## WELL REVIEW REPORT

The Division of Oil, Gas, and Geothermal Resources (Division) possesses records regarding oil and gas wells drilled and operated in the State of California. (Cal. Public Res. Code, §§ 3215, 3126.) Based on the Division's records and expertise, the Division has undertaken review of the well(s) referenced below at the request of a party either having jurisdiction over the use of the parcel referenced above, or a party having control over, or an interest in, the use of the parcel. This request is considered by the Division as voluntary participation in the Division's Well Review Program. The Division provides the information below to facilitate local permitting agencies' exercise of local land use authority regarding use of land where oil and gas wells are situated. In contrast, the Division does not possess local land use decision authority, but alternatively has authority for permitting any necessary work on any well in the state. (Cal. Public Res. Code, §§ 3106 and 3203.)

The Division has conducted a record review of the known well(s) located on the referenced parcel(s). The record review process consists of determining the possible location, last known operator, and abandonment status of any known well on the property by examining records previously submitted to the Division, and then comparing the abandonment status with current abandonment standards.

In general, a well may be considered adequately abandoned when both the record review and on-site evaluation process reflect that steps have been taken to isolate all oil-bearing or gas-bearing strata encountered in the well, and to protect underground or surface water suitable for irrigation or farm or domestic purposes from the infiltration or addition of any detrimental substance, and to prevent damage to life, health, property, and other resources. (Cal. Public Res. Code, § 3208.)

The local permitting agency, property owner, and/or developer should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil and gas wells. These issues are non-exhaustively identified in the following comments, and are provided by the Division for consideration by the local permitting agency, in conjunction with the property owner and/or developer, on a parcel-by-parcel or well-by-well basis. As stated above, the Division provides the above well review information solely to facilitate decisions made by the local permitting agency regarding potential development near oil or gas wells.

- 1. The Division recommends that access to any well located on the property be maintained in the event abandonment or re-abandonment of the well becomes necessary in the future. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access. This includes, but is not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, and decking.
- 2. Nothing guarantees that wells abandoned to current standards will not start leaking oil, gas, and/or water in the future. It always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. The Division acknowledges wells that are presently abandoned to current standards have a lower probability of leaking oil, gas, and/or water in the future, but makes no guarantees as to the adequacy of the abandonment or the potential need for future re-abandonment.
- 3. Based on comments 1 and 2 above, the Division makes the following general recommendations:
  - a. Maintain physical access to all oil and gas wells.
  - b. Ensure that the abandonment of all oil and gas wells is to current standards.

If the local permitting agency, property owner, and/or developer chooses not to follow recommendation b for each well located on the development site property, the Division believes that the importance of following recommendation a for each well located on the subject property increases. If recommendation a cannot be followed

for each well located on the subject property, then the Division advises the local permitting agency, property owner, and/or developer to consider any and all alternatives to proposed construction or development on the site (see comment 4 below).

- 4. Sections 3208 and 3255(a)(3) of the Public Resources Code give the Division the authority to order the re-abandonment of any well that is hazardous, or that poses a danger to life, health, or natural resources. Responsibility for reabandonment costs for any well may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general recommendations set forth in this letter. (Cal. Public Res. Code, § 3208.1.)
- 5. Maintaining sufficient access to an oil or gas well may be generally described as maintaining "rig access" to the well. Rig access allows a well servicing rig and associated necessary equipment to reach the well from a public street or access way, solely over the parcel on which the well is located. A well servicing rig, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure.
- 6. The Division recommends that a local permitting agency consider the use of surface mitigation measures as a condition for project approval, if and when appropriate. Examples of surface mitigation measures include venting systems for wells, venting systems for parking lots, patios, and other hardscape, methane barriers for building foundations, methane detection systems, and collection cellars for well fluids. The Division does not regulate the design, installation, operation, or adequacy of such measures. The Division recommends that such surface mitigation measures are designed, installed, and operated by qualified engineers. The permitting of surface mitigation measures falls under the jurisdiction of the local permitting agency.
- 7. If during the course of development of a parcel any unknown wells are discovered, the Division should be notified immediately so that the newly discovered well(s) can be incorporated into the Well Review processes.
- 8. The Division recommends that any soil containing significant amounts of hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

9. The Division recommends that the information contained in this Well Review Report, and any pertinent information obtained after the issuance of this report, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property. This is to ensure that present and future property owners are aware of (1) the wells located on the property, and (2) potentially significant issues associated with any improvements near oil or gas wells.

No well work may be performed on any oil or gas well without written approval from the Division in the form of an appropriate permit. This includes, but is not limited to, mitigating leaking fluids or gas from abandoned wells, modifications to well casings, and/or any other re-abandonment work. NOTE: The Division regulates the depth of any well below final grade (depth below the surface of the ground). Title 14, Section 1723.5 of the California Code of Regulations states that all well casings shall be cut off at least 5 feet but no more than 10 feet below grade. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this grade regulation, a permit from the Division is required before work can start.

To reiterate, the local permitting agency, property owner, and/or developer should be aware of, and fully understand, that the above comments are made by the Division with the intent to encourage full consideration of significant and potentially dangerous issues associated with development near oil or gas wells.

Total number of known wells on development site: 1

| Well   | Status   |
|--|--|
| Continental Oil Company Title Insurance et al Well #1 API 0410720010 | The record review process shows that these subject wells are not abandoned to current Division standards as of 8/22/2019.  Section 36, T. 21S, R. 26E, MD B&M  Based on well records:  This (1) well does not meet plugging and abandonment requirements for surface plugging.  CCR 1723.5  Please refer to the Division's online Well Finder map for well location at http://www.conservation.ca.gov/dog/Pages/Wellfinder.aspx  California Code of Regulations (CCR) and PRC may be found at https://www.conservation.ca.gov/dog/pubs stats/Documents/DOGGR-Statutes-Regs.pdf  CCR accessed on August 22, 2019 for this review. |
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