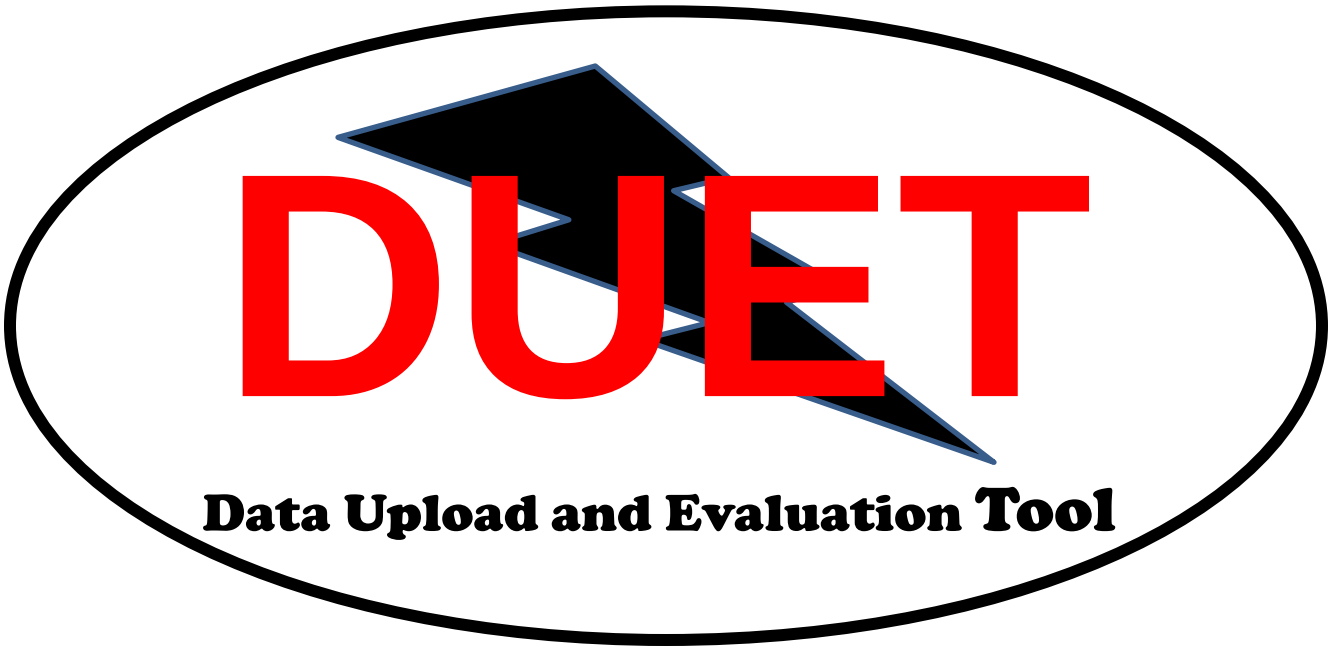

NONTIDAL

Data Submittal
Lookup Tables
(WQ_DATA & WQ_EVENT)

Version 3
6 February 2014
Mike Mallonee

WQ_DATA (WQ_DATA_BMDL same) Lookup Table Fields

- PROJECT (required = NTN)
- SOURCE (required)
- LAYER (required)
- SAMPLE_TYPE (required)
- SAMPLE_ID (required)
- PARAMETER (required)
- QUALIFIER (optional, as needed)
- UNITS (required)
- METHOD (required)
- LAB (optional, as needed)
- PROBLEM (optional, as needed)
- PRECISION_PC (optional, as needed)
- BIAS_PC (optional, as needed)

NOTE: New fields are identified by green text.

WQ_EVENT
Lookup Table Fields

- CRUISE (required, instructions to follow)
- SOURCE (required)
- AGENCY (required)
- PROGRAM (required = NTWQM)
- PROJECT (required = NTN)
- EVENT_TYPE (optional, but highly needed)
- EVENT_REMARK (optional, but highly needed)
- WIND SPEED (optional)
- WIND DIRECTION (optional)
- PRECIP TYPE (optional)
- CLOUD COVER (optional)

NOTE: New fields are identified by green text.

AGENCY Lookup Table

AGENCY	DESCRIPTION
CBL	UNIVERSITY OF MARYLAND CHESAPEAKE BIOLOGICAL LABORATORY
CBNERRS	CHESAPEAKE BAY NOAA NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM VA OFFICE
CBPO	CHESAPEAKE BAY PROGRAM OFFICE
CRL	EPA CENTRAL REGIONAL LABORATORY
DCDOH	DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH
DEDNREC	DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
ICPRB	INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN
IHDNSWC	INDIAN HEAD DIVISION NAVAL SURFACE WARFARE CENTER
MDDNR	MARYLAND DEPARTMENT OF NATURAL RESOURCES
MDE	MARYLAND DEPARTMENT OF THE ENVIRONMENT
MDHMH	MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE
NCBO	NOAA CHESAPEAKE BAY OFFICE
NCBO/NCPO	NOAA CHESAPEAKE BAY OFFICE/NOAA COASTAL PROGRAM OFFICE
NCPO	NOAA COASTAL PROGRAM OFFICE
NERRS	NOAA'S NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM
NFWF	NATIONAL FISH AND WILDLIFE FOUNDATION
ODU	OLD DOMINION UNIVERSITY
PADEP	PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SMCM	ST MARY'S COLLEGE OF MARYLAND
SRBC	SUSQUEHANNA RIVER BASIN COMMISSION
USGS	UNITED STATES GEOLOGICAL SURVEY
USGSWV	USGS WEST VIRGINIA WATER SCIENCE CENTER
VA/SWCB	VIRGINIA STATE WATER CONTROL BOARD
VADEQ	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
VIMS	VIRGINIA INSTITUTE OF MARINE SCIENCE

CLOUD_COVER Lookup Table

CLOUD_COVER	DESCRIPTION
0	CLEAR (0-10%)
1	SCATTERED TO PARTLY CLOUDY (10-50%)
2	PARTLY TO BROKEN (50-90%)
3	OVERCAST (>90%)
4	FOGGY
5	HAZY
6	CLOUD (NO PERCENTAGE)

EVENT_REMARK Lookup Table

EVENT_REMARK_ID	EVENT_REMARK	DESCRIPTION
1	NF	Normal flow sampling location used given conditions at sampling site
2	LF	Low flow sampling location used given conditions at normal sampling site
3	HF	High flow sampling location used given conditions at normal sampling site
4	AL	Alternate sampling location used given inaccessibility to normal sampling site

NOTE: Code “NF” is the default for this field, but it is not required to be populated.

EVENT_TYPE Lookup Table

EVENT_TYPE_ID	EVENT_TYPE	DESCRIPTION
1	R	Routine monthly fixed interval sample
2	RSI	Routine Storm Impacted monthly fixed interval sample
3	S	Storm sample
4	ONS	Other, not storm sample
5	OS	Other storm sample

LAB Lookup Table

LAB	DESCRIPTION
AMRL	OLD DOMINION UNIVERSITY APPLIED MARINE RESEARCH LABORATORY (THIS LAB BECAME THE ODU LAB IN MAY, 2000)
BPFL	BLUE PLAINS FIELD LABORATORY
CBL	UNIVERSITY OF MARYLAND CHESAPEAKE BIOLOGICAL LABORATORY
CRL	USEPA-CENTRAL REGIONAL LABORATORY (moved to FT Meade 1999)
ELB	DISTRICT OF COLUMBIA DEPT OF HEALTH ENVIRONMENTAL LABORATORY BRANCH AT EPA CRL
MDHMH	MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE
MDHMH-WM	MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE-WESTERN MARYLAND LAB
NYDEC	COLUMBIA ANALYTICAL SERVICES **(WILL BE UPDATED TO ALS)**
ODU	OLD DOMINION UNIVERSITY LABORATORY
OWML	OCCOQUAN WATERSHED MONITORING LABORATORY
PADEP	PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION LAB
SMRP	ST MARY'S RIVER PROJECT
SRBC	SUSQUEHANNA RIVER BASIN COMMISSION LAB
UMCES-AL	UNIVERSITY OF MARYLAND APPALACHIAN LABORATORY
USGS-KDSL	UNITED STATES GEOLOGICAL SURVEY KENTUCKY DISTRICT SEDIMENT LABORATORY
USGS-NWQL	UNITED STATES GEOLOGICAL SURVEY NATIONAL WATER QUALITY LABORATORY
~~**USGS-SED**~~	~~**USGS SEDIMENT LABORATORY IN KENTUCKY**~~
VADCLS	VIRGINIA DIVISION OF CONSOLIDATED LABORATORY SERVICES
VCU	VIRGINIA COMMONWEALTH UNIVERSITY
VIMS	VIRGINIA INSTITUTE OF MARINE SCIENCE

