NOTICE OF PUBLIC REVIEW AND INTENT TO ADOPT A PROPOSED NEGATIVE DECLARATION

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970" as amended to date, this is to advise you that the Contra Costa County Department of Conservation and Development, Community Development Division, has prepared an initial study evaluating the potential environmental impacts of the following project:

1. Project Title: Powerdrive Oil & Gas Company Wells
2. County File Number: Land Use Permit LP19-2019
3. Lead Agency: Contra Costa County, Department of Conservation and Development
4. Lead Agency Contact Person and Phone Number: Syd Sotoodeh, Planner II
   925-674-7815
5. Project Location: A 160-acre parcel located at:
   Unaddressed site located approximately 2,600 feet south of the corner of Hidden Ranch Road and Old Sand Creek Road (APN: 019-120-002)
6. Applicant’s Name, Address, and Phone Number: Powerdrive Oil & Gas Company, LLC
   Niclas Biornstad
   1401 Kentucky Street
   Michigan City, Indiana 94360
   (219) 575-4199
7. **Description of Project:** The applicant seeks approval of a Land Use Permit to allow the establishment of a gas and oil well pad on an agriculturally zoned parcel. The project proposes to use a temporary, portable drilling rig to drill and explore for the accumulation of oil and/or gas within the Old Brentwood Oil and Gas Field. Three exploratory wells will be drilled, and if oil and/or gas is found in commercial quantities, casing will be installed and a smaller completion rig will be moved in and a permanent production well will be installed. Exploratory drilling time is estimated to take approximately 20 days per well with continuous 24 hour per day, 7 days a week operation until completion. If commercial quantities are found, installation of a completion rig will take an additional 30 days, and the rig will operate about 12 hours per day. The proposal also includes the installation of a gas pipeline, which will run approximately 4-feet under the existing access road and will be 3-inches in diameter. The total length of this pipeline will be approximately 3,350 linear feet, though most of it will be within the city limits of Antioch. The proposed wells site will be 60,000 square feet and located approximately 463 feet south and 525 feet west of the northeast corner of the subject property. The total area for the proposed facility is less than one percent of the property’s total area of 160 acres.

8. **Surrounding Land Uses and Setting:** The 160-acre subject property is located south of Hidden Ranch Road and Old Sand Creek Road, within a predominately agricultural area of unincorporated Brentwood in Contra Costa County. The surrounding area, including the subject property, is relatively hilly topographically. The subject property and properties west and southwest are located within the Agricultural Preserve (A-4) zoning district and has a General Plan Land Use designation of Agricultural Lands (AL). The property directly north of the project site is located within the city limits of Antioch, but is used for agricultural activities. The properties to the east and southeast are located within the city limits of Brentwood and are occupied by residential subdivisions.

The 160-acre property is located south of Hidden Ranch Road and Old Sand Creek Road in the unincorporated Brentwood area. The subject property does not front any public road and is accessed off an existing dirt road from the corner of Hidden Ranch Road and Old Sand Creek Road. The subject property is outside of the Urban Limit Line. The property is primarily used for livestock grazing and for Pacific Gas and Electric transmission towers. Additionally, the property has been used for gas and oil production, being part of the Brentwood Oil and Gas Fields. There are no existing buildings on the site nor will any buildings be constructed for the drilling operation.

9. **Determination:** The County has determined that the project may result in impacts to the environment, but those impacts will be less than significant. Therefore, pursuant to California Code of Regulations Section 15070, a Negative Declaration/initial study has been prepared. Prior to adoption of the Negative Declaration, the County will be accepting comments on the Negative Declaration/initial study during a 30-day public comment period.

Due to the COVID-19 shelter-in-place order, the mitigated negative declaration can be viewed online at the following link: [https://www.contracosta.ca.gov/4841/Public-Input](https://www.contracosta.ca.gov/4841/Public-Input). Any documents referenced in the index can be provided upon request by contacting the project planner.
**Public Comment Period** – The period for accepting comments on the adequacy of the environmental document will **begin April 20, 2020 and extend to 5:00 P.M., Tuesday, May 19, 2020.** Any comments should be submitted in writing to the following address:

Contra Costa County  
Department of Conservation & Development  
Attn: Syd Sotoodeh  
30 Muir Road  
Martinez, CA 94553

The proposed Negative Declaration will be considered for adoption at a meeting of the County Zoning Administrator. The hearing date before the County Zoning Administrator has not yet been scheduled. The hearing will be held at 30 Muir Road, Martinez. Hearing notices will be sent out prior to the finalized hearing date.

**Additional Information** – For additional information on the Negative Declaration and the proposed project, you can contact me by telephone at (925) 674-7815, or email at syd.sotoodeh@dcd.cccounty.us.

Sincerely,

[Signature]

Syd Sotoodeh  
Planner II  
Department of Conservation & Development

cc: County Clerk’s Office (2 copies)  
Adjacent Occupants and Property Owners  
Notification List

attach: Project Vicinity Map & Site Plan
3 well locations
Minimum 50’ apart
With all production facilities in orange and well locations in black/red. All with impervious surface surrounded by chain link fencing.
Existing gas pipeline
Gas pipeline to be built

Area of surface rights
With access shown

LM LAUGENOUR AND MEIKLE
CIVIL ENGINEERING • LAND SURVEYING • PLANNING
500 COURT STREET, WOODLAND, CALIFORNIA 95776 • PHONE: (530) 662-1728
P.O. BOX 826, WOODLAND, CALIFORNIA 95770 • FAX: (530) 662-4402

INGRESS AND EGRESS ROUTE
LOCATED IN A PORTION OF SECTION 9,
TOWNSHIP 1 NORTH, RANGE 2 EAST,
MOUNT DIABLO MERIDIAN,
CONTRA COSTA COUNTY, CALIFORNIA
SHEET 2 OF 2 AUGUST 21, 2018
CEQA ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:**
   - County File #LP19-2019
   - Powerdrive Oil & Gas Company Wells

2. **Lead Agency Name and Address:**
   - Contra Costa County
   - Department of Conservation and Development
   - 30 Muir Rd.
   - Martinez, CA 94553

3. **Contact Person and Phone Number:**
   - Syd Sotoodeh
   - (925) 674-7815

4. **Project Location:**
   - A 160-acre parcel located at:
   - Unaddressed site located approximately 2,600 feet south of the corner of Hidden Ranch Road and Old Sand Creek Road (APN: 019-120-002)

5. **Project Sponsor's Name and Address:**
   - Powerdrive Oil & Gas Company, LLC
   - Niclas Biornstad
   - 1401 Kentucky Street
   - Michigan City, Indiana 94360
   - (219) 575-4199

6. **General Plan Designation:**
   - AL – Agricultural Lands

7. **Zoning:**
   - A-4 – Agricultural Preserve District

8. **Description of Project:** The applicant seeks approval of a Land Use Permit to allow the establishment of a gas and oil well pad on an agriculturally zoned parcel. The project proposes to use a temporary, portable drilling rig to drill and explore for the accumulation of oil and/or gas within the Old Brentwood Oil and Gas Field. Three exploratory wells will be drilled, and if oil and/or gas is found in commercial quantities, casing will be installed and a smaller completion rig will be moved in and a permanent production well will be installed. Exploratory drilling time is estimated to take approximately 20 days per well with continuous 24 hour per day, 7 days a week operation until completion. If commercial quantities are found, installation of a completion rig will take an additional 30 days, and the rig will operate about 12 hours per day. The proposal also includes the installation of a gas pipeline, which will run approximately 4-feet under the existing access road and will be 3-inches in diameter. The total length of this pipeline will be approximately 3,350 linear feet, though most of it will be within the city limits of Antioch. The proposed wells site will be 60,000 square feet and located approximately 463 feet south and 525 feet west of the northeast corner of the subject property. The total area for the proposed facility is less than one percent of the property’s total area of 160 acres.

