



Monthly Report

April, 1998

TOSCO Refinery at Rodeo Fenceline Monitor System


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5/27/98
Date

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FTIR System

Operation:

The North FTIR on stream efficiency was 92.8 percent with no weather related down time. Most of the down time was due to short duration lapses (1-2 acquisition periods).

The South FTIR on stream efficiency was 36.0 percent with no weather related down time. Most of the down time was due to maintenance, software failures, and diagnostics. Detector failure required the unit to be shutdown and sent to ETG for service on April 10. It was returned to on-line operation on April 28. Short duration lapses (1-2 acquisition periods) accounted for the remaining downtime.

Data:

The ambient gas QA compound results for the North Sensor show the mean Nitrous Oxide concentration was 0.24 ppm with a 0.023 ppm or 9.60 percent standard deviation, and the mean Methane concentration was 1.27 ppm with a 0.06 ppm or 4.93 percent standard deviation.

The ambient gas QA compound results for the South Sensor show the mean Nitrous Oxide concentration was 0.25 ppm with a 0.021 ppm or 8.25 percent standard deviation, and the mean Methane concentration was 1.46 ppm with a 0.109 ppm or 7.41 percent standard deviation.

Data summary reports are attached.

TDLS System

OPERATION:

All of the TDLS units have downtime reported due to a bug in the logging software. Data continued to be acquired but was not logged. None of the TDLS units experienced any hardware downtime.

DATA:

The data summary report is attached.

UV System

OPERATION:

Downtime for the UV systems was partially due to intermittent beam blocks. The susceptibility to beam block was decreased by careful alignment of the receiver units and changing of the source lamps in February. Potential improvements to the alignment mechanism are being evaluated.

South unit PUV-06 went into system fault condition and stopped logging data on March 23. Error files and system log files were sent to Sci-Tec for troubleshooting. The unit was back on-line on May 13.

North unit PUV-04 experienced a power supply failure causing the instrument to go into fault on the morning of April 14. The cause of this has been identified as an electrical short possibly resulting from condensation accumulating in the power supply box. This has been repaired in the field and the box made more weather resistant. The system was put back on-line the evening of May 21. The other UV power supplies will be checked for similar conditions.

DATA:

Data summary reports are attached.

VOC System

OPERATION:

All of the VOC units have downtime reported due to a bug in the logging software. Data continued to be acquired but was not logged. Other than this problem, all detectors except the E-3 Outfall detector (AT-4) were operational throughout the month. It (AT-4) required a new circuit board and was repaired on April 10.

DATA:

The data summary report is attached.