MINUTE ITEM
This Calendar Item No. C65 was approved as Minute Item No. 65 by the California State Lands Commission by a vote of 3 to 0 at its 8-17-04 meeting.

CALENDAR ITEM
C65

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PRC 8557

08/17/04
W 40874
J. Planck
M. LeClair

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CONSIDER APPLICATION FOR A NEGOTIATED SUBSURFACE (NO SURFACE USE) OIL AND GAS LEASE AND A RIGHT-OF-WAY (PASS-THROUGH) AGREEMENT, SUISUN BAY, CONTRA COSTA COUNTY

APPLICANTS:

Rio Delta Resources, Inc.
3600 American River Drive, Suite 220
Sacramento, CA 95864

Russell H. Green, Jr.
P.O. Box 965
Healdsburg, CA 95448

AREA, LAND TYPE, AND LOCATION:

Proposed negotiated subsurface (no surface use) Oil and Gas Lease and Right-of-Way (Pass-Through) Agreement W 40874 covers approximately 335 acres in Suisun Bay, Contra Costa County, California (See Exhiibit A, attached hereto).

BACKGROUND:

Russell H. Green, Jr., and Rio Delta Resources, Inc. (Rio Delta), have submitted an application for a negotiated subsurface (no surface use) Oil and Gas Lease and Right-of-Way (Pass-Through) Agreement. The purpose of the Pass-Through Agreement is to permit the Applicant to drill wells through State land in order to produce oil and/or gas from locations lying outside the lands of the State.

Because the State land is a waterway, surface locations for oil and gas operations (drill sites) are not available. However, oil and gas resources within the State land can be developed and protected pursuant to the Commission's negotiated subsurface (no surface use) Oil and Gas Lease, which would permit Commission-approved directional drilling from an approved upland drill site.

The Applicants propose to drill and test a maximum of eight gas wells from an upland location adjacent to the State's lands in Suisun Bay. The Applicant's current drilling program provides for one or more exploratory test wells to be drilled through the State lands to target locations lying outside the boundary of the proposed Oil and Gas Lease. Although the Applicants do not have present plans to complete any of its proposed wells into the State's lands, staff believes that their exploration activity in the vicinity may generate geologic data that could lead to exploration and development on State lands or proposals to pool or combine State lands into a unit for the production of natural gas.

The Applicants have also requested a right-of-way lease for roadway access and a natural gas gathering line across Mallard Slough to the south of the drill site. The right-of-way lease over the historic bed of Mallard Slough will be the subject of a separate calendar item for Commission consideration at this meeting. If the wells are successful, the Applicants would site a gas gathering facility adjacent to the drill site and construct a gas pipeline to the nearest sales point (south of the site).

Public Resources Code section 6815(a) authorizes the Commission to negotiate and enter into oil and gas leases on State lands if any of the following exist: 1) wells drilled on private or public lands are draining or may drain oil and gas from the State lands: 2) the Commission determines the State lands to be unsuitable for competitive bidding because of such factors as their small size or irregular configuration or their inaccessibility from surface drill sites reasonably available or obtainable; 3) the State owns a fractional mineral interest in the lands; or 4) the Commission determines the lease to be in the best interests of the State.

Commission staff has concluded that the criteria of Public Resources Code section 6815(a) have been satisfied because the Applicant controls, by lease and agreement, all of the private property adjacent to the State land described in Exhibit A, attached hereto, and because the Applicant has received the approval of the Contra Costa County Water District, the CEQA Lead Agency, to drill up to eight wells near the State land. A negotiated subsurface (no surface use) Oil and Gas Lease with the Applicant will protect oil and gas resources that may underlie the State land.

In addition to the right to prospect for, drill for, produce and take oil, gas and other hydrocarbon substances from the leased lands, Lessee is requesting a non-exclusive right of way to drill one or more "pass-through" well(s) into and

through the lease lands, . A "pass-through well" is a well that is drilled through the Leased lands and produced from an interval in the reservoir not closer to the lease lands than 1,489 feet, provided however, that a pass-through well may produced from an interval within 1,489 feet of the leased lands with the written consent of the State, upon a determination by the State that a closer production interval will not subject the State land to uncompensated drainage of oil or gas. As consideration for the Pass-Through Agreement, the State would be compensated by the payment of an overriding royalty in the amount of three percent (3%) of all production from the pass-through well(s).

STATUTORY AND OTHER REFERENCES:

A. Public Resource Code Division 6, Parts 1 and 2, and Division 13
B. Public Resources Code section 6815(a)

OTHER PERTINENT INFORMATION

1. A Mitigated Negative Declaration (State Clearinghouse Number 2003042112) and Mitigation Monitoring Program were prepared and adopted for this project by Contra Costa Water District. The California State Lands Commission's staff has reviewed that document.

