GEOTRACES IDP2017 v1 Discrete Sample Parameters

	Name	Units	Description
1	PRESSURE	dbar	Sample/sensor pressure
2	DEPTH	m	Sample/sensor depth
3	GEOTRACES Sample Number		GEOTRACES Sample Number
4	Cast Identifier		Cast Identifier
5	Sampling Device		Sampling Device
6	Bottle Number		Bottle Number
7	BODC Bottle Number		BODC Bottle Number
8	Bottle Flag		Bottle Flag
9	Firing Sequence		Firing Sequence
10	CTDTMP	deg C	Temperature from CTD sensor in the ITS-90 convention
11	CTDSAL		Practical salinity from CTD sensor on the PSS-1978 scale
12	SALINITY_D_CONC_BOTTLE		Practical salinity from bottle sample on the PSS-1978 scale
13	CFC-11_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved CFC-11
14	CFC-12_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved CFC-12
15	CFC113_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved CFC113
16	SF6_D_CONC_BOTTLE	fmol/kg	Concentration of dissolved SF6
17	He_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Helium
18	Ne_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Neon
19	Ar_D_CONC_BOTTLE	umol/kg	Concentration of Argon
20	Kr_D_CONC_BOTTLE	nmol/kg	Concentration of Krypton
21	Xe_D_CONC_BOTTLE	nmol/kg	Concentration of Xenon
22	OXYGEN_D_CONC_BOTTLE	umol/kg	Concentration of dissolved oxygen from a bottle sample
23	CTDOXY	umol/kg	Concentration of dissolved oxygen from sensor on CTD
24	PHOSPHATE_D_CONC_BOTTLE	umol/kg	Concentration of dissolved phosphate, samples may or may not have been filtered
25	PHOSPHATE_LL_D_CONC_BOTTLE	umol/kg	Concentration of low-level dissolved phosphate determined by long path length spectrophotometry using filtered seawater
26	SILICATE_D_CONC_BOTTLE SILICATE_D_CONC_BOTTLE	1	
20	SILICATE_D_CONC_BOTTLE	umol/kg	Concentration of dissolved silicate, samples may or may not have been filtered

27	NITRATE_D_CONC_BOTTLE	umol/kg	Concentration of dissolved NITRATE, samples may or may not have been filtered
21	NITRATE_D_CONC_BOTTLE	uilloi/kg	Concentration of low-level dissolved NITRATE determined by long path length spectrophotometry
28	NITRATE_LL_D_CONC_BOTTLE	umol/kg	using filtered seawater
29	NITRITE_D_CONC_BOTTLE	umol/kg	Concentration of dissolved NITRITE, samples may or may not have been filtered
			Concentration of low-level dissolved NITRITE determined by long path length spectrophotometry
30	NITRITE_LL_D_CONC_BOTTLE	umol/kg	using filtered seawater
31	NO2+NO3_D_CONC_BOTTLE	umol/kg	Concentration of dissolved NITRITE plus NITRATE, samples may or may not have been filtered
32	NH4_D_CONC_BOTTLE	umol/kg	Concentration of dissolved ammonium, samples may or may not have been filtered
33	TALK_D_CONC_BOTTLE	umol/kg	Concentration of total alkalinity
34	DIC_D_CONC_BOTTLE	umol/kg	Concentration of dissolved inorganic carbon
35	PH_SWS_BOTTLE		pH, referred to seawater scale
36	DOC_D_CONC_BOTTLE	umol/kg	Concentration of dissolved organic carbon
37	TN_T_CONC_BOTTLE	umol/kg	Concentration of total nitrogen (Kjeldahl)
			Atom ratio of dissolved C isotopes in dissolved inorganic carbon expressed in conventional delta
38	DIC_13_12_D_DELTA_BOTTLE	per mil	notation referenced to {PDB}
39	DIC_14_12_D_DELTA_BOTTLE	per mil	DELTA 14C (radiocarbon) of DIC
40	He_3_4_D_DELTA_BOTTLE	per mil	Delta 3He of dissolved He referenced to air
41	TRITIUM_D_CONC_BOTTLE	TU	Concentration of tritium
42	H2O_2_1_D_DELTA_BOTTLE	per mil	Atom ratio of hydrogen isotopes in water expressed in conventional DELTA notation referenced to {VSMOW}
43	H2O_18_16_D_DELTA_BOTTLE	per mil	Atom ratio of oxygen isotopes in water expressed in conventional DELTA notation referenced to {VSMOW}
44	NITRATE_15_14_D_DELTA_BOTTLE	per mil	Atom ratio of dissolved N isotopes in NITRATE expressed in conventional DELTA notation referenced to Air N2, samples may or may not have been filtered
			Atom ratio of dissolved silicic acid Si isotopes expressed in conventional DELTA notation
45	SILICATE_30_28_D_DELTA_BOTTLE	per mil	referenced to {NBS28}
46	SALINITY_D_CONC_PUMP		Practical salinity on the PSS-1978 scale
47	PHOSPHATE_D_CONC_PUMP	umol/kg	Concentration of dissolved phosphate in a water sample collected using a bottle attached to a pump, samples may or may not have been filtered
''		annow kg	Concentration of dissolved silicate in a water sample collected using a bottle attached to a pump,
48	SILICATE_D_CONC_PUMP	umol/kg	samples may or may not have been filtered
40	NITDATE D. CONC. DUMD	um al /l/a	Concentration of dissolved NITRATE in a water sample collected using a bottle attached to a pump,
49	NITRATE_D_CONC_PUMP	umol/kg	samples may or may not have been filtered Concentration of dissolved NITRITE in a water sample collected using a bottle attached to a pump,
50	NITRITE_D_CONC_PUMP	umol/kg	samples may or may not have been filtered
51	SALINITY_D_CONC_FISH		Practical salinity from a towed fish sample on the PSS-1978 scale
		umol/kg	

52	DUOCDUATE D CONC FIGU	um al /l/a	Concentration of dissolved phosphate, samples may or may not have been filtered
52	PHOSPHATE_D_CONC_FISH	umol/kg	Concentration of dissolved phosphate, samples may of may not have been intered Concentration of low-level dissolved phosphate determined by long path length
53	PHOSPHATE_LL_D_CONC_FISH	umol/kg	spectrophotometry using filtered seawater
54	SILICATE_D_CONC_FISH	umol/kg	Concentration of dissolved silicate, samples may or may not have been filtered
55	NITRATE_D_CONC_FISH	umol/kg	Concentration of dissolved NITRATE, samples may or may not have been filtered
56	NITRATE_LL_D_CONC_FISH	umol/kg	Concentration of low-level dissolved NITRATE determined by long path length spectrophotometry using filtered seawter
57	NITRITE_D_CONC_FISH	umol/kg	Concentration of dissolved NITRITE, samples may or may not have been filtered
58	NITRITE_LL_D_CONC_FISH	umol/kg	Concentration of low-level dissolved NITRITE determined by long path length spectrophotometry using filtered seawater
59	NO2+NO3_D_CONC_FISH	umol/kg	Concentration of dissolved NITRITE plus NITRATE, samples may or may not have been filtered
60	DOC_D_CONC_FISH	umol/kg	Concentration of dissolved organic carbon
61	SALINITY_D_CONC_UWAY		Practical salinity from a seawater sample collected using the ship's underway sampling system on the PSS-1978 scale
62	CFC-11_D_CONC_UWAY	pmol/kg	Concentration of dissolved CFC-11
63	CFC-12_D_CONC_UWAY	pmol/kg	Concentration of dissolved CFC-12
64	CFC113_D_CONC_UWAY	pmol/kg	Concentration of dissolved CFC113
65	SF6_D_CONC_UWAY	fmol/kg	Concentration of dissolved SF6
66	PHOSPHATE_D_CONC_UWAY	umol/kg	Concentration of dissolved phosphate, samples may or may not have been filtered
67	SILICATE_D_CONC_UWAY	umol/kg	Concentration of dissolved silicate, samples may or may not have been filtered
68	NITRATE_D_CONC_UWAY	umol/kg	Concentration of dissolved NITRATE, samples may or may not have been filtered
69	NITRITE_D_CONC_UWAY	umol/kg	Concentration of dissolved NITRITE, samples may or may not have been filtered
70	DOC_D_CONC_UWAY	umol/kg	Concentration of dissolved organic carbon
71	AI_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Al
72	Ba_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Ba
73	Cd_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Cd
74	Co_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Co (after UV oxidation)
75	Cu_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Cu
76	Fe_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Fe
77	Fe_II_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Fe(II)
78	Fe_S_CONC_BOTTLE	nmol/kg	Concentration of operationally defined soluble Fe (colloids excluded)
79	Ga_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Ga
80	Hf_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Hf

