

## **Exploration in Mature Basins with the Information Provided by Satellite Photogeology**

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Satellites gathered the data used to create a photogeology map of Mars. On Earth, we also map structures, plus tonal anomalies (and Google Earth makes a handy platform for presenting this information). Such work helps to save time, save money, and reduce risk in mature basin exploration. We'll see examples of it's use to:

- map structure,
- close off a subsurface nose,
- find tonal anomalies,
- identify trends,
- determine which way to drill out from a show,
- extend plays, designing/maintaining pipelines,
- plan the cost-effective use of more expensive tools,
- document environmental conditions.

In gas shales, mapping fracture “sweet spots” orients the drill direction. Faults--which suck energy from frac jobs, bring on water, release overpressure, and create interference--are found in photogeology.

Undiscovered hydrocarbons in mature basins have to be in the blank, unknown, untested regions. Satellite photogeology is a reliable and cost-effective method for adding knowledge to each of them.