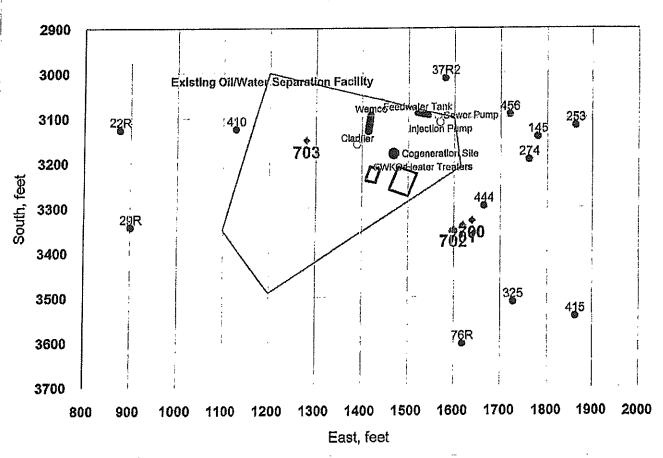
n process and the second of th

### West Newport Oil Company New Oil Wells - Field Grid Map

(949) 631-1100, Tom McCloskey



#### West Newport Oil Company New Oil Wells - "Banning" 700, 701, 702 and 703 Detail Area



## Section VII Educational Materials Included

The following is a list of educational materials included in this WQMP.

- not applicable
- M
- 耳
- X6
- 20
- 77

#### SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

#### PART I GENERAL INFORMATION

<ol> <li>Name of facility</li> </ol>	Banning Ranch - West Newport Field
2. Type of facility	Onshore Producing Facility
	1080 W. 17th Street, Costa Mesa
	Orange County, California
	bordering the city of Newport Beach
4. Name and address of	of owner or operator:
	West Newport Oil Company
	P.O. Box 1487
	Newport Beach, CA 92659
5. Designated person a	accountable for oil spill prevention at facility:
5	
Name and title	Rick Swaringen and Richard Jenkins, supervisiors
_	
6. Facility experienced	I a reportable oil spill event during the twelve months prior to Jan. 10,
	0 CFR. Part 112). (if YES, complete Attachment #1.) No
•	- Bridgereum-nicht mehr bei der
	MANAGEMENT APPROVAL
This	SPCC Plan will be implemented as herein described.
Signature _	Ly & I V
	$\leftarrow$
Name	I. R. Stair
Title	Vice President
	CERTIFICATION
I hereby certify that I hav	e examined the facility, and being familiar with the provisions of 40
CFR, Part 412, allest that	this SPCC Plan has been prepared in accordance with good engineering
pragices NOVE ON	
	Thomas Downs McCloskey
His 18 Miles	
Ha It to crow hi	Printed Name of Registered Professional Engineer
A MARKET AND A STATE OF THE STA	The Me Color
(Scall)	Monos Down / and
The on the order	Signature of registered Professional Engineer
OF LAND	<u> </u>
Date 1/8/06	Registration No. M025507 State CA

# Part I General Information

# 7. Potential Spills - Prediction and Control:

Source	Type of Failure	Product	Quantity (Bbls)	Rate (Bbls/hr	Direction of Flow	Secondary Containment
Tank Farm 2 - 1000 Bbl tanks 1 - truck loading rack	Leak or Rupture	Crude Oil	1,000	15	West	Concrete Block Wall
Diesel Tanks	Leak or Rupture	Diesel Fuel	240	240	Southwest	Earthen Berm
Wastewater Tanks – Tank Farm Area	Leak or Rupture	Wastewater, < 100 ppm oil	500	300	West	Concrete Block Wall
Wastewater Tank – Sewer Connection	Leak or Rupture	Wastewater, < 100 ppm oil	500	150	West	Earthen Berm
Oil Production Wells and Pipelines	Leak or Rupture	Oil/Water mixture, 98% water	1,000	300	Southwest	Well Cellars, Ditches, Settling Ponds, Earthen Berms
City of Newport Beach Wastewater Pipeline	Leak or Rupture	Wastewater, < 100 ppm oil	500	75	West	Earthen Berm

Name of Facility

Banning Ranch - West Newport Field

Operator

West Newport Oil Company

## Part I GENERAL INFORMATION

#### Discussion:

- The Banning Ranch portion of the West Newport Field is manned 24 hours per day, seven days per week, 52 weeks per year.
- The secondary containment listed in the preceding table is sufficient to control 100% of the stored products.
- Individual wells all have concrete well cellars and are inspected daily for mechanical integrity. Oil which accumulates in the well cellars is removed by vacuum trucks as necessary. Vacuum trucks are maintained on site.
- Production pipelines have gate, block, and check valves for fluid emergency shut off. Direction of flow (run off) is west to southwest through natural drainage channels to the Santa Ana River. There are several settling ponds or ditches along the drainage course where potential spills could be collected and removed. An earthen berm running from the northwest property corner, south along the western border, and then angling southeast to the Tank Farm spill containment is maintained. This berm provides additional containment for over 90% of the field's producing operations.
- Well numbers 22R, 29R, 37R2, 448 and 410 are isolated from potential spills by earthen berms which encircle the producing sites.
- An earthen berm provides secondary containment for the City of Newport Beach wastewater pipeline and is routinely maintained. Well numbers 76R, 148, and 416 lie within the City wastewater pipeline containment berm. Any drain valves in this berm are kept closed except when collected rainwater is to be released.
- There are backhoes, dump trucks, and skip loaders on site for cleanup activity if necessary. This equipment can be used to create temporary dikes and contain potential spills.
- Pipeline right-of-ways should be kept clear to facilitate inspection and repair.
- The wastewater is characterized as an iron sulfide contaminated brine with oil generally present at concentrations less than 100 ppm. The majority of wastewater produced is injected back into the main producing reservoir.

Name of Facility Banning Ranch - West Newport Field

Operator West Newport Oil Company

(Part I) Page 3 of 4

# Part I General Information

waters	are practicabl	e.	ctures or equipn	nent to prevent of	l from reaching na Yes	vigable -
•	ions and Reco		follow written p	procedures.	Yes	_
В.	The written supervisor or			spections, signed	l by the appropriate	e Yes
	Discussi	on: see	Attachment Attachment Attachment	3		
10. Personn	el Training a	nd Spill Preve	ention Procedur	es		
A.			tructed in the fo ntenance of equ	ollowing: nipment to prever	nt oil discharges Yes	_
	2) appli	cable pollutio	on control laws	, rules, and regul	ations Yes	_
The prevent oil sp	pills. Applica	ble laws, rul	es and regulation	eration and maint ons and oil spill r	enance of equipme eporting requireme	nt to ents wil
				erating personnel of the SPCC Plan	are conducted free	quently -
These briefin	gs should inc and recently d	lude a discus eveloped pre	sion of known	spill events or fa	/ with each filed op ilures, malfunction r will record notew	ing
Name of Facil	ity <u>B</u>	anning Ranc	h - West Newp	ort Field		
Operator	<u>v</u>	est Newport	Oil Company			

# PART II. ALTERNATE B DESIGN AND OPERATING INFORMATION ONSHORE OIL PRODUCTION FACILITY

#### A. Facility Drainage

- 1. Drainage from diked storage areas is controlled as follows:
  - Manually operated valves are sealed in a closed position and are rarely opened to drain rainwater.
  - Rainwater which collects in the tank farm can be pumped into the wastewater system.
  - During periods of prolonged, heavy rain, containment rainwater may be pumped into natural drainage paths.
- 2. The procedure for supervising the drainage of rainwater from secondary containment into natural drainage courses is as follows (a record of inspection and drainage events is to be maintained on a form similar to Attachment #3):
  - The field operator will visually inspect the condition of the water for the presence of oil before releasing the water.
  - Drain valves will be kept closed except when necessary to drain rainwater.
  - A record shall be maintained of each such event (see Attachment #3).
- 3. Field drainage ditches, cellars, or other such potential oil traps are inspected at regularly scheduled intervals for accumulations of oil.

  Yes

During each shift (8 hour tour), the filed operator will visually inspect for accumulations of oil on roads, ditches, and other production facilities. Accumulated oil will be picked up by a vacuum truck or disposed of by approved methods as required. Necessary repairs and/or troubleshooting efforts will be made as soon as possible.

#### B. Bulk Storage Tanks

- 1. All oil storage tanks are bolted steel, 10 or 12 gauge steel. Tanks are equipped with equalizing lines for failsafe operation and Varic liquid level indicators for quick gauging. The diesel storage tank is welded with 1" thick steel walls. The tank is piped with a guided, lift off flange on top for failsafe operation. The wastewater system tanks are fiberglass to prevent excessive corrosion.
- 2. The design, construction material, and containment volume of tanks are as follows:

Product	Construction	Volume, Bbls
Crude Oil and Wastewater, Tank Fa	Concrete Block Wall arm	50,000
Diesel Tanks	Earthen Berm	1,200
Wastewater	Earthen Berm	5,000

# PART II. ALTERNATE B DESIGN AND OPERATING INFORMATION -ONSHORE OIL PRODUCTION FACILITY

3. Visual examination will be made daily for leaks at chimes and flanges and for the condition of the foundations for tank support. The tanks shall be examined semiannually by the production supervisor and his observations shall be recorded.

## C. Facility Transfer Operations

- 1. Above ground valve and pipelines are examined and recorded quarterly. Wellhead production equipment are examined daily. Wastewater production and disposal equipment are examined daily. Wastewater system is examined weekly and any oil accumulation is skimmed by a vacuum truck as required. The field is constantly under inspection as routine operations are conducted.
- 2. Records of pipeline maintenance repairs and leaks are kept and used in a maintenance and replacement program. Scale and corrosion inhibitors are injected into key production and wastewater lines. Where applicable, plastic or fiberglass piping systems are used.

#### D. Oil Drilling and Workover Facilities

1. A blowout preventer (BOP) assembly and well control system is istalled before drilling below any casing string and, as required during workover operations.

Yes

2. This BOP assembly is capable of controlling any expected wellhead pressure. Yes

3. Casing and BOP installations conform to state regulations.

Yes

Name of Facility Banning Ranch - West Newport Field

Operator West Newport Oil Company

(Part II) Page 2 of 2

# **Agencies to Report Oil Spills**

1.	National Response Center	800 - 424 - 8802
	-	www.nrc.uscg.mil
2.	U.S. Coast Guard	673 - 0420
3,	State of California	
	Office of Emergency Services	800 - 852 - 7550
4.	Division of Oil and Gas	714 - 816 - 6847
5.	Fish and Game Department	310 - 590 - 5132
6.	City of Newport Beach	640 - 2151
7.	Clean Coastal Waters	310 – 432 – 1415

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### Attachment A

# West Newport Oil Company Field Inspection Report

Date	Area Inspected	Findings	Inspector
J			

Name of Facility Banning Ranch - West Newport Field

Operator West Newport Oil Company

#### Attachment B

# West Newport Oil Company Daily Inspection and Procedures

- 1. Visual inspection of wellhead and cellars.
- 2. Visual inspection of pipelines for leaks.
- 3. Visual inspection of tank farm areas for leaks.
- 4. Visual inspection of diesel storage tanks.
- 5. Visual inspection of wastewater tanks for oil accumulation and leaks.

Name of Facility Banning Ranch - West Newport Field

Operator West Newport Oil Company

#### SPCC Plan Attachment #3

# West Newport Oil Company Facility Bulk Storage Tanks – Drainage System

# Inspection Procedure:

- Operating conditions of the valves and pipelines will be checked semi-annually.
- Visual inspections of the rainwater for pollutants will be made before each drainage.

Record of drainage, bypassing, inspection, and oil removal from secondary containment:

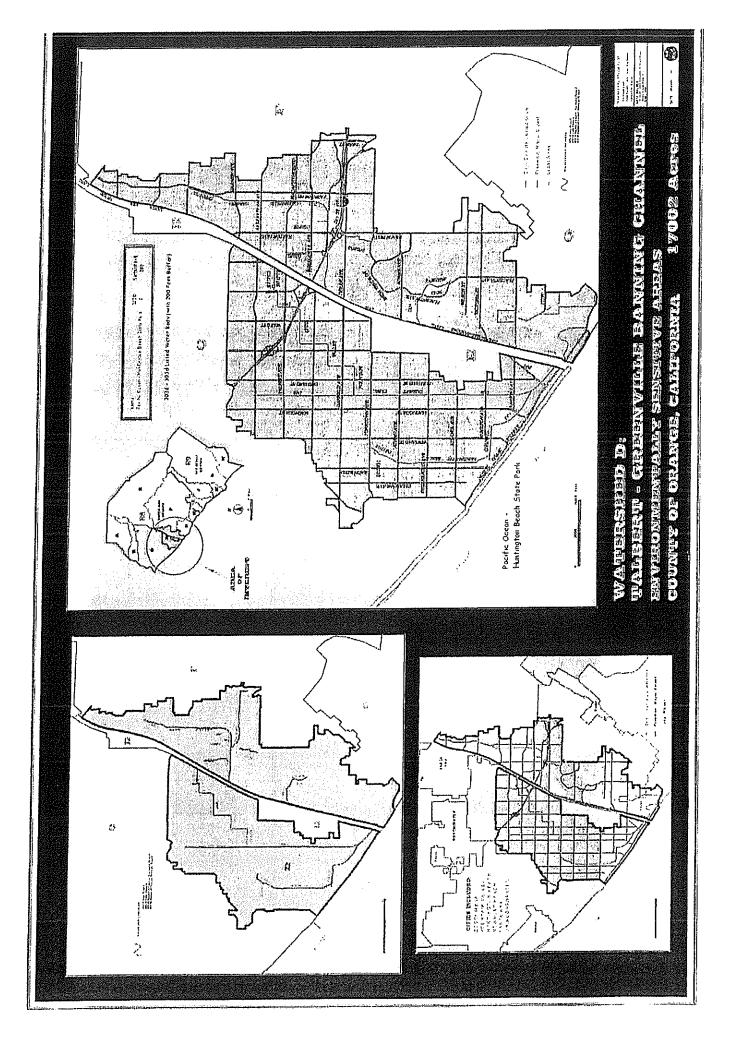
Date of	Date of Byp	Date of Bypassing			Operator's	
Drainage	Open	Closed	Inspection	Oil Removed	Signature	
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Name of Facility

Banning Ranch - West Newport Field

Operator

West Newport Oil Company





June 5, 2007

Tom McCloskey West Newport Oil Company P.O. Box 1487 Newport Beach, CA 92659

SUBJECT: New Oil Drill Sites at West Newport Oil Company, Newport Beach, California

#### Dear McCloskey:

We have analyzed the potential impacts to biological resources relating to new oil drilling wells proposed within the West Newport Oil Company property located in Newport Beach, California [Exhibit 1], between Brookhurst Street and Superior Avenue just north of Pacific Coast Highway [Exhibit 2]. Specifically, our analysis focuses on the two sites proposed for the new oil wells:

- 1) the existing "Banning 444" drill site, proposed for well numbers 700, 701, and 702, and
- a drill site within the existing "Tank Farm" or oil/water separation facility, proposed for well number 703.

#### **OBSERVATIONS AND ANALYSIS**

On June 8, 2007 a GLA biologist visited the two sites mentioned above that are being contemplated for the new oil wells; each site is described below.

### "Banning 444" site for wells 700, 701, and 702

The "Banning 444" site is a highly disturbed area due to the existing oil well number 444 and associated operations and maintenance [Exhibit 3, photograph 1]. The site is a relatively flat area located adjacent to a dirt maintenance road, and is enclosed by a small earthen berm to the northwest and northeast, and bounded by steep bluffs on the south [Exhibit 4]. There is a minimum 20-foot buffer between the permanent property line and the bluffs; on an ongoing basis, the drilling operation will occur six feet north of and within the property line, however

installation of the wells may necessitate temporary staging of equipment within the 20-foot buffer.

The vegetation on the drill site included a few scattered sprigs of dead ice plant (i.e., hottentot fig, Carpobrotus edulis) and one dry black mustard plant (Brassica nigra). The vegetation on the bluffs outside of the 20ft buffer zone and between 20 and 25 feet away from the proposed well sites includes ice plant, castor bean (Ricinus communis), tree tobacco (Nicotiana glauca), pampas grass (Cortaderia jubata) and a few scattered mulefat (Baccharis salicifolia).

#### "Tank Farm" site for well 703

The "Tank Farm" site is a flat gravel pad located adjacent to a paved maintenance road [Exhibit 3, photograph 2]. The site is enclosed by a 2.7-foot high concrete block wall to the west, north, and east, and is bounded by increasingly higher grade to the south [Exhibit 4]. This site is approximately 8 feet lower in elevation than the "Banning 444" site. Absolutely no vegetation is present on site.

#### CONCLUSION

Based on the highly disturbed nature of the "Bannign 444" site and the developed nature of the "Tank Farm" site, there are no sensitive habitats (e.g. wetland, riparian, coastal sage scrub) or sensitive species at either site, and no biological impacts are expected to occur due to installation of the oil wells as planned.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

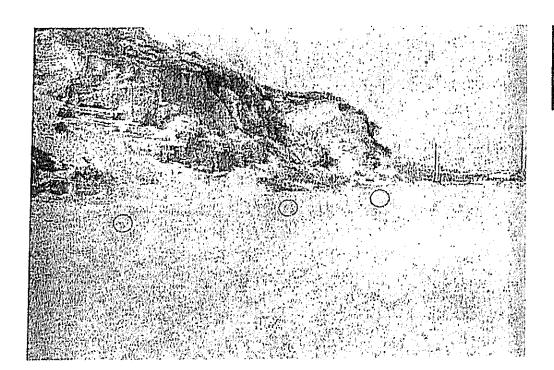
Tony Bomkamp Senior Biologist

Fran C. Had

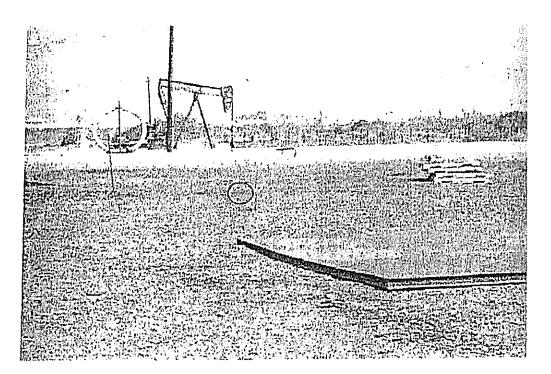
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EXHIBIT 3



PHOTOGRAPH 1: "Banning 444" well site with approximate locations of proposed well numbers 700, 701, and 702 denoted by circles.



PHOTOGRAPH 2: "Tank Farm" well site with approximate location of proposed well number 703 denoted by a circle.





Orange County Oil Well Permitting Process – "Banning" 700

CEQA Review



**DATE:** June 28, 2007

TO: File

**FROM:** Environmental Planning Services Division (EPSD)

SUBJECT: OW070001 - Oil Wells for Banning 700, 702 & 703 in Oil Wells area of

Banning Ranch

**PROJECT DESCRIPTION:** The applicant, West Newport Oil Company, is requesting approval for three new oil well drilling sites: Banning 700, 702 and 703 in an area designated for oil operations that currently has 52 oil producing wells in the City of Newport Beach area of unincorporated Orange County.

**PROJECT LOCATION:** The project site is in the southern portion of unincorporated Orange County near the City of Newport Beach, east of Santa Ana River, off of Pacific Coast Highway (see location map).

CEQA DETERMINATION: The CEQA documentation for the proposed project has been completed by the Environmental Planning Services Division (EPSD). Based upon its review, EPSD has determined that the proper CEQA documentation for the project is Negative Declaration OW070001. The following information is attached to this memo for your consideration:

- I. Instructions for Filing CEQA Documents with the County Clerk; and
- II. CEQA Statements, Actions and Findings which should be used for Staff Reports and AITs for the Project, including:
  - A. CEQA Compliance Statement for AITs and Staff Reports; and
  - B. Recommended Finding for an Exempt Project; and
  - C. Fish and Game Code Finding for Approval of Project; and
  - D. NCCP Finding for Approval of Project.
- III. Negative Declaration OW070001

If clarification is needed regarding this Memo or if there are questions, please contact the following staff person from the Environmental Planning Services Division:

EPSD Staff Contact: Chris Uzo-Diribe Telephone Number: (714) 834-2542

Tim Neely, Director, Planning & Development Services Department

By: \_\_\_\_\_ Date \_\_\_\_\_
Title: Chief, Environmental Planning Section

Attachment 1: Filing Instructions for County Clerk

Attachment 2: Recommended CEQA Statements, Actions, Findings

Attachment 3: Negative Declaration OW070001

Attachment 4: NOD

#### ATTACHMENT 1

# FILING CEQA DOCUMENTS WITH THE COUNTY CLERK

Your division will be responsible for filing the CEQA documentation and paying its related \$43.00 filing fee with the County Clerk for your project. The County Clerk now only needs your CEQA document(s) with your project charge number in the upper right corner in order to post the document and recover this fee. You must, however, obtain a fee receipt from the County Clerk, which must then be turned in immediately to Management Services/Accounting Services. The County Clerk requires the \$50.00 documentary handling fee for the following items:

\*Notices of Determinations (NOD); and

\*Notices of Exemption (NOE)

### Please note the following:

- 1. Within 5 days of Project approval by the Board, Planning Commission, Zoning Administrator, Subdivision Committee or Director of PDS, a Notice of Determination (NOD) must be filed with the County Clerk.
- 2. If Department of Fish and Game (DFG) has determined that the Project is exempt from the fees, a Certificate of Fee Exemption will be provided to PDSD/staff, which must accompany your project's NOD.
- 3. If DFG cannot find your project exempt from the DFG fees and has no record of the fee payment, the Applicant will be required to pay \$2,500.00 for the EIR and \$1,800 for ND, including the \$50.00 handling fee.

You will need to fill in the information on the NOD form and get an original authorizing signature from your division after the approval action on your project. You will need to take the original set, and at least one set of copies to the EIR Clerk located in the Recorders/Clerks Office, Building 12, Civic Center Plaza. The Clerk will stamp the NOD and keep the original set. The Clerk will issue a receipt for the environmental document, which must be returned to Management Services/Accounting Services by the end of the day. A copy of a stamped NOD must be sent to EPSD for the file.

#### **ATTACHMENT 2**

# RECOMMENDED CEQA STATEMENT, ACTION AND FINDINGS FOR STAFF REPORTS/AITs

### A. CEOA COMPLIANCE STATEMENT (FOR TEXT OF STAFF REPORT/AIT):

The CEQA compliance statement, located in the text of the staff report or body of the AIT under "Additional Data", shall include the following statement advised otherwise by County Counsel or the Manager, Environmental Planning Services Division.

Negative Declaration No. OW070001 has been prepared and was posted for public review on 07/2/07. It is attached for your consideration and must be approved prior to project approval with a finding that it is adequate to satisfy the requirements of CEOA.

#### B. RECOMMENDED ACTION STATEMENT FOR APPROVING PROJECT:

State law requires that action on a CEQA document be taken by the decision-maker <u>prior</u> to approval of the project for which it has been prepared. The following action must be taken before action on the project, unless directed otherwise by County Counsel or the Manager, PDS/EPSD.

In accordance with Section 21080(c) of the Public Resources Code and CEQA Guidelines Section 15074, Negative Declaration No. OW070001, reflects the independent judgment of the lead agency, Orange County, and satisfies the requirements of CEQA. It is approved for the proposed project based upon the following findings:

- a. The Negative Declaration and Comments on the Negative Declaration received during the public review process were considered and the Negative Declaration was found adequate in addressing the impacts related to the project; and
- b. There is no substantial evidence that the project, with the implementation of the mitigation measures, if any, which are included in the Negative Declaration, will have a significant effect on the environment; and
- c. If mitigation measures are included, pursuant to Public Resources Code Section 21081.6, the Mitigation Monitoring and Reporting Program is adopted.

#### C. FISH AND GAME CODE FINDING FOR APPROVAL OF PROJECT:

Find that pursuant to Section 711.4 of the California Fish and Game Code, this project may be subject to a 'No Effect Determination Notice' from California Department of Fish & Game if determined by the Dept. that no adverse impacts to wildlife resources will result from the project.

#### D. NCCP FINDING FOR APPROVAL OF PROJECT:

Find that the proposed project will not have a significant unmitigated impact upon Coastal Sage Scrub habitat and, therefore, will not preclude the ability to implement the adopted Subregional Natural Communities Conservation Planning (NCCP) Programs.

#### **ATTACHMENT 3**

# Negative Declaration IS OW070001 - 3 new Oil Wells (Banning 700, 702 and 703) Newport Beach area

**PROJECT DESCRIPTION:** The applicant, West Newport Oil Company, is requesting approval for three new oil well drilling sites: Banning 700, 702 and 703 in an area designated for oil operations that currently has 52 oil producing wells in the City of Newport Beach area of unincorporated Orange County.

**PROJECT LOCATION:** The project site is in the southern portion of unincorporated Orange County near the City of Newport Beach, east of Santa Ana River, off of Pacific Coast Highway (see location map).

**EXISTING SITE CONDITION:** The subject site exists as Oil Operation and open space area. The majority of the site is currently disturbed and some areas composed of dense natural vegetation with oil drilling operation fully established.

The "Banning" 700, 701 and 702 drill site shares the existing "Banning" 444 well site. This site is roughly 8 feet higher than the adjoining oil/water separation facility grade. This site is enclosed on three sides by a small earthen berm. Towards the south from this site, closure is accomplished by increasingly higher grade elevation. The "Banning" 703 drill site is within the enclosed West Newport Oil oil/water separation facility. The facility is enclosed by a 32" high concrete block wall on three sides. The fourth side (east side) is enclosed by an increasingly higher grade elevation.

**PROJECT BACKGROUND:** The existing General Plan designation for Banning Ranch is 5 "Open Space and R4 Zoning Districts with "Oil production" and Flood Plain "FP2" overlay under the County Zoning Code. The Area includes a long-term plan established in 1944 for the phasing of oil wells with selective abandonment and consolidation of certain oil production facilities. The new well will be located where there are other 52 producing wells, area allocated exclusively to oil operation as long as oil production is economically viable.

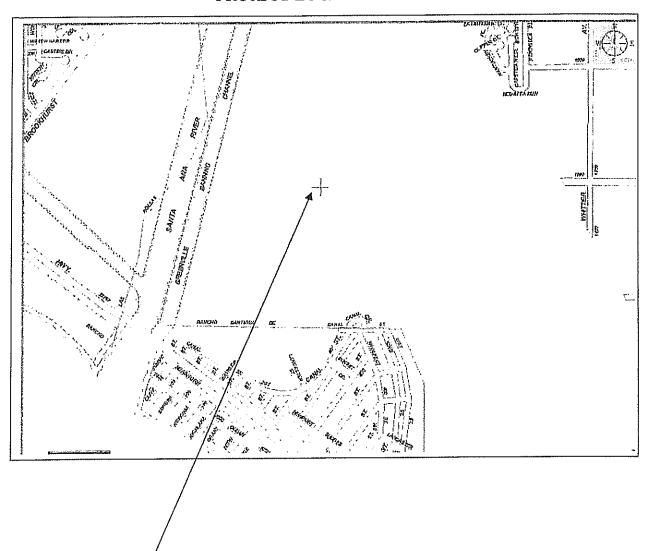
# CEQA BACKGROUND: CEQA BASIS FOR A NEGATIVE DECLARATION:

The California Environmental Quality Act allows the Lead Agency to prepare a Mitigated Negative Declaration when;

- A. The Initial Study identifies potentially significant effects but:
- 1. The determination is made that there will not be a significant effect in the subject case because the Mitigation Measures added to the project will eliminate the impacts or reduce them to levels of insignificance.

# EXHIBIT 1 REGIONAL LOCATION MAP

EXHIBIT 2
PROJECT LOCATION MAP



PROJECT LOCATION

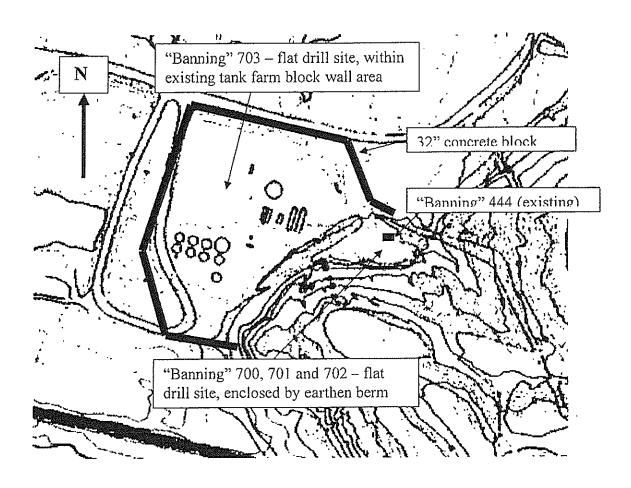
# EXHIBIT 3 AERIAL PHOTO OF PROJECT SITE



PROJECT LOCATION

#### **EXHIBIT 4**

# West Newport Oil Company "Banning" 700, 701, 702 and 703 Site Topographical Detail Map



Based upon the foregoing, the Environmental Planning Division determined that a Negative Declaration was the proper environmental document for the project since there was no substantial evidence that the proposed project will have any significant adverse impacts upon the environment that cannot be mitigated. Consequently, Negative Declaration OW070001 was prepared as the appropriate documentation for the project.

The following is the analysis of the subject proposal and compilation of pertinent mitigation measures. These mitigation measures have been updated to reflect the latest requirements of CEQA in addition to County ordinances, policies and guidelines.

#### ANALYSIS OF IMPACTS/MITIGATION:

### 1. LAND USE & PLANNING Would the proposal:

- a) Conflict with general plan designation or zoning?
- b) Conflict with applicable environmental plans or policies of agencies with jurisdiction over the project?
- c) Disrupt or divide the physical arrangement of an established community (e.g. low income, minority)?
- d) Conflict with adjacent, existing or planned land uses?

#### ANALYSIS:

# a) Conflict with general plan designation or zoning?

The area contains oil producing properties that are owned by West Newport Oil. The entire Banning Ranch area project encompasses approximately 480 acres adjacent to the Cities of Newport Beach and Costa Mesa. The proposed site remains designated 1B (Suburban Residential) District with an "Oil" and "FP2" Districts overlay and is in compliance with the applicable zoning for the Banning Ranch area.

# b) Conflict with applicable environmental plans or policies of agencies with jurisdiction over the project?

The proposed project is located in designated oil drill operation area and it does not conflict with applicable environmental plans or policies of the above-mentioned agencies. A biological assessment dated June 5, 2007 was prepared by Glen Lucos & Assc. to address potential impacts on biological resources and to provide appropriate mitigation measure if necessary. The level of impact was considered less than significant. Therefore, no additional mitigation measures are required.

# c) Disrupt or divide the physical arrangement of an established community (e.g. low income, minority)?

The proposed project would not disrupt or divide the physical arrangement of an established community. No new impacts would occur as a result of implementing the proposed project. Therefore, no mitigation measures are required.

# d) Conflict with adjacent, existing or planned land uses?

The proposed new oil wells creation would not conflict with adjacent, existing or planned land uses. The proposed new oil wells are proposed to be established in an area more than 175 feet from a dwelling and other surrounding planning areas. Therefore, consistent with the Orange County's Division 8 of the 'Oil Drilling & Production Regulations' Therefore, no additional mitigation measures are required.

# 2. AGRICULTURE. Would the project:

- a) Convert Farmlands listed as "Prime", "Unique", or of "Statewide Importance," as shown on the State Farmland Mapping and Monitoring Program, to non-agricultural use?
- b) Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use?

The proposed project site is to be located on vacant land utilized for oil production since 1944 and currently proposes additional oil wells. As such, no impacts would occur to farmlands or result in conversion of Farmland to non-agricultural use. Prior to subject action, the site consisted entirely of oil production, and no *unique farmland* under the Farmland Mapping and Monitoring Program (FMMP) existed on site. Therefore, no mitigation measures are required.

# 3. POPULATION AND HOUSING Would the proposal:

- a) Cumulatively exceed adopted regional or local population projections?
- b) Induce substantial grown in an area directly or indirectly through project in an undeveloped areas or extension of major infrastructure?
- c) Displace existing housing affecting a substantial number of people?

#### ANALYSIS:

a) Cumulatively exceed adopted regional or local population projections?

The proposed new oil wells project would not exceed adopted regional or local population projections. The plans for the entire Banning Ranch area are consistent with the County of Orange General Plan Growth Management Element (GME). No additional mitigation measures are required.

b) Induce substantial growth in an area directly or indirectly through project in an undeveloped areas or extension of major infrastructure?

The proposed project is being established in an undeveloped area designate for oil

operations. No impact is anticipated.

# c) Displace existing housing affecting a substantial number of people

The proposed new oil wells do not propose changes that would generate impacts, which would result in house displacement of people or induce substantial growth in the area. Therefore no impact is anticipated and no mitigation measure is required.

# 4. GEOPHYSICAL Would project result in or expose people to impacts involving:

- a) Local fault rupture?
- b) Seismicity: ground shaking or liquefaction?
- c) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
- d) Landslides or mudslides?
- e) Erosion, changes in topography or unstable soil conditions from excavation, grading or fill?
- f) Subsidence of the land?
- g) Expansive soils?
- h) Unique geologic or physical features?

#### ANALYSIS:

#### a) Local fault rupture?

No known active or potentially active faults are found within this oil field. No mitigation measures are required.

#### b) Seismicity: ground shaking or liquefaction?

Oil operation area is located within a seismically active region, and ground shaking is likely to occur over the life of the project. Through the implementation of current design standards and standard engineering practices, risks associated with seismic shaking can be reduced to a level considered less than significant. There is possibility of liquefaction and/or seismic settlement occurring beneath the entire Banning area but is considered very remote, since majority of the project site is elevated and underlain by bedrock. No adverse impacts related to seismicity are anticipated and no mitigation measures are required.

c) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The use of septic tanks or alternative wastewater disposal systems will not be required for the proposed project. No mitigation measures are required.

### d) Landslides or mudslides?

Mitigation Measure required prior to issuance of a grading permit for the new oil wells will reduce landslide or mudslide impacts to less than significant levels. No additional mitigation measures are required.

# e) Erosion, changes in topography or unstable soil conditions from excavation, grading or fill?

There will be no grading required to prepare the well sites. The "Banning" 700 and 702 wells are located on the existing well site of "Banning" 444. The "Banning" 703 well is located within the existing tank farm block wall and the site is flat enough for the drilling equipment as is. The total footprint of the drilling equipment is roughly 200'x50'. Both sites are accessible from existing infrastructure and roads.

# f) Subsidence of the land?

Impacts associated with compressible and expansive soils and subsidence, of land are reduced to less than significant levels by removing and re-compacting onsite soils and implementing standard engineering practices during excavation. The applicant routinely drills oil wells in the West Newport Field. In most instances, a multi-well drilling program is executed. The drilling of wells sequentially, without pause in operations, allows the applicant to recycle drilling fluids from well to well. Throughout a drilling program, cuttings and drilling fluids that cannot be recycled are impounded in either a tank or lined remediation cell. During the impoundment process the fluids dehydrate. At the end of the drilling program WNOC will arrange for a contractor to remove the solids for offsite disposal. The applicant relies on a contractor named Anterra for disposal. Anterra is located in Oxnard, California and is a widely used processor of oil field solid waste. Therefore, no new impacts would occur from implementing the proposed new oil wells. No additional mitigation measures are required.

# g) Expansive soils?

Compliance with the County of Orange, Grading and Excavation Code and the standard mitigation measures will continue to ensure that potential impacts will be mitigated to a level of insignificance.

# h) Unique geologic or physical features?

There are no unique geologic or physical features associated with the proposed project site.

No additional mitigation measures are required.

## 5. HYDROLOGY & DRAINAGE. Would the proposal result in:

- a) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in manner which would result in:
  - i) Substantial erosion or siltation on- or off-site?
  - ii) A substantial increase in the rate or amount of surface runoff in manner, which would result in flooding on- or off-site?

The proposed project would not change or alter existing drainage pattern substantially due to its nature and location. The submitted draft water quality plan adequately addresses most of the items enumerated in the County's checklist for water quality impacts and mitigation; however, a complete and acceptable plan must be submitted prior to issuance of any oil drilling permit.

b) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The proposed new oil wells would not create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. As discussed earlier all drilling mud would be disposed accordingly and no additional mitigation measures are required.

The individual wells all have concrete well cellars and are inspected daily for mechanical integrity. Oil which accumulates in the well cellars is removed by vacuum trucks as necessary. The direction of run-off is west to southwest through natural drainage channels to Santa Ana River. There are several settling ponds or ditches along the drainage course where potential spills could be collected and removed. There are also earthen berm, back hoes, dump trucks and skip loaders on site for clean-up.

c) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

The proposed project site is not located within an "FP2" Flood Plain overlay. The existing oil wells and the proposed project were and would be built or drilled in a manner to impede or redirect flood flows. No mitigation measures are required.

d) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow?

The proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow due to its nature and appropriate measures.

The proposed new oil wells plan does not propose changes that would generate impacts exceeding the impacts originally noted and mitigated in the existing oil wells operations.

## 6. WATER QUALITY Would the project:

- a) Violate any water quality standards or waste discharge requirements?
- b) Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of a local groundwater table level?
- c) Otherwise substantially degrade water quality?

#### ANALYSIS:

a) Violate any water quality standards or waste discharge requirements?

The proposed new oil wells will not violate any water quality standards or waste discharge requirements due to previously outlined mitigation measure, listed above and the site-specific WQMP. No further impact is anticipated. WQMP designed for the site to current standards would be submitted prior to issuance of any grading or drilling permit and it will determine which BMPs to be implemented. These measures will ensure water quality standards and waste discharge requirements are met. To ensure that the proposed project is in compliance with water quality standards and waste discharge requirements, the following mitigation measures shall be complied with:

### Mitigation Measure#1

Prior to issuance of any grading or building permit, applicant shall submit for approval of the Manager, Subdivision Division, in consultation with the Manager, Environmental Resources, a proposal specifically identifying Best Management Practices (BMPs) that will be used on site to control predictable pollutant run-off.

This proposal shall identify the types of structural and non-structural measures to be used, the location(s) of structures, and assignment of long-term maintenance responsibilities (specifying the developer, parcel owner, maintenance association, lessee, etc.). Regrading and/or construction of special features to adequately control any kind of water pollution.

# b) Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of a local groundwater table level?

The proposed new wells are not expected to have a significant impact on the quantity of groundwater, direction or rate of flow, or groundwater quality. The new oil wells would not substantially deplete ground water supply, nor result in any other new impact. Therefore, no additional mitigation measures are required.

### c) Otherwise substantially degrade water quality?

The new oil wells plan is not expected to degrade water quality and no impact is anticipated. No additional mitigation measures are required.

# a) Increased vehicle trips or traffic congestion beyond adopted policies and/or forecasts?

The proposed project would not increase vehicle trips or traffic congestion beyond adopted policies and/or forecasts. The project would not generate significant additional vehicular movement since the project site is currently being utilized.

