

# CEM - 2012 (Quarterly)

Chevron Canada Ltd.  
Permit: 0117 / Due Date: Jan 30 2012

| 19R - Fluid catalytic cracker (FCC) regenerator and waste heat boiler (WHB) |                         |
|---|-------------------------|
| <b>Nitrogen Oxides</b>  |                         |
| Test Date Range:  | October 1 - December 31 |
| Total Hours of Data Collected:  | 2205 hrs                |
| Permitted Flow Limit:   | 2450 m3/min             |
| Average Measured CEM Flow:  |                         |
| Contaminant Permit Limit Value:   | 860 kg/day              |
| Minimum Hourly Average Test Result:   | 290 kg/day              |
| Date/Time of Minimum Hourly Average Test Result:                            | Oct 24 2011             |
| Maximum Hourly Average Test Result:   | 754 kg/day              |
| Date/Time of Maximum Hourly Average Test Result:                            | Dec 05 2011             |
| Average of Test Results Over the Quarter:                                   | 508 kg/day              |
| 98th Percentile Value:  | 732 kg/day              |
| Data Recovery:  | 99.9 %                  |
| Comments:   |                         |
| <b>Opacity</b>  |                         |
| Test Date Range:  | October 1 - December 31 |
| Total Hours of Data Collected:  | 2208 hrs                |
| Permitted Flow Limit:   | 2450 m3/min             |
| Average Measured CEM Flow:  |                         |
| Contaminant Permit Limit Value:   | 20 %                    |
| Minimum Hourly Average Test Result:   | 2 %                     |
| Date/Time of Minimum Hourly Average Test Result:                            | Nov 17 2011             |
| Maximum Hourly Average Test Result:   | 13 %                    |
| Date/Time of Maximum Hourly Average Test Result:                            | Oct 25 2011             |
| Average of Test Results Over the Quarter:                                   | 7 %                     |
| 98th Percentile Value:  | 12 %                    |
| Data Recovery:  | 100 %                   |
| Comments:   |                         |
| <b>Sulphur Oxides</b>   |                         |
| Test Date Range:  | October 1 - December 31 |
| Total Hours of Data Collected:  | 2205 hrs                |
| Permitted Flow Limit:   | 2450 m3/min             |
| Average Measured CEM Flow:  |                         |
| Contaminant Permit Limit Value:   | 3000 kg/day             |
| Minimum Hourly Average Test Result:   | 460 kg/day              |
| Date/Time of Minimum Hourly Average Test Result:                            | Oct 24 2011             |
| Maximum Hourly Average Test Result:   | 1159 kg/day             |
| Date/Time of Maximum Hourly Average Test Result:                            | Nov 30 2011             |
| Average of Test Results Over the Quarter:                                   | 883 kg/day              |
| 98th Percentile Value:  | 1092 kg/day             |
| Data Recovery:  | 99.9 %                  |
| Comments:   |                         |