

# SOLANO COUNTY ZONING ADMINISTRATOR

## Use Permit U-00-13 revision 3

### Resource Management Staff Report

Application No. U-00-13-MR 3

Project Planner: Eric Wilberg

Meeting of August 4, 2011

Agenda Item No. 4

**Applicant:**

**Name:** Venoco, Inc.

**Address:** 370 Seventeenth Street, Suite 3900  
Denver, CO 80202

**Property Owner:**

**Name:** John & Nancy Abel Trust

**Address:** 555 South Fourth Street  
Rio Vista, CA 94571

**Action Requested:** Use permit revision to allow for the drilling of one additional gas well at an existing natural gas exploration and production site (Suisun Community #22).

**Site Information:**

Size: ~57 Acres

Location: On the shores of Suisun Bay, at the westerly terminus of Van Sickle Road

APN: 0046-210-110

Zoning: Marsh Preservation 'MP'

Land Use: Privately owned duck club also utilized for natural gas exploration & production

General Plan: Marsh

Ag. Contract: Contract No. 684

Soils Type: Valdez Silty Clay Loam, Clay Substratum

Access: Provided from Van Sickle Road

Utilities: No water or sewer facilities proposed

**Adjacent General Plan Designations, Zoning and Existing Land Uses**

	General Plan	Zoning	Land Use
North	Marsh	MP	Marshland, duck club, well facilities
South	Water Bodies/Courses	-----	Suisun Bay
East	Marsh	MP	Marshland, duck club, well facilities
West	Marsh	MP	Marshland, duck club, well facilities

**Environmental Status:**

The requested revision is Categorical Exempt from CEQA pursuant to Section 15302 of the State CEQA Guidelines, Replacement or Reconstruction

**Motion to Approve:**

Zoning Administrator hereby **ADOPT** the mandatory and additional findings and **APPROVE** Use Permit U-00-13 revision 3, subject to the recommended conditions of approval.

## **BACKGROUND and PROJECT DESCRIPTION**

The original use permit was granted by the Planning Commission (PC) on February 1, 2001, with the Board of Supervisors upholding the decision on appeal. Minor revision 1 was granted by the PC on February 7, 2002, which extended the well drilling operations into the 2002 drilling season (July 15 to October 1). Minor revision 2 was granted by the Zoning Administrator on March 5, 2009, which permitted two additional natural gas wells on the existing well pad. These two wells are referred to as the Suisun Community #101 and #102 gas wells.

The Suisun Community #101 was drilled in 2010 and the well was plugged and abandoned in 2011. As a result, Venoco is requesting approval of an additional well, Suisun Community #103 to be drilled from the existing Suisun Community #22 natural gas well site. In addition, drilling operations will be extended through the end of the 2014 drilling season. Currently, one natural gas well and associated production equipment is located at the project site. The site is graveled and encompasses an area of approximately 0.56 acres.

Prior to initiating drilling activities, all workers will be given an environmental orientation to ensure that those working in the project area understand the sensitivity of the areas adjacent to the project site and the necessity of avoiding disturbance to these areas. The environmental orientation will also discuss emergency response guidelines. A sediment barrier fence and earthen berm will be installed around the boundary of the existing natural gas well site to ensure all project activities are restricted to the existing project site and that no activities occur in adjacent wetland areas. No additional grading or fill material is required. Drilling and testing will require approximately 20 to 25 total truck trips to mobilize drilling equipment to the site. Equipment will then be rigged and drill activities initiated. Approximately 3 to 4 truck trips a day will be required during drilling operation to support drilling operations. Drilling activities will operate 24 hours per day, and each well may require approximately 20 to 30 days to drill and complete. Approximately 12 to 15 personnel will be on site at any given time during drilling operations. After the well is drilled, the well is either completed or abandoned and the drilling rig (and related equipment) will be removed from the site.

No sump will be excavated, and drilling mud will be contained in tanks. All drilling equipment and production testing equipment (i.e. drilling rig, mud pumps, mud system equipment, portable water tanks, waste tanks, fuel tanks, portable toilets, pipe racks, and pipe baskets) will be temporarily contained within the proposed project area. Drilling equipment is identified on the Drilling Pad Site Plan. Temporary lighting will be used during drilling operations but lighting is not required for the production facility. Directional lighting will be used to minimize potential impacts to areas outside of the proposed project area.

If drilling is successful, the project applicant proposes to connect the wells to existing production equipment. Production equipment is identified on the Production Pad site plan. An existing gate and fence around the property provide security. Venoco anticipates that drilling and testing will be completed by the end of the 2014 drilling

season.