81	Hg_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Hg
82	I_D_CONC_BOTTLE	nmol/kg	Concentration of total dissolved lodine
83	I_V_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved lodate, iodine in the V oxidation state
84	Mn_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Mn, method may include Mn(II) plus Mn(III)
85	Mo_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Mo
86	Ni_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Ni
87	Pb_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Pb
	DI TO COMO DOTTI S		Concentration of total dissolvable Pb (dissolved plus reactive particulate phase that dissolves while
88	Pb_TD_CONC_BOTTLE	pmol/kg	stored acidified)
89	Ti_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Ti
90	U_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved U
91	V_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved V
92	Zn_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved Zn
93	Y_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Yttrium
94	La_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved La
95	Ce_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Ce
96	Pr_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Pr
97	Nd_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Nd
98	Sm_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Sm
99	Eu_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Eu
100	Gd_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Gd
101	Tb_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Tb
102	Dy_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Dy
103	Ho_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Ho
104	Er_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Er
105	Tm_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Tm
106	Yb_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Yb
107	Lu_D_CONC_BOTTLE	pmol/kg	Concentration of dissolved Lu
108	Nd_143_144_D_EPSILON_BOTTLE	per 10000	Atom ratio of dissolved Nd isotopes expressed in conventional EPSILON notation
109	Pb_206_204_D_RATIO_BOTTLE		Atom ratio of given isotopes for dissolved Pb referenced to {NBS981}
110	Pb_206_204_TD_RATIO_BOTTLE		Atom ratio of given isotopes of total dissolvable Pb isotopes referenced to {NBS981} (dissolved plus reactive particulate phase that dissolves while stored acidified)

111	DE 207 207 D DATIO DOTTIE		Atom votice of given instance for discolved Db referenced to (NDC001)
111	Pb_206_207_D_RATIO_BOTTLE		Atom ratio of given isotopes for dissolved Pb referenced to {NBS981} Atom ratio of given isotopes of total dissolvable Pb isotopes referenced to {NBS981} (dissolved
112	Pb_206_207_TD_RATIO_BOTTLE		plus reactive particulate phase that dissolves while stored acidified)
113	Pb_208_207_D_RATIO_BOTTLE		Atom ratio of given isotopes for dissolved Pb referenced to {NBS981}
			Atom ratio of given isotopes of total dissolvable Pb isotopes referenced to {NBS981} (dissolved
114	Pb_208_207_TD_RATIO_BOTTLE		plus reactive particulate phase that dissolves while stored acidified)
445	DI 007 004 TD DATIO DOTTIE		Atom ratio of given isotopes of total dissolvable Pb isotopes referenced to {NBS981} (dissolved
115	Pb_207_204_TD_RATIO_BOTTLE		plus reactive particulate phase that dissolves while stored acidified) Atom ratio of given isotopes of total dissolvable Pb isotopes referenced to {NBS981} (dissolved
116	Pb_208_204_TD_RATIO_BOTTLE		plus reactive particulate phase that dissolves while stored acidified)
1			Atom ratio of given isotopes of total (unfiltered, dissolved plus total particulate) Pb isotopes
117	Pb_208_206_TD_RATIO_BOTTLE		referenced to {NBS981}
			Atom ratio of dissolved Ba isotopes expressed in conventional DELTA notation referenced to {NIST
118	Ba_138_134_D_DELTA_BOTTLE	per mil	3104a}
119	Cd_114_110_D_DELTA_BOTTLE	per mil	Atom ratio of dissolved Cd isotopes expressed in conventional DELTA notation referenced to {NIST3108}
117	00_114_110_b_ble1/\(\frac{1}{2}\)b01112	permi	Atom ratio of dissolved Fe isotopes expressed in conventional DELTA notation referenced to
120	Fe_56_54_D_DELTA_BOTTLE	per mil	{IRMM-14}
			Atom ratio of dissolved Zn isotopes expressed in conventional DELTA notation referenced to
121	Zn_66_64_D_DELTA_BOTTLE	per mil	{Lyon-JMC}
122	Pa_231_D_CONC_BOTTLE	uBq/kg	Concentration (or activity) of dissolved 231Pa
123	Pb_210_D_CONC_BOTTLE	mBq/kg	Concentration (or activity) of dissolved 210Pb
124	Po_210_D_CONC_BOTTLE	mBq/kg	Concentration (or activity) of dissolved 210Po
125	Ra_224_D_CONC_BOTTLE	uBq/kg	Concentration (or activity) of dissolved 224Ra
126	Ra_226_T_CONC_BOTTLE	mBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 226Ra
127	Ra_226_D_CONC_BOTTLE	mBq/kg	Concentration (or activity) of dissolved 226Ra
128	Ra_228_T_CONC_BOTTLE	mBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 228Ra
129	Ra_228_D_CONC_BOTTLE	mBq/kg	Concentration (or activity) of dissolved 228Ra
130	Th_230_T_CONC_BOTTLE	uBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 230Th
131	Th_230_D_CONC_BOTTLE	uBq/kg	Concentration (or activity) of dissolved 230Th
132	Th_232_T_CONC_BOTTLE	pmol/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 232Th
133	Th_232_D_CONC_BOTTLE	pmol/kg	Concentration (or activity) of dissolved 232Th
134	Th_234_T_CONC_BOTTLE	mBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 234Th
135	Cs_137_D_CONC_BOTTLE	uBq/kg	Concentration (or activity) of dissolved 137Cs
136	Np_237_D_CONC_BOTTLE	uBq/kg	Concentration of dissolved 237Np

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137	Pu_239_D_CONC_BOTTLE	uBq/kg	Concentration of dissolved 239Pu
138	Pu_239_Pu_240_D_CONC_BOTTLE	uBq/kg	Concentration (or activity) of dissolved 239Pu+240Pu
139	Pu_240_D_CONC_BOTTLE	uBq/kg	Concentration of dissolved 240Pu
140	U_236_D_CONC_BOTTLE	atoms/kg	Concentration of dissolved 236U
141	U_236_T_CONC_BOTTLE	atoms/kg	Concentration of total (unfiltered, dissolved plus total particulate) 236U
142	Be_7_T_CONC_PUMP	uBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 7Be
143	Ra_223_D_CONC_PUMP	mBq/kg	Concentration (or activity) of dissolved 223Ra
144	Ra_224_D_CONC_PUMP	mBq/kg	Concentration (or activity) of dissolved 224Ra
145	Ra_226_D_CONC_PUMP	mBq/kg	Concentration (or activity) of dissolved 226Ra
146	Ra_228_T_CONC_PUMP	mBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 228Ra
147	Ra_228_D_CONC_PUMP	mBq/kg	Concentration (or activity) of dissolved 228Ra
148	Th_228_D_CONC_PUMP	uBq/kg	Concentration (or activity) of dissolved 228Th
149	Th_234_T_CONC_PUMP	uBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 234Th
150	AI_D_CONC_FISH	nmol/kg	Concentration of dissolved Al
151	Ba_D_CONC_FISH	nmol/kg	Concentration of dissolved Ba
152	Cd_D_CONC_FISH	nmol/kg	Concentration of dissolved Cd
153	Co_D_CONC_FISH	pmol/kg	Concentration of dissolved Co (after UV oxidation)
154	Cu_D_CONC_FISH	nmol/kg	Concentration of dissolved Cu
155	Fe_D_CONC_FISH	nmol/kg	Concentration of dissolved Fe
156	Fe_II_D_CONC_FISH	nmol/kg	Concentration of dissolved Fe(II)
157	Fe_S_CONC_FISH	nmol/kg	Concentration of operationally defined soluble Fe (colloids excluded)
158	Ga_D_CONC_FISH	pmol/kg	Concentration of dissolved Ga
159	Hf_D_CONC_FISH	pmol/kg	Concentration of dissolved Hf
160	Hg_D_CONC_FISH	pmol/kg	Concentration of dissolved Hg
161	Mn_D_CONC_FISH	nmol/kg	Concentration of dissolved Mn, method may include Mn(II) plus Mn(III)
162	Mo_D_CONC_FISH	nmol/kg	Concentration of dissolved Mo
163	Ni_D_CONC_FISH	nmol/kg	Concentration of dissolved Ni
164	Pb_D_CONC_FISH	pmol/kg	Concentration of dissolved Pb
165	Ti_D_CONC_FISH	pmol/kg	Concentration of dissolved Ti
166	V_D_CONC_FISH	nmol/kg	Concentration of dissolved V
167	Zn_D_CONC_FISH	nmol/kg	Concentration of dissolved Zn