LAYER Lookup Table

LAYER_ID	LAYER	DESCRIPTION
1	AB	FIXED ABOVE BOTTOM
2	AP	ABOVE PYCNOCLINE
3	B	BOTTOM-MEASURED FROM SURFACE of water
4	BP	BELOW PYCNOCLINE
5	BS	SAMPLE TAKEN BELOW SURFACE-for CMON/DFLO only
6	I	Vertical portion of stream depth is represented in 1 (Avg) sample. Sampler fills down then up to surface.
7	M	MID-DEPTH
8	M1	MIDDLE 1/3 OF TOTAL STATION DEPTH
9	M2	MIDDLE 2/3 OF TOTAL STATION DEPTH
10	S	SURFACE-measure from surface to the sampling depth
11	VP	Vertical Profile-measurements taken at fixed depths by meter. Separate measurements taken. SWM program.
12	VH	Vert/Horiz portion of stream is represented in 1 average sample. NTN program.

METHOD Lookup Table

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
120	AS	L01	206.2	TOTAL ARSENIC ATOMIC ABSORPTION FURNACE TECHNIQUE
450	BATT	NA		BATTERY VOLTAGE
61	BIOSI	L01		PARTICULATE BIOGENIC SILICA
451	BOAT_SPEED	NA		BOAT_SPEED IN KNOTS
99	BOD20F	L01		20 DAY BOD; FILTERED
100	BOD20W	L01		20 DAY BOD; UNFILTERED
17	BOD5F	L01	405.1	5-DAY BIOCHEMICAL OXYGEN DEMAND (FILTERED)
23	BOD5W	L01	405.1	5-DAY BIOCHEMICAL OXYGEN DEMAND
115	CD	L01	200.7	TOTAL CADMIUM; ATOMIC EMISSION SPECTROMETRIC
452	CDOM_440	L01		DISSOLVED ORGANIC MATTER ABSORPTION COEFFICIENT (GELBSTOFF)
453	CDOM_SLOPE	L01		SLOPE OF CDOM ABSORPTION COEFFICIENT SPECTRUM (400 TO 500 NM)
74	CHL_A	L01	446.0	TRICHROMATIC CHLOROPHYLL A
85	CHL_B	L01	446.0	TRICHROMATIC CHLOROPHYLL B
90	CHL_C	L01	446.0	TRICHROMATIC CHLOROPHYLL C
438	CHLA	F01		FLUOROMETIC CHLOROPHYLL USING PROBE
108	CHLA	L01	446.0	MONOCHROMATIC; SPECTROPHOTOMETRIC
70	CHLA	L02		MONOCHROMATIC; SPECTROPHOTOMETRIC
69	CHLA	L03	445.0	FLUOROMETRIC; IN-VITRO CHLOROPHYLL A
123	CLW	L01	325.3	TITRIMETRIC; MERCURIC NITRATE
91	COD	L01	410.1	TITRIMETRIC; MID-LEVEL
92	COD	L02	410.3	TITRIMETRIC; HIGH LEVEL FOR SALINE WATERS
93	COD	L03	410.4	COLORIMETRIC; AUTOMATED OR MANUAL
116	CR	L01	200.7	TOTAL CHROMIUM; ATOMIC EMISSION SPECTROMETRIC
117	CU	L01	200.7	TOTAL COPPER; ATOMIC EMISSION SPECTROMETRIC
157	DIN	D01		DATABASE CALCULATED DIN - METHOD 1

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
158	DIN	D01A		DATABASE CALCULATED DIN - METHOD 1 – MDL
159	DIN	D01B		DATABASE CALCULATED DIN - METHOD 1 - 1/2 MDL
161	DIN	D01D		DATABASE CALCULATED DIN - METHOD 1
253	DIN	D02		DATABASE CALCULATED DIN - METHOD 2
254	DIN	D02A		DATABASE CALCULATED DIN - METHOD 2 – MDL
255	DIN	D02B		DATABASE CALCULATED DIN - METHOD 2 - 1/2 MDL
257	DIN	D02D		DATABASE CALCULATED DIN - METHOD 2
35	DO	F01	360.1	IN-SITU MEMBRANE ELECTRODE
36	DO	F02	360.1	DISSOLVED OXYGEN
37	DO	F03	360.2	DISSOLVED OXYGEN; MODIFIED WINKLER
470	DO	F04		IN-SITU DISSOLVED OXYGEN; OPTICAL DO PROBE
205	DO_SAT_M	D01		DATABASE CALCULATED DO_SAT = METHOD 1
94	DO_SAT_P	F01		DO RELATIVE TO THEORETICAL VALUE AT SATURATION (%)
42	DOC	L01		COMBUSTION INFRARED METHOD
73	DOC	L02		WET OXIDATION METHOD
80	DOC	L03		UV OR HEATED PERSULFATE OXIDATION
145	DON	D01		DATABASE CALCULATED DON - METHOD 1
146	DON	D01A		DATABASE CALCULATED DON - METHOD 1 – MDL
147	DON	D01B		DATABASE CALCULATED DON - METHOD 1 - 1/2 MDL
149	DON	D01D		DATABASE CALCULATED DON - METHOD 1
150	DON	D02		DATABASE CALCULATED DON - METHOD 2
151	DON	D02A		DATABASE CALCULATED DON - METHOD 2 – MDL
152	DON	D02B		DATABASE CALCULATED DON - METHOD 2 - 1/2 MDL
154	DON	D02D		DATABASE CALCULATED DON METHOD 2

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
155	DON	D03		DATABASE CALCULATED DON - METHOD 3
156	DON	D03A		DATABASE CALCULATED DON - METHOD 3 – MDL
231	DON	D03B		DATABASE CALCULATED DON - METHOD 3 - 1/2 MDL
233	DON	D03D		DATABASE CALCULATED DON - METHOD 3
163	DOP	D01		DATABASE CALCULATED DOP - METHOD 1
165	DOP	D01A		DATABASE CALCULATED DOP - METHOD 1 – MDL
164	DOP	D01B		DATABASE CALCULATED DOP - METHOD 1 - 1/2 MDL
220	DOP	D01D		DATABASE CALCULATED DOP - METHOD 1
104	EPAR_S	F01		EPAR AT SURFACE
88	EPARD_Z	F01		IN-SITU; SENSOR DOWN; UPWELLING PAR
103	EPARU_Z	F01		IN-SITU; SENSOR UP; DOWNWELLING PAR
19	FCOLI_C	L02		FECAL COLIFORM MEMBRANE FILTER; M-FC MEDIUM
18	FCOLI_M	L01		FECAL COLIFORM - EC MEDIUM; MPN
105	FCOLI_M	L03		DIRECT TEST; A-1 MEDIUM
87	FE_M	L01		TOTAL IRON; PHENANTHROLINE METHOD
114	FE_U	L02	200.7	TOTAL IRON; ATOMIC EMISSION SPECTROMETRIC
102	FLOW_AVG	F01		STREAMFLOW; MEAN DAILY
101	FLOW_INS	F01		STREAMFLOW; INSTANTANEOUS
469	FLUOR	NA		MARYLAND DNR FLUORESCENCE METHOD
449	FLUORESCENCE	NA		FLUORESCENCE
112	FS	L01	160.4	FIXED SOLIDS
31	FSS	L01	160.4	FIXED SUSPENDED SOLIDS
84	HARDNESS	L01	130.2	TITRIMETRIC; EDTA
62	HARDNESS	L02	130.1	COLORIMETRIC; AUTOMATED EDTA
122	HG	L01	245.2	TOTAL MERCURY; AUTOMATED COLD VAPOR TECHNIQUE
77	IBOD5F	L01		CARBONACEOUS BOD5; INHIBITED; FILTERED

