

**Senate Natural Resources and Water Committee**  
**Informational hearing**

**“Well Stimulation in the Oil and Gas Fields of California”**

*June 18, 2013*

**Glossary of terms**

**Acid fracking** – a fracking treatment where acids are used to dissolve materials in the geologic formation in combination with the physical fracturing of the formation due to applied fluid pressure.

**Acid matrix stimulation** – Matrix stimulation using acid.

**DOGGR** – The Division of Oil, Gas and Geothermal Resources is California’s oil and gas regulator. DOGGR is located within the Department of Conservation in the California Natural Resources Agency.

**Fracking** – Formally called “hydraulic fracturing,” this is the practice of injecting a mix of fluids into an oil well at pressures high enough to crack or fracture the formation in order to provide or enhance channels for the oil and gas to flow to the wellbore and thus increase oil and gas production from the well. The fluids injected typically include water and chemicals with proppant mixed in. It is also referred to as “hydrofracking” and is a well stimulation treatment.

**Matrix stimulation** – This is a well stimulation treatment where, in general, a mix of fluids are injected into an oil and gas well in order through chemical action to provide or enhance channels for the oil and gas to flow to the wellbore and thus increase oil and gas production from the well. In contrast to fracking, matrix stimulation injection pressures are not high enough to fracture the formation. Typically, acids in combination with other chemicals are used.

**Monterey Shale** – This is a massive shale formation underlying large swaths of Southern California, the Central Valley and the Central Coast. The Monterey Shale is the ultimate source of much of California’s existing conventional hydrocarbon reserves. Renewed interest in developing the Monterey Shale’s unconventional reserves stems from recent estimates that over 15 billion barrels of recoverable oil – more than 60 percent of the United States’ shale oil reserves – may be produced from it. Technological advances in drilling and production are, in part, responsible for the increased estimates.

**Produced water** – During oil and gas production, this is the water that is extracted from the oil and gas well at the same time. In general, produced water is briny and there are currently 8 – 10 barrels of produced water extracted for every barrel of oil in California.

**Proppant** – natural or manufactured granular materials, such as sand, injected into the well during fracking in order to help keep the new or enhanced channels open after the fracking treatment is completed.

**Trade Secret** – Information that has been kept secret, and includes formulas, methods, techniques and processes that derive value from being kept secret from competitors.

**Well stimulation** – A general term used to refer to a variety of treatments to oil and gas wells meant to increase oil and gas production.