

BP WELL BORE AND CASING INTEGRITY MAY BE BLOWN, SAYS FLORIDA'S SEN. NELSON

Oil and gas may be leaking from the seabed surrounding the BP Macondo well in the Gulf of Mexico, Senator Bill Nelson of Florida told Andrea Mitchell today on MSNBC. Nelson, one of the most informed and diligent Congressmen on the BP gulf oil spill issue, has received reports of leaks in the well, located in the Mississippi Canyon sector. This is potentially huge and devastating news.

If Nelson is correct in that assertion, and he is smart enough to not make such assertions lightly, so I think they must be taken at face value, it means the well casing and well bore are compromised and the gig is up on containment pending a completely effective attempt to seal the well from the bottom via successful "relief wells". In fact, I have confirmed with Senator Nelson's office that they are fully aware of the breaking news and significance of what the Senator said to Andrea Mitchell.

Furthermore, contrary to the happy talk propounded by BP, the Obama Administration and the press, the likely success of the "relief well" effort on the first try in August is nowhere near a certainty; and certainly nowhere near the certainty it is being painted as.

About five days ago, I responded to someone in comments with the following:

Yeah, but I am absolutely convinced there is such a lack of integrity, from pretty much top to bottom, of the well that totally plugging it at the top just creates the blowout of whatever remaining seal they have with the cement at the wellhead. I believe they have a total clusterfuck in about every regard

and are just not admitting it:

1) BP used, if not substandard, then very close to it, casing that under the circumstances was inappropriate. It is fragile.

2) They did not install somehow or another at least one major casing segment seal, and the remaining seals are now either completely blown out or on their way to it and as a result oil and gas flow is not only coming up the inside of the casing, but the outside of the casing between the casing and well bore walls in the rock.

3) BP specified a light and fluffy cement and, additionally, there may be significant breaches and voids making the cement job weak and disintegrating.

4) Even at best, the cement is in the upper depths of the well bore where the natural geologic rock structure is the loosest, weakest, most porous and fragile (hell some of it may effectively be silt). The oil and gas, which has a natural well pressure of 12,000 or so psi is going to erode and corrode through and around the cement and the porous well bore rock.

5) Being attached to the Deepwater Horizon rig by the riser, and perhaps drill string too, when all hell broke loose and it exploded, shifted and sank, it put various pressures and forces through attachment to the BOP in turn attached on the well casing head. This action may have kind of reamed out and loosened that whole situation making it even looser and more susceptible to 2 and 4 above.

6) The BOP, to the extent it had restrictions present initially, has now been eroded and reamed out by the long term flow of gas and oil upwards and

then the caustic flow of drilling mud
the other direction from the attempted
Top Kill. It is totally fucked way worse
than it even was initially.

7) The reservoir of oil in Macondo is
way larger than most anybody realizes
and certainly bigger than BP will admit.
It is a *huge* mother lode. Could flow
forever.

8) Did I mention that the natural well
pressure may be as high as 12,000 psi??

The Gulf of Mexico, the Gulf States and
all of us are totally fucked.

As Sir Richard Mottram famously said:

We're all fucked. I'm fucked.
You're fucked. The whole [thing]
is fucked. It's the biggest
cock-up ever. We're all
completely fucked.

I may have been uncomfortably close to the mark.
And the quote from Sir Richard Mottram was dead
on the money; if Senator Nelson is correct about
the breach of fundamental well integrity, the
game is close to over for the Gulf of Mexico. We
shall see where this goes from Nelson's initial
comment. But make no mistake, Nelson is a
careful guy not prone to overt hyperbole, and he
clearly understood the ramifications of what he
was saying.

It also means, of course, that BP and the Obama
Administrations continue to give the American
public short shrift in the truth and honesty
departments. How surprising.