168	Y_D_CONC_FISH	pmol/kg	Concentration of dissolved Yttrium
169	La_D_CONC_FISH	pmol/kg	Concentration of dissolved 1tt dam Concentration of dissolved La
170	Ce_D_CONC_FISH	pmol/kg	Concentration of dissolved La
171	Pr_D_CONC_FISH	pmol/kg	Concentration of dissolved oc
172	Nd_D_CONC_FISH	pmol/kg	Concentration of dissolved Nd
173	Sm_D_CONC_FISH	pmol/kg	Concentration of dissolved Na
174	Eu_D_CONC_FISH	pmol/kg	Concentration of dissolved 5111
175	Gd_D_CONC_FISH	pmol/kg	Concentration of dissolved Ed
176	Tb_D_CONC_FISH	pmol/kg	Concentration of dissolved Gu Concentration of dissolved Tb
177	Dy_D_CONC_FISH	pmol/kg	Concentration of dissolved TD Concentration of dissolved Dy
178	Ho_D_CONC_FISH	pmol/kg	Concentration of dissolved By Concentration of dissolved Ho
179	Er_D_CONC_FISH	pmol/kg	Concentration of dissolved Fr
180	Tm_D_CONC_FISH	pmol/kg	Concentration of dissolved I'm
181	Yb_D_CONC_FISH	pmol/kg	Concentration of dissolved Yb
182	Lu_D_CONC_FISH	pmol/kg	Concentration of dissolved Lu
183	Nd_143_144_D_EPSILON_FISH	per 10000	Atom ratio of dissolved Nd isotopes expressed in conventional EPSILON notation
184	Pb_206_204_D_RATIO_FISH	poi 10000	Atom ratio of given isotopes for dissolved Pb referenced to {NBS981}
10.			Atom ratio of given isotopes of total dissolvable Pb isotopes referenced to {NBS981} (dissolved
185	Pb_206_204_TD_RATIO_FISH		plus reactive particulate phase that dissolves while stored acidified)
186	Pb_206_207_D_RATIO_FISH		Atom ratio of given isotopes for dissolved Pb referenced to {NBS981}
187	Pb_206_207_TD_RATIO_FISH		Atom ratio of given isotopes of total dissolvable Pb isotopes referenced to {NBS981} (dissolved plus reactive particulate phase that dissolves while stored acidified)
188	Pb_208_207_D_RATIO_FISH		Atom ratio of given isotopes for dissolved Pb referenced to {NBS981}
	. ~		Atom ratio of given isotopes of total dissolvable Pb isotopes referenced to {NBS981} (dissolved
189	Pb_208_207_TD_RATIO_FISH		plus reactive particulate phase that dissolves while stored acidified)
190	Pb_207_204_TD_RATIO_FISH		Atom ratio of given isotopes of total dissolvable Pb isotopes referenced to {NBS981} (dissolved plus reactive particulate phase that dissolves while stored acidified)
170	TA_EGY_EG I_TB_IVIIIO_NON		Atom ratio of given isotopes of total dissolvable Pb isotopes referenced to {NBS981} (dissolved
191	Pb_208_204_TD_RATIO_FISH		plus reactive particulate phase that dissolves while stored acidified)
192	Pb_208_206_TD_RATIO_FISH		Atom ratio of given isotopes of total (unfiltered, dissolved plus total particulate) Pb isotopes referenced to {NBS981}
			Atom ratio of dissolved Cd isotopes expressed in conventional DELTA notation referenced to
193	Cd_114_110_D_DELTA_FISH	per mil	(NIST3108)
194	Fe_56_54_D_DELTA_FISH	per mil	Atom ratio of dissolved Fe isotopes expressed in conventional DELTA notation referenced to {IRMM-14}
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195	7n 44 44 D DELTA FISH	nor mil	Atom ratio of dissolved Zn isotopes expressed in conventional DELTA notation referenced to
196	Zn_66_64_D_DELTA_FISH Pa_231_D_CONC_FISH	per mil uBq/kg	{Lyon-JMC} Concentration (or activity) of dissolved 231Pa
197	Pb_210_D_CONC_FISH	mBq/kg	Concentration (or activity) of dissolved 2311 a
198	Po_210_D_CONC_FISH	mBq/kg	Concentration (or activity) of dissolved 210Po
199	Ra_226_T_CONC_FISH	mBq/kg	Concentration (or activity) of dissolved 21010 Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 226Ra
200	Ra_228_T_CONC_FISH	mBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 228Ra Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 228Ra
201	Th_230_D_CONC_FISH	uBq/kg	Concentration (or activity) of dissolved 230Th
202	Th_232_D_CONC_FISH	pmol/kg	Concentration (or activity) of dissolved 232Th
203	Th_234_T_CONC_FISH	mBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 234Th
204	U_236_D_CONC_FISH	atoms/kg	Concentration of dissolved 236U
205	Hf_D_CONC_UWAY	pmol/kg	Concentration of dissolved Hf
206	La_D_CONC_UWAY	pmol/kg	Concentration of dissolved La
207	Ce_D_CONC_UWAY	pmol/kg	Concentration of dissolved Ce
208	Pr_D_CONC_UWAY	pmol/kg	Concentration of dissolved Pr
209	Nd_D_CONC_UWAY	pmol/kg	Concentration of dissolved Nd
210	Sm_D_CONC_UWAY	pmol/kg	Concentration of dissolved Sm
211	Eu_D_CONC_UWAY	pmol/kg	Concentration of dissolved Eu
212	Gd_D_CONC_UWAY	pmol/kg	Concentration of dissolved Gd
213	Tb_D_CONC_UWAY	pmol/kg	Concentration of dissolved Tb
214	Dy_D_CONC_UWAY	pmol/kg	Concentration of dissolved Dy
215	Ho_D_CONC_UWAY	pmol/kg	Concentration of dissolved Ho
216	Er_D_CONC_UWAY	pmol/kg	Concentration of dissolved Er
217	Tm_D_CONC_UWAY	pmol/kg	Concentration of dissolved Tm
218	Yb_D_CONC_UWAY	pmol/kg	Concentration of dissolved Yb
219	Lu_D_CONC_UWAY	pmol/kg	Concentration of dissolved Lu
220	Nd_143_144_D_EPSILON_UWAY	per 10000	Atom ratio of dissolved Nd isotopes expressed in conventional EPSILON notation
221	Pa_231_D_CONC_UWAY	uBq/kg	Concentration (or activity) of dissolved 231Pa
222	Po_210_D_CONC_UWAY	mBq/kg	Concentration (or activity) of dissolved 210Po
223	Pb_210_D_CONC_UWAY	mBq/kg	Concentration (or activity) of dissolved 210Pb
224	Ra_224_D_CONC_UWAY	mBq/kg	Concentration (or activity) of dissolved 224Ra

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225	Ra_226_T_CONC_UWAY	mBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 226Ra
226	Ra_226_D_CONC_UWAY	mBq/kg	Concentration (or activity) of dissolved 226Ra
227	Ra_228_T_CONC_UWAY	mBq/kg	Concentration (or activity) of total (unfiltered, dissolved plus total particulate) 228Ra
228	Ra_228_D_CONC_UWAY	mBq/kg	Concentration (or activity) of dissolved 228Ra
229	Th_230_D_CONC_UWAY	uBq/kg	Concentration (or activity) of dissolved 230Th
230	Th_232_D_CONC_UWAY	pmol/kg	Concentration (or activity) of dissolved 232Th
231	Th_234_T_CONC_UWAY	mBq/kg	Concentration (or activity) of total 234Th
232	Cs_137_D_CONC_UWAY	uBq/kg	Concentration (or activity) of dissolved 137Cs
233	Pu_239_Pu_240_D_CONC_UWAY	uBq/kg	Concentration (or activity) of dissolved 239Pu+240Pu
234	L1Cu_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved L1 Cu-binding ligand
235	L1Cu_D_LogK_BOTTLE		Log of the conditional stability constant for binding of Cu by L1 Cu-binding ligand
236	L1Fe_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved L1 Fe-binding ligand
237	L1Fe_D_LogK_BOTTLE		Log of the conditional stability constant for binding of Fe by L1 Fe-binding ligand
238	L2Fe_D_CONC_BOTTLE	nmol/kg	Concentration of dissolved L2 Fe-binding ligand
239	L2Fe_D_LogK_BOTTLE		Log of the conditional stability constant for binding of Fe by L2 Fe-binding ligand
240	L1Cu_D_CONC_FISH	nmol/kg	Concentration of dissolved L1 Cu-binding ligand
241	L1Cu_D_LogK_FISH		Log of the conditional stability constant for binding of Cu by L1 Cu-binding ligand
242	L1Fe_D_CONC_FISH	nmol/kg	Concentration of the operationally-defined soluble L1 Fe-binding ligand (colloids excluded)
243	L1Fe_D_LogK_FISH		Log of the conditional stability constant for binding of Fe by the operationally-defined soluble L1 Fe-binding ligand (colloids excluded)
244	L2Fe_D_CONC_FISH	nmol/kg	Concentration of dissolved L2 Fe-binding ligand
245	L2Fe_D_LogK_FISH		Log of the conditional stability constant for binding of Fe by L2 Fe-binding ligand
246	Filtration_Volume	1	Sample volume (filtration)
247	P_TP_CONC_BOTTLE	nmol P/kg	Concentration of total particulate phosphorus determined by filtration from a water sampling bottle
248	P_TPL_CONC_BOTTLE	nmol P/kg	Concentration of labile particulate phosphorus determined by filtration from a water sampling bottle
249	AI_TP_CONC_BOTTLE	nmol/kg	Concentration of total particulate aluminium determined by filtration from a water sampling bottle
250	AI_TPL_CONC_BOTTLE	nmol/kg	Concentration of labile particulate aluminium determined by filtration from a water sampling bottle
251	AI_TPR_CONC_BOTTLE	nmol/kg	Concentration of refractory particulate aluminium determined by filtration from a water sampling bottle
252	Ba_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate barium determined by filtration from a water sampling bottle
232	DU_TI_OOTIO_DOTTEL	pinorky	or identification of total particulate barrain determined by intration from a water sampling bottle