9. **Surrounding Land Uses and Setting:** The 160-acre subject property is located south of Hidden Ranch Road and Old Sand Creek Road, within a predominately agricultural area of unincorporated Brentwood in Contra Costa County. The surrounding area, including the subject property, is relatively hilly topographically. The subject property and
properties west and southwest are located within the Agricultural Preserve (A-4) zoning district and has a General Plan Land Use designation of Agricultural Lands (AL). The property directly north of the project site is located within the city limits of Antioch, but is used for agricultural activities. The properties to the east and southeast are located within the city limits of Brentwood and are occupied by residential subdivisions.

**Existing Site Condition:** The 160-acre property is located south of Hidden Ranch Road and Old Sand Creek Road in the unincorporated Brentwood area. The subject property does not front any public road and is accessed off an existing dirt road from the corner of Hidden Ranch Road and Old Sand Creek Road. The subject property is outside of the Urban Limit Line. The property is primarily used for livestock grazing and for Pacific Gas and Electric transmission towers. Additionally, the property has been used for gas and oil production, being part of the Brentwood Oil and Gas Fields. There are no existing buildings on the site nor will any buildings be constructed for the drilling operation.

10. **Other public agencies whose approval is required (e.g., permits, financing, approval, or participation agreement):**
   - Contra Costa County Building Inspection Division
   - California Division of Oil, Gas and Geothermal Resources
   - Bay Area Air Quality Management District
   - County Health Services Department, Environmental Health Division
   - Contra Costa County Fire Protection District

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

    A correspondence dated November 21, 2019 was sent to Wilton Rancheria, which included an opportunity to seek comments. No tribes have requested consultation on the project.
Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project as indicated by the checklist on the following pages.

☐ Aesthetics  ☐ Agriculture and Forestry Resources  ☐ Air Quality
☐ Biological Resources  ☐ Cultural Resources  ☐ Energy
☐ Geology/Soils  ☐ Greenhouse Gas Emissions  ☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality  ☐ Land Use/Planning  ☐ Mineral Resources
☐ Noise  ☐ Population/Housing  ☐ Public Services
☐ Recreation  ☐ Transportation  ☐ Tribal Cultural Resources
☐ Utilities/Services Systems  ☐ Wildfire  ☐ Mandatory Findings of Significance

Environmental Determination

On the basis of this initial evaluation:

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

☐ I find that, although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

☒ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☒ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Syd Sotoodeh
Planner II
Contra Costa County
Department of Conservation & Development

Date
ENVIRONMENTAL CHECKLIST

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

1. **AESTHETICS**— *Except as provided in Public Resources Code Section 21099, would the project:*

   a) Have a substantial adverse effect on a scenic vista?  
      | ☐ | ☐ | ☒ | ☐ |

   b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?  
      | ☐ | ☐ | ☐ | ☒ |

   c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?  
      | ☐ | ☐ | ☒ | ☐ |

   d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?  
      | ☐ | ☐ | ☒ | ☐ |

**SUMMARY:**

a) *Would the project have a substantial adverse effect on a scenic vista? (Less than significant)*

   The subject property is relatively hilly, and the proposed equipment and pad will be located below the ridgeline of a hill. The equipment will not be visible from any residence or public area. The subject property is not located within a scenic ridgeline or near a designated scenic route. Therefore, as proposed there will be a less than significant impact on any scenic vistas.

b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway? (No impact)*

   The proposed gas and oil well pad will be constructed in an undisturbed area of the subject property located off an existing dirt access road. There are no trees, rock outcroppings, or buildings within the subject property. Therefore, the construction of the pad will not require the removal or work within the vicinity of any of these features. The project will not be visible from any state designated scenic highways. Therefore, the new oil and gas well facility does not impact any scenic resources.
Environmental Issues | Potentially Significant Impact | Less Than Significant Impact | Mitigation Incorporated | Less Than Significant Impact | No Impact
---|---|---|---|---|---

**c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (Less than significant)**

The subject property is in a non-urbanized area of the County. The proposed oil and gas well facility will be located in the northeast portion of the property. The equipment will not be visible from any public area as they will be located below the ridgeline of the hill. The equipment is located a substantial distance away from any public viewing area and is not visible from any publicly accessible vantage points. The closest scenic route as designated in the County’s General Plan (Figure 5-4) to the proposed project site is Deer Valley Road. However, the proposed oil and gas well facility is located more than a mile away from Deer Valley Road and will not have any impacts to views from the road. As proposed, the oil and gas well facility will have a less than significant impact and will not conflict with applicable zoning and other regulations governing scenic quality.

**d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Less than significant)**

Night lighting will be required during the drilling phase of the project. The rig and location will be lit during the night for working operations by use of portable temporary lights that will be focused on the rig and drilling locations. Additionally, drilling activities are considered short term, and any light or glare generated from these activities will be temporary. This light and glare is not anticipated to impact any nearby sensitive uses due to their distance from the project well pad. If commercial quantities of oils and gas are found, a permanent production facility will be established. If needed, the permanent facility will include a gas and oil well pump as well as storage tanks for the resources extracted. However, no lighting will be required for the completion rig and all operation of this rig will occur during daytime hours.

**Sources of Information**
(1), (6)
2. AGRICULTURAL AND FOREST RESOURCES – Would the project:

<table>
<thead>
<tr>
<th>Environmental Issues</th>
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</tr>
</thead>
<tbody>
<tr>
<td>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</td>
<td>☒</td>
<td>✗</td>
<td>✗</td>
<td>☒</td>
</tr>
<tr>
<td>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</td>
<td>☒</td>
<td>✗</td>
<td>✗</td>
<td>☒</td>
</tr>
<tr>
<td>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?</td>
<td>☒</td>
<td>✗</td>
<td>☒</td>
<td>✗</td>
</tr>
<tr>
<td>d) Result in the loss of forest land or conversion of forest land to non-forest use?</td>
<td>☒</td>
<td>✗</td>
<td>✗</td>
<td>☒</td>
</tr>
<tr>
<td>e) Involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland, to non-agricultural use?</td>
<td>☒</td>
<td>✗</td>
<td>✗</td>
<td>☒</td>
</tr>
</tbody>
</table>

**SUMMARY:**

a) **Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (Less than significant impact)**

The property is located within an Agricultural Preserve (A-4) zoning district and an Agricultural Lands (AL) general plan designation. The California Department of Conservation designates the area as grazing land. The 1.4 acre well pad is relatively small compared to the size of the property and is not anticipated to impact any potential farmland or farming activities in the area.

b) **Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? (No impact)**

The property is not in a Williamson Act contract, and there are no plans to change the zoning or agricultural use of the site. As such, the project will not conflict with the agricultural zoning or any Williamson Act contract.
Environmental Issues | Potentially Significant Impact | Less Than Significant Impact with Mitigation Incorporated | Less Than Significant Impact | No Impact
---|---|---|---|---
c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g) or conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)? (No impact)

The property is located within an Agricultural Preserve (A-4) zoning district and Agricultural Lands (AL) general plan designation. The subject property is not zoned nor does it have a general plan designation for forest land. Additionally, it does not meet the definition of forest land as defined in Public Resources Code section 12220(g). No timberland production occurs on this site. There is no conflict with any forest land nor does the project propose rezoning of forest or timberland.

d) Would the project involve or result in the loss of forest land or conversion of forest land to non-forest use? (No impact)

The property is located within an Agricultural Preserve (A-4) zoning district and Agricultural Lands (AL) general plan designation. There is no proposal to convert any forestland to a non-forest use and no rezoning is proposed. The site is not designated as forest land and there are no trees located on the site, thus, the project would not impact any forest use.

e) Would the project involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland, to non-agricultural use? (No impact)

The property is located within an Agricultural Preserve (A-4) zoning district and Agricultural Lands (AL) general plan designation. The proposed gas and oil well pad will only take up 1.4 acres of the 160-acre property and will not impact the grazing or farming ability of the property. There is no proposal to rezone the property to a non-agricultural use, thus and the project would not impact farmland.

