

CENTRIFUGAL PUMP API-610
DATA SHEET
US Customary & SI UNITS

JOB NO. _____ ITEM NO. _____
 REQ / SPEC No. _____ / _____
 PURCH ORDER No. _____ DATE **21-Jun-17**
 INQUIRY No. _____ BY _____

1 APPLICABLE TO: PROPOSAL PURCHASE AS BUILT

2 FOR: **CEYLON PETROLEUM CORPORATION** UNIT: **82**

3 SITE: **OIL REFINERY, SAPUGASKANDA** SERVICE: **Aviation Fuel (Jet A1) / Kerosene**

4 NO. REQ _____ PUMP SIZE _____ TYPE: _____ NO. STAGES **SINGLE**

5 MANUFACTURER _____ MODEL: _____ SERIAL No. _____

6 NOTES: INFORMATION BELOW TO BE COMPLETED BY PURCHASER BY MANUFACTURER BY MANUFACTURER OR PURCHASER

7 **GENERAL**

8 PUMPS TO OPERATE IN (PARALLEL) No. MOTOR DRIVEN _____ No. TURBINE DRIVEN _____

9 (SERIES) WITH _____ PUMP ITEM No. _____ PUMP ITEM No. _____

10 GEAR ITEM No. _____ MOTOR ITEM No. _____ TURBINE ITEM No. _____

11 GEAR PROVIDED BY _____ MOTOR PROVIDED BY _____ TURBINE PROVIDED BY _____

12 GEAR MOUNTED BY _____ MOTOR MOUNTED BY _____ TURBINE MOUNTED BY _____

13 GEAR DATA SHT. No. _____ MOTOR DATA SHT. No. _____ TURBINE DATA SHT. No. _____

14 **OPERATING CONDITIONS** **SITE AND UTILITY DATA (COT'D)**

15 CAPACITY NORMAL **270 (m³/h)** RATED _____ (m³/h)

16 OTHER _____

17 SUCTION PRESSURE MAX/RATED **30.4 / 11.2 (PSIA)**

18 DISCHARGE PRESSURE **236.2 (PSIA)**

19 DIFERENTIAL PRESSURE **225 (PSI)**

20 DIFF. HEAD _____ (m) NPSHA **9.80 (ft)**

21 PROCESS VARIATIONS _____

22 STARTING CONDITIONS _____

23 SERVICE: CONT. INTERMITTENT (STARTS/DAY) _____

24 PARALLEL OPERATION REQ'D

25 **SITE AND UTILITY DATA**

26 **LOCATION:**

27 INDOOR HEATED UNDER ROOF

28 OUTDOOR UNHEATED PARTIAL SIDES

29 GRADE MEZZANINE _____

30 ELECTRICAL AREA CLASSIFICATION

31 CL _____ GR _____ DIV _____

32 WINTERIZATION REQ'D TROPICALIZATION REQ'D.

33 **SITE DATA**

34 ALTITUDE **25.6 (m)** BAROMETER **1 (BAR)**

35 RANGE OF AMBIENT TEMP: MIN/MAX. **20 / 40 (°C)**

36 RELATIVE HUMIDITY: MIN / MAX **90 / 98 (%)**

37 **UNUSUAL CONDITIONS:** DUST FUMES

38 OTHER _____

39 **UTILITY CONDITIONS:**

40 **STEAM:** DRIVERS HEATING

41 MIN.: _____ (Kg/cm²) (°C) _____ (Kg/cm²) (°C)

42 MAX.: _____ (Kg/cm²) (°C) _____ (Kg/cm²) (°C)

43 **ELECTRICITY** DRIVERS HEATING CONTROL SHUTDOWN

44 VOLTAGE: **415** _____

45 HERTZ: **50** _____

46 PHASE: **3** _____

47 **COOLING WATER:**

48 TEMP. INLET **36 (°C)** MAX. RETURN **43 (°C)**

49 NORM PRESS. **2.4 (BARG)** DESIGN _____ (PSIG)

50 MIN RETURN **1.3 (BARG)** MAX ALLOW DP _____ (PSI)

WATER SOURCE _____

CHLORIDE CONCENTRATION (PPMW) _____

INSTRUMENT AIR: MAX / MIN PRESS **4.2 / _____ (Kg/cm²)**

LIQUID

TYPE OR NAME OF LIQUID **Aviation Fuel (Jet A1) / Kerosene**

PUMPING TEMPERATURE:

