

sci.energy: Re: Endless Oil?

## Re: Endless Oil?

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Date: Tue, 28 Sep 2004 18:39:16 GMT

"charlie2" <[charlie2@ev1.net](mailto:charlie2@ev1.net)> wrote in message  
news:10lj7u4gfmqcm5c@corp.supernews.com...

...

> *gravity effect involved. Freon 12 is approximately 4 times the density of  
> air, and without constant mixing, it should be expected to sink to ground  
> level.*

You are overlooking the thermal molecular motions that disperse the gas. If there were nothing but Freon 12, no air, it would still form an atmosphere getting thinner with altitude, perhaps just a bit faster than air does. I think the air adds a higher level of molecular motion and disperses the gas to a higher concentration at altitude than would be the case of the pure Freon. It wouldn't settle to the ground for the same reason that nitrogen does not settle to the ground. In general the gas has an independent partial pressure based on its concentration, and this will drop with altitude because the gas is denser than air, but it still diffuses up because of thermal excitation.