Sources of Information
(1), (6), (7), (8)
3. **AIR QUALITY – Would the project:**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Expose sensitive receptors to substantial pollutant concentrations?</td>
<td>☐</td>
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</tr>
<tr>
<td>Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
</tr>
</tbody>
</table>

**SUMMARY:**

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan? (Less than significant)*

The proposed project consists of constructing a new oil and natural gas well. Site preparation and restoration phases include earth-moving activities that generally have the potential to generate emissions of fine particulate matter, as well as tailpipe emissions from diesel engines. The drill site will be graded and leveled as needed; however, the grading involved with the project will be minimal as the site is relatively flat. The total number of vehicles and the duration of use will be limited during this initial site preparation and the drill installation phase. Once the drilling rig is set up, the frequency of large trucks at the site will be minimal. Large trucks will visit the site occasionally after drilling begins, but these visits will average two trips per day during this period. Other vehicle visits will be with much smaller automobiles and pickup trucks for crew shift changes, mud loggers, engineers, and deliveries of items for the drilling rig. Any impacts to air quality would be related to the construction portion of the project and would be temporary in nature. Therefore, impacts will be less than significant.

b) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? (Less than significant)*

Based on EPA data, in 2019 Contra Costa County had a “marginal” air pollutant non-attainment status for Ozone (i.e. “smog”) and Particulate Matter 2.5 (PM-2.5). Non-attainment is a classification applied to an area that had one or more violations within the last three years. The EPA did not provide data identifying how many violations were identified in Contra Costa County or where the violations occurred. Both smog and PM-2.5 are pollutants commonly associated with dense urban areas such as the metropolitan Bay Area, therefore it can be reasonably assumed that the violations were logged in the more densely populated areas of central and western Contra Costa County. As mentioned in the response to question (a), the main element of the proposed facility that has the potential for impacting air quality is the construction and exploratory drilling
phase of the project. This phase will be temporary (approximately 20 days per well). The emissions generated from these activities is negligible, and therefore there will be a less than significant impact on the air quality in the area. These impacts will be lessened by the implementation of typical best management practices as required by the Bay Area Air Quality Management District (BAAQMD), such as watering exposed surface, limiting speed of vehicles on unpaved roads, and reducing idling times of vehicles and equipment.

c) **Would the project expose sensitive receptors to substantial pollutant concentrations? (Less than significant)**

The nearest sensitive receptor to the proposed gas and oil well pad is a residential subdivision located approximately 1,100 feet from the proposed well site. It is unlikely that these sensitive receptors would be exposed to dust emissions, diesel emissions, and emissions from production equipment. Construction and grading activities would produce combustion emissions from various sources, including heavy equipment engines and motor vehicles used by the construction workers. Dust would be generated during construction activities and drilling activities. The amount of dust generated would be highly variable and is dependent on the size of the area disturbed, the amount of activity, soil conditions, and meteorological conditions. The main portion of the project will be within a 1.4-acre well site. This site will be located behind a hill and will not be visible from any nearby sensitive receptors. Any construction and exploratory drilling activities would be temporary, and therefore any impacts to sensitive receptors will be less than significant.

d) **Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (Less than significant)**

BAAQMD’s CEQA Guidelines list several types of industrial operations that are considered a significant source of odors. Oil and gas wells are not one of the listed operations, and no objectionable odors would be generated from the natural gas and oil well production operations. The proposed well site is located approximately 1,100 feet from the nearest residence and is not expected to affect any of the nearby residential uses. As mentioned previously, the main aspect of the project that has a potential for impacting air quality is due to the site preparation and exploratory drilling in the form of engine emissions. These activities are temporary in nature. The resulting emissions, such as those resulting in odors, will be negligible, and therefore will have a less than significant impact on adversely affecting a substantial number of people. Additionally, the project will be conditioned to include air quality management practices provided by the BAAQMD. No other portion of the project is expected to result in emissions or odors.

*Sources of Information*
(1), (10), (11), (12), (13)
4. **BIOLOGICAL RESOURCES – Would the project:**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>a)</strong> Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td><strong>b)</strong> Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td><strong>c)</strong> Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td><strong>d)</strong> Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td><strong>e)</strong> Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td><strong>f)</strong> Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
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</tbody>
</table>

**SUMMARY:**

**a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Less than significant)**

The proposed project consists of establishing a well pad for the exploratory drilling of up to three gas and oil wells. Establishing the well pad site may require minimal grading at the property, but is not anticipated to have an adverse effect on and special status species in the area. The well site will consist of less than one percent of the total size of the property. Additionally, this property is also used for agriculture and is routinely farmed and plowed, and therefore is unlikely to be a habitat for any sensitive species. All access to the project site will be through existing roads and will not require the creation of any new roads to the site. Therefore, the project will have a less than significant impact on any species identified as a candidate, sensitive, or special status species in any local or regional plans.
b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Less than significant)

Pursuant to Figure 8-1 (Significant Ecological Area and Selected Locations of Protected Wildlife and Plans Species Areas) of the County General Plan, the Shoreline Between Martinez Waterfront and Concord Naval Weapons Station Significant Ecological Resource Area is located in the Port Chicago area; the subject property is not within proximity of this area, and thus will have no impacts on that resource. The subject property is not located within any of the local areas managed by the California Department of Fish and Wildlife or U.S. Department of Fish and Wildlife Service. The oil and gas well pad will be located near a tributary for Sand Creek, but will have no impact, as all access roads to the well site are existing. The property has been routinely plowed as part of a farming operation and it is unlikely that any species would use the site for habitat. Therefore, there is minimal potential for the proposed project having a substantial impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Wildlife or U.S. Department of Fish and Wildlife Service.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Less than significant)

The U.S. Army Corp of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) are two of the primary Federal agencies which enforce the Clean Water Act and administer the associated permitting program. As such, these agencies define wetland as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. There is a tributary that runs through the property, which will be required to be crossed as part of the access to the well pad, but the road crossing this feature is existing and any impact will be less than significant.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites? (Less than significant)

The proposed gas and oil well site will have less than significant impacts on the water circulation of any native resident or migratory fish, as there are no active waterways on-site or in the immediate area surrounding the property. Therefore, the proposed project will have minimal impacts on this analysis category. The well pad will have a small footprint in relation to the total size of the property and will have less than significant impacts to the surface movement of any
wildlife. Based on the above, the proposed project has a less than significant potential for substantially interfering with the movement of wildlife.

e) **Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (No impact)**

There are no trees within the vicinity of the project site. The project as proposed does not encroach within the driplines of any trees nor proposes to remove any trees. Field and GIS reconnaissance of the site confirms that there are no such features in the project vicinity. Therefore, it would not conflict with any local policies or ordinances protecting biological resources.

f) **Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (Less than significant)**

The proposed project, the drilling of an exploratory gas well, is located outside of the Urban Limit Line and therefore is not subject to the Contra Costa County Habitat Conservation Plan (HCP) or the Natural Community conservation Plan (NCCP). The proposed facility will be located on a property that is routinely farmed and plowed and therefore is unlikely to be a habitat for any sensitive species. Therefore, there will not be any conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

**Sources of Information**
(1), (6), (14), (15), (16), (20)

<table>
<thead>
<tr>
<th>Environmental Issues</th>
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<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
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</table>

5. **CULTURAL RESOURCES – Would the project:**

<table>
<thead>
<tr>
<th>a)</th>
<th>Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?</th>
<th>☐</th>
<th>☐</th>
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</tr>
</thead>
<tbody>
<tr>
<td>b)</td>
<td>Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
</tr>
<tr>
<td>c)</td>
<td>Disturb any human remains, including those interred outside of formal cemeteries?</td>
<td>☐</td>
<td>☐</td>
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</table>