Activities associated with ongoing production operations include daily site visits to monitor production and perform routine maintenance and removal of production water. Venoco anticipates that that removal of production water will require 1 truck trip per week. Production water will be disposed of off site according to applicable local, state and federal regulations. Venoco proposes to limit non-routine maintenance/work i.e., work over rig use to the identified drilling season.

At the conclusion of the economic life (production) of the well, the wells will be abandoned and plugged according to DOGGR regulations. Once all of the wells on site are abandoned and plugged, surface equipment will be removed from the site. Contours will be re-established to near grade conditions present at the time of project initiation. After all equipment is removed, vegetation will be planted to provide erosion control and improve habitat. The goal of site restoration is to restore the site to its condition or better than that observed at the time of project initiation.

The site is within the Primary Management Area of the Suisun Marsh and will require a Marsh Development Permit from BCDC. An existing road provides access to the site and an existing pipeline interconnect is located on site. The applicant has analyzed multiple potential well sites and has chosen an option that minimizes environmental impact by locating within an established pad used for the extraction and production of natural gas.

## **GENERAL PLAN, ZONING & WILLIAMSON ACT CONSISTENCY**

The project site is designated Marsh by the Solano County General Plan Land Use Diagram. Natural gas exploration and production are consistent with the General Plan's goals and policies for the Marsh designation.

Solano County Code Section 28-38(c)(3) requires a conditional use permit for oil and gas wells in the Marsh Preservation Zoning District. The proposed project meets required setback requirements from property lines. The suggested conditions of approval will ensure that adequate controls are taken to prevent offensive noise, odor, vibration and fumes and that derricks will be removed when wells are brought into production or when drilling is abandoned as required by Section 28-53(l)(29) and by Section 28-50(b)(5) regulations for oil and gas wells.

The proposed project is located on a parcel entered into a land conservation contract under the Williamson Act. Oil and gas wells are considered a compatible land use in an agricultural preserve pursuant to Table A of Solano County Uniform Rules and Procedures Governing Agricultural Preserves and Land Conservation Contracts.

## **ENVIRONMENTAL REVIEW**

Revision 3 to U-00-13 will allow for the installation of one additional gas well on an existing pad at an existing gas well production facility (Suisun Community #22). The project will not increase the size of the production pad and the current access route is suitable to serve the scope of this revision.

An Initial Study was completed and a Mitigated Negative Declaration was prepared, circulated, and adopted by the Planning Commission for the original project. Because this is a minor alteration, essentially replacement and reconstruction of natural gas well, additional environmental review is not required. The fact that there will be no grading or fill required, and that all of the drilling equipment is temporary in nature, staff has determined that the proposal is Categorically Exempt from CEQA pursuant to Section 15302 of the State CEQA Guidelines.

The temporary drilling rig has a proposed height of up to 158 feet. The drill site is situated within the Travis Air Force Base Land Use Compatibility Plan's Area of Influence and is subject to review to determine the project's consistency with the applicable land use compatibility criteria.

The drill site is within Compatibility Zone C, which requires review for objects taller than 100 ft. After referencing the Airspace Protection Zones (Fig. 2C) of the Travis AFB LUCP, the site is located within the outer horizontal surface of the FAR 77 Boundaries. The maximum height for any object within the outer horizontal surface is 562 feet above Mean Sea Level.

The site's elevation is ~2 ft. The proposed height of the drill rig is 158 ft.

Therefore, at a maximum height of 160 ft., the proposed temporary rig is consistent with the applicable height limitations for objects in this location.

## **DEPARTMENTAL REVIEW**

### **Solano County Department of Resource Management**

#### **Building & Safety:**

All requirements of the Solano County Building and Safety Division shall be met including:

- 1) The permittee shall obtain approval from the Building and Safety Division prior to construction, erection, enlargement, altering, repairing, moving, improving, removing, converting, demolishing any building or structure, fence or retaining wall regulated by the Solano County Laws.

#### **Public Works Engineering:**

The following are recommended conditions to be placed on approval of the lot line adjustment.

- 1) The applicant shall apply for and obtain an appropriate grading permit for the construction of the drilling site. Public Works Engineering will require the submittal of a drainage plan showing all offsite and onsite improvements necessary to manage storm water issues related to this development.
- 2) Should the delivery or removal of any of the associated drilling equipment require oversize or overweight loads, appropriate transportation permits will need to be secured from Public Works Engineering.
- 3) The applicant will need to apply for an Oil and Gas Drilling Security through Public Works Engineering.