050	D. TDI COMO DOTTI E	1.41	
253	Ba_TPL_CONC_BOTTLE	pmol/kg	Concentration of labile particulate barium determined by filtration from a water sampling bottle
254	Cd_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate cadmium determined by filtration from a water sampling bottle
255	Cd_TPL_CONC_BOTTLE	pmol/kg	Concentration of labile particulate cadmium determined by filtration from a water sampling bottle
257	C4 TDD COMC DOTTLE		Concentration of refractory particulate cadmium determined by filtration from a water sampling
256	Cd_TPR_CONC_BOTTLE	pmol/kg	bottle
257	Co_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate cobalt determined by filtration from a water sampling bottle
258	Co_TPL_CONC_BOTTLE	pmol/kg	Concentration of labile particulate cobalt determined by filtration from a water sampling bottle
259	Co_TPR_CONC_BOTTLE	pmol/kg	Concentration of refractory particulate cobalt determined by filtration from a water sampling bottle
260	Cr_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate chromium determined by filtration from a water sampling bottle
261	Cu_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate copper determined by filtration from a water sampling bottle
262	Cu_TPL_CONC_BOTTLE	pmol/kg	Concentration of labile particulate copper determined by filtration from a water sampling bottle
263	Fe_TP_CONC_BOTTLE	nmol/kg	Concentration of total particulate iron determined by filtration from a water sampling bottle
264	Fe_TPL_CONC_BOTTLE	nmol/kg	Concentration of labile particulate iron determined by filtration from a water sampling bottle
265	Fe_TPR_CONC_BOTTLE	nmol/kg	Concentration of refractory particulate iron determined by filtration from a water sampling bottle
266	Mn_TP_CONC_BOTTLE	nmol/kg	Concentration of total particulate manganese determined by filtration from a water sampling bottle
267	Mn_TPL_CONC_BOTTLE	nmol/kg	Concentration of labile particulate manganese determined by filtration from a water sampling bottle
268	Mn_TPR_CONC_BOTTLE	nmol/kg	Concentration of refractory particulate manganese determined by filtration from a water sampling bottle
269	Mo_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate molybdenum determined by filtration from a water sampling bottle
270	Mo TDL CONC DOTTLE	nmal/kg	Concentration of labile particulate molybdenum determined by filtration from a water sampling bottle
	Mo_TPL_CONC_BOTTLE	pmol/kg	
271	Ni_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate nickel determined by filtration from a water sampling bottle
272	Ni_TPL_CONC_BOTTLE	pmol/kg	Concentration of labile particulate nickel determined by filtration from a water sampling bottle Concentration of refractory particulate phosphorus determined by filtration from a water
273	P_TPR_CONC_BOTTLE	nmol/kg	sampling bottle
274	Pb_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate lead determined by filtration from a water sampling bottle
275	Pb_TPL_CONC_BOTTLE	pmol/kg	Concentration of labile particulate lead determined by filtration from a water sampling bottle
276	Sc_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate scandium determined by filtration from a water sampling bottle
277	Th_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate thorium determined by filtration from a water sampling bottle
278	Th_TPL_CONC_BOTTLE	pmol/kg	Concentration of labile particulate thorium determined by filtration from a water sampling bottle
279	Ti_TP_CONC_BOTTLE	nmol/kg	Concentration of total particulate titanium determined by filtration from a water sampling bottle

280	Ti_TPL_CONC_BOTTLE	nmol/kg	Concentration of labile particulate titanium determined by filtration from a water sampling bottle
200	TI_TE_CONC_BOTTLE	TilTiOi7 Kg	Concentration of rabine particulate transium determined by filtration from a water sampling Concentration of refractory particulate titanium determined by filtration from a water sampling
281	Ti_TPR_CONC_BOTTLE	nmol/kg	bottle
282	V_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate vanadium determined by filtration from a water sampling bottle
283	V_TPL_CONC_BOTTLE	pmol/kg	Concentration of labile particulate vanadium determined by filtration from a water sampling bottle
284	Zn_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate zinc determined by filtration from a water sampling bottle
285	Zn_TPL_CONC_BOTTLE	pmol/kg	Concentration of labile particulate zinc determined by filtration from a water sampling bottle
286	Y_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate yttrium determined by filtration from a water sampling bottle
287	La_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate lanthanum determined by filtration from a water sampling bottle
288	Ce_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate cerium determined by filtration from a water sampling bottle
289	Pr_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate praseodymium determined by filtration from a water sampling bottle
290	Nd_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate neodymium determined by filtration from a water sampling bottle
291	Sm_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate samarium determined by filtration from a water sampling bottle
292	Gd_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate gadolinium determined by filtration from a water sampling bottle
293	Tb_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate terbium determined by filtration from a water sampling bottle
294	Dy_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate dysprosium determined by filtration from a water sampling bottle
295	Ho_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate holmium determined by filtration from a water sampling bottle
296	Er_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate erbium determined by filtration from a water sampling bottle
297	Tm_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate thullium determined by filtration from a water sampling bottle
298	Yb_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate ytterbium determined by filtration from a water sampling bottle
299	Lu_TP_CONC_BOTTLE	pmol/kg	Concentration of total particulate lutetium determined by filtration from a water sampling bottle
300	Fe_56_54_TP_DELTA_BOTTLE	per mil	Atom ratio of total particulate Fe isotopes expressed in conventional DELTA notation determined by filtration from a water sampling bottle referenced to {IRMM-14}
301	Po_210_TP_CONC_BOTTLE	mBq/kg	Concentration of total particulate Po-210 determined by filtration from a water sampling bottle
302	Pb_210_TP_CONC_BOTTLE	mBq/kg	Concentration of total particulate Pb-210 determined by filtration from a water sampling bottle
303	PIC_LPT_CONC_PUMP	umol C/kg	Concentration of particulate inorganic carbon determined by in situ filtration (pump) collected on a prefilter (large particles)
304	PIC_SPT_CONC_PUMP	umol C/kg	Concentration of particulate inorganic carbon determined by in situ filtration (pump) collected on a main filter (small particles)

