## JetBrief

Location: New Zealand

Service: Fishing Boat

Waterjet Model: HJ403

JetBrief No. 377

January 2006



## NAME:

Coromandel Harvester SERVICE: Mussel Harvesting Barge LENGTH: 25.00 metres **BEAM:** 7.00 metres **DRAUGHT:** 0.80 metres **DISPLACEMENT:** 48 tonnes (empty) CAPABILITY: 96 tonnes **CONSTRUCTION:** Aluminium SPEED: 11.5 knots WATERJETS: Twin HamiltonJet Model HJ403 **ENGINES:** Twin Scania D12 diesel engines 372kW (500hp) @ 1400rpm **DESIGNER/BUILDER:** Bos & Carr Boatbuilders, Auckland, New Zealand

OPERATOR: Gulf Mussel Farms, Auckland, New Zealand HamiltonJet DISTRIBUTOR: Hamilton Marine, Christchurch, New Zealand

## Mussel Barge Shows Versatility of Hamilton Waterjets

Waterjets are more than just a high speed propulsion option. New Zealand mussel farming barge 'Coromandel Harvester' is the latest example of how the many benefits of waterjet propulsion can be utilised in a slow speed workboat.

Shallow draught, manoeuvrability and reliability were key design requirements of Coromandel Harvester, which operates on a mussel farm located in a highly tidal area. The vessel needed to be able to manoeuvre in and around the mussel mooring lines without risk of fouling, as well as off-load in very shallow water. Waterjets were the obvious answer and a pair of Hamilton HJ403 jets were chosen as the best suited to this application.

With a top speed of 11.5 knots Coromandel Harvester is no racer. But considering she can carry a load of 48 tonnes in a mere 800mm of water, this very stable workboat is ideally suited to its role. A pair of de-rated Scania D12 engines provide 500hp at 1400rpm directly to each jet unit, which are mounted in "pods" well forward of the transom to accommodate the rising chine at the stern. The low stress of this drive system will help ensure Coromandel Harvester achieves its third main objective of high reliability. Owner/operator Gulf Mussel Farms has been using a Scania / HamiltonJet powered mussel barge since the mid 1980s. This earlier boat is fitted with a pair of HJ361 jets and has proved so successful it was logical for the company to choose the same designer/builder (operating now as Bos & Carr Boat Building), engine supplier and waterjet manufacturer for its new boat.

Gulf Mussel Farms harvests between 12 and 22 tonnes of mussels per harvest in the off-seasons, and up to 40 tonnes during peak times. Coromandel Harvester will allow them to reduce the time taken for each harvest and consequently reduce costs.