### **Environmental Health**

All requirements of the Solano County Environmental Health Services Division shall be met including:

- 1) Prior to the issuance of this permit, the permittee shall submit to this Division, a maintenance agreement with a licensed sanitation company to provide and maintain a portable chemical toilet on site for the duration of the initial drilling phase.
- 2) If hazardous materials are stored or produced on site which exceed 50 gallons of liquid, 200 cubic feet of compressed gas, or 500 pounds of solid, the a Hazardous Materials Management Plan shall be submitted by the applicant and approved by this Division.

### **Solano County Agriculture Department**

The Agricultural Commissioner was notified and had no comment on the proposal.

### **Suisun Fire Protection District**

The Suisun Fire Protection District was notified and had no comment on the proposal.

## **MANDATORY FINDINGS**

1. **The establishment, maintenance or operation of the proposed use is in conformity to the General Plan for the County with regard to traffic circulation, population densities and distribution, and other aspects of the General Plan.**

Both the construction phase and the operation phase are consistent with the intent of the Marsh designation of the Solano County General Plan which allows uses that do not adversely impact the sensitive habitat of the Suisun Marsh. This project is also consistent with the Resources Chapter which permits new natural gas wells provided they minimize destruction of natural vegetation and agricultural activities. The project does not require an expansion of the existing pad and permit conditions are in place to minimize any potential environmental impact.

2. **Adequate utilities, access roads, drainage and other necessary facilities have been or are being provided.**

Natural gas drilling rigs produce their own electrical power. There is existing access to the site. No grading improvements will be required.

3. **The subject use will not, under the circumstances of the particular case, constitute a nuisance or be detrimental to the health, safety, peace, morals, comfort or general welfare of persons residing or working in or passing through the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.**

The project has been reviewed and processed in accordance with the California Environmental Quality Act (CEQA) and the County EIR Guidelines. At the time of the original project approval, a Negative Declaration with mitigation measures

were prepared, circulated, and adopted by the Planning Commission. The subject revision request qualifies for a categorical exemption, pursuant to section 15302 which allows for replacement/reconstruction of existing facilities. The Zoning Administrator finds that there is no evidence that the project will have a significant impact on the environment.

#### **SUGGESTED FINDINGS**

4. Said Zoning Administrator heard testimony relative to the subject application at a duly noticed public hearing.
5. The proposed project is located within the Primary Management Area of the Suisun Marsh and requires a Marsh Development Permit from the San Francisco Bay Conservation and Development Commission.
6. The proposed project is consistent with the Suisun Marsh Preservation Act.
7. The project is located on land contracted under the Williamson Act. Natural gas wells are listed as compatible uses under Table A of the Solano County Uniform Rules and Procedures Governing Agricultural Preserves and Land Conservation Contracts.
8. The existing facility operates with a noise level of 69.7 dBA as measured at a location of 50 feet from the existing compressor.

#### **RECOMMENDATION**

Staff recommends that the Zoning Administrator **ADOPT** the mandatory and suggested findings, and **APPROVE** this Revision No. 3 to Use Permit Application U-00-13 subject to the following recommended conditions of approval.

#### **CONDITIONS OF APPROVAL**

1. The use shall be established in accord with the plans and information submitted with Use Permit Application No. U-00-13 revision 3 and approved by the Solano County Zoning Administrator.
2. The permittee shall take all necessary measures to prevent dust, noise, light, glare, odor and other objectionable elements from adversely affecting the surrounding area beyond acceptable limits.
3. Drilling operations shall conform to the regulations of the California Division of Oil, Gas and Geothermal Resources (DOGGR) designed to prevent damage to natural resources.
4. After drilling is complete, all drilling muds, tail wastes, wastewater and other fluids will be removed from the site and disposed of in a manner that does not adversely affect other areas.
5. Derricks shall be removed when the well is brought into production.