			Concentration of particulate organic carbon determined by in situ filtration (pump) collected on a
305	POC_LPT_CONC_PUMP	umol C/kg	prefilter (large particles)
303	TOO_LI T_OONO_I OWII	unioi o/kg	Concentration of particulate organic carbon determined by in situ filtration (pump) collected on a
306	POC_SPT_CONC_PUMP	umol C/kg	main filter (small particles)
	1 00_01 1_00110_1 01111	arrior or kg	Concentration of particulate nitrogen determined by in situ filtration (pump) collected on a
307	PN_LPT_CONC_PUMP	nmol N/kg	prefilter (large particles)
		·····e····	Concentration of particulate nitrogen determined by in situ filtration (pump) collected on a main
308	PN_SPT_CONC_PUMP	nmol N/kg	filter (small particles)
			Concentration of particulate biogenic silicon determined by in situ filtration (pump) without size
			fractionation, see metadata for assumed molecular composition (e.g., opal, calculated as 67.9 g
309	bSi_TP_CONC_PUMP	nmol Si/kg	opal/mole Si)
			Concentration of particulate biogenic silicon determined by in situ filtration (pump) collected on a
			prefilter (large particles), see metadata for assumed molecular composition (e.g., opal, calculated
310	bSi_LPT_CONC_PUMP	nmol Si/kg	as 67.9 g opal/mole Si)
			Concentration of particulate biogenic silicon determined by in situ filtration (pump) collected on a
			main filter (small particles), see metadata for assumed molecular composition (e.g., opal,
311	bSi_SPT_CONC_PUMP	nmol Si/kg	calculated as 67.9 g opal/mole Si)
			Concentration of particulate mass (dry weight) determined by in situ filtration (pump) collected
312	PARTICLEMASS_LPT_CONC_PUMP	ug/kg	on a prefilter (large particles)
		_	Concentration of particulate mass (dry weight) determined by in situ filtration (pump) collected
313	PARTICLEMASS_SPT_CONC_PUMP	ug/kg	on a main filter (small particles)
	A LDT GONG BUMB		Concentration of total particulate silver determined by in situ filtration (pump) collected on a
314	Ag_LPT_CONC_PUMP	pmol/kg	prefilter (large particles)
245	A - CDT COMC DUMD		Concentration of total particulate silver determined by in situ filtration (pump) collected on a main
315	Ag_SPT_CONC_PUMP	pmol/kg	filter (small particles) Concentration of total particulate aluminium determined by in situ filtration (pump) without size
316	AI_TP_CONC_PUMP	nmol/kg	fractionation
310	AI_IP_CONC_PUIVIP	TITTOT/Kg	Concentration of total particulate aluminium determined by in situ filtration (pump) collected on a
317	AI_LPT_CONC_PUMP	nmol/kg	prefilter (large particles)
317	AI_LI I_CONO_F UIVIF	TITTOT/ NY	Concentration of total particulate aluminium determined by in situ filtration (pump) collected on a
318	AI_SPT_CONC_PUMP	nmol/kg	main filter (small particles)
510	7.1_0. 1_00140_1 01411	innon kg	Concentration of total particulate barium determined by in situ filtration (pump) collected on a
319	Ba_LPT_CONC_PUMP	pmol/kg	prefilter (large particles)
317		p	Concentration of total particulate barium determined by in situ filtration (pump) collected on a
320	Ba_SPT_CONC_PUMP	pmol/kg	main filter (small particles)
		1	Concentration of total particulate cadmium determined by in situ filtration (pump) without size
321	Cd_TP_CONC_PUMP	pmol/kg	fractionation
	_ 		Concentration of total particulate cadmium determined by in situ filtration (pump) collected on a
322	Cd_LPT_CONC_PUMP	pmol/kg	prefilter (large particles)
	_		Concentration of total particulate cadmium determined by in situ filtration (pump) collected on a
323	Cd_SPT_CONC_PUMP	pmol/kg	main filter (small particles)
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			Concentration of total particulate cobalt determined by in situ filtration (pump) collected on a
324	Co_LPT_CONC_PUMP	pmol/kg	prefilter (large particles)
324	CO_LPT_CONC_POWP	pilioi/kg	Concentration of total particulate cobalt determined by in situ filtration (pump) collected on a
325	Co_SPT_CONC_PUMP	nmol/ka	main filter (small particles)
323	CO_3P1_CONC_POWP	pmol/kg	Concentration of total particulate copper determined by in situ filtration (pump) collected on a
326	CU LDT COMO DUMD	nmol/ka	prefilter (large particles)
320	Cu_LPT_CONC_PUMP	pmol/kg	Concentration of total particulate copper determined by in situ filtration (pump) collected on a
327	CH COT COMO DUMD	nmal/ka	main filter (small particles)
321	Cu_SPT_CONC_PUMP	pmol/kg	Concentration of total particulate iron determined by in situ filtration (pump) without size
328	EO TO CONC DUMD	nmol/ka	fractionation
328	Fe_TP_CONC_PUMP	nmol/kg	Concentration of total particulate iron determined by in situ filtration (pump) collected on a
329	FO LDT CONC DUMD	nmal/ka	prefilter (large particles)
329	Fe_LPT_CONC_PUMP	nmol/kg	Concentration of total particulate iron determined by in situ filtration (pump) collected on a main
330	Fo CDT CONC DUMP	nmal/ka	filter (small particles)
330	Fe_SPT_CONC_PUMP	nmol/kg	Concentration of total particulate gallium determined by in situ filtration (pump) without size
221	Co TD CONC DUMD	nmal/ka	fractionation
331	Ga_TP_CONC_PUMP	pmol/kg	Concentration of total particulate manganese determined by in situ filtration (pump) without size
332	Me TD CONC DIMD	nmal/ka	fractionation
332	Mn_TP_CONC_PUMP	nmol/kg	
333	Me LDT CONC DUMP	nmal/ka	Concentration of total particulate manganese determined by in situ filtration (pump) collected on
333	Mn_LPT_CONC_PUMP	nmol/kg	a prefilter (large particles) Concentration of total particulate manganese determined by in situ filtration (pump) collected on
334	Mp SDT CONC DUMD	nmol/ka	a main filter (small particles)
334	Mn_SPT_CONC_PUMP	nmol/kg	Concentration of total particulate molybdenum determined by in situ filtration (pump) without
335	Mo TD CONC DIMD	nmal/ka	size fractionation
333	Mo_TP_CONC_PUMP	pmol/kg	Concentration of total particulate nickel determined by in situ filtration (pump) without size
224	NI TO CONC DUMP	nmal/ka	fractionation
336	Ni_TP_CONC_PUMP	pmol/kg	Concentration of total particulate nickel determined by in situ filtration (pump) collected on a
337	NI LDT CONC DUMD	nmal/ka	
337	Ni_LPT_CONC_PUMP	pmol/kg	prefilter (large particles)
220	NI SDT CONC DUMD	nmol/kg	Concentration of total particulate nickel determined by in situ filtration (pump) collected on a main filter (small particles)
338	Ni_SPT_CONC_PUMP	pmol/kg	Concentration of total particulate phosphorus determined by in situ filtration (pump) without size
220	D TD CONC DUMD	nmol/kg	fractionation from particulate phosphorus determined by in situ filtration (pump) without size fractionation
339	P_TP_CONC_PUMP	nmol/kg	
240	D LDT CONC DUMD	nmol/kg	Concentration of total particulate phosphorus determined by in situ filtration (pump) collected on
340	P_LPT_CONC_PUMP	nmol/kg	a prefilter (large particles)
241	D CDT COMC DUMD	nmol/ka	Concentration of total particulate phosphorus determined by in situ filtration (pump) collected on
341	P_SPT_CONC_PUMP	nmol/kg	a main filter (small particles)
242	DE TO COMO DIMAD	n ma a l /l / m	Concentration of total particulate lead determined by in situ filtration (pump) without size
342	Pb_TP_CONC_PUMP	pmol/kg	fractionation
242	DE LOT COMO DUMD	n ma a l /l / m	Concentration of total particulate lead determined by in situ filtration (pump) collected on a
343	Pb_LPT_CONC_PUMP	pmol/kg	prefilter (large particles)

