

Meydenbauer Bay Yacht Club Maintenance Dredging Evaluation
Validated Data

					Task	MBYC_2023	MBYC_2023	MBYC_2023
					Location ID	DU-1A-20230919	DU-2A-20230919	DU-3A-20230919
					Sample ID	DU-1A-20230919	DU-2A-20230919	DU-3A-20230918
					Sample Date	9/19/2023	9/19/2023	9/18/2023
					Depth	0 - 2 ft	0 - 1.8 ft	0 - 2.8 ft
					Sample Type	N	N	N
					Matrix	SE	SE	SE
					X			122.2074439
					Y			47.60810649
					DMMPSL2021	DMMPBT2021	DMMPML2021	
Conventional Parameters (mg/kg)								
Ammonia as nitrogen	SM4500NH3H					83.7	15	16.5
Sulfide	SM4500S2D					193 J	96.3 J	122 J
Conventional Parameters (pct)								
Total organic carbon	SW9060AM					17.4 J	13 J	16.4 J
Total solids	D2216					16.43	22.89	22.56
Total solids	SM2540G					14.04 J	24.37 J	22.99 J
Total volatile solids	PSEP-TV5					27.54 J	22.18 J	23.57 J
Grain Size (pct)								
Gravel	PSEP-PS					12.5	7.8	6
Gravel, very coarse	PSEP-PS					10.9	3.6	3.8
Gravel, coarse	PSEP-PS					0.3	0.8	0.4
Gravel, medium	PSEP-PS					1.3	3.4	1.8
Sand	PSEP-PS					25.5	56.3	34
Sand, very coarse	PSEP-PS					3.2	5	3.1
Sand, coarse	PSEP-PS					3.8	9.8	3.8
Sand, medium	PSEP-PS					5.1	25.1	12.3
Sand, fine	PSEP-PS					5.7	8.8	3.8
Sand, very fine	PSEP-PS					7.7	7.6	11
Silt	PSEP-PS					35.2	29.7	52.3
Silt, coarse	PSEP-PS					9.3	16.1	28.5
Silt, medium	PSEP-PS					11.2	0.1 U	3.1
Silt, fine	PSEP-PS					6.5	8.1	11.4
Silt, very fine	PSEP-PS					8.2	5.5	9.3
Clay	PSEP-PS					26.8	6.3	7.6
Clay, coarse	PSEP-PS					12.3	1.7	2.4
Clay, medium	PSEP-PS					8.1	1	1.1
Clay, fine	PSEP-PS					6.4	3.6	4.1
Metals (mg/kg)								
Antimony	SW6020	150		200		1.4 UJ	0.78 UJ	0.86 UJ
Arsenic	SW6020	57	507.1	700		17.9 J	15.5 J	14.9 J
Cadmium	SW6020	5.1		14		1.9	0.54	1.87
Chromium	SW6020	260				51.7	32.4	42.9
Copper	SW6020	390		1300		127 J	59.3 J	92.9 J
Lead	SW6020	450	975	1200		356	161	369
Mercury	SW7471B	0.41	1.5	2.3		0.438 J	0.132 J	0.361 J
Selenium	SW6020		3			3.5 U	1.95 U	2.14 U
Silver	SW6020	6.1		8.4		0.98 J	0.19 J	0.78 J
Zinc	SW6020	410		3800		523	258	473

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Volatile Organics (µg/kg)							
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11		270	20.9 U	15.5 U	14.5 U
Semivolatile Organics (µg/kg)							
1,2,4-Trichlorobenzene	SW8270ESIM	31		64	20.9 U	15.5 U	14.5 U
1,2-Dichlorobenzene	SW8270ESIM	35		110	20.9 U	15.5 U	14.5 U
1,4-Dichlorobenzene	SW8270ESIM	110		120	5.2 J	15.5 U	14.5 U
2,4-Dimethylphenol	SW8270ESIM	29		210	83.5 UJ	62.1 UJ	58 UJ
2-Methylphenol (o-Cresol)	SW8270E	63		77	83.5 UJ	62.1 UJ	58 UJ
4-Methylphenol (p-Cresol)	SW8270E	670		3600	79.8 J	62.1 UJ	58 UJ
Benzoic acid	SW8270E	650		760	182 J	621 UJ	580 UJ
Benzyl alcohol	SW8270E	57		870	83.5 U	62.1 U	58 U
Bis(2-ethylhexyl)phthalate	SW8270E	1300		8300	3080 J	1690 J	4010 J
Butylbenzyl phthalate	SW8270E	63		970	231	78.4	208
Diethyl phthalate	SW8270E	200		1200	209 U	155 U	145 U
Dimethyl phthalate	SW8270E	71		1400	83.5 U	62.1 U	58 U
Di-n-butyl phthalate	SW8270E	1400		5100	52.9 J	62.1 U	75
Di-n-octyl phthalate	SW8270E	6200		6200	80.9 J	68.1 J	58 UJ
Hexachlorobenzene	SW8270ESIM	22	168	230	20.9 U	15.5 U	14.5 U
n-Nitrosodiphenylamine	SW8270ESIM	28		130	20.9 U	15.5 U	14.5 U
Pentachlorophenol	SW8270E	400	504	690	417 U	311 U	290 U
Phenol	SW8270E	420		1200	41.6 J	28.1 J	33.5 J
Polycyclic Aromatic Hydrocarbons (µg/kg)							
1-Methylnaphthalene	SW8270E				83.5 U	24.9 J	44.8 J
2-Methylnaphthalene	SW8270E	670		1900	36 J	40 J	75.1
Acenaphthene	SW8270E	500		2000	323	185	1340
Acenaphthylene	SW8270E	560		1300	36.7 J	27.6 J	38.1 J
Anthracene	SW8270E	960		13000	454	448	912
Benzo(a)anthracene	SW8270E	1300		5100	2250	1860 J	3310
Benzo(a)pyrene	SW8270E	1600		3600	2910	2320 J	4060
Benzo(b,j,k)fluoranthenes	SW8270E				5340	4110	6580
Benzo(g,h,i)perylene	SW8270E	670		3200	1080	1020 J	1240
Carbazole	SW8270E				207	210	331
Chrysene	SW8270E	1400		21000	3710	2930 J	5130
Dibenzo(a,h)anthracene	SW8270E	230		1900	402	374 J	414
Dibenzofuran	SW8270E	540		1700	61.5 J	54.3 J	126
Fluoranthene	SW8270E	1700	4600	30000	5780	5800 J	10200
Fluorene	SW8270E	540		3600	67.1 J	103	209
Indeno(1,2,3-c,d)pyrene	SW8270E	600		4400	1150	1070	1390
Naphthalene	SW8270E	2100		2400	66.3 J	51.7 J	113
Phenanthrene	SW8270E	1500		21000	2910	3060 J	5270
Pyrene	SW8270E	2600	11980	16000	5000	4720 J	8870
Total Benzofluoranthenes (b,j,k) (U = 0)		3200		9900	5340	4110	6580
Total HPAH (DMMP) (U = 0)		12000		69000	28000	24000 J	41200
Total LPAH (DMMP) (U = 0)		5200		29000	3860 J	3880 J	7880 J
Pesticides (µg/kg)							
2,4'-DDD (o,p'-DDD)	SW8081B				208 U	136 U	181 U
2,4'-DDE (o,p'-DDE)	SW8081B				5.21 U	3.88 U	3.62 U
2,4'-DDT (o,p'-DDT)	SW8081B				5.21 U	3.88 U	3.62 U
4,4'-DDD (p,p'-DDD)	SW8081B	16			224 U	97.1 UJ	217 U