2. On June 4, 2003, the Contra Costa Water District approved Rio Delta's Application for drilling for oil and natural gas on uplands located in Contra Costa County.

3. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq., and based upon the staff's consultation with persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

4. A primary term of five years, and for so long thereafter as oil or gas is produced in paying quantities, or so long as the lessee is diligently conducting necessary lease or well maintenance operations.

5. Annual rental of $20 per acre ($6,700 for approximately 335 acres).

6. Royalty of 20 percent on all gas and oil produced.

7. Performance bond or other security in the sum of $150,000.00 covering lease operations, including the drilling and operation of one well into or

through the leased lands, with an additional $50,000.00 for each additional well drilled into or through the leased lands. The lease provides for periodic review and adjustment of the amount of the bond.

8. For the pass-through wells, the State will receive an overriding royalty of three percent (3%) of the current market price of all oil, gas and hydrocarbon substances produced from pass-through well(s).

9. Applicant has obtained approvals for the project from Contra Costa Water District, Contra Costa County, Contra Costa County Community Development Department, U. S. Fish and Wildlife Service, California Department of Fish and Game, California Regional Water Quality Control Board, and the U.S. Army Corp of Engineers.

EXHIBITS:

A. Land Description
B. Site Map
C. Mitigation Monitoring Program
D. Special Operating Requirements (Lease Agreement "Exhibit C")

PERMIT STREAMLINING ACT DEADLINE:

February 8, 2005

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

CEQA FINDINGS:

1. FIND THAT A MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING PROGRAM WERE PREPARED AND ADOPTED FOR THIS PROJECT BY CONTRA COSTA WATER DISTRICT AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

2. ADOPT THE MITIGATION MONITORING PROGRAM, ATTACHED HERETO AS EXHIBIT C.

3. FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED BY THE COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCES CODE SECTIONS 6370, ET SEQ.

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AUTHORIZATION:

1. DETERMINE THAT THE CRITERIA OF PUBLIC RESOURCES CODE SECTION 6815(a) HAVE BEEN MET, THAT A NEGOTIATED SUBSURFACE (NO SURFACE USE) OIL AND GAS LEASE AND RIGHT-OF-WAY AGREEMENT IS THE BEST INSTRUMENT TO DEVELOP AND PROTECT OIL AND GAS RESOURCES WITHIN THE STATE LAND DESCRIBED IN EXHIBIT A, ATTACHED HERETO, AND THAT THE STATE LAND IS UNSUITABLE FOR COMPETITIVE BIDDING BECAUSE SUFRACE DRILL SITES ARE NOT AVAILABLE AND WELLS DRILLED ON THE ADJACENT PRIVATE PROPERTY MAY DRAIN STATE OIL AND GAS RESOURCES.

2. PURSUANT TO PUBLIC RESOURCES CODE SECTION 6815(a), AUTHORIZE THE STATE TO ENTER INTO A NEGOTIATED SUBSURFACE (NO SURFACE USE) OIL AND GAS LEASE WITH RUSSEL H. GREEN, JR., AND RIO DELTA RESOURCES, INC.; THE LEASE WILL CONTAIN THE STATE LAND DESCRIBED IN EXHIBIT A, ATTACHED HERETO, (APPROXIMATELY 335 ACRES), HAVING A PRIMARY TERM OF FIVE YEARS, ANNUAL RENTAL OF $20 PER ACRE ($6,700 FOR APPROXIMATELY 335 ACRES), ROYALTY FIXED AT 20 PERCENT ON ALL GAS, OIL, AND OTHER HYDROCARBON SUBSTANCES PRODUCED, REQUIRING A PERFORMANCE BOND OR OTHER SECURITY FOR THE FAITHFULL PERFORMANCE OF THE LEASE TERMS AND CONDITIONS, AND ABANDONMENT OF THE WELLS, INITIALLY IN THE SUM OF ONE HUNDRED AND FIFTY THOUSAND DOLLARS ($150,000.00) COVERING LEASE OPERATIONS, INCLUDING THE DRILLING AND OPERATION OF THE FIRST WELL, SUCH BOND TO INCREASE BY $50,000.00 FOR EACH ADDITIONAL WELL DRILLED THEREAFTER. ADDITIONALLY, THE LEASE WILL PROVIDE FOR A PASS-THROUGH OVERRIDING ROYALTY OF THREE PERCENT (3%) OF THE CURRENT MARKET PRICES OF OIL, GAS, AND HYDROCARBON SUBSTANCES PRODUCED FROM ANY PASS-THROUGH WELL(S).

