

How much fuel is used to move the fuel?

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A transport truck is carrying a full load in a tanker semitrailer that weighs 48000 lbs. while also burning two full 150gal. tanks of diesel fuel. The total weight of the truck and trailer when empty is 20000 lbs., the total weight when full is 68000 lbs.. There is 2100lbs of fuel in both of the truck's fuel tanks combined. The fuel efficiency of the truck is 6.7mi. per gallon. The truck can travel up to 2010mi. with two full tanks of diesel fuel.

$$2100 \div 68000 = 0.03\%$$

$$6.7 \times 2010 \times 0.03 = 404.01\text{gal}$$

404.01gal is 19.2386% of 2100gal.

In 2010mi. the transport truck will burn 404.01gal. or 19.2386% of it's diesel in order to move the diesel it's carrying.