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4,4'-DDE (p,p'-DDE)	SW8081B	9			26.2	10.8	25.6
4,4'-DDT (p,p'-DDT)	SW8081B	12			5.21 U	3.88 U	181 U
Aldrin	SW8081B	9.5			2.6 U	1.94 U	1.81 U
Chlordane, alpha- (Chlordane, cis-)	SW8081B				2.6 U	1.94 U	1.81 U
Chlordane, beta- (Chlordane, trans-)	SW8081B				24.5	13.2 J	32.2
Dieldrin	SW8081B	1.9		1700	5.21 U	3.88 U	3.62 U
Endrin ketone	SW8081B				5.21 U	3.88 U	3.62 U
Heptachlor	SW8081B	1.5		270	2.6 U	1.94 U	1.81 U
Hexachlorocyclohexane (BHC), beta-	SW8081B				2.6 U	1.94 UJ	1.81 U
Nonachlor, cis-	SW8081B				208 U	69.9 U	149 U
Nonachlor, trans-	SW8081B				27.7	12.9	34.5
Oxychlordane	SW8081B				5.21 U	3.88 U	3.62 U
Sum 4,4 DDT, DDE, DDD (U = 0)			50	69	26.2	10.8 J	25.6
Total Chlordane (DMMP) (U = 0)		2.8	37		52.2	26.1 J	66.7
Dioxin Furans (ng/kg)							
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B				2.05	0.339 U	0.625 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B				11.9	6.17	10.2
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B				14.4	7.49	12.4
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B				55.9	27.2	53
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B				32.3	16.7	28.2
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B				1090	628	1150
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B				7540 J	4770 J	8920 J
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B				28.6	4.69 J	17.5
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B				58.2	27.3 J	47.6
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B				422	245	406
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B				2460	1510	2660
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B				11.5 J	6.01 J	8.13 J
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B				8.54	3.52	8.12
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B				9.33	4.12 J	9.03 J
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B				23.7	10.1	24.7
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B				21.2	10	22
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B				7.73	4.03	8.66
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B				19 J	6.82	12.9
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B				277	157	351
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B				17.6	11.7	22.4
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B				412	270	318
Total Tetrachlorodibenzofuran (TCDF)	E1613B				159	52.5	86.4
Total Pentachlorodibenzofuran (PeCDF)	E1613B				266	110 J	138
Total Hexachlorodibenzofuran (HxCDF)	E1613B				536	289	596
Total Heptachlorodibenzofuran (HpCDF)	E1613B				737	408	903
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2)		4	10		51.8 J	26 J	48.5 J
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0)		4	10		51.8 J	26 J	48.2 J
PCB Aroclors (µg/kg)							
Aroclor 1016	SW8082A				20.9 U	15.5 U	14.5 U
Aroclor 1221	SW8082A				20.9 U	15.5 U	14.5 U
Aroclor 1232	SW8082A				20.9 U	15.5 U	14.5 U
Aroclor 1242	SW8082A				20.9 U	15.5 U	14.5 U
Aroclor 1248	SW8082A				212	78.5 J	127 J
Aroclor 1254	SW8082A				305 J	159	133

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Aroclor 1260	SW8082A				130	86.5	95
Total DMMP PCB Aroclors (U = 0)		130		3100	650 J	324 J	355 J
PCB Aroclors (mg/kg-OC)							
Total DMMP PCB Aroclors (U = 0)			38		3.7 J	2.49 J	2.16 J

Notes:

Detected concentration is greater than DMMPSL2021 screening level

Detected concentration is greater than DMMPBT2021 screening level

Detected concentration is greater than DMMPML2021 screening level

Bold: Detected result

Calculated values have been rounded to laboratory-reported significant digits

J: Estimated value

U: Compound analyzed for, but not detected above detection limit

UJ: Compound analyzed for, but not detected above estimated detection limit