

## Appendix N

# Pools with Production Predominantly Facilitated By Hydraulic Fracturing

This appendix contains two lists of pools for which more than half the wells starting production from 2002 through late 2013 are estimated to be hydraulically fractured. The first list (“non-GS”) regards oil and gas production pools. The second list (“GS”) regards gas storage pools. The lists provide the following for each pool:

- The number of wells entering production during the time period
- The number of these wells for which records were received
- The fraction of wells with records received
- The number of records indicating hydraulic fracturing
- The fraction of records indicating hydraulic fracturing
- The fraction of such records adjusted for underreporting,
- Oil, gas, and water production from 2002 through May 2014
- The oil, gas, and water production multiplied by the fraction of records indicating hydraulic fracturing adjusted for underreporting
- Average oil and gas production per well per day
- The gas-oil ratio

The underreporting adjustment was made by taking the minimum of one or 1.63 times the fraction of records indicating hydraulic fracturing. The underreporting adjustment factor is equal to 150, which is the estimated average number of well fractured per month statewide, divided by 92, which is the estimated average number of records indicating fracturing statewide (shown on Figure 3-10 and discussed in related text).

The oil, gas, and water production were summed from sum by pool data available through the California Department of Oil, Gas, and Geothermal Resources online production and injection portal (<http://opi.consrv.ca.gov/opi/opi.dll>). The full data can be found at <http://ccst.us/publications/WST>.