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
78	IBOD5W	L01		CARBONACEOUS BOD5; INHIBITED; UNFILTERED
265	KD	D01		DATABASE CALCULATED KD - SAV 2 POINT METHOD
435	KD	F01		LIGHT ATTENUATION
468	MEASURED_DEPTH	NA		SHALLOW WATER MEASURED DEPTH METHOD
43	NH4F	L01	350.1, 349.0	COLORIMETRIC; AUTOMATED PHENATE (INDOPHENOL)
76	NH4F	L02		COLORIMETRIC; AUTO SALICYLATE-HYPOCHLORITE
20	NH4W	L01	350.1	COLORIMETRIC; AUTOMATED PHENATE (INDOPHENOL)
319	NO23F	C01A		CALCULATED BY ADDITION AT REGION VADEQ/NRO
124	NO23F	D01		DATABASE CALCULATED NO23F - METHOD 1
125	NO23F	D01A		DATABASE CALCULATED NO23F - METHOD 1 – MDL
126	NO23F	D01B		DATABASE CALCULATED NO23F - METHOD 1 - 1/2 MDL
222	NO23F	D01D		DATABASE CALCULATED NO23F - METHOD 1
46	NO23F	L01	353.2, 353.4	COLORIMETRIC; AUTOMATED CADMIUM REDUCTION
47	NO23F	L02	353.3	SPECTROPHOTOMETRIC; MANUAL CADMIUM REDUCTION
471	NO23F	L03	None	ENZYMATIC NITRATE METHOD
127	NO23W	D01		DATABASE CALCULATED NO23W
128	NO23W	D01A		DATABASE CALCULATED NO23W - METHOD 1 – MDL
129	NO23W	D01B		DATABASE CALCULATED NO23W - METHOD 1 - 1/2 MDL
224	NO23W	D01D		DATABASE CALCULATED NO23W - METHOD 1
22	NO23W	L01	353.2	COLORIMETRIC; AUTOMATED CADMIUM REDUCTION
27	NO23W	L02	353.3	MANUAL; SPECTROPHOTOMETRIC; CADMIUM REDUCTION
44	NO2F	L01	353.2, 353.4	AUTOMATED; COLORIMETRIC; DIAZOTIZATION
45	NO2F	L02	354.1	MANUAL; SPECTROPHOTOMETRIC; DIAZOTIZATION

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
21	NO2W	L01	353.2	AUTOMATED; COLORIMETRIC; DIAZOTIZATION
30	NO2W	L02	354.1	MANUAL; SPECTROPHOTOMETRIC; DIAZOTIZATION
110	NO3F	C01		CALCULATED NO3F (SUBMITTED TO CBPO)
225	NO3F	D01		DATABASE CALCULATED NO3F - METHOD 1
166	NO3F	D01A		DATABASE CALCULATED NO3F - METHOD 1 – MDL
167	NO3F	D01B		DATABASE CALCULATED NO3F - METHOD 1 - 1/2 MDL
226	NO3F	D01D		DATABASE CALCULATED NO3F - METHOD 1
95	NO3F	L01	300.0	NITRATE BY ION CHROMATOGRAPHY
227	NO3W	D01		DATABASE CALCULATED NO3W - METHOD 1
169	NO3W	D01A		DATABASE CALCULATED NO3W - METHOD 1 – MDL
170	NO3W	D01B		DATABASE CALCULATED NO3W - METHOD 1 - 1/2 MDL
228	NO3W	D01D		DATABASE CALCULATED NO3W - METHOD 1
436	ORP	F01		OXIDATION REDUCTION POTENTIAL
119	PB	L01	239.2	TOTAL LEAD; ATOMIC ABSORPTION; FURNACE TECHNIQUE
51	PC	L01	440.0	PARTICULATE CARBON (inorg+organic)
38	PH	F01	150.1	IN-SITU ELECTRODE METHOD
39	PH	F02	150.1	ELECTRODE METHOD
71	PHEO	L01	446.0	MONOCHROMATIC; SPECTROPHOTOMETRIC
72	PHEO	L02		MONOCHROMATIC; SPECTROPHOTOMETRIC
26	PHEO	L03	445.0	MONOCHROMATIC; FLUOROMETRIC
446	PIC	L01	440.0	PARTICULATE INORGANIC CARBON
64	PIP	L01		PARTICULATE INORGANIC PHOSPHORUS
52	PN	L01	440.0	PARTICULATE NITROGEN
48	PO4F	L01	365.1, 365.5	ORTHOPHOSPHATE; AUTOMATED; ASCORBIC ACID
49	PO4F	L02	365.2	ORTHO-P; MANUAL; ASCORBIC ACID; SINGLE REAGENT

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
50	PO4F	L03	365.3	ORTHOPHOSPHATE MANUAL; ASCORBIC ACID; TWO REAGENT
28	PO4W	L01	365.1, 365.5	ORTHOPHOSPHATE; AUTOMATED; ASCORBIC ACID
208	POC	D01		DATABASE CALCULATED POC - METHOD 1
175	POC	D01A		DATABASE CALCULATED POC - METHOD 1 – MDL
176	POC	D01B		DATABASE CALCULATED POC - METHOD 1 - 1/2 MDL
207	POC	D01D		DATABASE CALCULATED POC - METHOD 1
229	PON	D01		DATABASE CALCULATED PON - METHOD 1
178	PON	D01A		DATABASE CALCULATED PON - METHOD 1 – MDL
179	PON	D01B		DATABASE CALCULATED PON - METHOD 1 - 1/2 MDL
230	PON	D01D		DATABASE CALCULATED PON - METHOD 1
209	PP	D01		DATABASE CALCULATED PP - METHOD 1
210	PP	D01A		DATABASE CALCULATED PP - METHOD 1 - MDL
211	PP	D01B		DATABASE CALCULATED PP - METHOD 1 - 1/2 MDL
213	PP	D01D		DATABASE CALCULATED PP - METHOD 1
11	PP	L01		PARTICULATE PHOSPHORUS; SEMI-AUTOMATED; DIRECT
109	SALINITY	F01		IN-SITU MEASUREMENT WITH PROBE
67	SALINITY	F02		CALCULATED FROM SPCOND
75	SALINITY	F03		CALCULATED FROM SPCOND
68	SALINITY	F04		UNESCO '83 CALCULATION
121	SE	L01	270.2	TOTAL SELENIUM; ATOMIC ABSORPTION; FURNACE TECHNIQ
82	SECCHI	F01		20 CM SECCHI DEPTH
83	SECCHI	F02		30 CM SECCHI DEPTH
53	SIF	L01	366.0	COLORIMETRIC; AUTOMATED; MOLYBDENUM BLUE
12	SIF	L02	370.1	SPECTROPHOTOMETRIC; MANUAL; MOLYBDOSILICATE
54	SIF	L03		SILICA; ATOMIC ABSORPTION SPECTROMETRY; DIRECT