NORMAL **35 (°C)** MAX **40 (°C)** MIN **28 (°C)**

VAPOR PRESSURE **9 (PSIA)** _____ (°C)

RELATIVE DENSITY (SPECIFIC GRAVITY):

NORMAL **0.8** MAX _____ MIN _____

SPECIFIC HEAT, Cp _____ (Kcal/kg°C)

VISCOSITY **8.0 (cSt) @ -20 (°C)**

MAX. VISCOSITY _____ (Cp)

CORROSIVE/EROSIVE AGENT _____

CHLORIDE CONCENTRATION (PPMW) _____

H₂S CONCENTRATION (PPMW) _____

LIQUID HAZARDOUS FLAMMABLE

OTHER _____

PERFORMANCE

PROPOSAL CURVE No. _____ RPM _____

IMPELLER DIA RATED _____ MAX _____ MIN _____ (mm)

RATED POWER _____ (BHP) EFFICIENCY _____ (%)

MINIMUM CONTINUOUS FLOW:

THERMAL _____ (m³/h) STABLE _____ (m³/h)

PREFERRED OPERATING REGION _____ TO _____ (m³/h)

ALLOWABLE OPERATING REGION _____ TO _____ (m³/h)

MAX HEAD @ RATED IMPELLER _____ (m)

MAX POWER @ RATED IMPELLER _____ (kw)

NPSHR AT RATED CAPACITY _____ (m)

SUCTION SPECIFIC SPEED _____

MAX. SOUND PRESS. LEVEL REQ'D _____ (dBA)

EST MAX. SOUND PRESS. LEVEL _____ (dBA)