**SUMMARY:**

a) **Would the project cause a substantial adverse change in the significance of a historical resource pursuant to California Environmental Quality Act Guidelines Section 15064.5? (No impact)**

The California Public Resources code defines a historical resource as a resource that has been listed or is eligible for listing on the California Historical Register of Historical Resources, a resource included in a local register of historical resources, or identified as significant in a historical survey meeting the requirements of the Public Resources Code. The subject property is
not listed in the County’s Historic Resources Inventory (updated through December 2010) and there are no existing structure on the property. The property is largely used for farming and animal grazing as well as for electric utility structures, none of which holds any historical significance. The only structures on the property are electrical towers within the PG&E easement. Therefore, the existing structures located at the facility would not be considered as historical resources, and there would be no impact to any historic resources due to the project.

b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to California Environmental Quality Act Guidelines Section 15064.5? (Less than significant)*

The project record does not show any prior cultural resource studies being conducted at the subject property that indicate that archeological resources or paleontological resources exist at the subject property. The total area for the proposed facility (approximately 60,000 square-feet pad) is less than one percent of the property’s total area of 160 acres. Given that the property has been continuously farmed and plowed, there is low possibility of the project area to contain unrecorded archaeological sites.

c) *Would the project disturb any human remains, including those interred outside of formal cemeteries? (Less than significant)*

The project record does not show any prior cultural resource studies being conducted at the subject property that indicate that human remains exist at the subject property. The proposed well site will encompass a relatively small area of the 160-acre parcel, and will not require significant amounts of grading or trenching. The total area for the proposed facility (approximately 60,000 square-feet pad area) is less than one percent of the property’s total area of 160 acres. Given that the property has been routinely farmed and plowed over the years, there is a low possibility of the project area containing unrecorded archaeological sites or human remains.

**Sources of Information**

(1) (3)
## 6. ENERGY – Would the project:

<table>
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<tr>
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<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

### a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

- [ ] Potentially Significant Impact
- [ ] Less Than Significant With Mitigation Incorporated
- [x] Less Than Significant Impact
- [ ] No Impact

### b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

- [ ] Potentially Significant Impact
- [ ] Less Than Significant With Mitigation Incorporated
- [ ] Less Than Significant Impact
- [x] No Impact

### SUMMARY:

**a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (Less than significant)**

The project includes construction of a gas and oil well site. Gas and oil well facilities are not typically associated with unnecessary consumption of energy resources. The gas and oil well site is not large-scale development and will not be a source of excessive energy use. As part of the construction phase of development, contractors will be required to comply with the CalGreen/Construction & Demolition Debris Recovery Program. The program requires at least 65% by weight of job site debris to be recycled, reused, or otherwise diverted from landfill disposal.

**b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (No impact)**

Locally, Contra Costa County has an adopted Climate Action Plan (CAP) on December 15, 2015. The CAP outlines the County’s strategy to address the challenges of climate change by reducing local greenhouse gas (GHG) emissions while improving community health. However this plan is more focused on countywide policies rather than individual projects. Generally, gas and oil well sites are not typically associated with high energy uses. If commercial quantities of the resource are found, a completion rig will be installed to pump out the resource. These rigs are typically powered by natural gas that is extracted from the site, not requiring an outside power source. Additionally, production of the resource at this site will reduce the State’s need to import gas and oil from outside resources, thus, reducing emissions related to the transportation of gas and oil. Therefore, there will be no impact on any plans for renewable energy or energy efficiency.

**Sources of Information**

(1), (11)
7. **GEOLOGY AND SOILS** – Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:

   i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (No impact)

   The subject property is not located within close proximity to a known earthquake fault, nor is located within an identified Alquist-Priolo fault zone. The closest known Alquist-Priolo fault zone is the Marsh Creek Fault zone, which is located approximately 7.6 miles southwest of the subject property. The project would not involve construction of any habitable structures, and therefore would not increase risks associated with fault rupture hazards.

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<thead>
<tr>
<th>Environmental Issues</th>
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<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:</td>
<td></td>
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</tr>
<tr>
<td>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>ii) Strong seismic ground shaking?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>iii) Seismic-related ground failure, including liquefaction?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>iv) Landslides?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>b) Result in substantial soil erosion or the loss of topsoil?</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</td>
<td>☐</td>
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</tr>
<tr>
<td>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?</td>
<td>☐</td>
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<td>☒</td>
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<tr>
<td>e) 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?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
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<td>☐</td>
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<td>☐</td>
</tr>
</tbody>
</table>

**SUMMARY:**

a) **Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:**

i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (No impact)**
### ii) Strong seismic ground shaking? *(No impact)*

As mentioned in Section a.i above, the subject property is not located within a known Alquist-Priolo fault zone or within the vicinity of a known fault. The project would not involve construction of any habitable structures, and therefore would not increase risks associated with ground shaking hazards. Should the proposed project identify economic quantities of the resources, production facilities will be built in accordance with existing seismic design and construction standards. As such, the potential for exposing people or structures to substantial adverse effects because of ground shaking is less than significant.

### iii) Seismic-related ground failure, including liquefaction? *(No impact)*

Figure 10-5 of the County General Plan Indicates that the subject property is located within an area of the County with a “Generally Low” liquefaction potential. Activities associated with drilling and natural gas/oil production are not expected to increase the potential for liquefaction. The site is not anticipated to have any liquefiable sands or hazardous ground failures.

### iv) Landslides? *(No impact)*

The presence of a significant landslide hazard requires the existence of a steep slope, certain soil characteristics, and action of gravity. While the project site is relatively hilly, none of the slopes are steep or designated as over 26% in Figure 10-7 of the County’s General Plan. The drilling will take place on a flat area of the property. None of the activities associated with drilling and production are expected to contribute to increased potential for landslides or mudflows.

### b) Would the project result in substantial soil erosion or the loss of topsoil? *(Less than significant)*

The proposed gas and oil well project will involve grading, excavation, backfilling, and compaction activities at the drill site and access road, which could result in erosion of soil. The project also includes the installation of a gas pipeline, though the majority of this pipeline will be located in the city limits of Antioch. The pipeline will be installed under the existing access road and will be approximately 3-inches in diameter. The total length of the pipeline will be approximately 3,350 linear feet. Work will be performed in accordance with the National Pollutant Discharge Elimination System (NPDES) General Construction Activity Storm Water Permit requirements, which include erosion control measures, therefore the impacts will be less than significant.
Environmental Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact
---|---|---|---|---

**c)** Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? *(Less than significant)*

Figure 10-1 (Generalized Geology of Contra Costa County) of the Contra Costa County General Plan identifies the subject property as being located within an area with a geographical unit consisting of “Quaternary Alluvium” and “Tertiary Formations.” Quaternary Alluvium is characterized as consolidated and unconsolidated sediments. Localized problems for building include expansive clays, hillside earthflows and unstable cut slopes. Tertiary Formations consist of hard marine sandstone and shale overlain by soft non-marine units. Slope stability conditions in this formation range from good to poor. Despite the generalized characteristics of these geological units, structures can be safely constructed at the facility in a manner that is compliant with the applicable building codes. The structures and equipment associated with the proposed project will be reviewed and permitted by the building department and will not cause any significant impacts that would lead to soil instability.

**d)** Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? *(Less than significant)*

Expansive soils are soils that expand when water is added and shrink when they dry out. This continuous change in soil volume causes homes and other structures to move unevenly and crack. The County Building Inspection Division will require that any permanent structures be engineered according to building code standards. The engineering of the proposed structures pursuant to the applicable building code will ensure that any risks to life or property are reduced to a less than significant level.

**e)** Would the project 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? *(No impact)*

There are no sanitary facilities or wastewater disposal systems proposed as part of this project. These types of facilities are not required for gas and oil well sites. Therefore, there are no impacts regarding the soil’s inability to support a waste disposal system.

