A Company is developing an onshore field with a very thin oil rim (strong aquifer, large gas cap) with no direct commercial analogues.

To keep things simple we will assume there are no commercial contingencies except the economics.

A vertical well was tested and produced a small amount of oil but mostly gas (the gas has no value).

The Company intends to sidetrack the discovery well horizontally and then drill 5 horizontal wells.

The Company says it is committed to drilling the STK and all 5 HZ wells and has an FDP in place.

There is a risk the volumes recovered will be uneconomic.

How do you classify the resources?
Option 1

» The Company convinces you the “Project” is all 6 wells (1 STK + 5 HZs)

» You decide volumes are economic on a P50 and P10 basis but uneconomic on a P90 basis

» You assign 2P and 3P Reserves for the full project but do not assign any 1P

» The Company is happy with this outcome as it maximizes the 2P reserves
Option 2

» The Company convinces you the “Project” is all 6 wells (1 STK + 5 HZs)
» You decide volumes are economic on a P50 and P10 basis but uneconomic on a P90 basis
» You decide the recoverable volumes should all be classified as Contingent Resources until the STK has been drilled and the development concept has been established to be commercial
» The Company is unhappy with this outcome as it has no reserves to book
Option 3

» You decide there are really 2 “Projects”
  » Firstly 1 STK Well
  » Secondly 5 HZ wells contingent on the success of the STK

» You decide STK recoverable volumes are economic on a P50 and P10 basis but uneconomic on a P90 basis

» You assign 2P and 3P Reserves for the 1 STK and assign Contingent Resources to the 5 HZ wells

» The Company is fairly unhappy because it wanted Option 1
Survey Responses

» 29 Responses
  » 15 SPEE Members
  » 20 with Consultancies, 8 with Oil & Gas Companies, 1 in Banking
  » 26 applied SPE-PRMS and 3 applied COGEH

» No clear differences between how different groups responded e.g. SPEE Members versus Non-Members or Consultants versus Companies
All classification options were considered applicable but 20 out of 27 felt classifying as reserves was not an option.

**Respondents Selecting Only 1 Option**
- Reserves Only: -
- Contingent Resources Only: 10
- Reserves & Contingent Resources Only: 3

**Excluded Options**
- Responses excluding Option 1 (Reserves Only): 20
- Responses excluding Option 2 (Contingent Resources Only): 6
- Responses excluding Option 3 (Reserves & Contingent Resources): 12

**Respondents who considered all options were possible**: 4
» The preferred option was split evenly (12 for each) between assigning only contingent resources and assigning a mix.
SPEE Members vs Non Members

» Read into this what you like

Members

Non Members

Which Option applies most often?

Responses

Undecided

Reserves & Contingent Resources

Only Contingent Resources

Only Reserves

Reserves & Contingent Resources

Only Contingent Resources

17 November 2016

Case Study Developed by Paul Taylor – McDaniel International
The first options 1 to 3 assumed the project only failed in the low case.

But what happens if you decide the recoverable volumes are economic only on a P10 basis?

Options A to C on the next slides give some new choices.
Option A

» You assume the “Project” is all 6 wells (1 STK + 5 HZs)
» You decide the recoverable volumes are economic on a P10 basis only
» You decide to assign sub-economic Contingent Resources
Option B

» You decide there are really 2 “Projects”
  » Firstly 1 STK Well
  » Secondly 5 HZ wells contingent on the success of the STK

» You decide the recoverable volumes are economic on a P10 basis only

» You assign Possible Reserves (with no 1P or 2P) for the 1 STK as it is going ahead and treat the resources associated with the 5 HZ wells as Contingent Resources
» You decide there are really 2 “Projects”
  » Firstly 1 STK Well
  » Secondly 5 HZ wells contingent on the success of the STK

» You decide the recoverable volumes are economic on a P10 basis only

» You assign all volumes to Contingent Resources as you do not believe it is correct to assign standalone Possible Reserves

» (Which is then the same as Option A)
Preferred Option – Only P10 is Economic

» 11 respondents went for Option A which aligns with the previous Option 2.
» 4 respondents went for Option B and would assign Possible Reserves.
» 13 respondents went for Option C which aligns with the previous Option 3 but does not result in reserves being assigned because the 2P is uneconomic.