

NAPL Skimmer Tool

What is a Skimmer Tool?

The skimmer collects free-floating NAPL hydrocarbons from groundwater in 2-inch (5 cm) or larger recovery wells. It employs a density float and filter to differentiate hydrocarbons from water, skimming light product such as gasoline or diesel fuel down to a sheen.

INSTALLATION, MAINTENANCE

The skimmer assembly is connected to the bottom of a Blackhawk pneumatic pump foot valve with a 6-inch fuel-grade hose. The unit and pump are lowered into the well until the midpoint of the skimmer's travel is located at fluid level. Effective travel is 12 inches (30.5 cm).

Skimmers generally come with a 100 mesh screen, which periodically must be gently cleaned with WD40 or kerosene using a soft-bristle brush. After rinsing with clean water and drying, the screen must be reconditioned with diesel fuel or similar hydrocarbon, using a soft-bristle brush to saturate.

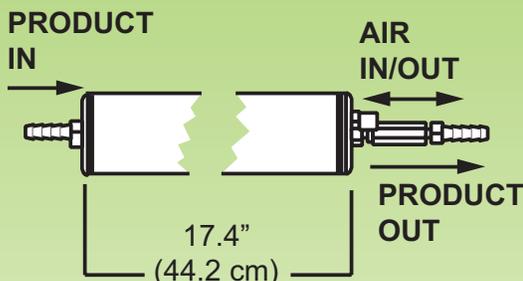
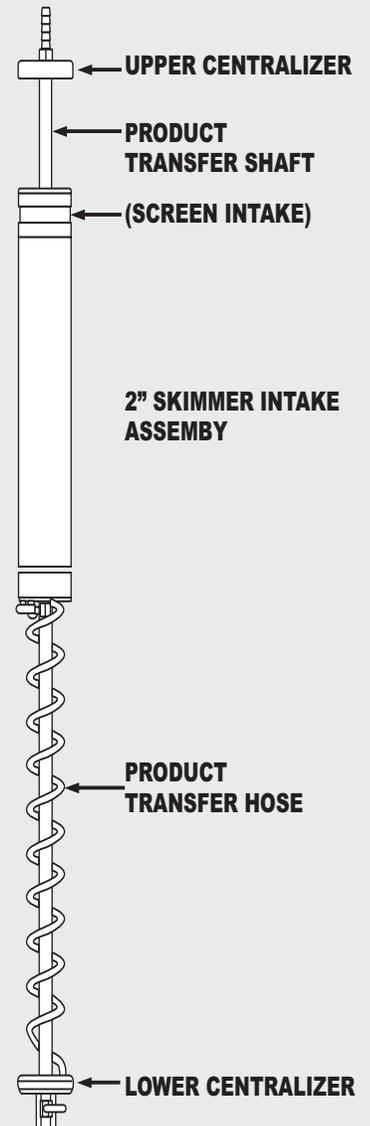
Technical Data

Performance

Application:	2 inches (5 cm) or larger recovery wells
Recovery Rate:	.2 gallons (.76 liters) per cycle
Maximum Depth:	180 feet (54.9 m)
Maximum Pressure:	100 PSIG (6.9 bar)
Oil/Water Separation:	Oleophilic/hydrophobic mesh screen

Skimmer Assembly

Size:	35.5" L x 1.75" OD (90 cm L x 4.5 cm OD)
Weight:	1.75 lbs. (0.8 kg)
Materials:	304 SS, Polyethylene, PVC, Polypropylene, & Brass Fittings
Effective Travel:	12" (30.5 cm) Standard Travel
Operating Temp:	32° to 100° F (0° to 38° C)
Minimum fluid level	15" (38 cm)



Product enters at bottom and travels up the hose through the intake assembly and screen, exiting at the top. Pneumatic air enters and exits at top.

HOW IT WORKS

The skimmer assembly -- product intake float, coiled product-transfer hose and transfer shaft -- is connected to a Blackhawk pneumatic pump.

The intake assembly follows the water table fluctuations and places the screen at the water/product interface.

As the pump cycles, product is drawn through the intake screen and is transferred to the pump through the coiled hose and transfer shaft.

The pump's reciprocating action draws product to surface level, and the liquid is discharged into a recovery tank at a rate of .2 gallons (.76 liters) per stroke.