

Berth 103 Stage 2 Dredging - Water Pollutant Monitoring

Site **TB2 NW of OHDS**

Easting 307825

Northing 6183604

Parameter	Units	LOR	Baseline			Dredging												
			14/05/2015	20/05/2015	26/05/2015	23/06/2015	4/07/2015	10/07/2015	22/07/2015	29/07/2015	5/08/2015	8/10/2015	13/10/2015	20/10/2015	27/10/2015	3/11/2015	13/11/2015	20/11/2015
Metals																		
Aluminium	mg/L	0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Antimony	mg/L	0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	mg/L	0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	mg/L	0.0001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Chromium	mg/L	0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cobalt	mg/L	0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	mg/L	0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead	mg/L	0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	mg/L	0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Selenium	mg/L	0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.02	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Silver	mg/L	0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Vanadium	mg/L	0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Zinc	mg/L	0.005	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.005	0.092	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Iron	mg/L	0.05	<0.50	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	0.11	<0.50	<0.50	<0.10	<0.10	<0.10	<0.50
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Polynuclear Aromatic Hydrocarbons (PAHs)																		
Naphthalene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Phenanthrene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Anthracene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Fluoranthene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pyrene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chrysene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b+j)fluoranthene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibenz(a,h)anthracene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Sum of PAHs	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (zero)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Organotin Compounds																		
Tributyltin	ngSn/L	2	<2	<2	<2	<2	<2	<2	<2	<3	<2	<2	<2	<2	<3	<2	<2	<2

Berth 103 Stage 2 Dredging - Water Pollutant Monitoring

Site **TB5 Background N of Tug Berth Cut**

Easting 306795

Northing 6184439

Parameter	Units	LOR	Baseline			Dredging												
			14/05/2015	20/05/2015	26/05/2015	23/06/2015	4/07/2015	10/07/2015	22/07/2015	29/07/2015	5/08/2015	8/10/2015	13/10/2015	20/10/2015	27/10/2015	3/11/2015	13/11/2015	20/11/2015
Metals																		
Aluminium	mg/L	0.01	<0.10	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Antimony	mg/L	0.001	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	mg/L	0.001	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	0.003	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	mg/L	0.0001	<0.0010	<0.0001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Chromium	mg/L	0.001	<0.010	<0.001	<0.010	<0.010	<0.001	<0.001	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cobalt	mg/L	0.001	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	mg/L	0.001	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead	mg/L	0.001	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	mg/L	0.001	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Selenium	mg/L	0.01	<0.10	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	0.02	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Silver	mg/L	0.001	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.001	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Vanadium	mg/L	0.01	<0.10	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.01	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Zinc	mg/L	0.005	<0.050	<0.005	<0.050	<0.050	<0.050	<0.050	<0.050	<0.005	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Iron	mg/L	0.05	<0.50	<0.05	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.10	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10	<0.50
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Polynuclear Aromatic Hydrocarbons (PAHs)																		
Naphthalene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Phenanthrene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Anthracene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Fluoranthene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pyrene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chrysene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b+j)fluoranthene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibenz(a.h)anthracene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	µg/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Sum of PAHs	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (zero)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Organotin Compounds																		
Tributyltin	ngSn/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<3	<2