



AIS Exam – Chapter 5

Analysis of Resource Companies

Professor's Comment:

It is possible that you will see 3 questions specifically related to this material. This summary is intended to provide coverage of the 10 key need to know items so that you can boost your score by 2 or 3 points...which may be the difference to push you over the passing mark.

Oil and Gas Industry

Equity valuation in the oil and gas industry focuses on “**reserves**”. Reserves are the natural resources owned by the company that are still in the ground.

Terms to Know:

Proved reserves: 90% chance that they will be recovered, also called “**P90**” or “**1P**”.

Probable reserves: 50% chance that they will be recovered, also called “**P50**” or “**2P**” or “**Proved + Probable**”.

Possible reserves: 10% chance that they will be recovered, also called “**P10**” or “**3P**” or “**Proved + Probable + Possible**”.

We can further breakdown the proved reserves category into:

- 1) Proved developed reserves (PDP)** - producing reserves that are currently generating cash flow. PDP assets are not discounted for valuation purposes.
- 2) Proved developed not producing (PDNP)** - same as PDP reserves but no cash flow yet. PDNP assets are discounted by 25% for valuation purposes.
- 3) Proved underdeveloped reserves (PUD)** - questionable recovery due to legal, regulatory or political risks. PUD assets are discounted by 35% for valuation purposes.

Reserves

A *barrel of oil equivalent (BOE)* is the basic unit of measurement for reserves.

1 BOE = 1 barrel of oil (bbls)

1 BOE = 6,000 standard cubic feet (scf) of natural gas (NGL)

Quick Example:

Stampede Oil has the following 1P reserves:

- 1) 5 million bbls of oil
- 2) 600 million scf of natural gas

Calculate the BOE of Stampede's entire reserves:

Solution:

5 million bbls of oil = 5 million BOE

600 million scf of natural gas / 6,000 = 100,000 BOE

Total reserves = 5,100,000 BOE