

f/v Pinnacle, Seattle WA

Walt Casto – Owner/Operator

Mark Casto – Captain

Mike Grant – Chief Engineer

November, 2013

Twin Caterpillar 3508 Mains, Triple Caterpillar 3406 Gen-set engines
Fitch Model: FHD5-19-1.5 after Westfalia centrifuge on 4,000 gallon day tank



140 ft. power scow docked in Fishermen's Terminal, Seattle, WA



Fitch FHD5 used to pre-treat fuel in 4,000 gallon day tank (max 300 gph)



Pinnacle crew at work in Bering Sea



Westfalia fuel centrifuge (l), fuel manifold and day tank(c), 3508 Cat main and Racor water separators(r)

Background on Vessel The *f/v Pinnacle* is a 140'X38' power scow with gross weight of 199 tons. Since receiving the "built to spec" boat in February, 1999 Walt Casto and his sons Mark and Glenn have been fishing in the annual king and snow crab fisheries in Alaska's Bering Sea. The vessel is home-ported in Seattle and makes the annual 7-day trip to Dutch Harbor in the early Fall after undergoing maintenance and preparation of crabbing gear.

The ship, its rigging, cranes, hydraulic systems, engine room, galley, wheelhouse, etc. is always maintained in excellent tip-top shape. Around Seattle, it is known as one of the best and most well-maintained vessels in the fleet.

The boat's crew makes every effort to provide the highest quality fuel to the engines. The *Pinnacle* can carry a maximum of 50,000 gallons of fuel in multiple storage tanks. Before being supplied to the engines from a dedicated 4,000 gallon drive day tank (starboard), fuel is pulled from a dedicated 4,000 gallon store day tank (port) through a Westfalia centrifuge to remove any free water and debris.

Each engine, main 3508s and 3406 auxiliaries have water separators and fuel filters to further remove residual water and any microscopic size particles from the fuel before being combusted. Unburned fuel is returned to the drive day tank.

Background on Interest in Fitch Fuel Catalyst The Castos are a fishing family, perhaps an institution in the Pacific Northwest. Glenn, the younger son owns and operates his own salmon gillnetter as well as captains for other well-known vessels like the *f/v Controller Bay* and *f/v Fierce Allegiance*. Glenn first became interested in using the **Fitch Fuel Catalyst (FFC)** in Aug., 2011 and ultimately purchased and used various solutions on his own boat; his diesel pickup truck and various lawn and power sports machines he owns.

As a result of Glenn's favorable impression of the benefits the Fitch treatment afforded vehicles and other equipment, several crew members purchased Fitch units for their own vehicles and boats which they operate in other fisheries when not crabbing on the *Pinnacle*.

Results of Pinnacle's Usage of the Fitch Fuel Catalyst; Shortly after installing the Fitch FHD5 shown in the above picture on the output of the centrifuge, a four hour sea trial was conducted in Puget Sound. Readings from the engines ECM displays indicated a reduction in fuel consumption of about 3gph on each main engine.

On about October 3rd, the *Pinnacle* headed to Dutch Harbor on a voyage which normally requires 10,000 gallons of fuel. After completing the short red king crab season and filling their quota, Mark reported that his total fuel consumption for the trip north was only 9,400 gallons, a 6 percent savings over previous seasons. Mark recommends the FFC to others and is purchasing a set for his own salmon gillnetter, the *f/v Bristolizer*.

This summary report was prepared by Mark Phillips, a Fitch Fuel Catalyst representative, and reviewed and approved by Mark Casto. For more information contact Power Fuel Savers at (206) 650-8755 or (562) 537-0165.