

Corporate Finance 15.402
Case 10: MW Petroleum

You have to present Apache's board of directors with a formal evaluation of the MW properties that Apache is considering acquiring. You will pay particular attention to identifying and valuing the several options that are imbedded in MW's assets.

- 1) Estimate the value of all the MW reserves using APV. Is your APV estimate more likely to be biased high or low? What is the main source of the bias?
- 2) How would you structure a simplified analysis of MW as a portfolio of assets-in-place and a number of *significant* options imbedded in MW's assets? Which parts of the business will you regard as assets-in-place and which as options?
- 3) Conduct the analysis you structured above, beginning with the assets-in-place. For each of the options you have decided to value:
 - a) Estimate S , X , r , T , σ , and discuss your estimates.
 - b) Compute option values and compare them to APV values.
- 4) **Decision Time:** What is your estimate of the MW properties under consideration?