

Re: Large Water Barometer

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galt_57@hotmail.com wrote in news:1111503789.832511.136530
@z14g2000cwz.googlegroups.com:

> A large, tall vertical tube is filled with water with the top of the
> tube being sealed and the base of the tube immersed in an open tank.
> Air pressure supports the column of water. What is the water pressure
> inside the tube? May a diver safely swim up the column of water?
>
>
15 lb/in², at the bottom (atmospheric pressure)

close to zero at the top (the vapor pressure of water at the temperature of
the water)

Is it safe? I wouldn't want to do it, but one could probably survive it IF
one did not hold ones breath while assending and one assended slowly.

It would be similar to assending from a depth where the pressure was 2
atmospheres.

By the time you get to the top, the air you have expelled during your
assent will have raised the pressure considerably, and there would be a
significant air-space at the top of the column.

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bz

please pardon my infinite ignorance, the set-of-things-I-do-not-know is an
infinite set.

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