Pump Vibration Service Report

Service Date: March 10, 2024
Service Technician: Alex Rodriguez
Customer Name: DEF Manufacturing Corp.
Customer Address: 789 Industrial Boulevard, Manufacturing City, USA
Contact Information: (555) 789-0123, alex.rodriguez@email.com
Pump Information:
- **Pump Type:** Horizontal Split Case Pump
- **Pump Serial Number:** HSC-345678
- **Pump Location:** Pump Room, DEF Manufacturing Corp.

Service Details:

1. Initial Assessment:

Upon arrival at the customer's facility, a thorough assessment of the pump experiencing vibration issues was conducted to identify the root cause. Key observations include:

- The pump, identified as a Horizontal Split Case Pump, was located in the Pump Room and was easily accessible for inspection.
- The pump's serial number HSC-345678 was verified.
- Visual inspection revealed noticeable vibrations, suspected to be associated with the suction piping.
- Further examination indicated that the pump's suction piping insulation was improperly installed, contributing to the vibration problem.

2. Vibration Analysis:

A comprehensive vibration analysis was performed to quantify and diagnose the pump's vibration issue. Key measurements and findings include:

- **Vibration Measurements:** Using vibration sensors, measurements indicated vibrations exceeding acceptable levels.
- **Frequency Analysis:** Frequency analysis pointed towards resonance within the system, primarily attributed to the insulation issue in the suction piping.

3. Corrective Actions:

To address the vibration issue emanating from the suction piping insulation, the following corrective actions were undertaken:

- **Suction Piping Insulation Rectification:** The improperly installed insulation was corrected to eliminate resonance issues. Proper insulation procedures were employed to minimize vibrations.

4. Equipment Calibration and Testing:

Following the correction, the pump underwent recalibration to ensure proper alignment and functionality. Tests performed include:

- **Vibration Reassessment:** Subsequent vibration measurements confirmed a reduction in vibration levels within acceptable limits.
- **Functional Test:** The pump was operated to validate the resolution of the vibration issue, ensuring optimal pump performance.

5. Documentation:

A detailed record of all service and repair activities was documented, including visual documentation, vibration analysis data, calibration records, and maintenance logs. This documentation will be provided to the customer for their records.

6. Customer Feedback and Approval:

The customer was briefed on the service outcomes and given the opportunity to inspect the pump. Satisfactory results were communicated, and customer approval was obtained.

7. Recommendations:

Based on the assessment and service, the following recommendations were provided to the customer:

- Regular monitoring of vibration levels to detect potential issues early.
- Periodic inspection of the insulation system to ensure sustained proper installation and prevent vibration-related problems.

8. Conclusion:

The pump's vibration issue, attributed to suction piping insulation concerns, has been successfully addressed. The customer expressed satisfaction with the service, and all relevant documentation was updated to reflect the service details and customer approval.

9. Customer Signature:

Customer Signature: _____
Date: _____

10. Service Technician Signature:

Technician Signature: Alex Rodriguez
Date: March 10, 2024