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
206	SIGMA_T	D01		DATABASE CALCULATED SIGMA_T - METHOD 1
25	SIW	L01	101	COLORIMETRIC; AUTOMATED; MOLYBDENUM BLUE
29	SIW	L02	370.1	SPECTROPHOTOMETRIC; MANUAL; MOLYBDOSILICATE
106	SO4F	L01	375.4	SULFATE; TURBIDIMETRIC METHOD
96	SO4F	L02	300.0	SULFATE BY ION CHROMATOGRAPHY
86	SO4F	L03	375.2	AUTOMATED COLORIMETRIC; METHYLTHYMOL BLUE
113	SO4W	L01	375.4	SULFATE; TURBIDIMETRIC METHOD
33	SPCOND	F01		IN-SITU SPECIFIC CONDUCTANCE AT 25 C
34	SPCOND	F02	120.1	SPECIFIC CONDUCTANCE AT 25 C - FIELD GRAB
462	SSC_%FINE	D01		PERCENT OF SUSPENDED SEDIMENT PARTICLES PASSING THROUGH 0.062 MM SIEVE
461	SSC_%SAND	D01		PERCENT OF SUSPENDED SEDIMENT PARTICLES RETAINED ON 0.062 MM SIEVE
458	SSC_FINE	L01		SUSPENDED SEDIMENT PARTICLES PASSING THROUGH A 0.062 MM SIEVE
459	SSC_FINE	L02		SUSPENDED SEDIMENT PARTICLES PASSING THROUGH A 0.062 MM SIEVE
456	SSC_SAND	L01		SUSPENDED SEDIMENT PARTICLES RETAINED ON A 0.062 MM SIEVE
457	SSC_SAND	L02		SUSPENDED SEDIMENT PARTICLES RETAINED ON A 0.062 MM SIEVE
460	SSC_TOTAL	D01		TOTAL SEDMENT
454	SSC_TOTAL	L01	NONE	GRAVIMETRIC FILTRATION METHOD; DRIED AT 90-105
455	SSC_TOTAL	L02	NONE	GRAVIMETRIC EVAPORATION METHOD; DRIED AT 90-105 DEGREES C
16	TALK	L01	310.1	ALKALINITY; TITRIMETRIC; pH 4.5
448	TCHL_PRE_CAL	F01		PRECALIBRATED FLUORESCENCE PROBE READING
89	TCOLI_C	L02		TOTAL COLIFORM MEMBRANE FILTER; M-FC MEDIUM
41	TCOLI_M	L01		STD. FERMENTATION TECHNIQUE (MPN)
181	TDN	D01		DATABASE CALCULATED TDN - METHOD 1
182	TDN	D01A		DATABASE CALCULATED TDN - METHOD 1 - MDL

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
183	TDN	D01B		DATABASE CALCULATED TDN - METHOD 1 - 1/2 MDL
185	TDN	D01D		DATABASE CALCULATED TDN - METHOD 1
260	TDN	D02		DATABASE CALCULATED TDN - METHOD 2
261	TDN	D02A		DATABASE CALCULATED TDN - METHOD 2 – MDL
262	TDN	D02B		DATABASE CALCULATED TDN - METHOD 2 - 1/2 MDL
264	TDN	D02D		DATABASE CALCULATED TDN - METHOD 2
55	TDN	L01		ALKALINE PERSULFATE WET OXIDATION + EPA 353.2 OR EPA 353.4
472	TDN	L02	NONE	ALKALINE PERSULFATE WET OXIDATION + ENZYME CATALYZED NITRATE REDUCTION
56	TDP	L01		ALKALINE PERSULFATE WET OXIDATION + EPA365.1OR EPA 365
59	TDP	L02		ALKALINE PERSULFATE WET OXIDATION + EPA 365.2
57	TDP	L03		ALKALINE PERSULFATE WET OXIDATION + EPA 365.3
32	TDP	L04	365.1	COLORIMETRIC; AUTOMATED; ASCORBIC ACID
79	TDP	L05	365.4	BLOCK DIGESTION;AUTOMATED ASCORBIC ACID
107	TDS	L01	160.1	TOT. DISSOLVED SOLIDS; GRAVIMETRIC; DRIED AT 180 C
13	TKNF	L01	351.1	TKN COLORIMETRIC; AUTOMATED PHENATE (INDOPHENOL)
60	TKNF	L02	351.2	SEMI-AUTOMATED BLOCK DIGESTOR; COLORIMETRIC; NITRO
58	TKNF	L03	351.3	COLORIMETRIC;NESSLER;TITRIMETRIC OR POTENTIOMETRIC
475	TKNW	D01		DATABASE CALCULATED TKNW - METHOD 1
477	TKNW	D01A		DATABASE CALCULATED TKNW - METHOD 1 – MDL
478	TKNW	D01B		DATABASE CALCULATED TKWN - METHOD 1 - 1/2 MDL
479	TKNW	D01D		DATABASE CALCULATED TKNW - METHOD 1
480	TKNW	D02		DATABASE CALCULATED TKNW - METHOD 2

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
481	TKNW	D02A		DATABASE CALCULATED TKWN - METHOD 2 – MDL
482	TKNW	D02B		DATABASE CALCULATED TKWN - METHOD 2- 1/2 MDL
483	TKNW	D02D		DATABASE CALCULATED TKNW - METHOD 2
1	TKNW	L01	351.1	TKN COLORIMETRIC; AUTOMATED PHENATE (INDOPHENOL)
2	TKNW	L02	351.2	SEMI-AUTOMATED BLOCK DIGESTOR; COLORIMETRIC; NITRO
3	TKNW	L03	351.3	COLORIMETRIC:NESSLER;TITRIMETIC OR POTENTIOMETRIC
130	TN	D01		DATABASE CALCULATED TN - METHOD 1
131	TN	D01A		DATABASE CALCULATED TN - METHOD 1 – MDL
132	TN	D01B		DATABASE CALCULATED TN - METHOD 1 - 1/2 MDL
134	TN	D01D		DATABASE CALCULATED TN - METHOD 1
135	TN	D02		DATABASE CALCULATED TN - METHOD 2
136	TN	D02A		DATABASE CALCULATED TN - METHOD 2 – MDL
137	TN	D02B		DATABASE CALCULATED TN - METHOD 2 - 1/2 MDL
139	TN	D02D		DATABASE CALCULATED TN - METHOD 2
140	TN	D03		DATABASE CALCULATED TN - METHOD 3
141	TN	D03A		DATABASE CALCULATED TN - METHOD 3 – MDL
142	TN	D03B		DATABASE CALCULATED TN - METHOD 3 - 1/2 MDL
144	TN	D03D		DATABASE CALCULATED TN - METHOD 3
235	TN	D04		DATABASE CALCULATED TN - METHOD 4
236	TN	D04A		DATABASE CALCULATED TN - METHOD 4 – MDL
237	TN	D04B		DATABASE CALCULATED TN - METHOD 4 - 1/2 MDL
239	TN	D04D		DATABASE CALCULATED TN - METHOD 4
465	TN	D05		DATABASE CALCULATED TN - METHOD 5

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
463	TN	D05A		DATABASE CALCULATED TN - METHOD 5
464	TN	D05B		DATABASE CALCULATED TN - METHOD 5
466	TN	D05D		DATABASE CALCULATED TN - METHOD 5
40	TN	L01		ALKALINE PERSULFATE DIGESTION + EPA METHOD 353.2
258	TOC	D01		DATABASE CALCULATED TOC - METHOD 1
187	TOC	D01A		DATABASE CALCULATED TOC - METHOD 1 – MDL
188	TOC	D01B		DATABASE CALCULATED TOC - METHOD 1 - 1/2 MDL
259	TOC	D01D		DATABASE CALCULATED TOC - METHOD 1
4	TOC	L01	415.1	COMBUSTION INFRARED METHOD
5	TOC	L02		WET OXIDATION METHOD
66	TOC	L03		UV OR HEATED PERSULFATE OXIDATION
190	TON	D01		DATABASE CALCULATED TON - METHOD 1
191	TON	D01A		DATABASE CALCULATED TON - METHOD 1 – MDL
192	TON	D01B		DATABASE CALCULATED TON - METHOD 1 - 1/2 MDL
194	TON	D01D		DATABASE CALCULATED TON - METHOD 1
195	TON	D02		DATABASE CALCULATED TON - METHOD 2
196	TON	D02A		DATABASE CALCULATED TON - METHOD 2 – MDL
197	TON	D02B		DATABASE CALCULATED TON - METHOD 2 - 1/2 MDL
199	TON	D02D		DATABASE CALCULATED TON - METHOD 2
200	TON	D03		DATABASE CALCULATED TON - METHOD 3
201	TON	D03A		DATABASE CALCULATED TON - METHOD 3 – MDL
246	TON	D03B		DATABASE CALCULATED TON - METHOD 3 - 1/2 MDL
248	TON	D03D		DATABASE CALCULATED TON - METHOD 3