Pb_SPT_CONC_PUMP				Concentration of total particulate lead determined by in situ filtration (pump) collected on a main
Th_TP_CONC_PUMP Th_LPT_CONC_PUMP Th_SPT_CONC_PUMP Ti_LPT_CONC_PUMP Ti_LTT_LTT_LTT_LTT_LTT_LTT_LTT_LTT_LTT_L	344	Ph SPT CONC PLIMP	nmol/ka	
Th_TP_CONC_PUMP pmol/kg pmol/k	311	1 5_31 1_00110_1 01111	pinonkg	
Th_LPT_CONC_PUMP Th_SPT_CONC_PUMP Ti_SPT_CONC_PUMP Ti_SPT_CONC_	345	Th TP CONC PLIMP	pmol/kg	
Th_LPT_CONC_PUMP mol/kg mol/kg Th_SPT_CONC_PUMP mol/kg Ti_LPT_CONC_PUMP mol/kg main filter (sarge particles) Concentration of total particulate thorium determined by in situ filtration (pump) collected on a main filter (sarge particles) Concentration of total particulate titanium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate titanium determined by in situ filtration (pump) collected on a main filter (small particles) Concentration of total particulate uranium determined by in situ filtration (pump) without size fractionation of total particulate vanadium determined by in situ filtration (pump) without size fractionation of total particulate vanadium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate vanadium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate vanadium determined by in situ filtration (pump) collected on a main filter (small particulate vanadium determined by in situ filtration (pump) collected on a main filter (small particulate vanadium determined by in situ filtration (pump) collected on a main filter (small particulate vanadium determined by in situ filtration (pump) collected on a main filter (small particulate vanadium determined by in situ filtration (pump) collected on a main filter (small particulate vanadium determined by in situ filtration (pump) collected on a main filter (small particulate vanadium determined by in situ filtration (pump) collected on a main filter (small particulate vanadium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate particulate vanadium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of to	0.0	THE TO SHOEL SHAIL	prilowing	
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Ti_SPT_CONC_PUMP pmol/kg pmo	0.0	111 <u></u>	prilowing	
Ti_LPT_CONC_PUMP pmol/kg Ti_LPT_CONC_PUMP pmol/kg Ti_LPT_CONC_PUMP pmol/kg Ti_SPT_CONC_PUMP pmol/kg pmol/kg Ti_SPT_CONC_PUMP pmol/kg Ti_SPT_CONC_	347	Th SPT CONC PLIMP	pmol/kg	
Ti_EPT_CONC_PUMP pmol/kg pmol/kg pmol/kg pmol/kg Concentration of total particulate titanium determined by in situ filtration (pump) collected on a main filter (small particulate uranium determined by in situ filtration (pump) without size fractionation fr	<u> </u>		pe., ng	
Ti_SPT_CONC_PUMP Ti_SPT_CONC_	348	TI LPT CONC PUMP	pmol/ka	
349 Ti_PT_CONC_PUMP pmol/kg main filter (small particules)			ļg	
Concentration of total particulate uranium determined by in situ filtration (pump) without size fractionation	349	TI SPT CONC PUMP	pmol/ka	
350 U_TP_CONC_PUMP			1 3	
Concentration of total particulate vanadium determined by in situ filtration (pump) without size fractionation Touchet all particulate vanadium determined by in situ filtration (pump) without size fractionation Touchet all particulate vanadium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate vanadium determined by in situ filtration (pump) collected on a main filter (small particulate zinc determined by in situ filtration (pump) without size fractionation Concentration of total particulate zinc determined by in situ filtration (pump) without size fractionation Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a main filter (small particulate yttrium determined by in situ filtration (pump) collected on a main filter (small particulate neodymium determined by in situ filtration (pump) without size fractionation Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a profilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a profilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a profilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a profilter (large particles)	350	U TP CONC PUMP	pmol/ka	
351 V_TP_CONC_PUMP pmol/kg fractionation Concentration of total particulate vanadium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate vanadium determined by in situ filtration (pump) collected on a prefilter (large particles) Some pmol/kg pmol/k			The state of the s	
Concentration of total particulate vanadium determined by in situ filtration (pump) collected on a prefilter (large particles) V_SPT_CONC_PUMP pmol/kg Zn_TP_CONC_PUMP pmol/kg Zn_TP_CONC_PUMP pmol/kg Tractionation Concentration of total particulate zinc determined by in situ filtration (pump) without size fractionation Concentration of total particulate zinc determined by in situ filtration (pump) without size fractionation Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a main filter (small particles) Concentration of total particulate neodymium determined by in situ filtration (pump) without size fractionation Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles)	351	V TP CONC PUMP	pmol/kg	
STEAL PROONC_PUMP pmol/kg prefilter (large particles) Concentration of total particulate vanadium determined by in situ filtration (pump) collected on a main filter (small particulate zinc determined by in situ filtration (pump) without size fractionation pmol/kg pmol/kg pmol/kg fractionation Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a main filter (small particulate yttrium determined by in situ filtration (pump) collected on a main filter (small particulate) Concentration of total particulate neodymium determined by in situ filtration (pump) without size fractionation Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected				
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353 V_SPT_CONC_PUMP pmol/kg main filter (small particles) Concentration of total particulate zinc determined by in situ filtration (pump) without size fractionation STATE CONC_PUMP pmol/kg				
Concentration of total particulate zinc determined by in situ filtration (pump) without size 354 Zn_TP_CONC_PUMP pmol/kg fractionation Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a pmol/kg prefilter (large particles) Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a pmol/kg pmol/kg main filter (small particulate neodymium determined by in situ filtration (pump) without size Concentration of total particulate neodymium determined by in situ filtration (pump) without size pmol/kg fractionation Concentration of total particulate neodymium determined by in situ filtration (pump) collected on appel/kg aprefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on	353	V SPT CONC PUMP	pmol/kg	
354 Zn_TP_CONC_PUMP pmol/kg fractionation				
Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a main filter (small particles) Concentration of total particulate neodymium determined by in situ filtration (pump) without size Concentration of total particulate neodymium determined by in situ filtration (pump) without size fractionation Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on	354	Zn_TP_CONC_PUMP	pmol/kg	
355 Y_LPT_CONC_PUMP pmol/kg prefilter (large particles) 356 Y_SPT_CONC_PUMP pmol/kg fractionation 357 Nd_TP_CONC_PUMP pmol/kg particulate neodymium determined by in situ filtration (pump) collected on pmol/kg pmol/kg pmol/kg particulate neodymium determined by in situ filtration (pump) collected on pmol/kg				Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a
Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a main filter (small particulate) Concentration of total particulate neodymium determined by in situ filtration (pump) without size fractionation Concentration of total particulate neodymium determined by in situ filtration (pump) without size fractionation Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on	355	Y_LPT_CONC_PUMP	pmol/kg	
356 Y_SPT_CONC_PUMP pmol/kg main filter (small particles) 357 Nd_TP_CONC_PUMP pmol/kg fractionation 358 Nd_LPT_CONC_PUMP pmol/kg fractionation 358 Nd_LPT_CONC_PUMP pmol/kg fractionation concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in situ filtration (pump) collected on concentration of total particulate neodymium determined by in				Concentration of total particulate yttrium determined by in situ filtration (pump) collected on a
357 Nd_TP_CONC_PUMP pmol/kg fractionation Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on	356	Y_SPT_CONC_PUMP	pmol/kg	
Concentration of total particulate neodymium determined by in situ filtration (pump) collected on a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined by in situ filtration (pump) collected on Concentration of total particulate neodymium determined				Concentration of total particulate neodymium determined by in situ filtration (pump) without size
358 Nd_LPT_CONC_PUMP pmol/kg a prefilter (large particles) Concentration of total particulate neodymium determined by in situ filtration (pump) collected on	357	Nd_TP_CONC_PUMP	pmol/kg	fractionation
Concentration of total particulate neodymium determined by in situ filtration (pump) collected on				Concentration of total particulate neodymium determined by in situ filtration (pump) collected on
	358	Nd_LPT_CONC_PUMP	pmol/kg	
359 Nd SPT CONC PUMP pmol/kg a main filter (small particles)				
	359	Nd_SPT_CONC_PUMP	pmol/kg	a main filter (small particles)
Atom ratio of total particulate Nd isotopes expressed in conventional EPSILON notation				
360 Nd_143_144_TP_EPSILON_PUMP per 10000 determined by in situ filtration (pump) without size fractionation	360	Nd_143_144_TP_EPSILON_PUMP	per 10000	
Concentration of total particulate Pa-231 determined by in situ filtration (pump) without size				
361 Pa_231_TP_CONC_PUMP uBq/kg fractionation	361	Pa_231_TP_CONC_PUMP	uBq/kg	fractionation
Concentration of total particulate Pa-231 determined by in situ filtration (pump) collected on a				Concentration of total particulate Pa-231 determined by in situ filtration (pump) collected on a
362 Pa_231_SPT_CONC_PUMP uBq/kg main filter (small particles)	362	Pa_231_SPT_CONC_PUMP	uBq/kg	
Concentration of total particulate Th-228 determined by in situ filtration (pump) collected on a				Concentration of total particulate Th-228 determined by in situ filtration (pump) collected on a
363 Th_228_SPT_CONC_PUMP uBq/kg main filter (small particles)	363	Th_228_SPT_CONC_PUMP	uBq/kg	