The drilling operations will involve limited incremental traffic volume during actual drilling of the wells. There is a mobilization and demobilization procedure that involves equipment delivery and set up at the start of the program and then at the end of the program. The mobilization and demobilization procedure takes roughly one day to rig up and one day to rig down drilling equipment. The traffic on these days will consist of approximately four trucks and two cranes.

During drilling operations, the incremental truck traffic volume will involve the arrival and departure of specialty contractors and some material delivery (such as pipe). On average, there may be an additional truck every day. The rig crews typically carpool from their hotel by passenger vehicle. There will be an additional car arriving and departing three times daily during drilling operations.

Drilling operations are anticipated to take three to four weeks depending on the equipment and manpower reliability and expertise.

West Newport employees currently drive approximately 12 passenger vehicles to work every day. In addition, onsite normal and routine operations involve a service rig, three vacuum trucks, two back hoe loaders, six pickup trucks, UPS deliveries, contractors and other traffic required to maintain the 400 acre oil field with 50 producing wells. Historically, West Newport Oil Company has conducted operations with several times the current onsite traffic activity. The oil field once had over 250 active wells in service. During this time there were over 60 employee vehicles, four service rigs, a company

owned and operated drilling rig and additional heavy equipment that supported this substantially larger operation.

# b) Exceed, either individually or cumulatively, a level of service standards established by the county congestion management agency for designated roads or highways?

Normal and routine existing truck traffic to and from the oil field may increase after the drilling program is completed, depending on the productivity of the new wells drilled. The applicant currently has 1.5 trucks per day visiting the field. It is hoped that this truck traffic will increase to 2.0 trucks per day after the new wells are completed. Previously the Company has had over 8.0 trucks per day visiting the field for crude oil transportation.

The expected traffic load after the program is completed will continue to be several times smaller than historical traffic flows. In addition, the traffic increase expected during drilling operations will be small and short lived.

The proposed project would not exceed level of service standards established by the County of Orange. The circulation system as designed (including internal connector streets) has been implemented in a manner to accommodate the amount of traffic to be generated from the proposed new oil wells therefore no adverse on-site circulation impacts are anticipated. Additional mitigation measures are not required.

# c) Safety hazards from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

The on-site circulation system were designed to incorporated the entire Banning area and specific features (e.g., visibility, access, appropriate lane sizing, contoured road curves, and adequate signage/signalized intersections) are already in place to ensure the safety of residents. No additional mitigation measures are required for the proposed project.

# d) Inadequate emergency access of access to nearby uses?

The primary roadway providing vehicular access to Oil operation area is Pacific Coast Highway, Superior and Balboa Blvd. will provide additional vehicular access. The Initial Study has concluded the traffic and circulation impacts anticipated from the implementation of the proposed new oil wells is insignificant and no additional mitigation measures are required.

# e) Insufficient parking capacity on-site or off-site?

Parking area for the entire Banning Ranch area was designed in accordance with County standards to ensure sufficient parking capacity for all users. By satisfying County standards, the proposed project would provide sufficient parking. No additional mitigation measures are required.

## f) Hazards or barriers for pedestrians or bicyclists?

Roadways within Oil operation area have been designed so as not to contain sharp curves and all intersections are adequately signed and/or signalized in accordance with County roadway standards. No additional mitigation measures are required.

g) Conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)?

The proposed project will not conflict with adopted policies supporting alternative transportation. The on-site circulation system for Oil operation area has been designed in accordance with County roadway standards. No new impacts to alternative transportation policies will occur.

h) Rail, waterborne or air traffic impacts?

The proposed project would not result in rail, waterborne, or air traffic impacts. No mitigation measures are required.

i) Change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The proposed project would not result in a change in air traffic patterns. No additional mitigation measures are required.

### 7. AIR QUALITY. Would the proposal:

- a) Violate any SCAQMD standard or contribute to air quality deterioration beyond projections of SCAQMD?
- b) Expose sensitive population groups to pollutants in excess of acceptable levels?
- c) Alter air movement, moisture, or temperature, or cause any change in climate?
- d) Create objectionable odors affecting a substantial number of people?

#### ANALYSIS:

a) Violate any SCAQMD standard or contribute to air quality deterioration beyond projections of SCAQMD?

Orange County is located within the South Coast Air Basin which is designated a non-attainment area for carbon monoxide, photochemical oxidants and total suspended particulates with average daily air quality pollutant levels exceeding the Pollutant Standard Index (PSI). The proposed project is consistent with the Air Quality Management Plan (AQMP) for the South Coast Air Basin that was approved by the EPA

in 1994. Therefore, the proposed project would not contribute to air quality deterioration beyond projections of SCAQMD.

b) Expose sensitive population groups to pollutants in excess of acceptable levels?

The proposed project would not expose sensitive population groups to pollutants in excess of acceptable levels. No additional mitigation measures are required.

c) Alter air movement, moisture, or temperature, or cause any change in climate?

The proposed project would not alter air movement, moisture or temperature, or cause any change in climate. No additional mitigation measures are required.

d) Create objectionable odors affecting a substantial number of people?

The proposed project would not create objectionable odors that would affect a substantial number of people. No mitigation measures are required.

The proposed new oil wells plan does not propose changes that would generate impacts exceeding the current impacts. No new impacts are noted and no mitigation is required.

# 8. NOISE Would the proposal:

- a) Increase existing noise levels?
- b) Expose people to noise levels exceeding adopted County standards?
- c) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

#### ANALYSIS:

a) Increase existing noise levels?

The proposed new oil wells would not result in an increase in long-term noise levels from traffic. However, the mitigation measure listed below will reduce any unforeseeable short term impact below a level of significance. The County Oil drilling and Production Regulations disallows oil wells to be drilled within 175 feet of any dwelling. There are existing homes to the north and to the south of proposed equipment locations. The homes to the north are approximately 1,800 feet from the proposed site and the homes to the south are approximately 1,100 feet. The projected noise levels at the nearest residences would be below County Noise Ordinance projection. Therefore no long-term impact is anticipated. The mitigation measures will be complied with through implementation of

Standard Conditions of approval prior to issuance of oil well permits. No additional mitigation measures are required.

# b) Expose people to noise levels exceeding adopted County standards?

The proposed project would not be exposed to high traffic noise levels generated by Pacific Coast Highway, Superior and Balboa Blvd. due to its nature. To ensure that short term noise levels do not exceed adopted County standards the mitigation measure listed below must be complied with. No additional mitigation measures are required.

c) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The proposed new oil wells will not be located within an airport land use plan or within two miles of a public airport or public use airport. Therefore, there is no threat of exposing people residing or working in the project area to excessive airport noise levels. However, the following mitigation measure would continue to ensure that short-term impact is kept below a level of significance:

### Mitigation Measure#2

- A. Prior to the issuance of any grading or building permits, the project proponent shall produce evidence acceptable to the Manager, Subdivision & Grading, that:
  - (1) All construction vehicles or equipment, fixed or mobile, operated within 1,000' of a dwelling shall be equipped with properly operating and maintained mufflers.
  - (2) All operations shall comply with Orange County Codified Ordinance Division 6 (Noise Control).
  - (3) Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings.
- B. Notations in the above format, appropriately numbered and included with other notations on the front sheet of grading plans, will be considered as adequate evidence of compliance with this condition.

### 10. BIOLOGICAL RESOURCES Would the project impact:

a) Endangered, threatened or rare species or their habitats including, but not limited to, plants, fish, insects, animals and birds?

- b) Locally designated species e.g. heritage trees?
- c) Locally designated natural communities (e.g. oak forest, coastal habitat, etc.)?
- d) Wetland habitat e.g. marsh, riparian and vernal pool?
- e) Wildlife dispersal or migration corridors?
- f) Adopted conservation plans and policies (e.g. Natural Community Conservation Plan or Resource Management Plan)?

#### ANALYSIS:

a) Endangered, threatened or rare species or their habitats including, but not limited to, plants, fish, insects, animals and birds?

A biological assessment dated June 5, 2007 was prepared by Glen Lucos & Assc. to address potential impacts on biological resources and to provide appropriate mitigation measure if necessary. The level of impact was considered less than significant based on the highly disturbed nature of the site. Therefore, no additional mitigation measures are required.

No new impacts will occur from implementing the proposed project that would require Mitigation measures.

b) Locally designated species e.g. heritage trees?

Please see response to question a above.

c) Locally designated natural communities (e.g. oak forest, coastal habitat, etc.)?

Please see response to question a above.

d) Wetland habitat e.g. marsh, riparian and vernal pool?

The project requires incorporation of all the conditions and provisions contained in the state and federal resource agency permits. No additional mitigation measures are required for the proposed project.

e) Wildlife dispersal or migration corridors?

No wildlife impact is anticipated according to the submitted bio-assessment therefore, no additional mitigation measures are required.

## f) Adopted conservation plans and policies (e.g. Natural Community Conservation Plan or Resource Management Plan)?

The proposed oil wells drilling would not occur within areas (based on the Central Coastal Subregional NCCP Program Biological Value Map). Therefore, these areas would not be considered significant for the reserve system or compromise its integrity. Therefore, no new impacts would occur as a result of implementing the proposed oil wells.

#### 11. AESTHETICS Would the project:

- a) Affect a scenic vista or view open to the public?
- b) Affect a designated scenic highway?
- c) Substantially degrade the existing visual character or quality of the site and its surroundings?
- d) Create light or glare beyond the physical limits of the project site?

#### ANALYSIS:

#### a) Affect a scenic vista or view open to the public?

The proposed new oil wells would not have a significant impact on scenic views open to the public due to its nature and location. No additional mitigation measures are required.

#### b) Affect a designated scenic highway?

No effect on County's Scenic Highway Plan and/or preserving scenic resources. No new impacts would occur as a result of implementing the proposed project.

The proposed new oil wells plan does not propose changes that would generate impacts exceeding the impacts already existing in the area. No new impacts are noted and no mitigation measure is required.

## c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The landscape concept for the Oil operation area and entire Banning Ranch area is intended to reinforce the heritage of surrounding development, which provides a visual backdrop to the city. Therefore, the plan for the proposed oil wells would be in compliance with the existing landscape.

#### d) Create light or glare beyond the physical limits of the project site?

The proposed project will create new sources of light and glare but not beyond the physical limits of the project site due to the location of these wells no adverse impact is

anticipated. No additional mitigation measures are required.

#### 12. CULTURAL/SCIENTIFIC RESOURCES Would the project:

- a) Disturb archaeo or paleo resources?
- b) Affect historical resources?
- c) Have the potential to cause a physical change which would affect unique ethnic cultural values?

#### ANALYSIS:

#### a) Disturb archaeo or paleo resources?

Oil operation area may contain non-renewable paleontological resources. The mitigation measure listed below will reduce impacts on cultural, scientific, or paleontological resources to less than significant.

#### b) Affect historical resources?

Implementing the proposed project will not affect historical resources. The site is previously disturbed, whatever existed may have been removed or destroyed prior to this action.

# c) Have the potential to cause a physical change that would affect unique ethnic cultural values?

The proposed project would not cause a physical change that would affect unique ethnic cultural values or restrict existing religious or sacred uses. The proposed new oil wells sites are subject to the following mitigation measure to ensure that potential impacts are mitigated below a level of significance:

#### Mitigation Measure#3

Prior to the issuance of any grading or building permit, the project applicant shall provide written evidence to the Manager, Subdivision and Grading, that applicant has retained a County certified paleontologist to observe grading activities and salvage and catalogue fossils as necessary. The paleontologist shall be present at the pre-grade conference, shall establish procedures for paleontological resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of the fossils. If the paleontological resources are found to be significant, the paleontologist shall determine appropriate actions, in cooperation with the applicant, which ensure proper exploration and/or salvage

#### 13. RECREATION Would the project:

- a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration or the facility would occur or be accelerated?
- b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?
- c) Conflict with adopted recreational plans or policies?

#### ANALYSIS:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No recreational, neighborhood or regional park facilities are required due to the nature of the proposed project. No new impacts would occur from implementing the proposed new oil wells activity. Therefore, no additional mitigation measures are required.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No additional mitigation measures are required.

c) Conflict with adopted recreational plans or policies?

No adverse impact is anticipated from the proposed new oil wells due to its nature.

#### 14. MINERAL RESOURCES Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

#### ANALYSIS:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. The oil production would continue at same capacity without any impact from proposed project.

As a matter of fact there might be an increase as a result of establishing these three new wells. Therefore, no mitigation measures are required.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The proposed project does not impact a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. As stated earlier oil production would continue without interruption therefore, no mitigation measures are required.

#### 15. HAZARDS Would the project:

- a) Create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Exposure of people to existing sources of health hazards?
- e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

#### ANALYSIS:

a) Create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The proposed project would not create a hazard to the public or the environment due to its nature.

b) Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The Orange County Health Care Agency, Environmental Health Division conducts environmental site assessment/investigation report and requests for site remedial action plan when necessary to ensure that proper remediation of hazardous or toxic materials present in the area of oil wells including the proposed new oil wells site are performed accordingly. No additional mitigation measures are required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The proposed project site would not be subject to hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. See response to questions a and b above.

d) Exposure of people to existing sources of health hazards?

The proposed project site is currently disturbed and there are no known sources of health hazards that exist within the entire land use plan for Banning Ranch area

e) For a project located within an airport land use plan or, where such plan has been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The proposed project is not located within an airport land use plan. No mitigation measures are required.

f) For a project within the vicinity of private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The proposed project is not located within the vicinity of a private airstrip. No mitigation measures are required.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No additional mitigation measures are required.

h) Expose people or structures to a significant risk or loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The proposed project would not expose people or structures to a significant risk or loss, injury or death involving wildland fires.

The proposed new oil wells plan does not propose changes that would generate impacts exceeding the impacts existing in the area. No new impacts are noted and no mitigation measures are required.

16. PUBLIC SERVICES. Would project result in needs for new/altered government facilities/services in:

- a) Fire protection?
- b) Police protection?
- c) Schools?
- d) Maintenance of public facilities, including roads?
- e) Other government services?

#### ANALYSIS:

#### a) Fire protection?

The proposed new oil wells would not result in any changes to public services due to its nature and location.

#### b) Police protection?

The proposed new oil wells would not result in any public services impact due to its nature. Therefore, no additional mitigation measures are required.

#### c) Schools?

The proposed new oil wells would not result in any public services impact due to its nature. No adverse impact is anticipated and no mitigation measures are required.

#### d) Maintenance of public facilities, including roads?

No maintenance of public facilities, including roads for the new Oil wells operation area. The internal roadway systems that traverse throughout the entire Banning Ranch area are adequate to support the traffic from the new wells no additional mitigation measures are required for the proposed project.

#### e) Other government services?

Implementing the proposed new oil wells in Oil operation area would not increase the need for additional government services.

# 17. UTILITIES AND SERVICE SYSTEMS. Would the project result in needs for new or substantial alterations in:

- a) Power or natural gas?
- b) Communications systems?
- c) Local or regional water treatment or distribution facilities?
- d) Sewer or septic tanks?

#### e) Solid waste disposal?

#### ANALYSIS:

#### a) Power or natural gas?

The proposed new oil wells will not result in needs or an increase use of natural gas supplied by Southern California Gas Company or utilities and service systems such as power, communication systems, water treatment facilities, sewer and solid waste disposal due to its nature. No mitigation measures are required.

#### b) Communication systems?

In regard to communication systems, the proposed new oil wells would not result in the need for additional communication systems such as cable television and telephone services due to its nature. Therefore, impacts on communication systems are not expected to occur as a result of implementing the proposed project. No mitigation measures are required.

#### c) Local or regional water treatment of distribution facilities?

The proposed project would not have impact on local or regional water treatment or distribution facilities due to its nature. No significant impact to water supply would occur as a result of implementing the proposed new oil wells. Additional mitigation measures are not required.

#### d) Sewer or septic tanks?

The proposed project would not impact waste disposal systems, nor require additional new connections to the existing main sewer lines due to its nature. Therefore, no additional mitigation measures are required.

#### e) Solid waste disposal

There will be no significant impact on County solid waste facilities due to the nature of the project. The Oil operation activity is not expected to substantially shorten the lifespan of the landfills.

Therefore, the proposed new oil wells plan does not propose changes that would generate impacts exceeding the impacts already existing in the area. No mitigation measure is required.

#### FINDINGS

Negative Declaration IS OW070001 adequately satisfies the requirements of CEQA for the proposed project.

The project would not have significant impacts on fish, wildlife habitat or communities, but may have impact on rare or endangered species or any periods of California history.

Due to the project's small scale and the mitigation measures described above, no long-term environmental goals would be compromised.

Due to the mitigation measures described above there are no known effects from other projects that would result in significant cumulative impacts.

The project would not have any adverse effects on human beings. The mitigation measures described above would reduce the adverse effects below the level of significance.

By:	Date:	
Environmental	Planning Services Division	

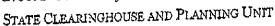
Orange County Oil Well Permitting Process – "Banning" 700

**CEQA** Comments



#### STATE OF CALIFORNIA

# GOVERNOR'S OFFICE of PLANNING AND RESEARCH





Cynthia Bryant Director

August 7, 2007

Chris Uzo-Diribe Orange County 300 N. Flower Street Santa Ana, CA 92702

Subject: Banning Oil Wells 700, 702, & 703 - Negative Declaration OW070001

SCH#: 2007071018

Dear Chris Uzo-Diribe:

The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 6, 2007, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 211(4(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Teary Roberts

Director, State Clearinghouse

Derry Roberto

Enclosures

cc: Resources Agency



### County of Orange

## Planning and Development Services Dept.

Environmental Planning Services Division 300 N. Flower, P. O. Box 4048 Santa Ana, CA 92702-4048 Return FAX: 714-667-8344

Phone: 714-834 - 2542



To:	To	m McCloskey		From:	CHRIS UZ	D-DIRIBE
Fax:	94	9 645 1127		Pages:		3 (including this page)
****	949	553 8076				
Phone:		•		Date:	8/23/2007	
Re: Native American Heritage		ritage	cc:	Brooks Smith - LSA		
Ung	ent	For Review	Please Comment	: []PI	enso Reply	Please Recycle
Please	call m	ne for clarification if n	ecessary			
Thanks	Chris	•				

EXAMEDE CALEDRAIA

Amold Schwarzenster, (Ut CECVA)

NATIVE AMERICAN HERITAGE COMMISSION 216 CAPITOL MALL ROOM 2004

Bacramento, ca 95614 (216) 668-2161 Fex (916) 657-6380 Web Ger Monning Baden Dength: de\_rehod probellast



August 23, 2007

Ron Tippets
Chief, Current & environmental Planning Services
COUNTY OF ORANGE
300 N. Flower Street
P.O. Box 4048
Santa Ana, CA 92702-4048

Sent by FAX: 714-867-8344

Number of pages: 2

Re: Proposed Initial Study & proposed Negative Declaration for Banning Oil Wells, Orange County

Dear Mr. Tippets:

The Native American Heritage Commission was able to perform a record search of its Secred Lands File (SLF) for the affected project area. The SLF falled to indicate the presence of Native American cultural resources in the 932-54 Fairfax Union School District, Bakersfield immediate project area. The absence of specific site Information in the Secred Lands File does not guarantee the absence of cultural resources in any 'area of potential offect (APE).'

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the nearest tribes that may have knowledge of cultural resources in the project area. A List of Native American contacts and attached to assist you. The Commission makes no recommendation of a single individual or group over another. It is advisable to contact the person listed; if they cannot supply you with specific information about the Impact on cultural resources, they may be able to refer you to another tribe; or person knowledgeable of the cultural resources in or near the affected project area (APE).

Lack of surface evidence of archeological resources does not preclude the existence of archeological resources. Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 5097.98 and Health & Safety Code: Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

if you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Dave Singleton

Program Analyst

Attachment: Native American Contact List

. TOLLIN

August 21, 2007

Juaneno Band of Wission Indians Adjachemen Nation Juaneno Band of Mission Indians

David Belardes, Champerson

31742 Via Belardes

Sen Juan Capletrano , CA 92875

(949) 493-0959 (949) 493-1601 Fax

Adolph "Bud" Sepulveda, Chairpenson Juaneno

P.O. Box 25828 Juaneno

Sonte Ans , CA 92798

bseepul@yahoo.net 714-838-3270

714-914-1812 - CELL bsepul@yahoo.net

Juaneno Band of Mission Indians Acjachemen Nation Sonia Johnston, Tribal Vice Chairperson

Anthony Rivera, Chalman

31411-A La Matanza Street

Juaneno

San Juan Capitoteno , CA 92675-2674

arivera@juaneno.com 949-488-3484

949-488-3294 Fax

Juanello Band of Mission Indians

P.O. Box 25628

Juensno , CA 92799

Santa Ana

(714) 323-8312

sonia.johnston@sbcglobal.net

Juaneno Band of Mission Indians Adjachemen Nation Joyce Perry , Tribal Manager & Cultural Resources 31742 Via Belardes Juaneno San Juan Capistrano . CA 92675 (949) 493-0959 (949) 293-8522 Cell (949) 493-1601 Fax

Juaneno Band of Mission Indians Alfred Cruz, Culural Resources Coordinator P.O. Box 25628 Juaneno Santa Ana , CA 92799 alfredgoruz@sboglobal.net 714-998-0721 stiredgcruz@sbcglobal.net

Yinds that he comment only as of the district this document.

Distribution of this list does not relieve any popular of stabliony responsibility as defined in Section 7050.5 of the Needs and Salety Code, Section 5007.94 of the Public Resources Code and Rection 6007.95 of the Public Resources Code.

This list is only explicable for contexting local Mativa American with regard to cultural resources for the proposed Secred Lands Pile march pertaining to a proposed Magailles Declaration for project attigating and Monitoring Twee Here Wells in the vicinity of Monport Manchi Omago County, California, buttern as Tarring QS Well Nos. 700, 702, 703.



# County of Orange Planning and Development Services Dept.

Environmental Planning Services Division 300 N. Flower, P. O. Box 4048 Santa Ana, CA 92702-4048 Return FAX: 714-667-8344

Phone: 714-834 - 2542



To:	Tor	Tom McCloskey			CHRIS UZO	-DIKIBE	
Fax:	94	9-645 1127		Pages:		6 (including this page)	
Phone	k			Date:	8/14/2007		
Re:		ter from the SCH mment	& CALTRANS	CC:			
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Please	call m	ne for clarification					
Thanks	s Chris	3					

## State Clearinghouse Data Base

SCH# Project Title Load Agency	2007071018  Banning Oil Wells 700, 702, & 703 - Negative Declaration OW070001  Orange County						
Туре	Neg Negative Declaration						
Description	The applicant, West Newport Oil Company, is requesting approval of three new oil well drilling sites:  Banning 700, 703, and 703 in an area designated for oil operations that currently has 52 oil producing wells in the City of Newport Beach area of unincorporated Orange County.						
Lead Agenc	by Contact						
Name	Chris Uzo-Diribe						
Agency	Orange County						
Phone emali	(714) 834-2542 Fax						
Address	300 N. Flower Street						
City	Santa Ans State CA Zip 92702						
Project Loc	ation						
County	Orange						
City	Newport Beach, Unincorporated						
Region	and the second s						
Cross Streets	Pacific Coast Highway (PCH) and Balboa Boulevard						
Parcel No.	114-170-77  Pance Section Base						
Township	Range Section Dase						
Proximity to	<b>):</b>						
Highways	Pacific Coast Highway						
Airports							
Railways							
Waterways	Pacific Ocean, Senta Ana River						
Schools	MOCH and HEDDE District oversity						
Land Use	Designated 1B (Suburban Residential) District with an "Off" and "FP2" District overlay						
Project Issues	Archaeologic-Historic; Flood Plain/Flooding; Minerals; Noise; Water Quality; Wildlife						
Reviewing	Caltrans, District 12; California Highway Patrol; Department of Conservation; Department of Water						
Agencies	Paraurces: Denortment of Fish and Game, Region 5: Office of Historic Preservation; Integrated Wester						
	Management Board; Native American Heritage Commission; Department of Parks and Recreation;						
	Regional Water Quality Control Board, Region 8; Resources Agency; Department of Toxic Substances Control						
ute Received	07/06/2007 Start of Review 07/06/2007 End of Review 08/06/2007						

#### DEPARTMENT OF TRANSPORTATION

District 12 3337 Michelson Drive, Suite 380 Irvine, CA 92612-8894 Tel. (680) 724 2241

Tel: (949) 724-2241 Fax: (949) 724-2592



Flex your power! Be energy efficient!

August 1, 2007

Chris Uzo-Diribe County of Orange 300 N. Flower Street P.O. Box 4048 Santa Ana, California 92702 File: IGR/CEQA SCH#: 2007071018

Log#: 1892

PCH

Subject: Bauning Oil Wells

Dear Mr. Uzo-Diribe,

Thank you for the opportunity to review and comment on the Negative Declaration for the Banning Oil Wells Project. The proposal is to add three new oil well drilling sites in an area designated for oil operations that currently has 52 oil producing wells. The project site is located in the southern portion of unincorporated Orange County near the City of Newport Beach, east of the Santa Ana River. The nearest State route to the project area is SR-1.

Caltrans District 12 is a commenting agency on this project and has no comment at this time. However, in the event of any activity in Caltrans' right-of-way, an encroachment permit will be required.

Please continue to keep us informed of this project and any future developments that could potentially impact State transportation facilities. If you have any questions or need to contact us, please do not hesitate to call Marlon Regisford at (949) 724-2241.

Sincerely

Ryan Chamberlain, Branch Chief

Local Development/Intergovernmental Review

C: Terry Roberts, Office of Planning and Research

#### NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 864 SAGRAMENTO, CA 95614 (916) 858-6251 Fix (915) 657-6390 Web Site www.inshc.cz.ijoy e-mpil: de\_nehc@pacbell.net



July 24, 2007

**BECEIVED** 

AHR 0 6 2007

STATE CLEARING HOUSE

ctear 8/6/07 e

Mr. Chris Uzo-Diribe COUNTY OF ORANGE PLANNING & DEVELOPMENT DEPARTMENT 300 N. Flower Street; P.O. Box 4048 Sente Ana, CA 92702-4048

Re: SCIH#2007071018: CEQA Notice of Completion; Negative Declaration for New OB Wells Project (OW070001); County of Ocrange Planning & Development Department; Orange County, California

Dear Mr. Uzo-Diribe:

Thank you for the opportunity to comment on the above-reterenced document. The Native American Heritage Commission is the state's Trustee Agency for Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the alignificance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per CEQA guidelines § 15064.5(b)(c). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

v Contact the appropriate California Historic Resources Information Center (CHRIS). Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/

http://www.ohp.parks.ca.gov/1088/files/IC%20Roster.pd[ The record search will determine:

- If a part or the entire APE has been previously surveyed for cultural resources.
- If any known cultural resources have already been recorded in or adjacent to the APE.
- . If the probability is low, moderate, or high that cultural resources are located in the APE.
- If a survey is required to determine whether previously unrecorded cultural resources are present.
- $\sqrt{}$  if an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
- The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
- The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological information Center.
- √ Contact the Native American Heritage Commission (NAHC) for:
  - A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity that may have additional cultural resource information. Please provide this office with the following citation format to easist with the Sacred Lands File search request. <u>USGS 7.5-minute quadrangle citation</u> with name, township, range and section:
- The NAHC advises the use of Native American Monitors to ensure proper identification and care given cultural
  resources that may be discovered. The NAHC recommends that contact be made with Native American
  Contacts on the attached list to get their input on potential project impact (APE).
- I Lack of surface evidence of archeological resources does not preclude their subsurface existence.
- Lead agencies should include in their mitigation plan provisions for the identification and evaluation of
  accidentally discovered archaelogical resources, per California Environmental Quality Act (CEQA) §15064.5 (f).
  In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native
  American, with knowledge in outtural resources, should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
- √ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.
  - CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americane identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to essure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

69/14/5601 IO:00 174 00:004

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the CEQA Guidelines mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

location other than a dedicated cemetery.

Vend agencies should consider evoldance, as defined in § 15370 of the CECIA Guidelines, when significant cultural pending.

resources are discovered during the course of project plenning.

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Dave Singleton / Program Analyst

Cc: State Clearinghouse

Attachment List of Native American Contacts

.

BERKELEY CARLSBAD COLMA PORT COLLINS
PALM SPRINGS
POINT RICHMOND

RIVERSIDN ROCKLIN SAN LUIS OBISPO

August 13, 2007

Ms. Chris Uzo-Diribe County of Orange Planning and Development Services Department 300 North Flower Street, P.O. Box 4048 Santa Ana, CA 92702-4048

Subject:

Letter of Retention for Paleontological Mitigation Monitoring for Three New Wells on

the Banning Ranch Property, Unincorporated County of Orange in the Vicinity of

Newport Beach, California.

Dear Ms. Uzo-Diribe:

This letter is to verify that West Newport Oil Company has retained LSA Associates, Inc. (LSA) to provide paleontological mitigation monitoring services for Banning Oil Well Nos. 700, 702, and 703, which are located in an unincorporated area in the County of Orange (County) in the vicinity of the City of Newport Beach, near the Santa Ana River. Project development includes drilling the three wells to depths as deep as 2,500 feet, with several casing diameters dependent on the depth.

LSA looks forward to providing paleontological resource monitoring as required by the County's Mitigation Measure No. 3 (MM-3). MM-3 requires that a paleontologist be present at the pre-grade meeting to establish procedures to implement in the event fossil resources are discovered; provides paleontological monitoring during ground disturbing activities; allows the paleontologist to collect, identify, and curate any observed paleontological resources; and finally requires the preparation of a final report documenting the results of the monitoring program.

LSA personnel have direct experience with monitoring and are acknowledged experts with many years of experience working with fossils from the project vicinity. LSA is prepared to commence work on this project following Notice to Proceed. If you have any questions or comments, please contact me at (949) 553-0666. LSA looks forward to working with you on this project.

Sincerely,

LSA ASSOCIATES, INC.

Brooks Smith

County of Orange Certified Paleontologist

Archaeology/Paleontology Group



Bryan Speegle, Director

300 N. Flower Street Santa Ana, CA

P.O. Box 4048 Santa Ana, CA 92702-4048

August 14, 2007

Greg Holmes, Unit Chief SC Cleanup Operations 5796 Corporate Avenue Cypress California 90630

Subject: Initial Study & proposed Negative Declaration for Banning Oil Wells

Dear Mr. Holmes:

The County of Orange has reviewed your comment on the above subject document dated July 31, 2007 and submits the following responses: The "Banning" 700 and 702 wells are planned from the existing "Banning" 444 production well site. "Banning" 703 is planned from within the existing and enclosed oil/water separation facility. In addition, "Banning" 703 will be drilled from a site on which the abandoned wells "Banning" nos. 275 and 15R3 were located. Neither of these two sites will require excavation and grading beyond the digging that is involved in drilling operations.

West Newport Oil Company (WNOC) has had licensed contractors removed crude oil contaminated soil from the West Newport Oil Field site in the past. Most recently, Anterra Energy Services removed some tank bottom material. Anterra had the tank bottom material tested for CAM 17 metals and found no significant levels of contaminants.

WNOC routinely disposes of a portion of the produced water from oil recovery operations to the Orange County Sanitation District. WNOC has a water discharge permit for this discharge. There are water quality standards that WNOC must meet and performance monitoring protocol that has been established to verify that effluent water quality is acceptable.

The applicant believes that the existing procedures practiced and described in the permit application should be found satisfactory by your Department.

- 1 -

If you have any questions concerning this, please do not hesitate to contact me at (714) 834-5394, or Chris Uzo-Diribe at (714) 834-2542.

Sincerely,

Ron Tippets

Chief, Environmental & Current Planning Services

cc: Tom McCloskey

**WNOC** 

I Initial Study & proposed Negative Declaration for Banning Oil Wells August 14, 2007

-2-

Bryan Speegle, Director

300 N. Flower Street Santa Ana, CA

P.O. Box 4048 Santa Ana, CA 92702-4048

August 14, 2007

Dave Singleton, Program Analyst Native American Heritage 915 Capitol Mall Rm. 364 Sacramento California 95614

Subject: Initial Study & proposed Negative Declaration for Banning Oil Wells

Dear Mr. Singleton:

The County of Orange has reviewed your comment on the above subject document dated July 24, 2007 and is please to inform you that the applicant has retained the services of a reputable historical and paleontological consultant in compliance with Mitigation Measure #3 (Page 22) of the above subject document to ensure record search, determine whether previously unrecorded cultural resources are present and provision for the discovery of Native American human remains. The attached document is the retaining letter from LSA indicating works to be completed to ensure adequate mitigation of any existing or unforeseeable adverse impact that may occur as a result of establishing "Banning" 700 and 702 and 703 oil wells.

If you have any questions concerning this, please do not hesitate to contact me at (714) 834-5394, or Chris Uzo-Diribe at (714) 834-2542.

-1-

Sincerely.

Ron Tippetš

Chief, Current & Environmental Planning Services

Attachment: LSA Retention Letter Doc.

cc: Tom McCloskey

WNOC

949.553.8076 FAX

RERKELEY CARLSBAD COLMA

FORT COLLINS PALM SPRINGS POINT RICHMOND

RIVERSIDE ROCKLIN SAN LUIS OBIRPO

August 13, 2007

Ms. Chris Uzo-Diribe County of Orange Planning and Development Services Department 300 North Flower Street, P.O. Box 4048 Santa Ana, CA 92702-4048

Subject:

Letter of Retention for Paleontological Mitigation Monitoring for Three New Wells on the Banning Ranch Property, Unincorporated County of Orange in the Vicinity of

Newport Beach, California.

Dear Ms. Uzo-Diribe:

This letter is to verify that West Newport Oil Company has retained LSA Associates, Inc. (LSA) to provide paleontological mitigation monitoring services for Banning Oil Well Nos. 700, 702, and 703, which are located in an unincorporated area in the County of Orange (County) in the vicinity of the City of Newport Beach, near the Santa Ana River. Project development includes drilling the three wells to depths as deep as 2,500 feet, with several casing diameters dependent on the depth.

LSA looks forward to providing paleontological resource monitoring as required by the County's Mitigation Measure No. 3 (MM-3). MM-3 requires that a paleontologist be present at the pre-grade meeting to establish procedures to implement in the event fossil resources are discovered; provides paleontological monitoring during ground disturbing activities; allows the paleontologist to collect, identify, and curate any observed paleontological resources; and finally requires the preparation of a final report documenting the results of the monitoring program.

LSA personnel have direct experience with monitoring and are acknowledged experts with many years of experience working with fossils from the project vicinity. LSA is prepared to commence work on this project following Notice to Proceed. If you have any questions or comments, please contact me at (949) 553-0666. LSA looks forward to working with you on this project.

Sincerely,

LSA ASSOCIATES, INC.

County of Orange Certified Paleontologist

Archaeology/Paleontology Group

Orange County Oil Well Permitting Process – "Banning" 700

Notice of Determination – Negative Declaration



# County of Orange

# NOTICE OF DETERMINATION

Project Charge Number: PP 34705

-	

County Clerk, County of Orange

FROM:

Planning and Development Services Department

SUBJECT:

Filing of Notice of Determination in Compliance with Section 21108 or 21152 of the Public

Resources Code

Project Title:

OW 070001 - Oil Wells for Banning 700,

702 & 703 in Oil Wells area of Banning

Ranch

State Clearinghouse Number: 2007071018 Type of Document: Negative Declaration

Previously certified or adopted? If yes, provide document number and certification date: Negative Declaration:

OW 070001

**Contact Persons:** 

Project Manager: Mahrooz Ilkhanipour

CEQA Project Manager: Chris Uzo-Diribe

Telephone: (714) 834 - 2629

(714) 834 - 2542

Applicant: West Newport Oil Company

Address: 23200 Pacific Coast Highway Newport Beach CA, 92659

Project Location: The project site is in the southern portion of unincorporated Orange County near the City of Newport Beach, east of Santa Ana River, off of Pacific Coast Highway.

Project Description: The applicant, West Newport Oil Company, is requesting approval for three new oil well drilling sites: Banning 700, 702 and 703 in an area designated for oil operations that currently has 52 oil producing wells in the City of Newport Beach area of unincorporated Orange County.

Notice is hereby given that the County of Orange as lead agency, Subdivision Grading Services Division, has made the following determination on the above-described project:

The project was approved by Director of Planning & Development Services on 08/27/07

AUG 27 2007

20/20/20/2

The project will not have a significant effect on the environment.

TOM DALY, CLERK-RECORDER An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA. 200 DEFUTY 

A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.  $\times$ 

- Mitigation Measures were incorporated into the project through conditions of approval and project design.
- For this project a Statement of Overriding consideration was Not Adopted.
- Findings were not made pursuant to CEQA Guidelines 15091 (Statement of Facts and Findings).

Accept in the Negative Declaration OW 070001 and the record of the project approval is on file and be examined at:

AUG 2 7 2007

TOM DALY, GLÉRK-BEGORDER

Planning & Development Services Department, Environmental Planning Services Division,

300 N. Flower, Room 321 Santa Ana, California 92702-4048.

(714) 834-5550.

