

Date: May 19, 2014

Address: mike.bates@normanok.com

Name: Mike Bates

Subject: City of Norman, OK.

Fairbanks Morse Pump

16" VTSH

S/N K4H2-062735

Rehab Quote

PSG J/N 507136

Pump Services Group

3601 Fairbanks Ave

Kansas City, Kansas Phone 913-748-4055

Fax 913-371-0515

Mobile 816-797-4291 http://www.pentair.com

e-mail bob.dudley@pentair.com

We at Fairbanks Nijhuis would like to thank you for allowing us the opportunity to quote on the above unit.

Please review the following for your approval;

Scope of Repair

- 1) Receive pump from Customer.
- 2) Disassemble, clean and inspect per prints.
- 3) Beadblast all reusable components.
- 4) Suction Bell It is in poor condition but reusable. Reestablish register fit and wear ring fit. Fill erosion with Ceramic "R" metal and top coat with Belzona Supermetal glide.



5) Discharge Bowl – From the picture you can see that the lower bearing fit has been sleeved before and the pump shaft has worn thru the bearing

into the sleeved portion. We suggest to machine the sleeve to a nominal size and machine a new bearing with the proper OD. The sleeved bore is approximately .004 under low limit of our standard print dimension.



6) Impeller – Impeller is worn extremely thin. Pitted and eroded, suggest replacing.



7) Pump Shaft – broke at the threaded portion of the shaft. Replace.



- 8) Lineshafting Due to the wear at the bearing journals we suggest replacing.
- 9) Enclosing Tube Clean and reuse.
- 10) Column Pipe Clean and reuse.
- 11) Tube Tension Bearing Housing Due to the eroded threads we suggest replacing.



12) Discharge Head – Weld repair the register fits on this piece, motor register, tension housing bore and column fit. Weld and finish machine to print dimension.



- 13) Supply the following new components at assembly; impeller, impeller hardware, pump shaft, bowl bearings, line shaft bearings, lineshaft couplings, tube tension housing, tube tension bearing, impeller wear ring, throttle ring, restrictor bushing, suction bowl wear ring, line shaft couplings, top shaft sleeve, snap ring, gaskets, packing and hardware as needed for a complete pump build up.
- 14) Assemble complete

- 15) Paint OD column and bowls with two-part epoxy suitable for potable water. Paint OD of discharge head with Fairbanks Morse standard blue enamel.
- 16) Prep and load for shipping back to the Customers location..

Cost to perform above scope of repair will be \$59,638.00 each excluding freight and taxes if applicable.

Delivery would be approximately 10-12 weeks ARO.

This quotation includes only the parts or processes specifically outlined above. Any other parts or processes judged to be necessary by F.N. will be quoted separately at an extra cost, and will be included only after the approval and authorization by the Customer. Warranty will be contingent on the inclusion of any processes deemed necessary by F.N.

The above quotation is valid for 30 days from the date of this letter, and is subject to Fairbanks Nijhuis Standard Terms and Conditions (KC585) including the same warranty as new Fairbanks Nijhuis products. Taxes and Freight are excluded, and will be billed separately, as applicable. This quotation presumes that the equipment in question, is in reusable condition without repair or modification other then those listed in the scope of repair.

As always, we at Fairbanks Nijhuis appreciate you allowing us to quote the above project.

If there are any questions please call.

Thanks

Bob Dudley

Sales Engineer PSG

Cc:

Tom Hoffman Curt Cunningham