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Draft:

**Research Results Summary: Temperature of Magnegas Flames for  
Magnegas Corporation**

The following is a summary of results of 4 measurements for the temperature of the Magnegas flame and its comparison to Blackbody distribution.

Temperature was calculated using Wien's law:  $T = (2.9 \times 10^6) / \lambda_{\max}$ :

**1-Temperature of Magnegas from crude oil+Oxygen, Flame only:** 3mm from base and fit with Blackbody. The peak wavelength of the flame at  $\lambda_{\max}=473\text{nm}$ . The corresponding temperature is: **T= 6,132 Kelvin (10,578 Fahrenheit; 5,859 Celsius).**

**2-Temperature Flame of Magnegas from crude oil+Oxygen cutting metal:** at 3mm above the surface of metal while cutting it.(approximately 2mm from base of flame) And fit with Blackbody. The peak wavelength of the flame at  $\lambda_{\max}=739\text{nm}$ . The corresponding temperature is: **T=3,920 Kelvin (6,597 Fahrenheit; 3,647 Celsius).**

**3-Temperature of Magnegas from antifreeze+ Oxygen, Flame only:** 3mm from base and fit with Blackbody. The peak wavelength of the flame at  $\lambda_{\max}=476\text{nm}$ . The corresponding temperature is **T= 6,092 Kelvin (10506 Fahrenheit; 5,819 Celsius).**

**4-Temperature Flame of Magnegas from antifreeze+ Oxygen cutting metal:** at 3mm above the surface of metal while cutting it.(approximately 2mm from base of flame), and fit with Blackbody. The peak wavelength of the flame at  $\lambda_{\max}=735\text{nm}$ . The corresponding temperature is: **T=3,943 Kelvin (6,638 Fahrenheit; 3,670 Celsius).**

The peak wavelength from the flame has a non Blackbody distribution form.

Additional details are provided on a separate report.

The measurements were done by Hani Ahmar and Yuri Budansky on February 15<sup>th</sup>-18<sup>th</sup>-2012

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