Overview
In the coming year, the American Petroleum Institute will be releasing a new standard around a specific piece of natural gas well equipment, called a Lubricator. As a result, Well Master must update existing products and processes so they follow all of the aspects of this new standard. In order to remain at the top of the market, it is vital that Well Masters’ products adhere to these standards.

Objectives
Our project will focus on auditing Well Master and its suppliers to the API specifications as well as evaluation of other processes for improvements that can be made. Based off these audits, we are to provide recommendations for the company that help to fulfil all aspects of the new standard. The three main areas of focus for this project include:
- Audit of Factory manufacturing and quality processes in Changzhou, China
- Audit of Assembly and Quality processes at Well Master Corporation Golden, CO
- Traceability of raw materials and processes performed

Approach
- Research and develop an understanding of current and previous API and ASME standards
- Develop audit checklists based off requirements of new API standard.
- Visit and audit assembly and quality processes at Well Master Corporation in Golden, CO
- Visit Audit factory manufacturing and quality processes in Changzhou, China
- Compare results and track down documentation/information missing from audit checklists
- Create an Inspection Testing Packet (ITP) and Documentation of Validated designs packet
- Develop documentation that “closes the gap” of what is required by the new standard
- Create SolidWorks model of a nameplate used to help guarantee traceability
- Fabricate multiple prototypes based off SolidWorks model for a nameplate
- Implement the use of an IPad and Data Management System for documentation storage and organization (Quip)

Outcomes
- Well Master will be able to use recommendations to finalize conformance with the new API standard.
- Using Quip, Well Master will be able to improve efficiency, organization, and guarantee efficiency
- Well Master will be able to finalize and implement the proposed nametag design for guaranteed traceability