Since 2007 when USEPA mandated ULSD the below question has never been answered

The ASTM HFRR test is an abortion. A complete joke. Where does the HFRR test duplicate pressure like a modern-day diesel fuel system? Bosch CP4 pump failures prove the current ASTM lubricity test is a complete abomination

I would like to ask you a question, in all your years of experience, has anyone ever defined for you the meaning of "Diesel Fuel Lubricity"? Beyond just the words? I have looked high and low and from here to there for even a technical definition by anybody and I have found nothing. Sulfur has no lubricating properties whatsoever.

Or put another way. Outside of the ultra-low sulfur diesel fuel excuse. Do you know what causes diesel fuel to have poor lubricity? What is causal mechanism in the fuel that is causing the diesel fuel the poor lubricity problem?

Thank you for your time

Kindest Regards Mike Colburn Las Vegas, NV USA

702 716 0182 	

---- Forwarded Message -----

ASTM Answer Below

From: PTP <ptp@astm.org>

To: drfuelinstein@yahoo.com <drfuelinstein@yahoo.com>

Sent: Tuesday, August 23, 2022 at 12:14:06 PM PDT

Subject: RE: Diesel Fuel Lubricity?

I asked several people and received this information:

- 1. At this time, Committee D02, SC E has not defined "diesel" fuel, although we have a definition that has passed the SC E process and is not an active item on the current D02 Main Committee ballot.
- 2. EPA Rules under §1090.80 defines Diesel as:

Diesel fuel means any of the following:

- (1) Any fuel commonly or commercially known as diesel fuel.
- (2) Any fuel (including NP diesel fuel or a fuel blend that contains NP diesel fuel) that is intended or used to power a vehicle or engine that is designed to operate using diesel fuel.
- (3) Any fuel that conforms to the specifications of ASTM D975 (incorporated by reference in §1090.95) and is made available for use in a vehicle or engine designed to operate using diesel fuel.

Note that our proposed definition is not quite the same as EPA...

3. Subcommittees B, E and J all have definitions for Lubricity. For Diesel, I gravitate to the SCE definition:

lubricity, *n*—a qualitative term describing the ability of a fluid to affect friction between, and wear to, surfaces in relative motion under load.

DISCUSSION—In this test method, the lubricity of a fluid is evaluated by the wear scar, in microns, produced on an oscillating ball from contact with a stationary disk immersed in the fluid operating under defined and controlled conditions.

I do not see any EPA definition for Lubricity in Part 1090.

This is quite a long way around the barn to get to my more succinct answer: No, I am not aware of a definition from either ASTM Committee D02 or EPA for "Diesel Fuel Lubricity". But if we take the terms separately, it should be understood.

Sincerely,

Jean Kennedy