		Concentration of total particulate Th-230 determined by in situ filtration (pump) without size
Th_230_TP_CONC_PUMP	uBq/kg	fractionation
		Concentration of total particulate Th-230 determined by in situ filtration (pump) collected on a
Th_230_SPT_CONC_PUMP	uBq/kg	main filter (small particles)
Th 232 TP CONC PLIMP	nmol/ka	Concentration of total particulate Th-232 determined by in situ filtration (pump) without size fractionation
111_232_11 _001\0_1 01\11	pinorky	Concentration of total particulate Th-232 determined by in situ filtration (pump) collected on a
Th_232_SPT_CONC_PUMP	pmol/kg	main filter (small particles)
		Concentration of total particulate Th-232 determined by in situ filtration (pump) collected on a pre
Th_232_LPT_CONC_PUMP	pmol/kg	filter (large particles)
Th_234_SPT_CONC_PUMP	mBq/kg	Concentration of total particulate Th-234 determined by in situ filtration (pump) collected on a main filter (small particles)
The 224 LDT COMO DUMD	D//	Concentration of total particulate Th-234 determined by in situ filtration (pump) collected on a pre
		filter (large particles)
		Concentration of total particulate phosphorus determined by towed fish without size fractionation
AI_TP_CONC_FISH	nmol/kg	Concentration of total particulate aluminium determined by towed fish without size fractionation
AI_TPL_CONC_FISH	nmol/kg	Concentration of labile particulate aluminum determined by towed fish without size fractionation
Ba_TP_CONC_FISH	pmol/kg	Concentration of total particulate barium determined by towed fish without size fractionation
Ba_TPL_CONC_FISH	pmol/kg	Concentration of labile particulate barium determined by towed fish without size fractionation
Cd_TP_CONC_FISH	pmol/kg	Concentration of total particulate cadmium determined by towed fish without size fractionation
Cd_TPL_CONC_FISH	pmol/kg	Concentration of labile particulate cadmium determined by towed fish without size fractionation
Co_TP_CONC_FISH	pmol/kg	Concentration of total particulate cobalt determined by towed fish without size fractionation
Co_TPL_CONC_FISH	pmol/kg	Concentration of labile particulate cobalt determined by towed fish without size fractionation
Cu_TP_CONC_FISH	pmol/kg	Concentration of total particulate copper determined by towed fish without size fractionation
Cu_TPL_CONC_FISH	pmol/kg	Concentration of labile particulate copper determined by towed fish without size fractionation
Fe_TP_CONC_FISH	nmol/kg	Concentration of total particulate iron determined by towed fish without size fractionation
Fe_TPL_CONC_FISH	nmol/kg	Concentration of labile particulate iron determined by towed fish without size fractionation
Mn_TP_CONC_FISH	nmol/kg	Concentration of total particulate manganese determined by towed fish without size fractionation
Mn_TPL_CONC_FISH	nmol/kg	Concentration of labile particulate manganese determined by towed fish without size fractionation
Ni_TP_CONC_FISH	pmol/kg	Concentration of total particulate nickel determined by towed fish without size fractionation
Ni_TPL_CONC_FISH	pmol/kg	Concentration of labile particulate nickel determined by towed fish without size fractionation
P_TPL_CONC_FISH	nmol/kg	Concentration of labile particulate phosphorus determined by towed fish without size fractionation
Pb_TP_CONC_FISH	pmol/kg	Concentration of total particulate lead determined by towed fish without size fractionation
	Th_230_SPT_CONC_PUMP Th_232_TP_CONC_PUMP Th_232_SPT_CONC_PUMP Th_234_SPT_CONC_PUMP Th_234_LPT_CONC_PUMP Th_234_LPT_CONC_PUMP P_TP_CONC_FISH Al_TP_CONC_FISH Al_TPL_CONC_FISH Ba_TP_CONC_FISH Cd_TP_CONC_FISH Cd_TP_CONC_FISH Cd_TPL_CONC_FISH Co_TPL_CONC_FISH Cu_TP_CONC_FISH Cu_TP_CONC_FISH Cu_TP_CONC_FISH Cu_TP_CONC_FISH Fe_TP_CONC_FISH Fe_TP_CONC_FISH Mn_TP_CONC_FISH Mn_TP_CONC_FISH Ni_TP_CONC_FISH Ni_TPL_CONC_FISH	Th_230_SPT_CONC_PUMP Th_232_TP_CONC_PUMP Th_232_SPT_CONC_PUMP Th_232_LPT_CONC_PUMP Th_234_SPT_CONC_PUMP Th_234_SPT_CONC_PUMP Th_234_LPT_CONC_PUMP Th_234_LPT_CONC_PUMP MBq/kg P_TP_CONC_FISH AI_TP_CONC_FISH AI_TP_CONC_FISH Ba_TP_CONC_FISH Ba_TP_CONC_FISH Cd_TP_CONC_FISH Cd_TP_CONC_FISH Cd_TP_CONC_FISH Cd_TP_CONC_FISH Cd_TP_CONC_FISH Cd_TP_CONC_FISH pmol/kg Cd_TP_CONC_FISH pmol/kg Cd_TP_CONC_FISH pmol/kg Cd_TP_CONC_FISH pmol/kg Cd_TP_CONC_FISH pmol/kg Cu_TP_CONC_FISH pmol/kg Cu_TP_CONC_FISH pmol/kg Fe_TP_CONC_FISH pmol/kg Fe_TP_CONC_FISH nmol/kg Mn_TP_CONC_FISH nmol/kg Mn_TP_CONC_FISH nmol/kg Mn_TP_CONC_FISH nmol/kg Mn_TP_CONC_FISH nmol/kg Ni_TP_CONC_FISH pmol/kg Ni_TP_CONC_FISH pmol/kg Ni_TP_CONC_FISH pmol/kg Ni_TP_CONC_FISH pmol/kg Ni_TPL_CONC_FISH pmol/kg

390	Pb_TPL_CONC_FISH	pmol/kg	Concentration of labile particulate lead determined by towed fish without size fractionation
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391	Th_TP_CONC_FISH	pmol/kg	Concentration of total particulate thorium determined by towed fish without size fractionation
392	Th_TPL_CONC_FISH	pmol/kg	Concentration of labile particulate thorium determined by towed fish without size fractionation
393	Ti_TP_CONC_FISH	pmol/kg	Concentration of total particulate titanium determined by towed fish without size fractionation
394	Ti_TPL_CONC_FISH	pmol/kg	Concentration of labile particulate titanium determined by towed fish without size fractionation
395	V_TP_CONC_FISH	pmol/kg	Concentration of total particulate vanadium determined by towed fish without size fractionation
396	V_TPL_CONC_FISH	pmol/kg	Concentration of labile particulate vanadium determined by towed fish without size fractionation
397	Zn_TP_CONC_FISH	pmol/kg	Concentration of total particulate zinc determined by towed fish without size fractionation
398	Zn_TPL_CONC_FISH	pmol/kg	Concentration of labile particulate zinc determined by towed fish without size fractionation
399	Y_TP_CONC_FISH	pmol/kg	Concentration of total particulate yttrium determined by towed fish without size fractionation
400	La_TP_CONC_FISH	pmol/kg	Concentration of total particulate lantanum determined by towed fish without size fractionation
401	D- 210 TD COMO HIMAY	D / L	Concentration of total particulate Po-210 determined by ship's underway seawater system
401	Po_210_TP_CONC_UWAY	mBq/kg	without size fractionation Concentration of total particulate Pb-210 determined by ship's underway seawater system
402	Pb_210_TP_CONC_UWAY	mBq/kg	without size fractionation
403	CHLA_FLUOR_TP_CONC_BOTTLE	ng/liter	Concentration of Chlorophyll a via fluorometric method without size fractionation of particles
404	PHAEO_FLUOR_TP_CONC_BOTTLE	ng/liter	Concentration of phaeopigments via fluorometric method without size fractionation of particles
405	Chl a_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Chlorophyll a measured using HPLC method
406	Chl b_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Chlorophyll b measured using HPLC method
407	Chl c3_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Chlorophyll c3 measured using HPLC method
408	Chl c TOT_HPLC_P_CONC_BOTTLE	ng/liter	sum of the concentrations of chl c1 + chl c2 + chl c3 when reported together
409	Chlide a_HPLC_P_CONC_BOTTLE	ng/liter	concentration of chlorophyllide a measured using HPLC method
410	DV chl a_HPLC_P_CONC_BOTTLE	ng/liter	concentration of divinyl chlorophyll a measured using HPLC method
411	Chl a-DV chla_HPLC_P_CONC_BOTTLE	ng/liter	concentration of chlorophyll a + divinyl chlorophyll a measured using HPLC method
412	Allo_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Alloxanthin measured using HPLC method
413	But fuco_HPLC_P_CONC_BOTTLE	ng/liter	concentration of 19' Butanoyloxyfucoxanthin measured using HPLC method
414	Alpha Car_HPLC_P_CONC_BOTTLE	ng/liter	concentration of alpha-Carotene measured using HPLC method
415	Beta Car_HPLC_P_CONC_BOTTLE	ng/liter	concentration of beta-Carotene measured using HPLC method
416	Diadino_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Diadinoxanthin measured using HPLC method
417	Diato_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Diatoxanthin measured using HPLC method
418	Fuco_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Fucoxanthin measured using HPLC method
419	Hex fuco_HPLC_P_CONC_BOTTLE	ng/liter	concentration of 19' hexanoyloxyfucoxanthin measured using HPLC method

