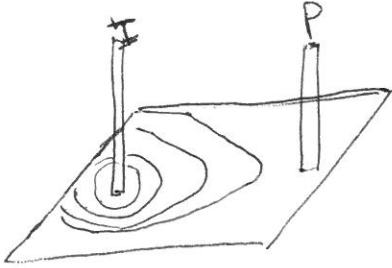


# Joe Capriotti

## 1. Setup

- state the problem. draw a picture.



Fluid Flow, where is the fluid in the subsurface?

## 2. Properties

- what are the diagnostic physical property contrasts?

conductivity changes between fluids, ~~A~~ mixing laws change bulk conductivity

## 3. Survey

- where are the sources? receivers? time domain? frequency domain? grounded? inductive?

Sources could be in monitoring wells or surface... just really a general electrical/electromagnetic property ~~but~~ survey, depending on the reservoir

## 7. Synthesis

- how do we combine our interpretation with other knowledge about the problem and make a decision?

Can forecast water breakthroughs and better plan injection and production rates to control the ~~the~~ hydrocarbon recovery, based on fluid locations and movements.

## 6. Interpretation

- what do the results tell us in terms of the geological or geotechnical objectives?

Hopefully show where fluid has been exchanged.

## 5. Processing

- what steps should be taken prior to obtaining an interpretable image?

Need Background conductivity model that doesn't change between the two data sets.

## 4. Data

- what are the data? what do you expect to see?

expect to see measurable time lapse response in the recorded Electrical/EM data.