METHOD_ID	PARAMETER	METHOD	EPA_METHOD	TITLE
467	TOTAL_DEPTH	NA		SHALLOW WATER TOTAL DEPTH METHOD
214	TP	D01		DATABASE CALCULATED TP - METHOD 1
215	TP	D01A		DATABASE CALCULATED TP - METHOD 1 – MDL
216	TP	D01B		DATABASE CALCULATED TP - METHOD 1 - 1/2 MDL
218	TP	D01D		DATABASE CALCULATED TP - METHOD 1
6	TP	L01	365.4	COLORIMETRIC; AUTOMATED; BLOCK DIGESTOR AAII
7	TP	L02	365.2	COLORIMETRIC; MANUAL;ASCORBIC ACID; SINGLE REAGENT
8	TP	L03	365.3	COLORIMETRIC; MANUAL;ASCORBIC ACID; TWO REAGENT
9	TP	L04	365.1	COLORIMETRIC; AUTOMATED; ASCORBIC ACID
474	TP	L05	365.1	ALKALINE PERSULFATE DIGESTION AND EPA 365.1
111	TS	L01	160.3	TOTAL SOLIDS DRIED AT 103-105 DEGREES
10	TSS	L01	160.2	GRAVIMETRIC; DRIED AT 103-105 C
434	TURB_FTU	L01		FORMAZIN TURBIDITY UNITS
24	TURB_JTU	L01		JACKSON TURBIDITY UNITS
437	TURB_NTU	F01	NONE	IN-SITU NEPHELOMETRIC (YSI 6136)
445	TURB_NTU	F02	NONE	IN-SITU NEPHELOMETRIC (YSI 6026)
14	TURB_NTU	L01	180.1	NEPHELOMETRIC
447	TURB_NTU	UNK	NONE	IN-SITU NEPHELOMETRIC-UNKNOWN YSI
98	VSS	L01	160.4	GRAVIMETRIC; IGNITION AT 550 C
63	WTEMP	F01	170.1	IN-SITU THERMISTOR
81	WTEMP	F02	170.1	THERMOMETRIC
118	ZN	L01	200.7	TOTAL ZINC; ATOMIC EMISSION SPECTROMETRIC
NEW	TURB_FNU	L01		
NEW	TURB_NTRU	L01		
NEW	HPO4F	L01		
NEW	ALKF	L01		
NEW	CLF	L01		

NOTE: New method codes are identified by green text. The rest of the fields will be populated when available.

PARAMETER Lookup Table

PARAMETER_ID	PARAMETER	UNIT	STORET_CODE	USGS_CODE	DESCRIPTION
1	AG	UG/L	01077	P01077	TOTAL SILVER
2	AS	UG/L	01252		TOTAL ARSENIC
125	BATT	VOLTS			BATTERY VOLTAGE
3	BIOSI	MG/L	49574		BIOGENIC SILICA
126	BOAT_SPEED	KNOTS			BOAT SPEED IN KNOTS
4	BOD20F	MG/L			20-DAY BIOCHEMICAL OXYGEN DEMAND (FILTERED SAMPLE)
5	BOD20W	MG/L	00324	P324	20-DAY BIOCHEMICAL OXYGEN DEMAND (WHOLE SAMPLE)
6	BOD5F	MG/L			5-DAY BIOCHEMICAL OXYGEN DEMAND (FILTERED SAMPLE)
7	BOD5W	MG/L	00310	P310	WHOLE 5-DAY BIOCHEMICAL OXYGEN DEMAND
8	CAF	MG/L	00915	P915	DISSOLVED CALCIUM AS CA
9	CD	UG/L	01027	P1027	TOTAL CADMIUM
142	CDOM_440	1/M			ABSORPTION DUE TO DISSOLVED ORGANIC MATTER
143	CDOM_SLOPE	1/NM			SLOPE OF CDOM ABSORPTION COEFFICIENT SPECTRUM (400-500 NM)
10	CHL_B	MG/L	32231	P32231	CHLOROPHYLL B
11	CHL_C	MG/L	32232	P32232	CHLOROPHYLL C
12	CHLA	UG/L	32211	P32211	ACTIVE CHLOROPHYLL-A
13	CLW	MG/L	00940	P940	TOTAL CHLORIDE
14	COD	MG/L			CHEMICAL OXYGEN DEMAND
16	CR	UG/L	01034	P01034	TOTAL CHROMIUM
17	CU	UG/L	01042	P01042	TOTAL COPPER
18	DIN	MG/L			DISSOLVED INORGANIC NITROGEN

PARAMETER_ID	PARAMETER	UNIT	STORET_CODE	USGS_CODE	DESCRIPTION
19	DO	MG/L	00300	P300	DISSOLVED OXYGEN IN MG/L
20	DO_SAT_M	MG/L			DO SATURATION CONCENTRATION IN MG/L
21	DO_SAT_P	PCT		P301?	DO SATURATION USING PROBE UNITS IN PERCENT
22	DOC	MG/L	00681	P681	DISSOLVED ORGANIC CARBON
23	DON	MG/L	00607	P607	DISSOLVED ORGANIC NITROGEN
24	DOP	MG/L	00673	P673	DISSOLVED ORGANIC PHOSPHORUS
25	EPAR_S	UM/M**2/S			PAR MEASURED IN AIR OR ON DECK
26	EPARD_Z	UM/M**2/S			PAR WITH SENSOR POINTING DOWN; MEASURES UPWELLING
27	EPARU_Z	UM/M**2/S			PAR WITH SENSOR POINTED UP; MEASURES DOWNWELLING
28	FCOLI_C	COL/100 ML	31616	P31616	FECAL COLIFORMS (COLONIES)
29	FCOLI_M	MPN/100 ML	31615	P31615	FECAL COLIFORMS (MOST PROBABLE NUMBER)
171	FDS	MG/L			FIXED DISSOLVED SOLIDS;IGNITED AT 550 C
30	FE_M	MG/L			TOTAL IRON
31	FE_U	UG/L	01045	P01045	TOTAL IRON
32	FLOW_AVG	CFS	00060	P60	STREAM FLOW; MEAN DAILY
33	FLOW_INS	CFS	00061	P61	STREAM FLOW; INSTANTANEOUS
122	FLUORESCENCE	%FS			FLUORESCENCE

PARAMETER_ID	PARAMETER	UNIT	STORET_CODE	USGS_CODE	DESCRIPTION
34	FS	MG/L			FIXED SOLIDS
35	FSS	MG/L	00540	P540	FIXED SUSPENDED SOLIDS
36	GAGE_HEIGHT	FT		P65	STREAM STAGE IN FEET
37	HARDNESS	MG/L	00900	P900	HARDNESS AS CACO3
38	HG	UG/L	71900	P71900	TOTAL MERCURY
39	IBOD5F	MG/L			INHIBITED 5-DAY BIOCHEMICAL OXYGEN DEMAND (FILTERED SAMPLE)
40	IBOD5W	MG/L			INHIBITED 5-DAY BIOCHEMICAL OXYGEN DEMAND (WHOLE SAMPLE)
41	KD	1/M			LIGHT ATTENUATION
42	KF	MG/L	00935	P935	DISSOLVED POTASSIUM AS K
43	MGF	MG/L	00925	P925	DISSOLVED MAGNESIUM AS MG
44	MN	UG/L	01055	P01055	TOTAL MANGANESE
45	NAF	MG/L	00930	P930	DISSOLVED SODIUM AS NA
46	NH4F	MG/L	00608	P608	AMMONIUM NITROGEN AS N (FILTERED SAMPLE)
47	NH4W	MG/L	00610	P610	AMMONIUM NITROGEN AS N (WHOLE SAMPLE)
48	NI	UG/L	01067	P01067	TOTAL NICKEL
49	NO23F	MG/L	00631	P631	NITRITE+NITRATE NITROGEN AS N (FILTERED SAMPLE)
50	NO23W	MG/L	00630	P630	NITRITE+NITRATE NITROGEN AS N (WHOLE SAMPLE)