6. If wells are abandoned, they shall be sealed in accordance with DOGGR regulations, and the drilling or new production facilities shall be removed.
7. All buildings, tanks, or other facilities related to drilling or natural gas production shall be removed when the site is no longer being utilized for gas production.
8. Any change of use or intensification of use will require permit revision and further environmental review. Any deviation from the project description or requirements of the Zoning Administrator will subject the use permit to review and possible revocation.
9. The permittee shall obtain permits or other clearances from all agencies having jurisdiction over the proposed project including the San Francisco Bay Conservation and Development Commission, the Division of Oil, Gas and Geothermal Resources and the Regional Water Quality Control Board. The permittee shall comply with all requirements of Solano County including the Policies and Regulations Governing the Suisun Marsh.
10. All requirements of the Solano County Building and Safety Division shall be met including:
  - a. The permittee shall obtain approval from the Building and Safety Division prior to construction, erection, enlargement, altering, repairing, moving, improving, removing, converting, demolishing any building or structure, fence or retaining wall regulated by the Solano County Building Laws. Submit four (4) sets of plans to the Building and Safety Division for plan review and permits prior to beginning any improvements.
11. All requirements of the Solano County Environmental Health Services Division shall be met including:
  - a. Prior to the issuance of this use permit, the permittee shall submit to this Division, a maintenance agreement with a licensed sanitation company to provide and maintain a portable chemical toilet on site for the duration of the initial drilling phase.
  - b. If hazardous materials are stored or produced on-site which exceed 50 gallons of liquid, 200 cubic feet of compressed gas, or 500 lbs. of solid, then a Hazardous Materials Management Plan shall be submitted by the applicant and approved by this Division.
12. All requirements of the Public Works Engineering Division shall be met including:
  - a. The applicant shall apply for and obtain an appropriate grading permit for the construction of the drilling site. Public Works Engineering will require the submittal of a drainage plan showing all offsite and onsite improvements necessary to manage storm water issues related to this development.
  - b. Should the delivery or removal of any of the associated drilling equipment require oversize or overweight loads, appropriate transportation permits will need to be secured from Public Works Engineering.

- c. Applicant will need to apply for an Oil and Gas Drilling Security through Public Works Engineering.
13. To reduce potential impacts on the area's biological and wetland resources the following shall be required:
    - a. No new equipment shall be placed on the pad, and no site preparation, pre-drilling work, or drilling of the proposed natural gas well shall commence earlier than July 15 and shall not continue past October 1. All associated drilling equipment shall be removed from the drillsite by this date. Should additional downhole problems arise, the permittee shall be allowed to finalize the project during the same time period the following year.
    - b. Night lighting may have an adverse effect on marshland wildlife near the well site. If night lighting is needed, the lighting shall be hooded and directed at the facilities and not at adjacent areas.

**Verification:**

- The permittee shall submit written notice to the Planning Services Division stating specifically when the drilling will occur. The permittee shall submit a photograph to the Planning Services Division verifying that Condition 13.b. has been satisfied.
14. The Venoco project representative shall establish traffic restraints and erect signs to restrict construction-related traffic to approved access roads, construction areas, storage areas, staging and parking areas. Off-road traffic outside of designated project areas shall be prohibited. Project related vehicles shall observe a 20 mph speed limit in all project areas except on County roads and State and Federal highways. All signs shall be removed upon the termination of the drilling phase. The project representative shall inform all employees and vehicle drivers of this requirement.
  15. All vehicles traveling to and from the job site must be equipped with spark arrestors.
  16. An endangered species education program for employee orientation shall be conducted and consist of a brief consultation in which persons knowledgeable in endangered species biology and legislative protection explain endangered species concerns. All those working on both the drilling operation and production facility operation should understand the sensitivity of the marsh, its importance to sensitive plant and wildlife species and the necessity of avoiding disturbance to the marsh.
  17. Sediment barrier fencing shall be erected around the project site prior to commencement of project activities to ensure that project-related materials do not enter the marsh to the south and to restrict human access to the marsh. Project area boundaries shall be clearly delineated by stakes, flagging and/or rope or cord to minimize inadvertent degradation or loss of adjacent wildlife habitats during construction. Project related vehicles shall be restricted to approved travel paths/roads and the well pad site.



