WTD Proposed Raw Sewage Pump Mechanical Evaluation

_____ Pump Station

Date of Inspection …….

Person (s) Performing Inspection ……..

Equipment Tag Identification (number and description) …….
……..

Asset Tag Number …….

Manufacturer ……..

Model Number ……...

Serial Number …….....

Size ……

Type (horizontal, vertical, wet or dry pit submersible) ……..

Factory Pump Curve Tests:
- Speed ……
- TDH …….
- Suction Head ……
- Output in GPM……...

Present Maximum Output in GPM …….....
- Wet Well Level at time of testing ……
- Speed of pump during testing ……..
- Actual TDH, in feet, at pump station ……
- (Considered high head above 80 feet)

Seal Type (packed or mechanically sealed) …….
- Seal Condition ……..
- Seal Water System Condition ……..

Operational Design Context (equal run time or lead/lag, if lead/lag, which is this pump?)
……...

Initial Start up date ……...

Lifetime Total Hours (to date): ……

Frequency of Pump Overhauls (check to identify greater frequency of repair in recent history) …….....
……
……
……

Major Component Replacement (impeller, volute, shaft, back head, front head, to include dates and hours run): ……....
……
……
……

Pump Parts Availability (in our inventory, in factory inventory, obsolete, needing custom casting and manufacture; special or obsolete bearings): …….....
……
……
……

Drive Type: (VFD motor drive, constant speed motor with eddy current speed reducer, or engine driven) ……..
……

Gear Box Manufacturer …….....

Gear Box Model & Serial Number: …….
……

Gear Box Type: Straight Drive or Right Angle, Vertical or Horizontal: ……....
……

Condition of:

Gear Box ……...
……
……

Bearings replaced (date) ..……
……

Rebuild (date) …….....
……
……

Condition of:

Base and Mountings …….
……
……

Suction and Discharge Piping ……..
……
……

Isolation Valves ……...
……
……

Check Valve …….
……

Flow Meter ……...
……

Bearing Frame ……..
……
……

Condition of Volute :

Internal …….
……
……
. ……

External ……
……
……

Thickness …….
……
…….....

Original volute? (Yes/No)
…….....

Replacement date(s): ……....
……

Condition of Impeller: (original or replacement)…….....
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…….....
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(Additional information from available ultra-sound tests and input from mechanics):
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