From:	Austin Weyant
To:	Yu, Olivia, EMNRD
Cc:	Heather Patterson; Dinwiddie, Blake
Subject:	TRNCC 1005 vs EPA 8015
Date:	Friday, October 6, 2017 3:51:34 PM
Attachments:	image001.png

First I apologize for the use of an unfamiliar method the client uses a Texas based lab and deflated to a Texas based method, all closure samples will be performed by SMA and will be the method described in NMOCD spill Guidance (93)
EPA 418.1 or (TNRCC 1005) are packed-column gas chromatographic (GC) methods compared with capillary GC methods like EPA 8015B/M. These analytical methods do not create significant changes in the quality or type of data received from laboratories.
There are, however, two significant factors that you should be aware of between the two analytical methods:

- Emulsifiers can interfere with (TNRCC 1005) creating a false high value
- Because of a Beers Law relationship (EPA 8015) can only read up to a 34C chain hydrocarbon.

The first factor should not be overlooked because, some wells use emulsifiers in there transport lines. But a false positive would only be more conservative. The second point is that TNRCC 1005 can read hydrocarbons above the motor oil range. TNRCC 1005 will confuse soil organic matter as hydrocarbons thus resulting in a false positive.
For these reasons and because the samples were taken by Key Energy Staff within 48 hours after the incident SMA believes that the data contained in the work plan is valid and accurate.

Thank You

Austin Weyant
Project Scientist

Souder, Miller & Associates
Engineering ♦ Environmental ♦ Surveying
201 S Halagueno Street
Carlsbad, NM 88220
www.soudermiller.com
(575) 689-7040 (cell)