18. Hazardous materials fuels, lubricants or solvents that may accidentally spill during well drilling activities shall be cleaned up and disposed of according to applicable federal, state, and local regulations.
19. All equipment storage and parking during site development shall be confined to the project area or to previously disturbed off site areas that are not habitat for listed species.
20. To prevent entrapment of endangered species or other animals during the construction phase of the project, all excavated, steep-walled holes or trenches in excess of three feet in depth or greater shall be provided with one or more escape ramps constructed of earth fill if wildlife proof barricade fencing is not used at the well pad site. The ramps shall be at less than 45 degrees. Trenches shall be inspected for entrapped wildlife each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped animals. Any animals so discovered shall be allowed to escape voluntarily, without harassment, before construction activities resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.
21. All construction pipes, culverts, or similar structures that are stored at a construction site overnight shall be thoroughly inspected for trapped animals before the subject pipe is buried, capped, or otherwise used or moved. Pipes laid in trenches overnight shall be capped. If during construction an animal is discovered inside a pipe, that section of pipe shall not be capped or buried until the animal has escaped.
22. All food-related trash items such as wrappers, cans, bottles, and food scraps generated both during construction and subsequent operation shall be disposed of in closed containers only and regularly removed from the site. Food items may attract animals onto a project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.
23. To prevent harassment, mortality, or destruction of sensitive species and/or their habitat by domestic dogs and cats, no pets shall be permitted on-site.
24. At no time shall the production facility emit a noise output above the existing level of 69.7 dBA as measured at a location 50 feet from the compressor. A noise level test shall be conducted at the future request of this Department.
25. If the production facility is ever abandoned, all wells shall be sealed in accordance with the California Division of Oil and Gas regulations and all facilities shall be removed, the natural contours re-established, and the surface area revegetated with native vegetation within one growing season after abandonment. The area shall be returned to a condition suitable for the regrowth of native vegetation and planted with native plants. Wells shall not be left idle for more than one year.
26. The permittee shall monitor the permanent operation of the facility 24 hours a day, 7 days a week using remote monitoring. During duck hunting season (October 1 to January 30 or as otherwise designated by the CDFG), routine site inspections and scheduled repairs or maintenance shall be limited to Mondays and Thursdays. Should Venoco, Inc. detect a problem with the well that requires immediate attention, Venoco, Inc. may access the site at that time. During duck

- hunting season, the permittee shall notify the SRCD prior to any site inspections not conducted on Mondays or Thursday.
27. On-site water tanks shall accommodate the largest volume of water possible to reduce the number of trips required to remove water from the site.
  28. The permittee shall repair and/or maintain private roads to a level equal to or better than the condition of the roads prior to project initiation.
  29. A complaint log shall be kept and maintained by the Department of Resource Management relating to the operation of the project.
  30. Department staff shall be notified of the date of project commencement. Staff shall conduct periodic site inspections and monitoring during the site preparation, drilling, and construction time period to ensure compliance with conditions of approval.
  31. The permit shall be in effect for a ten (10) year period, with the provision that renewal may be granted if said request is received prior to the expiration date of February 19, 2019, and the use shall remain the same and in compliance with the conditions of approval.

**Exhibits:**

- Exhibit A. Draft Resolution  
Exhibit B. Assessor Parcel Map

**SOLANO COUNTY ZONING ADMINISTRATOR  
RESOLUTION NO. XX**

**WHEREAS**, the Solano County Zoning Administrator has considered Minor Revision No. 3 to Use Permit No. U-00-13 of **Venoco, Inc.** to drill an additional well on an existing pad at Venoco's Suisun Community #22 site. The property is located at 3950 Van Sickle Road 8 miles south of the City of Suisun in an "MP" Marsh Preservation Zoning District, APN: 0046-210-110, and;

**WHEREAS**, said Zoning Administrator has reviewed the report of the Department of Resource Management and heard testimony relative to the subject application at the duly noticed public hearing held on August 4, 2011, and;

**WHEREAS**, after due consideration, the Zoning Administrator has made the following findings in regard to said proposal:

- 1. The establishment, maintenance or operation of the proposed use is in conformity to the General Plan for the County with regard to traffic circulation, population densities and distribution, and other aspects of the General Plan.**

Both the construction phase and the operation phase are consistent with the intent of the Marsh designation of the Solano County General Plan which allows uses that do not adversely impact the sensitive habitat of the Suisun Marsh. This project is also consistent with the Resources Chapter which permits new natural gas wells provided they minimize destruction of natural vegetation and agricultural activities. The project does not require an expansion of the existing pad and permit conditions are in place to minimize any potential environmental impact.

- 2. Adequate utilities, access roads, drainage and other necessary facilities have been or are being provided.**

Natural gas drilling rigs produce their own electrical power. There is existing access to the site. No grading improvements will be required.

- 3. The subject use will not, under the circumstances of the particular case, constitute a nuisance or be detrimental to the health, safety, peace, morals, comfort or general welfare of persons residing or working in or passing through the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.**

4. The project has been reviewed and processed in accordance with the California Environmental Quality Act (CEQA) and the County EIR Guidelines. At the time of the original project approval, a Negative Declaration with mitigation measures were prepared, circulated, and adopted by the Planning Commission. The subject revision request qualifies for a categorical exemption, pursuant to section 15302 which allows for replacement/reconstruction to existing facilities. The Zoning Administrator finds that there is no evidence that the project will have a significant impact on the environment.