Signature:

Previously Paid Receipt No. (See Attached):

Fish & Game Fee Finding: ND - \$1,800.00

Daly,

in Official Records, Orange County

Recorded

Orange County Oil Well Permitting Process – "Banning" 700

County Clerk Recording

Lead Agency: PLAULIUL & NEVEL SERVICES DEPT. LEVIE: PLAUCIUS BEZ 7-07  County/State Agency of Filing: OC CLERK RECORDER Document No: 2000 9.	28
Lead Agency: PUNUAL 9- NEVEC. SERVICES DEPT. IN VIR. PLANTIN Date: 8-27-07 2607.8.500.9	28
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Project Title: OW 57MVI - OIL WELLS FOR BANNING 700, 702, 703 WOIL WE	حبك
Project Title: OW 57000 - OIL WELLS FOR PAUVING 700, 702, 703 WOLL WE AREA OF ZALINIAG RAKEH. WEST NEW PORT OIL COMPANY	
Project Applicant Address: 23200 PCH	
City NEW PORT BEACH State CA - Zip Code 92659 Phone Number: 1714834-59	<u> </u>
Project Applicant (check appropriate box):	
Local Public Agency School District Other Special District State Agency Private Entity	
Check Applicable Fees:	
Environmental Impact Report \$2500.00 \$	
Negative Declaration \$1800.00 \$ <u>/800/</u>	
Application Fee Water Diversion (State Water Resources Control Board Only) \$850.00 \$	
Projects Subject to Certified Regulatory Programs \$850,00 \$	
County Administrative Fee \$50.00 \$ 50	
Project that is exempt from fees	!
Notice of Exemption	,
DFG No Effect Determination (Form Attached)	
TOTAL RECEIVED \$ 1050-	
Signature and title of person receiving payment:  WHITE-PROJECT APPLICANT  YELLOW-DFG/ASB  PINK-LEAD AGENCY  GOLDENROD-COUNTY CLERK DFG/753.5a (Re	

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ORANGE COUNTY RECORDER TOM DALY

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Orange County Oil Well Permitting Process – "Banning" 700

Plan Approval

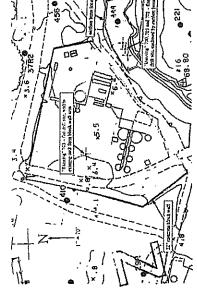


Site Map for New Oil Wells

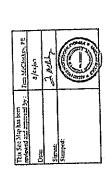
	County Permit #	05:070:001	OWOSOOTT	C0002000	ONFG70003	Project Manager - Tem McCloskey	
1	Well #	Barring 100	-Berning 701	"Banning" 702	"Bancing" 703	Project Marugar	

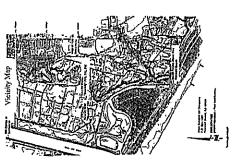
Erosion Control and Sediment Control Plan

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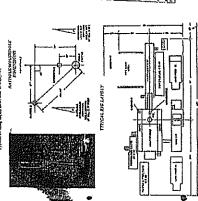








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Orange County Oil Well Permitting Process – "Banning" 700

Oil Well Permit



## County of Orange

Resources & Development Management Department

(This permit will expire after 180 days of inactivity and the

300 N. Flower Street Third Floor Santa Ana, CA 92702

Inspection Office 22921 Triton Way Laguna Hills, CA

applicant is responsible for tracking and maintaining it active. For more information, visit our website.) For Inspections Call: (714) 796-0407 or (949)472-7922 or Visit us on the web at: http://www.ocplanning.net

#### OIL WELL PERMIT

Permit Number:

OW070001

Description of Work/Use: new oil well Banning 700 Job Address: 5800 Pacific Coast Highway, Costa

Additional Address:

Assessor Parcel No: 114-170-52 A0111 AC NT Legal Description:

Related Permits: OW070002 OW070003

Waste Discharge ID No. (WDID):

Current Planning/Zoning Approval Info:

Applicant: West Newport Oil Company (Applicant)

Address: P.O. Box 1487

Newport Beach, CA 92659

Phone: Attn:

949-631-1100 Tom McCloskey Issue Date: 8/30/07 Issued By: Elie Nasr

Owner:

West Newport Oil Company(Applicant)

Main Office

Address: P.O. Box 1487

Newport Beach, CA 92659

Phone: Attn:

949-631-1100 Tom McCloskey

Approved By: John Powers

Date:8/30/07

Lessee: Address:

Phone: Attn:

By signing below, I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this county to enter upon the above-mentioned property for inspection purposes.

Declarations: I hereby affirm under penalty of penjury that:

#### Licensed Contractor Declaration

I am licensed under provisions of Chapter 9 (commencing with Section 7000) of division 3 of the Business and Professions Code, and my license is in full force and effect.

License Class: No.:

Contractor:

#### Owner - Builder Declaration

I am exempt from the Contractors' State license Law for the following reason (Sec. 7031.5), Business and Professions Code: Any city or county that requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for the permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors' State License Law (Chapter 9 commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt there from and the basis for the alleged exemption. Any violation of Section 7031,5 by any applicant for a permit subjects the applicant to a civil penalty of not more then five hundred dollars (\$500).

It, as owner of the property, or my employees with wages as their sole compensation, will do the work and the structure is not intended or offered for sale (Sec. 7044. Business and Professions Code: The Contractors' State License Law does not apply to an owner of property who builds or improves thereon, and who does the work himself or herself or through his or her own employees, provided that the improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale.).

[4] as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec.7044, Business and Professions Code: The Contractors' State License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors' State License Law).

t am exempt under Sec. \_\_\_\_, B & P.C. for this reason

#### Construction Lending Agency

I hereby affirm under penalty of perjury that there is a construction-lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.)

Lender's Name: None Lender's Address: None

#### Workers Compensation Declaration

I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

I have and will maintain worker's compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

I certify that, in the performance of the work for which this permit is issued. I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Warning: failure to secure workers' compensation coverage is unlawful, and shall subject employer to criminal penalties and civil lines up to one hundred thousand dollars (\$100,000), in addition to the cost of compensation, damages as provided for in section 3706 of the labor code, interest, and attorney's fees.

Signatory: 4 om McCloskey Date: August 30, 2007 11:18AM P8

Reason: Owner-Applicant Signature



## **County Of Orange**

Resources & Development Management Department P.O. Box 4048

**Development Processing Center** 300 N. Flower Street Santa Ana, CA 92702-4048

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Receipt #: R0714596 Posted: 8/30/2007 11:23 AM

Operator: Norbert Ponce

#### Payer

Payer: Address: Tom McCloskey

P.O. Box 1487

Newport Beach, CA 92659

Phone #:

949-631-1100

Notation:

Attn: West Newport Oil Company

### Permit Summary

Permit Number: OW070001

Job Address: 5800 PACIFIC COAST HIGHWAY COSTA

Legal:

A0111 AC NT

Applicant:

West Newport Oil Company

Address:

P.O. Box 1487

Newport Beach, CA 92659

Phone #:

949-631-1100

#### **Accumulative Permit Charges**

Fee Item	Description		Charges_	Payment	Balance	Coding	
4398	Oil Well Permit Revenue		\$396.00	\$396.00	\$0.00	11311366006430	98
		Charges	\$396.00				
		Payment	\$396.00				
		Balance Due	\$0.00				

#### **Current Permit Charges**

Fee Item	Description	Charges	Coding	
4398	Oil Well Permit Revenue	\$396.00	11311366006430	98

**Total Permit Charges** 

\$396.00

#### Payment

			· ·
Туре	Amount	Account	<u>Notation</u>
Credit	\$396.00		
Cardholder:	THOMAS MCCLOSKEY		
Acct#:	XXXXXXXXXXX7959		
Exp Date:	08/08		
Auth#:	09126A		

**Total Paid** 

\$396,00

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			v

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RECORDING REQUESTED BY FIRST AMERICAN TITLE COMPANY SUBDIVISION DEPARTMENT

1503266MW

RECORDING REQUESTED BY AND WHEN RECORDED MAIL TO:

Steven M. Sommers, Esq. Brownstein Hyatt & Farber, P.C. 410 Seventeenth Street, 22nd Floor Denver, Colorado 80202

# This Document was electronically recorded by First American Title C

Recorded in Official Records, Orange County Tom Daly, Clerk-Recorder

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(Space Above This Line For Recorder's Use Only)

#### SURFACE USE EASEMENT AGREEMENT

among

HORIZONTAL DEVELOPMENT LLC, a California limited liability company ("HDLLC")

and

AERA ENERGY, LLC, a California limited liability company with CHEROKEE NEWPORT BEACH, LLC, a Delaware limited liability company (collectively the "Surface Owner")

Dated As Of December 20, 2005

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#### Exhibits:

Exhibit A - Legal Description of Newport Banning Ranch

Exhibit B - Legal Description and Depiction of HDLLC Drillsites

Exhibit C - Legal Description and Depiction of Drainage Corridor

#### SURFACE USE EASEMENT AGREEMENT

This Agreement is made and entered in to this 20 day of of cember, 2005, by and between HORIZONTAL DEVELOPMENT LLC, a California limited liability company ("HDLLC"), and AERA ENERGY, LLC, a California limited liability company ("Aera") and CHEROKEE NEWPORT BEACH, LLC, a Delaware limited liability company ("Cherokee") (Aera and Cherokee are collectively referred to as "Surface Owner").

#### RECITALS

- A. Surface Owner is the owner of certain real property located in Orange County, California and commonly known as the Newport Banning Ranch (the "NBR"), which is more particularly described in Exhibit A attached hereto.
- B. HDLLC owns all minerals lying vertically below 500 feet from the surface of the NBR as granted under that certain Quitclaim With Reservation of Easement dated April 30, 1997, recorded on May 5, 1997 as Document No. 19970206789 in the Official Records, Orange County, California (the "Mineral Estate"). HDLLC is the successor in interest to Armstrong Petroleum Corporation, a California corporation.
- C. HDLLC is the owner and operator of certain oil and gas production facilities on the NBR. HDLLC's oil and gas production facilities and equipment are located on or under those portions of the Property legally described and depicted on <a href="Exhibit B">Exhibit B</a> (the "HDLLC Drillsites").
- D. Simultaneous with the execution of this Agreement, Surface Owner and HDLLC will enter into that certain Operating and Surface Use Agreement of even date herewith ("OSUA"). The OSUA provides that Surface Owner will convey to HDLLC a perpetual easement on, over, under and across the HDLLC Drillsites in accordance with the terms hereinafter provided.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and with the above recitals incorporated herein and made a part of this Agreement, the undersigned hereby agree as follows.

- 1. <u>Definitions</u>. Any capitalized terms used in this Agreement that are not otherwise defined herein, shall have the meanings given in the OSUA.
- 2. Grant of Easement for HDLLC Drillsites. Subject to the terms and conditions hereinafter set forth, Surface Owner hereby grants unto HDLLC and its successors and assigns, and their respective agents, employees, independent contractors and licensees, an exclusive easement over, on, under and across the HDLLC Drillsites for the purposes and with the exclusive right to prospect, explore, mine, drill, and operate for oil, gas, gas condensate, and other hydrocarbons and associated substances, to use recovery operations now known or unknown, to produce, take, own, use, treat, store, sell, remove and dispose of such substances from the HDLLC Drillsites, and to drill and slant drill wells (including without limitation, to deepen, repair, redrill and rework wells), to inject fluids, gases, steam, air, or other substances in

the subsurface strata, together with the right to permit, construct, erect, maintain, operate, use, repair, replace and remove wells, pipelines, telephone, telegraph and power lines, tanks, machinery, roads, utilities, appliances, buildings (including administrative offices) and other structures, facilities or improvements which are incidental, useful, necessary or proper for carrying on HDLLC's operations on the HDLLC Drillsites. Any wells, facilities, tanks, machinery, appliances, buildings and other structures so constructed by HDLLC may also be used by it in operations on lands in the vicinity of the HDLLC Drillsites. Except as specifically provided in this Agreement and the OSUA, Surface Owner has no right to use the surface of the HDLLC Drillsites.

3. <u>Use After Termination of the OSUA.</u> Subsequent to the termination of the OSUA, HDLLC shall be entitled to use the HDLLC Drillsites for HDLLC Oil Operations and thereafter for open space or comparable land use designation.

#### 4. Additional Rights and Obligations.

- (a) Surface Water Reservation. The grant of easement to the HDLLC Drillsites hereunder is subject to a reservation of rights by Surface Owner to discharge natural and irrigation surface runoff water from the NBR, in its current, interim and improved condition as a residential neighborhood over the Drainage Corridor legally described and depicted on Exhibit C hereto. HDLLC agrees to accept into the Drainage Corridor all such surface water from the NBR in its current condition, in an interim condition during development and as a fully developed residential neighborhood. HDLLC agrees not to restrict the free flow of all such waters to and from the Drainage Corridor to the current point of disposal. In this regard, Surface Owner shall have the right at its sole cost and upon reasonable notice to HDLLC to enter upon the HDLLC Drillsites to make such repairs and improvements to the Drainage Corridor as are necessary to manage the flow of such water. If and to the extent Surface Owner undertakes improvements on the NBR which cause an increase of water flows in the Drainage Corridor which are in excess of historic flows, Surface Owner shall be responsible for making the necessary improvements to the Drainage Corridor to accommodate such excess flows in accordance with sound engineering practices and applicable governmental regulations. Except for matters caused by the HDLLC Parties, Surface Owner shall indemnify, defend, protect and hold harmless HDLLC Parties from and against any and all liens, claims, demands, actions, causes of action, obligations, penalties, charges, liabilities, damages, losses, costs or expenses, including reasonable attorneys' fees and costs of litigation, including fees and costs incurred in preparation for litigation, investigation and appeal, and which result directly or indirectly from Surface Owner's construction, maintenance or repair of improvements to the Drainage Corridor.
- (b) <u>Compliance with Applicable Law</u>. HDLLC shall comply with all current and future federal, state, or local statutes, laws, ordinances, rules or interpretations relating to the HDLLC Oil Operations including without limitation the regulations of the DOGGR and the Government Requirements.
- (c) <u>Revenues</u>. HDLLC shall be entitled to retain all revenue generated from HDLLC Oil Operations on the HDLLC Drillsites and Surface Owner shall not be entitled to any revenue generated from the HDLLC Drillsites or any activities thereon.

- (d) <u>Decommissions</u>. Surface Owner shall have no right to decommission any wells on the HDLLC Drillsites.
- (e) <u>Maintenance and Operating Costs</u>. HDLLC shall, at its sole cost and expense, be responsible for (a) all HDLLC Oil Operations expenses including utilities and facilities maintenance; (b) maintenance of the HDLLC Drillsites, (c) ad valorem property taxes assessed on the Mineral Estate; and (d) personal property taxes assessed on any equipment owned or used by HDLLC in the HDLLC Oil Operations.
- (f) Abandonment and Remediation. Except as provided in Section 14.3 of the OSUA, HDLLC shall be responsible for the Abandonment and Remediation of all wells located on the HDLLC Drillsites. HDLLC may, in its sole discretion, elect to cease all operations on the HDLLC Drillsites and upon HDLLC's cessation of its use thereof, HDLLC shall only be obligated to Surface Owner to abandon the HDLLC Drillsites in conformity with general regulatory requirements respecting surface and well abandonment, Government Requirements and Section 14.4 of the OSUA. HDLLC shall have no responsibility hereunder for any cost in excess of that required by the previous sentence in the event any future land use designation applied to the HDLLC Drillsites such as open space, requires additional abandonment and remediation actions with respect to surface and well abandonments.
- Cooperation with Operational, Abandonment and Remediation Activities. (g) HDLLC and Surface Owner shall cooperate with one another in any operational, abandonment, or remediation activities conducted on the NBR which cooperation shall include providing access for consultants and contractors retained by either party to provide services on the NBR and any other assistance as agreed to by HDLLC and Surface Owner. Such cooperation shall include the acceptance by HDLLC of fluids from Surface Owner's abandonment and remediation operations on the NBR into the existing Aera operating facilities located in the No Use Area of the Tank Farm Drillsites, provided accepting such fluids does not interfere with HDLLC's Oil Operations or render such operations more costly. If in its reasonable judgment HDLLC determines that the acceptance of a fluid interferes in any material respect with HDLLC Oil Operations or renders them more costly, net of any income derived from such fluids, HDLLC may immediately cease acceptance of a fluid until such time as the fluids may be accepted without causing interference or additional cost. Notwithstanding the foregoing, HDLLC shall accept such fluids if Surface Owner pays the net additional costs incurred by HDLLC that are directly attributable to the acceptance of such fluids. After removal of the existing operating facilities in the No Use Area by Surface Owner pursuant to Section 14.3 of the OSUA, HDLLC will accept fluids from Surface Owner's abandonment and remediation operations on the NBR into the operating facilities owned by HDLLC on commercially reasonable terms and conditions as HDLLC and Surface Owner may mutually agree. Surface Owner shall be and remain responsible for all losses, claims, damages, demands, suits, causes of action, fines, penalties, expenses and liabilities, including without limitation reasonable attorneys' fees and other costs associated therewith asserted by third parties arising out of or connected with Surface Owner's providing access to the HDLLC Drillsites for consultants and contractors, retained to provide services on the NBR and acceptance by HDLLC of fluids from Surface Owner's abandonment and remediation operations on the NBR into the existing Aera operating facilities located in the No Use Area of the Tank Farm Drillsite. HDLLC makes no warranty or representation as to the suitability, condition, or fitness for a particular purpose, of the existing Aera operating facilities

3

located in the No Use Area of the Tank Farm Drillsite and Surface Owner agrees to accept such facilities in their "as-is", "where-is" condition.

- (h) If Surface Owner desires or is required as part of the No Use Area Abandonment and Remediation to drill water monitoring, free product recovery or dewatering wells (such wells, and any such wells that exist as of the Closing Date are collectively referred to as the "Remedial Wells"), HDLLC shall allow Remedial Wells, at no cost to Surface Owner to be located in any portion of the No Use Area or the Tank Farm Drillsite that does not, in HDLLC's reasonable discretion, materially interfere with HDLLC Oil Operations. Remedial Wells will be allowed to continue to operate as long as they are required by Government Requirements. HDLLC will accept any fluids associated with the Remedial Wells and the No Use Area Abandonment and Remediation into the operating facilities owned by HDLLC on commercially reasonable terms. Surface Owner shall be responsible for all costs to install and operate the Remedial Wells and all costs to plug and abandon such wells upon completion of the required monitoring activities.
- (i) <u>Secondary Recovery</u>. HDLLC shall forebear from conducting in-situ combustion or steam flooding recovery operations as provided in paragraph 5 of the Armstrong Deed.
- 5. <u>Buffer Zones</u>. Surface Owner shall have the right, at its sole cost and expense, to create buffer zones around the HDLLC Drillsites.
- (a) <u>Control Equipment</u>. The buffer zones may include, without limitation, aesthetic screening, odor emissions control equipment and sound attenuation equipment for the HDLLC Drillsites so as to isolate the HDLLC Oil Operations thereon to the extent desired and to enhance the ability to develop or otherwise beneficially use the Surface Owner NBR Lands. In no event shall installation of Control Equipment hinder, limit, or render more costly in any material amount HDLLC's full use of the HDLLC Drillsites.
- (b) Reimbursement of Additional Operation Expense Incurred by HDLLC. In the event the measures undertaken by Surface Owner to create buffer zones around the HDLLC Drillsites results in any material cost to HDLLC, then, in addition to the cost and expense of providing and installing such equipment and facilities, Surface Owner shall either directly pay such expenses, or shall reimburse HDLLC for any and all reasonable incremental operating costs incurred by HDLLC as a result thereof.
- (c) <u>No Direct Interference with HDLLC's Drillsites</u>. In no event shall the creation of buffer zones by Surface Owner, or other efforts by Surface Owner under this Agreement to insulate the Surface Owner NBR Lands from the HDLLC Drillsites interfere with, limit, or modify in any material respect HDLLC access to the HDLLC Drillsites or the production methods employed by HDLLC on the HDLLC Drillsites.
- (d) <u>Oil Operation Mandates</u>. The provisions of Paragraph 5 shall be applicable only to the voluntary actions of Surface Owner in areas surrounding the HDLLC Drillsites, as applicable. The provisions of Paragraph 5 shall not be applicable to governmental

mandates and regulations that are required of HDLLC with respect to the HDLLC Oil Operations or any new facilities installed by HDLLC.

#### 6. HDLLC Drillsites Entitlement, Use and Conveyance.

- (a) Open Space Designation. HDLLC acknowledges that Surface Owner and/or the applicable governmental agencies may designate a permanent public open space or comparable land use designation for the HDLLC Drillsites in any general plan, local coastal plan or permit submitted by Surface Owner for the NBR; provided, however, that Surface Owner shall also apply for designation of the such drillsites for oil operations on an interim basis through the appropriate land use designation (e.g., oil district, oil production, oil overlay). HDLLC shall not be obligated, and this Agreement shall not be deemed or construed to obligate, HDLLC to limit or restrict HDLLC Oil Operations on the HDLLC Drillsites because of such permanent public open space land use designation.
- (b) <u>HDLLC's Use of HDLLC Drillsites</u>. The termination of the OSUA on the Final Date without the delivery of the quitclaim deeds and assignment as provided in Section 11.4 of the OSUA shall not limit or restrict, and shall not be deemed or construed to terminate, limit or restrict HDLLC's Oil Operations on the HDLLC Drillsites or this Easement. In the event the OSUA shall terminate prior to satisfaction of Section 11.4(a) of the OSUA, HDLLC shall continue to operate the HDLLC Drillsites in accordance with the terms of this Surface Use Easement.
- 7. Obligation of Cooperation with Proposed Development. Surface Owner and HDLLC shall cooperate with each other in good faith with any proposed development of the NBR, including residential development or development of the Mineral Estate, which do not impair the rights of the parties hereunder. Neither party will oppose, organize, encourage, participate or contribute to any opposition to any such proposed development of the NBR and the Mineral Estate. In the event a governmental body requires the affirmative consent of Surface Owner to the Oil Operations as permitted herein, then, provided Surface Owner does not incur any liability or expense with such action, Surface Owner shall provide the required consent within 15 days of written request. In the event a governmental body requires the affirmative consent of HDLLC to the development of the NBR, then, provided HDLLC does not incur any liability or expense with such action, HDLLC shall provide the consent within 15 days of written request.
- 8. <u>PCH Drillsite Rentals</u>. HDLLC shall be entitled to all surface rentals and royalties paid pursuant to the 250' Lease, insofar, and only insofar, as such rentals are paid for the use of portions of the PCH Drillsite. Surface Owner shall immediately notify the 250' Lease lessor of the change in 250' Lease rental payment required by this Paragraph 8.
- 9. <u>Acquisition Proceeds</u>. HDLLC shall be entitled to all proceeds from the acquisition of all or any portion of the HDLLC Drillsites by any local, state or federal agency, whether by condemnation or otherwise, including, but not limited to, the acquisition by the Orange County Sanitation District for the Bitter Point Pump Station. Upon notification of any such proposed acquisition, Surface Owner shall immediately notify HDLLC, and shall also

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notify the acquiring agency that HDLLC has sole and exclusive authority to negotiate, settle, prosecute and receive any distribution of proceeds from such proposed acquisition.

and the

- 10. Existing Encumbrances. HDLLC hereby acknowledges and agrees that the HDLLC Drillsites may be burdened by existing easements and rights of way, both exclusive and non-exclusive, and accepts this Easement and the rights herein granted subject to all easements and matters of record on the HDLLC Drillsites on the date hereof. Surface Owner makes no representation or warranty as to the suitability, condition or fitness for a particular purpose, the condition of the HDLLC Drillsites and HDLLC hereby accepts this Easement on the HDLLC Drillsites in an "as-is", "where-is" state of condition.
- 11. <u>Security</u>. HDLLC shall install and maintain, at its sole cost and expense, all gates and locks necessary for the security of any wells and/or production facilities in the HDLLC Drillsites.
- 12. <u>Third Party Consents</u>. HDLLC and the Surface Owner, by their signatures on this Agreement, represent and warrant to each other that they have full power and authority to enter into this Agreement. HDLLC and the Surface Owner have obtained all necessary third-party consents which may be required to execute, deliver, consummate, and perform their obligations under this Agreement.

#### 13. <u>Limitation of Liability, Release</u> and Indemnity.

- (a) <u>Limitation of Liability</u>. No party shall be liable for, or be required to pay for, special, punitive, or exemplary damages to any other party for activities undertaken within the scope of this Agreement.
- (b) <u>Indemnity and Release</u>. Each party shall be and remain responsible for the indemnities and releases as provided in the OSUA, notwithstanding any termination of the OSUA.
- 14. <u>Assignment</u>. Upon the assignment or conveyance of a party's entire property interest affected by this Agreement (being HDLLC as to the HDLLC Drillsites and Surface Owner as to NBR), that party shall automatically be released from, and the successor holder of such interest shall automatically be bound by, the indemnification obligations set forth in paragraph 13 above for all actions or occurrences with respect to the use of the HDLCC Drillsites or NBR, as appropriate, occurring after such assignment or conveyance.
- 15. Termination of this Agreement. The easements and rights granted herein shall terminate and be of no further force and effect upon the earlier of: (i) conveyance to HDLLC of fee title to the HDLLC Drillsites or (ii) only upon written instrument terminating this Agreement executed and recorded by HDLLC. At such time as HDLLC ceases oil operations on the HDLLC Drillsites and abandoned the Wells on the HDLLC Drillsites, HDLLC shall remove all surface and subsurface equipment and features located in the HDLLC Drillsites. At such time as HDLLC has completed abandonment of the HDLLC Drillsites, HDLLC shall execute and record such documents or instruments as may be reasonably required in order to evidence the termination of this Agreement.

- 16. Easements and Rights to Run with the Land. The easements and rights and the terms, covenants, conditions, obligations, restrictions and limitations contained herein shall bind the NBR and the HDLLC Drillsites and burden the NBR for the benefit of the HDLLC Drillsites and, except as provided in Section 14 above, shall be perpetual, shall run with the land and shall be appurtenant to the HDLLC Drillsites.
- Notices. All notices, demands and requests and other communications required or permitted hereunder shall be in writing, and shall be deemed to be delivered: (i) when received if delivered personally or by private messenger or courier service, or (ii) three (3) business days after the deposit thereof in a regularly maintained receptacle for the United States mail, registered or certified, return receipt requested, postage prepaid, or (iii) on the next business day after deposit with a reputable overnight courier service (e.g., Federal Express or U.P.S.), or (iv) on the date of transmission if sent by facsimile utilizing a facsimile machine that provides a written confirmation of the completion of the transmission, provided further that a so-called "hard copy" of the communication is sent that same day by U.S. mail, postage prepaid. Any and all such communications shall addressed to the parties at the following addresses (and any party may change its notice address by utilizing the aforementioned procedures):

To Surface Owner: Aera Energy, LLC

3030 Saturn Street, Suite 101

Brea, CA 92821

Attn: George L. Basye

Vice President

With a copy to: Jeffrey Donfeld, Esq.

Donfeld, Kelley & Rollman

11845 West Olympic Blvd., Suite 1245

Los Angeles, CA 90064 Fax No. (310) 312-8014

Cherokee Newport Beach, LLC

c/o Cherokee Investment Partners, LLC

4600 Ulster Street, Suite 500

Denver, CO 80237 Attn: Dwight Stenseth Fax No. (303) 689-1461

Steven M. Sommers, Esq.

Brownstein Hyatt & Farber, P.C.

410 Seventeenth Street Twenty-Second Floor

Denver, Colorado 80202-4437

Fax No. (303) 223-0921

To HDLLC: Armstrong Petroleum Corporation

Managing Member of HDLLC

1080 West 17<sup>th</sup> Street

Costa Mesa, CA 92627 P.O. Box 1547 Newport Beach, CA 92659 Attn: Mr. Robert Armstrong Fax No. 949-650-4005

- 18. Entire Agreement. This instrument contains the entire agreement between the parties relating to the rights herein granted and the obligations herein assumed. Any oral representations or modifications concerning this instrument shall be of no force or effect unless evidenced by a subsequent modification in writing, signed by the party to be charged.
- 19. <u>Attorney's Fees</u>. In the event any party hereto is required to initiate or defend any action or proceeding in any way connected with this Agreement, the prevailing party, in addition to any other relief which may be granted, whether legal or equitable, shall be entitled to recover from the losing party reasonable expenses, attorneys' fees, and costs. Attorney's fees shall include attorney's fees on any appeal.
- 20. <u>Binding Effect: No Assignment by HDLLC</u>. This instrument shall bind and inure to the benefit of the respective heirs, personal representatives, successors, and assigns of the parties hereto.
- 21. <u>Cooperation</u>. Surface Owners and HDLLC agree, upon request of the other, to execute and deliver such further instruments of transfer as either party may reasonable require to effectively transfer and convey from each to the other the interests described herein.
- 22. <u>Applicable Law</u>. This Agreement shall be construed and interpreted in accordance with the laws of the State of California. Legal actions concerning any dispute, claim or matter arising out of or in connection with this Agreement shall be instituted in the Superior Court of the County of Orange, State of California, or any other appropriate court in such county, and the parties hereto agree to submit to the jurisdiction of such court in the event of any action.
- 23. <u>Counterpart Signatures</u>. This Agreement may be executed in any number of counterparts, each of which shall be effective only upon delivery and thereafter shall be deemed an original, and all of which shall be taken to be one and the same instrument, for the same effect as if all parties hereto had signed the same signature page.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed on the month, day and year first hereinabove written.

#### SURFACE OWNER:

AERA ENERGY, LLC, a California limited liability company

CHEROKEE NEWPORT BEACH, LLC, a Delaware limited liability company

By: Name:

**HDLLC:** 

HORIZONTAL DEVELOPMENT, LLC, a California

limited liability company
By: Arristrong Petroleum Corporation Hanadina Henper

By: Name:

President

#### CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California	1
	ss.
County of <u>Orange</u>	
On December 16, 2005, before me, _	Meg Peckham, Notary Public  Name and Title of Officer (e.g., "Jane Dog, Notary Public")
personally appeared	Arge. L. Basile-
poloonary appoalou	Name(s) of Signar(s)
	personally known to me
	☐ proved to me on the basis of satisfactor evidence
	to be the person(s) whose name(s) is/are
	subscribed to the within instrument and
MEG PECKHAM	acknowledged to me that he/ehe/they executed
Commission # 1526573 Notary Public - California	the same in his/ <del>her/their</del> authorized capacity(jes), and that by his/ <del>her/thei</del>
Orange County	signature(s) on the instrument the person(s), o
My Comm. Expires Nov 30, 2008	the entity upon behalf of which the person(s
	acted, executed the instrument.
	WITNESS my hand and official seal.
	m D
Share Matery Cool Above	Meg Veckham
Place Notary Seal Above	Signate of Holday Labita
<del></del>	PTIONAL
	w, it may prove valuable to persons relying on the document nd reattachment of this form to another document.
Description of Attached Document Title or Type of Document:	Use Easement agent.
Document Date:	Number of Pages:
Signer(s) Other Than Named Above:	
Capacity(ies) Claimed by Signer	-
Signer's Name:	OF SIGNER!
Corporate Officer — Title(s):	Top of thumb here
☐ Partner — ☐ Limited ☐ General	
Attorney in Fact	
Trustee	
Guardian or Conservator Other:	
J. Other.	
Signer Is Representing:	

STATE OF CALIFORNIA ) ) ss. COUNTY OF )
On
Notary Public
STATE OF CALIFORNIA ) SS. COUNTY OF Orange )
On <u>Occumber 13</u> , 2005 before me, <u>Meg Deckham</u> , Notary Public, personally appeared <u>Dwight Stanseth</u> , proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), of the entity upon behalf of which the person(s) acted, executed the instrument.
WITNESS my hand and official seal.
MEG PECKHAM Commission # 1526573 Notary Public California Orange County My Comm. Expires Nov 30, 2008

STATE OF <u>California</u>	)	
	)	SS.
COUNTY OF <u>Orange</u>	)	

On <u>December 13</u>, 2005 before me, <u>Meg Deckham</u>, Notary Public, personally appeared <u>R.A. Ormstrong</u>, proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Meg Peckham

Notary Public

MEG PECKHAM
Commission # 1526573
Notary Public - California
Orange County
My Comm. Expires Nov 30, 2008

#### **GOVERNMENT CODE 27361.7**

I CERTIFY UNDER PENALTY OF PERJURY THAT THE NOTARY SEAL ON THE DOCUMENT TO WHICH THIS STATEMENT IS ATTACHED READS AS FOLLOWS:

NAME OF NOTARY: Meg Peckham

DATE COMMISSION EXPIRES: Nov 30, 2008 COUNTY WHERE BOND IS FILED: Orange

COMMISSION NUMBER: 1526573

MANUFACTURER/VENDOR NUMBER: NNA1

PLACE OF EXECUTION: Santa Ana, CA

DATED: December 20, 2005

SIGNATURE: CMILLO

### Exhibit A

### Legal Description of Newport Banning Ranch

See attached.

#### EXHIBIT A LEGAL DESCRIPTION

Real property in the City of Newport Beach, County of Orange, State of California, described as follows:

#### PARCEL 1:

A PORTION OF LOTS "B", "C" AND "D", ALL IN THE BANNING TRACT, AS SHOWN ON A MAP OF SAID TRACT FILED IN THE CASE OF HANCOCK BANNING AND OTHERS VS. MARY H. BANNING, FOR PARTITION, BEING CASE NO. 6385 UPON THE REGISTER OF ACTIONS OF THE SUPERIOR COURT OF LOS ANGELES COUNTY, CALIFORNIA, AND A PORTION OF RANCHO SANTIAGO DE SANTA ANA, DESCRIBED IN BOOK 3, PAGE 387 OF PATENTS, RECORDS OF LOS ANGELES COUNTY, CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE BOUNDARY LINE BETWEEN LOTS "A" AND "B" OF SAID BANNING TRACT, WHICH POINT IS THE POINT OF INTERSECTION OF THE CENTER LINE OF NINETEENTH STREET AND THE NORTHWESTERLY LINE OF THE FIRST ADDITION TO THE NEWPORT MESA TRACT, AS SHOWN ON A MAP RECORDED IN BOOK 8, PAGE 61 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH 89 DEGREES 26' 55" WEST ALONG THE NORTHERLY LINE OF SAID LOT "B", 3315.29 FEET TO THE NORTHWESTERLY CORNER OF LOT "B" OF SAID BANNING TRACT; THENCE SOUTHERLY ALONG THE WESTERLY BOUNDARY LINE OF LOT "B" OF SAID BANNING TRACT, THE FOLLOWING COURSES AND DISTANCES: SOUTH 1 DEGREE 45' WEST 462.00 FEET; THENCE SOUTH 34 DEGREES 15' WEST 462.95 FEET; THENCE SOUTH 6 DEGREES 15' EAST 1058.48 FEET; THENCE SOUTH 19 DEGREES 45' WEST 529.21 FEET; THENCE SOUTH 34 DEGREES 30' WEST 463.08 FEET; THENCE SOUTH 42 DEGREES 45' WEST 397.00 FEET; THENCE SOUTH 4 DEGREES 45' WEST 462.00 FEET; THENCE SOUTH 21 DEGREES 15' WEST 198.50 FEET TO THE SOUTHWEST CORNER OF LOT "B", AS SHOWN ON SAID MAP OF THE BANNING TRACT, WHICH CORNER IS ALSO STATION NO. 149 OF THE BOUNDARY LINE OF RANCHO SANTIAGO DE SANTA ANA, AS DESCRIBED IN BOOK 3, PAGE 387 OF PATENTS, RECORDS OF LOS ANGELES COUNTY, CALIFORNIA; THENCE SOUTH 72 DEGREES 51' 36" EAST 807.47 FEET TO A POINT WHICH BEARS NORTH 20 DEGREES 32' 44" EAST 606.79 FEET FROM THE POINT OF INTERSECTION OF THE CENTER LINE OF THE SANTA ANA RIVER, AS SHOWN ON THE MAP FILED IN AND ANNEXED TO THE COMPLAINT IN THE CASE OF J. B. BANNING JR. VS. SMITH AND OTHERS, BEING CASE NO. 22797 OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A COPY OF THE JUDGMENT OF SAID CASE NO. 22797 HAVING BEEN RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF OFFICIAL RECORDS, WITH THE SOUTHEASTERLY LINE OF SUMMIT STREET, 30 FEET IN WIDTH, AS SHOWN ON A MAP OF EL MORO TRACT RECORDED IN BOOK 8, PAGE 75 OF MISCELLANEOUS



MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE EASTERLY, NORTHEASTERLY AND SOUTHEASTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER AND 600.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: SOUTH 78 DEGREES 02' EAST 486.60 FEET; THENCE SOUTH 66 DEGREES 42' 20" EAST 517.33 FEET; THENCE NORTH 20 DEGREES 06' 15" EAST 539.49 FEET; THENCE NORTH 51 DEGREES 48' EAST 405.76 FEET; THENCE NORTH 74 DEGREES 07' EAST 722.86 FEET; THENCE SOUTH 45 DEGREES 20' 28" EAST 740.97 FEET; THENCE SOUTH 27 DEGREES 46' EAST 498.37 FEET; THENCE SOUTH 13 DEGREES 35' 40" EAST 820.19 FEET; THENCE SOUTH 1 DEGREE 38' 25" WEST 871.22 FEET TO A POINT IN A LINE 600.00 FEET NORTHERLY OF AND PARALLEL WITH THE NORTHERLY LINE OF THE 100-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY, AS DESCRIBED IN DEED RECORDED APRIL 20, 1936 IN BOOK 822, PAGE 48 OF OFFICIAL RECORDS; THENCE SOUTHEASTERLY, PARALLEL WITH THE NORTHERLY AND NORTHEASTERLY LINE OF SAID CALIFORNIA STATE HIGHWAY, THE FOLLOWING COURSES AND DISTANCES: THENCE SOUTH 83 DEGREES 18' EAST 328.62 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 1650.00 FEET AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 500.12 FEET; THENCE SOUTH 65 DEGREES 56' EAST, TANGENT TO SAID CURVE, 667.15 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1650.00 FEET AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 48.34 FEET TO A POINT IN THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF WHITTIER AVENUE (60 FEET IN WIDTH), AS SHOWN ON A MAP OF THE NEWPORT MESA TRACT RECORDED IN BOOK 5, PAGE 1 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, A RADIAL LINE FROM SAID POINT BEARS SOUTH 25 DEGREES 44' 43" WEST; THENCE NORTH 0 DEGREES 36' 01" WEST ALONG THE SAID PROLONGATION OF WHITTIER AVENUE, 3061.05 FEET TO A POINT IN THE SOUTHWESTERLY LINE OF SAID FIRST ADDITION TO NEWPORT MESA TRACT; THENCE NORTH 29 DEGREES 24' 45" WEST ALONG THE SOUTHWESTERLY LINE OF SAID FIRST ADDITION TO THE NEWPORT MESA TRACT, 2706.70 FEET TO THE MOST WESTERLY CORNER OF SAID FIRST ADDITION TO THE NEWPORT MESA TRACT; THENCE NORTH 19 DEGREES 01' 55" EAST ALONG THE NORTHWESTERLY LINE OF THE LAST MENTIONED TRACT, 1065.62 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM, THAT PORTION OF LOT "B" OF SAID BANNING TRACT DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE EASTERLY LINE OF THE 300-FOOT STRIP OF LAND FOR SANTA ANA RIVER CHANNEL, AS DESCRIBED IN THE DEED TO THE NEWBERT PROTECTION DISTRICT, RECORDED JUNE 22, 1911 IN BOOK 197, PAGE 300 OF DEEDS, ORANGE COUNTY, WHICH POINT IS NORTH 71 DEGREES 20' EAST 510.47 FEET FROM THE SOUTHWEST CORNER OF SAID LOT "B", WHICH LAST MENTIONED CORNER IS ALSO STATION 149 OF THE RANCHO SANTIAGO DE SANTA ANA; THENCE NORTH 13 DEGREES 25' EAST ALONG THE



EASTERLY LINE OF SAID 300-FOOT STRIP OF LAND, 660 FEET; THENCE SOUTH 76 DEGREES 35' EAST 660 FEET; THENCE SOUTH 13 DEGREES 25' WEST 660 FEET; THENCE NORTH 76 DEGREES 35' WEST 660 FEET TO THE POINT OF BEGINNING, AS CONDEMNED BY THE CITY OF NEWPORT BEACH IN THE ACTION ENTITLED "CITY OF NEWPORT BEACH, A MUNICIPAL CORPORATION, PLAINTIFF VS. TOWNSEND LAND COMPANY AND OTHERS, DEFENDANTS", BEING CASE NO. 34747 OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A CERTIFIED COPY OF THE FINAL JUDGMENT HAVING BEEN RECORDED AUGUST 20, 1937 IN BOOK 910, PAGE 19 OF OFFICIAL RECORDS OF ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THAT PORTION OF LOT "B" IN SAID BANNING TRACT CONVEYED BY THE TOWNSEND LAND COMPANY TO THE NEWBERT PROTECTION DISTRICT FOR A RIVER CHANNEL, 300 FEET WIDE, BY DEED RECORDED JUNE 22, 1911 IN BOOK 197, PAGE 300 OF DEEDS, ORANGE COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT IN THE SOUTHERLY LINE OF SAID LOT "B" OF THE BANNING TRACT, SOUTH 84 DEGREES 45' EAST 135.84 FEET DISTANT FROM THE SOUTHWESTERLY CORNER OF SAID LOT "B", WHICH CORNER IS ALSO STATION 149 OF THE RANCHO SANTIAGO DE SANTA ANA; THENCE NORTH 13 DEGREES 25' EAST ALONG THE WESTERLY SIDE OF SAID 300-FOOT RIGHT OF WAY, 946.75 FEET TO A POINT IN THE WESTERLY LINE OF SAID LOT "B"; THENCE ALONG THE WESTERLY LINE OF SAID LOT "B", NORTH 42 DEGREES 45' EAST 38.70 FEET TO AN ANGLE IN SAID WESTERLY LINE; THENCE NORTH 34 DEGREES 30' EAST 462.00 FEET TO AN ANGLE IN SAID WESTERLY LINE; THENCE NORTH 19 DEGREES 45' EAST 528.00 FEET TO AN ANGLE IN SAID WESTERLY LINE; THENCE STILL ALONG SAID WESTERLY LINE, NORTH 6 DEGREES 15' WEST 723.17 FEET TO A POINT IN THE WESTERLY LINE OF SAID 300-FOOT RIGHT OF WAY; THENCE NORTH 13 DEGREES 25' EAST ALONG THE WESTERLY LINE OF SAID RIGHT OF WAY, 607.27 FEET TO A POINT IN THE WESTERLY LINE OF SAID LOT "B"; THENCE ALONG THE WESTERLY LINE OF SAID LOT "B", NORTH 34 DEGREES 15' EAST 148.48 FEET TO AN ANGLE IN SAID LINE; THENCE NORTH 1 DEGREE 45' EAST 436.44 FEET TO THE NORTHWEST CORNER OF SAID LOT "B"; THENCE ALONG THE NORTHERLY LINE OF SAID LOT "B", NORTH 89 DEGREES 28' EAST 346.14 FEET TO A POINT IN THE EASTERLY LINE OF SAID 300-FOOT RIGHT OF WAY; THENCE SOUTH 13 DEGREES 25' WEST 3831.55 FEET TO THE SOUTHERLY LINE OF SAID LOT "B"; THENCE ALONG THE SOUTHERLY LINE OF SAID LOT "B", NORTH 84 DEGREES 45' WEST 303.08 FEET TO THE POINT OF COMMENCEMENT.