REMARKS: _____

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1 CONSTRUCTION	CONSTRUCTION (CONT)
2 APPLICABLE STANDARD:	<input type="checkbox"/> SHAFT DIAMETER BETWEEN BEARINGS _____ (mm)
3 <input checked="" type="radio"/> API 610 10TH EDITION OR LATEST	<input type="checkbox"/> SPAN BETWEEN BEARING CENTERS _____ (mm)
4 <input type="radio"/> OTHER _____ (SEE REMARKS)	<input type="checkbox"/> SPAN BETWEEN BEARING & IMPELLER _____ (mm)
5 PUMP TYPE:	REMARKS: _____
6 <input checked="" type="radio"/> OH2 <input type="radio"/> BB1 <input type="radio"/> VS1 <input type="radio"/> VS6	_____
7 <input type="radio"/> OH3 <input type="radio"/> BB2 <input type="radio"/> VS2 <input type="radio"/> VS7	_____
8 <input type="radio"/> OH6 <input type="radio"/> BB3 <input type="radio"/> VS3 <input type="radio"/> OTHER	_____
9 <input type="radio"/> BB4 <input type="radio"/> VS4	_____
10 <input type="radio"/> BB5 <input type="radio"/> VS5	_____
11 <input type="checkbox"/> NOZZLE CONDITIONS:	COUPLINGS: _____ DRIVER-PUMP
12	<input type="radio"/> MAKE _____
13 FLANGE	<input type="checkbox"/> MODEL _____
14 SUCTION	<input type="checkbox"/> RATING (KW/100 RPM) _____
15 DISCHARGE	<input type="radio"/> LUBRICATION GREASE
16 BALANCE DRUM	<input type="checkbox"/> LIMITED END FLOAT REQUIRED _____
17 PRESSURE CASING CONNECTIONS:	<input type="checkbox"/> SPACER LENGHT _____ (mm)
18	<input type="checkbox"/> SERVICE FACTOR _____
19	DRIVER HALF COUPLING MOUNTED BY:
20	<input checked="" type="radio"/> PUMP MFR. <input type="radio"/> DRIVER MFR. <input type="radio"/> PURCHASER
21	<input checked="" type="radio"/> COUPLING PER API671
22	BASEPLATES:
23	<input type="radio"/> API BASEPLATE NUMBER _____
24	<input type="radio"/> NON-GROUT CONSTRUCTION
25	REMARKS: _____
26	_____
27	_____
28	_____
29	_____
30	_____
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<p>1 BEARINGS AND LUBRICATION (CONT)</p> <p>2 <input type="radio"/> OIL HEATER REQ'D <input type="radio"/> ELECTRIC <input type="radio"/> STEAM</p> <p>3 <input type="radio"/> OIL PRESS TO BE GREATER THAN COOLANT PRESS</p> <p>4 REMARKS: _____</p> <p>5 _____</p> <p>6 _____</p> <p>7 MECHANICAL SEAL OR PACKING</p> <p>8 SEAL DATA:</p> <p>9 <input type="radio"/> SEE ATTACHED API-682 DATA SHEET</p> <p>10 <input type="radio"/> NON API-682 SEAL</p> <p>11 <input type="radio"/> SEAL CODE As per API 682 latest Ed.</p> <p>12 <input type="radio"/> SEAL MANUFACTURER _____</p> <p>13 <input type="radio"/> SIZE AND TYPE _____ / _____</p> <p>14 <input type="radio"/> MANUFACTURER CODE _____</p> <p>15 SEAL CHAMBER DATA:</p> <p>16 <input type="radio"/> TEMPERATURE _____ (°C)</p> <p>17 <input type="radio"/> PRESSURE _____ (Kg/cm²)</p> <p>18 <input type="radio"/> FLOW _____ (m³/h)</p> <p>19 <input type="checkbox"/> SEAL CHAMBER SIZE _____</p> <p>20 <input type="checkbox"/> TOTAL LENGTH (in) <input type="checkbox"/> CLEAR LENGTH (mm)</p> <p>21 SEAL CONSTRUCTION:</p> <p>22 <input type="checkbox"/> SLEEVE MATERIAL _____</p> <p>23 <input type="checkbox"/> GLAND MATERIAL _____</p> <p>24 <input type="radio"/> AUX SEAL DEVICE _____</p> <p>25 <input checked="" type="checkbox"/> JACKET REQUIRED</p> <p>26 GLAND TAPS:</p> <p>27 <input checked="" type="checkbox"/> FLUSH (F) <input type="checkbox"/> DRAIN (D) <input type="checkbox"/> BARRIER/BUFF (B)</p> <p>28 <input checked="" type="checkbox"/> QUENCH (Q) <input type="checkbox"/> COOLING (C) <input type="checkbox"/> LUBRICATION (G)</p> <p>29 <input checked="" type="checkbox"/> HEATING (H) <input type="checkbox"/> LEAKAGE <input type="checkbox"/> PUMPED FLUID (P)</p> <p>30 <input checked="" type="checkbox"/> BALANCE FLUID (E) <input type="checkbox"/> EXTERNAL FLUID INJECTION (X)</p> <p>31 SEAL FLUIDS REQUIREMENT AND AVAILABLE FLUSH LIQUID:</p> <p>32 NOTE: IF FLUSH LIQUID IS PUMPAGE LIQUID (AS IN FLUSH PIPING</p> <p>33 PLANS 11 TO 41), FOLLOWING FLUSH LIQUID DATA IS NOT REQ'D.</p> <p>34 <input type="radio"/> SUPPLY TEMPERATURE MAX/MIN _____ / _____ (°C)</p> <p>35 <input type="radio"/> RELATIVE DENSITY (SPECIFIC GRAVITY) _____ @ _____ (°C)</p> <p>36 <input type="radio"/> NAME OF FLUID _____</p> <p>37 <input type="radio"/> SPECIFIC HEAT, Cp _____ (KJ/Kg°C)</p> <p>38 <input type="radio"/> VAPOR PRESSURE _____ (Kpa abs) @ _____ (°C)</p> <p>39 <input type="radio"/> HAZARDOUS <input type="radio"/> FLAMMABLE <input type="radio"/> OTHER _____</p> <p>40 <input type="checkbox"/> FLOW RATE MAX/MIN _____ / _____ (m³/h)</p> <p>41 <input type="checkbox"/> PRESSURE REQ'D MAX/MIN _____ / _____ (Kg/cm²)</p> <p>42 <input type="checkbox"/> TEMPERATURE REQ'D MAX/MIN _____ / _____ (°C)</p> <p>43 BARRIER/BUFFER FLUID</p> <p>44 <input type="radio"/> SUPPLY TEMPERATURE MAX/MIN _____ / _____ (°C)</p> <p>45 <input type="radio"/> RELATIVE DENSITY (SPECIFIC GRAVITY) _____ @ _____ (°C)</p> <p>46 <input type="radio"/> NAME OF FLUID _____</p> <p>47 ADDITIONAL REMARKS: _____</p> <p>48 _____</p> <p>49 _____</p> <p>50 _____</p> <p>51 _____</p>	<p>MECHANICAL SEAL OR PACKING (CONT)</p> <p><input type="radio"/> VAPOR PRESSURE _____ (Kg/cm²) _____ (°C)</p> <p><input type="radio"/> HAZARDOUS <input type="radio"/> FLAMMABLE <input type="radio"/> OTHER _____</p> <p><input type="checkbox"/> FLOW RATE MAX/MIN _____ / _____ (m³/h)</p> <p><input type="checkbox"/> PRESSURE REQ'D MAX/MIN _____ / _____ (Kg/cm²)</p> <p><input type="checkbox"/> TEMPERATURE REQ'D MAX/MIN _____ / _____ (°C)</p> <p>QUENCH FLUID:</p> <p><input type="radio"/> NAME FLUID _____</p> <p><input type="checkbox"/> FLOW RATE _____ (m³/h)</p> <p>SEAL FLUSH PIPING:</p> <p><input type="radio"/> SEAL FLUSH PIPING PLAN _____</p> <p><input checked="" type="checkbox"/> TUBING <input checked="" type="checkbox"/> CARBON STEEL</p> <p><input checked="" type="checkbox"/> PIPE <input checked="" type="checkbox"/> STAINLESS STEEL</p> <p><input type="radio"/> AUXILIARY FLUSH PLAN _____</p> <p><input checked="" type="checkbox"/> TUBING <input checked="" type="checkbox"/> CARBON