

CALIFORNIA REFINERY CLEANS UP WITH ISOCLEAN® CERTIFIED LUBRICANTS.



The Challenge

A long time Chevron refinery customer located in Northern California is served by Chevron Lubricant Marketer, SC Fuels. During a lubricant training session with the refinery's supervisors and maintenance team, the topic of particle induced contamination was discussed and the effects it can have on equipment wear. The refinery's maintenance team expressed concern that "contaminated oil" could be reducing the life of the lubricant and their compressor's life based on OEM recommendations. The maintenance team had recently collected some compressor oil samples and requested that the SC Fuels review to see if they could help identify and quantify the level of contamination.

Investigation and Site Assessment

Garrett Dodds from SC Fuels contacted Rob Richter and David Valencia from Chevron about the refinery's contamination concerns and the team immediately scheduled an RBL™ Best in Class Site Assessment with the refinery maintenance team. They identified the current compressor fluid had visible water contamination and the compressors were running at higher than normal temperatures. Steam was observed hitting some of the trico oilers and poor seals were quickly identified. Oil samples were collected from the primary lubricant products including a turbine oil ISO 32 and R&O Oil ISO 150. These samples were sent to an oil analysis lab. The results identified particle counts which were 5-10 times higher than the OEM required. The average ISO Cleanliness particle count was 19/17/13 and when compared to the OEM recommendation of 17/15/12, this was a factor of 1.5 times the life using the Noria Life Extension Tables for this application.

Solution – Start Clean & Stay Clean

To minimize the negative effects of contamination wear, SC Fuels implemented the Chevron ISOCLEAN Certified Lubricants Program. SC Fuels is now providing Chevron GST® 32 - ISOCLEAN® Certified and Chevron Regal® R&O 150 - ISOCLEAN Certified to an ISO Cleanliness code of 17/15/11 on every delivery. These new lubricants have helped the refinery meet their OEM requirements for performance, protection and cleanliness. To help the refinery maintain a stay-clean program while in operation, SC Fuels is working with the refinery to implement several Best in Class recommendations from the RBL Site Assessment which include a comprehensive oil analysis program, monitoring and testing for varnish on critical equipment, installing sample ports on critical equipment and training on proper sampling techniques and data interpretation.

Results – Extended Equipment Lifecycles and Improved System Performance

The team jointly identified areas for improvement including component repair, maintenance budget savings and possible effects on production increases. A few of the KPI's (key performance indicators) identified include an increase in compressor bearing life by 150% and a decrease in the overall maintenance budget of \$104,000. If full component life is achieved in the journal and pump bearings, the refinery could see another decrease in the maintenance budget.

**Contact us to learn more
about ISOCLEAN® Certified**

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