

## Hydrocarbon Viscosity Test Kit

### User Manual

Part No. 26030020



### Test Kit Description

Hydrocarbon Viscosity Test Kit is used to determine hydrocarbon viscosity vs. applicability of the oleophilic/hydrophobic screen technology. It is especially useful when the Geotech Product Recovery System is going to be used to collect varying hydrocarbons.

The test kit comes with a glass container and lid, floatable test screens of 100 and 60 mesh, sample container, and a syringe for injecting the sample. This screen technology is used on Geotech's product line of assorted intake cartridges and Skimmer assemblies.

The test kit does not measure viscosity – it helps to verify if the screen technology is applicable for the site. The blue screen is 100 mesh, which is good for gasoline, kerosene, diesel, JP-4 and #2 fuel oil type viscosities. The green screen is 60 mesh, which is good for hydrocarbons that fall between #2 and #4 fuel oil type viscosities.

**Special Note:** The specific gravity of the product to be recovered must be less than 1.0 and its viscosity less than 100 SSU for use with the "light" oil filter screen (100 mesh), 100 to 400 SSU for use with the "heavy" oil screen (60 mesh). Geotech application engineers should be consulted for product recovery operations with viscosities outside that range.

Silts and fines in the product can clog the screens ability to recover hydrocarbons. Alternatives should be discussed if their presence in the product is anticipated. This technology is designed to be used in wells with free product of at least 1/8" (3.2 mm) thickness. The presence of surfactants or detergents in the product can also affect the screen's ability to differentiate between water and hydrocarbons. Please call Geotech at (800) 833-7958 to discuss your special applications.

### Using the Hydrocarbon Viscosity Test Kit

When testing for product viscosity, always start with the 100 mesh (blue) floatable test screen (a complete kit is shown on the left).

**Note:** Viscosity is temperature dependent. When testing for applicability, make sure the hydrocarbons tested are at the same temperature as the environment in which they will be recovered. Testing at 75°-80°F (24°-27°C) room temperature may prove applicable, but may not function in a 45°-50°F (7°-10°C) ground-water environment.