STEEL</p> <p><input checked="" type="checkbox"/> PIPE <input checked="" type="checkbox"/> STAINLESS STEEL</p> <p><input type="radio"/> PIPING ASSEMBLY:</p> <p><input checked="" type="checkbox"/> THREADED <input checked="" type="checkbox"/> UNIONS <input type="checkbox"/> SOCKET WELDED</p> <p><input checked="" type="checkbox"/> FLANGED <input type="checkbox"/> TUBE TYPE FITTINGS</p> <p><input checked="" type="checkbox"/> PRESSURE SWITCH (PLAN 52/53) TYPE _____</p> <p><input type="radio"/> PRESSURE GAUGE (PLAN 52/53)</p> <p><input checked="" type="checkbox"/> LEVEL SWITCH (PLAN 52/53) TYPE _____</p> <p><input type="radio"/> LEVEL GAUGE (PLAN 52/53)</p> <p><input type="radio"/> TEMP INDICATOR (PLAN 21, 22, 23, 32, 41)</p> <p><input type="radio"/> HEAT EXCHANGER (PLAN 52/53)</p> <p>REMARKS: _____</p> <p>_____</p> <p>_____</p> <p>PACKING DATA:</p> <p>MANUFACTURER _____</p> <p>TYPE _____</p> <p>SIZE _____ No. OF RINGS _____</p> <p><input type="checkbox"/> PACKING INJECTION REQUIRED</p> <p><input type="checkbox"/> FLOW _____ (m³/h) @ _____ (°C)</p> <p><input type="checkbox"/> LANTERN RING _____</p> <p>STEAM AND COOLING WATER PIPING</p> <p><input type="radio"/> COOLING WATER PIPING PLAN _____</p> <p><input type="radio"/> COOLING WATER REQUIREMENTS</p> <p><input type="radio"/> SEAL JACKET/BRG HSG _____ (m³/h) @ _____ (Kg/cm²)</p> <p><input type="radio"/> SEAL HEAT EXCHANGER _____ (m³/h) @ _____ (Kg/cm²)</p> <p><input type="radio"/> QUENCH _____ (m³/h) @ _____ (Kg/cm²)</p> <p>TOTAL COOLING WATER _____ (m³/h)</p> <p><input type="radio"/> STEAM PIPING <input type="radio"/> TUBING <input type="radio"/> PIPE</p> <p>REMARKS: _____</p> <p>_____</p> <p>_____</p>
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<p>1 INSTRUMENTATION</p> <p>2 VIBRATION:</p> <p>3 <input type="radio"/> NON CONTACTING (API-670) <input type="radio"/> TRANSDUCER</p> <p>4 <input type="radio"/> PROVISION FOR MOUNTING ONLY</p> <p>5 <input checked="" type="radio"/> FLAT SURFACE REQ D</p> <p>6 <input type="radio"/> SEE ATTACHED API-670 DATA SHEET</p> <p>7 <input type="radio"/> MONITORS AND CABLES</p> <p>8 REMARKS: _____</p> <p>9 _____</p> <p>10 _____</p> <p>11 TEMPERATURE AND PRESSURE:</p> <p>12 <input type="radio"/> RADIAL BRG METAL TEMP <input type="radio"/> THRUST BRG METAL TEMP</p> <p>13 <input type="radio"/> PROVISION FOR INSTRUMENTS ONLY</p> <p>14 <input type="radio"/> SEE ATTACHED API-670 DATA SHEET</p> <p>15 <input type="radio"/> TEMP GAUGES (WITH THERMOWELLS)</p> <p>16 OTHER _____</p> <p>17 <input type="radio"/> PRESSURE GAUGE TYPE _____</p> <p>18 LOCATION _____</p> <p>19 REMARKS: _____</p> <p>20 _____</p> <p>21 _____</p>	<p>MOTOR DRIVE (CONT)</p> <p>REMARKS: _____</p> <p>_____</p> <p>_____</p> <p>SURFACE PREPARATION AND PART</p> <p><input checked="" type="radio"/> MANUFACTURER'S STANDARD</p> <p><input type="radio"/> OTHER (SEE BELOW)</p> <p>PUMP:</p> <p><input type="radio"/> PUMP SURFACE PREPARATION _____</p> <p><input type="radio"/> PRIMER _____</p> <p><input