

Department of  
Radiation Oncology

Mr Bob Carroll,  
Biofriendly Corporation,  
135 Sawpit lane,  
Bradbury  
California  
USA.

October, 18, 2001

Dear Bob,

I am pleased to report to you that the tests we performed using the Ames bacterial tester strains for mutagenic DNA damage on the Biofriendly Combustion catalyst mixture showed no mutagen activity and no toxic activity at any of the concentrations we examined. We can conclude that even the undiluted 1 to 1000 essence has no mutagenic or toxic effect. Please find attached to this letter copies of charts showing the results of the mutation assays done using Ames bacterial tester strains. As you know Dr. Ames developed these mutagenicity assays to provide a relatively quick and reliable way to test chemicals and other potentially carcinogenic agents for the ability to mutate DNA. There is reliable and credible evidence that mutation in DNA is critical for carcinogenic development. I have attached a copy of one of the first papers published by Dr. Ames on this subject as background. The Ames test is now used in many Federal and Private laboratories in the US and around the world as a "first line test" when an agent needs to be examined for potential carcinogenic effects. It is much quicker, cheaper and usually more reliable than small rodent tests. Usually animal tests are only performed if the Ames test gives positive results.

In the graphs I have shown data for two different strains that detect damage to DNA. Please note that the zero dose is the background level of mutation seen in these bacteria under the conditions of the test. The Biofriendly solution Bill gave me was the 1:1000 solution in water that he uses as a base. We used it neat (undiluted) and diluted by 10, 1000, 10,000 and 1,000,000. We found no evidence of any induced mutations at any of the concentrations in either strain (top graph). As positive controls we tested the same strains with formaldehyde a known potent mutagen and with DMBA (Dimethylbenzanthracene, an aromatic hydrocarbon), also a known carcinogen, but one that has to be activated by a liver S9 mix. Both positive controls showed a nice linear increase in mutations with increasing dose of chemical. These are the lower two graphs.

We conclude that at the concentrations tested the Biofriendly product has no mutagenic effect.

I might add that it is well known that gasoline and diesel fuels already contain small quantities of carcinogenic agents either in the formulation or in the exhaust after burning. Two well know contaminants are formaldehyde, and benzene. So it is very unlikely that the ultra low concentrations of the Biofriendly product that finish up in the fuel that is used in a combustion engine will add to the carcinogenic potential. On the contrary from results Mr William Carroll has been showing me on the emissions reductions that occur when the Biofriendly fuel treatment is added to fuel, one would expect the carcinogen content to be reduced and the carcinogenic potential to be lowered as well because the Biofriendly product actually helps to reduce the amount of existing carcinogens in the fuel as it improves the combustion of the fuel.

Your sincerely,

A handwritten signature in black ink that reads "Colin K Hill" with a stylized flourish at the end.

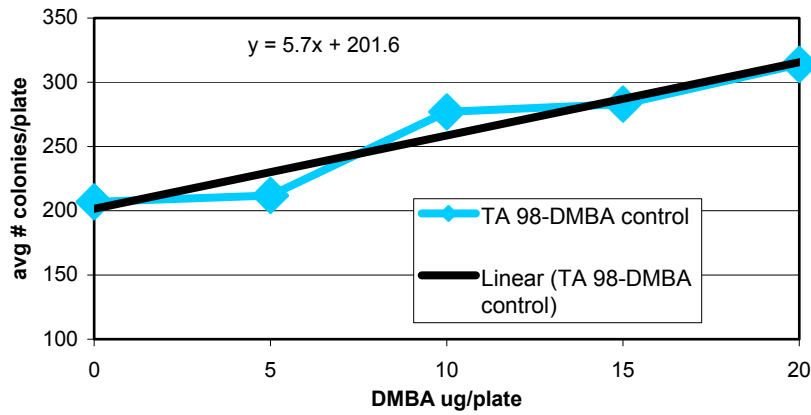
Colin K. Hill Ph.D.

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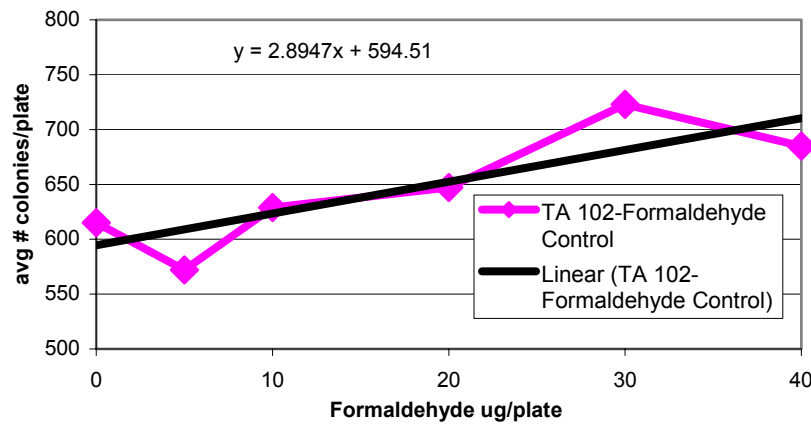
Associate Professor of Radiation Oncology and Molecular Microbiology and Immunology,  
Head Experimental Radiotherapy, Norris Comprehensive Cancer Center,  
University of Southern California,  
Keck School of Medicine.  
Los Angeles,  
California.

And Scientific Advisor to Biofriendly Corporation.

### TA 98- Dimethylbenzanthracene, (DMBA) positive control



### TA 102-Formaldehyde positive control



### AMES TEST ON GREENPLUS PRODUCT

