



Steam Trap Case Study

BENEFITS:

- Eliminate excess steam usage
- Lower condensate load
- Process will remain heated
- Reduce water hammering
- Identify all safety issues

BACKGROUND:

The client is a leading producer of oil and gas in the U.S. They employ over 400 employees and is located on about 551 acres. Client is refining 131,000 barrels per day.



THE TASK:

To reduce the steam load, keep the processes heated and to evaluate all steam lines. Investigate why the condensate system is overheated.

RESULTS:

We identified multiple steam traps that were malfunctioning, also found multiple bypass valves that were bypassing the traps and going to the condensate system.

SOLUTION:

Locate and identify and test all steam traps by using ultrasonic, thermographic and visual inspection. Inspect the steam and condensate system during survey.

STEAM TRAP SURVEY

- Total Traps - 1,844
- Total PPH loss - 267,126
- Est. Annual \$ Loss - \$1,473,782

RECOMMENDATIONS:

For the client to implement a yearly steam trap survey into the preventative maintenance program to keep the steam and condensate load down. Investigate why bypass valves were open.

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