

**Date:** 02/05/2008

**Customer:** Ferox LLC.

Fuel Analysis Results

BTU: (British thermal units) – the amount of heat necessary to rise one (1) pound of water one (1) degree Fahrenheit) per gallon, they are able to deliver more power per gallon. This is critical to diesel engine fuel economy. A given fuel may meet 1D or 2D specifications, but if the Btu rating is too low, then decreased fuel mpg will result. (Average diesel fuel 130,000 BTU's. Premium Diesel Fuels 138,000 to 140,000 BTU's)

**Fuel Tested:**

**# 2 and # 1 Blended USLD fuel**

**Not Treated**

Test	Method	Result	Condition
Gravity, A.P.I. Hydrometer on Fuels		37.2	NORMAL
Initial Boiling Point	D-86	344	NORMAL
10PCT		376	NORMAL
50PCT		470	NORMAL
90PCT		586	NORMAL
ENDPNT		642	NORMAL
RETPCT		98	NORMAL
Cetane Index, Calculated		45.1	NORMAL
Water	D-1796	<.05	NORMAL
Sediment	D-1796	<.05	NORMAL
Sulfur Determination		.031	NORMAL
BTU		137480	NORMAL

**Treated Fuel with Ferox 230**

Test	Method	Result	Condition
Gravity, A.P.I. Hydrometer on Fuels		36.7	NORMAL
Initial Boiling Point	D-86	350	NORMAL
10PCT		378	NORMAL
50PCT		468	NORMAL
90PCT		582	NORMAL
ENDPNT		640	NORMAL
RETPCT		98	NORMAL
Cetane Index, Calculated		43.9	NORMAL
Water	D-1796	<.05	NORMAL
Sediment	D-1796	<.05	NORMAL
Sulfur Determination		.035	NORMAL
BTU		139770	NORMAL

**Conclusion:**

- Treated fuel has an API Gravity result of .5% allowing the fuel to burn more clean and complete.
- BTU rating increased 2290 parts, allowing a more complete burn of the fuel in the combustion chamber and a possible decrease in Exhaust Temperature.
- No increase in Cetane rating, in fact a decrease was noted.