



California
**Department of
Conservation**
Geologic Energy Management

Oil and Gas Wells Metadata

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Metadata

The California Department of Conservation and its Geologic Energy Management Division provide spatial information on oil and gas wells within the State of California. The well data is updated on the daily basis. Three data formats are available for user viewing or download, including shapefile (.shp), comma separated values (csv), and Esri feature service (REST) formats. This document provides information and definitions for the attributes that are associated with the well data.

Spatial Reference

The spatial reference of well data uses the WGS 1984 Web Mercator Auxiliary Sphere (well-known ID 3857) projection for REST endpoints; NAD 83 California (Teale) Albers (well-known ID 3310) projection for shapefile. The latitude and longitude coordinates found in well attributes reference NAD 83 (EPSG 4269).

Data Attributes and Definitions

There are 21 attributes included in the well data. A brief description for each attribute is provided here.

1. API: API Number is a unique and permanent number assigned to each well as standardized by the American Petroleum Institute.
2. Lease Name: Lease name of the associated Oil & Gas lease.
3. Well Number: Operator-assigned alpha-numeric designation for well.
4. Well Status: A code identifying current well status, including Active, Idle, New, and Plugged.
 - Abeyance represents held in abeyance wells.
 - Active represents drilled and completed wells.
 - Canceled represents canceled well permits prior to drilling.
 - Idle represents idle wells, or wells not producing, but capable of being reactivated.

- Permitted represents new wells, including recently permitted wells or wells in the process of being drilled.
 - Plugged represents plugged and abandoned wells that are permanently sealed.
 - Plugged Only represents plugged wells.
 - Unknown represents unknown well status. These are mostly older, pre-1976 wells.
5. Well Type: Code identifying well types. The types include the following:
 - AI represents Air Injector.
 - CH represents Core Hole.
 - DG represents Dry Gas.
 - DH represents Dry Hole.
 - GAS represents Gas Well.
 - GD represents Gas Disposal.
 - GS represents Gas Storage.
 - INJ represents Injection.
 - LG represents Liquid Gas.
 - Multi represents Multi-Purpose.
 - OB represents Observation.
 - OG represents Oil & Gas.
 - PM represents Pressure Maintenance.
 - SC represents Cyclic Steam.
 - SF represents Steam Flood.
 - UNK represents Unknown.
 - WD represents Water Disposal.
 - WF represents Water Flood.
 - WS represents Water Source.
 6. Operator Code: Operator Code identifies the operator.
 7. Operator Name: Name of operator.
 8. Field Name: Name of the Oil and Gas field.
 9. Area Name: Name of area.
 10. District: CalGEM district where the well is located.
 11. County Name: County name where the well is located.
 12. Base Meridian: Principle meridians required for all California surveys. This is the basis for Public Land Survey System. There are three principle meridians in

California: H, MD, and SB.

- H represents Humboldt Meridian.
- MD represents Mount Diablo Meridian.
- SB represents San Bernardino Meridian.

13. Section: Public Land Survey System Section number.

14. Township: Public Land Survey System Township code.

15. Range: Public Land Survey System Range value.

16. Latitude: Latitude in NAD 83 (EPSG 4269) coordinate system.

17. Longitude: Longitude in NAD 83 (EPSG 4269) coordinate system.

18. GIS Source: Geographic Information System Source Code indicating the method by which the well location was established. The source could be GPS, OPR, SUM, NOI, DOQ, MIP, and HUD.

- GPS represents Global Positioning System. These coordinates are derived from CalGEM staff using Trimble GPS units.
- HUD represents Heads Up Digitized. These coordinates are derived from scanned and georeferenced Mylar maps.
- MIP represents MapInfo Plotted. These coordinates are generated from tool in MapInfo using corner call locations.
- Notice of Intent to Drill represents operator submitted notice. These coordinates are provided by operator prior to drilling in Notices of Intent.
- Operator represents the entity that owns the well. These coordinates are provided by operator via electronic format such as Excel files and databases.
- Well Summary represents well summary report. These coordinates are provided by operator after drilling through summary reports.

19. is Confidential: This indicates if the subsurface information for well is held confidential for a period of two years, pursuant to Public Resources Code section 3234. Y represents the well information is held confidential; N represents non-confidential information.

20. is Directionally Drilled: This indicates whether well was directionally drilled. Y represents directionally drilled wells; N represents non-directionally drilled wells.

21. Spud Date: The date on which well drilling commenced.

Additional Information

For oil and gas wells data inquiries and questions, please e-mail the [Webmaster](#) in the Division.