

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 - H2						
Reference point	Date & Time of sampling	Flue gas flow rate (Nm <sup>3</sup> /hour)	Fuel or fuels used during sampling period, [include S content(s), mass flow rate(s)]	Measured concentration (mg/Nm <sup>3</sup> )	Sampling method used (refer to standards)	CEMS result (where continuous monitor is in use) over sampling period (hourly mean)
A6	01/07/21 10:07 - 11:07	92535	Fuel Gas. Flow = 4.08 te/hr, H2S = 2.1 ppm	1,032	Infra Red	
A12	19/07/21 11:05 - 12:05	94301	Fuel Gas. Flow = 6.49 te/hr, H2S = 0.5 ppm	4	Infra Red	

Discontinuous Monitoring for Oxides of Nitrogen - H2						
Reference point	Date & Time of sampling	Flue gas flow rate (Nm <sup>3</sup> /hour)	Fuel or fuels used during sampling period, [include mass flow rate(s)]	Measured concentration (mg/Nm <sup>3</sup> )	Sampling method used (refer to standards)	CEMS result (where continuous monitor is in use) over sampling period (hourly mean)
A6	01/07/21 10:07 - 11:07	92535	Fuel Gas. Flow = 4.08 te/hr, H2S = 2.1 ppm	184	BS EN 14792	
A12	19/07/21 11:05 - 12:05	94301	Fuel Gas. Flow = 6.49 te/hr, H2S = 0.5 ppm	153	BS EN 14792	

Discontinuous Monitoring for Particulate (Dust) - H2						
Reference point	Date & Time of sampling	Flue gas flow rate (Nm <sup>3</sup> /hour)	Fuel or fuels used during sampling period, [include mass flow rate(s)]	Measured concentration (mg/Nm <sup>3</sup> )	Sampling method used (refer to standards)	CEMS result (where continuous monitor is in use) over sampling period (hourly mean)
A6	01/07/21 10:07 - 11:07	92535	Fuel Gas. Flow = 4.08 te/hr, H2S = 2.1 ppm	1.3	BS EN 13284-1	
A12	19/07/21 11:05 - 12:11	94301	Fuel Gas. Flow = 6.49 te/hr, H2S = 0.5 ppm	1.8	BS EN 13284-1	

Discontinuous Monitoring for Carbon Monoxide - H2						
Reference point	Date & Time of sampling	Flue gas flow rate (Nm <sup>3</sup> /hour)	Fuel or fuels used during sampling period, [include mass flow rate(s)]	Measured concentration (mg/Nm <sup>3</sup> )	Sampling method used (refer to standards)	CEMS result (where continuous monitor is in use) over sampling period (hourly mean)
A6	01/07/21 10:07 - 11:07	92535	Fuel Gas. Flow = 4.08 te/hr, H2S = 2.1 ppm	4	BS EN 15058	
A12	19/07/21 11:05 - 12:05	94301	Fuel Gas. Flow = 6.49 te/hr, H2S = 0.5 ppm	4	BS EN 15058	

Signed : RD LivockName : Richard Livock

On behalf of the Operator Valero Energy Ltd

Date : 06/01/2022