

Operator : Valero Energy Ltd

Installation Location : Pembroke Refinery, Pembroke, SA71 5SJ

Parameters: sulphur dioxide, oxides of nitrogen, dust (particulate matter) and carbon monoxide - (by discontinuous measurement)
(For use for 50 to >100 MW(th) LCP and for parallel test reporting for LPC of 100 or more MW(th))

| Discontinuous Monitoring for Sulphur Dioxide - H1 | | | | | | |
|---|-------------------------|--|--|--|---|---|
| Reference point | Date & Time of sampling | Flue gas flow rate (Nm ³ /hour) | Fuel or fuels used during sampling period, [include S content(s), mass flow rate(s)] | Measured concentration (mg/Nm ³) | Sampling method used (refer to standards) | CEMS result (where continuous monitor is in use) over sampling period (hourly mean) |
| A6 | 30/06/21 13:20 - 14:20 | 94935 | Fuel Gas. Flow = 3.61 te/hr, H2S = 0.5 ppm | 2,530 | Infra Red | |
| A12 | 20/01/21 13:00 - 14:00 | 85877 | Fuel Gas. Flow = 5.61 te/hr, H2S = 0.5 ppm | 10 | Infra Red | |

| Discontinuous Monitoring for Oxides of Nitrogen - H1 | | | | | | |
|--|-------------------------|--|--|--|---|---|
| Reference point | Date & Time of sampling | Flue gas flow rate (Nm ³ /hour) | Fuel or fuels used during sampling period, [include mass flow rate(s)] | Measured concentration (mg/Nm ³) | Sampling method used (refer to standards) | CEMS result (where continuous monitor is in use) over sampling period (hourly mean) |
| A6 | 30/06/21 13:20 - 14:20 | 94935 | Fuel Gas. Flow = 3.61 te/hr, H2S = 0.5 ppm | 226 | BS EN 14792 | |
| A12 | 20/01/21 13:00 - 14:00 | 85877 | Fuel Gas. Flow = 5.61 te/hr, H2S = 0.5 ppm | 128 | BS EN 14792 | |

| Discontinuous Monitoring for Particulate (Dust) - H1 | | | | | | |
|--|-------------------------|--|--|--|---|---|
| Reference point | Date & Time of sampling | Flue gas flow rate (Nm ³ /hour) | Fuel or fuels used during sampling period, [include mass flow rate(s)] | Measured concentration (mg/Nm ³) | Sampling method used (refer to standards) | CEMS result (where continuous monitor is in use) over sampling period (hourly mean) |
| A6 | 30/06/21 13:20 - 14:20 | 94935 | Fuel Gas. Flow = 3.61 te/hr, H2S = 0.5 ppm | 1.0 | BS EN 13284-1 | |
| A12 | 20/01/21 13:00 - 14:06 | 85877 | Fuel Gas. Flow = 5.61 te/hr, H2S = 0.5 ppm | 1.1 | BS EN 13284-1 | |

| Discontinuous Monitoring for Carbon Monoxide - H1 | | | | | | |
|---|-------------------------|--|--|--|---|---|
| Reference point | Date & Time of sampling | Flue gas flow rate (Nm ³ /hour) | Fuel or fuels used during sampling period, [include mass flow rate(s)] | Measured concentration (mg/Nm ³) | Sampling method used (refer to standards) | CEMS result (where continuous monitor is in use) over sampling period (hourly mean) |
| A6 | 30/06/21 13:20 - 14:20 | 94935 | Fuel Gas. Flow = 3.61 te/hr, H2S = 0.5 ppm | 6 | BS EN 15058 | |
| A12 | 20/01/21 13:00 - 14:00 | 85877 | Fuel Gas. Flow = 5.61 te/hr, H2S = 0.5 ppm | 4 | BS EN 15058 | |

Signed : RDLivockName : Richard Livock

On behalf of the Operator Valero Energy Ltd

Date : 23/07/2021