ALSO EXCEPTING THEREFROM, THE PORTIONS THEREOF INCLUDED WITHIN A STRIP OF LAND 30 FEET IN WIDTH, THE CENTER LINE OF WHICH IS DESCRIBED AS FOLLOWS: BEGINNING AT THE POINT WHERE THE EASTERLY BOUNDARY LINE OF THE RANCHO LAS BOLSAS BETWEEN STATIONS 78 AND 79 OF THE SAID BOUNDARY LINE IS INTERSECTED BY THE LINE WHICH BEARS NORTH 13 DEGREES 26' 30" EAST FROM THE POINT ON THE SOUTH LINE OF SECTION 18, TOWNSHIP 6 SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN,



2294.92 FEET NORTH 89 DEGREES 38' EAST FROM THE SOUTH QUARTER SECTION CORNER OF SAID SECTION, SAID BEGINNING POINT BEING ON THE SURVEYED CENTER LINE OF THE SANTA ANA-ANAHEIM JOINT OUTFALL SEWER; THENCE FROM SAID POINT OF BEGINNING, SOUTH 13 DEGREES 26' 30" WEST ALONG SAID CENTER LINE TO STATION 187+74.49, BEING THE POINT ON THE SOUTH LINE OF SAID SECTION 18, 2294.92 FEET NORTH 89 DEGREES 38' EAST FROM THE SOUTH QUARTER CORNER OF SAID SECTION; THENCE CONTINUING SOUTH 13 DEGREES 26' 30" WEST ALONG SAID SURVEYED CENTER LINE, 2795.66 FEET TO STATION 215+70.15; THENCE SOUTH 16 DEGREES 27' 30" WEST ALONG SAID CENTER LINE, 1050.35 FEET TO A POINT 15.30 FEET SOUTH 84 DEGREES 45' EAST FROM STATION 68 OF THE RANCHO LAS BOLSAS, TOGETHER WITH THE STRIP OF LAND OF VARYING WIDTHS LYING BETWEEN THE EASTERLY LINE OF THE ABOVE DESCRIBED 30-FOOT STRIP AND THE WESTERLY LINE OF THE RIGHT OF WAY OF THE SANTA ANA RIVER THROUGH THE NEWBERT PROTECTION DISTRICT, AS CONVEYED TO THE CITY OF SANTA ANA BY DEED RECORDED APRIL 14, 1934 IN BOOK 670, PAGE 147 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THAT PORTION OF SAID LAND INCLUDED WITHIN A STRIP OF LAND 180 FEET WIDE, DESCRIBED AS PARCELS D3-121.1 AND D3-122.1 IN THE FINAL ORDER OF CONDEMNATION RENDERED JANUARY 26, 1962 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF ORANGE, IN THE ACTION ENTITLED "ORANGE COUNTY FLOOD CONTROL DISTRICT VS. CITY OF NEWPORT BEACH, AND OTHERS" (CASE NO. 77399), A CERTIFIED COPY OF WHICH DECREE WAS RECORDED JANUARY 30, 1962 IN BOOK 5993, PAGE 441 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THAT PORTION OF SAID LAND INCLUDED WITHIN THE FOLLOWING DESCRIBED LAND:

THAT PORTION OF BLOCK C OF THE BANNING TRACT, AS SHOWN ON A MAP ATTACHED TO REPORT OF THE REFEREES FILED APRIL 14, 1890 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, AND THAT PORTION OF LOTS 1111 AND 1112 AND PORTION OF SIXTEENTH STREET AND WHITTIER AVENUE ADJOINING, AS SHOWN ON THE MAP OF NEWPORT MESA TRACT RECORDED IN BOOK 5, PAGE 1 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF SAID SIXTEENTH STREET WITH THE SOUTHWESTERLY BOUNDARY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT, AS SHOWN ON A MAP RECORDED IN BOOK 8, PAGE 61 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH 89 DEGREES 21' 50" WEST 16.50 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 500.00 FEET; THENCE WESTERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 28 DEGREES 48' 33", A DISTANCE OF 251.41 FEET TO A LINE TANGENT; THENCE SOUTH 60 DEGREES 33'



17" WEST ALONG SAID LINE TANGENT, A DISTANCE OF 404.60 FEET; THENCE NORTH 29 DEGREES 26' 43" WEST 804.50 FEET; THENCE NORTH 60 DEGREES 33' 17" EAST 300.00 FEET; THENCE SOUTH 88 DEGREES 48' 26" EAST 316.57 FEET TO A POINT IN A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 50.00 FEET, A RADIAL LINE FROM SAID POINT BEARS NORTH 89 DEGREES 21' 50" EAST; THENCE NORTHERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 44 DEGREES 24' 55", A DISTANCE OF 38.76 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 90.00 FEET; THENCE NORTHERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 44 DEGREES 24' 55", A DISTANCE OF 69.77 FEET TO A LINE TANGENT; THENCE NORTH 0 DEGREES 38' 10" WEST ALONG SAID LINE TANGENT, A DISTANCE OF 11:11 FEET TO THE SAID SOUTHWESTERLY BOUNDARY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT; THENCE SOUTH 29 DEGREES 26' 43" EAST ALONG SAID SOUTHWESTERLY BOUNDARY LINE, A DISTANCE OF 789.32 FEET TO THE POINT OF BEGINNING.

AS DESCRIBED IN THE FINAL ORDER OF CONDEMNATION RENDERED AUGUST 4, 1965 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF ORANGE, ENTITLED "COSTA MESA UNION SCHOOL DISTRICT OF ORANGE COUNTY, CALIFORNIA VS. SECURITY FIRST NATIONAL BANK, ETC., AND OTHERS" (CASE NO. 123141), A CERTIFIED COPY OF WHICH ORDER WAS RECORDED AUGUST 5, 1965 IN BOOK 7620, PAGE 215 OF OFFICIAL RECORDS, ORANGE COUNTY.



ALSO EXCEPTING THEREFROM, THAT PORTION DESCRIBED AS FOLLOWS:

THAT PORTION OF LOT B OF THE BANNING TRACT, AS SHOWN ON A MAP FILED IN THE CASE OF HANCOCK BANNING AND OTHERS VS. MARY H. BANNING, FOR PARTITION, BEING CASE NO. 6385 UPON THE REGISTER OF ACTIONS OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR LOS ANGELES COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWESTERLY CORNER OF SAID LOT B; THENCE SOUTHERLY ALONG THE WESTERLY BOUNDARY OF SAID LOT B, SOUTH 01 DEGREE 45' 00" WEST 462.00 FEET TO RANCHO LAS BOLSAS, STATION 75, AND SOUTH 34 DEGREES 15' 00" WEST 462.95 FEET TO RANCHO LAS BOLSAS, STATION 74, BEING THE TRUE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID WESTERLY BOUNDARY, SOUTH 06 DEGREES 15' 00" EAST TO THE WESTERLY LINE OF THE STRIP OF LAND DESCRIBED IN DEED TO THE CITY OF SANTA ANA, RECORDED APRIL 14, 1934 IN BOOK 670, PAGE 147 OF OFFICIAL RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE NORTHERLY ALONG SAID WESTERLY LINE TO THE INTERSECTION WITH THAT CERTAIN COURSE HEREINABOVE CITED AS "SOUTH 34 DEGREES 15' 00" WEST 462.95 FEET"; THENCE ALONG SAID CERTAIN COURSE, SOUTH 34 DEGREES 15' 00" WEST TO THE TRUE POINT OF BEGINNING.



ALSO EXCEPTING THEREFROM THOSE PORTIONS DESCRIBED AS PARCELS 100, 103, 106 AND 108 IN THE NOTICE OF LIS PENDENS, UNITED STATES DISTRICT

COURT FOR THE CENTRAL JUSTICE OF CALIFORNIA CASE NO. CV 91-3991IH, A CERTIFIED OF WHICH WAS RECORDED AUGUST 23, 1991 AS INSTRUMENT NO. 91-455338 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY, WHICH INCLUDES A DECLARATION OF TAKING.

ALSO EXCEPTING THEREFROM THAT PORTION INCLUDED WITHIN THE LAND DESCRIBED IN THE INTERLOCUTORY DECREE OF PARTITION, SUPERIOR COURT CASE NO. 22797, A CERTIFIED COPY OF WHICH WAS RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF SAID OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM THAT PORTION INCLUDED WITHIN THE LAND DESCRIBED IN THAT CERTAIN ORDER, SUPERIOR COURT CASE NO. 13753, A CERTIFIED COPY OF WHICH WAS RECORDED APRIL 29, 1949 IN BOOK 1836, PAGE 429 OF SAID OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM THAT PORTION DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWESTERLY CORNER OF SAID LOT B; THENCE SOUTHERLY ALONG THE WESTERLY BOUNDARY OF SAID LOT B, SOUTH 01°45'00" WEST 462.00 FEET TO RANCHO LAS BOLSAS STATION 75; THENCE SOUTH 34°15'00" WEST 462.95 FEET TO RANCHO LAS BOLSAS STATION 74; THENCE SOUTH 6°15'00" EAST 1056.00 FEET TO RANCHO LAS BOLSAS STATION 73; THENCE SOUTH 19°45'00" WEST 528.00 FEET TO RANCHO LAS BOLSAS STATION 72; THENCE SOUTH 34°30'00" WEST 462.00 FEET TO RANCHO LAS BOLSAS STÁTION 71; THENCE SOUTH 42°45'00" WEST 396.00 FEET TO RANCHO LAS BOLSAS STATION 70 AND THE TRUE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID WESTERLY BOUNDARY, SOUTH 4°45'00" WEST 382.72 FEET TO THE WESTERLY LINE OF THE STRIP OF LAND DESCRIBED IN DEED TO THE CITY OF SANTA ANA RECORDED APRIL 14, 1934 IN BOOK 670, PAGE 147 OF SAID OFFICIAL RECORDS; THENCE NORTHERLY ALONG SAID WESTERLY LINE OF SAID DEED TO THE CITY OF SANTA ANA TO THE INTERSECTION WITH THAT CERTAIN COURSE HEREINABOVE CITED AS "SOUTH 42°45'00" WEST 396.00 FEET"; THENCE ALONG SAID CERTAIN COURSE SOUTH 42°45'00" WEST TO THE TRUE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM, THE TITLE AND EXCLUSIVE RIGHT TO ALL OF THE MINERALS, INCLUDING, BUT NOT LIMITED TO, ALL PETROLEUM, OIL, NATURAL GAS, AND OTHER HYDROCARBON SUBSTANCES AND PRODUCTS DERIVED THEREFROM, TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS, UPON, OVER AND BENEATH THE SURFACE OF SAID LAND, AT ALL TIMES TO EXPLORE FOR, EXTRACT AND REMOVE ANY OF SAID MINERALS LOCATED BELOW A DEPTH OF 6200 FEET, BUT WITHOUT THE RIGHT TO USE THE SURFACE OF SAID LAND DOWN TO A DEPTH OF 500 FEET, AS RESERVED IN THE DEED EXECUTED BY HANCOCK BANNING JR. AND OTHERS, DATED AUGUST 1, 1958, RECORDED AUGUST 29, 1958 IN BOOK 4400, PAGE 532, AND RE-RECORDED OCTOBER 6, 1958 IN BOOK 4437, PAGE 228, AS AMENDED BY THE DEED AND



AGREEMENT EXECUTED BY HANCOCK BANNING JR. AND OTHERS, RECORDED DECEMBER 27, 1961 IN BOOK 5957, PAGE 665, ALL IN OFFICIAL RECORDS, ORANGE COUNTY.

#### PARCEL 2:

BEGINNING AT THE SOUTHWEST CORNER OF THAT CERTAIN LAND AS DESCRIBED IN PARCEL 1 IN DEED FROM HANCOCK BANNING JR. AND OTHERS, DATED AUGUST 1, 1958, RECORDED AUGUST 29, 1958 IN BOOK 4400, PAGE 532 OF OFFICIAL RECORDS, ORANGE COUNTY, AND RE-RECORDED OCTOBER 6, 1958 IN BOOK 4437, PAGE 228 OF OFFICIAL RECORDS, ORANGE COUNTY, ALSO BEING THE SOUTHWEST CORNER OF LOT "B" OF THE BANNING TRACT, AS SHOWN ON THE MAP ATTACHED TO THE REPORT OF THE REFEREES FILED APRIL 14, 1890 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, CALIFORNIA, WHICH CORNER IS ALSO STATION 149 OF THE BOUNDARY LINE OF RANCHO SANTIAGO DE SANTA ANA, AS DESCRIBED IN BOOK 3, PAGE 387 OF PATENTS, RECORDS OF LOS ANGELES COUNTY, CALIFORNIA; THENCE ALONG THE SOUTHERLY LINE OF SAID PARCEL 1, SOUTH 72 DEGREES 51' 36" EAST 807.47 FEET TO A POINT WHICH BEARS NORTH 20 DEGREES 32' 44" EAST 606.79 FEET FROM THE POINT OF INTERSECTION OF THE CENTER LINE OF THE SANTA ANA RIVER, AS SHOWN ON THE MAP FILED IN AND ANNEXED TO THE COMPLAINT IN THE CASE OF J. B. BANNING JR. VS. SMITH AND OTHERS, BEING CASE NO. 22797 OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A COPY OF THE JUDGMENT OF SAID CASE NO. 22797 HAVING BEEN RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF OFFICIAL RECORDS, WITH THE SOUTHEASTERLY LINE OF SUMMIT STREET, 30 FEET IN WIDTH, AS SHOWN ON A MAP OF EL MORO TRACT RECORDED IN BOOK 8, PAGE 75 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE EASTERLY, NORTHEASTERLY AND SOUTHEASTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER AND 600.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: SOUTH 78 DEGREES 02' EAST 486.60 FEET; SOUTH 66 DEGREES 42' 20" EAST 517.33 FEET; NORTH 20 DEGREES 06' 15" EAST 539.49 FEET; NORTH 51 DEGREES 48' EAST 405.76 FEET; NORTH 74 DEGREES 07' EAST 722.86 FEET; SOUTH 45 DEGREES 20' 28" EAST 740.97 FEET; SOUTH 27 DEGREES 46' EAST 498.37 FEET; SOUTH 13 DEGREES 35' 40" EAST 820.19 FEET; SOUTH 1 DEGREE 38' 25" WEST 871.22 FEET TO A POINT IN A LINE 600.00 FEET NORTHERLY OF AND PARALLEL WITH THE NORTHERLY LINE OF THE 100-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY, AS DESCRIBED IN DEED RECORDED APRIL 20, 1936 IN BOOK 822, PAGE 48 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE SOUTHEASTERLY, PARALLEL WITH THE NORTHERLY AND NORTHEASTERLY LINE OF SAID CALIFORNIA STATE HIGHWAY, THE FOLLOWING COURSES AND DISTANCES: SOUTH 83 DEGREES 18' EAST 328.62 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 1650.00 FEET AND



TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 500.12 FEET; THENCE SOUTH 65 DEGREES 56' EAST, TANGENT TO SAID CURVE, 667.15 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1650.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 48.34 FEET TO A POINT IN THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF WHITTIER AVENUE (60 FEET IN WIDTH), AS SHOWN ON A MAP OF THE FIRST ADDITION TO NEWPORT MESA TRACT RECORDED IN BOOK 8, PAGE 61 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, A RADIAL LINE FROM SAID POINT BEARS SOUTH 25 DEGREES 44' 43" WEST, WHICH POINT IS THE SOUTHEAST CORNER OF SAID PARCEL 1; THENCE SOUTH 0 DEGREES 36' 01" EAST ALONG THE SAID PROLONGATION OF WHITTIER AVENUE, 404.46 FEET TO AN INTERSECTION WITH THE NORTHEASTERLY LINE OF THAT CERTAIN STRIP OF LAND 250 FEET IN WIDTH, AS DESCRIBED IN PARCEL 1, ARTICLE II OF SAID DEED RECORDED AUGUST 29, 1958 IN BOOK 4400, PAGE 532 OF OFFICIAL RECORDS, ORANGE COUNTY, AND RE-RECORDED OCTOBER 6, 1958 IN BOOK 4437, PAGE 228 OF OFFICIAL RECORDS, ORANGE COUNTY, A RADIAL LINE FROM SAID INTERSECTION BEARS SOUTH 33 DEGREES 40' 54" WEST; THENCE ALONG THE NORTHEASTERLY, NORTHERLY, NORTHWESTERLY AND NORTHERLY LINE OF SAID PARCEL 1, ARTICLE II, THROUGH THE FOLLOWING COURSES AND DISTANCES: NORTHWESTERLY ALONG A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 1300.00 FEET, THROUGH AN ANGLE OF 9 DEGREES 36' 54", A DISTANCE OF 218.16 FEET TO A LINE TANGENT THERETO; THENCE NORTH 65 DEGREES 56' WEST, TANGENT TO SAID CURVE, 667.15 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE WESTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1300.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 394.04 FEET; THENCE NORTH 83 DEGREES 18' WEST, TANGENT TO SAID CURVE, 646.66 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE WESTERLY ALONG A CURVE CONCAVE TO THE NORTH AND HAVING A RADIUS OF 700.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 2.34 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT EAST THEREFROM, MEASURED AT RIGHT ANGLES THERETO, A RADIAL LINE FROM SAID POINT BEARS NORTH 6 DEGREES 53' 29" EAST; THENCE NORTHERLY, NORTHWESTERLY AND SOUTHWESTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 1 DEGREE 38' 25" EAST 1144.77 FEET; NORTH 13 DEGREES 35' 40" WEST 729.87 FEET; NORTH 27 DEGREES 46' WEST 400.76 FEET; NORTH 45 DEGREES 20' 28" WEST 482.58 FEET; SOUTH 74 DEGREES 07' WEST 449.53 FEET; SOUTH 51 DEGREES 48' WEST 237.37 FEET; SOUTH 20 DEGREES 06' 15" WEST 319.00 FEET TO A POINT IN A LINE PARALLEL WITH THE NORTHWESTERLY LINE OF TRACT NO. 772, AS SHOWN ON A MAP RECORDED IN BOOK 23, PAGES 5 AND 6 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, AND 250 FEET DISTANT WEST THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE SOUTHWESTERLY AND WESTERLY, PARALLEL WITH THE



NORTHWESTERLY AND NORTHERLY LINE OF SAID TRACT NO. 772, AND 250.00 FEET DISTANT WESTERLY AND NORTHWESTERLY THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: SOUTH 29 DEGREES 06' WEST 258.16 FEET; SOUTH 42 DEGREES 06' WEST 131.37 FEET; SOUTH 72 DEGREES 45' WEST 158.65 FEET; NORTH 88 DEGREES 25' WEST 16.51 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER AND 250.00 FEET DISTANT NORTHERLY THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE WESTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER AND 250.00 FEET DISTANT NORTHERLY THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 66 DEGREES 42' 20" WEST 620.94 FEET; NORTH 78 DEGREES 02' WEST 504.69 FEET TO A POINT IN A LINE PARALLEL WITH THE NORTHERLY LINE OF BLOCK C, EL MORO TRACT, AS SHOWN ON A MAP RECORDED IN BOOK 8, PAGE 75 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, AND 250.00 FEET DISTANT NORTHERLY THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE WESTERLY, PARALLEL WITH THE SAID NORTHERLY LINE OF BLOCK C, EL MORO TRACT, AND 250.00 FEET DISTANT NORTHERLY THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 60 DEGREES 52' 34" WEST 120.39 FEET; NORTH 64 DEGREES 06' 50" WEST 216.59 FEET TO A POINT IN THE EASTERLY LINE OF THE EASEMENT FOR THE PURPOSE OF MAINTAINING A RIVER CHANNEL OVER A STRIP OF LAND 300 FEET WIDE, IN FAVOR OF NEWBERT PROTECTION DISTRICT, AS DESCRIBED IN THE INTERLOCUTORY DECREE OF PARTITION DATED JULY 19, 1929, A CERTIFIED COPY OF WHICH WAS RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF OFFICIAL RECORDS, ORANGE COUNTY, SAID POINT BEING THE MOST NORTHWESTERLY CORNER OF SAID PARCEL 1, ARTICLE II; THENCE SOUTH 13 DEGREES 25' WEST ALONG SAID EASTERLY LINE OF THE RIVER CHANNEL, 256.04 FEET TO THE MOST SOUTHWESTERLY CORNER OF SAID PARCEL 1, ARTICLE II; THENCE NORTH 64 DEGREES 06' 50" WEST ALONG THE NORTHERLY LINE OF SAID BLOCK C OF EL MORO TRACT, 16.02 FEET TO AN INTERSECTION WITH THE NORTHEASTERLY LINE OF THE 100-FOOT RIGHT OF WAY OF CALIFORNIA STATE HIGHWAY; THENCE NORTH 54 DEGREES 02' WEST ALONG SAID HIGHWAY RIGHT OF WAY LINE, 145.48 FEET TO THE CENTER LINE OF SAID 300-FOOT RIVER CHANNEL EASEMENT; THENCE NORTH 13 DEGREES 25' EAST ALONG SAID CENTER LINE, 390.57 FEET TO THE NORTHEAST CORNER OF LAND DESCRIBED IN DEED DATED DECEMBER 30, 1929 FROM JOSEPH BANNING JR. AND OTHERS, TO JAMES H. MACKLIN, RECORDED JANUARY 29, 1930 IN BOOK 356, PAGE 31 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE NORTH 74 DEGREES 17' WEST 289.47 FEET TO A POINT IN THE SOUTHERLY EXTENSION OF THE WESTERLY BOUNDARY LINE OF SAID RANCHO SANTIAGO DE SANTA ANA, WHICH POINT IS ALSO THE NORTHWEST CORNER OF SAID LAND DESCRIBED IN SAID DEED RECORDED IN BOOK 356, PAGE 31 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE NORTH 15 DEGREES 43' EAST ALONG THE SAID SOUTHERLY EXTENSION OF THE WESTERLY BOUNDARY LINE OF RANCHO SANTIAGO DE SANTA ANA, 119.00 FEET TO THE POINT OF BEGINNING.



EXCEPT ANY PORTION OR PORTIONS OF SAID ABOVE DESCRIBED LAND WHICH IS OR ARE NOT INCLUDED EITHER WITHIN THE EXTERIOR BOUNDARIES OF THE RANCHO SANTIAGO DE SANTA ANA, OR WITHIN THE EXTERIOR BOUNDARY LINES OF GOVERNMENT LOT 1, SECTION 19; GOVERNMENT LOT 1, SECTION 20; AND GOVERNMENT LOT 1, SECTION 29, ALL IN TOWNSHIP 6 SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN.

ALSO EXCEPTING THEREFROM, THAT PORTION OF SAID LAND INCLUDED WITHIN A STRIP OF LAND 180 FEET WIDE, DESCRIBED AS PARCEL D3-122.1 IN THE FINAL ORDER OF CONDEMNATION RENDERED JANUARY 26, 1962 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF ORANGE, IN THE ACTION ENTITLED "ORANGE COUNTY FLOOD CONTROL DISTRICT VS. CITY OF NEWPORT BEACH AND OTHERS" (CASE NO. 77399), A CERTIFIED COPY OF WHICH DECREE RECORDED JANUARY 20, 1962, BOOK 5993, PAGE 441, OFFICIAL RECORDS, ORANGE COUNTY, CALIFORNIA.

ALSO EXCEPTING THEREFROM THOSE PORTIONS DESCRIBED AS PARCELS 100, 103, 106 AND 108 IN THE NOTICE OF LIS PENDENS, UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF CALIFORNIA CASE NO. CV 91-3991-IH, A CERTIFIED OF WHICH WAS RECORDED AUGUST 23, 1991 AS INSTRUMENT NO. 91-455338 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY, WHICH INCLUDES A DECLARATION OF TAKING.

ALSO EXCEPTING THEREFROM THAT PORTION INCLUDED WITHIN THE LAND DESCRIBED IN THE INTERLOCUTORY DECREE OF PARTITION, SUPERIOR COURT CASE NO. 22797, A CERTIFIED COPY OF WHICH WAS RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF SAID OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM THAT PORTION INCLUDED WITHIN THE LAND DESCRIBED IN THAT CERTAIN ORDER, SUPERIOR COURT CASE NO. 13753, A CERTIFIED COPY OF WHICH WAS RECORDED APRIL 29, 1949 IN BOOK 1836, PAGE 429 OF SAID OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM, THE TITLE AND EXCLUSIVE RIGHT TO ALL OF THE MINERALS, INCLUDING, BUT NOT LIMITED TO, ALL PETROLEUM, OIL, NATURAL GAS AND OTHER HYDROCARBON SUBSTANCES AND PRODUCTS DERIVED THEREFROM, IN OR UNDER, OR PRODUCIBLE FROM SAID LAND AT ANY DEPTH OR DEPTHS 6200 FEET OR MORE BELOW THE SURFACE OF SAID LAND, TOGETHER WITH THE FREE AND UNLIMITED RIGHT TO MINE, DRILL, BORE, OPERATE AND REMOVE FROM BENEATH THE SURFACE OF SAID LAND, AT ANY LEVEL OR LEVELS 500 FEET OR MORE BELOW THE SURFACE OF SAID LAND, FOR THE PURPOSE OF DEVELOPMENT OR REMOVAL OF SAID RESERVED SUBSTANCES, AS RESERVED IN THE DEED AND AGREEMENT FROM HANCOCK BANNING JR. AND OTHERS, RECORDED DECEMBER 27, 1961 IN BOOK 5957, PAGE 665 OF OFFICIAL RECORDS, ORANGE COUNTY, SUBJECT TO CERTAIN LIMITATIONS AND CONTINGENCIES CONTAINED IN SAID DEED.



#### PARCEL 3:

A STRIP OF LAND 250 FEET WIDE, DESCRIBED AS FOLLOWS:

BEGINNING AT THE POINT OF INTERSECTION OF THE NORTHERLY LINE OF BLOCK C OF EL MORO TRACT, AS SHOWN ON A MAP RECORDED IN BOOK 8, PAGE 75 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, AND THE EASTERLY LINE OF THE EASEMENT FOR THE PURPOSE OF MAINTAINING A RIVER CHANNEL OVER A STRIP OF LAND 300 FEET WIDE, IN FAVOR OF NEWBERT PROTECTION DISTRICT, AS DESCRIBED IN THE INTERLOCUTORY DECREE OF PARTITION DATED JULY 19, 1929, A CERTIFIED COPY OF WHICH WAS RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF OFFICIAL RECORDS; THENCE SOUTH 64 DEGREES 06' 50" EAST, ALONG THE NORTHERLY LINE OF SAID EL MORO TRACT, 154.24 FEET; THENCE CONTINUING ALONG THE LAST MENTIONED NORTHERLY LINE, SOUTH 60 DEGREES 52' 34" EAST 151.04 FEET TO A POINT IN THE SOUTHEASTERLY LINE OF SUMMIT STREET, 30.00 FEET IN WIDTH, AS SHOWN ON THE MAP OF SAID EL MORO TRACT, SAID POINT BEING IN THE CENTER LINE OF THE SANTA ANA RIVER, AS SHOWN ON A MAP FILED IN AND ANNEXED TO THE COMPLAINT IN CASE OF J. B. BANNING JR. VS. SMITH AND OTHERS, CASE NO. 22797 OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A COPY OF THE JUDGMENT OF SAID CASE NO. 22797 HAVING BEEN RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE SOUTH 78 DEGREES 02' EAST ALONG THE SAID CENTER LINE OF THE SANTA ANA RIVER, 517.61 FEET; THENCE CONTINUING ALONG THE SAID CENTER LINE OF THE SANTA ANA RIVER, SOUTH 66 DEGREES 42' 20" EAST 644.09 FEET TO A POINT IN THE NORTHERLY LINE OF TRACT NO. 772, AS SHOWN ON A MAP RECORDED IN BOOK 23, PAGES 5 AND 6 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE EASTERLY AND NORTHEASTERLY ALONG THE NORTHERLY AND NORTHWESTERLY LINE OF SAID TRACT NO. 772, THE FOLLOWING COURSES AND DISTANCES: SOUTH 88 DEGREES 25' EAST 105.91 FEET; NORTH 72 DEGREES 45' EAST 268.62 FEET; NORTH 42 DEGREES 06' EAST 228.36 FEET; NORTH 29 DEGREES 06' EAST 306.31 FEET TO A POINT IN THE SAID CENTER LINE OF THE SANTA ANA RIVER; THENCE ALONG THE SAID CENTER LINE OF THE SANTA ANA RIVER, THE FOLLOWING COURSES AND DISTANCES: NORTH 20 DEGREES 06' 15" EAST 267.71 FEET; NORTH 51 DEGREES 48' EAST 117.09 FEET; NORTH 74 DEGREES 07' EAST 254.30 FEET; SOUTH 45 DEGREES 20' 28" EAST 298.02 FEET; SOUTH 27 DEGREES 46' EAST 331.04 FEET; SOUTH 13 DEGREES 35' 40" EAST 665.36 FEET; SOUTH 1 DEGREE 38' 25" WEST 1205.19 FEET; SOUTH 10 DEGREES 47' 30" EAST 116.85 FEET TO A POINT IN THE NORTHERLY LINE OF THE 100-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY, AS DESCRIBED IN DEED RECORDED APRIL 20, 1936 IN BOOK 822, PAGE 48 OF OFFICIAL RECORDS, ORANGE COUNTY, A RADIAL LINE FROM SAID POINT BEARS NORTH 19 DEGREES 20' 43" EAST; THENCE ALONG THE NORTHERLY AND NORTHEASTERLY LINE OF SAID CALIFORNIA STATE HIGHWAY, THE FOLLOWING COURSES AND DISTANCES: EASTERLY ALONG A CURVE



CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 950.00 FEET, A DISTANCE OF 209.67 FEET; SOUTH 83 DEGREES 18' EAST, TANGENT TO SAID CURVE, 646.66 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT, SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1050.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 318.26 FEET; SOUTH 65 DEGREES 56' EAST, TANGENT TO SAID CURVE, 667.15 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT, SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1050.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 216.09 FEET; SOUTH 54 DEGREES 08' 30" EAST 387.05 FEET TO THE BEGINNING OF A CURVE TO THE LEFT, SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTHEAST, HAVING A RADIUS OF 950.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 264.46 FEET; SOUTH 70 DEGREES 05' 30" EAST, TANGENT TO SAID CURVE, 527.80 FEET TO THE SOUTHEASTERLY BOUNDARY LINE OF LOT D OF THE BANNING TRACT, AS SHOWN ON THE MAP ATTACHED TO THE REPORT OF THE REFEREES FILED APRIL 14, 1980 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, CALIFORNIA; THENCE LEAVING SAID CALIFORNIA STATE HIGHWAY, NORTH 39 DEGREES 43' 45" EAST, ALONG THE SOUTHEASTERLY BOUNDARY LINE OF SAID LOT D OF BANNING TRACT, 265.74 FEET TO A POINT, BEING 250.00 FEET NORTH, MEASURED AT RIGHT ANGLES FROM THE NORTHEASTERLY LINE OF SAID 100-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY; THENCE NORTH 70 DEGREES 05' 30" WEST, PARALLEL WITH THE NORTHEASTERLY LINE OF SAID STATE HIGHWAY, 49.03 FEET TO A POINT IN THE SOUTHEASTERLY LINE OF THAT CERTAIN 2.7827-ACRE PARCEL OF LAND AS DESCRIBED IN DEED FROM FARMERS AND MERCHANTS NATIONAL BANK OF LOS ANGELES, TRUSTEE FOR ANNE O. BANNING AND OTHERS, TO A. E. S. CHAFFEY AND OTHERS, RECORDED MARCH 14, 1958 IN BOOK 4228, PAGE 191 OF OFFICIAL RECORDS, ORANGE COUNTY, A RADIAL LINE FROM SAID POINT BEARS NORTH 26 DEGREES 10' 42" WEST; THENCE ALONG THE BOUNDARY LINE OF THE LAST MENTIONED PARCEL OF LAND, THE FOLLOWING COURSES AND DISTANCES: SOUTHWESTERLY ALONG A CURVE CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 373.48 FEET, A DISTANCE OF 176.40 FEET TO THE MOST SOUTHERLY CORNER OF SAID PARCEL OF LAND, NORTH 5 DEGREES 44' 28" WEST 104.32 FEET TO A POINT IN A LINE PARALLEL WITH THE NORTHEASTERLY LINE OF SAID STATE HIGHWAY, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE NORTHWESTERLY, PARALLEL WITH THE SAID NORTHEASTERLY AND NORTHERLY LINE OF SAID STATE HIGHWAY, AND 250 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 70 DEGREES 05' 30" WEST 376.41 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT, NORTHWESTERLY ALONG A CURVE CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 700.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 194.87 FEET; NORTH 54 DEGREES 08' 30" WEST, TANGENT TO SAID CURVE, 387.05 FEET TO THE BEGINNING OF A CURVE TO THE LEFT, NORTHWESTERLY ALONG A CURVE



CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1300.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 267.55 FEET; NORTH 65 DEGREES 56' WEST, TANGENT TO THE SAID CURVE, 667.15 FEET TO THE BEGINNING OF A CURVE TO THE LEFT, WESTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1300.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 394.04 FEET; THENCE NORTH 83 DEGREES 18' WEST, TANGENT TO SAID CURVE, 646.66 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT, WESTERLY ALONG A CURVE CONCAVE TO THE NORTH AND HAVING A RADIUS OF 700.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 2.34 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, A RADIAL LINE FROM SAID POINT BEARS NORTH 6 DEGREES 53' 29" EAST; THENCE NORTHERLY, NORTHWESTERLY AND SOUTHWESTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 1 DEGREE 38' 25" EAST 1144.77 FEET; NORTH 13 DEGREES 35' 40" WEST 729.87 FEET; NORTH 27 DEGREES 46' WEST 400.76 FEET; NORTH 45 DEGREES 20' 28" WEST 482.58 FEET; SOUTH 74 DEGREES 07' WEST 449.53 FEET; SOUTH 51 DEGREES 48' WEST 237.37 FEET; SOUTH 20 DEGREES 06' 15" WEST 319.00 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID NORTHWESTERLY LINE OF TRACT NO. 772, AND 250 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE SOUTHWESTERLY AND WESTERLY, PARALLEL WITH NORTHWESTERLY AND NORTHERLY LINE OF SAID TRACT NO. 772, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: SOUTH 29 DEGREES 06' WEST 258.16 FEET; SOUTH 42 DEGREES 06' WEST 131.37 FEET; SOUTH 72 DEGREES 45' WEST 158.65 FEET; NORTH 88 DEGREES 25' WEST 16.51 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE WESTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 66 DEGREES 42' 20" WEST 620.94 FEET; NORTH 78 DEGREES 02' WEST 504.69 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID NORTHERLY LINE OF BLOCK C, EL MORO TRACT, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE WESTERLY, PARALLEL WITH THE SAID NORTHERLY LINE OF BLOCK C, EL MORO TRACT, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 60 DEGREES 52' 34" WEST 120.39 FEET, AND NORTH 64 DEGREES 06' 50" WEST 216.59 FEET TO A POINT IN THE EASTERLY LINE OF SAID EASEMENT 300.00 FEET WIDE, FOR PURPOSE OF MAINTAINING THE SANTA ANA RIVER CHANNEL; THENCE SOUTH 13 DEGREES 25' WEST ALONG SAID EASTERLY LINE OF THE RIVER CHANNEL, 256.04 FEET TO THE POINT OF BEGINNING.