**Exhibit A**

5. Said Zoning Administrator heard testimony relative to the subject application at a duly noticed public hearing.
6. The proposed project is located within the Primary Management Area of the Suisun Marsh and requires a Marsh Development Permit from the San Francisco Bay Conservation and Development Commission.
7. The proposed project is consistent with the Suisun Marsh Preservation Act.
8. The project is located on land contracted under the Williamson Act. Natural gas wells are listed as compatible uses under Table A of the Solano County Uniform Rules and Procedures Governing Agricultural Preserves and Land Conservation Contracts.
9. The existing facility operates with a noise level of 69.7 dBA as measured at a location of 50 feet from the existing compressor.

**BE IT THEREFORE RESOLVED**, that the Zoning Administrator has approved Minor Revision No. 3 to Use Permit No. U-00-13 subject to the following recommended conditions of approval:

1. The use shall be established in accord with the plans and information submitted with Use Permit Application No. U-00-13 revision 3 and approved by the Solano County Zoning Administrator.
2. The permittee shall take all necessary measures to prevent dust, noise, light, glare, odor and other objectionable elements from adversely affecting the surrounding area beyond acceptable limits.
3. Drilling operations shall conform to the regulations of the California Division of Oil, Gas and Geothermal Resources (DOGGR) designed to prevent damage to natural resources.
4. After drilling is complete, all drilling muds, tail wastes, wastewater and other fluids will be removed from the site and disposed of in a manner that does not adversely affect other areas.
5. Derricks shall be removed when the well is brought into production.
6. If wells are abandoned, they shall be sealed in accordance with DOGGR regulations, and the drilling or new production facilities shall be removed.
7. All buildings, tanks, or other facilities related to drilling or natural gas production shall be removed when the site is no longer being utilized for gas production.
8. Any change of use or intensification of use will require permit revision and further environmental review. Any deviation from the project description or requirements of the Zoning Administrator will subject the use permit to review and possible revocation.
9. The permittee shall obtain permits or other clearances from all agencies having jurisdiction over the proposed project including the San Francisco Bay Conservation and Development Commission, the Division of Oil, Gas and Geothermal Resources and the Regional Water Quality Control Board. The permittee shall comply with all requirements of Solano County including the Policies and Regulations Governing the Suisun Marsh.

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  - a. The permittee shall obtain approval from the Building and Safety Division prior to construction, erection, enlargement, altering, repairing, moving, improving, removing, converting, demolishing any building or structure, fence or retaining wall regulated by the Solano County Building Laws. Submit four (4) sets of plans to the Building and Safety Division for plan review and permits prior to beginning any improvements.
  
11. All requirements of the Solano County Environmental Health Services Division shall be met including:
  - a. Prior to the issuance of this use permit, the permittee shall submit to this Division, a maintenance agreement with a licensed sanitation company to provide and maintain a portable chemical toilet on site for the duration of the initial drilling phase.
  - b. If hazardous materials are stored or produced on-site which exceed 50 gallons of liquid, 200 cubic feet of compressed gas, or 500 lbs. of solid, then a Hazardous Materials Management Plan shall be submitted by the permittee and approved by this Division.
  
12. All requirements of the Public Works Engineering Division shall be met including:
  - a. The permittee shall apply for and obtain an appropriate grading permit for the construction of the drilling site. Public Works Engineering will require the submittal of a drainage plan showing all offsite and onsite improvements necessary to manage storm water issues related to this development.
  - b. Should the delivery or removal of any of the associated drilling equipment require oversize or overweight loads, appropriate transportation permits will need to be secured from Public Works Engineering.
  - c. Permittee will need to apply for an Oil and Gas Drilling Security through Public Works Engineering.
  
13. To reduce potential impacts on the area's biological and wetland resources the following shall be required:
  - a. No new equipment shall be placed on the pad, and no site preparation, pre-drilling work, or drilling of the proposed natural gas well shall commence earlier than July 15 and shall not continue past October 1. All associated drilling equipment shall be removed from the drillsite by this date. Should additional downhole problems arise, the permittee shall be allowed to finalize the project during the same time period the following year.
  - b. Night lighting may have an adverse effect on marshland wildlife near the well site. If night lighting is needed, the lighting shall be hooded and directed at the facilities and not at adjacent areas.