3. APPROVAL OF THE LEASE AGREEMENT SHALL BE SUBJECT TO ADHERENCE TO THE ABOVE CITED MITIGATION

MONITORING PROGRAM AND ADHERENCE TO THE SPECIAL OPERATING REQUIREMENTS OF EXHIBIT "C" OF THE LEASE (AND ATTACHED AS EXHIBIT D HERETO).

4. AUTHORIZE THE EXECUTIVE OFFICER OR HIS DESIGNEE TO EXECUTE ANY DOCUMENT NECESSARY TO IMPLEMENT THE COMMISSION'S ACTION.

SECTION 3
LAND DESCRIPTION

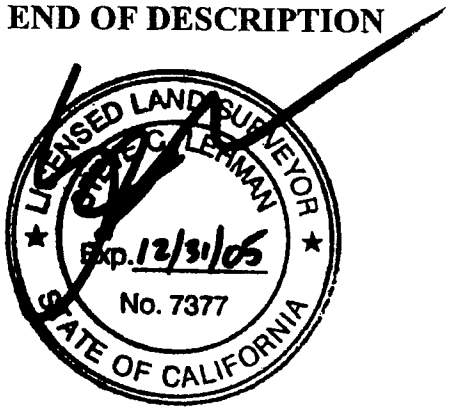
A parcel of tide and submerged lands lying within the bed of Suisun Bay in Contra Costa and Solano Counties, California, more particularly described as follows:

COMMENCING at the National Geodetic Survey Monument "Wise", having a latitude of North 38° 03' 02.537" and a longitude of West 121° 53' 49.496", North American Datum (1927), thence South 88° 36' 01" West 5564 feet more or less to the southeastern corner of a parcel described as Instrument # 2001-00076296 in the Official Records of Solano County and the TRUE POINT OF BEGINNING; thence northwesterly along the Ordinary High Water Mark on the north shore of Suisun Bay to the intersection with the west line of Protracted Section 1, T.2N., R1W, M.D.M.; thence along said section line South 00° 14' 30"East 3152 feet more or less to a point on the Ordinary High Water Mark on the south shore of Suisun Bay; thence southeasterly along the Ordinary High Water Mark on the south shore of Suisun Bay to the intersection with the east line of Protracted Section 1, T.2N., R1W, M.D.M.; thence North 17° 02' 44" West 3125 feet more or less to the TRUE POINT OF BEGINNING.

EXCEPTING THEREFROM any land lying landward of the ordinary high water mark of Suisun Bay.

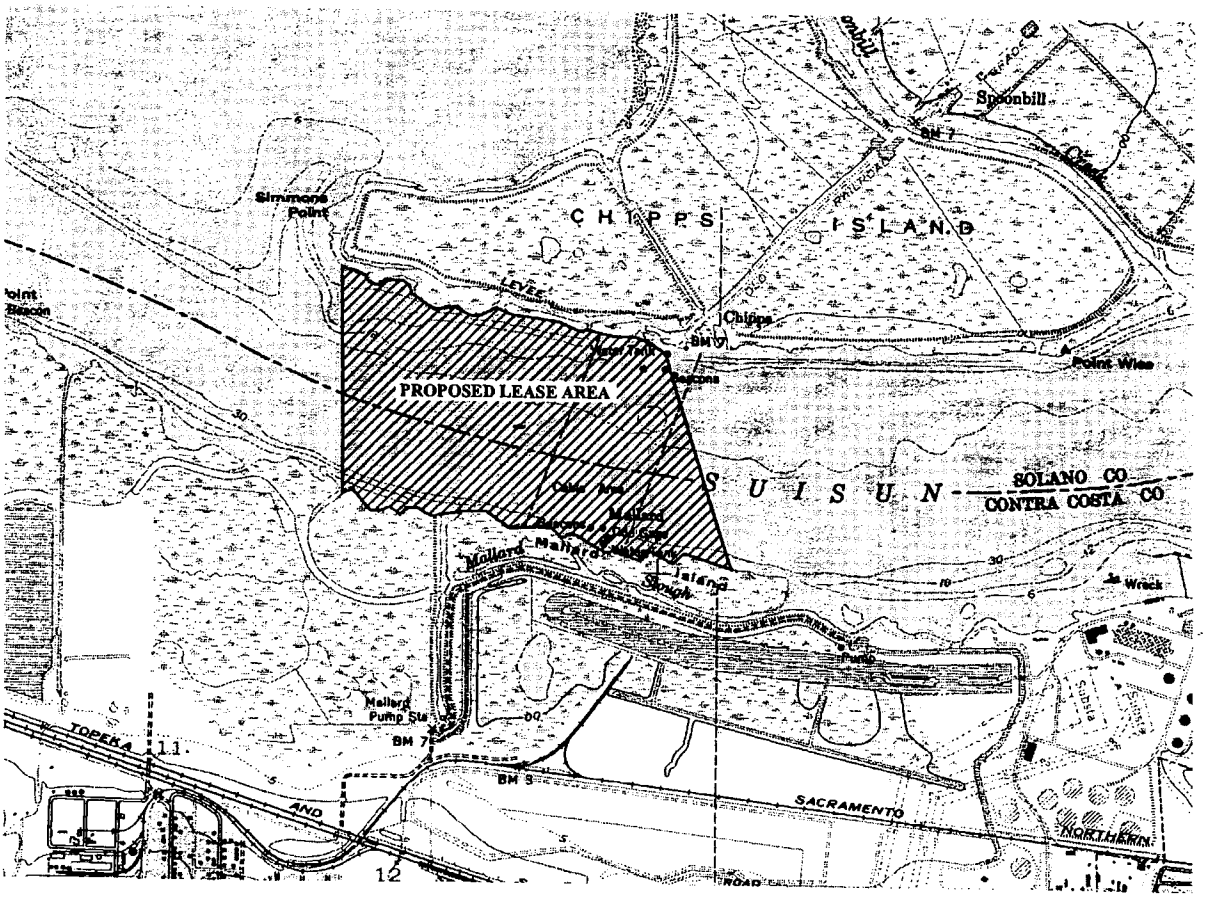
The bearings and distances used herein are based on the California Coordinate System 27, Zone 3. All distances are grid. To obtain ground distances multiply all distances by 1.00005747.