EXCEPTING THEREFROM ANY PORTION THEREOF LYING GENERALLY SOUTHERLY OF THE AGREED BOUNDARY LINE DESCRIBED IN EXHIBIT "E" ATTACHED TO THAT CERTAIN SETTLEMENT AND BOUNDARY LINE AGREEMENT, STATE AND CITY DEEDS AND CORPORATION DEED REGARDING CERTAIN LANDS IN THE COUNTY OF ORANGE, CALIFORNIA, BLA. NO. 260 RECORDED AUGUST 30, 1989 AS INSTRUMENT NO. 89-466419 OF SAID OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM, THE PORTION OR PORTIONS OF SAID LAND WHICH IS OR ARE NOT INCLUDED EITHER WITHIN THE EXTERIOR BOUNDARIES OF THE RANCHO SANTIAGO DE SANTA ANA, THE PATENT FOR WHICH WAS RECORDED JUNE 28, 1884 IN BOOK 3, PAGE 387 OF PATENTS, RECORDS OF LOS ANGELES COUNTY, CALIFORNIA, AND AS ESTABLISHED BY SAID HEREINABOVE DESCRIBED SETTLEMENT AND BOUNDARY LINE AGREEMENT, OR WITHIN THE EXTERIOR BOUNDARIES OF LOT 1 OF SECTION 19, TOWNSHIP 6 SOUTH, RANGE 10 WEST; LOT 1 OF SECTION 20, TOWNSHIP 6 SOUTH, RANGE 10 WEST; AND LOT 1 OF SECTION 29, TOWNSHIP 6 SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN, THE PATENT FOR WHICH LOTS WAS RECORDED APRIL 19, 1893 IN BOOK 1, PAGE 66 OF PATENTS, RECORDS OF ORANGE COUNTY, CALIFORNIA, OR WITHIN ACCRETIONS OF SAID RANCHO OR SAID LOTS.

ALSO EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN THE PARCEL OF LAND DESCRIBED AS PARCEL D3-122.1 IN THE FINAL ORDER OF CONDEMNATION RENDERED JANUARY 26, 1962 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF ORANGE, IN THE ACTION ENTITLED "ORANGE COUNTY FLOOD CONTROL DISTRICT VS. CITY OF NEWPORT BEACH AND OTHERS" (CASE NO. 77399), A CERTIFIED COPY OF WHICH FINAL ORDER WAS RECORDED JANUARY 30, 1962 IN BOOK 5993, PAGE 441 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THE PORTION INCLUDED WITHIN THE LAND DESCRIBED IN DEED TO THE STATE OF CALIFORNIA RECORDED FEBRUARY 14, 1966 IN BOOK 7839, PAGE 739 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM THAT PORTION DESCRIBED AS PARCEL 73170-1 IN THAT CERTAIN FINAL DECREE OF CONDEMNATION, SUPERIOR COURT CASE NO. 667539, A CERTIFIED COPY OF WHICH WAS RECORDED JANUARY 14, 1994 AS INSTRUMENT NO. 94-0032786 OF SAID OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM THOSE PORTIONS DESCRIBED AS PARCELS 100, 103, 106 AND 108 IN THE NOTICE OF LIS PENDENS, UNITED STATES DISTRICT COURT FOR THE CENTRAL JUSTICE OF CALIFORNIA CASE NO. CV 91-3991IH, A CERTIFIED OF WHICH WAS RECORDED AUGUST 23, 1991 AS INSTRUMENT NO. 91-455338 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY, WHICH INCLUDES A DECLARATION OF TAKING.



ALSO EXCEPTING THEREFROM, AN UNDIVIDED 30% INTEREST IN AND TO THE TITLE AND EXCLUSIVE RIGHT TO ALL OF THE MINERALS, INCLUDING, BUT NOT LIMITED TO, ALL PETROLEUM, OIL, NATURAL GAS, AND OTHER HYDROCARBON SUBSTANCES AND PRODUCTS DERIVED FROM SAID LAND LOCATED BELOW A DEPTH OF 6200 FEET, BUT WITHOUT THE RIGHT TO USE THE SURFACE OF SAID LAND DOWN TO A DEPTH OF 500 FEET, AS RESERVED IN THE DEED FROM HANCOCK BANNING JR. AND OTHERS, DATED AUGUST 1, 1958, RECORDED AUGUST 29, 1958 IN BOOK 4400, PAGE 532 OF OFFICIAL RECORDS, ORANGE COUNTY, AND RE-RECORDED OCTOBER 6, 1958 IN BOOK 4437, PAGE 228 OF OFFICIAL RECORDS, ORANGE COUNTY, AS AMENDED BY THE DEED DATED NOVEMBER 29, 1961 FROM HANCOCK BANNING JR. AND OTHERS, RECORDED DECEMBER 27, 1961 IN BOOK 5957, PAGE 665 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, AN UNDIVIDED 70% INTEREST IN AND TO THE TITLE AND EXCLUSIVE RIGHT TO ALL OF THE MINERALS, INCLUDING, BUT NOT LIMITED TO, ALL PETROLEUM, OIL, NATURAL GAS, AND OTHER HYDROCARBON SUBSTANCES AND PRODUCTS DERIVED THEREFROM, IN OR UNDER, OR PRODUCIBLE FROM SAID LAND AT ANY DEPTH OR DEPTHS 6200 FEET OR MORE BELOW THE SURFACE OF SAID LAND, TOGETHER WITH THE FREE AND UNLIMITED RIGHT TO MINE, DRILL, BORE, OPERATE AND REMOVE FROM BENEATH THE SURFACE OF SAID LAND, AT ANY LEVEL OR LEVELS 500 FEET OR MORE BELOW THE SURFACE OF SAID LAND, FOR THE PURPOSE OF DEVELOPMENT OR REMOVAL OF SAID RESERVED SUBSTANCES, AS RESERVED IN THE DEED AND AGREEMENT FROM HANCOCK BANNING JR. AND OTHERS, RECORDED DECEMBER 27, 1961 IN BOOK 5957, PAGE 665 OF OFFICIAL RECORDS, ORANGE COUNTY, SUBJECT TO CERTAIN LIMITATIONS AND CONTINGENCIES CONTAINED IN SAID DEED.

#### PARCEL 4:

THOSE PORTIONS OF LOTS C AND D OF THE BANNING TRACT, AS SHOWN ON THE MAP ATTACHED TO THE REPORT OF THE REFEREES FILED APRIL 14, 1890 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, BEING ALSO A PORTION OF LOT 1 OF TRACT NO. 463, AS SHOWN ON A MAP RECORDED IN BOOK 32, PAGES 2 AND 3 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, AND A PORTION OF TRACT NO. 2250, AS SHOWN ON A MAP RECORDED IN BOOK 104, PAGES 6 AND 7 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY CORNER OF TRACT NO. 15, AS SHOWN ON A MAP RECORDED IN BOOK 9, PAGE 19 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, WHICH CORNER IS IN THE CENTER LINE OF SUPERIOR AVENUE, FORMERLY NEWPORT AVENUE, AS SAID NEWPORT AVENUE IS SHOWN ON SAID MAP OF TRACT NO. 15, AND ALSO IN THE SOUTHEASTERLY



LINE OF SAID LOT D IN THE BANNING TRACT; THENCE NORTH 29 DEGREES 24' 45" WEST ALONG THE NORTHEASTERLY LINE OF SAID TRACT NO. 15, AND ALONG THE SOUTHWESTERLY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT, AS SHOWN ON A MAP RECORDED IN BOOK 8, PAGE 61 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, 3691.50 FEET TO A POINT IN THE EASTERLY LINE OF WHITTIER AVENUE, 60 FEET IN WIDTH, AS SHOWN ON SAID MAP OF FIRST ADDITION TO NEWPORT MESA TRACT; THENCE SOUTH 0 DEGREES 36' 01" EAST ALONG THE SOUTHERLY PROLONGATION OF THE SAID EASTERLY LINE OF WHITTIER AVENUE, SAID PROLONGATION BEING THE EASTERLY LINE OF PARCEL 1 AS DESCRIBED IN DEED EXECUTED BY HANCOCK BANNING JR. AND OTHERS, DATED AUGUST 1, 1958, RECORDED AUGUST 29, 1958 IN BOOK 4400, PAGE 532 OF OFFICIAL RECORDS, ORANGE COUNTY, AND RE-RECORDED OCTOBER 6, 1958 IN BOOK 4437, PAGE 228 OF OFFICIAL RECORDS, ORANGE COUNTY, 3465.51 FEET, MORE OR LESS, TO AN INTERSECTION WITH A LINE ON A CURVE CONCAVE TO THE SOUTHWEST, 250.00 FEET NORTHEASTERLY OF AND PARALLEL WITH THE NORTHEASTERLY LINE OF THE 100-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY, AS DESCRIBED IN DEED RECORDED APRIL 20, 1936 IN BOOK 822, PAGE 48 OF OFFICIAL RECORDS, ORANGE COUNTY, A RADIAL LINE FROM SAID POINT OF INTERSECTION BEARS SOUTH 33 DEGREES 40' 54" WEST; THENCE SOUTHEASTERLY, PARALLEL WITH THE NORTHEASTERLY LINE OF SAID STATE HIGHWAY, AND 250,00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 1300.00 FEET, 49.39 FEET; THENCE SOUTH 54 DEGREES 08' 30" EAST, TANGENT TO SAID CURVE, 387.05 FEET TO BEGINNING OF CURVE TO THE LEFT; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTHEAST, HAVING A RADIUS OF 700.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, 194.87 FEET; THENCE SOUTH 70 DEGREES 05' 30" EAST, TANGENT TO SAID CURVE, 376.41 FEET TO A POINT IN THE WESTERLY LINE OF THAT CERTAIN 2.7827-ACRE PARCEL OF LAND AS DESCRIBED IN DEED FROM THE FARMERS AND MERCHANTS NATIONAL BANK OF LOS ANGELES, TRUSTEE FOR ANNE O. BANNING AND OTHERS, TO A. E. S. CHAFFEY AND OTHERS, RECORDED MARCH 14, 1958 IN BOOK 4228, PAGE 191 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE ALONG THE WESTERLY, NORTHERLY AND NORTHEASTERLY BOUNDARY LINE OF SAID 2.7827-ACRE PARCEL, THE FOLLOWING COURSES AND DISTANCES: NORTH 5 DEGREES 44' 28" WEST 160.43 FEET TO THE MOST WESTERLY CORNER OF SAID 2.7827-ACRE PARCEL, FROM WHICH A RADIAL LINE BEARS NORTH 20 DEGREES 20' 15" WEST; THENCE NORTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 450.00 FEET, 235.10 FEET; THENCE NORTH 39 DEGREES 43' 45" EAST, TANGENT TO THE LAST MENTIONED CURVE, 75.42 FEET TO THE MOST NORTHERLY CORNER OF SAID 2.7827-ACRE PARCEL, FROM WHICH A RADIAL LINE BEARS SOUTH 29 DEGREES 30' 33" WEST; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 730.00 FEET, A DISTANCE OF 130.21 FEET; THENCE SOUTH 50 DEGREES 16' 15" EAST, TANGENT TO THE LAST MENTIONED CURVE, 122.00 FEET TO A POINT IN THE NORTHWESTERLY LINE OF SUPERIOR



AVENUE, 60 FEET IN WIDTH, FORMERLY NEWPORT AVENUE, AS SAID NEWPORT AVENUE IS SHOWN ON SAID MAP OF TRACT NO. 15, WHICH POINT BEARS NORTH 39 DEGREES 43' 45" EAST 35.24 FEET FROM THE MOST EASTERLY CORNER OF LOT 1 IN BLOCK 1 OF SAID TRACT NO. 15; THENCE SOUTH 50 DEGREES 16' 15" EAST 30.00 FEET TO THE CENTER LINE OF SAID SUPERIOR AVENUE; THENCE ALONG THE CENTER LINE OF SAID SUPERIOR AVENUE, NORTH 39 DEGREES 43' 45" EAST 705.55 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN THE FOLLOWING DESCRIBED LAND: THAT PORTION OF BLOCK C OF THE BANNING TRACT, AS SHOWN ON A MAP ATTACHED TO THE REPORT OF THE REFERES FILED APRIL 14, 1890 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, AND THAT PORTION OF LOTS 1111 AND 1112 AND PORTION OF SIXTEENTH STREET AND WHITTIER AVENUE ADJOINING, AS SHOWN ON THE MAP OF NEWPORT MESA TRACT RECORDED IN BOOK 5, PAGE 1 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF SAID SIXTEENTH STREET WITH THE SOUTHWESTERLY BOUNDARY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT, AS SHOWN ON A MAP RECORDED IN BOOK 8, PAGE 61 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH 89 DEGREES 21' 50" WEST 16.50 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 500.00 FEET; THENCE WESTERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 28 DEGREES 48' 33", A DISTANCE OF 251.41 FEET TO A LINE TANGENT; THENCE SOUTH 60 DEGREES 33' 17" WEST ALONG SAID LINE TANGENT, A DISTANCE OF 404.60 FEET; THENCE NORTH 29 DEGREES 26' 43" WEST 804.50 FEET; THENCE NORTH 60 DEGREES 33' 17" EAST 300.00 FEET; THENCE SOUTH 88 DEGREES 48' 26" EAST 316.57 FEET TO A POINT IN A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 50.00 FEET, A RADIAL LINE FROM SAID POINT BEARS NORTH 89 DEGREES 21' 50" EAST; THENCE NORTHERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 44 DEGREES 24' 55", A DISTANCE OF 38.76 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 90.00 FEET; THENCE NORTHERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 44 DEGREES 24' 55", A DISTANCE OF 69.77 FEET TO A LINE TANGENT; THENCE NORTH 0 DEGREES 38' 10" WEST ALONG SAID LINE TANGENT, A DISTANCE OF 11.11 FEET TO THE SAID SOUTHWESTERLY BOUNDARY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT; THENCE SOUTH 29 DEGREES 26' 43" EAST ALONG SAID SOUTHWESTERLY BOUNDARY LINE, A DISTANCE OF 789.32 FEET TO THE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN THE FOLLOWING: THAT PORTION OF LOT 1 AND ALL OF LOT 2 OF TRACT NO. 463 AS SHOWN ON A MAP RECORDED IN BOOK 32, PAGES 2 AND 3 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:



BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF FIFTEENTH STREET WITH THE CENTER LINE OF MONROVIA AVENUE, AS SHOWN ON A MAP RECORDED IN BOOK 65, PAGES 31 THROUGH 36 INCLUSIVE OF RECORD OF SURVEYS IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH 0 DEGREES 37' 24" EAST, ALONG THE CENTER LINE OF SAID MONROVIA AVENUE, 440.93 FEET TO THE NORTHEASTERLY LINE OF SAID TRACT NO. 463; THENCE NORTH 29 DEGREES 26' 43" WEST ALONG SAID NORTHEASTERLY LINE, 272.61 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 29 DEGREES 26' 43" EAST ALONG SAID NORTHEASTERLY LINE, 1288.43 FEET TO THE CENTER LINE OF SUPERIOR AVENUE; THENCE SOUTH 39 DEGREES 41' 15" WEST, ALONG SAID CENTER LINE OF SUPERIOR AVENUE, 705.55 FEET; THENCE NORTH 50 DEGREES 18' 45" WEST, ALONG THE NORTHEASTERLY LINE OF THE LAND DESCRIBED IN A DEED TO A. E. S. CHAFFEY AND OTHERS, RECORDED IN BOOK 4228, PAGE 191 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY, AND THE SOUTHEASTERLY PROLONGATION THEREOF, 152.00 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 730.00 FEET; THENCE NORTHWESTERLY 130.21 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 10 DEGREES 13' 12" TO A POINT IN THE NORTHEASTERLY LINE OF PARCEL 1, AS DESCRIBED IN A DEED RECORDED IN BOOK 7839, PAGE 739 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY; THENCE ALONG SAID NORTHEASTERLY LINE, NORTH 63 DEGREES 11' 16" WEST 1160.70 FEET TO A POINT IN A LINE PARALLEL WITH AND DISTANT 100.00 FEET EASTERLY, AS MEASURED AT RIGHT ANGLES FROM THE WESTERLY LINE OF THE LAND DESCRIBED IN ANNEXATION NO. 54 TO THE CITY OF NEWPORT BEACH, DECEMBER 30, 1963; THENCE ALONG SAID PARALLEL LINE, NORTH 0 DEGREES 38' 10" WEST 734.93 FEET TO A LINE THAT BEARS SOUTH 77 DEGREES 45' 00" WEST FROM THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID PARALLEL LINE, NORTH 77 DEGREES 45' 00" EAST 1110.58 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION.

ALSO EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN THE LAND DESCRIBED IN THE DEED TO THE STATE OF CALIFORNIA, RECORDED FEBRUARY 14, 1966 IN BOOK 7839, PAGE 739 OF OFFICIAL RECORDS, ORANGE COUNTY.

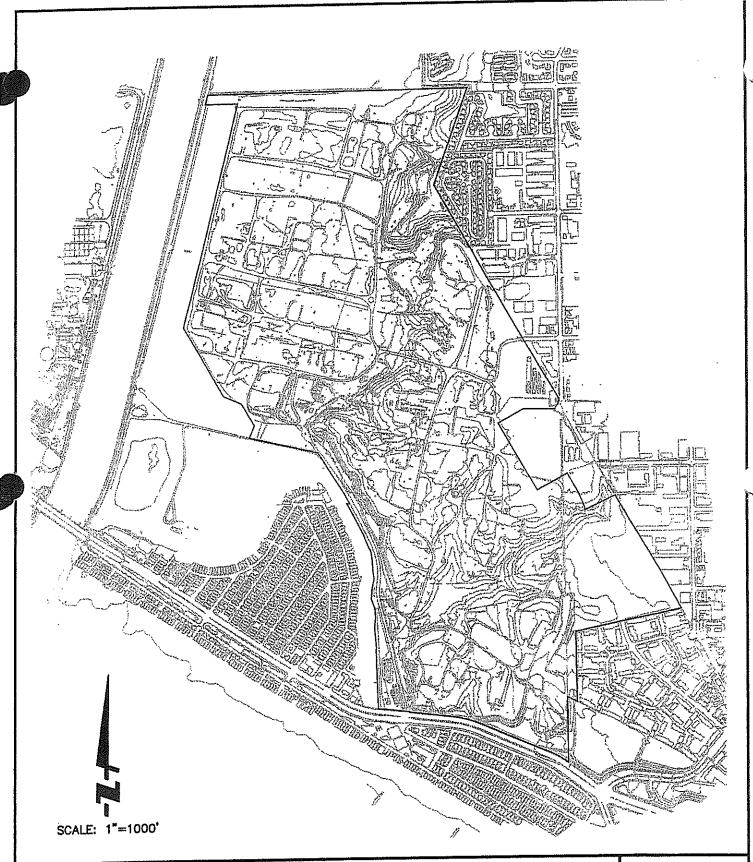
ALSO EXCEPTING THEREFROM, ANY PORTION INCLUDED WITHIN WHITTIER AVENUE AND SIXTEENTH STREET, AS SHOWN ON THE MAP OF NEWPORT MESA TRACT RECORDED IN BOOK 5, PAGE 1 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

ALSO EXCEPTING THEREFROM THAT PORTION INCLUDED WITHIN THE LAND DESCRIBED IN THE DEED TO THE CITY OF NEWPORT BEACH RECORDED JUNE 6, 1995 AS INSTRUMENT NO. 95-0237652 OF OFFICIAL RECORDS.



ALSO EXCEPTING THEREFROM, THE TITLE AND EXCLUSIVE RIGHT TO ALL OF THE MINERALS, INCLUDING, BUT NOT LIMITED TO, ALL PETROLEUM, OIL, NATURAL GAS AND OTHER HYDROCARBON SUBSTANCES AND PRODUCTS DERIVED THEREFROM, IN OR UNDER, OR PRODUCIBLE FROM SAID LAND, AT ANY DEPTH OR DEPTHS 6200 FEET OR MORE BELOW THE SURFACE OF SAID LAND, TOGETHER WITH THE FREE AND UNLIMITED RIGHT TO MINE, DRILL, BORE, OPERATE AND REMOVE FROM BENEATH THE SURFACE OF SAID LAND AT ANY LEVEL OR LEVELS 500 FEET OR MORE BELOW THE SURFACE OF SAID LAND, FOR THE PURPOSE OF DEVELOPMENT OR REMOVAL OF SAID RESERVED SUBSTANCES, AS RESERVED IN THE DEED AND AGREEMENT FROM HANCOCK BANNING JR. AND OTHERS, RECORDED DECEMBER 27, 1961 IN BOOK 5957, PAGE 665 OF OFFICIAL RECORDS, ORANGE COUNTY, SUBJECT TO CERTAIN LIMITATIONS AND CONTINGENCIES CONTAINED IN SAID DEED.

ALSO EXCEPTING THEREFROM ALL THE MINERALS, INCLUDING WITHOUT LIMITATION ALL OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN, ON OR UNDER THE HEREINAFTER DESCRIBED LAND LYING 500 VERTICAL FEET BELOW THE SURFACE OF SAID LAND WAS QUITCLAIM TO ARMSTRONG PETROLEUM CORPORATION, A CALIFORNIA CORPORATION BY AN INSTRUMENT RECORDED MAY 5, 1997 AS INSTRUMENT NO. 19970206789 OF OFFICIAL RECORDS.





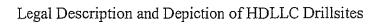
16795 Von Korman, Suite 100, Irvine, California 92606 tel 949.474.1960 o fax 949.474.5315 o www.fuscae.com

## EXHIBIT PA

NEWPORT/BANNING RANCH NEWPORT BEACH, COUNTY OF ORANGE STATE OF CALIFORNIA DATE: 11/11/05 SCALE: 1\*=1000 JN: 743.0101

1 OF 1

### Exhibit B



See attached.

## EXHIBIT B PCH DRILL SITE LEGAL DESCRIPTION

A PORTION OF LOT "D", OF THE BANNING TRACT, AS SHOWN ON A MAP OF SAID TRACT FILED IN THE CASE OF HANCOCK BANNING AND OTHERS VS. MARY H. BANNING, FOR PARTITION, BEING CASE NO. 6385 UPON THE REGISTER OF ACTIONS OF THE SUPERIOR COURT OF LOS ANGELES COUNTY, CALIFORNIA, AND A PORTION OF RANCHO SANTIAGO DE SANTA ANA, DESCRIBED IN BOOK 3, PAGE 387 OF PATENTS, RECORDS OF LOS ANGELES COUNTY, CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHERLY TERMINUS OF THAT CERTAIN COURSE IN THE EXISTING NEWPORT BEACH CITY BOUNDARY SHOWN AS "SOUTH 4°31'33" EAST 439.65 FEET" ON A MAP FILED IN BOOK 65, PAGES 31 THROUGH 36 OF RECORDS OF SURVEYS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, SAID POINT ALSO BEING ON THE NORTHWESTERLY LINE OF PARCEL "A" AS DESCRIBED IN QUITCLAIM DEED TO THE CITY OF NEWPORT BEACH RECORDED APRIL 12, 1983 AS INSTRUMENT NO. 83-151675 OF OFFICIAL RECORDS OF ORANGE COUNTY; THENCE ALONG SAID NORTHWESTERLY LINE NORTH 77°00'03" EAST 17.10 FEET TO A POINT ON THE NORTHERLY LINE OF THAT CANAL OR BODY OF WATER SOMETIMES COMMONLY KNOWN AS "OXBOW LOOP", SAID OXBOW LOOP BEING A FORMER BED OF THE SANTA ANA RIVER, AS SAID NORTHERLY LINE IS DESCRIBED IN THAT INSTRUMENT TITLED "SETTLEMENT AND BOUNDARY LINE AGREEMENT, STATE AND CITY DEEDS AND CORPORATION DEED REGARDING CERTAIN LANDS IN THE COUNTY OF ORANGE, CALIFORNIA, BLA NO. 260", BETWEEN THE STATE OF CALIFORNIA AND CITY OF NEWPORT BEACH (AS TRUSTEE AND INDIVIDUALLY) AS ONE PARTY, AND MOBIL OIL CORPORATION AND RANCHO SANTIAGO PARTNERSHIP AS THE OTHER PARTY, DATED 28 FEBRUARY 1989 AND RECORDED 30 AUGUST 1989 AS DOCUMENT NO. 89-466419, OF OFFICIAL RECORDS OF ORANGE COUNTY SAID POINT ALSO BEING THE TRUE POINT OF BEGINNING FOR THIS DESCRIPTION; THENCE ALONG SAID AGREEMENT LINE SOUTH 5°07'00" EAST 3.34 FEET, SOUTH 2°00'00" WEST 60.00 FEET AND SOUTH 1°55'00" EAST 588.87 FEET TO A POINT IN THE NORTHERLY LINE OF PARCEL 73170-1 IN THAT CERTAIN FINAL DECREE OF CONDEMNATION, SUPERIOR

COURT CASE NO. 667539, A CERTIFIED COPY OF WHICH WAS RECORDED JANUARY 14, 1994 AS INSTRUMENT NO. 94-0032786 OF OFFICIAL RECORDS OF ORANGE COUNTY; THENCE ALONG SAID NORTHERLY LINE SOUTH 83°25'55" EAST 322.37 FEET, SOUTH 6°42'45" WEST 5.00 FEET AND SOUTH 83°17'15" EAST 54.65 FEET TO THE INTERSECTION WITH THE NORTHEASTERLY LINE OF SAID PARCEL "A"; THENCE ALONG SAID NORTHEASTERLY LINE AND ITS NORTHWESTERLY PROLONGATION NORTH 12°59'57" WEST 770.26 FEET TO THE INTERSECTION WITH THE NORTHEASTERLY PROLONGATION OF SAID NORTHWESTERLY LINE OF PARCEL "A"; THENCE ALONG SAID PROLONGATION AND NORTHWESTERLY LINE OF PARCEL "A"; SOUTH 77°00'03" WEST 224.34 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINING 208,290 SQUARE FEET, 4.782 ACRES MORE OR LESS.

AS SHOWN ON THE PLAT ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

DATED THIS That DAY OF forembor, 2005.

JERRY USELTON, L.S. 5347, EXP. 12/31/05

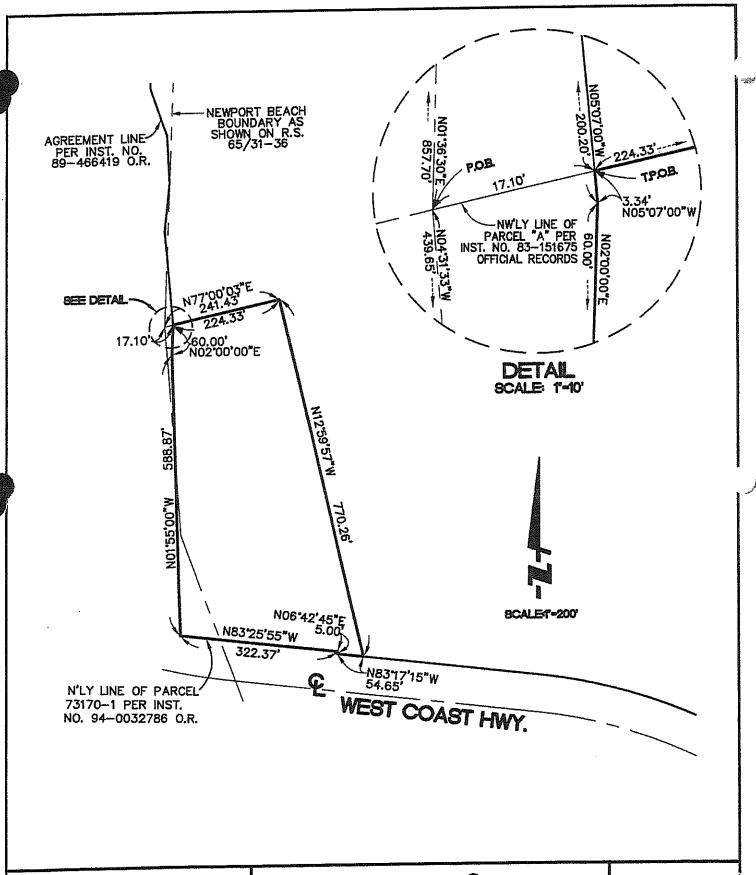




EXHIBIT B

PCH DRILLSITE

POR. LOT D, BANNING TRACT

POR. LOT D, BANNING TRACT
UNINCORPORATED TERRITORY OF ORANGE,
CALIFORNIA

DATE: 09/15/05 SCALE: 1"=200' JN: 472.0201

1 OF 1

# EXHIBIT B CONTINUED TANK FARM DRILL SITE LEGAL DESCRIPTION

A PORTION OF LOT "B" OF THE BANNING TRACT, AS SHOWN ON A MAP OF SAID TRACT FILED IN THE CASE OF HANCOCK BANNING AND OTHERS VS. MARY H. BANNING, FOR PARTITION, BEING CASE NO. 6385 UPON THE REGISTER OF ACTIONS OF THE SUPERIOR COURT OF LOS ANGELES COUNTY, CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEASTERLY TERMINUS OF A COURSE IN THE CENTERLINE OF A 30.00 FOOT EASEMENT FOR SEWER AND ROAD PURPOSES PER SUPERIOR COURT CASE NO. 24763 SHOWN AS "NORTH 76°32'23" WEST 1596.18 FEET" ON A MAP FILED IN BOOK 65, PAGES 31 THROUGH 36 OF RECORDS OF SURVEYS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID ORANGE COUNTY;

THE OFFICE OF THE COUNTY RECORDER OF SAID ORANGE COUNTY; THENCE NORTH 28°40'56" WEST 325.82 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 82°37'16" EAST 7.00 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 370.03 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 66°04'50" WEST; THENCE NORTHEASTERLY 136.22 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 21°05'35" TO A POINT ON A NON-TANGENT CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 214.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 48°19'12" WEST; THENCE NORTHEASTERLY 58.86 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 15°45'35" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 238.00 FEET, A RADIAL LINE TO SAID POINT BEARS SOUTH 32°33'37" EAST; THENCE NORTHEASTERLY 33.64 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 08°05'52" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 60.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 40°39'29" WEST; THENCE EASTERLY 54.14 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 51°41'45" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 53.00 FEET, A RADIAL LINE TO SAID POINT BEARS SOUTH 11°02'16" WEST; THENCE EASTERLY 28.31 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 30°36'35" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 452.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 19°34'19" WEST; THENCE EASTERLY 169.39 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 21°28'18" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 225.00 FEET, A RADIAL LINE TO SAID POINT BEARS SOUTH 01°53'59" WEST; THENCE EASTERLY 48.49 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 12°20'51" TO THE BEGINNING OF A COMPOUND CURVE, HAVING A RADIUS OF 34.00 FEET, A RADIAL LINE TO SAID POINT BEARS SOUTH 10°26'52" EAST; THENCE NORTHEASTERLY 37.91 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 63°53'17" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 190.00 FEET A RADIAL LINE TO SAID POINT BEARS NORTH 74°20'09" WEST; THENCE NORTHEASTERLY 100.42 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 30°16'57";

THENCE NORTH 45°56'48" EAST 203.87 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 720.00 FEET; THENCE NORTHEASTERLY 68.25 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 05°25'51" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 106.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 49°29'03" WEST; THENCE



NORTHEASTERLY 49.14 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 26°33'32";

THENCE NORTH 67°04'29" EAST 61.05 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 191.00 FEET; THENCE NORTHEASTERLY 173.36 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 52°00'11";

THENCE NORTH 15°04'18" EAST 50.37 FEET;

THENCE NORTH 75°09'09" WEST 254.42 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 475.00 FEET A RADIAL LINE TO SAID POINT BEARS NORTH 87°35'07" EAST; THENCE SOUTHERLY 159.68 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 19°15'41" TO THE BEGINNING OF A COMPOUND CURVE, HAVING A RADIUS OF 211.00 FEET, A RADIAL LINE TO SAID POINT BEARS SOUTH 73°09'12" EAST; THENCE SOUTHWESTERLY 261.71 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 71°03'58" TO THE BEGINNING OF A COMPOUND CURVE, HAVING A RADIUS OF 615.00 FEET, A RADIAL LINE TO SAID POINT BEARS SOUTH 02°05'14" EAST; THENCE WESTERLY 258.77 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 24°06'29";

THENCE NORTH 67°58'45" WEST 85.44 FEET;

THENCE NORTH 14°50'32" EAST 165.94 FEET;

THENCE NORTH 75°09'09" WEST 204.52 FEET;

THENCE SOUTH 15°18'26" WEST 640.52 FEET;

THENCE SOUTH 34°59'06" EAST 199.12 FEET;

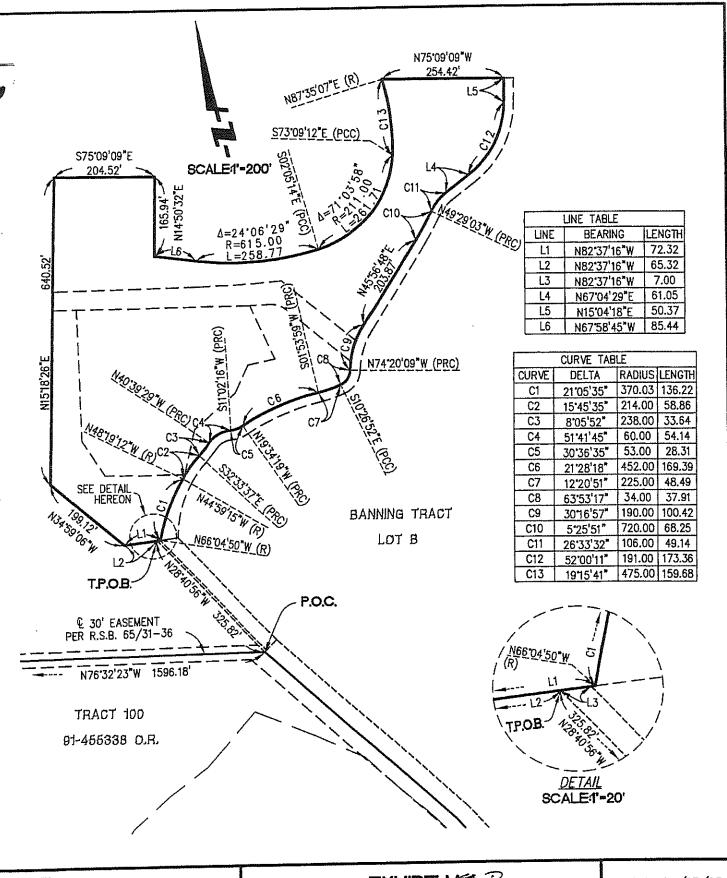
THENCE SOUTH 82°37'16" EAST 65.32 FEET TO THE POINT OF BEGINNING.

CONTAINING 374,430 SQUARE FEET, 8.596 ACRES MORE OR LESS.

AS SHOWN ON THE PLAT ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

DATED THIS That OF Jovenhar, 2005.

JERRY L. USELTON, L.S. 5347, EXP. 12/31/05





16795 Von Karman, Suite 100, Irvine, California 92606

tel 949.474.1960 o fax 949.474.5315 o www.fuscoa.com

EXHIBIT F

TANK FARM DRILLSITE

POR. LOT B, BANNING TRACT

UNINCORPORATED TERRITORY OF ORANGE,

CALIFORNIA

DATE: 09/15/05 SCALE: 1"=200' JN: 472.0201 1 OF 1

### Exhibit C

Legal Description and Depiction of Drainage Corridor

See attached.

# EXHIBIT C TANK FARM DRAINAGE EASEMENT LEGAL DESCRIPTION

THAT PORTION OF LOT "B" OF THE BANNING TRACT, AS SHOWN ON A MAP OF SAID TRACT FILED IN THE CASE OF HANCOCK BANNING AND OTHERS VS. MARY H. BANNING, FOR PARTITION, BEING CASE NO. 6385 UPON THE REGISTER OF ACTIONS OF THE SUPERIOR COURT OF LOS ANGELES COUNTY, CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEASTERLY TERMINUS OF A COURSE IN THE CENTERLINE OF A 30.00 FOOT EASEMENT FOR SEWER AND ROAD PURPOSES PER SUPERIOR COURT CASE NO. 24763 SHOWN AS "NORTH 76°32'23" WEST 1596.18 FEET" ON A MAP FILED IN BOOK 65, PAGES 31 THROUGH 36 OF RECORDS OF SURVEYS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID ORANGE COUNTY;

THENCE NORTH 28°40'56" WEST 325.82 FEET;

THENCE SOUTH 82°37'16" EAST 7.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 370.03 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 66°04'50" WEST; THENCE NORTHEASTERLY 136.22 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 21°05'35" TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 214.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 48°19'12" WEST; THENCE NORTHEASTERLY 58.86 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 15°45'35" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 238.00 FEET, A RADIAL LINE TO SAID POINT BEARS SOUTH 32°33'37" EAST; THENCE NORTHEASTERLY 33.64 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 08°05'52" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 60.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 40°39'29" WEST; THENCE EASTERLY 54.14 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 51°41'44" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 53.00 FEET, A RADIAL LINE TO SAID POINT BEARS SOUTH 11°02'16" WEST; THENCE EASTERLY 28.31 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 30°36'35" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 452.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 19°34'19" WEST; THENCE EASTERLY 169.39 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 21°28'18" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 225.00 FEET, A RADIAL LINE TO SAID POINT BEARS SOUTH 01°53'59" WEST; THENCE EASTERLY 48.49 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 12°20'51" TO THE BEGINNING OF A COMPOUND CURVE, HAVING A RADIUS OF 34.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 10°26'52" WEST; THENCE NORTHEASTERLY 37.91 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 63°53'17" TO THE BEGINNING OF A REVERSE CURVE, HAVING A RADIUS OF 190.00 FEET, A RADIAL LINE TO SAID POINT BEARS NORTH 74°20'09" WEST; THENCE NORTHEASTERLY 18.48 FEET THROUGH A CENTRAL ANGLE OF 5°34'21" TO THE TRUE POINT OF BEGINNING, A RADIAL LINE TO SAID POINT BEARS NORTH 68°45'48" WEST; THENCE CONTINUING ALONG SAID CURVE 44.83 FEET THROUGH A CENTRAL ANGLE OF 13°31'05" TO A POINT OF NON-TANGENCY, A RADIAL LINE TO SAID POINT BEARS NORTH 55°14'43" WEST; THENCE NORTH 35°26'02" WEST 198.58 FEET TO A POINT ON A NON-TANGENT

CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 2144.80 FEET, A RADIAL

LINE TO SAID POINT BEARS SOUTH 08°53'24" WEST; THENCE WESTERLY 172.63 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 04°36'42";

THENCE NORTH 76°29'54" WEST 298.22;

THENCE SOUTH 15°18'26" EAST 39.20 FEET;

THENCE SOUTH 75°58'09" EAST 406.74 FEET;

THENCE SOUTH 78°30'22" EAST 38.67 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 52.00 FEET; THENCE SOUTHEASTERLY 39.09 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 43°04'20";

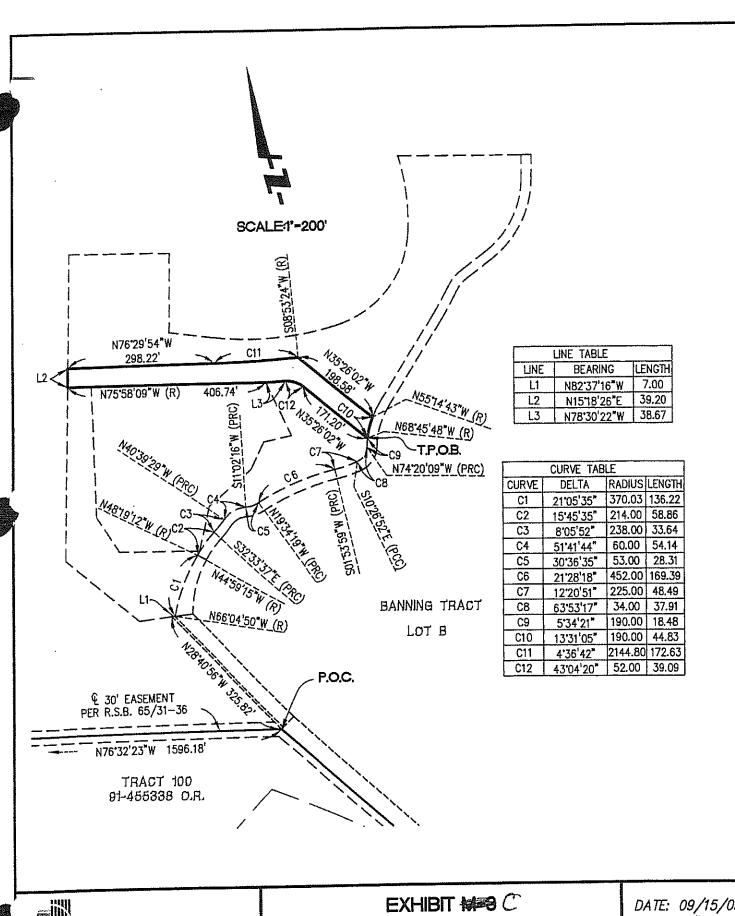
THENCE SOUTH 35°26'02" EAST 171.20 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINING 27,472 SQUARE FEET, 0.631 ACRES MORE OR LESS.