**Verification:**

The permittee shall submit written notice to the Planning Services Division stating specifically when the drilling will occur. The permittee shall submit a photograph to the Planning Services Division verifying that Condition 13.b. has been satisfied.

14. The Venoco project representative shall establish traffic restraints and erect signs to restrict construction-related traffic to approved access roads, construction areas, storage areas, staging and parking areas. Off-road traffic outside of designated project areas shall be prohibited. Project related vehicles shall observe a 20 mph speed limit in all project areas except on County roads and State and Federal highways. All signs shall be removed upon the termination of the drilling phase. The project representative shall inform all employees and vehicle drivers of this requirement.
15. All vehicles traveling to and from the job site must be equipped with spark arrestors.
16. An endangered species education program for employee orientation shall be conducted and consist of a brief consultation in which persons knowledgeable in endangered species biology and legislative protection explain endangered species concerns. All those working on both the drilling operation and production facility operation should understand the sensitivity of the marsh, its importance to sensitive plant and wildlife species and the necessity of avoiding disturbance to the marsh.
17. Sediment barrier fencing shall be erected around the project site prior to commencement of project activities to ensure that project-related materials do not enter the marsh to the south and to restrict human access to the marsh. Project area boundaries shall be clearly delineated by stakes, flagging and/or rope or cord to minimize inadvertent degradation or loss of adjacent wildlife habitats during construction. Project related vehicles shall be restricted to approved travel paths/roads and the well pad site.
18. Hazardous materials fuels, lubricants or solvents that may accidentally spill during well drilling activities shall be cleaned up and disposed of according to applicable federal, state, and local regulations.
19. All equipment storage and parking during site development shall be confined to the project area or to previously disturbed off site areas that are not habitat for listed species.
20. To prevent entrapment of endangered species or other animals during the construction phase of the project, all excavated, steep-walled holes or trenches in excess of three feet in depth or greater shall be provided with one or more escape ramps constructed of earth fill if wildlife proof barricade fencing is not used at the well pad site. The ramps shall be at less than 45 degrees. Trenches shall be inspected for entrapped wildlife each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped animals. Any animals so discovered shall be allowed to escape voluntarily, without harassment, before construction activities resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.
21. All construction pipes, culverts, or similar structures that are stored at a construction site overnight shall be thoroughly inspected for trapped animals before the subject pipe is buried, capped, or otherwise used or moved. Pipes laid in trenches overnight shall be capped. If during construction an animal is discovered inside a pipe, that section of pipe shall not be capped or buried until the animal has escaped.
22. All food-related trash items such as wrappers, cans, bottles, and food scraps generated both during construction and subsequent operation shall be disposed of in closed containers only and regularly removed from the site. Food items may attract animals onto a project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

23. To prevent harassment, mortality, or destruction of sensitive species and/or their habitat by domestic dogs and cats, no pets shall be permitted on-site.
24. At no time shall the production facility emit a noise output above the existing level of 69.7 dBA as measured at a location 50 feet from the compressor. A noise level test shall be conducted at the future request of this Department.
25. If the production facility is ever abandoned, all wells shall be sealed in accordance with the California Division of Oil and Gas regulations and all facilities shall be removed, the natural contours re-established, and the surface area revegetated with native vegetation within one growing season after abandonment. The area shall be returned to a condition suitable for the regrowth of native vegetation and planted with native plants. Wells shall not be left idle for more than one year.
26. The permittee shall monitor the permanent operation of the facility 24 hours a day, 7 days a week using remote monitoring. During duck hunting season (October 1 to January 30 or as otherwise designated by the CDFG), routine site inspections and scheduled repairs or maintenance shall be limited to Mondays and Thursdays. Should Venoco, Inc. detect a problem with the well that requires immediate attention, Venoco, Inc. may access the site at that time. During duck hunting season, the permittee shall notify the SRCD prior to any site inspections not conducted on Mondays or Thursday.
27. On-site water tanks shall accommodate the largest volume of water possible to reduce the number of trips required to remove water from the site.
28. The permittee shall repair and/or maintain private roads to a level equal to or better than the condition of the roads prior to project initiation.
29. A complaint log shall be kept and maintained by the Department of Resource Management relating to the operation of the project.
30. Department staff shall be notified of the date of project commencement. Staff shall conduct periodic site inspections and monitoring during the site preparation, drilling, and construction time period to ensure compliance with conditions of approval.
31. The permit shall be in effect for a ten (10) year period, with the provision that renewal may be granted if said request is received prior to the expiration date of February 19, 2019, and the use shall remain the same and in compliance with the conditions of approval.