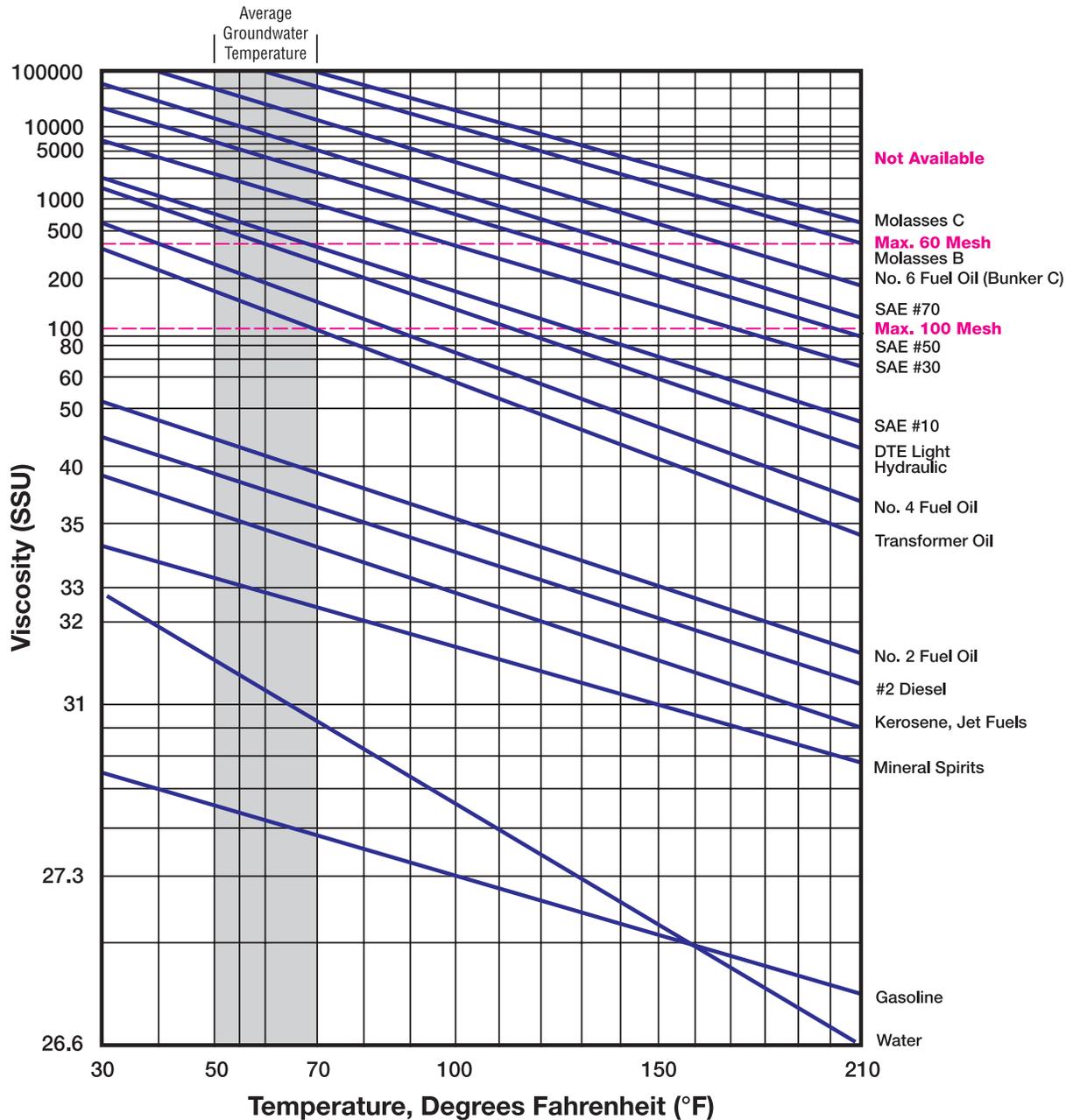
1. Fill the glass container 1/3-1/2 full of water.
  2. Using the syringe, introduce 20cc of the hydrocarbon to the jar.
  3. Using a soft bristle brush, condition (or prime) the outside of the 100 mesh (blue) test screen with the product to be recovered.
  4. Once the hydrocarbon in the jar has settled to the top of the water, slowly place the floatable screen on top of the product/water surface. The screen is designed to float at the oil/water interface and allow hydrocarbon to pass through the screen.
- Note:** Do not place too much hydrocarbon in the glass jar. Too much product may cause the floating screen to fill up and sink to the bottom of the glass jar.
5. If the 100 mesh screen does not pass product, the viscosity may be too great. Re-test using the 60 mesh (green) test screen and restart the procedure at Step 3.
  6. If the green screen will not pass product, the product's viscosity is too great for this type of technology.

Geotech application engineers should be consulted for product recovery operations with viscosities outside the range of the Hydrocarbon Viscosity Test Kit.

### Test Kit Maintenance

The Hydrocarbon Viscosity Test Kit screens are re-useable and can be easily cleaned with a soft bristle brush using either kerosene or diesel. Afterwards, clean the equipment with a mild detergent and air dry before storing. See listing of test kit part numbers on the reverse.

# Hydrocarbon Viscosity Specifications



## Replacement Parts List

Part Number	Part Description
26030020	Manual, Test Kit, Hydrocarbon Viscosity
86020001	Test Kit, Hydrocarbon Viscosity

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## The Warranty

For a period of thirty (30) days from date of first sale, product is warranted to be free from defects in materials and workmanship. Geotech agrees to repair or replace, at Geotech's option, the portion proving defective, or at our option to refund the purchase price thereof. Geotech will have no warranty obligation if the product is subjected to abnormal operating conditions, accident, abuse, misuse, unauthorized modification, alteration, repair, or replacement of wear parts. User assumes all other risk, if any, including the risk of injury, loss, or damage, direct or consequential, arising out of the use, misuse, or inability to use this product. User agrees to use, maintain and install product in accordance with recommendations and instructions. User is responsible for transportation charges connected to the repair or replacement of product under this warranty.