

FORM WATER ANNUAL: Emissions to controlled water (W1) - Annual samples.

Permit Number : EPR/YP3930EX
 Operator : Valero Energy Ltd
 Installation Location : Pembroke Refinery, Pembroke, SA71 5SJ
 Reporting Period : Annual 2021

Parameters: Hydrocarbon Oil Index, Total Nitrogen, COD, Suspended Solids, Phenol Index, Nickel, Vanadium, Lead, Total Mercury, Benzene, BTEX, Total Cadmium

Release Point	W1 discharge to Milford Haven Waterway	
Parameter	ELV (mg/l)	Annual average of daily samples (mg/l)
Hydrocarbon Oil Index	2.5	0.6
Total Nitrogen [as N]	25	8
COD	125	56
Suspended Solids	25	16

Release Point	W1 discharge to Milford Haven Waterway	
Parameter	ELV (mg/l)	Annual average of monthly samples (mg/l)
Phenol Index*	-	0.2

Release Point	W1 discharge to Milford Haven Waterway	
Parameter	ELV (µg/l)	Annual average of quarterly samples (µg/l)
Nickel	85	12
Lead	30	2
Mercury (Total Hg)	1	0.2
Cadmium (Total Cd)	8	0.3
Benzene	50	<1
Vanadium	-	0.5
Benzene, Toluene, Ethylbenzene, Xylene (BTEX)	-	<5

Signed : RD Livock
 Name : Richard Livock
 On behalf of the Operator Valero Energy Ltd
 Date : 12/01/2022