| **Attribute** | **Definition** | **Programs that Require Reporting** | **Required/Optional1** | **Recommended Reporting Accuracy2** | **Unit/Format** | **Data Type** | **List of Options** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Local Well Name** | Name or number identifier given by the Monitoring Agency used to identify the well on a local basis. | GeoTracker | Optional | N/A | N/A | text | N/A |
| **State Well Number** | State Well Number provided by the Department of Water Resources. |  | At least one well identifier must be entered for each submittal | N/A | N/A | text | N/A |
| **Site Code** | Unique identifier assigned to each well for a relevant program that the program uses to track individual wells within the program’s system. | SGMA  CASGEM  GeoTracker | At least one well identifier must be entered for each submittal | N/A | N/A | text | N/A |
| **Relevant Program** | Name of the program that the Master Code has been specified from to aid in identifying what program the well is associated with. |  | Required, if Site Code entered | N/A | N/A | text (selected from list of options) | * SGMA/CASGEM * GeoTracker * SAFER |
| **Permit Number** | Permitting agency permit number associated with well. |  | Optional | N/A | N/A | text | N/A |
| **Local Permit Agency** | Agency who approved permit associated with well. |  | Optional | N/A | N/A | text | N/A |
| **Measurement Date** | Date groundwater level measurement was taken. | SGMA  CASGEM  GeoTracker | Required | N/A | mm/dd/yyyy | date | N/A |
| **Measurement Time** | Time groundwater level measurement was taken. | SGMA  CASGEM | Optional, default is 12:00:00 | N/A | hh:mm:ss (PST 24-hour) | time | N/A |
| **Reading at Reference Point (RRP)** | Reading of the measurement device taken at the reference point of the well. . | SGMA\*  CASGEM\*  GeoTracker\* | Required, unless a No Measurement Code is selected | tenth of a foot | feet below RP | numeric | N/A |
| **Reading at Water Surface (RWS)** | Measurement of the watermark on a steel tape, equivalent, or electronic sounder after making the groundwater sounding; typically, 0.00 for an electronic sounder. | SGMA\*  CASGEM\* | Optional, default is 0.00 | tenth of a foot | feet | numeric | N/A |
| **Water Surface Elevation (WSE)** | Calculated water surface elevation.   **Calculated as**: WSE = RPE - (RRP - RWS)  RPE = Elevation of the reference point from which depth to water measurements are collected, which is reported as part of the Well Characteristics attributes |  | Optional | tenth of a foot | Feet; default in NAVD88 | numeric | N/A |
| **Ground Surface to Water Surface (GS to WS)** | Depth to water below ground surface.  **Calculated as**: GS to WS = GSE - WSE  GSE = Elevation of the ground surface associated with the location of the well, which is reported as part of the Well Characteristics attributes. |  | Optional | tenth of a foot | feet below ground surface (bgs) | numeric | N/A |
| **Water Level Datum** | Vertical datum associated with calculated water surface elevation. |  | Required | N/A | NAVD88 (recommended) | text (selected from list of options) | WGS84  NAVD88  NGVD29 |
| **No Measurement Code** | Code providing explanation for no groundwater level measurement being taken. | SGMA\*  CASGEM\* | Required, unless a RRP is entered | N/A | N/A | text (selected from list of options) | * 0 - Measurement Discontinued * 1 – Pumping * 2 - Pump house locked * 3 - Tape hung up * 4 - Can't get tape in casing * 5 - Unable to locate well * 6 - Well has been destroyed * 7 - Special/Other * 8 - Casing leaking or wet * 9 - Temporarily inaccessible * D - Dry well * F - Flowing artesian well |
| **Measurement Quality Code** | Code providing a description of the quality of the groundwater level measurement. |  | Optional | N/A | N/A | text (selected from list of options) | * Caved or deepened * Pumping * Nearby pump operating * Casing leaking or wet * Pumped recently * Air or pressure gauge measurement * Other * Recharge or surface water effects near well * Oil or foreign substance in casing * Acoustical sounder * Recently flowing * Flowing * Nearby flowing * Nearby recently flowing * Dry * Injector site monitor * Injector site monitor * Plugged * Measurement discontinued * Obstruction * Nearby recently pumped * Foreign substance * Well destroyed * Surface water effects * Blank – static |
| **Measurement Method** | Method used to collect groundwater level measurement. | SGMA\*  CASGEM\* | Required, if RRP is entered | N/A | N/A | text (selected from list of options) | * Airline * Acoustic or sonic sounder * Analog or graphic recorder * Calibrated airline * Estimated * Electric sounder measurement * Transducer * Pressure-gage * Calibrated pressure-gage * Interpreted from geophysical logs * Manometer * Non-recording gage * Observed * Reported, method unknown * Steel-tape measurement * Electric-tape * Electronic pressure transducer * Calibrated electric tape * Other * Unknown |
| **Measurement Accuracy** | Accuracy of groundwater level measurement. | SGMA\*  CASGEM\* | Optional | N/A | N/A | Text (selected from list of options) | * 1 Ft * 0.1 Ft * 0.01 Ft * 0.001 Ft * Not to nearest foot * Unknown * Other |
| **Collection Agency** | Full name of collection or co-op agency that collected groundwater level measurement. | SGMA  CASGEM | Optional | N/A | N/A | text | N/A |
| **Reporting Agency** | Full name of reporting agency that reports the groundwater level measurement. |  | Optional | N/A | N/A | Text | N/A |
| **Water Level Comments** | General description or other notes associated with groundwater level measurement. | SGMA\* | Optional | N/A | N/A | text | N/A |
| 1Attributes designated as optional may be required depending on program specific reporting compliance. Fields designated as required are deemed to be the most important attributes for reporting. However, if required data is missing, the user may still upload the attributes that are available. Required fields that are not submitted will cause the data to be flagged for quality control purposes. Additional evaluation of the SAFER program’s level of requirements is still needed to highlight program reporting requirements.  2The Recommended Reporting Accuracy does not preclude data outside of the recommended accuracy from being submitted. Data with Unknown or Other Accuracy may be flagged as potentially inaccurate data.  \*Designated as a conditional reporting requirement for the specific program.  **Acronyms**:  N/A = not applicable PST = Pacific Standard Time RP = reference point  RPE = reference point elevation RRP = reading at reference point RWS = reading at water surface WSE = water surface elevation NAVD88 = North American Vertical Datum of 1988  WGS84 = World Geodetic System  NAD83 = North American Datum of 1983  NGVD29 = North Geodetic Vertical Datum of 1929 | | | | | | | |
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