END OF DESCRIPTION



NO SCALE

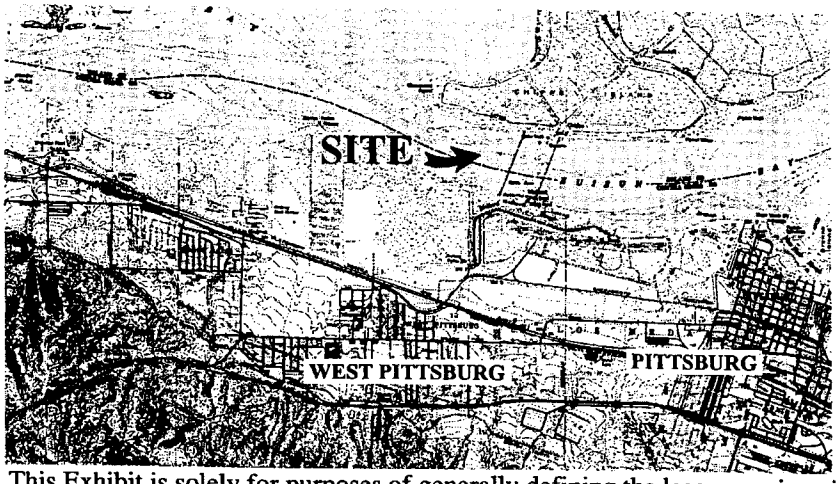
SITE



PROPOSED RIO DELTA RESOURCES OIL AND GAS LEASE, SUISUN BAY

NO SCALE

LOCATION



This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property. MAP SOURCE: USGS QUAD

W 40874
RIO DELTA RESOURCES
SOLANO AND
CONTRA COSTA
COUNTIES

RAB 06/03

EXHIBIT C

W 40874

MITIGATION MONITORING AND REPORTING PROGRAM

In accordance with Section 15074(d) of the CEQA Guidelines, the following Mitigation Monitoring and Reporting Program (MMRP) identifies the mitigation measures for the Russell H. Green Mallard Slough natural gas well project. The MMRP includes the reporting provisions that will be required to ensure proper implementation of these measures.

The Contra Costa Water District, as lead agency, is responsible for compliance, monitoring, and verification. Compliance monitoring will be carried out by a monitor hired by the Applicant and subject to approval by the Contra Costa Water District. Contra Costa Water District construction inspectors will assist in compliance mitigation monitoring. Reports will be prepared weekly by the compliance monitor(s) once field activities are initiated and will continue through project completion. These compliance reports will be sent to the Contra Costa Water District.