PARAMETER_ID	PARAMETER	UNIT	STORET_CODE	USGS_CODE	DESCRIPTION
51	NO2F	MG/L	00613	P613	NITRITE NITROGEN AS N (FILTERED SAMPLE)
52	NO2W	MG/L	00615	P615	NITRITE NITROGEN AS N (WHOLE SAMPLE)
53	NO3F	MG/L	00618	P618	NITRATE NITROGEN AS N (FILTERED SAMPLE)
54	NO3W	MG/L	00620	P620	NITRATE NITROGEN AS N (WHOLE SAMPLE)
56	ORP	MV			OXIDATION REDUCTION POTENTIAL
57	PB	UG/L	01051	P01051	TOTAL LEAD
58	PC	MG/L	00694	P694	PARTICULATE CARBON; INORGANIC + ORGANIC
59	PERIPHY	G/M**2	49954	P49954	PERIPHYTON BIOMASS; WATER
60	PH	SU	00400	P400	PH CORRECTED FOR TEMPERATURE (25 DEG C)
61	PHEO	UG/L	32218	P32218	PHEOPHYTIN
62	PIC	MG/L		P688	PARTICULATE INORGANIC CARBON
63	PIP	MG/L			PARTICULATE INORGANIC PHOSPHORUS
64	PN	MG/L	00601	P601	PARTICULATE NITROGEN
65	PO4F	MG/L	00671	P671	ORTHOPHOSPHATE PHOSPHORUS AS P (FILTERED SAMPLE)
66	PO4W	MG/L	70507	P650	ORTHOPHOSPHATE PHOSPHORUS AS P (WHOLE SAMPLE)
170	POC	MG/L	00689	P689	PARTICULATE ORGANIC CARBON

PARAMETER_ID	PARAMETER	UNIT	STORET_CODE	USGS_CODE	DESCRIPTION
67	PON	MG/L			PARTICULATE ORGANIC NITROGEN
68	PP	MG/L	00667	P667	PARTICULATE PHOSPHORUS
69	SALINITY	PPT	00480	P480	SALINITY UNITS ARE PARTS PER THOUSAND (PPT) AND ARE EQUAL TO PRACTICAL SALNITY UNITS (PSU).
70	SE	UG/L	01147	P1147	TOTAL SELENIUM
71	SECCHI	M	00078	P00078	SECCHI DEPTH
72	SI	UG/L	01142	P1142	TOTAL SILICON AS SI
73	SIF	MG/L	00955	P955	SILICA AS SI (FILTERED SAMPLE)
74	SIGMA_T	NONE			WATER DENSITY; DEPENDENT ON SALINITY AND WTEMP
75	SIW	MG/L			SILICA AS SI (WHOLE SAMPLE)
76	SN	UG/L	01102	P1102	TOTAL TIN
77	SO3	MG/L	00740	P740	TOTAL SULFITE AS SO3
78	SO4F	MG/L			SULFATE
79	SO4W	MG/L	00945	P945	TOTAL SULFATE AS SO4
15	SPCOND	UMHOS/CM	00095	P95	CONDUCTIVITY CORRECTED FOR TEMPERATURE (25 DEG C) AND SALINITY
165	SSC_%FINE	PCT	70331	P70331	CALCULATED PERCENT FINE SAND
164	SSC_%SAND	PCT	70335	P70335	CALCULATED PERCENT SAND

PARAMETER_ID	PARAMETER	UNIT	STORET_CODE	USGS_CODE	DESCRIPTION
159	SSC_FINE	MG/L			SUSPENDED SEDIMENT PARTICLES PASSING THROUGH A 0.062 MM SIEVE
158	SSC_SAND	MG/L			SUSPENDED SEDIMENT PARTICLES RETAINED ON A 0.062 MM SIEVE
153	SSC_TOTAL	MG/L	80154	P80154	TOTAL SUSPENDED SEDIMENT CONCENTRATION
80	TALK	MG/L	00410	P410	TOTAL ALKALINITY AS CACO3
109	TCHL_PRE_CAL	UG/L			TOTAL CHLOROPHYLL; from a PRECALIBRATED FLUORESCENCE PROBE READING
81	TCOLI_C	COL/100 ML			TOTAL COLIFORMS (COLONIES)
82	TCOLI_M	MPN/100 ML	31505	P31505	TOTAL COLIFORMS (MOST PROBABLE NUMBER)
83	TDN	MG/L	00602	P602	TOTAL DISSOLVED NITROGEN
84	TDP	MG/L	00666	P666	TOTAL DISSOLVED PHOSPHORUS
85	TDS	MG/L	70300	P70300	TOTAL DISSOLVED SOLIDS;GRAVIMETRIC;DRIED AT 180 C
86	TKNF	MG/L	00623	P623	TOTAL KJELDAHL NITROGEN (FILTERED SAMPLE)
87	TKNW	MG/L	00625	P625	TOTAL KJELDAHL NITROGEN (WHOLE SAMPLE)

PARAMETER_ID	PARAMETER	UNIT	STORET_CODE	USGS_CODE	DESCRIPTION
88	TN	MG/L	00600	P600	TOTAL NITROGEN
89	TOC	MG/L	00680	P680	TOTAL ORGANIC CARBON
90	TON	MG/L	00605	P605	TOTAL ORGANIC NITROGEN
91	TOP	MG/L	00670	P00670	TOTAL ORGANIC PHOSPHORUS
92	TP	MG/L	00665	P665	TOTAL PHOSPHORUS
93	TS	MG/L	80180		TOTAL SOLIDS
94	TSS	MG/L	00530	P530	TOTAL SUSPENDED SOLIDS
96	TURB_FTU	FTU	00076	P76	TURBIDITY; TURBIDIMETER (FORMAZIN UNITS)
97	TURB_JTU	JTU	82537		TURBIDITY; JACKSON CANDLE METHOD (FORWARD SCATTER)
98	TURB_NTU	NTU	82079	P82079	TURBIDITY; NEPHELOMETRIC METHOD
99	VSS	MG/L	00535	P535	VOLATILE SUSPENDED SOLIDS
100	WTEMP	DEG C	00010	P10	WATER TEMPERATURE
102	ZN	UG/L	01092	P01092	TOTAL ZINC
NEW	TURB_FNU	FNU	63680	P63680	TURBIDITY, UNFILTERED(FNU)
NEW	TURB_NTRU	NTRU	63676	P63676	TURBIDITY, UNFILTERED, RATIOMETRIC CORRECTION
NEW	HPO4F	MG/L	00677	P677	PHOSPHORUS, ORTHOPHOS-PHATE PLUS HYDROLZABLE
NEW	ALKF	MG/L	39086	P39086	DISSOLVED ALKALINITY
NEW	CLF	MG/L	00941	P941	DISSOLVED CHLORIDE

NOTE: New parameters are identified by green text.