type="radio"/> FINISH COAT _____</p> <p>BASEPLATE:</p> <p><input type="radio"/> BASEPLATE SURFACE PREPARATION _____</p> <p><input type="radio"/> PRIMER _____</p> <p><input type="radio"/> FINISH COAT _____</p> <p>SHIPMENT:</p> <p><input type="radio"/> DOMESTIC <input type="radio"/> EXPORT <input checked="" type="radio"/> EXPORT BOXING REQUIRED</p> <p><input type="radio"/> OUTDOOR STORAGE MORE THAN 6 MONTHS</p> <p>SPARE ROTOR ASSEMBLY PACKAGED FOR:</p> <p><input type="radio"/> HORIZONTAL STORAGE <input type="radio"/> VERTICAL STORAGE</p> <p><input type="radio"/> TYPE OF SHIPPING PREPARATION _____</p> <p>REMARKS: _____</p> <p>_____</p> <p>_____</p>
<p>22 SPARE PARTS</p> <p>23 <input checked="" type="radio"/> START-UP <input type="radio"/> NORMAL MAINTENANCE</p> <p>24 <input checked="" type="radio"/> SPECIFY RECOMMENDED SPARES FOR 02 YEARS OPERATION</p> <p>25 TO BE NOTED SEPERATELY</p> <p>26 _____</p>	<p><input type="checkbox"/> WEIGHTS</p> <p>MOTOR DRIVEN:</p> <p>WEIGHT OF PUMP (Kg) _____</p> <p>WEIGHT OF BASEPLATE (Kg) _____</p> <p>WEIGHT OF MOTOR (Kg) _____</p> <p>WEIGHT OF GEAR (Kg) _____</p> <p>TOTAL WEIGHT (Kg) _____</p> <p>TURBINE DRIVEN:</p> <p>WEIGHT OF BASEPLATE (Kg) _____</p> <p>WEIGHT OF TURBINE (Kg) _____</p> <p>WEIGHT OF GEAR (Kg) _____</p> <p>TOTAL WEIGHT (Kg) _____</p> <p>REMARKS: _____</p> <p>_____</p> <p>_____</p>
<p>27 MOTOR DRIVE</p> <p>28 <input type="radio"/> MANUFACTURER ABB / WEG / SIEMENS / CMG</p> <p>29 <input type="checkbox"/> KW _____ (RPM) _____</p> <p>30 <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/> VERTICAL</p> <p>31 <input type="checkbox"/> FRAME _____</p> <p>32 <input type="radio"/> SERVICE FACTOR 1.1</p> <p>33 <input type="radio"/> VOLTS/PHASE/HERTZ 415 / 3 / 50</p> <p>34 <input type="radio"/> TYPE INDUCTION</p> <p>35 <input type="radio"/> ENCLOSURE TEFC</p> <p>36 <input type="radio"/> MINIMUM STARTING VOLTAGE _____</p> <p>37 <input type="radio"/> TEMPERATURE RISE _____</p> <p>38 <input type="radio"/> FULL LOAD AMPS _____</p> <p>39 <input type="radio"/> LOCKED ROTOR AMPS _____</p> <p>40 <input type="radio"/> INSULATION F</p> <p>41 <input type="radio"/> STARTING METHOD DOL</p> <p>42 <input type="radio"/> LUBE GREASE</p> <p>43 <input type="checkbox"/> VERTICAL THRUST CAPACITY _____</p> <p>44 UP _____ (N) DOWN _____ (N)</p> <p>45 BEARINGS (TYPE / NUMBER):</p> <p>46 <input type="checkbox"/> RADIAL _____ / _____</p> <p>47 <input type="checkbox"/> THRUST _____ / _____</p> <p>48 REMARKS: _____</p> <p>49 _____</p> <p>50 _____</p> <p>51 _____</p>	<p>OTHER PURCHASE REQUIREMENTS</p> <p><input type="radio"/> COORDINATION MEETING REQUIRED</p> <p><input type="radio"/> REVIEW FOUNDATION DRAWINGS</p> <p><input type="radio"/> REVIEW PIPING DRAWINGS</p> <p><input type="radio"/> OBSERVE PIPING CHECKS</p> <p><input type="radio"/> OBSERVE INITIAL ALIGNMENT CHECK</p> <p><input type="radio"/> CHECK ALIGNMENT AT OPERATING TEMPERATURE</p> <p><input type="radio"/> CONNECTION DESIGN APPROVAL</p>