**f)** Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? *(Less than significant)*

The proposed well site will encompass a relatively small area of the 160-acre parcel, and will not require significant amounts of grading or trenching. The total area for the proposed facility (approximately 60,000 square-feet pad area) is less than one percent of the property’s total area of 160 acres. The location of the well pad is relatively flat with no visible geologic features or
rock outcroppings. Given that the property has been routinely farmed and plowed over the years, the likelihood of destroying a unique geologic or paleontological feature is low, so any impacts are considered less than significant.

**Sources of Information**

(1), (6)

<table>
<thead>
<tr>
<th>Environmental Issues</th>
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<td></td>
<td>Potentially Significant</td>
<td>Mitigation Incorporated</td>
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</table>

**8. GREENHOUSE GAS EMISSIONS – Would the project:**

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?  
   - [ ]  
   - [ ]  
   - [x]  
   - [ ]

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?  
   - [ ]  
   - [ ]  
   - [x]  
   - [ ]

**SUMMARY:**

a) **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Less than significant)**

The primary sources of greenhouse gas emissions from the proposed oil and gas well will be from transport of supplies, materials, and crew as well as the diesel engine required to power the drill operations. These impacts will mostly occur during the exploratory drilling and completion rig setup stage of the process. If economic quantities of oil are discovered and a completion rig is installed, there will be infrequent truck visits to haul the product from the site. The number of truck trips to the site at this stage largely depend on the amount of oil found but is typically between one and two visits per day. The frequency of visits will lessen as the oil production rate falls off during the first few months. Additionally, according to the California Air Resources Board, oil production in California reduces the need to import the resource from outside the state. By producing the resource in the State, this will lower the demand of importing the resource ultimately creates a net reduction in greenhouse gas emissions. Therefore, the proposed gas and oil well will have a less than significant impact on the generation of greenhouse gas emissions.

b) **Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (Less than significant)**

The Contra Costa County Board of Supervisors, in April 2012, directed the Department of Conservation and Development to prepare a Climate Action Plan (CAP) to address climate change impacts in the unincorporated area by reducing GHG emissions. The CAP was adopted by the Board of Supervisors on December 15, 2015. The CAP outlines the County’s strategy to address the challenges of climate change by reducing local GHG emissions while improving community health. Additionally, the CAP meets the California Environmental Quality Act requirements for developing a qualified GHG reduction strategy, and is consistent with the Bay Area Air Quality Management District’s (BAAQMD) guidance on preparing a qualified GHG reduction strategy.
As mentioned above in section a), production of oil and gas within the State of California will reduce the need to import the resource from out of the State. There may be some increase in greenhouse gases because of the truck and vehicle visits to the site as well as for powering the drill and equipment. However, production of oil and gas within California reduces the need for the State to import the resource from outside the State and therefore results in a net reduction in greenhouse gas emissions. Thus, the proposed project will not conflict with any plans or policies, such as the Contra costa County Climate Action Plan, adopted to reduce such emissions.

Sources of Information
(1), (6), (10), (11)

<table>
<thead>
<tr>
<th>HAZARDS AND HAZARDOUS MATERIALS – Would the project:</th>
</tr>
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<tbody>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
</tr>
<tr>
<td>b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
</tr>
<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
</tr>
<tr>
<td>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?</td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?</td>
</tr>
<tr>
<td>f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
</tr>
<tr>
<td>g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</td>
</tr>
</tbody>
</table>

SUMMARY:

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Less than significant)

All material produced as a result of the gas and oil well will be either stored onsite in containment areas or will be transported offsite by truck or through gas pipelines. The California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) regulates oil and gas
well drilling and the associated transportation of these resources. As this property and many nearby have historically been used for gas and oil well production, there are existing gas pipelines in place nearby. A new pipeline will be installed from the proposed well site to an existing pipeline for the transportation of natural gas. Oil will be routinely transported offsite by truck, or will be stored in containers depending on the amount of oil produced at the facility. If sufficient quantities of oil are found, three to five oil storage tanks, pumps, meters, and loading racks will be installed and all other associated production and operation equipment will be placed on the wellsite and maintained. Based on the foregoing and the requirements of DOGGR, any impact from the transportation of hazardous materials will be less than significant.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment? (Less than significant)

The proposed project involves drilling for and possible production of natural gas and oil. Well drilling and operation of the proposed well has the possibility to produce hazards including a blowout during drilling operations, a natural gas explosion, or ruptures or failure of a storage or transportation system. The well site will be entirely on private property, and the transportation of the materials will occur through new and existing gas pipelines for natural gas and by truck for oil. The California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) regulates oil and gas well drilling and the associated transportation of these resources. As required by DOGGR (14 CCR § 1722.2-1724.1) surface casting would be set, cemented, and blowout prevention equipment would be installed at each of the wellheads and tested to minimize the potential releases associated with blowouts. Impacts associated with the accidental release of these materials depend on several different factors, including but not limited to the quantity and type, the location where it is used, the toxicity or other hazardous characteristics of the material, and whether the material is transported or stored. The applicant would be required to comply with all regulations from DOGGR and, therefore, the project will have a less than significant impact to the public or environment due to accident conditions involving the release of hazardous materials.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (Less than significant)

The proposed well site is not located within one-quarter mile of an existing or proposed school, with the closest school being located approximately 0.5 miles from the subject property. For the exploratory drilling phase, no hazardous materials will be used in the drilling process. All drilled cuttings will be separated and stored and hauled to a municipal waste facility that handles non-hazardous waste. If oil is expected to be produced it will be trucked from the site. Initially, one or two trucks per day may be needed, but the frequency will lessen and the oil production rates fall off during the first few months. If there is sufficient volume of oil, three to five oil storage
tanks, pumps, meters, and loading racks will be permanently installed and maintained. The impact on any schools within the vicinity of the project will be less than significant.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (No impact)

A review of the Cortese List database maintained by the California Environmental Protection Agency (CEPA) indicates that the property is not on the list of contaminated properties or toxic substance clean-up sites. In addition to farming and agricultural uses, the subject property and many of the surrounding properties has historically been used for gas and oil production. As the site is not listed as a hazardous materials site, the project would not create a significant hazard to the public or environment in this regard.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? (No impact)

The project is not located within the vicinity of any public airport or public use airport and will not conflict with airport land use plan. The nearest airport to the project site is the Byron Airport, which is approximately 9.5 miles from the site. Thus, the project would not create an aircraft safety hazard, or a noise hazard (see Section 13 of this document for analysis of project noise impacts), for people working, residing in, or traveling through the area; therefore no impacts are anticipated.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Less than significant)

The proposed gas and oil well pad will be located completely within the boundaries of the subject property, and will not interfere with transport or access along any roadways or waterways that may be part of an emergency response or evacuation plan. In addition, the proposed project does not include the removal or alteration of any existing structures or mass communication facilities which may be utilized to execute an emergency response or evacuation plan.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (Less than significant)

According to Figure 10-10—“Fire Hazard Areas” of the Safety Element of the General Plan, the site is located in a Class 3 Critical Fire Weather area, which means that the site could be subject to 9.5 or more critical fire days per year. Figure 10-10 also indicates that the project site is located in a low fire hazard local responsibility area, as opposed to moderate and high fire hazard areas that are the responsibility of the state. The subject property is located within the service area of
the East Contra Costa County Fire Protection District. The Department of Conservation and Development, Community Development Division (CDD) generally refers requests for new land uses to the respective Fire District for review and comment to ensure that the proposed project meets applicable fire codes. Such was done for the proposed project, and there was no indication from the Fire District that the proposed project would pose a significant fire risk.

**Sources of Information**
(1), (18), (19)

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<th>Environmental Issues</th>
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<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
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</table>

**10. HYDROLOGY AND WATER QUALITY – Would the project:**

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?  

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

   i) Result in substantial erosion or siltation on- or off-site?

   ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

   iii) 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?

   iv) Impede or redirect flood flows?

   d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

   e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**SUMMARY:**

a) _Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? (Less than significant)_

The proposed gas and oil well facility will not increase the waste discharge at the subject property. The exploratory well drilling process will result in some solid waste, but will not affect or degrade surface or water ground quality. Drilled cuttings will be separated from the mud system, de-watered, and stored in a closed system at the well site until drilling is complete. The mud system
is a form of solids control to separate any solids brought up in the drilling process. Then, they will be hauled to a municipal waste disposal facility that handles non-hazardous waste. Water from the drilling mud will be re-used as needed in the mud system, and excess will be stored in a closed system and hauled to a waste facility at the end of the job. A portable sanitary facility will be used during the drilling operation and will be pumped on a regular basis for disposal at an approved off-site location. The daily operation of the proposed well site will not involve commercial, manufacturing, or processing activities which would have the potential for generating byproducts or other waste which would pose a significant risk for violating waste discharge requirements or impacting water quality at the property if not disposed of correctly. Therefore, any impact to water quality due to discharge will be less than significant.

b) **Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (Less than significant)**

The subject property is not located within the service area of any water service provider. There will be no interaction between the proposed facility and any groundwater table or aquifer that may exist at the subject site. There are no water wells proposed as part of the project. Water may be extracted during the exploratory drilling period, but this amount is negligible and not expected to interfere with groundwater management. This water will be recycled through the mud cutting system as described in the response in question (a). The potential for the proposed project substantially depleting groundwater supplies or interfering with groundwater recharge is minimal.

c) **Would the project substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**

i) **Result in substantial erosion or siltation on- or off-site? (Less than significant)**

No stream or river will be altered as a result of any element of the proposed project. All access to the well site will be through existing roads, and there will be minimal grading activities for establishing the well site. The potential for the proposed project significantly altering drainage patterns in a manner that would result in substantial erosion is less than significant.

ii) **Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? (Less than significant)**

Access to the well site will require crossing a tributary, but the road for this access is already existing. Additionally, the entire property is currently used for agriculture production and has been routinely farmed and plowed. The proposed project is not located within a flood plain or flood hazard area. The grading for site preparation will be minimal, and the project
Environmental Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact
---|---|---|---|---

does not include the installation of impervious surface that would affect runoff. Therefore, the potential for the proposed project significantly altering drainage patterns in a manner that would result flooding is less than significant.

iii) 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? (Less than significant)

The proposed project site is not located near any stormwater drainage systems. The project will have minimal grading, as the site is mostly flat, and does not include the installation of impervious surfaces that would affect runoff water. It is unlikely that the proposed gas and oil well site will create an additional source of polluted runoff.

iv) Impede or redirect flood flows? (Less than significant)

No stream or river will be altered as a result of any element of the proposed project. The proposed project is not located within a flood plain or flood hazard area. Therefore, the potential for the proposed project significantly altering drainage patterns in a manner that would impede or redirect flood flows is less than significant.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? (No impact)

Seiche, tsunami, and mudflow events are generally associated with large bodies or large flows of water. The subject property is not located in close proximity to any of the County’s large water bodies or natural water courses which would increase the potential for a seiche, tsunami, or mudflow event. There is also no proposal to remove or modify any existing dam, levee, or other infrastructure used to divert or otherwise control large volumes of water as part of the project. Therefore, the proposed project will have no impact to current exposures of people or structures to a significant risk of loss, injury, or death involving flooding, seiche, tsunami, or mudflow.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Less than significant)

The proposed gas and oil well will not require new water services to the subject site. The subject property has historically been used for gas and oil well drilling. The project will involve the drilling of up to three gas and oil wells. Water will be extracted as part of the drilling operation and will be used as needed for the drilling mud system. Regardless, the operation is not anticipated to significantly conflict or obstruct with the implementation of a water quality control plan or sustainable groundwater management plan.

Sources of Information
(1), (2), (17)
11. LAND USE AND PLANNING – Would the project:

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Physically divide an established community?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>b) Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
</tbody>
</table>

**SUMMARY:**

a) *Would the project physically divide an established community? (No impact)*

The proposed gas and oil well site will be entirely located within the existing boundaries of the subject property. The subject property is a large piece of agricultural land, and there are no residences on the property. The nearest community is a subdivision located directly east of the subject property. Therefore, the project will not physically divide any established communities.

b) *Would the project cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (Less than significant)*

The subject property is located within an area with a General Plan land use designation of Agricultural Lands (AL). The purpose of the AL designation is generally for agricultural properties. The proposed gas and oil well pad will cover less than 1% of the total area of the property, and therefore will not cause a significant impact to the amount of property that is currently used or that has the capability of being used for agricultural purposes. Therefore, the will have a less than significant impact on the agricultural capabilities of the property and will not conflict with the established land use district.

**Sources of Information**

(1), (6)
12. MINERAL RESOURCES – Would the project:

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

**SUMMARY:**

a) **Would the project 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? (No impact)**

Implementation of the project will not use non-renewable resources in a wasteful or inefficient manner. The drilling and construction related equipment will be powered by diesel fuel and gasoline, but their usage will be only used during the exploratory drilling portion of the project and will be temporary. According to Figure 8-4 (Mineral Resource Areas) of the Contra Costa County General Plan, the subject property is not located within an area identified as a significant mineral resource area. Therefore, the proposed gas and oil well site will not impact the availability of known mineral resources.

b) **Would the project 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? (No impact)**

According to Figure 8-4 (Mineral Resource Areas) of the Contra Costa County General Plan, the subject property is not located within an area identified as a significant mineral resource area. Implementation of the proposed project will not result in loss of any known mineral resource within the project area.

**Sources of Information**

(1), (6)
13. **NOISE – Would the project result in:**

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mitigation Incorporated</td>
<td></td>
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</tr>
</tbody>
</table>

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?  

- [ ] Potentially Significant Impact
- [ ] Less Than Significant Impact
- [x] Mitigation Incorporated
- [ ] No Impact

b) Generation of excessive groundborne vibration or groundborne noise levels?  

- [ ] Potentially Significant Impact
- [ ] Less Than Significant Impact
- [x] Mitigation Incorporated
- [ ] No Impact

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a 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?  

- [ ] Potentially Significant Impact
- [ ] Less Than Significant Impact
- [ ] Mitigation Incorporated
- [x] No Impact

**SUMMARY:**

a) **Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?** *(Less than significant)*

Figure 11-6 (Land Use Compatibility for Community Noise Environments) of the County General Plan’s Noise Element indicates that noise exposure levels at or below 75 decibels are considered as “Normally Acceptable” for land uses that fall within the “Utilities” and land use category. According to figure 11-6 of the County General Plan’s Noise Element, the conditionally acceptable noise levels for agricultural land uses is up to 80 decibels, and normally acceptable up to 75 decibels. The subject property is located within an Agricultural Preserve (A-4) Zoning District. The proposed facility is located approximately 1,100 feet to the nearest residence, and is surrounded by hilly terrain. These residences are located within the city limits of Brentwood, whose general plan notes 75 decibels as conditionally acceptable noise level for single-family residential uses. The applicant provided two separate noise impact studies for a similar drilling operation located near the proposed project site. The majority of the noise produced by the project will be during the drilling phase of the project. Noise is expected from the truck trips hauling equipment for the drill, the setup of the drill, and the running of the drill itself. Noise from the drilling rig will be mostly from the diesel engines that power the rig. The drill site is located behind hills, which will help reduce noise traveling to the adjacent residential uses. It is not anticipated that the noise generated by the drilling operations or the completion rig will result in substantial noise levels that conflict with standards established by the general plan.
b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels? *(Less than significant)*

The proposed gas and oil well and has very little chance for resulting in excessive ground borne vibration as a result of its daily use and operation. Any ground borne vibration or ground borne noise that may be created as part of the project would be produced during the construction and exploratory drilling phase. Therefore, any possible ground borne vibrations or noise would be temporary in nature. The nearest residence the project site is approximately 1,100 feet away from the drill site and is not anticipated to experience any groundborne vibration or noise levels. Therefore, based on the nature of the proposed improvements and overall anticipated duration for the construction phase of the project, the probable for excessive ground borne vibration or ground borne noise levels is less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a 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? *(No impact)*

The subject property is not located within two miles of a public airport or airstrip, nor is it located within an area covered by the County’s Airport Land Use Compatibility Plan. The nearest public airport is Byron Airport, which is located over nine miles southeast of the subject property.