PRECIP_TYPE Lookup Table

PRECIP_TYPE	DESCRIPTION
10	NONE
11	DRIZZLE
12	RAIN
13	HEAVY RAIN
14	SQUALLY
15	FROZEN PRECIPITATION
16	MIXED RAIN AND SNOW

PROBLEM Lookup Table

PROBLEM	DESCRIPTION
A	LABORATORY ACCIDENT
AA	FIELD ACCIDENT
B	CHEMICAL MATRIX INTERFERENCE
TP	**TORN FILTER PAD**
C	INSTRUMENT FAILURE
D	INSUFFICIENT SAMPLE
DD	SAMPLE SIZE NOT REPORTED (ASSUMED)
E	SAMPLE RECEIVED AFTER HOLDING TIME
F	POST-CALIBRATION FAILURE LIKELY DUE TO EQUIPMENT DAMAGE AFTER SAMPLING; DATA APPEAR NORMAL
FF	MEAN REPORTED DUE TO POOR REPLICATION BETWEEN PADS
~~G~~	~~REPORTED VALUE IS BETWEEN MDL AND THE PRACTICAL QUANTITATION LEVEL (OR REPORTING LIMIT); 12/17/10~~
GG	SAMPLE ANALYZED AFTER HOLDING TIME
I	SUSPECT VALUE HAS BEEN VERIFIED CORRECT
J	INCORRECT SAMPLE FRACTION FOR ANALYSIS
JJ	VOLUME FILTERED NOT RECORDED (ASSUMED)
L	LICOR CALIBRATION OFF BY >= 10% PER YEAR. USE WITH CALC KD WHERE PROB OF LU, LS, LB EXIST IN RAW
LB	LICOR CALIBRATION OFF BY >= 10% PER YEAR FOR BOTH AIR AND UPWARD FACING SENSORS
LS	LICOR CALIBRATION OFF BY >= 10% PER YEAR FOR AIR SENSOR
LU	LICOR CALIBRATION OFF BY >= 10% PER YEAR FOR UPWARD FACING SENSOR
MM	OVER 20% OF SAMPLE ADHERED TO POUCH AND OUTSIDE OF PAD
NN	PARTICULATES FOUND IN FILTERED SAMPLE
P	PROVISIONAL DATA
R	SAMPLE CONTAMINATED
RR	NO SAMPLE RECEIVED BY LAB FROM FIELD OFFICE
SS	SAMPLE REJECTED DUE TO HIGH SUSPENDED SEDIMENT CONCENTRATION
U	MATRIX PROBLEM RESULTING FROM THE INTERRELATIONSHIP BETWEEN VARIABLES SUCH AS PH AND AMMONIA
un	For DCDOH data, these values are issues or are nulls with no assigned problem codes. 8/27/2008
V	SAMPLE RESULTS REJECTED DUE TO QC CRITERIA
WW	HIGH OPTICAL DENSITY (750 NM); ACTUAL VALUE RECORDED
X	SAMPLE NOT PRESERVED PROPERLY

PROBLEM	DESCRIPTION
	CALCULATED PARAMETER PROBLEM CODES (ASSIGNED BY DUET)
CC	CANNOT CALCULATE GIVEN AVAILABLE DATA
	CONSISTENCY CHECK PROBLEM CODES
QQ	PART EXCEEDS WHOLE VALUE YET DIFFERENCE IS WITHIN ANALYTICAL PRECISION (PQL OR REPORTING LIMIT)
NQ	PART EXCEEDS WHOLE VALUE AND DIFFERENCE IS NOT WITHIN ANALYTICAL PRECISION
IQ	CANNOT DETERMINE IF PART EXCEEDS WHOLE VALUE AND WHETHER OR NOT DIFFERENCE IS WITHIN ANALYTICAL PRECISION
NV	NEGATIVE CALCULATED VALUE IS VALID GIVEN PRECISION OF MEASURED WATER QUALITY PARAMTERS; ACTUAL CALCULATED CONCENTRATION LIKELY IS LOW; POSSIBLY LESS THAN PQLS OF MEASURED WATER QUALITY PARAMETERS
	PRECISION CHECK PROBLEM CODES (ASSIGNED BY DUET)
HI	HIGH RELATIVE PERCENT DIFFERENCE IN DUPLICATE SAMPLE MEASUREMENTS
	BIAS CHECK PROBLEM CODES
UB	CONCENTRATION OF FIELD BLANK REFLECTS INITIAL OR ISOLATED OCCURRENCE OF CONTAMINATION; SOURCE OF CONTAMINATION UNDER INVESTIGATION
BB	SPURIOUS OR PERSISTENT CONTAMINATION THAT APPEARS TO AFFECT BLANKS ONLY. CONTAMINATION IS RELATED TO THE MANNER OR EQUIPMENT OR SUPPLIES USED TO OBTAIN THE BLANK; SUCH AS CONTAMINATED SOURCE WATER
CB	SPURIOUS OR PERSISTENT CONTAMINATION; WHICH APPEARS TO REFLECT THE MANNER OR EQUIPMENT OR SUPPLIES USED TO OBTAIN BLANKS AND ASSOCIATED WATER QUALITY SAMPLES
BM	BIASED MEASUREMENT; CONCENTRATION COULD REFLECT CONTAMINATION BIAS; ASSOCIATED FIELD BLANK CONCENTRATIONS WERE WITHIN SAME MAGNITUDE AND COULD CONTRIBUTE AT LEAST 10% TO THE MEASURED WATER QUALITY PARAMETER CONCENTRATION **(ASSIGNED BY DUET)**

NOTE: New problem codes are identified by green text.

PROGRAM Lookup Table

PROGRAM	DESCRIPTION
ERMP	ELIZABETH RIVER MONITORING PROGRAM
IHMP	INDIAN HEAD MONITORING PROGRAM
NTID	NONTIDAL MONITORING PROGRAM - MULTIPLE AGENCIES
NTWQM	**NONTIDAL WATER QUALITY MONITORING PROGRAM**
RIM	RIVER INPUT MONITORING PROGRAM
SMRP	ST MARY'S RIVER PROJECT
SNAP	SUSQUEHANNA NUTRIENT ASSESSMENT PROGRAM
SWM	SHALLOW WATER MONITORING
TWQM	TIDAL WATER QUALITY MONITORING PROGRAM
VEMP	VIMS EASTERN SHORE MONITORING PROGRAM
WQMP	WATER QUALITY MONITORING PROGRAM

PROJECT Lookup Table

PROJECT_ID	PROJECT	DESCRIPTION
1	CMON	CONTINUOUS MONITORING
2	DFLO	DATAFLOW MONITORING
3	ELIZ	ELIZABETH RIVER MONITORING
4	MAIN	CHESAPEAKE BAY MAINSTEM MONITORING
5	**NTID**	**NONTIDAL MONITORING - OUT OF NETWORK**
6	SPEC	SPECIAL STUDY
7	TRIB	CHESAPEAKE BAY TIDAL TRIBUTARY MONITORING
8	STRM	NONTIDAL MONITORING (STORM SAMPLING)
9	BAS	NONTIDAL MONITORING (BASEFLOW SAMPLING)
10	**NTN**	**NONTIDAL NETWORK MONITORING**
11	**PART**	**NON-TRADITIONAL PARTNER**

QUALIFIER Lookup Table

QUALIFIER_ID	QUALIFIER	DESCRIPTION
1	<	Concentration is less than method detection limit
2	>	Concentration not quantified; exceeds given value (eg.FCOLI).
3	**G**	**REPORTED VALUE IS BETWEEN MDL AND THE PRACTICAL QUANTITATION LEVEL (OR REPORTING LIMIT)**

NOTE: New fields are identified by green text.