Land Use and Planning

Mitigation Measure 2.1.3.1e

Restrict hours for mobilization and demobilization of site preparation and drilling equipment. Mobilization and demobilization of site preparation and drilling equipment will be restricted to the hours of 7:00 A.M to 5:00 PM Monday through Friday and from 8:00 AM to 5:00 PM on weekends.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing during mobilization and demobilization
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Hours are restricted during mobilization and demobilization

Water Resources

Mitigation Measure 2.4.3.1b

Properly dispose of generated waste. Waste generated during project activities shall be stored in designated waste collection containers away from waterways and shall be disposed of according to applicable regulatory requirements.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Water quality is maintained at pre-project levels

Mitigation Measure 2.4.3.*2b*

Properly maintain vehicles and equipment. Vehicles and equipment shall be maintained properly to prevent leakage of hydrocarbons and other automotive fluids. All maintenance shall occur in designated areas located away from waterways.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Water quality is maintained at pre-project levels

Mitigation Measure 2.4.3.3 *b*

Locate fueling areas to minimize risk of water contamination. Steel sheet-piling will be used around the project area. This sheet piling will extend above the ground surface to prevent the possibility of any spilled hydrocarbons from reaching surface water adjacent to the site.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Water quality is maintained at pre-project levels

Mitigation Measure 2.4.3.4b

Maintain accessibility to spill prevention and response equipment. Spill prevention and response equipment including drip pans, drop cloths, and absorbent materials shall be kept at all designated maintenance and fueling areas. Steel sheet-piling will be used as an effective secondary containment for any potential surface spill.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Water quality is maintained at pre-project levels

Mitigation Measure 2.4.3.5b

Promptly clean up spins and notify responsible agencies. Any accidental spill of hydrocarbons or other vehicle fluids shall be cleaned up immediately. Crewmembers shall use absorbent material to prevent a spill from entering waterways. Responsible agencies shall be notified immediately in the event of an accidental spill to ensure proper clean up and disposal of the spilled material

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Water quality is maintained at pre-project levels

Air Quality

Mitigation Measure 2.5.3.1 ab
Minimize fugitive dust emissions. To minimize the generation of fugitive dust emissions, the project proponent shall implement the following dust control measures:

- Water all active construction areas at least twice daily, as needed.
- Cover all trucks hauling soil, sand, or other loose materials OR require all trucks to maintain at least two feet of freeboard.
- Apply water three times daily on all unpaved access roads, parking areas, and staging areas, as needed.
- Sweep daily (with water sweepers) an paved access roads, parking areas and staging areas, as needed.
- Sweep public streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing during site preparation, drilling and testing and site restoration
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Compliance with dust control measures

Biological Resources

Mitigation Measure 2.7.3.1a
Conduct surveys and avoid special-status plants. In conjunction with the survey phase, a qualified biologist will identify populations of existing and potential threatened, endangered, rare, and other special-status plants located at the project site. Qualified biologist(s) will conduct surveys prior to site preparation to locate existing and potential populations of these species and assist the site preparation crew in avoiding them (i.e., special status plant species in brackish marsh habitat around the edge of the project site).

Special-status plants will be identified during the survey phase when plants are readily identifiable in the field by floral or vegetation characteristics. Surveys will be conducted in all vegetation communities that contain suitable habitat for the species being searched as follows:

- Spring surveys (as early as March or as late as May, depending on when flowers or other vegetation characteristics are visible this year) - Non-native grasslands.
- Summer surveys (as early as June or as late as October, depending on when flowers or other vegetation characteristics are visible this year) - Brackish marsh areas and drainages, including all upland areas, seasonal and permanent wetland areas, and adjacent ruderal habitats.

The project proponent will ensure that a 25-foot exclusion zones is mapped and GPS points are taken for each population occurrence. No project activities will be allowed within the exclusion zones. In order to inspect and monitor compliance with this measure, a qualified compliance monitor will be onsite during site preparation operations and during the drilling phases of the proposed project when

these project activities are occurring in the vicinity of special-status species populations and associated exclusion zones.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Prior to site preparation
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Biological surveys are made available to CCWD upon request

Mitigation Measure 2.7.3.2a

Avoid occupied California clapper rail habitats and establish a buffer around these areas. Surveys for California clapper rails will be conducted using agency approved methods or project site preparations and other related operations will be initiated after 31 August. If surveys are conducted and nesting clapper rails are found within 700 feet of proposed initial project activities, areas will be avoided by all initial wellpad operations from 1 February through 31 August. However, vehicles will be allowed on paved and graveled roads during this period.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Prior to site preparation
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Occupied clapper rail habitat is avoided

Mitigation Measure 2.7.3.30

Avoid occupied California black rail habitats and establish a buffer around these areas until June 30. California black rails are known to occur in the project area near Mallard Slough (Figure 5). Surveys for California black rails will be conducted using agency approved methods or project site preparations and other related operations will be initiated after 30 June. If surveys are conducted and nesting black rails are found within 500 feet of proposed initial project activities will be avoided by all initial wellpad operations until after 30 June. However, vehicles will be allowed on paved and graveled roads during this period.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Prior to site preparation
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Occupied black rail habitat is avoided

Mitigation Measure 2.7.3.4a

Conduct preactivity surveys for northern harrier, black-shouldered kite, tricolored blackbird, saltmarsh common yellowthroat, Suisun gong sparrow and loggerhead shrike. Preactivity surveys will be conducted for nesting northern harrier, black-shouldered kite, tricolored blackbird, saltmarsh common yellowthroat, Suisun song sparrow and loggerhead shrike in the project area when project activities occur before 31 August. Preactivity surveys for will be conducted at the project site in suitable habitats for the presence of these nesting species on the project site and/or in suitable adjacent habitats.