\*\*\*\*\*

I hereby certify that the foregoing resolution was adopted at the regular meeting of the Solano County Zoning Administrator on August 4, 2011.

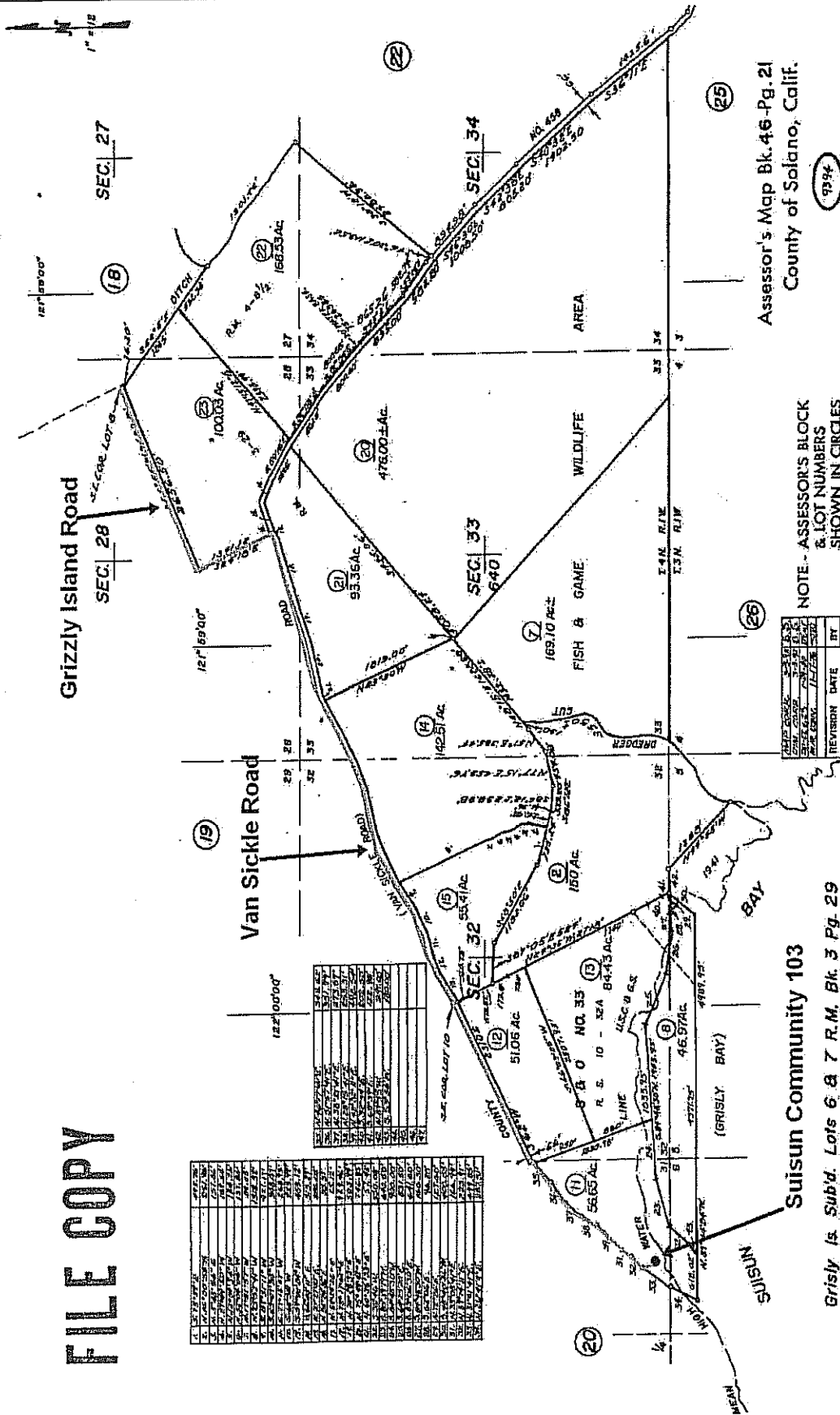
BILL EMLLEN, DIRECTOR  
RESOURCE MANAGEMENT

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Michael Yankovich  
Planning Program Manager

T. 4 N., R. 1 W., M. D. B. & M. Tax Area Code 60003 46-21

**FILE COPY**



Assessor's Map Bk. 46-Pg. 21  
 County of Solano, Calif.

**Venoco, Inc.**  
 Assessors Parcel Map  
 June 2011

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