SAMPLE_ID Lookup (SAMPLE_REPLICATE_TYPE)

SAMPLE_REPLICATE_TYPE	DESCRIPTION
EB	EQUIPMENT AND FILTRATION BLANK (ADDED 07/09/2012)
FB	FIELD FILTRATION BLANK (ADDED 04/09/2012)
FS_AVG	AVERAGE OF TWO FIELD SPLIT SUBSAMPLE VALUES
FS1	FIELD SPLIT SUBSAMPLE 1
FS1/LAV	LABORATORY AVERAGE FOR FIELD SPLIT ONE
FS1/LS1	FIELD SPLIT SUBSAMPLE 1/LAB SPLIT SUBSAMPLE 1
FS1/LS2	FIELD SPLIT SUBSAMPLE 1/LAB SPLIT SUBSAMPLE 2
FS1/LS3	FIELD SPLIT SUBSAMPLE 1/LAB SPLIT SUBSAMPLE 3
FS1_AVG	AVERAGE OF LAB SPLITS GENERATED FROM FIELD SPLIT SUBSAMPLE 1
FS2	FIELD SPLIT SUBSAMPLE 2
FS2/LAV	LABORATORY AVERAGE FOR FIELD SPLIT TWO
FS2/LS1	FIELD SPLIT SUBSAMPLE 2/LAB SPLIT SUBSAMPLE 1
FS2/LS2	FIELD SPLIT SUBSAMPLE 2/LAB SPLIT SUBSAMPLE 2
FS2/LS3	FIELD SPLIT SUBSMAPLE 2/LAB SPLIT SUBSAMPLE 3
FS2_AVG	AVERAGE OF LAB SPLITS GENERATED FROM FIELD SPLIT SUBSAMPLE 2
FS3	FIELD SPLIT SUBSAMPLE 3
FS4	FIELD SPLIT SUBSAMPLE 4
LS1	LAB SPLIT SUBSAMPLE 1
LS2	LAB SPLIT SUBSAMPLE 2
LS3	LAB SPLIT SUBSAMPLE 3
M1	FIELD MEASUREMENT 1
M2	FIELD MEASUREMENT 2
M3	FIELD MEASUREMENT 3
S1	SAMPLE 1
S1/LS1	SAMPLE 1/LAB SPLIT SUBSAMPLE 1
S1/LS2	SAMPLE 1/LAB SPLIT SUBSAMPLE 2
S1/LS3	SAMPLE 1/LAB SPLIT SUBSAMPLE 3
S2	SAMPLE 2
S2/LS1	SAMPLE 2/LAB SPLIT SUBSAMPLE 1
S2/LS2	SAMPLE 2/LAB SPLIT SUBSAMPLE 2
S2/LS3	SAMPLE 2/LAB SPLIT SUBSAMPLE 3
S3	SAMPLE 3
SPK1	SPIKE SAMPLE SUBSAMPLE 1
SPK2	SPIKE SAMPLE SUBSAMPLE 2
SWB	SOURCE WATER (DI) BLANK (ADDED 04/09/2012)

SAMPLE_TYPE Lookup Table

SAMPLE_TYPE	DESCRIPTION
CS	COMPOSITE SAMPLE COLLECTED SPATIALLY
CT	COMPOSITE SAMPLE COLLECTED TEMPORALLY
D	DISCRETE (GRAB) SAMPLE COLLECTED AT DEPTH
HVIC	HORIZONTAL AND VERTICALLY INTEGRATED COMP SAMPLE
ISM	IN-SITU MEASUREMENT. NO SAMPLE COLLECTED

SOURCE Lookup Table

SOURCE_ID	SOURCE	DESCRIPTION
1	ANS	THE ACADEMY OF NATURAL SCIENCES
2	DCDOH	DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH
3	IHDNSWC	INDIAN HEAD DIVISION NAVAL SURFACE WARFARE CENTER
4	MDDNR	MARYLAND DEPARTMENT OF NATURAL RESOURCES
5	MSU	MORGAN STATE UNIVERSITY
6	ODU	OLD DOMINION UNIVERSITY
7	SMCM	ST MARY'S COLLEGE OF MARYLAND
8	SRBC	SUSQUEHANNA RIVER BASIN COMMISSION
9	USGS	UNITED STATES GEOLOGICAL SURVEY
10	VADEQ	NEW NAME FOR VA/SWCB,VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
11	VADEQ/NRO	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY-NORTHERN REGIONAL OFFICE
12	VADEQ/PRO	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY-PIEDMONT REGIONAL OFFICE
13	VADEQ/SCRO	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY-SOUTH CENTRAL REGION LYNCHBURG
14	VADEQ/SWRO	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY-SOUTH WEST REGION ABINGDON
15	VADEQ/TRO	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY-TIDEWATER REGIONAL OFFICE
16	VADEQ/VRO	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY-VALLEY OFFICE HARRISONBURG
17	VADEQ/WCRO	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY-WEST CENTRAL OFFICE ROANOKE
18	VERSAR	VERSAR INC.
19	VIMS	VIRGINIA INSTITUTE OF MARINE SCIENCE
20	VA/SWCB	VIRGINIA STATE WATER CONTROL BOARD
22	USGSVA	UNITED STATES GEOLOGICAL SURVEY VIRGINIA WATER SCIENCE CENTER
23	DEDNREC	DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
24	USGSWV	USGS WEST VIRGINIA WATER SCIENCE CENTER
25	USGSMD	USGS MARYLAND WATER SCIENCE CENTER
26	USGSPA	USGS PENNSYLVANIA WATER SCIENCE CENTER
27	PADEP	PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
28	NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

UNITS Lookup Table

UNIT	DESCRIPTION
%FS	PERCENT FULL SCALE
1/M	UNITS PER METER
1/NM	UNITS PER NANOMETER
ABS	OPTICAL DENSITY
CFS	CUBIC FEET PER SECOND
COL/100 ML	NUMBER OF COLONIES PER 100 MILLILITERS
DEG C	DEGREES CELSIUS
FT	FEET
FTU	FORMAZIN UNITS
G/M**2	GRAMS PER SQUARE METER
JTU	JACKSON TURBIDITY UNITS
KG/DAY	KILOGRAMS PER DAY
KG/MONTH	KILOGRAMS PER MONTH
KG/YEAR	KILOGRAMS PER YEAR
KNOTS	SPEED
LBS/DAY	POUNDS PER DAY
LBS/MONTH	POUNDS PER DAY
LBS/YEAR	POUNDS PER YEAR
M	METERS
MG/L	MILLIGRAMS PER LITER
MPN/100 ML	MOST PROBABLE NUMBER PER 100 MILLILITERS
MV	MILLIVOLTS
NONE	PARAMETER HAS NO ASSOCIATED UNITS
NTU	NEPHELOMETRIC UNITS
PCT	PERCENT
PPT	PARTS PER THOUSAND. EQUAL TO PRACTICAL SALNITY UNITS (PSU).
SU	SPECIFIC UNITS
TONS/DAY	TONS PER DAY
TONS/MONTH	TONS PER MONTH
TONS/YEAR	TONS PER YEAR
UE/M**2/S	MICROEINSTEINS PER METER SQUARED PER SECOND
UG/L	MICROGRAMS PER LITER
UM/M**2/S	MICROMOLES PER METER SQUARED PER SECOND. EQUAL TO MICROEINSTEINS
UMHOS/CM	MICROHMS PER CENTIMETER
VOLTS	VOLTAGE

WIND_DIRECTION Lookup Table

WIND_DIRECTION	DESCRIPTION
E	FROM THE EAST (90 DEGREES)
ENE	FROM THE EAST NORTHEAST (67.5 DEGREES)
ESE	FROM THE EAST SOUTHEAST (112.5 DEGREES)
N	FROM THE NORTH (0 DEGREES)
NE	FROM THE NORTH EAST (45 DEGREES)
NNE	FROM THE NORTH NORTHEAST (22.5 DEGREES)
NNW	FROM THE NORTH NORTHWEST (337.5 DEGREES)
NW	FROM THE NORTHWEST (315 DEGREES)
S	FROM THE SOUTH (180 DEGREES)
SE	FROM THE SOUTH EAST (135 DEGREES)
SSE	FROM THE SOUTH SOUTHEAST (157.5 DEGREES)
SSW	FROM THE SOUTH SOUTHWEST (202.5 DEGREES)
SW	FROM THE SOUTH WEST (225 DEGREES)
VAR	VARIABLE WINDS
W	FROM THE WEST (270 DEGREES)
WNW	FROM THE WEST NORTHWEST (292.5 DEGREES)
WSW	FROM THE WEST SOUTHWEST (247.5 DEGREES)

WIND_SPEED Lookup Table

WIND_SPEED	DESCRIPTION
0	0 TO 1 KNOT
1	>1 TO 10 KNOTS
2	>10 TO 20 KNOTS
3	>20 TO 30 KNOTS
4	>30 TO 40 KNOTS
5	>40 KNOTS