**Sources of Information**

(1), (6)

### 14. POPULATION AND HOUSING – Would the project:

<table>
<thead>
<tr>
<th>Otherwise Induced</th>
<th>Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
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</tr>
</tbody>
</table>

**SUMMARY:**

a) Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? *(No impact)*

The proposed project consists of developing and operating a gas and oil well facility. The proposed facility is not an improvement that will directly or indirectly cause a substantial increase in population.
b) *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (No impact)*

The proposed gas oil well is not an improvement that will directly or indirectly cause a substantial increase in population. Additionally, the project will be occurring on a parcel of land that is used for agriculture, and will not displace any existing housing in the area.

**Sources of Information**
(1), (6)

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

**15. PUBLIC SERVICES – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

<table>
<thead>
<tr>
<th>a) Fire Protection?</th>
<th>☐</th>
<th>☐</th>
<th>☒</th>
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</thead>
<tbody>
<tr>
<td>b) Police Protection?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>c) Schools?</td>
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<tr>
<td>d) Parks?</td>
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<td>☐</td>
<td>☐</td>
<td>☒</td>
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<tr>
<td>e) Other public facilities?</td>
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</table>

**SUMMARY:**

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) *Fire Protection? (Less than significant)*

If commercial quantities of the resources are discovered, the project will involve construction of production facilities that will require fire protection services. However, the production facilities will be unmanned. Existing fire protection services are capable of responding to any accidental fire or medical emergency associated with the project. The project will be located within the East Contra Costa Fire Protection District, who has a station located approximately 3 miles east of the project site at 150 City Park Way in Brentwood.

b) *Police Protection? (No impact)*

Security for project related activities and equipment is not expected to require any police response. Existing police protection services are capable of responding to any emergency associated with project activities.
<table>
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<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

c)  **Schools? (No impact)**

The project does not include the establishment of uses that require the services of any school facility. Therefore, there is no need to add new school facilities or to modify any existing school facilities.

d)  **Parks? (No impact)**

The project does not include the establishment of uses that require the services of any park facility. Therefore, there is no need to add new park facilities or to modify any existing park facilities.

e)  **Other public facilities?**

**Libraries: (No impact)**

The project does not include the establishment of uses that require the services of any library. Therefore, there is no need to add new libraries or to modify any existing libraries.

**Health Facilities: (No impact)**

The project does not include the establishment of uses that require the services of any health care facility. Therefore, there is no need to add new health care facilities or to modify any existing health facilities.

**Sources of Information**

(1), (6), (18)
### 16. **RECREATION**

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project 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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?</td>
<td>☐</td>
<td>☐</td>
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</tbody>
</table>

**SUMMARY:**

**a) Would the project 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 impact)**

The deterioration, daily use, and demand for neighborhood parks and other recreational resources is largely dependent on the number of people in the surrounding area and the frequency in which they utilize those resources. As discussed in the Population and Housing Section of this study, the proposed project will not result in a population increase in the County. In addition, oil drilling will not result in the increased use of recreational areas within the County. Therefore, the proposed project will not cause substantial physical deterioration or requiring the construction or expansion of recreational facilities in a manner that would have an adverse physical effect on the environment.

**b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? (No impact)**

The deterioration, daily use, and demand for neighborhood parks and other recreational resources is largely dependent on the number of people in the surrounding area and the frequency in which they utilize those resources. As discussed in the Population and Housing Section of this study, the proposed project will not result in a significant population increase in the County. In addition, the proposed land use is not of the type that would otherwise result in the increased use of recreational areas within the County. Drilling and production equipment will be contained within the drill site/production pad and will not adversely affect any recreational facilities. Therefore, the proposed project will not cause substantial physical deterioration or requiring the construction or expansion of recreational facilities in a manner that would have an adverse physical effect on the environment.

**Sources of Information**

(1), (6)
<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>17. TRANSPORTATION – Would the project:</strong></td>
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</tr>
<tr>
<td>a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d) Result in inadequate emergency access?</td>
<td>☐</td>
<td>☐</td>
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<td>☒</td>
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</tbody>
</table>

**SUMMARY:**

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? (Less than significant)

The project involves the exploratory drilling of up to three gas/oil wells on the proposed well pad and the possible installation of permanent pumping rig is economic quantities of the resource are discovered. Implementation Measure 4-c of the Growth Management Element in the General Plan requires a traffic-impact analysis be conducted for any project that is estimated to generate 100 or more AM or PM peak-hour trips. An impact analysis was not required because 100 AM or PM peak-hour trips will not be generated. The most intensive period of the project, in regards to transportation, will be the exploratory drilling portion. The move-in and set up of the drilling rig will take approximately two days per well. It will take approximately 35 tractor and trailer loads of equipment to erect the drilling rig with 3/5 tractor and trailer loads of various equipment and supplies moving in and out over every 24-hour period per well. The drilling crew consists of four men working eight-hour shifts, three shifts per day as well as a rig company drilling foreman and a representation from Powerdrive Oil & Gas Company. After the drilling rig is established, there frequency of large trucks at the site will be minimal. Once drilling begins there is anticipated to be an average of two trips per day. A majority of the trucks will be used to move the drilling rig and equipment at the beginning and end of the drilling portion of the project. If commercial quantities of the resource are discovered, a smaller completion rig will be installed. If oil is produced, it will be trucked from the site. Initially, one or two trucks per day may be needed but the frequency will lessen as the oil production rate falls off during the first few months.

The project will utilize existing public roads and an unimproved access road on private property to the drill pad. The existing access road may need gravel and sand if necessary. Most trips to and from the site will be during the initial exploratory drilling portion of the project and will not generate 100 or more AM or PM peak-hour trips. If a completion rig is established, trips will be significantly fewer. Therefore, the proposed project has a less than significant potential for exceeding the capacity of the existing circulation system or conflicting with an applicable congestion management program.
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)? (Less than significant)

As stated above in section a), the proposed project will not yield 100 or more peak-hour trips, and therefore a traffic-impact analysis is not required. The project is small and will not contribute to traffic congestion in the area. In light of these factors, the County considers this an appropriate qualitative analysis of traffic impacts consistent with CEQA guidelines.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (No impact)

The proposed oil and gas well site will be located entirely on private property, and will not encroach into the public right-of-way. The proposed project also does not require the creation or alteration of any existing public roads or other transportation elements within the County utility easement. There is an existing access road to the site, but there are no geometric design features that would create an increased hazard.

d) Would the project result in inadequate emergency access? (No impact)

The proposed gas and oil well site will be located entirely on private property, and will not encroach into the public right-of-way. The proposed project also does not require the creation or alteration of any existing public roads or other transportation elements within the County utility easement. There is an existing unimproved access road, which may require gravel and sand if necessary. Therefore, the proposed project has no potential for substantially increasing road hazards or adversely affecting existing emergency access, to the subject property or other properties within the County.