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<p>1 OTHER PURCHASER REQUIRMENTS (CONT)</p> <p>2 <input type="checkbox"/> RIGGING DEVICE REQ'D FOR TYPE OH3 PUMP</p> <p>3 <input type="checkbox"/> HYDRODYNAMIC THRUST BRG SIZE REVIEW REQ'D</p> <p>4 <input checked="" type="checkbox"/> LATERL ANALYSIS REQUIRED</p> <p>5 <input checked="" type="checkbox"/> ROTOT DYNAMIC BALANCE</p> <p>6 <input checked="" type="checkbox"/> MOUNT SEAL RESERVOIR OFF BASEPLATE</p> <p>7 <input checked="" type="checkbox"/> INSTALLATION LIST IN PROPOSAL</p> <p>8 <input type="checkbox"/> SPARE ROTOR VERTICAL STORAGE</p> <p>9 <input type="checkbox"/> TORSIONAL ANALYSIS / REPORT</p> <p>10 <input type="checkbox"/> PROGRESS REPORTS REQUIRED</p> <p>11 REMARKS: _____</p> <p>12 _____</p> <p>13 _____</p>	<p>QA INPECTION AND TEST (CONT)</p> <p><input type="checkbox"/> ADDITIONAL INSPECTION REQUIRED FOR:</p> <p style="padding-left: 20px;"><input type="checkbox"/> MAGNETIC PARTICLE <input type="checkbox"/> LIQUID PENETRANT</p> <p style="padding-left: 20px;"><input type="checkbox"/> RADIOGRAPHIC <input type="checkbox"/> ULTRASONIC</p> <p><input type="checkbox"/> ALTERNATE ACCEPTANCE CRITERIA (SEE REMARKS)</p> <p><input type="checkbox"/> HARDNESS TEST REQUIRED FOR:</p> <p>_____</p> <p><input type="checkbox"/> WETTING AGENT HYDROSTEST</p> <p><input type="checkbox"/> VENDOR SUBMIT TEST PROCEDURES</p> <p><input type="checkbox"/> RECORD FINAL ASSEMBLY RUNNING CLEARANCES</p> <p><input type="checkbox"/> INSPECTION CHECK-LIST (APPENDIX N) _____</p> <p>REMARKS: _____</p> <p>_____</p>																																																																																																																
<p>14 QA INSPECTION AND TEST</p> <p>15 <input type="checkbox"/> REVIEW VENDORS QA PROGRAM</p> <p>16 <input checked="" type="checkbox"/> PERFORMANCE CURVE APPROVAL</p> <p>17 <input type="checkbox"/> SHOP INSPECTION</p> <p>18 <input checked="" type="checkbox"/> TEST WITH SUBTITUTE SEAL</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">TEST</th> <th style="width:15%;">NON-WIT</th> <th style="width:15%;">WIT</th> <th style="width:15%;">OBSERVED</th> </tr> </thead> <tbody> <tr> <td>20 HYDROSTATIC</td> <td style="text-align:center"><input checked="" type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> <tr> <td>21 PERFORMANCE</td> <td style="text-align:center"><input checked="" type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> <tr> <td>22 NPSH</td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> <tr> <td>23 COMPLETE UNIT TEST</td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> <tr> <td>24 SOUND LEVEL TEST</td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> <tr> <td>25 <input type="checkbox"/> CLEANLINESS PRIOR TO</td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> <tr> <td>26 FINAL ASSEMBLY</td> <td></td> <td></td> <td></td> </tr> <tr> <td>27 <input type="checkbox"/> NOZZLE LOAD TEST</td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> <tr> <td>28 <input type="checkbox"/> BRG HSG RESONANCE</td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> <tr> <td>29 TEST</td> <td></td> <td></td> <td></td> </tr> <tr> <td>30 <input type="checkbox"/> REMOVE / INSPECT</td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> <td style="text-align:center"><input type="checkbox"/></td> </tr> <tr> <td>31 HYDRODYNAMIC BEARINGS</td> <td></td> <td></td> <td></td> </tr> <tr> <td>32 AFTER RESR</td> <td></td> <td></td> <td></td> </tr> <tr> <td>33 <input type="checkbox"/> AUXILIARY EQUIPMENT</td> <td style="text-align:center"><input 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