420	Lut_HPLC_P_CONC_BOTTLE	ng/liter	concentration of lutein measured using HPLC method
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421	Perid_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Peridinin measured using HPLC method
422	Pras_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Prasinoxanthin measured using HPLC method
423	Viola_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Violaxanthin measured using HPLC method
424	Zea_HPLC_P_CONC_BOTTLE	ng/liter	concentration of Zeaxanthin measured using HPLC method
			Nickel-containing superoxide dismutase [Synechococcus WH8102 and Prochlorococcus]. The
425	DED VAAEAVI SMTV NISOD Drosva DUMD	fmol/liter	letters correspond to abbreviations while the numbers are unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for more information, including the sequence.
425	PEP_VAAEAVLSMTK_NiSOD_ProSyn_PUMP	Imornitei	Iron ABC transporter, substrate binding protein (IdiA) [Prochlorococcus marinus MIT 9515]. The
			letters correspond to abbreviations while the numbers are unique internal identifiers to
426	PEP_SPYNQSLVANQIVNK_IdiA_Pro_PUMP	fmol/liter	differentiate sequences. Refer to Table S3 (PDF) for more information, including the sequence.
120	1 E1 _31 114@3E4744@1444C_1617_1 10_1 0141	TITIOI/ ITCI	Flavodoxin [Prochlorococcus marinus MIT 9515]. The letters correspond to abbreviations while the
			numbers are unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for
427	PEP_LHNFISSAESPK_FId_Pro_PUMP	fmol/liter	more information, including the sequence.
			Flavodoxin [Prochlorococcus marinus MIT 9515]. The letters correspond to abbreviations while the
			numbers are unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for
428	PEP_AGADMVGYVDK_Fld_Pro_PUMP	fmol/liter	more information, including the sequence.
			Flavodoxin [Prochlorococcus marinus MIT 9515]. The letters correspond to abbreviations while the
400	DED THOUGHT TOU FILL D. DIMAR	6 1/11	numbers are unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for
429	PEP_TVGIYYATTTGK_FId_Pro_PUMP	fmol/liter	more information, including the sequence. Nitrogen Regulatory Protein P-II glnB glnK [Prochlorococcus]. The letters correspond to
			abbreviations while the numbers are unique internal identifiers to differentiate sequences. Refer
430	PEP_VNSVIDAIAEAAK_P-II-gInB-gInK_Pro_PUMP	fmol/liter	to Table S3 (PDF) for more information, including the sequence.
430	TEL_VIVOVIDAIALAAK_L-II-GIIID-GIIIK_LTO_LOIVII	TITIOI/TITCI	Nitrogen Regulatory Protein NtcA [Cyanobacteria]. The letters correspond to abbreviations while
			the numbers are unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for
431	PEP_LSHQAIAEAIGSTR_NtcA_Cyano_PUMP	fmol/liter	more information, including the sequence.
	,		Two Component Phosphate Regulator PhoP [Synechococcus WH8109] (45% Identity to Bacillus
			subtilis PY79 PhoP). The letters correspond to abbreviations while the numbers are unique internal
			identifiers to differentiate sequences. Refer to Table S3 (PDF) for more information, including the
432	PEP_SKLEDDPANPELILTAR_PhoP_Syn_PUMP	fmol/liter	sequence.
			Urea ABC transporter, substrate binding protein [Prochlorococcus marinus MIT 9215]. The letters
422	DED LIDODOVDVVCCVVTCACD Licoatrop Dec DUMAD	fmol/litor	correspond to abbreviations while the numbers are unique internal identifiers to differentiate
433	PEP_LIDQDGVPVVFGGWTSASR_UreaTran_Pro_PUMP	fmol/liter	sequences. Refer to Table S3 (PDF) for more information, including the sequence. Urea ABC transporter, substrate binding protein [Prochlorococcus marinus MIT 9215]. The letters
1			correspond to abbreviations while the numbers are unique internal identifiers to differentiate
434	PEP_VVGEDYLPLGNTEVAPIISK_UreaTran_Pro_PUMP	fmol/liter	sequences. Refer to Table S3 (PDF) for more information, including the sequence.
	- 1 - 1 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2		Urea ABC transporter [Prochlorococcus and Synechococcus]. The letters correspond to
			abbreviations while the numbers are unique internal identifiers to differentiate sequences. Refer
435	PEP_IEYIVEDGASDWPTFAEK_UreaTran_ProSyn_PUMP	fmol/liter	to Table S3 (PDF) for more information, including the sequence.

			Urease Alpha subunit UreC (Prochlorococcus). The letters correspond to abbreviations while the
			numbers are unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for
436	PEP_IPEDIAFAESR_UreC_Pro_PUMP	fmol/liter	more information, including the sequence.
			Urease UreG (Prochlorococcus). The letters correspond to abbreviations while the numbers are
			unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for more
437	PEP_VGVAGPVGSGK_UreG_Pro_PUMP	fmol/liter	information, including the sequence.
			sulfolipid (UDP-sulfoquinovose, multiple taxa). The letters correspond to abbreviations while the
420	DED EDVDCDVCTVIND LIDD outle guin ver tous DUMD	fra al /litar	numbers are unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for
438	PEP_FDYDGDYGTVLNR_UDP-sulfoquin_m-taxa_PUMP	fmol/liter	more information, including the sequence. sulfolipid (UDP-sulfoquinovose, Prochlorococcus). The letters correspond to abbreviations while
			the numbers are unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for
439	PEP_NEAVENDLIVDNK_UDP-sulfoquin_Pro_PUMP	fmol/liter	more information, including the sequence.
			Ammonium transporter [Prochlorococcus MIT9312]. The letters correspond to abbreviations while
			the numbers are unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for
440	PEP_EAYPDFASAK_NH4-transporter_Pro_PUMP	fmol/liter	more information, including the sequence.
			Glutamine synthetase, glutamateammonia ligase [Prochlorococcus marinus MIT 9215]. The
	DED EDOLINGA DANGA ATAWA OLA A DE DINAD	6 1/11	letters correspond to abbreviations while the numbers are unique internal identifiers to
441	PEP_FDSLINSADNVMTYK_Glut-synt_Pro_PUMP	fmol/liter	differentiate sequences. Refer to Table S3 (PDF) for more information, including the sequence.
			Glutamine synthetase, glutamateammonia ligase [Prochlorococcus marinus MIT 9215]. The letters correspond to abbreviations while the numbers are unique internal identifiers to
442	PEP_EGYFPVSPNDTAQDIR_Glut-synt_Pro_PUMP	fmol/liter	differentiate sequences. Refer to Table S3 (PDF) for more information, including the sequence.
	TELECTIVO NETICEDIA, COLOR SYNCETO E ONI	Titlow ittol	Glutamine synthetase, glutamateammonia ligase [Prochlorococcus and Synechococcus]. The
			letters correspond to abbreviations while the numbers are unique internal identifiers to
443	PEP_HAPSFLAFTNPTTNSYK_Glut-synt_ProSyn_PUMP	fmol/liter	differentiate sequences. Refer to Table S3 (PDF) for more information, including the sequence.
			sulfolipid (UDP-sulfoquinovose, Prochlorococcus). The letters correspond to abbreviations while
			the numbers are unique internal identifiers to differentiate sequences. Refer to Table S3 (PDF) for
444	PEP_VASLTGADINYLPNPR_UDP-sulfoquin_Pro_PUMP	fmol/liter	more information, including the sequence.
445	Chl a_HPLC_P_CONC_FISH	ng/liter	concentration of Chlorophyll a measured using HPLC method
446	Chl b_HPLC_P_CONC_FISH	ng/liter	concentration of Chlorophyll b measured using HPLC method
447	Chl c3_HPLC_P_CONC_FISH	ng/liter	concentration of Chlorophyll c3 measured using HPLC method
448	DV chl a_HPLC_P_CONC_FISH	ng/liter	concentration of divinyl chlorophyll a measured using HPLC method
449	Allo_HPLC_P_CONC_FISH	ng/liter	concentration of Alloxanthin measured using HPLC method
450	But fuco_HPLC_P_CONC_FISH	ng/liter	concentration of 19' Butanoyloxyfucoxanthin measured using HPLC method
451	Beta Car_HPLC_P_CONC_FISH	ng/liter	concentration of beta-Carotene measured using HPLC method
452	Diadino_HPLC_P_CONC_FISH	ng/liter	concentration of Diadinoxanthin measured using HPLC method
453	Fuco_HPLC_P_CONC_FISH	ng/liter	concentration of Fucoxanthin measured using HPLC method
454	Hex fuco_HPLC_P_CONC_FISH	ng/liter	concentration of 19' hexanoyloxyfucoxanthin measured using HPLC method

456	Perid_HPLC_P_CONC_FISH	ng/liter	concentration of Peridinin measured using HPLC method
457	Viola_HPLC_P_CONC_FISH	ng/liter	concentration of Violaxanthin measured using HPLC method
458	Zea_HPLC_P_CONC_FISH	ng/liter	concentration of Zeaxanthin measured using HPLC method