Surveys for tricolored blackbirds will be conducted in blackberry patches and suitable emergent wetland habitat. Surveys for the black-shouldered kite will be conducted in suitable nest trees within the project area. Surveys for the saltmarsh common yellowthroat and Suisun song sparrow will be conducted in suitable marsh and riparian habitat areas where these birds have potential to occur.

Preactivity surveys will focus on these specific species occurring in their respective habitat types in the project area. Surveys would include the biologist walking in and near suitable habitat types in the project area and inspecting habitats for nesting special-status species. If a special-status species is found or suspected to be nesting, a buffer area will be established to avoid impacts on the nest until the end of the nesting period. If no tricolored blackbirds, black-shouldered kites, northern harriers, saltmarsh common yellowthroats, Suisun song sparrows or loggerhead shrike are found, project activities may proceed and no further mitigation measures are required. If nesting sites are found, Mitigation Measure 2.7.3.5 has been incorporated to reduce potential impacts to a less than-significant level.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Prior to site preparation
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Nesting special-status species are avoided

Mitigation Measure 2.7.3.5a

Establish a buffer area around nest sites. Where nest sites are identified or suspected to occur during preactivity surveys, the qualified biologist will establish buffer zones around nest sites and no project operations will occur within these buffer zones. Buffer zones for nest avoidance are presented below.

Tricolored Blackbird, Northern Harrier and Black-Shouldered Kite Nests. In order to avoid and minimize impacts on these species, a 200-foot buffer will be established around active tricolored blackbird, northern harrier and black-shouldered kite nests. No project related operations will occur within this buffer until young have fledged or the species are no longer attempting to nest. No further mitigation measures are required once young have fledged or after 1 August.

Saltmarsh Common Yellowthroat, Suisun Song Sparrow and Loggerhead Shrike. In order to avoid and minimize impacts on these species, a 200-foot buffer will be established around active nests. No project operations will occur within this buffer until young have fledged or the species are no longer attempting to nest to avoid and minimize impacts on this species. No further mitigation measures are required once young have fledged or after 1 August. If no nesting saltmarsh common yellowthroat, Suisun song sparrows or loggerhead shrikes are found, construction activities may proceed and no further mitigation measures are required.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Prior to site preparation
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.

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Performance Criteria: Nesting sites are avoided

Mitigation Measure 2.7.3.6a

Avoid removing vegetation outside of work area. To avoid impacts on sensitive habitats and special-status plant and wildlife species, the project proponent shall ensure that no vegetation will be cut, cleared, or otherwise removed in any habitat types other than within the permitted work area. This area will be clearly delineated prior to construction and will be inspected by the biologist and/or wetland delineator. The qualified biologist/wetland delineator will identify vegetation areas and assist project personnel with rerouting to avoid these areas.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Vegetation outside of work area is not removed

Mitigation Measure 2.7.3.7a

Qualified biologists and environmental monitors will be used to provide clearance for biologically sensitive areas. The project proponent shall hire at least one qualified botanist (or wetland delineator familiar with local flora and wetland plants) and wildlife biologist to provide clearance for sensitive areas and special status species populations before any project activity commences. Qualified biologist(s) shall be onsite during the survey phase of the project to assist ground crews and global positioning system (GPS) crews with locating, inputting, and mapping biologically unique or sensitive habitat areas, such as populations of special-status species. Qualified biologists will have experience in identification and behavior of special-status wildlife species described in this initial study, habitat assessment experience, and identification of special-status plant species and will have general knowledge of the natural resources of the Suisun Bay local area.

The qualified biologist(s)/wetland delineator will be responsible for the following:

- Identifying special-status plants in suitable habitats potentially affected by project activities and establishing exclusion zones as described in Mitigation Measure 2.7.3.1.
- Identifying clapper rail habitat and areas where clapper rails are known to occur and ensuring the project boundary is at least a buffer distance of 700 feet from these areas pursuant to Mitigation Measure 2.7.3.2.
- Identifying black rail habitat and areas of known black rail habitat and ensuring that the project boundary is at least a buffer distance of 500 feet from these areas pursuant to Mitigation Measure 2.7.3.3.
- Identifying nesting areas for northern harrier, black-shouldered kite, tricolored blackbird, saltmarsh common yellowthroat, Suisun song sparrow and loggerhead shrike as described in Mitigation Measure 2.7.3.4. The biologist shall identify boundaries of nest sites and establish buffer zones for the areas as provided in Mitigation Measure 2.7.3.5.
- Identifying wetland, brackish marsh, and sensitive habitats to avoid impacts on riparian and marsh vegetation and special-status species populations as described in Mitigation Measure 2.7.3.1 and 2.7.3.7.