AS SHOWN ON THE PLAT ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

DATED THIS DAY OF / waher, 2005.

TERRY L. USELTON, L.S. 5347, EXP. 12/31/05





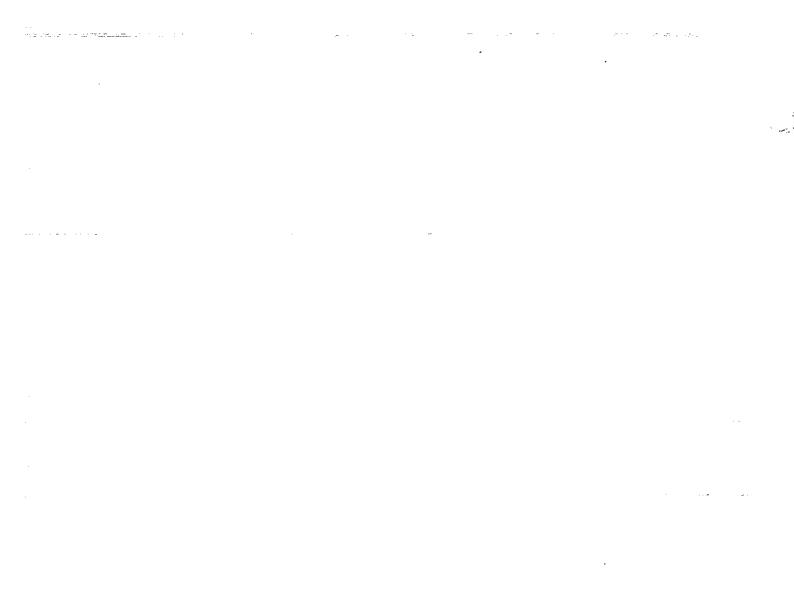
TANK FARM DRAINAGE EASEMENT POR. LOT B. BANNING TRACT UNINCORPORATED TERRITORY OF ORANGE,

**CALIFORNIA** 

DATE: 09/15/05 SCALE: 1"=200' JN: 472.0201

1 OF 1

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RECORDING REQUESTED BY THRST AMERICAN TITLE COMPANY SUBDIVISION DEPARTMENT

### RECORDING REQUESTED BY TAND WHEN RECORDED MAIL TO:

Armstrong Petroleum Corporation P.O. Box 1547 Newport Beach, CA 92663

### This Document was electronically recorded by First American Title C

Recorded in Official Records, Orange County Tom Daly, Clerk-Recorder

2005001016861 04:30pm 12/20/05

(Space Above This Line For Recorder's Use Only)

The undersigned Grantor declares:

1503266 MW

Documentary Transfer Tax of \$0 computed on the consideration or

value of the property conveyed.

Signature of declarant or agent

determining tax

#### QUITCLAIM

This Agreement ("Quitclaim") is made and entered in to this 21st day of September, 1999, by and between Armstrong Petroleum Corporation, a California corporation ("Armstrong") and Horizontal Development LLC, a California limited liability company ("HDLLC"); Armstrong and HDLLC are sometimes individually referred to as "Party" and collectively referred to as "PARTIES".

Whereas, Armstrong owns a fee interest in all minerals lying 500 feet vertically below the surface of that certain real property in the County of Orange, State of California, more particularly described in Exhibit "A" attached hereto and by this reference made a part hereof ("Minerals") as conveyed by that certain Quitclaim with Reservation of Interest dated April 7, 1997, by and among Mobil California Exploration and Producing Asset Company, a Delaware Corporation, Rancho Santiago Partnership, a California general partnership, and Armstrong Petroleum Corporation, a California corporation, a Short Form of which was recorded as Instrument No. 19970206789 on May 5, 1997, in the office of the County Recorder, Orange County, California ("Minerals Quitclaim"); and

NOW, THEREFORE, FOR GOOD AND VALUABLE CONSIDERATION, the receipt and adequacy of which are hereby acknowledged, Armstrong hereby remises, releases and forever quitclaims unto HDLLC, all its right, title and interest in and to the Minerals subject to the terms, covenants and conditions of the Minerals Quitclaim.

This instrument shall bind and inure to the benefit of the respective heirs, personal representatives, successors, and assigns of the Parties hereto.

The Parties agree, upon request of the other, to execute and deliver such further instruments of transfer as either Party may reasonable require to effectively transfer and convey the interests described herein.

This Agreement shall be construed and interpreted in accordance with the laws of the State of California. Legal actions concerning any dispute, claim or matter arising out of or in connection with this Agreement shall be instituted in the Superior Court of the County of Orange, State of California, or any other appropriate court in such county, and the parties hereto agree to submit to the jurisdiction of such court in the event of any action.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on the month, day and year first hereinabove written.

#### "ARMSTRONG"

ARMSTRONG PETROLEUM CORPORATION, a California corporation

By:

R.A. Armstrong, President

-State of <u>CALIFORNIA</u>	
County of ORANGE	<del></del>
mercan.	me, <u>ARMEN AS/K-NOTARY PUBL</u> NAME TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC" ARNOLD ARMSTRUMES.
personally known to me - OR -	proved to me on the basis of satisfactory evidence
NOTARY PUBLIC - CALIFORNIA COMMISSION # 1436494 ORANGE COUNTY My Comm. Exp. Aug. 26, 2007	to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
**************************************	WITNESS my hand and official seal.
	SIGNATURE OF NOTARY
	OPTIONAL ****
Though the data below is not required by law, it may	OPTIONAL ****
Though the data below is not required by law, it may fraudulent reattachment of this form.	OPTIONAL prove valuable to persons relying on the document and could prevent
Though the data below is not required by law, it may fraudulent reattachment of this form.  CAPACITY CLAIMED BY SIGNER  INDIVIDUAL	OPTIONAL prove valuable to persons relying on the document and could prevent DESCRIPTION OF ATTACHED DOCUMENT
Though the data below is not required by law, it may fraudulent reattachment of this form.  CAPACITY CLAIMED BY SIGNER  INDIVIDUAL CORPORATE OFFICER  TITLE(S)  PARTNER(S)  LIMITED	OPTIONAL prove valuable to persons relying on the document and could prevent DESCRIPTION OF ATTACHED DOCUMENT Qui TCLAIM DEED.
Though the data below is not required by law, it may fraudulent reattachment of this form.  CAPACITY CLAIMED BY SIGNER  INDIVIDUAL CORPORATE OFFICER  TITLE(S)  PARTNER(S)  LIMITED GENERAL ATTORNEY-IN-FACT TRUSTEE(S)  GUARDIAN/CONSERVATOR	OPTIONAL prove valuable to persons relying on the document and could prevent DESCRIPTION OF ATTACHED DOCUMENT Qui TCLAIM DEED.
Though the data below is not required by law, it may fraudulent reattachment of this form.  CAPACITY CLAIMED BY SIGNER  INDIVIDUAL CORPORATE OFFICER  TITLE(S)  PARTNER(S)  LIMITED GENERAL ATTORNEY-IN-FACT TRUSTEE(S)	OPTIONAL  prove valuable to persons relying on the document and could prevent  DESCRIPTION OF ATTACHED DOCUMENT  OUTTOLAIM DEED  TITLE OR TYPE OF DOCUMENT
Though the data below is not required by law, it may fraudulent reattachment of this form.  CAPACITY CLAIMED BY SIGNER  INDIVIDUAL CORPORATE OFFICER  TITLE(S)  PARTNER(S)  LIMITED GENERAL ATTORNEY-IN-FACT TRUSTEE(S)  GUARDIAN/CONSERVATOR	OPTIONAL  prove valuable to persons relying on the document and could prevent  DESCRIPTION OF ATTACHED DOCUMENT  OUTCLAIM DEED.  TITLE OR TYPE OF DOCUMENT  NUMBER OF PAGES

#### **GOVERNMENT CODE 27361.7**

I CERTIFY UNDER PENALTY OF PERJURY THAT THE NOTARY SEAL ON THE DOCUMENT TO WHICH THIS STATEMENT IS ATTACHED READS AS FOLLOWS:

NAME OF NOTARY: Armen Asik

DATE COMMISSION EXPIRES: Aug. 26, 2007 COUNTY WHERE BOND IS FILED: Orange

COMMISSION NUMBER: 1436494

MANUFACTURER/VENDOR NUMBER: SUII

PLACE OF EXECUTION: Santa Ana, CA

DATED: December 20, 2005

SIGNATURE: MOULO

## EXHIBIT "A" TO QUITCLAIM

ALL THE MINERALS, INCLUDING WITHOUT LIMITATION ALL OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN, ON OR UNDER THE HEREINAFTER DESCRIBED LAND LYING 500 VERTICAL FEET BELOW THE SURFACE OF SAID LAND, ALL OF WHICH LAND IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF ORANGE, PARTLY IN THE CITY OF NEWPORT BEACH AND PARTLY IN THE CITY OF HUNTINGTO BEACH, AND DESCRIBED AS FOLLOWS:

#### PARCEL 1

A PORTION OF LOTS "B", "C" AND "D", ALL IN THE BANNING TRACT, AS SHOWN ON A MAP OF SAID TRACT FILED IN THE CASE OF H. BANNING, FOR PARTITION, BEING VS. MARY AND OTHERS BANNING ACTIONS OF THE OF CASE NO. 6385 UPON THE REGISTER COURT OF THE STATE OF CALIFORNIA, IN AND FOR LOS ANGELES COUNTY, SANTA ANA DESCRIBED SANTIAGO DE AND A PORTION OF RANCHO RECORDS OF LOS ANGELES COUNTY, PATENTS, 387 OF BOOK 3, PAGE CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE BOUNDARY LINE BETWEEN LOTS "A" "B" OF SAID BANNING TRACT, WHICH POINT IS THE POINT OF INTERSECTION THE CENTER LINE OF NINETEENTH STREET AND THE NORTHWESTERLY LINE OF THE FIRST ADDITION TO THE NEWPORT MESA TRACT, AS IN BOOK B, PAGE 61 OF MISCELLANEOUS MAPS, RECORDED A MAP RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH 89 DEGREES ALONG THE NORTHERLY LINE OF SAID LOT "B", 3315.29 26' 55" WEST FEET TO THE NORTHWESTERLY CORNER OF LOT "B" OF SAID BANNING THE WESTERLY BOUNDARY LINE OF THENCE SOUTHERLY ALONG TRACT; LOT "B" OF SAID BANNING TRACT, THE FOLLOWING COURSES AND DISTANCES: SOUTH 1 DEGREE 45' WEST 462.00 FEET; THENCE SOUTH 34 DEGREES FEET; THENCE SOUTH 6 DEGREES 15' EAST 1058.48 15' WEST 462.95 FEET; THENCE SOUTH 19 DEGREES 45' WEST 529.21 FEET; THENCE WEST 463.08 FEET; THENCE SOUTH 42 DEGREES 45' 34 · DEGREES 30' WEST 397.00 FEET; THENCE SOUTH 4 DEGREES 45' WEST 462.00 FEET: SOUTH 21 DEGREES 15' WEST 198.5D FEET TO THE SOUTHWEST CORNER OF LOT "B" AS SHOWN ON SAID MAP OF THE BANNING IS ALSO STATION NO. 149 OF THE BOUNDARY LINE OF WHICH CORNER RANCHO SANTIAGO DE SANTA ANA, AS DESCRIBED IN BOOK PATENTS, RECORDS OF LOS ANGELES COUNTY, CALIFORNIA; THENCE SOUTH 72 DEGREES 51' 36" EAST 807.47 FEET TO A POINT WHICH 44" EAST 606.79 FEET FROM THE POINT OF DEGREES 32' 20 INTERSECTION OF THE CENTER LINE OF THE SANTA ANA RIVER AS SHOWN FILED IN AND ANNEXED TO THE COMPLAINT IN THE CASE ON THE MAP OF J. B. BANNING JR. VS. SMITH AND OTHERS, BEING CASE NO. 22797

THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, CALIFORNIA, A COPY OF THE JUDGMENT OF SAID CASE 22797 HAVING BEEN RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF OFFICIAL RECORDS, ORANGE COUNTY, WITH THE SOUTHEASTERLY LINE OF SUMMIT AVENUE, 30 FEET IN WIDTH, AS SHOWN ON A MAP OF EL MORO TRACT RECORDED IN BOOK B, PAGE 75 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE EASTERLY, NORTHEASTERLY SOUTHEASTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 600.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: SOUTH 78 DEGREES 02' EAST 486.60 FEET; THENCE SOUTH 66 DEGREES 20" EAST 517.33 FEET; THENCE NORTH 20 DEGREES 06' 15" EAST 539.49 FEET; THENCE NORTH 51 DEGREES 48' EAST 405.76 FEET; THENCE NORTH 74 DEGREES 07' EAST 722.86 FEET; THENCE SOUTH 45 DEGREES 2D' 28" EAST 740.97 FEET; THENCE SOUTH 27 DEGREES 46' EAST 498.37 FEET; THENCE SOUTH 13 DEGREES 35' 40" EAST B20.19 FEET; THENCE SOUTH 1 DEGREE 38' 25" WEST 871.22 FEET TO A POINT IN A LINE 600.00 FEET NORTHERLY OF AND PARALLEL WITH THE NORTHERLY LINE OF THE 180-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY, AS DESCRIBED IN DEED RECORDED APRIL 2D, 1936 IN BOOK 822, PAGE 48 OF OFFICIAL RECORDS, ORANGE COUNTY: THENCE SOUTHEASTERLY, PARALLEL WITH THE NORTHERLY AND NORTHEASTERLY LINE OF SAID CALIFORNIA STATE HIGHWAY, THE FOLLOWING COURSES AND DISTANCES: THENCE SOUTH 83 DEGREES 18' EAST 328.62 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 1650.00 FEET AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 500.12 FEET; THENCE SOUTH 65 DEGREES 56' EAST, TANGENT TO SAID CURVE, 667.15 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1650.00 FEET AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 48.34 FEET TO A POINT IN THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF WHITTIER AVENUE (60 FEET IN WIDTH), AS SHOWN ON A MAP OF THE NEWPORT MESA TRACT RECORDED IN BOOK 5, PAGE OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, A RADIAL LINE FROM SAID POINT BEARS SOUTH 25 DEGREES 44' 43" WEST: THENCE NORTH D DEGREES 36' B1" WEST ALONG THE SAID PROLONGATION OF WHITTIER AVENUE, 3041.05 FEET TO A POINT IN THE SOUTHWESTERLY LINE OF SAID FIRST ADDITION TO NEWPORT MESA TRACT; THENCE NORTH 29 DEGREES 24' 45" WEST ALONG THE SOUTHWESTERLY LINE OF SAID FIRST ADDITION TO THE NEWPORT MESA TRACT; 2706.70 FEET TO THE MOST WESTERLY CORNER OF SAID FIRST ADDITION TO THE NEWPORT MESA TRACT; THENCE NORTH 19 DEGREES 01' 55" EAST ALONG THE NORTHWESTERLY LINE OF THE LAST MENTIONED TRACT, 1065.62 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM, THAT PORTION OF LOT "B" OF SAID BANNING TRACT DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE EASTERLY LINE OF THE 300-FOOT STRIP OF LAND FOR SANTA ANA RIVER CHANNEL, AS DESCRIBED IN THE DEED TO THE NEWBERT PROTECTION DISTRICT RECORDED JUNE 22, 1911 IN BOOK 197, PAGE 300 OF DEEDS, ORANGE COUNTY, WHICH POINT IS NORTH 71 DEGREES 20' EAST 510.47 FEET FROM THE SOUTHWEST CORNER OF SAID LOT "B", WHICH LAST MENTIONED CORNER IS ALSO STATION 149 OF THE RANCHO SANTIAGO DE SANTA ANA;

THENCE NORTH 13 DEGREES 25' EAST ALONG THE EASTERLY LINE OF SAID 3DD-FOOT STRIP OF LAND, 66D FEET; THENCE SOUTH 76 DEGREES 35' EAST 66D FEET; THENCE SOUTH 13 DEGREES 25' WEST 66D FEET; THENCE NORTH 76 DEGREES 35' WEST 66D FEET TO THE POINT OF BEGINNING, AS CONDEMNED BY THE CITY OF NEWFORT BEACH IN THE ACTION ENTITLED "CITY OF NEWPORT BEACH, A MUNICIPAL CORPORATION, PLAINTIFF VS. TOWNSEND LAND COMPANY AND OTHERS, DEFENDANTS", BEING CASE NO. 34747 OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A CERTIFIED COPY OF THE FINAL JUDGMENT HAVING BEEN RECORDED AUGUST 2D, 1937 IN BOOK 91D, PAGE 19 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THAT PORTION OF LOT "B" IN SAID BANNING TRACT CONVEYED BY THE TOWNSEND LAND COMPANY TO THE NEWBERT PROTECTION DISTRICT FOR A RIVER CHANNEL, 3DD FEET WIDE, BY DEED RECORDED JUNE ZZ, 1911 IN BOOK 197, PAGE 3DD OF DEEDS, ORANGE COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT IN THE SOUTHERLY LINE OF SAID LOT "B" OF THE BANNING TRACT, SOUTH 84 DEGREES 45' EAST 135.84 FEET DISTANT FROM THE SOUTHWESTERLY CORNER OF SAID LOT "B", WHICH CORNER IS ALSO STATION 149 OF THE RANCHO SANTIAGO DE SANTA ANA; THENCE NORTH 13 DEGREES 25' EAST ALONG THE WESTERLY SIDE OF SAID 300-FOOT RIGHT OF WAY, 946.75 FEET TO A POINT IN THE WESTERLY LINE OF SAID LOT "B"; THENCE ALONG THE WESTERLY LINE OF SAID LOT "B", NORTH 42 DEGREES 45' EAST 38.70 FEET TO AN ANGLE IN SAID WESTERLY LINE; THENCE NORTH 34 DEGREES 30' EAST 462.00 FEET TO AN ANGLE IN SAID WESTERLY LINE; THENCE NORTH 19 DEGREES 45' EAST 528.00 FEET TO AN ANGLE IN SAID WESTERLY LINE; THENCE STILL ALONG SAID WESTERLY LINE, NORTH & DEGREES 15' WEST 723.17 FEET TO A POINT IN THE WESTERLY LINE OF SAID 3DB-FOOT RIGHT OF WAY: THENCE NORTH 13 DEGREES 25' EAST ALONG THE WESTERLY LINE OF SAID RIGHT OF WAY, 607.27 FEET TO A POINT IN THE WESTERLY LINE OF SAID LOT "B"; THENCE ALONG THE WESTERLY LINE OF SAID LOT "B", NORTH 34 DEGREES 15' EAST 148.48 FEET TO AN ANGLE IN SAID LINE; THENCE NORTH 1 DEGREE 45' EAST 436.44 FEET TO THE NORTHWEST CORNER OF SAID LOT "B"; THENCE ALONG THE NORTHERLY LINE OF SAID LOT "B", NORTH B9 DEGREES 28' EAST 346.14 FEET TO A POINT IN THE EASTERLY LINE OF SAID 300-FOOT RIGHT OF WAY; THENCE SOUTH 13 DEGREES 25' WEST 3831.55 FEET TO THE SOUTHERLY LINE OF SAID LOT "B"; THENCE ALONG THE SOUTHERLY LINE OF SAID LOT "B", NORTH 84 DEGREES 45' WEST 303.08 FEET TO THE POINT OF COMMENCEMENT.

ALSO EXCEPTING THEREFROM, THE PORTIONS THEREOF INCLUDED WITHIN A STRIP OF LAND 3D FEET IN WIDTH, THE CENTER LINE OF WHICH IS DESCRIBED AS FOLLOWS: BEGINNING AT THE POINT WHERE THE EASTERLY BOUNDARY LINE OF THE RANCHO LAS BOLSAS BETWEEN STATIONS 78 AND 79 OF THE SAID BOUNDARY LINE IS INTERSECTED BY THE LINE WHICH BEARS NORTH 13 DEGREES 26' 30" EAST FROM THE POINT ON THE SOUTH LINE OF SECTION 18, TOWNSHIP 6 SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN, 2294.92 FEET NORTH 89 DEGREES 3B' EAST FROM THE SOUTH QUARTER SECTION CORNER OF SAID SECTION, SAID BEGINNING

POINT BEING ON THE SURVEYED CENTER LINE OF THE SANTA ANA-ANAHFIM SEWER; THENCE FROM SAID POINT OF BEGINNING, SOUTH JOINT OUTFALL 13 DEGREES 26' 30" WEST ALONG SAID CENTER LINE TO STATION 187+74.49, BEING THE POINT ON THE SOUTH LINE OF SAID SECTION 18, 2294.92 NORTH 89 DEGREES 38' EAST FROM THE SOUTH QUARTER CORNER OF SAID SECTION; THENCE CONTINUING SOUTH 13 DEGREES 26' 30" WEST ALONG SAID SURVEYED CENTER LINE, 2795.66 FEET TO STATION 215+70.15; THENCE SOUTH 16 DEGREES 27' 30" WEST ALONG SAID CENTER LINE, 1050.35 FEET TO A POINT 15.30 FEET SOUTH 84 DEGREES 45' EAST FROM STATION 68 OF THE RANCHO LAS BOLSAS, TOGETHER WITH LAND OF VARYING WIDTHS LYING BETWEEN THE EASTERLY THE STRIP OF LINE OF THE ABOVE DESCRIBED 3D-FOOT STRIP AND THE WESTERLY LINE OF THE RIGHT OF WAY OF THE SANTA ANA RIVER THROUGH THE NEWBERT PROTECTION DISTRICT, AS CONVEYED TO THE CITY OF SANTA ANA BY DEED RECORDED APRIL 14, 1934 IN BOOK 670, PAGE 147 OF OFFICIAL RECORDS, ORANGE COUNTY...

ALSO EXCEPTING THEREFROM, THAT PORTION OF SAID LAND INCLUDED WITHIN A STRIP OF LAND 18D FEET WIDE, DESCRIBED AS PARCELS D3-121.1 AND D3-122.1 IN THE FINAL ORDER OF CONDEMNATION RENDERED JANUARY 26, 1962 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF ORANGE, IN THE ACTION ENTITLED "ORANGE COUNTY FLOOD CONTROL DISTRICT VS. CITY OF NEWPORT BEACH AND OTHERS" (CASE NO. 77399), A CERTIFIED COPY OF WHICH DECREE WAS RECORDED JANUARY 3D, 1962 IN BOOK 5993, PAGE 441 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THAT PORTION OF SAID LAND INCLUDED WITHIN THE FOLLOWING DESCRIBED LAND:

THAT PORTION OF BLOCK "C" OF THE BANNING TRACT, AS SHOWN ON A MAP ATTACHED TO REPORT OF THE REFEREES FILED APRIL 14, 1870 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, AND THAT PORTION OF LOTS 1111 AND 1112 AND PORTION OF SIXTEENTH STREET AND WHITTIER AVENUE ADJOINING, AS SHOWN ON THE MAP OF NEWPORT MESA TRACT RECORDED IN BOOK 5, PAGE 1 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF SAID SIXTEENTH STREET WITH THE SOUTHWESTERLY BOUNDARY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT; AS SHOWN ON A MAP RECORDED IN BOOK B, PAGE 61 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH 89 DEGREES 21' 50" WEST 16.50 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 500.00 FEET; THENCE WESTERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 28 DEGREES 48' 33", A DISTANCE OF 251.41 FEET TO A LINE TANGENT; THENCE SOUTH 60 DEGREES 33' 17" WEST ALONG SAID LINE TANGENT; A DISTANCE OF 404.60 FEET; THENCE NORTH 29 DEGREES 26' 43" WEST 804.50 FEET; THENCE NORTH 60 DEGREES 33' 17" EAST 300.00 FEET; THENCE SOUTH 88 DEGREES 48' 26" EAST 316.57 FEET TO A POINT

IN A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 50.00 FEET, A RADIAL LINE FROM SAID POINT BEARS NORTH 89 DEGREES 21'50" EAST; THENCE NORTHERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 44 DEGREES 24'55", A DISTANCE OF 38.76 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 90.00 FEET; THENCE NORTHERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 44 DEGREES 24'55", A DISTANCE OF 69.77 FEET TO A LINE TANGENT; THENCE NORTH D DEGREES 38' 10" WEST ALONG SAID LINE TANGENT, A DISTANCE OF 11.11 FEET TO THE SAID SOUTHWESTERLY BOUNDARY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT; THENCE SOUTH 29 DEGREES 26' 43" EAST ALONG SAID SOUTHWESTERLY BOUNDARY LINE, A DISTANCE OF 789.32 FEET TO THE POINT OF BEGINNING;

AS DESCRIBED IN THE FINAL ORDER OF CONDEMNATION RENDERED AUGUST 4, 1965 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF ORANGE, ENTITLED "COSTA MESA UNION SCHOOL DISTRICT OF ORANGE COUNTY, CALIFORNIA VS. SECURITY FIRST NATIONAL BANK, ETC., AND OTHERS" (CASE NO. 123141), A CERTIFIED COPY OF WHICH ORDER WAS RECORDED AUGUST 5, 1965 IN BOOK 7620, PAGE 215 OF OFFICIAL RECORDS, ORANGE COUNTY.

#### PARCEL 2

BEGINNING AT THE SOUTHWEST CORNER OF THAT CERTAIN LAND AS DESCRIBED IN PARCEL 1 IN DEED FROM HANCOCK BANNING JR. AND OTHERS, DATED AUGUST 1, 1958, RECORDED AUGUST 29, 1956 IN BOOK 4400, PAGE 532 OF OFFICIAL RECORDS, ORANGE COUNTY, AND RE-RECORDED OCTOBER 6, 1958 IN BOOK 4437, PAGE 228 OF OFFICIAL RECORDS, ORANGE COUNTY, ALSO BEING THE SOUTHWEST CORNER OF LOT B OF THE BANNING TRACT, AS SHOWN ON THE MAP ATTACHED TO THE REPORT OF THE REFEREES FILED APRIL 14, 1890 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, CALIFORNIA, WHICH CORNER IS ALSO STATION 149 OF THE BOUNDARY LINE OF RANCHO SANTIAGO DE SANTA ANA, AS DESCRIBED IN BOOK 3, PAGE 387 OF PATENTS, LOS ANGELES COUNTY, CALIFORNIA; THENCE ALONG THE SOUTHERLY LINE OF SAID PARCEL 1, SOUTH 72 DEGREES 51' 36" EAST 807.47 FEET TO A POINT WHICH BEARS NORTH 2D DEGREES 32' 44" EAST 606.79 FEET FROM THE POINT OF INTERSECTION OF THE CENTER LINE OF THE SANTA ANA RIVER, AS SHOWN ON THE MAP FILED IN AND ANNEXED TO THE COMPLAINT IN THE CASE OF J. B. BANNING JR. VS. OTHERS, BEING CASE NO. 22797 OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A COPY OF THE JUDGMENT OF SAID CASE NO. 22797 HAVING BEEN RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF OFFICIAL RECORDS, ORANGE COUNTY, WITH THE SOUTHEASTERLY LINE OF SUMMIT STREET, 30 FEET IN WIDTH, AS

SHOWN ON A MAP OF EL MORO TRACT RECORDED IN BOOK B, PAGE 75 MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; MISCELLANEOUS THENCE EASTERLY, NORTHEASTERLY AND SOUTHEASTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER AND 600.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: SOUTH 78 DEGREES 02' EAST 486.60 FEET; SOUTH 66 DEGREES 42' 20" EAST 517.33 FEET; NORTH 20 DEGREES D6' 15" EAST 539.49 FEET; NORTH 51 DEGREES 48' EAST 405.76 FEET; DEGREES EAST 722.86 FEET; SOUTH 45 DEGREES 20' ילם, 28" EAST 740.97 FEET; SOUTH 27 DEGREES 46' EAST 498.37 FEET; SOUTH 13 DEGREES 35' 40" EAST 820.19 FEET; SOUTH 1 DEGREE 38' 25" WEST 871.22 FEET TO A POINT IN A LINE 400.00 FEET NORTHERLY AND PARALLEL WITH THE NORTHERLY LINE OF THE 100-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY, AS DESCRIBED IN DEED RECORDED APRIL 2D, 1936 IN BOOK 822, PAGE 48 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE SOUTHEASTERLY, PARALLEL WITH THE NORTHERLY AND NORTHEASTERLY LINE OF SAID CALIFORNIA STATE HIGHWAY, THE FOLLOWING COURSES AND DISTANCES: SOUTH 83 DEGREES 18' EAST 328.62 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 1650.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 5DB.12 FEET; THENCE SOUTH 45 DEGREES 54' TANGENT TO SAID CURVE, 667.15 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT: THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1650.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 48.34 FEET TO A IN THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF POINT WHITTIER AVENUE (60 FEET IN WIDTH), AS SHOWN ON A MAP OF ADDITION TO NEWPORT MESA TRACT RECORDED IN BOOK 8; PAGE 61 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, RADIAL LINE FROM SAID POINT BEARS SOUTH 25 DEGREES 44' 43" WEST, WHICH POINT IS THE SOUTHEAST CORNER OF SAID PARCEL 1; THENCE SOUTH D DEGREES 36' DI" EAST ALONG THE SAID PROLONGATION OF WHITTIER AVENUE, 404.46 FEET TO AN INTERSECTION WITH THE NORTHEASTERLY LINE OF THAT CERTAIN STRIP OF LAND 250 FEET IN WIDTH, AS DESCRIBED IN PARCEL 1, ARTICLE II OF SAID DEED RECORDED AUGUST 29, 1958 IN BOOK 4400, PAGE 532 OF OFFICIAL RECORDS, ORANGE COUNTY, AND RE-RECORDED OCTOBER 6, 1958 IN BOOK 228 OF OFFICIAL RECORDS, ORANGE COUNTY, A RADIAL LINE FROM SAID INTERSECTION BEARS SOUTH 33 DEGREES 40' 54" WEST; ALONG THE NORTHEASTERLY, NORTHERLY, NORTHWESTERLY AND NORTHERLY LINE OF SAID PARCEL 1, ARTICLE II, THROUGH THE FOLLOWING COURSES AND DISTANCES: NORTHWESTERLY ALONG A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 1300.00 FEET, THROUGH AN ANGLE OF 9 DEGREES 36' 54", A DISTANCE OF 218.16 FEET TO A LINE TANGENT THERETO; THENCE NORTH 45 DEGREES 54' WEST, TANGENT TO SAID CURVE, 647.15 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE WESTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1300.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 394.04 FEET; THENCE NORTH 83 DEGREES 18' WEST, TANGENT TO SAID CURVE, 646.66 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE WESTERLY ALONG A CURVE CONCAVE TO THE NORTH AND HAVING A RADIUS OF 700.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE,

DISTANCE OF 2.34 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, A RADIAL LINE FROM SAID POINT BEARS NORTH & DEGREES 53' 29" EAST; THENCE NORTHERLY, NORTHWESTERLY AND SOUTHWESTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 1 DEGREE 38' 25" EAST 1144.77 FEET; NORTH 13 DEGREES 35' 40" WEST 729.87 FEET; NORTH 27 DEGREES 46' WEST 400.76 FEET; NORTH 45 DEGREES 20' 28" WEST 482.58 SOUTH 74 DEGREES D7' WEST 449.53 FEET; SOUTH 51 DEGREES 48' WEST 237.37 FEET; SOUTH 20 DEGREES 06' 15" WEST 319.00 FEET TO A POINT IN A LINE PARALLEL WITH THE NORTHWESTERLY LINE OF TRACT NO. 772; AS SHOWN ON A MAP RECORDED IN BOOK 23, PAGES 5 AND 6 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, 250 FEET DISTANT WEST THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE SOUTHWESTERLY AND WESTERLY, PARALLEL WITH THE NORTHWESTERLY AND NORTHERLY LINE OF SAID TRACT NO. 772, AND 250.00 FEET DISTANT WESTERLY AND NORTHWESTERLY THEREFROM, ANGLES THERETO, THE FOLLOWING COURSES AND MEASURED AT RIGHT DISTANCES: SOUTH 29 DEGREES 06' WEST 258.16 FEET; SOUTH 42 WEST 131,37 FEET; SOUTH 72 DEGREES 45' WEST 158,65 DEGREES 06' FEET; NORTH BB DEGREES 25' WEST 16.51 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT NORTHERLY THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE WESTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH && DEGREES 42' 20" WEST 620.94 FEET; NORTH 78 DEGREES D2' WEST SD4.69 FEET TO A POINT IN A LINE PARALLEL WITH THE NORTHERLY LINE OF BLOCK C, EL MORO TRACT, AS SHOWN ON A MAP RECORDED IN BOOK B, PAGE 75 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, AND 250.00 FEET DISTANT NORTHERLY THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE WESTERLY, PARALLEL WITH THE SAID NORTHERLY LINE OF BLOCK EL MORO TRACT, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 4D DEGREES 52' 34" WEST 12D.39 FEET; NORTH 64 DEGREES 06' 50" WEST 216.59 FEET TO A POINT IN THE EASTERLY LINE OF THE. EASEMENT FOR THE PURPOSE OF MAINTAINING A RIVER CHANNEL OVER A STRIP OF LAND 300 FEET WIDE, IN FAVOR OF NEWBERT PROTECTION DISTRICT, AS DESCRIBED IN THE INTERLOCUTORY DECREE OF PARTITION DATED JULY 19, 1929, A CERTIFIED COPY OF WHICH WAS RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF OFFICIAL RECORDS, COUNTY, SAID POINT BEING THE MOST NORTHWESTERLY CORNER OF SAID PARCEL 1, ARTICLE II; THENCE SOUTH 13 DEGREES 25' WEST EASTERLY LINE 5AID OF THE RIVER CHANNEL, 256.04 FEET TO THE . MOST SOUTHWESTERLY CORNER OF SAID PARCEL 1, ARTICLE II; THENCE D6' 50" WEST ALONG THE NORTHERLY LINE OF SAID NORTH 64 DEGREES BLOCK C OF EL MORO TRACT, 16.02 FEET TO AN INTERSECTION WITH THE NORTHEASTERLY LINE OF THE 100-FOOT RIGHT OF WAY OF CALIFORNIA STATE HIGHWAY; THENCE NORTH 54 DEGREES 02' WEST, ALONG SAID HIGHWAY RIGHT OF WAY LINE, 145.48 FEET TO THE CENTER LINE OF SAID 300-FOOT RIVER CHANNEL EASEMENT; THENCE NORTH 13 DEGREES 25' EAST ALONG SAID CENTER LINE, 390.57 FEET TO THE NORTHEAST

CORNER OF LAND DESCRIBED IN DEED DATED DECEMBER 20, 1929 FROM JOSEPH BANNING JR. AND OTHERS, TO JAMES H. MACKLIN, RECORDED JANUARY 29, 1930 IN BOOK 354, PAGE 31 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE NORTH 74 DEGREES 17' WEST 289.47 FEET TO A POINT IN THE SOUTHERLY EXTENSION OF THE WESTERLY BOUNDARY LINE OF SAID RANCHO SANTIAGO DE SANTA ANA, WHICH POINT IS ALSO THE NORTHWEST CORNER OF SAID LAND DESCRIBED IN SAID DEED RECORDED IN BOOK 354, PAGE 31 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE NORTH 15 DEGREES 43' EAST ALONG THE SAID SOUTHERLY EXTENSION OF THE WESTERLY BOUNDARY LINE OF RANCHO SANTIAGO DE SANTA ANA, 119.00 FEET TO THE POINT OF BEGINNING.

EXCEPTING ANY PORTION OR PORTIONS OF SAID LAND WHICH IS, OR ARE, NOT INCLUDED EITHER WITHIN THE EXTERIOR BOUNDARIES OF THE RANCHO SANTIAGO DE SANTA ANA, OR WITHIN THE EXTERIOR BOUNDARY LINES OF LOT 1 OF SAID SECTION 19, LOT 1 OF SAID SECTION 2D, AND LOT 1 OF SAID SECTION 29, OR WITHIN ACCRETIONS OF SAID RANCHO AND/OR OF SAID LOTS.

ALSO EXCEPTING THEREFROM, THAT PORTION OF SAID LAND INCLUDED WITHIN A STRIP OF LAND 18D FEET WIDE, DESCRIBED AS PARCEL D3-122.1 IN THE FINAL ORDER OF CONDEMNATION RENDERED JANUARY 26, 1962 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF ORANGE, IN THE ACTION ENTITLED "ORANGE COUNTY FLOOD CONTROL DISTRICT VS. CITY OF NEWPORT BEACH AND OTHERS" (CASE NO. 77399), A CERTIFIED COPY OF WHICH DECREE WAS RECORDED JANUARY 3D, 1962 IN BOOK 5993, PAGE 441 OF OFFICIAL RECORDS, ORANGE COUNTY.

