Test Protocol – Field Testing

Engines/Trucks

The engines selected will be separated into two categories; i.e., a Control Group and a Candidate Group. The Control Group will use untreated diesel fuel throughout the scope of the project. The Candidate Group will receive Viscon-treated fuel.

A minimum of 3 engines for the Control Group and 3 engines for the Candidate Group will be selected. The preference is 5 engines for the Candidate Group. Using only 3, if one engine has mechanical problems or responds marginally due to the limited hours of treatment, the entire program may be deemed unsuccessful.

Baseline-1; establishes a reference/starting point, for the untreated Control and Candidate groups

Duration: 50 hours or 1 month

1. Capture operational hours/mileage and fuel added to the tank for EACH fueling
2. Compute total fuel used by hour/mile for each engine.
3. Maintain a running/cumulative fuel used average by engine for each fueling (to identify +/- trends).
4. Record averages grouped by Control v. Candidate groups.
5. At completion of the baseline, compute a ratio (factor/difference) between the Control and Candidate groups.

Viscon Treatment; captures data for the treated Candidate Group and untreated Control Group

Duration: 150 hours or 3 months

1. Capture operational hours/mileage and fuel added (and the amount of Viscon added for the Candidate engines) to the tank for EACH fueling
2. Compute total fuel used by hour/mile for each engine.
3. Maintain a running/cumulative fuel usage average by engine for each fueling starting at the Viscon Treatment point (to identify +/- trends).
4. Maintain a percent change from Baseline for each engine and each fueling (Control & Candidate).
5. Maintain a running/cumulative percent change from Baseline for each engine (Control & Candidate) as they relate to their Baseline data; i.e., determine the change from Baseline for each engine. Changes from Baseline, especially for the Control group may indicate changes in operations, weather, etc. The resulting change/ratio may be applied to the Candidate engine results as an adjustment factor.
6. Record averages grouped by Control v. Candidate groups.

Baseline-2; provides data relative to returning to baseline/residual effects after treatment has been completed

Duration: 50 hours or 1 month

1. Capture operational hours/mileage and fuel added to the tank for EACH fueling
2. Record data for individual engines and averages grouped by Control v. Candidate groups.
3. Compute total fuel used by hour/mile for each engine.
4. Maintain a running/cumulative fuel used average by engine for each fueling (to identify +/- trends).
5. At completion of the baseline, compute a ratio (difference) between the Control group during Treatment and the Control group during Baseline-2.

Attachments:

Fuel Consumption Log Sheet (for data capturing)

Sample Spreadsheet (for computations and reporting)

Fuel Consumption Log Sheet **Page:_____**

Business Name: .
Contact Info.:
Phone #:
Cell #:

Viscon California
Viscon Rep: _____
Phone: _____

Engine	
Make	
Model	
Year	
HP	
Hrs/Gal/Ltr	

Date Fueled	Hrs/Odom Reading	Amount of Fuel Added	Amount of Viscon Added	Oper. Initl's	Maintenance Records / Notes

1 Ounce of Viscon to 20 Gallons of Fuel

Add Viscon BEFORE Fueling

Engine Make _____ **Engine Model** _____ **Engine Year** _____ **Engine Horsepower** ____

BASELINE-1

Date	Hrs Odom	Net Hours Odom	Fuel Added	Fuel/ Hour/ Gal	--Running Average-- @ Baseline Start Percent Change
mm/dd/yy	99999	99999	9999.9	99.99	99.99%
mm/dd/yy	99999	99999	9999.9	99.99	99.99%
mm/dd/yy	99999	99999	9999.9	99.99	99.99%
Totals		99999	9999.9	99.99	

TREATMENT

Date	Hrs meter	Net Hours Odom	Fuel Added	Fuel/ Hour Gal	Amt of Viscon	--Running Average-- @ Treatment Start Fuel	Percent Change	--Running Average-- From Baseline Percent Change
mm/dd/yy	99999	99999	9999.9	99.99	99.9	Start "Running Averages" After 3-4 Fill-Ups		
mm/dd/yy	99999	99999	9999.9	99.99	99.9			
mm/dd/yy	99999	99999	9999.9	99.99	99.9	99.9	99.9%	99.9%
Treatment Totals		99999	9999.9	99.99				
Baseline Totals		99999	9999.9	99.99				
% Change				99.9%				
Baseline (Control v. Candidate) Factor				9.9%				
% Change				99.9%				
Treatment (Control v. Control) Factor				9.99				
% Change				99.9%				

BASELINE-2

Date	Hrs meter	Net Hours Odom	Fuel Added	Fuel/ Hour Gal	Amt of Viscon	--Running Average-- @ Baseline-2 Start Fuel	Percent Change	--Running Average-- From Baseline-1 Percent Change	--Running Average-- From Treatment Percent Change
mm/dd/yy	99999	99999	9999.9	99.99	99.9	99.9	99.9%	99.9%	99.9%
mm/dd/yy	99999	99999	9999.9	99.99	99.9	99.9	99.9%	99.9%	99.9%
mm/dd/yy	99999	99999	9999.9	99.99	99.9	99.9	99.9%	99.9%	99.9%
Baseline Totals		99999	9999.9	99.99					