The project proponent shall also hire qualified compliance monitors to be onsite during the site preparation and drilling phases of the project and at times when ground crews and heavy equipment

are in the vicinity of the sensitive biological resource areas that were identified, flagged, and mapped during the site preparation phase. As required in Mitigation Measures 2.7.3.1 through 2.7.3.7, the compliance monitor shall ensure that the project operations are conducted in a manner consistent with the mitigation measures so that impacts on sensitive habitats and special-status species are avoided or minimized. The compliance monitor shall also ensure compliance with requirements of all other mitigation measures contained within this initial study.

Both, the qualified biologist/wetland delineator and the qualified compliance monitor shall be responsible for communicating directly with the project supervisor and ground crew and provide information as needed to project supervisors on the locations of sensitive habitat areas and locations of special status plant populations. The qualified biologist shall conduct an employee orientation program for all project personnel. The orientation shall include the occurrence and distribution of listed species and other sensitive resources in the project area, measures being implemented to protect these sensitive resources during project actions, and applicable definitions and prohibitions under the state and federal ESAs. Weekly compliance reports will be prepared that summarize all compliance and non-compliance issues of the week. Results of the biological preconstruction surveys conducted for sensitive wildlife and special status plant species will be submitted to appropriate permitting agencies prior to site preparation.

In addition to species and habitat specific mitigation measures described above, the following general mitigation measures are recommended to reduce impacts from the project to less than significant for wildlife, plants and habitats at the project site and within the surrounding area. Some of the mitigations have been discussed in greater detail in other sections of this initial study but are reiterated here.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing during site preparation, drilling and testing, and construction related activities.
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Sensitive habitats and associated plant and wildlife species are protected

Mitigation Measure 2.7.3.8a

Provide an endangered species education program. An endangered species education program for employee orientation should 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 the project should understand the sensitivity of the project site, its importance to sensitive plant and wildlife species and the necessity of avoiding disturbance habitats outside of the approved work area.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Prior to on site work activities
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Sensitive habitats and associated plant and wildlife species are protected

Mitigation Measure 2.7.3.9d

Place sediment fencing around project site. Sediment fencing should be placed around the project area prior to commencement of project activities to ensure that project-related materials are not outside of approved work areas. This should be conducted prior to establishment of sheet piling at the project site. Sediment fencing will reduce risks of project site material (non-wetland soils) from escaping the work site and spilling into brackish marsh wetland habitats. Project area boundaries should 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 must be restricted to approved travel paths/road and the well pad site.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Prior to site preparation
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Project related activities are restricted to approved work areas

Mitigation Measure 2.7.3.10d

Restrict equipment storage and parking. All equipment storage and parking during all project activities should be confined to the project area or to previously disturbed off site areas that are not habitat for listed species.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Project related activities are restricted to approved work areas

Mitigation Measure 2.7.3.11*a*

Establish traffic control. The Russell Green project representative should 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 must be prohibited. Project-related vehicles should observe a 15-mpb speed limit in all project areas except on County roads and State and Federal highways.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Wildlife species are protected

Mitigation Measure 2.7.3.12a

Provide escape ramps for wildlife species. 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 should 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

should be at less than 45°. Trenches should be inspected for entrapped wildlife each working day. Before such holes or trenches are filled, they should be thoroughly inspected for entrapped animals. Any animals so discovered should 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.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Wildlife species are protected

Mitigation Measure 2.7.3.13a

Inspect all construction pipes, culverts, or similar structures. All construction pipes, culverts, or similar structures that are stored at the construction site overnight should be thoroughly inspected for trapped animals before the subject pipe is buried, capped, or otherwise used or moved. Pipes laid in trenches overnight should be capped. If during construction an animal is discovered inside a pipe, that section of pipe should not be capped or buried until the animal has escaped.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Wildlife species are protected

Mitigation Measure 2.7.3.14a

No pets permitted on-site. To prevent harassment, mortality, or destruction of sensitive species and/or their habitat by domestic dogs and cats, no pets should be permitted on-site.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Wildlife species and their habitats are protected

Hazards

Mitigation Measure 2.9.3.1a

Provide secondary containment. The drilling site will be constructed in such a manner that secondary containment is provided for drilling and production activities.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Wetland areas and water resources are protected