#### PARCEL 3

A STRIP OF LAND 250 FEET WIDE, DESCRIBED AS FOLLOWS: BEGINNING AT THE POINT OF INTERSECTION OF THE NORTHERLY LINE OF BLOCK C OF EL MORO TRACT, AS SHOWN ON A MAP RECORDED IN BOOK 8, PAGE 75 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, AND THE EASTERLY LINE OF THE EASEMENT FOR THE PURPOSE OF MAINTAINING A RIVER CHANNEL OVER A STRIP OF LAND 300 FEET WIDE, IN FAVOR OF NEWBERT PROTECTION DISTRICT, AS DESCRIBED IN THE INTERLOCUTORY DECREE OF PARTITION DATED JULY 19, 1929, A CERTIFIED COPY OF WHICH WAS RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE SOUTH 64 DEGREES 06' 50" EAST, ALONG THE NORTHERLY LINE OF SAID EL MORO TRACT, 154.24 FEET; THENCE CONTINUING ALONG THE LAST MENTIONED NORTHERLY LINE, SOUTH 60 DEGREES 52' 34" EAST 151.04 FEET TO A POINT IN THE SOUTHEASTERLY LINE OF SUMMIT STREET, 30.00 FEET IN WIDTH, AS SHOWN ON THE

MAP OF SAID EL MORO TRACT, SAID POINT BEING IN THE CENTER LINE OF THE SANTA ANA RIVER, AS SHOWN ON A MAP FILED IN AND ANNEXED TO THE COMPLAINT IN CASE OF J. B. BANNING JR. VS. SMITH AND OTHERS, CASE NO. 22797 OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A COPY OF THE JUDGMENT OF SAID CASE NO. 22797 HAVING BEEN RECORDED JULY 19, 1929 IN BOOK 297, PAGE 76 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE SOUTH 78 DEGREES DZ' EAST ALONG THE SAID CENTER LINE OF THE SANTA ANA RIVER, 517.61 FEET; THENCE CONTINUING ALONG THE SAID CENTER LINE OF THE SANTA ANA RIVER, SOUTH 66 DEGREES 42' EAST 644.09 FEET TO A POINT IN THE NORTHERLY LINE OF TRACT NO. 772, AS SHOWN ON A MAP RECORDED IN BOOK 23, PAGES 5 AND 6 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE EASTERLY AND NORTHEASTERLY ALONG THE NORTHERLY AND NORTHWESTERLY LINE OF SAID TRACT NO. 772, THE FOLLOWING COURSES AND DISTANCES: SOUTH BB DEGREES 25' EAST 105.91 FEET; NORTH 72 DEGREES 45' EAST 268.62 FEET; NORTH 42 DEGREES D6' EAST 228.36 FEET; NORTH 29 DEGREES DA' EAST 3D4.31 FEET TO A POINT IN THE SAID CENTER LINE OF THE SANTA ANA RIVER; THENCE ALONG THE SAID CENTER LINE OF THE SANTA ANA RIVER, THE FOLLOWING COURSES AND DISTANCES: 15" EAST 267.71 FEET; NORTH 51 DEGREES NORTH 2D DEGREES 06' 48' EAST 117.09 FEET; NORTH 74 DEGREES 07' EAST 254.30 FEET; SOUTH 45 DEGREES 2D' ZB" EAST 298.02 FEET; SOUTH 27 DEGREES 46' EAST 331.04 FEET; SOUTH 13 DEGREES 35' 40" EAST 665.36 FEET; SOUTH 1 DEGREE 38, 25" WEST 1205.19 FEET; SOUTH 10 DEGREES 47' 30" EAST 116.85 FEET TO A POINT IN THE NORTHERLY LINE OF THE 100-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY, AS DESCRIBED IN DEED RECORDED APRIL 2D, 1936 IN BOOK 822, PAGE 48 OF OFFICIAL RECORDS, ORANGE COUNTY, A RADIAL LINE FROM SAID POINT BEARS NORTH 19 DEGREES ZD' 43" EAST; THENCE ALONG THE NORTHERLY AND NORTHEASTERLY LINE OF SAID CALIFORNIA STATE HIGHWAY, THE FOLLOWING COURSES AND DISTANCES: EASTERLY ALONG A CURVE CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 950.00 FEET, A DISTANCE OF 209.67 FEET; SOUTH 83 DEGREES 18' EAST, TANGENT TO SAID CURVE, 646.66 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT, SOUTHEASTERLY ALONG: A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1050.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 318.26 FEET; SOUTH 65 DEGREES 56' EAST, TANGENT TO SAID CURVE, 467.15 FEET TO THE BEGINNING THE RIGHT, SOUTHEASTERLY ALONG A CURVE CONCAVE OF A CURVE TO AND HAVING A RADIUS OF 1050.00 FEET, AND TO THE SOUTHWEST TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 216.09 FEET; SOUTH 54 DEGREES OB' 30" EAST 387.05 FEET TO THE BEGINNING OF A CURVE TO THE LEFT, SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTHEAST, HAVING A RADIUS OF 950.00 FEET, AND TANGENT THE LAST MENTIONED COURSE, A DISTANCE OF 264.46 FEET; SOUTH 70 DEGREES 05' 30" EAST, TANGENT TO SAID CURVE, 527.80 FEET TO THE SOUTHEASTERLY BOUNDARY LINE OF LOT D OF THE BANNING TRACT, AS SHOWN ON THE MAP ATTACHED TO THE REPORT OF THE REFEREES FILED APRIL 14, 1890 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, CALIFORNIA; THENCE LEAVING SAID CALIFORNIA STATE HIGHWAY, NORTH 39 DEGREES 43' 45" EAST ALONG THE SOUTHEASTERLY BOUNDARY LINE

OF SAID LOT D OF BANNING TRACT, 265.74 FEET TO A POINT, BEING 250.00 FEET NORTH, MEASURED AT RIGHT ANGLES FROM THE NORTHEASTERLY LINE OF SAID 100-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY; THENCE NORTH 70 DEGREES 05' 30" WEST, PARALLEL WITH THE NORTHEASTERLY LINE OF SAID STATE HIGHWAY, 49.03 FEET TO A POINT IN THE SOUTHEASTERLY LINE OF THAT CERTAIN 2.7827-ACRE PARCEL OF LAND, AS DESCRIBED IN DEED FROM FARMERS AND MERCHANTS NATIONAL BANK OF LOS ANGELES, TRUSTEE FOR ANNE O. BANNING AND OTHERS, TO A. E. S. CHAFFEY AND OTHERS, RECORDED MARCH 14, 1958 IN BOOK 422B, PAGE 191 OF OFFICIAL RECORDS, ORANGE COUNTY, A RADIAL LINE FROM SAID POINT BEARS NORTH 26 DEGREES 10' 42" WEST; THENCE ALONG THE BOUNDARY LINE OF THE LAST MENTIONED PARCEL OF LAND, THE FOLLOWING COURSES AND DISTANCES: SOUTHWESTERLY ALONG A CURVE CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 373.48 FEET, A DISTANCE OF 176.40 FEET TO THE MOST SOUTHERLY CORNER OF SAID PARCEL OF LAND; NORTH 5 DEGREES 44' 28" WEST 104.32 FEET TO A POINT IN A LINE PARALLEL WITH THE : NORTHEASTERLY LINE OF SAID STATE HIGHWAY, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE NORTHWESTERLY, PARALLEL WITH THE SAID NORTHEASTERLY AND NORTHERLY LINE OF SAID STATE HIGHWAY, AND 250 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 7D DEGREES 05' 30" WEST 376.41 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT, NORTHWESTERLY ALONG A CURVE CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 700.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 194.87 FEET; NORTH 54 DEGREES 08' 30" WEST, TANGENT TO SAID CURVE, 387.05 FEET TO THE BEGINNING A CURVE TO THE LEFT, NORTHWESTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1300.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 267.55 FEET; NORTH 45 DEGREES 56' WEST, TANGENT TO THE SAID CURVE, 667.15 FEET TO THE BEGINNING OF A CURVE TO THE LEFT, WESTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND HAVING A RADIUS OF 1300.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 394.04 FEET; THENCE NORTH 83 DEGREES 18' WEST, TANGENT TO SAID CURVE, 646.66 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT, WESTERLY ALONG A CURVE CONCAVE TO THE NORTH AND HAVING A RADIUS OF 700.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 2.34 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, A RADIAL LINE FROM SAID POINT BEARS NORTH & DEGREES 53' EAST; THENCE NORTHERLY, NORTHWESTERLY AND SOUTHWESTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 1 DEGREE 38, EAST 1144.77 FEET; NORTH 13 DEGREES 35' 40" WEST 729.87 FEET; NORTH 27 DEGREE 46' WEST 400.76 FEET; NORTH 45 DEGREES 20' 28" WEST 482.58 FEET; SOUTH 74 DEGREES D7' WEST 449.53 FEET; SOUTH 51 DEGREES 48' WEST 237.37 FEET; SOUTH 2D DEGREES D6' 15" WEST 319.00 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID NORTHWESTERLY LINE OF TRACT NO. 772, AND 250 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE SOUTHWESTERLY

AND WESTERLY, PARALLEL WITH NORTHWESTERLY AND NORTHERLY LINE OF SAID TRACT NO. 772, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND SOUTH 29 DEGREES D6' WEST 258.16 FEET; SOUTH 42 DEGREES 06' WEST 131.37 FEET; SOUTH 72 DEGREES 45' WEST 158.65 FEET; NORTH 88 DEGREES 25' WEST 16.51 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE WESTERLY, PARALLEL WITH THE SAID CENTER LINE OF THE SANTA ANA RIVER, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: 66 DEGREES 42' 20" WEST 620.94 FEET; NORTH 78 DEGREES 02' WEST 504.69 FEET TO A POINT IN A LINE PARALLEL WITH THE SAID NORTHERLY LINE OF BLOCK C, EL MORO TRACT, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO; THENCE WESTERLY, PARALLEL WITH THE SAID NORTHERLY LINE OF BLOCK C, EL MORO TRACT, AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: NORTH 4D DEGREES 52' 34" WEST 120.39 FEET, AND NORTH 64 DEGREES 06' 50" WEST 216.59 FEET TO A POINT IN THE EASTERLY LINE OF SAID EASEMENT 300.00 FEET WIDE, FOR PURPOSE OF MAINTAINING THE SANTA ANA RIVER CHANNEL; THENCE SOUTH 13 DEGREES 25' WEST ALONG SAID EASTERLY LINE OF THE RIVER CHANNEL, 254.04 FEET TO THE POINT OF BEGINNING.

EXCEPTING ANY PORTION OF THE HEREIN DESCRIBED PROPERTY WHICH WAS OR IS TIDELANDS IN THE NATURAL BED OF THE SANTA ANA RIVER BELOW THE LINES OF ORDINARY HIGH TIDE.

ALSO EXCEPTING THEREFROM, THE PORTION OR PORTIONS OF SAID LAND WHICH IS, OR ARE, NOT INCLUDED EITHER WITHIN THE EXTERIOR BOUNDARIES OF THE RANCHO SANTIAGO DE SANTA ANA, THE PATENT FOR WHICH WAS RECORDED JUNE 2B, 1884 IN BOOK 3, PAGE 3B7 OF PATENTS, RECORDS OF LOS ANGELES COUNTY, CALIFORNIA, OR WITHIN THE EXTERIOR BOUNDARIES OF LOT 1 OF SECTION 19, TOWNSHIP 6 SOUTH, RANGE 10 WEST; LOT 1 OF SECTION 2D, TOWNSHIP 6 SOUTH, RANGE 10 WEST; AND LOT 1 OF SECTION 29, TOWNSHIP 6 SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN, THE PATENT FOR WHICH LOTS WAS RECORDED APRIL 19, 1893 IN BOOK 1, PAGE 66 OF PATENTS, RECORDS OF ORANGE COUNTY, CALIFORNIA, OR WITHIN ACCRETIONS OF SAID RANCHO OR SAID LOTS.

ALSO EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN THE PARCEL OF LAND DESCRIBED AS PARCEL D3-122.1 IN THE FINAL ORDER OF CONDEMNATION RENDERED JANUARY 26, 1962 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF ORANGE, IN THE ACTION ENTITLED "ORANGE COUNTY FLOOD CONTROL DISTRICT VS. CITY OF NEWPORT BEACH AND OTHERS" (CASE NO. 77399), A CERTIFIED COPY OF WHICH FINAL ORDER WAS RECORDED JANUARY 30, 1962 IN BOOK 5993, PAGE 441 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THE PORTION INCLUDED WITHIN THE LAND DESCRIBED IN DEED TO THE STATE OF CALIFORNIA, RECORDED FEBRUARY 14, 1966 IN BOOK 7839, PAGE 739 OF OFFICIAL RECORDS, ORANGE COUNTY.

THAT PORTION OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 6 SOUTH, RANGE 1D WEST, SAN BERNARDINO BASE AND MERIDIAN, LYING SOUTHERLY OF THE SOUTH LINE OF LOT B OF THE BANNING TRACT, AS SHOWN ON A MAP FILED IN BOOK 1, PAGE 34 OF MISCELLANEOUS RECORDS OF SAID COUNTY, AND LYING NORTHERLY OF THE NORTH LINE OF THE EL MORO TRACT, AS SHOWN ON A MAP FILED IN BOOK B, PAGE 75 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, THAT IS INCLUDED WITHIN A STRIP OF LAND OF THE UNIFORM WIDTH OF 18D.DD FEET, LYING SOUTHEASTERLY OF AND ADJACENT TO THE EASTERLY LINE OF THE SANTA ANA RIVER RIGHT OF WAY, 3DD FEET IN WIDTH, AS SHOWN ON A MAP FILED IN BOOK 12, PAGE 25 OF RECORD OF SURVEYS IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY, CALIFORNIA.

EXCEPTING THAT PORTION OF THE ABOVE 18D-FOOT STRIP LYING SOUTH-EASTERLY OF A LINE BEARING NORTH 36 DEGREES 15' 54" EAST, AND SAID LINE PASSING THROUGH A POINT IN THE NORTHEASTERLY LINE OF THE SOUTHERN PACIFIC RAILROAD RIGHT OF WAY, 60 FEET IN WIDTH, AS SHOWN ON SAID MAP OF EL MORO TRACT AS ABOVE REFERRED TO, SAID POINT BEING DISTANT ALONG SAID NORTHEASTERLY LINE, SOUTH 53 DEGREES 58' 30" EAST 64.00 FEET FROM ITS INTERSECTION WITH THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF THE 300-FOOT SANTA ANA RIVER RIGHT OF WAY REFERRED TO ABOVE.

EXCEPTING THE PORTION OR PORTIONS OF SAID LAND WHICH IS, OR ARE, NOT INCLUDED EITHER WITHIN THE EXTERIOR BOUNDARIES OF THE RANCHO SANTIAGO DE SANTA ANA, THE PATENT FOR WHICH WAS RECORDED JUNE 28, 1884 IN BOOK 3, PAGE 387 OF PATENTS, RECORDS OF LOS ANGELES COUNTY, CALIFORNIA, OR WITHIN THE EXTERIOR BOUNDARIES OF LOT 1 OF SECTION 19, TOWNSHIP 6 SOUTH, RANGE 10 WEST, SAN BERNARDING BASE AND MERIDIAN, THE PATENT FOR WHICH LOTS WAS RECORDED APRIL 19, 1893 IN BOOK 1, PAGE 66 OF PATENTS, RECORDS OF ORANGE COUNTY, CALIFORNIA, OR WITHIN ACCRETIONS OF SAID RANCHO AND/OR SAID LOTS.

EXCEPTING ANY PORTION OF THE HEREIN DESCRIBED PROPERTY WHICH WAS OR IS TIDELANDS IN THE NATURAL BED OF THE SANTA ANA RIVER BELOW THE LINES OF ORDINARY HIGH TIDE.

COMMENCING AT A POINT IN THE SOUTHERLY LINE OF SAID LOT B OF THE BANNING TRACT, DISTANT SOUTH 84 DEGREES 45' EAST 135.84 FEET FROM THE SOUTHWESTERLY CORNER OF SAID LOT B, SAID SOUTH-WESTERLY CORNER OF SAID LOT B BEING STATION 149 OF RANCHO SANTIAGO DE SANTA ANA; THENCE FROM SAID POINT OF COMMENCEMENT, NORTH 13 DEGREES 25' EAST ALONG THE WEST SIDE OF 3DD-FOOT RIGHT OF WAY OF THE SANTA ANA RIVER, 946.75 FEET TO A POINT IN THE WESTERLY LINE OF SAID LOT B OF THE BANNING TRACT; THENCE ALONG THE WESTERLY LINE OF SAID LOT B OF THE BANNING TRACT, NORTH 42 DEGREES 45' EAST 38.70 FEET TO AN ANGLE IN SAID LINE; THENCE NORTH 34 DEGREES 30' EAST 462 FEET TO AN ANGLE IN SAID LINE; THENCE NORTH 19 DEGREES 45' EAST 528 FEET TO AN ANGLE IN SAID LINE; THENCE STILL ALONG THE WESTERLY LINE OF SAID LOT B OF THE BANNING TRACT, NORTH 6 DEGREES 15' WEST 723.17 FEET TO A POINT IN THE WESTERLY LINE OF SAID 300-FOOT RIGHT OF WAY; THENCE NORTH 13 DEGREES 25' EAST ALONG THE WESTERLY LINE OF SAID RIGHT OF WAY, 607.27 FEET TO THE WESTERLY LINE OF SAID LOT B OF THE BANNING TRACT; THENCE ALONG THE WESTERLY LINE OF SAID LOT B, NORTH 34 DEGREES 15' EAST 148.48 FEET TO AN ANGLE IN SAID LINE; THENCE NORTH 1 DEGREE 45' EAST 436.44 FEET TO THE NORTHWESTERLY CORNER OF SAID LOT B OF THE BANNING TRACT; THENCE ALONG THE NORTHERLY LINE OF SAID LOT B, NORTH 89 DEGREES 28' EAST 346.14 FEET TO A POINT IN THE EASTERLY LINE OF SAID 300-FOOT RIGHT OF WAY; THENCE ALONG THE EASTERLY LINE OF SAID RIGHT OF WAY, SOUTH 13 DEGREES 25' WEST 3831.55 FEET TO THE SOUTHERLY LINE OF LOT B OF THE BANNING TRACT; THENCE ALONG THE SOUTHERLY LINE OF SAID LOT B OF THE BANNING TRACT, NORTH 84 DEGREES 45' WEST 303.08 FEET TO THE PLACE OF COMMENCEMENT.

EXCEPTING THE INTEREST CONVEYED TO NEWBERT PROTECTION DISTRICT BY DEED DATED APRIL 28, 1911, RECORDED JUNE 22, 1911 IN BOOK 197, PAGE 300 OF DEEDS, ORANGE COUNTY, WHICH SAID INTEREST 15, AT THE DATE HEREOF, VESTED IN ORANGE COUNTY FLOOD CONTROL DISTRICT.

THAT PORTION OF LOT B OF THE BANNING TRACT, AS SHOWN ON A MAP OF SAID TRACT FILED IN THE CASE OF HANCOCK BANNING AND OTHERS VS. MARY H. BANNING, FOR PARTITION, BEING CASE NO. 6385 UPON THE REGISTER OF ACTIONS OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR LOS ANGELES COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE EASTERLY LINE OF THE 3DD-FOOT STRIP OF LAND FOR SANTA ANA RIVER CHANNEL, AS DESCRIBED IN THE DEED TO THE NEWBERT PROTECTION DISTRICT RECORDED JUNE 22, 1911 IN BOOK 197, PAGE 3DD OF DEEDS, WHICH POINT IS NORTH 71 DEGREES 2D' EAST 51D.47 FEET FROM THE SOUTHWEST CORNER OF SAID LOT B, WHICH LAST MENTIONED CORNER IS ALSO STATION 149 OF THE RANCHO SANTIAGO DE SANTA ANA; THENCE NORTH 13 DEGREES 25' EAST ALONG THE EASTERLY LINE OF SAID 3DD-FOOT STRIP OF LAND, 66D FEET; THENCE SCUTH 76 DEGREES 35' EAST 66D FEET; THENCE SOUTH 13 DEGREES 25' WEST 66D FEET; THENCE NORTH 76 DEGREES 35' WEST 66D FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM, THE WESTERLY 180 FEET OF SAID LAND, AS CONVEYED TO ORANGE COUNTY FLOOD CONTROL DISTRICT BY DEED RECORDED AUGUST 25, 1960 IN BOOK 5389, PAGE 304 OF OFFICIAL RECORDS, ORANGE COUNTY.

#### PARCEL 7

THE WESTERLY 18D FEET OF THE FOLLOWING: BEGINNING AT A POINT IN THE EASTERLY LINE OF THE 3DD-FOOT STRIP OF LAND FOR SANTA ANA RIVER CHANNEL, AS DESCRIBED IN THE DEED TO THE NEWBERT PROTECTION DISTRICT, RECORDED JUNE 22, 1911 IN BOOK 197, PAGE 3DD OF DEEDS, ORANGE COUNTY, WHICH POINT IS NORTH 71 DEGREES 2D'EAST 51D.47 FEET FROM THE SOUTHWEST CORNER OF SAID LOT B, WHICH LAST MENTIONED CORNER IS ALSO STATION 149 OF THE RANCHO SANTIAGO DE SANTA ANA; THENCE NORTH 13 DEGREES 25'EAST ALONG THE EASTERLY LINE OF SAID 3DD-FOOT STRIP OF LAND, 66D FEET; THENCE SOUTH 76 DEGREES 35'EAST 66D FEET; THENCE SOUTH 13 DEGREES 25'WEST 66D FEET; THENCE NORTH 76 DEGREES 35'WEST 66D FEET TO THE POINT OF BEGINNING.



LOTS 1 TO 6 BOTH INCLUSIVE IN BLOCK C OF EL MORO TRACT, AS SHOWN ON A MAP RECORDED IN BOOK 8, PAGE 75 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

EXCEPTING THEREFROM, ANY PORTION OF SAID LAND WHICH IS NOT INCLUDED WITHIN THE EXTERIOR BOUNDARIES OF LOT 1 IN SECTION 19, TOWNSHIP 6 SOUTH, RANGE 10 WEST, THE PATENT FOR WHICH WAS RECORDED AFRIL 19, 1893 IN BOOK 1, PAGE 66 OF PATENTS, RECORDS OF ORANGE COUNTY, CALIFORNIA, AS SUCH LINES OF SAID PATENT EXISTED AT THE DATE OF THE ISSUANCE OF SAID PATENT, WHICH WAS NOT FORMED BY THE DEPOSIT OF ALLUVION FROM NATURAL CAUSES AND BY IMPERCEPTIBLE DEGREES.

ALSO EXCEPTING ANY PORTION OF THE HEREIN DESCRIBED PROPERTY WHICH WAS OR IS TIDELANDS IN THE NATURAL BED OF THE SANTA ANA RIVER BELOW THE LINES OF ORDINARY HIGH TIDE.

ALSO EXCEPTING THEREFROM, THAT PORTION OF SAID LAND LYING WITHIN THE STATE HIGHWAY, AS DESCRIBED IN THE DEED RECORDED OCTOBER 9, 1923 IN BOOK 434, PAGE 214 OF DEEDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THAT PORTION OF SAID LAND LYING NORTHWESTERLY OF A LINE BEARING NORTH 36 DEGREES 15' 54" EAST, AND SAID LINE PASSING THROUGH A POINT IN THE NORTHEASTERLY LINE OF THE SOUTHERN PACIFIC RAILROAD RIGHT OF WAY, 60 FEET IN WIDTH, AS SHOWN ON SAID MAP OF EL MORO TRACT AS ABOVE REFERRED TO, SAID POINT BEING DISTANT SOUTH 53 DEGREES 58' 30" EAST ALONG SAID NORTHEASTERLY LINE, 64 DD FEET FROM ITS INTERSECTION WITH SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF THE 300-FOOT SANTA ANA RIVER RIGHT OF WAY, AS SHOWN ON A MAP FILED IN BOOK 25 OF RECORD OF SURVEYS IN THE OFFICE OF THE COUNTY 12, PAGE RECORDER OF ORANGE COUNTY, CALIFORNIA; SAID PORTION THE FINAL ORDER OF CONDEMNATION RENDERED PARCEL D3-124 IN JANUARY 26, 1962 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF ORANGE, IN THE ACTION ENTITLED "ORANGE COUNTY FLOOD CONTROL DISTRICT VS. CITY OF NEWPORT BEACH AND OTHERS" (CASE NO. 77399), A CERTIFIED COPY OF WHICH FINAL ORDER WAS RECORDED JANUARY 3D, 1962 IN BOOK 5993, PAGE 441 OF OFFICIAL RECORDS, ORANGE COUNTY.

THAT PORTION OF LOTS 1 TO 6 INCLUSIVE IN BLOCK C OF EL MORO TRACT, AS SHOWN ON A MAP RECORDED IN BOOK 8, PAGE 75 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, LYING SOUTHEASTERLY OF A LINE BEARING NORTH 36 DEGREES 15' 54" EAST, AND SAID LINE PASSING THROUGH A POINT IN THE NORTHEASTERLY LINE OF THE SOUTHERN PACIFIC RAILROAD RIGHT OF WAY, 60 FEET IN WIDTH, AS SHOWN ON SAID MAP OF EL MORO TRACT AS ABOVE REFERRED TO, SAID POINT BEING DISTANT SOUTH 53 DEGREES 58' 30" EAST ALONG SAID NORTH-EASTERLY LINE, 64.00 FEET FROM ITS INTERSECTION WITH THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF THE 300-FOOT SANTA ANA RIVER RIGHT OF WAY, AS SHOWN ON A MAP FILED IN BOOK 12, PAGE 25 OF RECORD OF SURVEYS IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY, CALIFORNIA.

#### PARCEL 10

THOSE PORTIONS OF LOTS C AND D OF THE BANNING TRACT, AS SHOWN ON THE MAP ATTACHED TO THE REPORT OF THE REFEREES FILED APRIL 14, 1870 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, CALIFORNIA, BEING ALSO A PORTION OF LOT 1 OF TRACT NO. 463, AS SHOWN ON A MAP RECORDED IN BOOK 32, PAGES 2 AND 3 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, AND A PORTION OF TRACT NO. 2250, AS SHOWN ON A MAP RECORDED IN BOOK 104, PAGES 6 AND 7 OF MISIELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY CORNER OF TRACT NO. 15, AS SHOWN ON - A MAF RECORDED IN BOOK 9, PAGE 19 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, WHICH CORNER IS IN THE CENTER LINE OF SUPERIOR AVENUE, FORMERLY NEWPORT AVENUE, AS SAID NEWPORT AVENUE IS SHOWN ON SAID MAP OF SAID TRACT NO. 15, AND ALSO IN THE SOUTHEASTERLY LINE OF SAID LOT D IN THE BANNING TRACT; THENCE NORTH Z9 DEGREES 24' 45" WEST, ALONG THE NORTHEASTERLY LINE OF SAID TRACT NO. 15 AND ALONG THE SOUTHWESTERLY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT, AS SHOWN ON A MAP RECORDED IN BOOK B, PAGE 61 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, 3691.50 FEET TO A POINT IN THE EASTERLY LINE OF WHITTIER AVENUE, 60 FEET IN WIDTH, AS SHOWN ON SAID MAP OF FIRST ADDITION TO NEWPORT MESA TRACT: THENCE SOUTH D DEGREES 36, D1, EAST ALONG THE SOUTHERLY PROLONGATION OF THE SAID EASTERLY LINE OF WHITTIER AVENUE, SAID PROLONGATION BEING THE EASTERLY LINE OF PARCEL 1, AS DESCRIBED IN DEED EXECUTED BY HANCOCK BANNING JR. AND OTHERS, DATED AUGUST 16.

1, 1958, RECORDED AUGUST 29, 1958 IN BOOK 4400, PAGE 532 OF OFFICIAL RECORDS, ORANGE COUNTY, AND RE-RECORDED OCTOBER 6, 1958 IN BOOK 4437, PAGE 228 OF OFFICIAL RECORDS, ORANGE COUNTY, 3465.51 FEET, MORE OR LESS, TO AN INTERSECTION WITH A LINE ON A CURVE CONCAVE TO THE SOUTHWEST, 250.00 FEET NORTHEASTERLY OF AND PARALLEL WITH THE NORTHEASTERLY LINE OF THE 100-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY, AS DESCRIBED IN DEED RECORDED APRIL 2D, 1936 IN BOOK 822, PAGE 48 OF OFFICIAL RECORDS, ORANGE COUNTY, A RADIAL LINE FROM SAID POINT INTERSECTION BEARS SOUTH 33 DEGREES 40' 54" WEST; THENCE THE NORTHEASTERLY LINE SOUTHEASTERLY, PARALLEL WITH OF SAID STATE HIGHWAY AND 250.00 FEET DISTANT THEREFROM, MEASURED AT RIGHT ANGLES THERETO, THE FOLLOWING COURSES AND DISTANCES: THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 1300.00 FEET, 49.39 FEET; THENCE SOUTH 54 CURVE, 387.05 FEET TO DEGREES DB' 3D" EAST, TANGENT TO SAID BEGINNING OF CURVE TO THE LEFT; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTHEAST, HAVING A RADIUS OF 700.00 FEET, TANGENT TO THE LAST MENTIONED COURSE, 194.87 FEET; THENCE SOUTH 7D DEGREES D5' 30" EAST, TANGENT TO SAID CURVE, 376.41 FEET TO A POINT IN THE WESTERLY LINE OF THAT CERTAIN 2.7827-ACRE PARCEL OF LAND AS DESCRIBED IN THE DEED FROM THE FARMERS AND MERCHANTS, NATIONAL BANK OF LOS ANGELES, TRUSTEE FOR ANNE O. BANNING AND OTHERS, TO A. E. S. CHAFFEY AND OTHERS, RECORDED MARCH 14, 1958 IN BOOK 4228, PAGE 191 OF OFFICIAL RECORDS; THENCE ALONG THE WESTERLY, NORTHERLY AND NORTHEASTERLY BOUNDARY LINE OF SAID 2.7827-ACRE PARCEL, THE FOLLOWING COURSES AND DISTANCES: NORTH 5 DEGREES 44' 28" WEST 160.43 FEET TO THE WESTERLY CORNER OF SAID 2.7827-ACRE PARCEL, FROM WHICH MOST A RADIAL LINE BEARS NORTH 2D DEGREES 20' 15" WEST; THENCE NORTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 450.00 FEET, 235.10 FEET; THENCE NORTH 39 DEGREES 43' 45" EAST, TANGENT TO THE LAST MENTIONED CURVE, 75.42 FEET TO THE MOST NORTHERLY CORNER OF SAID 2.7827-ACRE PARCEL, FROM WHICH A RADIAL LINE BEARS SOUTH 29 DEGREES 30' 33" WEST; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTHWEST AND A RADIUS OF 730.00 FEET, A DISTANCE OF 130.21 FEET; THENCE SOUTH 5D DEGREES 16' 15" EAST, TANGENT TO THE LAST MENTIONED 122.00 FEET TO A POINT IN THE NORTHWESTERLY LINE OF CURVE, SUPERIOR AVENUE, AD FEET IN WIDTH, FORMERLY NEWPORT AVENUE, AS SAID NEWPORT AVENUE IS SHOWN ON SAID MAP OF TRACT NO. 15, WHICH POINT BEARS NORTH 39 DEGREES 43' 45" EAST 35.24 FEET FROM THE MOST EASTERLY CORNER OF LOT 1 IN BLOCK 1 OF SAID TRACT NO. 15; THENCE SOUTH 50 DEGREES 16' 15" EAST 30.00 FEET TO THE CENTER LINE OF SAID SUPERIOR AVENUE; THENCE ALONG THE CENTER LINE OF SAID SUPERIOR AVENUE, NORTH 39 DEGREES 43' 45" EAST 705.55 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN THE FOLLOWING DESCRIBED LAND: THAT PORTION OF BLOCK C OF THE BANNING TRACT, AS SHOWN ON A MAP ATTACHED TO REPORT OF THE REFEREES FILED APRIL 14, 1890 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, AND THAT PORTION OF LOTS 1111 AND 1112 AND PORTION OF SIXTEENTH STREET AND WHITTIER AVENUE ADJOINING, AS SHOWN ON THE MAP OF NEWPORT MESA TRACT, RECORDED IN BOOK 5, PAGE 1 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF SAID SIXTEENTH STREET WITH THE SOUTHWESTERLY BOUNDARY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT, AS SHOWN ON A MAP RECORDED IN BOOK B, PAGE 61 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH 89 DEGREES 21' 50" WEST 16.50 FEET TO THE BEGINNING TANGENT CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 500.00 FEET; THENCE WESTERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 28 DEGREES 48' 33", A DISTANCE OF 251.41 FEET TO A LINE TANGENT; THENCE SOUTH 60 DEGREES 33' 17" WEST ALONG SAID LINE TANGENT, A DISTANCE OF 404.60 FEET; THENCE NORTH 29 DEGREES 26' 43" WEST 804.50 FEET; THENCE NORTH 40 DEGREES 33' 17" EAST 300.00 FEET; THENCE SOUTH BB DEGREES 48' 26" EAST 316.57 FEET TO A POINT IN A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF SD. DD FEET, A RADIAL LINE FROM SAID POINT BEARS NORTH 89 DEGREES 21' 50" EAST; THENCE NORTHERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 44 DEGREES 24' 55", A DISTANCE OF 38.76 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 90.00 FEET; THENCE NORTHERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 44 DEGREES 24' 55", A DISTANCE OF 69.77 FEET TO A LINE TANGENT; THENCE NORTH D DEGREES 38' 10" WEST ALONG SAID LINE TANGENT, A DISTANCE OF 11.11 FEET TO THE SAID SOUTHWESTERLY BOUNDARY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT; THENCE SOUTH 29 DEGREES 26' 43" EAST ALONG SAID SOUTHWESTERLY BOUNDARY LINE, A DISTANCE OF 789.32 FEET TO THE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN THE FOLLOWING: THAT PORTION OF LOT 1 AND ALL OF LOT 2 OF TRACT NO. 463, AS SHOWN ON A MAP RECORDED IN BOOK 32, PAGES 2 AND 3 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF FIFTEENTH STREET WITH THE CENTER LINE OF MONROVIA AVENUE, AS SHOWN ON A MAP RECORDED IN BOOK 45, PAGES 31 THROUGH 34 INCLUSIVE OF RECORD OF SURVEYS IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE

COUNTY, CALIFORNIA; THENCE SOUTH D DEGREES 37' 24" EAST ALONG THE CENTER LINE OF SAID MONROVIA AVENUE, 440.93 FEET TO THE NORTHEASTERLY LINE OF SAID TRACT NO. 463; THENCE NORTH 29 DEGREES 26' 43" WEST ALONG SAID NORTHEASTERLY LINE, 272.61 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH EAST ALONG SAID NORTHEASTERLY LINE, 1288.43 DEGREES 26' 43" FEET TO THE CENTER LINE OF SUPERIOR AVENUE; THENCE SOUTH 39 DEGREES 41' 15" WEST, ALONG SAID CENTER LINE OF SUPERIOR AVENUE, 705.55 FEET; THENCE NORTH 50 DEGREES 18' 45" WEST, ALONG THE NORTHEASTERLY LINE OF THE LAND DESCRIBED IN A DEED TO A. E. S. CHAFFEY AND OTHERS, RECORDED IN BOOK 4228, PAGE 191 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY, AND THE SOUTHEASTERLY PROLONGATION THEREOF, 152.00 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 730.00 FEET; THENCE NORTH-WESTERLY 13D.21 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 10 DEGREES 13' 12" TO A POINT IN THE NORTHEASTERLY LINE OF PARCEL 1, AS DESCRIBED IN A DEED RECORDED IN BOOK 7839, PAGE 739 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY; THENCE ALONG SAID NORTHEASTERLY LINE, NORTH 43 DEGREES 11' 16" WEST 1140.70 TO A POINT IN A LINE PARALLEL WITH AND DISTANT 100.00 FEET FEET EASTERLY, AS MEASURED AT RIGHT ANGLES FROM THE WESTERLY LINE OF THE LAND DESCRIBED IN ANNEXATION NO. 54 TO THE CITY OF NEWPORT BEACH, DECEMBER 3D, 1963; THENCE ALONG SAID PARALLEL LINE, NORTH D DEGREES 3B' 10" WEST 734.93 FEET TO A LINE THAT BEARS SOUTH 77 DEGREES 45' DD" WEST FROM THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID PARALLEL LINE, NORTH 77 DEGREES 45' DD" EAST 1110.58 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION.

ALSO EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN THE LAND DESCRIBED IN THE DEED TO THE STATE OF CALIFORNIA, RECORDED FEBRUARY 14, 1966 IN BOOK 7839, PAGE 739 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, ANY PORTION INCLUDED WITHIN WHITTIER AVENUE AND SIXTEENTH STREET, AS SHOWN ON THE MAP OF NEWPORT MESA TRACT RECORDED IN BOOK 5, PAGE 1 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

#### PARCEL 11

THAT PORTION OF BLOCK C OF THE BANNING TRACT, AS SHOWN ON A MAP ATTACHED TO REPORT OF THE REFEREES FILED APRIL 14, 1870 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, AND THAT PORTION OF LOTS 1111 AND 1112 AND PORTION OF SIXTEENTH STREET AND WHITTIER AVENUE ADJOINING, AS SHOWN ON THE MAP OF NEWPORT MESA TRACT, RECORDED IN BOOK 5, PAGE 1 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF SAID SIXTEENTH STREET WITH THE SOUTHWESTERLY BOUNDARY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT, AS SHOWN ON A MAP RECORDED IN BOOK 8, PAGE 61 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH 89 DEGREES 21' 50" WEST 16.50 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 500.00 FEET; THENCE WESTERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 28 DEGREES 48' 33", A DISTANCE OF 251.41 FEET TO A LINE TANGENT; THENCE SOUTH 60 DEGREES 33' 17" WEST ALONG SAID LINE TANGENT, A DISTANCE OF 404.40 FEET; THENCE NORTH 29 DEGREES 26' 43" WEST 804.50 FEET; THENCE NORTH 60 DEGREES 33' 17" EAST 300.00 FEET; THENCE SOUTH 88 DEGREES 48' 26" EAST 316.57 FEET TO A POINT IN A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 50.00 FEET, A RADIAL LINE FROM SAID POINT BEARS NORTH 89 DEGREES 21' SO" EAST; THENCE NORTHERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 44 DEGREES 24' 55", A DISTANCE OF 38.76 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 70.00 FEET; THENCE NORTHERLY ALONG SAID CURVE, THROUGH AN ANGLE OF 44 DEGREES 24' 55", A DISTANCE OF 69.77 FEET TO A LINE TANGENT; THENCE NORTH D DEGREES 38" 10" WEST ALONG SAID LINE TANGENT, A DISTANCE OF 11.11 FEET TO THE SAID SOUTHWESTERLY BOUNDARY LINE OF FIRST ADDITION TO NEWPORT MESA TRACT: THENCE SOUTH 29 DEGREES 26' 43" EAST ALONG SAID SOUTH-WESTERLY BOUNDARY LINE, A DISTANCE OF 789.32 FEET TO THE POINT OF BEGINNING.