Sources of Information
(1), (6)
18. TRIBAL CULTURAL RESOURCES – Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

**SUMMARY:**

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? *(Less than significant)*

Neither the subject property nor any of the existing structures located on the site are listed on Contra Costa County’s Historic Resources Inventory (updated through December 2010). There is no evidence that the property has potential to be listed on any historic resource list. Additionally, there is no indication that this property holds any cultural value to a California Native American tribe. The Tribes were contacted for an opportunity to request consultation, but they did not request any consultation with our department. The land is currently used for agricultural purposes, including farming and routine plowing. Due to this, it is unlikely that any historic artifacts will be disturbed due to the drilling and installation of the gas and oil well.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? *(Less than significant)*

Neither the subject property nor any of the existing structures located on the site are listed on Contra Costa County’s Historic Resources Inventory (updated through December 2010). There is no evidence that the property has potential to be listed on any historic resource list. Additionally, there is no indication that this property holds any cultural value to a California Native American tribe. The Tribes were contacted for an opportunity to request consultation, but they did not request any consultation with our department. The land is currently used for agricultural purposes,
including farming and routine plowing. Due to this, it is unlikely that any historic artifacts will be disturbed due to the drilling and installation of the gas and oil well.

Sources of Information
(1), (3), (6)

<table>
<thead>
<tr>
<th>19. UTILITIES AND SERVICE SYSTEMS – Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?</td>
<td>☐</td>
<td>☐</td>
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<td>d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?</td>
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<td>e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</td>
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SUMMARY:

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects? (No impact)

The proposed project consists of establishing an oil and gas well facility. The project will not require the establishment of any water, wastewater, or any other utility. The drilling of the well will produce mud cuttings as waste, but these cuttings will be contained in a closed system on site and then hauled from the site to a municipal waste disposal facility once drilling is complete. Mud cuttings are the broken bits of solid material removed from the borehole during the drilling process. Therefore, there will be no need for new or expanded utility services.
Environmental Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact
--- | --- | --- | --- | ---

b) **Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? (No impact)**

The proposed project consists of establishing a gas and oil well pad for the exploratory drilling of up to three gas and oil wells, and possibly establishing a permanent pumping rig if commercial quantities are found. This type of facility will not require water supplies to service the facility. Therefore, there will be no need for new or expanded water services.

c) **Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments? (No impact)**

The proposed project consists of establishing an oil and gas well facility. The project will not require the establishment wastewater utility. The drilling of the well will produce mud cuttings as waste, but these cuttings will be contained in a closed system on site and then hauled from the site to a municipal waste disposal facility once drilling is complete. Therefore, there will be no need for new or expanded wastewater utility services.

d) **Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (No impact)**

The proposed project consists of establishing an oil and gas well facility. The drilling of the well will produce mud cuttings as waste, but these cuttings will be contained in a closed system on site and then hauled from the site to a municipal waste disposal facility once drilling is complete. The project will not generate solid waste in excess of State or local standards, and any solid waste produced will be properly disposed of.

e) **Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (No impact)**

The proposed project consists of establishing an oil and gas well facility. The drilling of the well will produce mud cuttings as waste, but these cuttings will be contained in a closed system on site and then hauled from the site to a municipal waste disposal facility once drilling is complete. The project will comply with federal, State, and local management and reduction statutes and regulations related to solid waste, and any solid waste produced will be properly disposed of.

**Sources of Information**
(1), (6)
Environmental Issues | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact
--- | --- | --- | --- | ---

### 20. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

| a) | Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐
|---|---|---|---|---
| b) | Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☒ | ☐
| c) | Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☒ | ☐
| d) | Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☒ | ☐

**SUMMARY:**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- **a) Substantially impair an adopted emergency response plan or emergency evacuation plan?** *(Less than significant)*
  
The project activity is not anticipated to block roads or bridges, or in any other way interfere with the implementation of an emergency evacuation plan. The project will be implemented on private property and away from any major roadways. The implementation of an emergency response or evacuation plan will not be effected by the installation of the gas and oil well.

- **b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?** *(Less than significant)*
  
The project will not be located in a high wildfire area. The structures will undergo a structural review as part of obtaining a building permit and will be periodically inspected throughout the building permit process. The facility will be designed and constructed to avoid such risks and is unlikely to fall due to high winds and slope. Therefore, the impact of the facility to exacerbate wildfire risks and expose occupants to pollutant concentrations from a wildfire is less than significant.
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<th>Environmental Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
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<th>No Impact</th>
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c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? *(Less than significant)*

The proposed project will not require the installation or maintenance of infrastructure for emergency services. All infrastructure to access the site is existing, and no new extensions are required to support the project.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? *(No impact)*

The proposed wellsite will not be located in an area prone to landslide or slope instability. The project will be located in the lower portion of the hilly area of the property and is located downhill from any nearby residences. Any downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes would be directed away from any residential uses, and there will not expose people or structures to any significant risks.

**Sources of Information**

(1), (4), (6)
### 21. MANDATORY FINDINGS OF SIGNIFICANCE

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a) Does the project have 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 animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?  
☐ ☐ ☒ ☐

b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)  
☐ ☐ ☒ ☐

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?  
☐ ☐ ☒ ☐

### SUMMARY:

a) Does the project have 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 animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? (Less than significant)

The proposed project seeks approval of a gas and oil well pad for up to three wells. No major periods of California history or prehistory are affected; the property is not listed on, and does not qualify to be listed on the National Register of Historic Places or the California Register of Historical Resources. It has been determined that the project would have a less than significant impact to substantially reduce the habit of a fish, or cause a fish or wildlife population to drop below self-sustaining levels. Given that the property has been used for agricultural purposes, including the routine plowing of the land, the proposed project will not restrict the range of rare or endangered plant or animal species, nor will it eliminate important examples of the major periods of California history or prehistory.
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) **(Less than significant)**

At the time this initial study was drafted, there were no concurrent project proposals for the subject property that would have a cumulative considerable impact in connection with this proposed oil and gas well site. There may be additional development proposed on the subject property at a future time. However, any subsequent development of the subject property would be subject to review under the guidelines of CEQA.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? **(Less than significant)**

Based on the preceding analyses contained in this document, there are no substantial environmental effects of the project on neighboring parcels or to the neighboring residential developments. The project as proposed would not result in significant environmental impacts. Furthermore, no evidence has been found in the record that would indicate that the project would have a potential to cause substantial adverse effects on human beings, whether directly or indirectly, so there will be a less than significant impact.

**Sources of Information**
(1), (3), (4), (6), (14), (15), (16), (20)
REFERENCES

In the process of preparing the Initial Study Checklist and conduction of the evaluation, the following references (which are available for review at the Contra Costa County Department of Conservation and Development, 30 Muir Rd., Martinez, CA 94553) were consulted:

1. Project Application and Plans for County File #LP19-2019
2. United States Environmental Protection Agency (EPA) Website
3. Contra Costa County Historic Resources Inventory (December 2010)
5. Contra Costa County Ordinance (Title 8 – Zoning)
8. California Department of Conservation, 2016 Contra Costa County Important Farmland Map (Webpage)
10. Bay Area Air Quality Management District California Environmental Quality Act Guidelines
12. Environmental Protection Agency – Federal Clean Air Act (Webpage)
13. Environmental Protection Agency – California Clean Air Act (Webpage)
14. California Department of Fish and Wildlife Website
15. California Department of Fish and Wildlife – California Natural Diversity Database Maps and Data
16. U.S. Department of Fish and Wildlife Website
17. Environmental Protection Agency Clean Water Act (Webpage)
18. Federal Emergency Management Agency (Webpage)
19. California EPA Hazardous Waste and Substances Site List - “Cortese List” (Webpage)
20. Contra Cost County ECCC HCP/NCCP
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**ATTACHMENTS**

1) Aerial View of Subject Property and Vicinity
3 well locations
Minimum 50’ apart
With all production facilities in orange and well locations in black/red. All with impervious surface surrounded by chain link fencing.
Existing gas pipeline
Gas pipeline to be built

Area of surface rights
With access shown

INGRESS AND EGRESS ROUTE
LOCATED IN A PORTION OF SECTION 9,
TOWNSHIP 1 NORTH, RANGE 2 EAST,
MOUNT DIABLO MERIDIAN,
CONTRA COSTA COUNTY, CALIFORNIA
SHEET 2 OF 2   AUGUST 21, 2018