Mitigation Measure 2.9.3.2d

Restrict access to staging areas. Staging areas shall be identified with tape and will have signs posted restricting access to the area.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing during drilling and testing and construction related activities
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Access by non-project personnel is restricted

Aesthetics

Mitigation Measure 2.13.3b

Paint production facilities. All production facilities shall be painted camouflage or an earthen tone to blend in with the environs and to prevent glare.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Upon completion of constructing production equipment
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Equipment blends in with environment and glare is prevented

Cultural Resources

Mitigation Measure 2.14.3.1b

Avoidance. The project proponent will seek to avoid cultural resources as the preferred mitigation measure. Avoidance of cultural resources would result in less-than-significant levels of impacts to identified cultural resources. Facilities, staging areas, and any activity involving ground disturbance shall be located to avoid resources.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing during drilling and testing and construction related activities
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Sensitive cultural resources are avoided

Mitigation Measure 2.14.3.2c

Determine eligibility of resource for listing on the CRHR The project proponent shall retain a qualified archaeologist to evaluate the potentially significant resources for CEQA "importance" or eligibility for the CRHR This would apply to the historic levee which is within the project area. Historic resource mitigation measures will include further study to evaluate the site, detailed recording, and/or excavation. If the levee is found not to be "important" no further management would be required. If the levee is considered important per CEQA or eligible for the CRHR, then a data recovery program will be implemented to reduce impacts to less-than-significant level. Data

recovery could include excavation and detailed analysis and/or further research, depending on the nature and type of the site.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Prior to project activities
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Hours are restricted during mobilization and demobilization

Mitigation Measure 2.13.3.3b

Halt work immediately if cultural resources are discovered. All project personnel involved in any form of ground disturbance shall be advised of the remote possibility of encountering subsurface cultural resources. If such resources are encountered or suspected (such as chipped or ground stone debitage, historic debris, building foundations, human bone, remnants of village structure, lithic scatters, etc.), work shall be halted immediately. A professional archaeologist shall be consulted to assess any discoveries and develop appropriate management recommendations for treatment of historical resources. If bones are encountered and appear to be human, California law requires that the County coroner and Native American Heritage Commission be contacted. If Native American remains are involved, a Most Likely Descendant (MLD) shall be identified by the Native American Heritage Commission. The MLD and landowner upon whose property any human remains were found shall consult to determine the treatment of the remains.

Responsible Parties:	Russell H. Green, Jr.
Monitoring Authority:	Contra Costa Water District
Implementation Schedule:	Ongoing through project completion
Monitoring Schedule:	Weekly report filed by compliance monitor
Funding:	Russell H. Green, Jr.
Performance Criteria:	Hours are restricted during mobilization and demobilization

EXHIBIT D

W 40874

SPECIAL OPERATING REQUIREMENTS

(1) The lessee shall follow all requirements set forth in the Contra Costa Water District Mitigated Negative Declaration.

(2) Prior to any drilling the lessee shall submit, for Staff review, a complete geotechnical report by a California Registered Geotechnical Engineer, detailing the stability of the drilling location and certifying that the location is fully able to support the drilling project.

(3) The lessee shall submit for Staff review, a set of design calculations and engineering design drawings as issued for construction, certified by a California Registered Civil/Structural Engineer.

(4) When using a mineral oil based mud, as proposed, the following handling measures shall be implemented:

a. Catch bins will be placed under all solids control equipment to capture all solid and liquid waste generated during the drilling operation.
b. Mats and high gauge plastic shall be placed under all catch bins and mud handling equipment to contain any spills or leaks.
c. A portable 10 bbl vacuum pump shall be provided on location to immediately vacuum up any spills or other contamination.
d. A bell nipple and/or a tarp system should be set up under the rig floor to capture all mud leaks and return the fluids to the active mud system.
e. All waste fluids that cannot be reused in the active mud system shall be transferred off location and disposed of in a legal and proper manner.
f. A 2-3 foot dirt berm shall be built around the mud handling system and drill rig, and any mud storage tank, or around the location in general inside of the sheet metal piling, to contain any spill or leak of mud or mud materials while drilling. A plan for removing and disposal of any spills, and/or rain water from within the bermed area should be posted and applied.
g. A Kelly cock shall be used when making connections during drilling to prevent mud from spilling out on of the drill pipe onto the rig floor or into the sub-base area.
h. Each rig crew shall be instructed in the use, proper handling, maintenance, and spill cleanup of the drilling fluid. Any new personnel added during the drilling phase shall receive the same instruction. The instruction shall be noted on the tour sheets, and a certification of that instruction, along with the names of the participants shall be filed with the Staff in Long Beach, to the attention of the staff drilling engineer.