# PARCEL 12

THAT PORTION OF LOT 1 AND ALL OF LOT 2 OF TRACT NO. 463, AS SHOWN ON A MAP RECORDED IN BOOK 32, PAGES 2 AND 3 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF FIFTEENTH STREET WITH THE CENTER LINE OF MONROVIA AVENUE, AS SHOWN ON A MAP RECORDED IN BOOK 65, PAGES 31 THROUGH 36 INCLUSIVE OF RECORD OF SURVEYS IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH 0 DEGREES 37' 24" EAST ALONG THE CENTER LINE OF SAID MONROVIA AVENUE, 440.93 FEET TO THE NORTHEASTERLY LINE OF SAID TRACT NO. 463; THENCE NORTH 29 DEGREES 26' 43" WEST ALONG SAID NORTHEASTERLY LINE, 272.61 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 29 DEGREES 26' 43" EAST ALONG SAID NORTHEASTERLY LINE, 1288.43 FEET TO THE CENTER LINE OF SUPERIOR AVENUE; THENCE SOUTH 39 DEGREES 41' 15" WEST ALONG SAID CENTER LINE OF SUPERIOR AVENUE, 705.55 FEET; THENCE NORTH 50 DEGREES 18' 45" WEST ALONG THE NORTHEASTERLY LINE OF THE LAND DESCRIBED IN A DEED TO A. E. S.

CHAFFEY AND OTHERS, RECORDED IN BOOK 4228, PAGE 191 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY, AND THE SOUTHEASTERLY PROLONGATION THEREOF, 152.00 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 730.00 FEET; THENCE WESTERLY 130.21 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 1D DEGREES 13' 12" TO A POINT IN THE NORTHEASTERLY LINE OF PARCEL 1, AS DESCRIBED IN A DEED RECORDED IN BOOK 7839, PAGE 739 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY; THENCE ALONG SAID NORTHEASTERLY LINE, NORTH 63 DEGREES 11' 16" WEST 1160.70 FEET TO A POINT IN A LINE PARALLEL WITH AND DISTANT 100.00 FEET EASTERLY, AS MEASURED AT RIGHT ANGLES FROM THE WESTERLY LINE OF THE LAND DESCRIBED IN ANNEXATION NO. 54 TO THE CITY OF NEWPORT DECEMBER 30, 1943; THENCE ALONG SAID PARALLEL LINE, NORTH D DEGREES 38' 10" WEST 734.93 FEET TO A LINE THAT BEARS SOUTH 77 DEGREES 45' DD" WEST FROM THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID PARALLEL LINE, NORTH 77 DEGREES 45' DD" EAST 1110.58 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION.

EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN LOT 2 OF SAID TRACT NO. 463.

#### PARCEL 13

THAT PORTION OF LOT 1 AND ALL OF LOT 2 OF TRACT NO. 463, AS SHOWN ON A MAP RECORDED IN BOOK 32, PAGES 2 AND 3 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF FIFTEENTH STREET, WITH THE CENTER LINE OF MONROVIA AVENUE, AS SHOWN ON A MAP RECORDED IN BOOK 65, PAGES 31 THROUGH 36 INCLUSIVE OF RECORD OF SURVEYS IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH D DEGREES 37' 24" EAST, ALONG THE CENTER LINE OF SAID MONROVIA AVENUE, 440.93 FEET TO NORTHEASTERLY LINE OF SAID TRACT NO. 463; THENCE NORTH 29 DEGREES 26' 43" WEST ALONG SAID NORTHEASTERLY LINE, 272.61 FEET TRUE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 29 DEGREE5 26' 43" EAST ALONG SAID NORTHEASTERLY LINE, 1288.43 FEET TO THE CENTER LINE OF SUPERIOR AVENUE; THENCE SOUTH 39 DEGREES 41' 15" WEST, ALONG SAID CENTER LINE OF SUPERIOR 705.55 FEET; THENCE NORTH 50 DEGREES 18' 45" WEST, ALONG THE NORTHEASTERLY LINE OF THE LAND DESCRIBED IN A DEED TO A. E. S. CHAFFEY AND OTHERS, RECORDED IN BOOK 4228, PAGE 191 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY, AND THE SOUTHEASTERLY PROLONGATION THEREOF, 152.0D FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 730.0D FEET; THENCE NORTHWESTERLY 130.21 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 10 DEGREES 13' 12" TO A POINT IN THE NORTHEASTERLY LINE OF PARCEL 1, AS DESCRIBED IN A DEED RECORDED IN BOOK 7839, PAGE 739 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY; THENCE ALONG SAID NORTHEASTERLY LINE, NORTH 63 DEGREES 11' 16" WEST 1160.70 FEET TO A POINT IN A LINE PARALLEL WITH AND DISTANT 100.00 FEET EASTERLY, AS MEASURED AT RIGHT ANGLES FROM THE WESTERLY LINE OF THE LAND DESCRIBED IN ANNEXATION NO. 54 TO THE CITY OF NEWPORT BEACH, DECEMBER 30, 1963; THENCE ALONG SAID PARALLEL LINE, NORTH D DEGREES 38' 10" WEST 734.93 FEET TO A LINE THAT BEARS SOUTH 77 DEGREES 45' 00" WEST FROM THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID PARALLEL LINE, NORTH 77 DEGREES 45' 00" EAST 1110.58 FEET TO THE TRUE POINT OF BEGINNING; THENCE

EXCEPTING THEREFROM, THE TITLE AND EXCLUSIVE RIGHTS DESCRIBED IN PARCEL 21 ABOVE.

### PARCEL 14

BEGINNING AT A POINT IN THE NORTHWESTERLY LINE OF SUPERIOR AVENUE, FORMERLY NEWPORT AVENUE, AS SAID NEWPORT AVENUE IS SHOWN ON A MAP OF TRACT NO. 15 RECORDED IN BOOK 9, PAGE 19 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, WHICH POINT OF BEGINNING BEARS NORTH 39 DEGREES 45' EAST 35.24 FEET FROM THE MOST EASTERLY CORNER OF LOT 1 IN BLOCK 1 OF SAID TRACT NO. 15; THENCE NORTH 50 DEGREES 15' WEST 122.00 FEET TO THE BEGINNING OF A CURVE TO THE LEFT; THENCE NORTHWESTERLY ON A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 730.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 130.21 FEET TO A POINT FROM WHICH A RADIAL LINE BEARS SOUTH 29 DEGREES 31' 48" WEST; THENCE SOUTH 39 DEGREES 45' WEST 75.42 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT; THENCE SOUTHWESTERLY ON A CURVE CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 450.00 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 235.10 FEET TO A POINT FROM WHICH A RADIAL LINE BEARS NORTH 20 DEGREES 19' WEST; THENCE SOUTH 5 DEGREES 43' 13" EAST 234.53 FEET TO AN INTERSECTION WITH THE NORTHERLY LINE OF THE EASEMENT FOR REALIGNMENT OF SUPERIOR AVENUE, AS DESCRIBED IN THE DEED TO ORANGE COUNTY, RECORDED JANUARY 4, 1954 IN BOOK 2643, PAGE 217 OF OFFICIAL RECORDS, ORANGE COUNTY, AND THE DEED RECORDED MARCH 22, 1954 IN BOOK 2692, PAGE 622 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE SOUTH 5 DEGREES 43' 13" EAST 30.22 FEET TO A POINT FROM WHICH A RADIAL LINE BEARS NORTH D DEGREES 54' D7" EAST; THENCE NORTHEASTERLY ON A CURVE CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 373.48 FEET, TO A POINT FROM

WHICH A RADIAL LINE BEARS NORTH 37 DEGREES 15' 00" WEST; THENCE NORTHEASTERLY ON A CURVE CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 904.00 FEET, A DISTANCE OF 205.11 FEET TO A POINT IN THE CENTER LINE OF SAID SUPERIOR AVENUE, FROM WHICH POINT A RADIAL LINE BEARS NORTH 50 DEGREES 15' WEST; THENCE NORTH 39 DEGREES 45' EAST, ALONG THE CENTER LINE OF SAID SUPERIOR AVENUE, 87.00 FEET; THENCE NORTH 50 DEGREES 15' WEST 30.00 FEET TO THE POINT OF BEGINNING.

# PARCEL 15

(A) THAT PORTION OF LOT 1 OF TRACT NO. 463, AS SHOWN ON A MAP RECORDED IN BOOK 32, PAGES 2 AND 3 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THAT PORTION OF LOT 1 OF TRACT NO. 2250, AS SHOWN ON A MAP RECORDED IN BOOK 104, PAGES & AND 7 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; AND THAT PORTION OF LOT D OF THE BANNING TRACT, AS SHOWN ON MAP FILED IN SUPERIOR COURT CASE NO. 6385, IN AND FOR THE COUNTY OF LOS ANGELES, CALIFORNIA, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE MOST NORTHERLY CORNER OF THAT CERTAIN PARCEL OF LAND DESCRIBED IN DEED RECORDED IN BOOK 4228, PAGE 191 OF OFFICIAL RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE NORTH-WESTERLY IN A DIRECT LINE TO A POINT IN THE NORTHERLY PROLONGATION OF THE WESTERLY LINE OF THE ANNEXATION TO THE CITY OF NEWPORT BEACH, KNOWN AS ANNEXATION NO. 55, SEPTEMBER 19, 1963, SAID POINT BEING DISTANT NORTHERLY, ALONG SAID WESTERLY LINE AND SAID NORTHERLY PROLONGATION, 740.00 FEET FROM A LINE PARALLEL WITH AND DISTANT NORTHEASTERLY 50.00 FEET, MEASURED AT RIGHT ANGLES FROM THE CENTER LINE OF THE COAST HIGHWAY, 100.00 FEET WIDE AS NOW ESTABLISHED; THENCE ALONG SAID PROLONGED LINE AND SAID WESTERLY LINE, SOUTHERLY 740.00 FEET TO SAID PARALLEL LINE; THENCE SOUTHEASTERLY ALONG SAID PARALLEL LINE, TO THE GENERAL NORTHERLY LINE OF SUPERIOR AVENUE, AS DESCRIBED IN DEED TO THE COUNTY OF ORANGE, RECORDED IN BOOK 2692, PAGE 622 OF SAID OFFICIAL RECORDS, AND BY DEED RECORDED IN BOOK 2643, PAGE 218 OF SAID OFFICIAL RECORDS; THENCE EASTERLY ALONG SAID NORTHERLY LINE OF SAID LAST MENTIONED DEEDS, TO THE WESTERLY LINE OF SAID CERTAIN PARCEL OF LAND; THENCE NORTHERLY AND NORTHEASTERLY ALONG THE WESTERLY AND NORTHWESTERLY LINES OF SAID CERTAIN PARCEL OF LAND TO THE POINT OF BEGINNING.

(B) THAT PORTION OF LOT D OF THE BANNING TRACT, AS SHOWN ON A MAP FILED IN SUPERIOR COURT CASE NO. 6385, COUNTY OF LOS ANGELES, CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTHWESTERLY LINE OF THE IRVINE SUBDIVISION, AS SHOWN ON A MAP RECORDED IN BOOK 1, PAGE 88 OF MISCELLANEOUS RECORD MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, WITH A LINE PARALLEL WITH AND DISTANT NORTHERLY 50.00 FEET, MEASURED AT RIGHT ANGLES FROM THE CENTER LINE OF THE COAST HIGHWAY, 100.00 FEET WIDE AS NOW ESTABLISHED; THENCE NORTHEASTERLY ALONG SAID NORTHWESTERLY LINE, TO THE SOUTHERLY LINE OF THE PARCEL OF LAND DESCRIBED IN THE EASEMENT FOR THE REALIGNMENT OF SUPERIOR AVENUE, AS CONVEYED TO ORANGE COUNTY BY DEEDS RECORDED IN BOOK 2643, PAGE 218 OF OFFICIAL RECORDS, ORANGE COUNTY, AND IN BOOK 2692, PAGE 622 OF SAID OFFICIAL RECORDS, ORANGE COUNTY; THENCE WESTERLY ALONG SAID SOUTHERLY LINE TO SAID PARALLEL LINE; THENCE EASTERLY ALONG SAID PARALLEL LINE TO THE POINT OF BEGINNING.

(C) BEGINNING AT THE INTERSECTION OF A LINE PARALLEL WITH AND DISTANT 30.00 FEET SOUTHEASTERLY, MEASURED AT RIGHT ANGLES FROM THE NORTHWESTERLY LINE OF THE IRVINE SUBDIVISION, AS SHOWN ON A MAP RECORDED IN BOOK 1, PAGE 88 OF MISCELLANEOUS RECORD MAPS, RECORDS OF THE RECORDER'S OFFICE OF ORANGE COUNTY, CALIFORNIA, WITH A LINE PARALLEL WITH AND DISTANT NORTHERLY 50.00 FEET, MEASURED AT RIGHT ANGLES FROM THE CENTER LINE OF THE COAST HIGHWAY, 100.00 FEET WIDE AS NOW ESTABLISHED: THENCE NORTHEASTERLY ALONG SAID FIRST MENTIONED PARALLEL LINE, TO THE SOUTHEASTERLY PROLONGATION OF THE NORTHEASTERLY LINE OF THAT CERTAIN PARCEL OF LAND DESCRIBED IN BOOK 4228, PAGE 191 OF OFFICIAL RECORDS IN SAID OFFICE; THENCE NORTHWESTERLY ALONG SAID SOUTHEASTERLY PROLONGATION TO A LINE THAT IS PARALLEL WITH AND DISTANT 30.00 FEET NORTHWESTERLY, MEASURED AT RIGHT ANGLES FROM SAID NORTH-WESTERLY LINE OF THE IRVINE SUBDIVISION: THENCE SOUTHWESTERLY ALONG SAID LAST DESCRIBED PARALLEL LINE, TO THE MOST NORTHERLY CORNER OF SUPERIOR AVENUE, AS CONVEYED TO ORANGE COUNTY BY DEEDS RECORDED IN BOOK 2643, PAGE 218 OF SAID OFFICIAL RECORDS, AND IN BOOK 2692, PAGE 622 OF SAID OFFICIAL RECORDS; THENCE ALONG THE GENERAL NORTHERLY LINES OF SAID DEEDS TO THE COUNTY OF ORANGE, TO THE NORTHERLY LINE OF SAID COAST HIGHWAY, 100.00 FEET WIDE; THENCE SOUTHEASTERLY ALONG SAID NORTHERLY LINE TO THE POINT OF BEGINNING.

EXCEPTING THAT PORTION THEREOF DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF SAID NORTHWESTERLY LINE WITH SAID NORTHERLY LINE; THENCE NORTHEASTERLY ALONG SAID NORTHWESTERLY LINE TO THE SOUTHERLY LINE OF THE PARCEL OF LAND DESCRIBED IN DEED RECORDED IN BOOK 2643, PAGE 218 OF SAID OFFICIAL RECORDS, AND IN DEED RECORDED IN BOOK 2672, PAGE 622 OF SAID OFFICIAL RECORDS; THENCE WESTERLY ALONG SAID SOUTHERLY LINE TO SAID NORTHERLY LINE; THENCE EASTERLY ALONG SAID NORTHERLY LINE TO THE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM, THAT PORTION THEREOF LYING SOUTHEASTERLY OF THE NORTHWESTERLY LINE OF SAID IRVINE SUBDIVISION.

BEGINNING AT THE POINT OF INTERSECTION OF THE SOUTHERLY (A) LINE OF THE BD-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY THE NORTHWESTERLY BOUNDARY OF IRVINE'S SUBDIVISION, AS SHOWN ON A MAP RECORDED IN BOOK 1, PAGE 88 OF MISCELLANEOUS RECORD ORANGE COUNTY, CALIFORNIA; THENCE ALONG SAID RECORDS OF NORTHWESTERLY BOUNDARY LINE OF IRVINE'S SUBDIVISION AND ITS SOUTHWESTERLY PROLONGATION, SOUTH 39 DEGREES 45" WEST 431 252.26 FEET TO A POINT IN THE LINE OF ORDINARY HIGH TIDE PACIFIC OCEAN IN NEWPORT BAY, AND DESIGNATED "NORTH LINE", AS ESTABLISHED BY THE DECREE IN THE ACTION ENTITLED "CITY NEWPORT BEACH, PLAINTIFF VS. F. M. STROBRIDGE AND OTHERS, DEFENDANTS", CASE NO. 23686, SUPERIOR COURT OF THE STATE IN AND FOR ORANGE COUNTY, A CERTIFIED COPY OF WHICH CALIFORNIA, DECREE WAS RECORDED SEPTEMBER 19, 1928 IN BOOK 201, PAGE OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE ALONG SAID TIDE LINE, NORTH 74 DEGREES 17' 11" WEST 592.01 FEET; THENCE NORTH 58 28' 28" WEST 1085.28 FEET; THENCE NORTH 46 DEGREES 44' 18" WEST 584.64 FEET; THENCE NORTH 60 DEGREES 19' 50" 577.07 FEET TO A POINT IN THE SOUTHERLY LINE OF THE 8D-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY, FROM WHICH POINT QUARTER CORNER BÉTWEEN SECTIONS 20 AND 29, TOWNSHIP & SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN, BEARS NORTH 5 DEGREES 55' 18" WEST 1113.01 FEET; THENCE ALONG THE SOUTHERLY LINE OF SAID CALIFORNIA STATE HIGHWAY, THE FOLLOWING COURSES THENCE SOUTH 83 DEGREES 18' EAST 605.33 FEET; AND DISTANCES: THENCE ON A CURVE CONCAVE TO THE SOUTH, HAVING A RADIUS 960 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 290.98 FEET; THENCE SOUTH 45 DEGREES 56' EAST 467.17 FEET; THENCE ON A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 940 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE THENCE SOUTH 54 DEGREES 08, 30" EAST 387.06 OF 197.56 FEET; FEET; THENCE ON A CURVE CONCAVE TO THE NORTHEAST; HAVING A RADIUS OF 1040 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE 289.51 FEET; THENCE SOUTH 70 DEGREES 05/ 30" EAST 494.84 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM, THAT PORTION CONVEYED TO THE TOWNSEND LAND COMPANY BY DEED RECORDED NOVEMBER 6, 1930 IN BOOK 429, PAGE 414 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THAT PORTION CONVEYED TO BEECO, LTD. BY DEED RECORDED DECEMBER 27, 1961 IN BOOK 5957, PAGE 657 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN TRACT NO. 3162, AS SHOWN ON A MAP RECORDED IN BOOK 75, PAGES 16, 17 AND 18 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

(B) ALL OF TRACT NO. 3162, AS SHOWN ON A MAP RECORDED IN BOOK 95, PAGES 16, 17 AND 18 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

### PARCEL 16

THAT PORTION OF THE RANCHO SANTIAGO DE SANTA ANA, THE PATENT FOR WHICH WAS RECORDED JUNE 28, 1884 IN BOOK 3, PAGE 387 OF PATENTS, RECORDS OF LOS ANGELES COUNTY, CALIFORNIA, AND THAT PORTION OF BLOCK D OF THE BANNING TRACT, AS SHOWN ON THE MAP OF SAID TRACT FILED IN THE CASE OF HANCOCK BANNING AND OTHERS VS. MARY H. BANNING, FOR PARTITION, CASE NO. 6385 UPON THE REGISTER OF ACTIONS OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR LOS ANGELES COUNTY, THAT IS INCLUDED WITHIN A STRIP OF LAND 100 FEET WIDE, SAID STRIP BEING 50 FEET WIDE ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTER LINE:

COMMENCING AT THE POINT OF INTERSECTION OF THE WEST LINE OF IRVINE'S SUBDIVISION, AS SHOWN ON A MAP RECORDED IN BOOK 1, PAGE 88 OF MISCELLANEOUS RECORD MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, WITH THE CENTER LINE OF THE 80-FOOT STATE HIGHWAY RIGHT OF WAY, AS DESCRIBED IN DEED RECORDED IN BOOK 508, 45 OF DEEDS, RECORDS OF ORANGE COUNTY, CALIFORNIA, SAID POINT OF INTERSECTION BEARS NORTH 39 DEGREES 43' 45" EAST ALONG SAID WEST LINE OF THE IRVINE SUBDIVISION, A DISTANCE OF 42.52 FEET FROM THE NORTHEASTERLY CORNER OF THE PARCEL OF LAND AWARDED TO THE LOS ANGELES FIRST NATIONAL TRUST AND SAVINGS BANK BY DECREE RENDERED IN THE SUPERIOR COURT, CASE NO. 23686, A COPY WHICH IS RECORDED IN BOOK 201, PAGE 253 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE FROM SAID POINT OF BEGINNING, NORTHWESTERLY ALONG THE SAID CENTER LINE OF THE BO-FOOT STATE HIGHWAY RIGHT OF WAY, THE FOLLOWING COURSES, CURVES AND DISTANCES: NORTH 70 DEGREES 05' 30" WEST A DISTANCE OF 509.26 FEET; THENCE ALONG A TANGENT CURVE TO THE RIGHT, HAVING A RADIUS OF 1000 FEET, THROUGH AN ANGLE OF 15 DEGREES 57', A DISTANCE OF 278.38 FEET; THENCE TANGENT NORTH 54 DEGREES 08/ 30" WEST, A DISTANCE OF 387.06 FEET; THENCE ALONG A TANGENT CURVE TO THE LEFT, HAVING A RADIUS OF 1000 FEET, THROUGH AN ANGLE OF 11 DEGREES 47' 30", A DISTANCE OF 205.80 FEET; THENCE TANGENT NORTH 45 DEGREES 54' WEST, A DISTANCE OF 667.17 FEET; THENCE ALONG A TANGENT CURVE TO THE LEFT, HAVING A RADIUS OF 1000 FEET, THROUGH AN ANGLE OF 17 DEGREES 22', A DISTANCE OF 3D3.11 FEET; THENCE TANGENT NORTH 83 DEGREES 18' WEST, A DISTANCE OF 646.66 FEET TO A POINT WHICH BEARS SOUTH 4 DEGREES 13' 24" EAST 1065.42 FEET FROM A CONCRETE MONUMENT MARKING THE NORTH QUARTER CORNER OF SECTION 29, TOWNSHIP & SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN.

EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN THE FOLLOWING: BEGINNING AT THE POINT OF INTERSECTION OF THE SOUTHERLY LINE THE BD-FOOT RIGHT OF WAY OF JHE CALIFORNIA STATE HIGHWAY AND THE NORTHWESTERLY BOUNDARY OF IRVINE'S SUBDIVISION, AS SHOWN ON A MAP RECORDED IN BOOK 1, PAGE 88 OF MISCELLANEOUS RECORD MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE ALONG SAID NORTHWESTERLY BOUNDARY LINE OF IRVINE'S SUBDIVISION AND ITS SOUTHWESTERLY PROLONGATION, SOUTH 37 DEGREES 43' 45" 252.26 FEET TO A POINT IN THE LINE OF ORDINARY HIGH TIDE OF THE PACIFIC OCEAN IN NEWPORT BAY, AND DESIGNATED "NORTH LINE", AS ESTABLISHED BY THE DECREE IN THE ACTION ENTITLED "CITY OF PLAINTIFF VS. F. M. STROBRIDGE AND OTHERS, NEWPORT BEACH, DEFENDANTS\*, CASE NO. 23686, SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A CERTIFIED COPY OF WHICH DECREE WAS RECORDED SEPTEMBER 19, 1928 IN BOOK 201, PAGE 253 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE ALONG SAID TIDE LINE, NORTH 74 DEGREES 17' 11" WEST 592.01 FEET; THENCE NORTH 58 DEGREES 28' 28" WEST 1085.28 FEET; THENCE NORTH 66 DEGREES 44' WEST 584.64 FEET; THENCE NORTH 60 DEGREES 19' 50" WEST 577.07 FEET TO A POINT IN THE SOUTHERLY LINE OF THE BD-FOOT RIGHT OF WAY OF THE CALIFORNIA STATE HIGHWAY, FROM WHICH POINT THE QUARTER CORNER BETWEEN SECTIONS 2D AND 29, TOWNSHIP 6 SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN, BEARS NORTH 5 DEGREES 55' 18" WEST 1113 D1 FEET; THENCE ALONG THE SOUTHERLY LINE OF SAID CALIFORNIA STATE HIGHWAY, THE FOLLOWING COURSES THENCE SOUTH 83 DEGREES 18' EAST 605.33 FEET; AND DISTANCES: THENCE ON A CURVE CONCAVE TO THE SOUTH, HAVING A RADIUS OF 960 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 290.98 FEET; THENCE SOUTH 45 DEGREES 56' EAST 667.17 FEET; THENCE ON A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 960 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 197.56 FEET; THENCE SOUTH 54 DEGREES 08' 30" EAST 387.06 THENCE ON A CURVE CONCAVE TO THE NORTHEAST, HAVING A RADIUS OF 1040 FEET, AND TANGENT TO THE LAST MENTIONED COURSE, A DISTANCE OF 289.51 FEET; THENCE SOUTH 70 DEGREES 05' 30" EAST 494.84 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM, THAT PORTION CONVEYED TO THE TOWNSEND LAND COMPANY BY DEED RECORDED NOVEMBER 6, 1930 IN BOOK 429, PAGE 414 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THAT PORTION OF SAID LAND CONVEYED TO BEECO, LTD. BY DEED RECORDED DECEMBER 27, 1961 IN BOOK 5957, PAGE 657 OF OFFICIAL RECORDS, ORANGE COUNTY.

ALSO EXCEPTING THEREFROM, THAT PORTION LYING SOUTHERLY AND WESTERLY OF THE FOLLOWING DESCRIBED LINE:

BEGINNING AT THE NORTHWESTERLY TERMINUS OF THAT CERTAIN ABOVE NAMED COURSE IN THE CENTER LINE OF SAID STATE HIGHWAY, 100.00 FEET WIDE, HAVING A BEARING OF NORTH 83 DEGREES 16'00" WEST AND A LENGTH OF 646.66 FEET; THENCE SOUTH 83 DEGREES 16'00" EAST, ALONG SAID COURSE, 41.33 FEET; THENCE SOUTH 06 DEGREES 42'00" WEST 40.00 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF SAID STATE HIGHWAY, 80.00 FEET WIDE; THENCE SOUTH 60 DEGREES 19'50" EAST TO THE SOUTHERLY RIGHT OF WAY LINE OF SAID STATE HIGHWAY, 100.00 FEET WIDE, SAID ABOVE DESCRIBED LINE IS SHOWN ON A MAP FILED IN BOOK 27, PAGE 47 OF RECORD OF SURVEYS IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY, CALIFORNIA.

#### PARCEL 17

ONE HUNDRED PERCENT (100%) OF ALL RIGHTS TO OIL, GAS AND OTHER HYDROCARBON AND MINERAL SUBSTANCES LYING UNDER, OR THAT MAY BE PRODUCED FROM THE FOLLOWING DESCRIBED LAND, TOGETHER WITH ONE HUNDRED PERCENT (100%) OF ALL RIGHTS TO THE PROCEEDS THEREFROM, AND ONE HUNDRED PERCENT (100%) OF ALL RENTS, BONUSES AND PROFITS ACCRUING THEREFROM, WITHOUT THE RIGHT TO USE OR OCCUPY OR TO ENTER UPON ANY PORTION OF THE SURFACE AND 500 FEET BELOW THE SURFACE, MEASURED VERTICALLY FROM THE SURFACE OF SAID LAND, FOR THE PURPOSE OF DRILLING FOR, CAPTURING, PRODUCING, EXTRACTING, STORING, TREATING OR OTHERWISE HANDLING OR UTILIZING SUCH OIL, GAS OR OTHER HYDROCARBON OR MINERAL SUBSTANCES, OR FOR THE PURPOSE OF EXERCISING GRANTOR'S RIGHTS THERETO, OVER THE FOLLOWING DESCRIBED LAND:

THAT PORTION OF LOT B OF THE BANNING TRACT, AS SHOWN ON A MAP FILED IN THE CASE OF HANCOCK BANNING AND OTHERS VS. MARY H. BANNING, FOR PARTITION, BEING CASE NO. 4385 UPON THE REGISTER OF ACTIONS OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR LOS ANGELES COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWESTERLY CORNER OF SAID LOT B; THENCE SOUTHERLY ALONG THE WESTERLY BOUNDARY OF SAID LOT B, SOUTH 01 DEGREE 45' 00" WEST 462.00 FEET TO RANCHO LAS BOLSAS, STATION 75, AND SOUTH 34 DEGREES 15' 00" WEST 462.75 FEET TO RANCHO LAS BOLSAS, STATION 74, BEING THE TRUE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID WESTERLY BOUNDARY, SOUTH 06 DEGREES 15' 00" EAST TO THE WESTERLY LINE OF THE STRIP OF LAND DESCRIBED IN DEED TO THE CITY OF SANTA ANA, RECORDED APRIL 14, 1934 IN BOOK 670, PAGE 147 OF OFFICIAL RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE NORTHERLY ALONG SAID WESTERLY LINE TO THE INTERSECTION WITH THAT CERTAIN COURSE HEREINABOVE CITED AS "SOUTH 34 DEGREES 15' 00" WEST 462.75 FEET"; THENCE ALONG SAID CERTAIN COURSE, SOUTH 34 DEGREES 15' 00" WEST TO THE TRUE POINT OF BEGINNING.

EXCEPTING THEREFROM, THE TITLE AND EXCLUSIVE RIGHT TO ALL OF THE MINERALS, INCLUDING, BUT NOT LIMITED TO, ALL PETROLEUM, OIL, NATURAL GAS AND OTHER HYDROCARBON SUBSTANCES AND PRODUCTS DERIVED THEREFROM, TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS, UPON, OVER AND BENEATH THE SURFACE OF SAID LAND, AT ALL TIMES, TO EXPLORE FOR, EXTRACT AND REMOVE ANY OF SAID MINERALS LOCATED BELOW A DEPTH OF 620D FEET, BUT WITHOUT THE RIGHT TO USE THE SURFACE OF SAID LAND DOWN TO A DEPTH OF 50D FEET, AS RESERVED IN THE DEED EXECUTED BY HANCOCK BANNING JR. AND OTHERS, DATED AUGUST 1, 1958, RECORDED AUGUST 29, 1958 IN BOOK 4400, PAGE 532 OF OFFICIAL RECORDS, ORANGE COUNTY, AND RE-RECORDED OCTOBER 6, 1958 IN BOOK 4437, PAGE Z28 OF OFFICIAL RECORDS, ORANGE COUNTY, AS AMENDED BY THE DEED AND AGREEMENT EXECUTED BY HANCOCK BANNING JR. AND OTHERS, RECORDED DECEMBER Z7, 1961 IN BOOK 5957, PAGE 665 OF OFFICIAL RECORDS, ORANGE COUNTY.

### PARCEL 18

BEGINNING AT THE INTERSECTION OF THE SOUTHERLY LINE OF THE STATE HIGHWAY, 100.00 FEET IN WIDTH, AS DESCRIBED IN A DEED RECORDED APRIL 2D, 1936 IN BOOK 822, PAGE 48 OF OFFICIAL RECORDS, ORANGE COUNTY, WITH THE NORTHWESTERLY BOUNDARY LINE OF IRVINE'S SUBDIVISION, AS SHOWN ON A MAP RECORDED IN BOOK 1, PAGE 88 OF MISCELLANEOUS RECORD MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA; THENCE SOUTH 39 DEGREES 43' 45" WEST 241.63 FEET ALONG SAID NORTHWESTERLY BOUNDARY LINE AND ITS SOUTHWESTERLY PROLONGATION TO THAT CERTAIN LINE DESIGNATED "NORTH LINE", AS ESTABLISHED BY A DECREE OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A CERTIFIED COPY OF WHICH WAS RECORDED SEPTEMBER 19, 1928 IN BOOK 201, PAGE 253 OF OFFICIAL RECORDS, THENCE NORTH 74 DEGREES 17' 11" WEST 265.62 ORANGE COUNTY; FEET ALONG SAID "NORTH LINE" TO THE NORTHEASTERLY LINE OF BALBOA BOULEVARD, AS DESCRIBED IN AN AGREEMENT RECORDED AUGUST 9, 1927 IN BOOK 70, PAGE 408 OF OFFICIAL RECORDS, ORANGE COUNTY; THENCE NORTH 19 DEGREES 41' 50" WEST 248.25 FEET ALONG SAID NORTHEASTERLY LINE TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 40.00 FEET; THENCE NORTHERLY AND NORTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 88 DEGREES 14' DA", A DISTANCE OF 61.60 FEET TO A POINT ON A CURVE IN THE SOUTHERLY LINE OF SAID STATE HIGHWAY, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1050.00 FEET, A RADIAL LINE THROUGH SAID POINT BEARS SOUTH 2D DEGREES 25' 32" WEST; THENCE ALONG SAID SOUTHERLY LINE, THROUGH A CENTRAL ANGLE OF D DEGREES 31' 02", A DISTANCE OF 9.48 FEET; THENCE TANGENT TO SAID CURVE, SOUTH 70 DEGREES 05' 30" EAST 491.24 FEET TO THE POINT OF BEGINNING. EXCEPTING THEREFROM, THAT PORTION INCLUDED WITHIN PARCEL 1 AND PARCEL 1-A OF THAT CERTAIN FINAL ORDER OF CONDEMNATION, SUPERIOR COURT CASE NO. 209895, A CERTIFIED COPY OF WHICH WAS RECORDED NOVEMBER 14, 1975 IN BOOK 11569, PAGE 736 OF OFFICIAL RECORDS OF ORANGE COUNTY, CALIFORNIA, AND RE-RECORDED DECEMBER 4, 1975 IN BOOK 11586, PAGE 102 OF SAID OFFICIAL RECORDS.

#### PARCEL 19

THAT PORTION OF LOT D OF THE BANNING TRACT IN THE CITY OF NEWPORT BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP ATTACHED TO THE REPORT OF THE REFEREES FILED APRIL 14, 1870 IN CASE NO. 6385 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, CALIFORNIA, TOGETHER WITH THAT PORTION OF SECTION 27, TOWNSHIP 6 SOUTH, RANGE 10 WEST, OF THE SAN BERNARDINO MERIDIAN, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THAT CERTAIN LINE DESIGNATED "NORTH LINE", AS ESTABLISHED BY A DECREE OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A CERTIFIED COPY OF WHICH WAS RECORDED SEPTEMBER 19, 1928 IN BOOK 201, PAGE 253 OF OFFICIAL RECORDS, RECORDS OF SAID COUNTY, WITH THE NORTHEASTERLY LINE OF BALBOA BOLLEVARD, BD.DD FEET WIDE, AS DESCRIBED IN THE AGREEMENT RECORDED AUGUST 9, 1927 IN BOOK 70, PAGE 408 OF OFFICIAL RECORDS, RECORDS OF SAID COUNTY; THENCE SOUTH 74 DEGREES 17' 37" EAST 19.04 FEET ALONG SAID "NORTH LINE" TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 554.00 FEET, A RADIAL TO SAID POINT BEARS SOUTH 62 DEGREES 58' 06" WEST; THENCE NORTHWESTERLY 55.40 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 5 DEGREES 43' 48" TO A POINT ON THE SOUTHEASTERLY LINE OF THE LAND DESCRIBED IN THE LEASE RECORDED IN BOOK 5988, PAGE 712 OF SAID OFFICIAL RECORDS, SAID POINT BEING THE TRUE POINT OF BEGINNING: THENCE CONTINUING NORTHWESTERLY 15.37 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 1 DEGREE 35' 29" TO ITS POINT OF TANGENCY WITH A LINE PARALLEL WITH AND NORTHEASTERLY 11.00 FEET FROM SAID NORTHEASTERLY LINE OF BALBOA BOULEVARD; THENCE NORTH 19 DEGREES 42' 37" WEST 213.33 FEET ALONG SAID PARALLEL LINE TO THE BEGINNING OF A TANGENT CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 18.00 FEET; THENCE NORTHERLY 3.23 FEET ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 10 DEGREES 17' 33" TO A POINT ON THAT CERTAIN CURVE IN SAID NORTHEASTERLY LINE OF BALBOA BOULEVARD, DESCRIBED IN SAID AGREEMENT AS BEING CONCAVE SOUTH- EASTERLY AND HAVING A RADIUS OF 40.00 FEET, A RADIAL OF SAID 40.00-FOOT RADIUS CURVE TO SAID POINT BEARS NORTH 45 DEGREES 34' 52" WEST; THENCE SOUTHERLY 30.81

FEET ALONG SAID CURVE AND SAID NORTHEASTERLY LINE, THROUGH A CENTRAL ANGLE OF 44 DEGREES D7' 46"; THENCE TANGENT TO SAID CURVE, SOUTH 19 DEGREES 42' 37" EAST 210.00 FEET ALONG SAID NORTHEASTERLY LINE TO THE MOST SOUTHERLY CORNER OF THE LAND DESCRIBED IN SAID LEASE; THENCE NORTH 42 DEGREES 25' 20" EAST 12.68 FEET ALONG THE SOUTHEASTERLY LINE OF SAID LAND TO THE TRUE POINT OF BEGINNING.

# PARCEL 20

THAT PORTION OF LOT D OF THE BANNING TRACT IN THE CITY OF NEWPORT BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP ATTACHED TO THE REPORT OF THE REFEREES FILED APRIL 14, 1870 IN CASE NO. 6385, IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF LOS ANGELES, TOGETHER WITH THAT PORTION OF SECTION 27, TOWNSHIP 6 SOUTH, RANGE 1D WEST, OF THE SAN BERNARDINO MERIDIAN, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THAT CERTAIN LINE DESIGNATED "NORTH LINE", AS ESTABLISHED BY A DECREE OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR ORANGE COUNTY, A CERTIFIED COPY OF WHICH WAS RECORDED SEPTEMBER 19, 1928 IN BOOK 201, PAGE OFFICIAL RECORDS, RECORDS OF SAID ORANGE COUNTY, WITH THE NORTHEASTERLY LINE OF BALBOA BOULEVARD, 80.00 FEET WIDE AS DESCRIBED IN THE AGREEMENT RECORDED AUGUST 9, 1927 IN BOOK 70, PAGE 408 OF OFFICIAL RECORDS, RECORDS OF SAID ORANGE COUNTY; THENCE SOUTH 74 DEGREES 17' 37" EAST 19.04 FEET ALONG SAID "NORTH LINE" TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTH-EASTERLY AND HAVING A RADIUS OF 554.00 FEET, A RADIAL TO SAID POINT BEARS SOUTH 62 DEGREES 58' 06" WEST; THENCE NORTHWESTERLY 55.40 FEET ALONG SAID CURVE, TO THE SOUTHEASTERLY LINE OF THE LAND DESCRIBED IN THE LEASE RECORDED IN BOOK 578, PAGE 712 OF SAID OFFICIAL RECORDS; THENCE SOUTH 42 DEGREES 25' 20" WEST 12.48 FEET ALONG SAID SOUTHEASTERLY LINE, TO SAID NORTHEASTERLY LINE OF BALBOA BOULEVARD; THENCE SOUTH 19 DEGREES 42' 37" EAST 38.25 FEET ALONG SAID NORTHEASTERLY LINE TO THE POINT OF BEGINNING.

EXCEPT ANY PORTION OR PORTIONS OF SAID ABOVE DESCRIBED LAND WHICH IS, OR ARE, NOT INCLUDED EITHER WITHIN THE EXTERIOR BOUNDARIES OF THE RANCHO SANTIAGO DE SANTA ANA, OR WITHIN THE EXTERIOR BOUNDARY LINES OF GOVERNMENT LOT 1, SECTION 19; GOVERNMENT LOT 1, SECTION 2D; AND GOVERNMENT LOT 1, SECTION 27, ALL IN TOWNSHIP 6 SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN.

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